

The
Reindeer Botanist

ALF ERLING PORSILD, 1901–1977

Wendy Dathan



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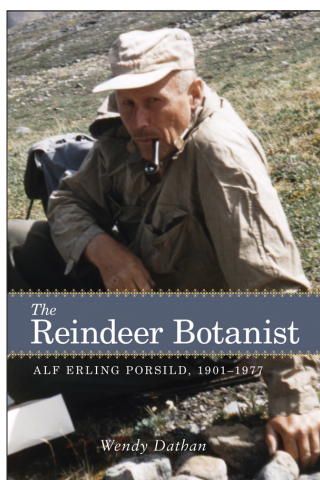
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**THE REINDEER BOTANIST:
ALF ERLING PORSILD, 1901-1977**

by Wendy Dathan

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The
Reindeer Botanist

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The
Reindeer Botanist



ALF ERLING PORSILD, 1901–1977

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Wendy Dathan

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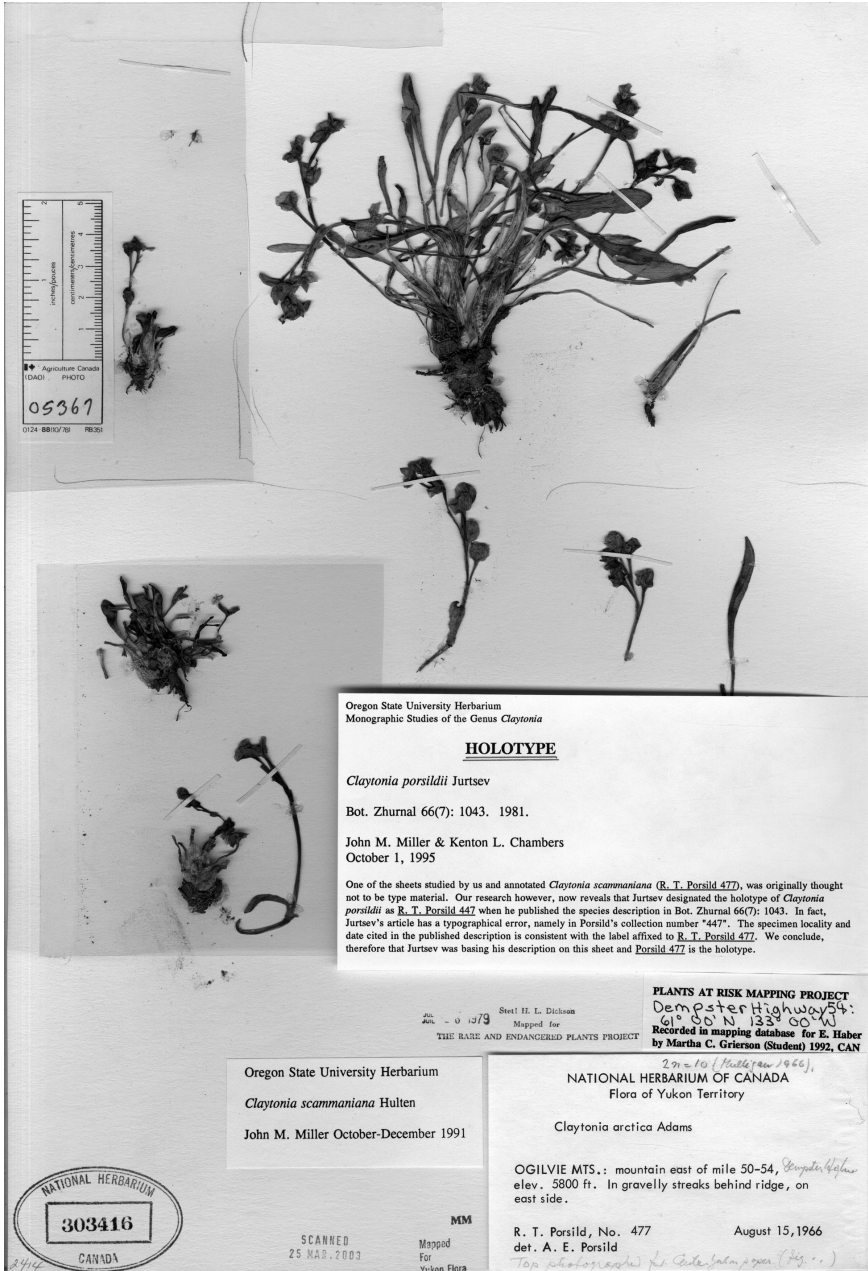
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ABBREVIATIONS

- AEP Alf Erling Porsild
- CMNA Canadian Museum of Nature Archives
- CRP Canadian Reindeer Project
- LAC Library and Archives of Canada
- LFP Lomen Family Papers, Elmer E. Rasmussen Library,
University of Alaska, Fairbanks
- MCA Museum of Civilization Archives
- MOM M. Oscar Malte
- MPP Morten Pedersen Porsild
- NAC/PAC National Archives of Canada/Public Archives of Canada
(since 2004 combined as Library and Archives Canada, see
LAC)
- NHC National Herbarium of Canada
- NHF National Herbarium correspondence files not in NAC/PAC or
CMNA at time of research
- OSF O. S. Finnie
- ROM Royal Ontario Museum, Porsild Collection
- RTP Robert Thorbjørn Porsild



Oregon State University Herbarium
 Monographic Studies of the Genus *Claytonia*

HOLOTYPE

Claytonia porsildii Jurtsev

Bot. Zhurnal 66(7): 1043. 1981.

John M. Miller & Kenton L. Chambers
 October 1, 1995

One of the sheets studied by us and annotated *Claytonia scammaniana* (R. T. Porsild 477), was originally thought not to be type material. Our research however, now reveals that Jurtsev designated the holotype of *Claytonia porsildii* as R. T. Porsild 447 when he published the species description in Bot. Zhurnal 66(7): 1043. In fact, Jurtsev's article has a typographical error, namely in Porsild's collection number "447". The specimen locality and date cited in the published description is consistent with the label affixed to R. T. Porsild 477. We conclude, therefore that Jurtsev was basing his description on this sheet and Porsild 477 is the holotype.

Jul. - 0 1979 Steel H. L. Dishoon
 Mapped for
 THE RARE AND ENDANGERED PLANTS PROJECT

PLANTS AT RISK MAPPING PROJECT
 Dempster Highway 54:
 61° 50' N 133° 00' W
 Recorded in mapping database for E. Haber
 by Martha C. Grieson (Student) 1992, CAN

Oregon State University Herbarium
Claytonia scammaniana Hulten
 John M. Miller October-December 1991

27-10 (Hillebrand 1966)
 NATIONAL HERBARIUM OF CANADA
 Flora of Yukon Territory

Claytonia arctica Adams

OGILVIE MTS.: mountain east of mile 50-54, Dempster Highway
 elev. 5800 ft. In gravelly streaks behind ridge, on east side.

R. T. Porsild, No. 477 August 15, 1966
 det. A. E. Porsild

NATIONAL HERBARIUM
 303416
 CANADA

SCANNED
 25 MAR 2003

MM
 Mapped
 For
 Yukon Flora

Top photograph by J. C. G. Adams (1966)

HOLOTYPE, *Claytonia porsildii* Jurtsev collected by R. T. Porsild off Dempster Highway, 15 August 1966 (National Herbarium of Canada, No. 303416; with permission of the Canadian Museum of Nature)

Foreword

Botanists are often stereotyped as shy, quiet people who pick flowers and spend long hours in front of a microscope. What, then, are we to make of Alf Erling Porsild, with a rifle on his shoulder, fighting arctic blizzards, and travelling hundreds of miles on dogsled through the frozen north, organizing a huge reindeer drive, and paddling rivers in the Canadian wilderness that few white men had ever seen while at the same time making major discoveries of plants of all kinds over terrain covered with half-frozen peat and home to billions of mosquitoes and black flies? This is the botanist we meet in Wendy Dathan's remarkable book.

When I was invited to visit Ottawa and the National Museum of Canada as a prospective addition to the Botany staff, I had only scant knowledge of Erling Porsild. I had been told that he was an arctic botanist, but that was no surprise considering that Canada has more arctic territory than almost any nation on earth. He ushered me into his modest office on the fourth floor of the Victoria Memorial Museum Building, filling his pipe and puffing away as he asked me a few questions about myself and my aspirations. He was a big man (or so he seemed to me), but he was soft-spoken, warm, and welcoming. I told him that I had just begun work at Chatham College in Pittsburgh and was happy there. I wasn't sure I wanted to move to a new job in a new country so soon. Erling puffed a bit on his pipe and said something like, "Nonsense. The National Museum is a fine place to work and you should come here. You will regret it if you don't. Such opportunities do not come often." He spoke softly, decisively, and persuasively.

In the decade that followed, I got to know Erling a little better, but never very well, certainly not as well as I would have liked. When he wasn't in the field or travelling to conferences, he kept busy in his office, studying specimens or updating distribution maps of arctic plants, which were bound in notebooks on a large table in his office-lab. (He told me later that it had been used by John Macoun.) He obviously loved his work, but he did not like meetings and bureaucracy, and he very rarely called staff meetings. If he was not deep into a project, he would sometimes take the time to remark about his arctic experiences, even spinning out a story about one of his many adventures (with polar bears, foul weather, odd people he met ...), but I never knew how rich those

experiences were until I read Wendy Dathan's book. Erling was a wonderful storyteller. Now that I know more about what he (and his equally remarkable brother Robert) went through, especially in those early days of exploration, I would love to have just one more evening with my old boss.

Wendy has taken Erling's journals, notes, and correspondence and woven them into a compelling narrative so skillfully that the reader will sometimes feel like an additional member of his field party. We feel the cold wind biting our face and the maddening attack of millions of biting insects, the frustration of strong headwinds in a canoe and the worry caused by high fever and sickness far from any medical help. We learn also about the frustrations and, dare I say, occasional insanities of working with the Canadian Government bureaucracy.

Why are we drawn to find out more about Erling Porsild? Because he was among the last of the botanical explorers who travelled into the Canadian wilderness before planes could pluck you up and put you down on almost any body of water more than a half-mile long. His plant presses were loaded on dogsleds and canoes, and yet they bore a wealth of new botanical discoveries. As a scientist, Erling was widely respected. His knowledge of the arctic and boreal flora of North America and Greenland could hardly be surpassed by anyone living at the time. His field experience made his opinions about the classification of arctic plants authoritative, and, although Erling had some professional rivals and some ongoing differences of opinion (including a well-publicized exchange with Farley Mowat), his many books and articles remain valuable references to this day. The stories behind some of the more important publications unfold in Wendy Dathan's book, and we meet many of the people that had major impacts on botanical science, especially in the fields of taxonomy and floristics, over the forty-year period from 1925 to 1965. Equally engrossing are the chapters covering the war years, when Erling was made Acting Consul for Greenland because of his intimate knowledge of Greenlandic people, languages, and terrain, and when his botanical expertise was critical in helping the Canadian military uncover the launch site of Japanese fire bombs.

Yet Erling was a modest and quiet man, easy to talk to. He and his wife, Margrit, frequently invited staff or colleagues to their home for marvelous home-cooked meals that were almost invariably followed by wonderful stories of his experiences. They were evenings I will not easily forget.

So, sit down with Wendy Dathan's recounting of the life of Erling Porsild, forget about botanical stereotypes, and enter the world of one of Canada's most interesting and accomplished scientists, a man who, although foreign-born, served Canada with distinction and dedication for fifty years.

Irwin M. Brodo
Research Lichenologist Emeritus
Canadian Museum of Nature
April 2012

PREFACE

Almost three decades have passed since Dr. Irwin Brodo of the National Herbarium of Canada first asked if I would be interested in doing a biography of Dr. Erling Porsild, who had retired in 1967 as Chief Botanist of the Herbarium after thirty-two years of curatorial service, and died in 1977 after a lifetime of work on the Arctic, Sub-Arctic, and Alpine flora of North America and Greenland. No one had worked on him since his death, and it was felt that as I had a background that included English and Botany I might be the person to tackle the job.

I had never met Erling Porsild. All I knew of him was that I had used his “Illustrated Flora of the Canadian Arctic Archipelago” on a collecting trip to Baffin Island with Dr. Dorothy Swales of Macdonald College of McGill University in the summer of 1978. Little did I know then how much of his botanical career was summarized in the small black dots on the plant distribution maps at the back of that much thumbed and underlined field guide; dots that showed where he had collected plants for his father on Disko Island when he was young and living at the Arctic Research Station and later as Canadian Vice/Acting Consul in Greenland during World War II; dots that marked where he and his brother had collected in Alaska, the Mackenzie River Delta area and Great Bear Lake during their first adventurous assignment with the Canadian Reindeer Project; more dots in the Arctic Archipelago illustrating his and other collections that led to his doctoral degree in 1955; even dots straying south down the Rockies that represented his southward chase for migrating northern species in his later collecting years.

With the generous encouragement of the staff of the National Herbarium, I was given free access to all the correspondence files before they were shipped out to the National Archives. This exceptional privilege brought rich research dividends, for the folders contained not only a great deal of personal information about the man himself but also the history of the Herbarium from its inception as part of the Victoria Memorial Museum (later the National Museum) around the turn of the twentieth century and by extension the history of the growth of Botany in Canada for close to three quarters of a hundred years afterwards. How they struggled, those early botanists and men of the Geological Survey teams, to bring back the unknown plants they found in our vast and

never-ending country! How much the times changed as their field specimens were brought back to be slowly, slowly organized and identified and catalogued by a burgeoning number of specialists in a movement that had started in the Herbarium with the father and son team of John and James Macoun and been carried on by Oscar Malte and Erling Porsild working alone until the end of the Second World War.

Porsild, it turned out, was a man of many parts. For his role as Reindeer Man, for which he first became well known in Canada, I turned for assistance to Professor Ludger Müller-Wille of the McGill University Geography Department who had done his doctoral degree on reindeer in Finland. Once enrolled as his student in the Master's program, an F.C.A.R. scholarship enabled me to go up to Ottawa for months on end to look at all the material on the Canadian Reindeer Project that was stored in the National Archives of Canada. A northern training grant from the Centre for Northern Studies at McGill University allowed me to travel to Alaska in 1985 to study the Lomen Family reindeer files in the Elmer E. Rasmussen Library in Fairbanks. Driving north from British Columbia up the Alaska Highway to the Arctic Circle north of Fairbanks, south to Denali and Anchorage, and east to Dawson and Whitehorse and the Canol Road as far as the road would take us gave me a feel for that magnificent northern terrain that no books or photographs could ever have given me, while flying over the Mackenzie River Delta brought a real appreciation of the difficulties of moving two and a half thousand reindeer from west to east over that watery expanse. With the help of the staff of the Inuvik Scientific Research Station, I visited what was left of Reindeer Station by boat travel down the muddy East Branch of the Mackenzie, and flew over the Tuktoyaktuk Peninsula in a small private plane in search of pingos and Canada's remaining herd.

Major changes in my own personal life interrupted the research for the next fifteen or so years as I moved from Montreal to the island of Grand Manan, New Brunswick. The Porsild material had to be stored in the attic of my old house and was in danger of going mouldy, but when all seventeen boxes were finally rescued everything was intact inside and I was able to spend another two winters in Ottawa looking at the diplomatic papers in the National Archives in search of Porsild the Consular Man. Canada's consular involvement with Greenland began in April 1940 when Denmark fell to the Nazis and the head of the Aluminum Company of Canada (ALCAN) was on the phone immediately to Ottawa in a panic over the threat to the only operating cryolite mine in the world located up a submarine-accessible fjord in S.W. Greenland,

cryolite being needed to turn bauxite into the aluminum desperately needed for the war effort. In the negotiations that followed, both the United States and Canada established consular services in Greenland, and Erling Porsild was seconded part-time from his botanical work to become Vice and then Acting Consul. The inevitable and long-winded reports for which External Affairs has become famous came from all the men involved in that wartime effort, men that included the wise and politically astute Kenneth Kirkwood, the friendly and irrepressible Maxwell Dunbar, the urbane Trevor Lloyd, and the man that Lloyd once called “the mighty Porsild,” and together they gave us an interesting picture of a Greenland that up to that date had been strictly out of bounds for most of the world except Denmark. To my knowledge, no one else has worked on the story of that northernmost outpost of Canada from 1940 to 1946.

Although I wished my biography to concentrate on Porsild’s working life and achievements, one of my earliest interviews was with his daughter Karin Lumsden and grand-daughter Jennifer Lumsden in order to find out something of his family life. I was somewhat disconcerted at this meeting to learn that Jennifer was also contemplating doing a biography of her grandfather. It was at this point that I nearly gave up the idea of doing what I had been asked to do, as I had no wish to compete or interfere with someone who obviously knew so much more about Porsild than I did. I really felt that I should withdraw until my advisers at the National Herbarium and McGill insisted that my professional approach was badly needed and could not be done by someone with no training in Botany, and in any case there was always room for more than one version of a life as interesting as that of Erling Porsild.

I also contacted Professor Hugh Raup of Harvard University, whose long friendship and working correspondence with Porsild was the highlight of the herbarium files. Unfortunately, we never met, because over the many years of their acquaintanceship, these two important but very human men had exchanged detailed information about their scientific findings, philosophies, failures and successes, their fieldwork and publications, and, in passing, added notes about their personal lives. Both were influential in the early days of the Arctic Institute of North America and other aspects of northern science, and their parallel work on the northern flora formed the building blocks for future studies of the Continental Northwest.

In writing the biography, I have been careful to keep within the style and tone of Porsild’s time. Throughout the text, I have quoted in detail from primary sources while trying to present original points of view in contexts that

do not distort or re-arrange the speaker's intention. As much as possible within quotations, I have allowed spelling and grammatical mistakes, or errors due to the writer's lack of familiarity with English, to stand untouched unless the meaning is unclear. Some connecting words that have been omitted in hasty writing or typing have been added, while some abbreviations have been written in full for the sake of clarity. The erratic and sometimes truncated use of common and scientific names as well as the lack of underlining scientific names in letters, notes, and diaries have sometimes been left as written in the hope the reader will understand. As the field of Botany is one of continual advancement, it should be noted that some of the botanical names given or used by Porsild during his career in Canada may have been changed after his lifetime, but they have been retained in the text as they can be found elsewhere as synonyms.

Other problems with names have included the need to distinguish between the three botanical Porsilds: Morten Pedersen Porsild; his oldest son, Robert Thorbjørn Porsild, who was called by his second name in Greenland and Denmark but in North America became better known as Robert or Bob Porsild; and the second son, Alf Erling Porsild, who detested the name Alf and always preferred to be called Erling. I have chosen to treat the senior Porsild formally by surname and to use the Christian names of his sons throughout the narrative, which worked reasonably well during the reindeer years when the brothers worked together but grew more awkward when Erling became "Mr. Porsild of the Herbarium" where his surname would be more appropriate. However, by that time, the reader could be expected to be accustomed to the use of his now-familiar Christian name and so it was continued.

Certain terms have been used or preserved in the text because they are historically apt. In order to conform with their earlier use, temperatures, weights and measurements have been left under the imperial British system rather than replacing them with metric equivalents. For the same reason, I have retained some words that today we would consider politically incorrect but which were simply in common usage and not intended to be inappropriate or derogatory at that earlier time. I have therefore continued to use the term "Lapp" with reference to the reindeer herders from Norway instead of injecting their preferred term "Sami" into or outside of quotations in the text. Similarly, although the present-day people of the Arctic prefer to be called "Yup'ik" in the Bering Sea area, "Inupiat" along the north coast of Alaska, "Inuvialuit" in the Mackenzie River Delta, and "Inuit" in the Eastern Arctic, I have followed historical precedent and used or allowed the terms "Esquimaux" or "Eskimo" in quotations and

in the narrative, except in situations of a more modern context. With regard to the Arctic people, it should be noted that the older terms are wider in interpretation and were used to distinguish all the aboriginal peoples across Arctic North America while the newer terms are more limited in their geography and often cannot be used as a substitute.

Wendy Dathan

INTRODUCTION

Alf Erling Porsild was unquestionably a man who looked to the North throughout his lifetime. He was only five years old when he crossed the Arctic Circle with his parents for the first time, and he and his siblings spent the early years of the twentieth century growing up in an Arctic research station on Disko Island, Greenland. Today, on the Tuktoyaktuk peninsula in what was Canada's Northwest Territories and is now Nunavut, there is a strange ice-cored hill called Porsild Pingo that was named after the quiet pipe-smoking Danish-Canadian who first put this Greenlandic-Inuit word into the English language. He was to make many such contributions to Canadian geography and science during his working lifetime, but his greatest efforts were in three widely separate arenas; namely, the Canadian Reindeer Project, 1926–35 and 1947, the Canadian Consulate in wartime Greenland, 1940–44, and Northern Botany and the National Herbarium of Canada, 1935–77.

A biography is a useful tool to cover such a wide field of endeavour, with its intimate recording of current philosophies and activities as well as the kind of firsthand details that give a basal reality to what we can learn about the subject's environs. Hence, in the case of Porsild, we have a fascinating life story of an unusual, ambitious, and adventurous man whose multi-faceted career in Canada gives us many social, scientific, and political insights into unexamined sections of our country's history.

As a key figure in the introduction of reindeer into Canada, Porsild's first service unfolds as a dramatic record of travelling hundreds of miles by dogsled in the bitter depths of winter, alone or accompanied by his brother Robert Porsild. It tells of coastal, lake, and river exploration by unreliable schooner and ice-threatened canoe, of swarming "flies" and lost dogs and an endless wait for the reindeer from Alaska to arrive at the East Branch of the slow north-moving Mackenzie River. The failure of the Canadian Reindeer Project to create a widespread herding industry from the Delta to Hudson Bay ended as an expensive disappointment for a government that had been inspired to try to improve the lot of the starving native peoples with this overly ambitious and ill-timed scheme, but it is Porsild's story that enables us to comprehend the full details of what happened and understand why it was doomed from the start, however much he tried to make the plan workable. After he left the project, it

was dogged by tragic deaths, mismanagement, and lack of local interest, until today our only consolation must be that the remaining herd is privately owned by a descendant of one of the original Sami herders brought by Porsild to train the Inuvialuit, and our reindeer still roam the area to which they were first consigned and supply some food and income to the people of the delta.

During his reindeer years, and later as expansion “north of sixty” followed river, road, and air corridors as far as the Arctic Archipelago, Porsild traced the ever-increasing access routes, gathering the huge collections of Arctic and sub-Arctic plants that formed the basis of his numerous scientific publications and the floral contributions that ultimately made him famous within national and international botanical circles. His many publications ranged from popular to scholarly, from a half-page scientific contribution to full-scale dissertations and floras. His collections, and those of his brother during the early and late gathering years, were duly placed in the National Herbarium of Canada in Ottawa, our historic storage area for dried, pressed, botanical material from every corner of the country dating back to the collections of Professor John Macoun, his son James, and the Geological Survey teams over the turn of the twentieth century. Plant collecting was no easy task for these early geo-botanists and explorers, including the Porsild brothers. Entire plants or parts of flowering trees and shrubs had to be gathered carefully, pressed between sheets of absorbent material, dried, and then, most importantly, kept dry until shipped out of the field, this while travelling and camping in remote areas under all kinds of difficult weather and other stressful conditions. Once inside the herbarium, they were mounted on sheets of stiff paper, labelled and sorted and placed in cabinets to keep them safe from insect and other damage, and were then available for the scientific study of voucher specimens for publication purposes as well as for noting plant variation and distribution and the documentation of plant occurrences over time.

The Macoun herbarium became part of the Victoria Memorial Museum, later the National Museum of Canada, and was curated by botanist Oscar Malte from the early 1920's to his unfortunate death while returning from Arctic fieldwork in 1933. In 1935, after Erling Porsild was at last able to leave Reindeer Station, he took up the task of identifying and re-organizing the vast number of plant specimens in the National Herbarium. His records and correspondence for the thirty-two years of his administration tell us much of the history of the institution, and, as sole Botanist in charge until the end of the Second World War and Chief Botanist until his retirement in 1967, his story equally delineates

the problems and advancement of Botany in Canada during this period. Perhaps the most interesting of the problems that occupied the botanists of the time involved the probable distribution of plants before, during, and after the last glacial ice sheets that all but covered the face of North America, and the migration of plants as well as people across the Bering land bridge.

Porsild's botanical work was forced to take second place during World War II when he was asked to play a political role in Greenland, his childhood homeland, in order to open the new Canadian Consulate in Godthaab (now Nuuk) in the spring of 1940. This post became important for maintaining friendly relations with our nearest neighbour after it had been cut off from its Danish mother country, leaving it, and us, in a vulnerable position from hostile war activity. The consular services were vital for the protection of Canada's aluminum industry, which relied on cryolite ore that was desperately needed in the bauxite conversion process and was obtainable from only one source in southwest Greenland, and our presence enabled the Canadian Government to keep a watch in U-boat-infested waters over incoming summer shipments to Arvida, Quebec, and outgoing food and other needed supplies to isolated Greenland and the Arctic islands, as well as to play a part in transporting badly needed Canadian-built planes to the United Kingdom. Of parallel interest to events in Greenland, the news of how the Herbarium was faring in Ottawa gives us an interesting picture of non-military scientists attempting to keep going with lost personnel, overcrowded and constantly moved work space, and research and salary cutbacks under the guise of support for the war effort.

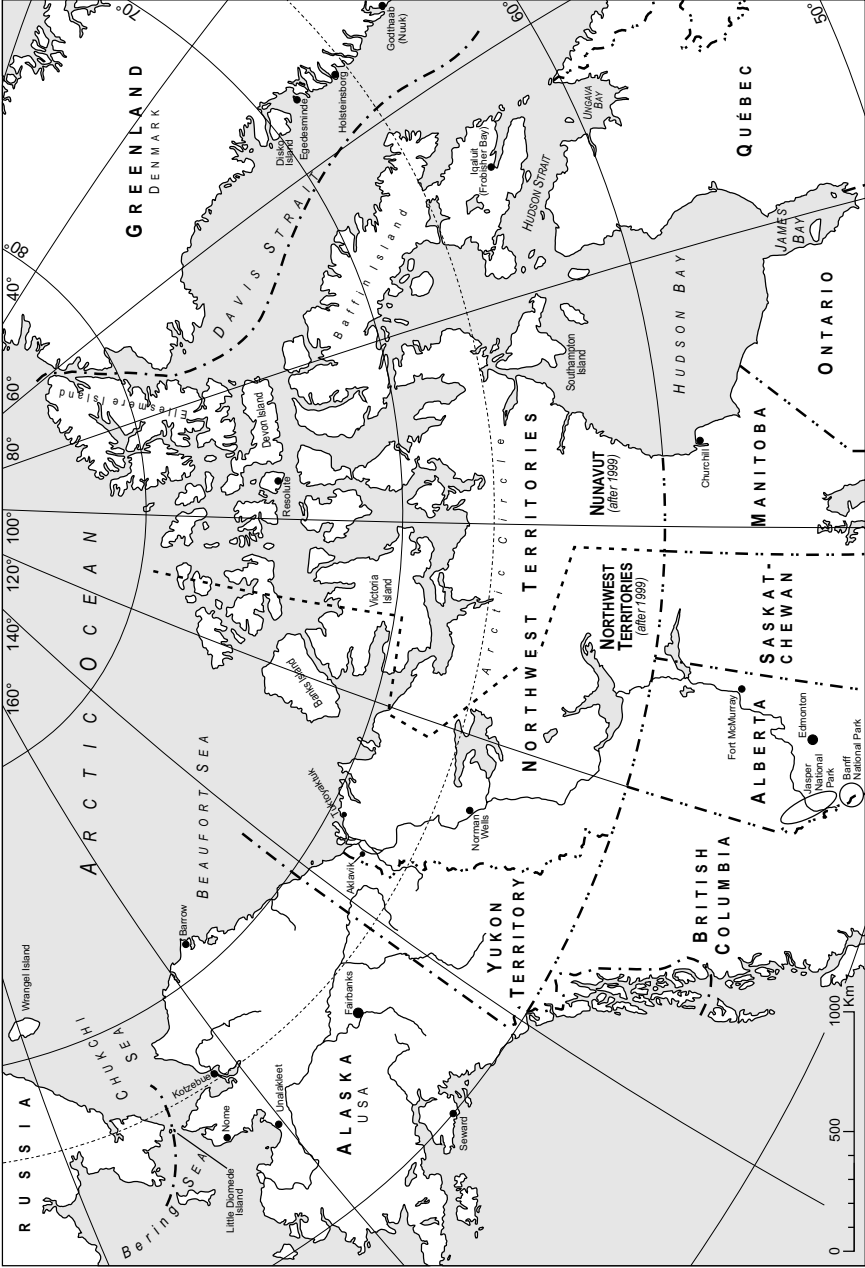
Porsild's contributions to Canada during the reindeer and wartime years were not without sacrifice on his part, for they often delayed or brought his personal and scientific ambitions to a standstill. However, much of his latter political influence in Ottawa circles depended on his intimate scientific knowledge of the North. He was a founding member of the Arctic Circle and played a leading role in the creation of the Arctic Institute of North America. Due to his participation as a man behind the scenes in northern decision-making, we learn much about little-known segments of Canadian history that would otherwise simply be lost. In following his connection with the National Herbarium, we find that we have Erling Porsild to thank for much of the increase in our knowledge of the Arctic/subarctic flora of Canada and how it relates to the alpine flora of the Rockies, but until he was able to work for and receive his doctorate from Copenhagen in 1955 his singular lack of a university degree at even an undergraduate level was an enormous handicap for him to overcome,

and it is greatly to his credit and perseverance that he was able to continue and succeed in an increasingly stratified professional field. No less than a hundred and twenty-eight publications appeared under his name, either alone or as co-author, and his plant collections included some eighty taxa new to science, most of which he described and published personally. He was an active participant in the International Botanical Congresses in Europe, and when the first truly international congress was held in North America, bringing many top Eurasian botanists to this country for the first time, his field trips to the Canadian Rocky Mountains and Arctic/sub-Arctic Canada were a triumphant success.

Erling Porsild is remembered in many quarters as a quiet, soft-spoken man who worked best alone, driving himself to complete what he set out to do. His dry sense of humour, along with his gift of story-telling, was notorious. He was a pragmatic rather than a charismatic leader, for he was not interested in inspiring others to great heights, nor did he suffer fools patiently or have the ability to calm troubled situations and he despised the routine work of administration, but he was respected for his wide knowledge of northern affairs, his personal integrity, and his total dedication to his scientific milieu. His many contributions to his chosen country deserve our recognition and appreciation.

Part One

REINDEER SURVEY /
EXPLORATION, 1901-1928



Northern North America and Greenland: A. E. Porsild's Region of Botanical Investigations (Cartography: Ragnar Müller-Wille)



CHAPTER ONE

GREENLAND BEGINNINGS¹

About two hundred miles above the Arctic Circle, twenty degrees south of the legendary North Pole, the line of seventy degrees north latitude travels all around the highest rim of the North American and Eurasian continents. Half-way between them, the line dissects the mini-continent of misnamed Greenland and cuts across the northeast corner of the island of Disko off Greenland's western shore.

Disko is a large island, a little larger than half the size of Prince Edward Island, and is separated from the mainland by a narrow strait on the east side. Its coastline is deeply indented with bays and fjords, while the interior is marked by table-topped basalt mountains intersected by long valleys that run from coast to coast in some sections. What makes the place especially remarkable is the variety of habitats that range from cold-swept Arctic glaciers to the warm thermal springs that create a mini-climate for southerly species of plants and insects.

Historically, Disko was often the starting point for numerous Danish-approved scientific expeditions to the High Arctic during the summer months. The approval was not lightly granted, because Denmark's policy towards her colonial people was fiercely protective and the whole of Greenland was cut off physically and politically for most of the year. No external trading or interference was permitted in order to prevent the intrusion of any potentially destructive elements from the outside world as the Danish administrators rigidly maintained a policy of "Greenland for the Greenlanders," believing that the aboriginal people were innocent and childlike and in constant need of their fatherly protection. No outsider could enter Greenland unless he could convince the Danish Government of his important scientific or other purpose,

cover his return passage in a Danish bank, and pass a medical examination immediately prior to sailing in order to prevent the introduction of disease among the vulnerable northerners. Even fellow Danes were required to have special permission to visit the country.

In 1898, a young Danish botanist, recently graduated from the University of Copenhagen with a degree in natural history, passed the necessary requirements to enter Greenland as part of the Steenstrups expedition to Disko sponsored by the Committee of Geological and Geographical Investigations of Greenland. Morten Pedersen Porsild was immediately impressed by the wealth of unusual plants he found on the island. It was, after all, a time in Europe when the vegetation was too well known for many new discoveries, and here he found a virtual botanical heaven of new species to be added to the known plants of the world. Many years later, Evelyn Stefansson, wife of explorer Vilhjalmur Stefansson, described the flora's fascination for visiting botanists: "White, star-like little mountain avens, belonging to the rose family, often color a whole mountain side with their abundant blossoms," she said. The landscape was also graced by the bright yellow flowers of *Arnica alpina*, looking like miniature Kansas sunflowers, as well as tiny bell-shaped cranberries, white heather, rhododendron, chickweed, and six or more varieties of saxifrage, of which the purple saxifrage with its gorgeous blooms was first in spring and could sometimes be seen bordering the snowdrifts. Plumy cottongrass grew along the riversides and ponds, and rare mosses and ferns grew profusely in the earth between the stones in rock ledges. Miniature willows produced their soft fuzzy catkins. The most conspicuous herb was *Archangelica*, sought for food. "Last but far from least, five species of the orchid family reproduce themselves and flower perfectly. One explorer tells that two varieties grow in such profusion along the narrow flats of the Disko shore that in walking them one crushed so many blossoms that the air was made sweet with their perfume."²²

Four years after his first experience with the Disko flora, Morten Pedersen Porsild was delighted to be given another chance to explore the lesser-known north side that had not been covered by the earlier expedition. By 1905, he was deeply engrossed in plans for the creation of a Danish Arctic Station at Godhavn, the Danish government settlement on the southwest side of Disko with an excellent inner harbour well protected from storms and drifting icebergs along the open coast, and in 1906, he was duly appointed Director of the first permanent research station to operate above the Arctic Circle.

It was here that he brought his Danish wife and two small sons, Robert Thorbjørn, aged eight, and Alf Erling, aged five. The new life in Greenland would be a wonderful and exciting change for the boys but not the best of moves for his young wife. Like her husband, Johanne Kristine Porsild (nee Nielsen) had come from farming stock in southern Jutland near the Danish-German border, and she was none too happy about leaving her homeland to come to this place on the top of the world that was so far from everyone and everything she knew. It is as well that she did not have a crystal ball to read into the future at that time for, except for brief and infrequent visits back to Denmark to visit her family and deliver a younger son Sten and daughter Tulle, she was to have to endure the isolated life of the station for the rest of her life.

Yet it was a unique environment in which they found themselves. T. J. Wood wrote lyrically of the setting: “Those with a knowledge of Greenland can appreciate the influence of its rugged beauty on the development of the young Porsild children; the great fjords, the swirling arctic mists; huge floating icebergs, the high mountains piercing the clouds; the great island mass itself slowly emerging from the clasp of the last great ice age.” Explorer Peter Freuchen, who together with Knud Rasmussen became heroes to the two older Porsild boys, made his first trip to Greenland in 1906 as a stoker aboard the *Hans Egede* and said that he could think of no place more beautiful than a Greenland fjord in summer.³

Erling Porsild’s adult memories of the social and political scene prior to 1918 suggest a naively happy childhood in a privileged situation, producing an idealistic role model that he continued to extol throughout his lifetime. “Up to the first world war, which did not touch Greenland at all,” he wrote in “Greenland at the Crossroads” in 1948,

... the island’s economy has been largely based on primitive Eskimo sealing and hunting.... Time did not matter very much in Greenland where no one ever did things in a hurry, and where the Greenlanders lived a sheltered but happy and contented life. No one ever went hungry for long, nor did any one ever become very prosperous, for all trading and trafficking, all industry, as well as the price of labour and native produce, were controlled by the State. In this completely nationalized economy prices never changed. Completely sealed off from the outside world, the economy, so to speak, operated in a total vacuum. Visitors to Greenland found life in the island idyllic and carefree, a

solace from the hectic, striving competition and foolish rush of other lands.

During the summer months, visitors to the station broke the isolation. Northern expeditions and patrol boats, approved by the Danish Government, generally called at Godhavn en route to the High Arctic. Anthropologist Frederica de Laguna, at the start of an expedition with archaeologist Therkel Mathiassen and in company with the ill-fated Kruger expedition to Ellesmere Island, described a typical arrival scene in June 1929:

We made Godhavn on Disko Island sometime that evening. We were now inside the Arctic Circle. Godhavn is the seat of government for North Greenland, and in consequence has a great many white men's houses, and the Greenlanders here are very civilized, for most of them are in the pay of the government.... Quite a few people came on board to welcome us.... Dr. Morten Porsild, who is an authority on every kind of science connected with the Arctic, invited us to visit him in the morning. His house is called the Arctic Station and is a kind of hotel for scientists, with a fine library and laboratory. That evening we called on an old friend of Mathiassen's who runs an earthquake and magnetic deviation observatory. There we had smokes and apples and whiskey. People in Greenland always get out their best when the ship comes to port....

The next day ... we got up bright and early, to go ashore.... Godhavn looks much better than Holsteinborg. It has an excellent landlocked harbor, made by the building up of a big bar between a small island and Disko, and the village is spread out more, and there is less dirt. Mathiassen and I walked a quarter of a mile across the narrow neck of the peninsula, and along the coast to Dr. Porsild's house. We looked inside, but, as we heard no movement, judged that everyone must be asleep, so we went on across some swampy ground, bright with the purple erica, to the beach where several icebergs were stranded. Then we went back to Dr. Porsild's house, where I played with the dogs. Young Erling Porsild, the doctor's son, came out and began to feed them with angmasset, a small, oily fish, like smelt.... Inside the Arctic Station we were entertained with coffee, etc.... I told young Porsild that I would like to taste an angmasset. He had been telling me

how he and his brother, when they were children, used to go out to the storehouse and eat quantities of the dog feed. So he took me out and prepared one for me... The fish are ... very tough, and have quite a peculiar taste, which one does not notice so much at first, but which sticks in the mouth and grows ranker and ranker... Young Porsild told me that once he had had nothing to eat but dried fish.⁴

When de Laguna and Mathiassen returned from the High Arctic in October, they again visited Godhavn where, together with the members of the Alfred Wegener expedition, they enjoyed the senior Porsilds' hospitality at the Arctic Station until their ship arrived to take them home.

Similar visits ashore were recorded in the annual reports of the Canadian arctic patrols. In 1922, the Officer in Charge, J. D. Craig, noted that he had been warmly greeted on arrival in Godhavn on 13 September by Dr. Morten Porsild and his son Erling. "Only about two hours were spent ashore but the visit though brief, was most interesting," he said. "The settlement is indeed an oasis in the desert. The houses, particularly some of those occupied by the Government officials, are very attractive and quite pretentious, being built of lumber imported from Denmark and are nicely painted in red with white trimmings. Neat, clean, well laid out paths lead from one point to another in the settlement, with quite large warehouses in the vicinity of the landing place. The Government scientific station and the residence of Dr. Porsild are situated across the harbour, unfortunately too far away to be visited in the short time available."⁵

If the time ashore was pleasant for those on board ship, it was a real highlight for those at the station. The line-up of scientific visitors kept the senior Porsilds in touch with developments "outside" and could not help but have an impression on the younger members of the family. In such a situation, it would have been hard not to have been affected by "expedition fever" as group after group passed through, full of hopes and expectations on the way north, full of achievements, adventures, and sadly, sometimes, accidents and failures on the way home. Many of the explorers who passed through the station did not return alive, men like Thorild Wulff, the Swedish botanist on Knud Rasmussen's Second Thule Expedition in 1917, who had botanized with Morten Porsild on Disko Island on the way to his death in Northern Greenland.

Tales of the exploits to the north undoubtedly inspired the older boys to pretend that they too were adventurers and capable of daring deeds. Young Erling carried this a bit too far one day. The story is told that while the boys



Official residences, Godhavn, Greenland, 1923 (Photo: Lt. L. T. Burwash, LAC, PA-99039)

were out cutting wood for the Station, he put his finger on the chopping block and dared his older brother to cut it off. Certain that he would pull his hand out of the way, Robert Thorbjørn brought down the axe and cut off the end of Erling's finger.

Several scientists explored the Disko Island botany with Morten Porsild in the summers between 1906 and 1920. Among them were H. Bachmann, M. Rikli, and W. Jost from Switzerland, Lauge Koch from Denmark, and W. E. Ekblaw from Illinois, U.S.A. Usually, they were accompanied by one or both of the older boys. From an early age, the brothers were encouraged to collect and compete for the best collections. They received the equivalent of 5¢ Canadian for each flowering plant they discovered on Disko, with a bonus of 50¢ for rare specimens and \$1.50 for plants new to the island flora. Robert Thorbjørn was proud to find six \$1.50 plants and one first for Greenland, *Pyrola minor x grandiflora*, which he collected in 1913 near the outflow of springs on South Disko and, in his father's absence, labelled as "*P. grandiflora*, extraordinarily late flowering." This was a particularly good find as hybridization is believed to be uncommon in arctic plants and the difference in flowering times of the two species usually precludes crossing. It was never found again, although the location was searched repeatedly. Erling was the first to find *Botrychium lanceolatum* on the island, a single specimen, fruiting abundantly, but afterwards

searched for in vain. Their father also made a number of botanical field trips to the West Greenland mainland, between 66°30' and 72°30' north latitude, assisted in the collecting by Robert Thorbjørn in 1909 and 1911 and by Erling in 1912, 1914, and 1918.⁶

Regular schooling was not available on the island. The children were tutored by their father, assisted by sundry young Danes seeking northern adventures, until the boys were sent away to Denmark during their teens. There is no doubt that the children received an excellent, well-rounded education at home, although Morten Porsild was later characteristically critical of the scholastic achievements of his second son. "He can speak and write English a little better than I, but not perfectly," he wrote, "he reads German easily and speaks it tolerably, but does not write it well. He reads French only with difficulty and he can [handle] nearly nothing in Latin. In Mathematics, Physics, Chemistry and Natural History (the above mentioned arctic parts excepted) he only learned the elements. But he always learned easily and was never timid in trying things as typewriting, shorthand, Spanish etc."⁷

It was left to the more generous assessment of Áskell Löve, in his memorial tribute to Erling Porsild, to write approvingly: "Nevertheless, they obtained substantial knowledge of the classical and essential European languages, and during the long winters they read the family library of the great books of civilization. In the summers they received training in the sciences in the field and laboratory under the guidance of the extraordinary father, with whom Erling and Thorbjørn especially traveled widely by foot, boat, and dogsled as small boys to help with the research. No formal university could have been as powerful a teacher, and I have never met a botanist who has been more effectively trained or more thoroughly educated than was Erling Porsild."⁸

Robert Thorbjørn, the oldest child, was the first to go away to school, continuing from 1914 until 1920 when his studies at the University of Copenhagen were interrupted by ill health and he was ordered to do "less studying and more physical work." The school chosen for the Porsild boys was "the famous Sorø Akademi, a classical and exclusive boarding school for boys in the beech forests of Zealand southwest of Copenhagen," where it is said that Erling arrived wearing kamiks, like any young Greenlander who found regular shoes uncomfortable, and had his dog team whip taken from him for using it to remove the blooms off the headmaster's prized rosebushes.

He received the equivalent of a high school education at the academy, passing "the so-called 'Realeksamen,' giving admission to further education at the

several colleges for agriculture, commerce, technology, pharmacy, art etc. but not to ... University. It is also the final college examination for people going to railway, telegraphic or postal service." Had he wished to continue on to University, he would have had to complete another three years to reach the level of the "Gymnasium" diploma to qualify for entrance.

Instead, Erling returned to Greenland where he helped his father with clerical and scientific work for the next two years. In 1918, he assisted the senior Porsild in his botanical investigations of Northern Strømfjord and the district of Egedesminde, in preparation for their joint publication on the flora of Disko Island and the adjacent coast of West Greenland. Much of their coastal exploration was in winter, by dog sled. "He knew the nature of Greenland fairly well, especially the higher plants, also the more difficult genera and he was a useful photographer, ran a motorboat and a dog sledge and so on," approved his father.

"I always favoured the idea to see my sons take up my own work," Morten Porsild wrote wistfully to fellow botanist, Dr. Merritt L. Fernald at the Gray Herbarium at Harvard, in 1922, "but to Erling, who wanted to see more of the world than Denmark and Greenland, it seemed to be to[o] slow a route, and, early ripe as he was, he turned his mind upon commerce, without losing his interests in science." In 1919, when he had turned eighteen, the younger Porsild son

... entered the office of one of our greatest Trading Co.'s where he was prepared for company service abroad, especially in South America. But unfortunately he got the Measles, was not carefully treated and gradually got Pneumonia combined with Influenza and he had to stay nearly nine months in hospital and sanatorium and at last he went still one year to Greenland to recover his health perfectly... When he left for Greenland, his company granted him his position for one year, but before the year expired the general decline in business had developed so far that it could not keep its promise and it has been impossible for him to find a suitable post in any other greater firm.

There was nothing else for Erling to do but to work as an unofficial assistant at the scientific station. "He has helped me very much," his father said, "in finding and identifying the very minute seedlings of arctic plants, in collecting seeds for my work and he wrote a small paper, *Sur le poids et les dimensions des graines arctiques*... We have in the press a joint work on the Flora of West-Greenland

from 66°71' N. L. and during the summer he was traveling manager, boat captain and interpreter for Professor A. C. Seward from Cambridge, England and his assistant, who made a trip to Greenland, chiefly for collecting Plant Fossils.” Already his younger son was showing signs of his facility with writing up what he saw while travelling for “At the same time Erling investigated the Flora of some hitherto not visited parts of West-Greenland and has a paper of 30–40 pages on the Flora and Vegetation ready for printing.”

Seward thought highly of his young companion in the summer of 1921, finding him invaluable both as an interpreter of the Eskimo language and as a guide in their botanical work. “I was very much impressed by his extraordinarily keen powers of observation; I never met a man with a keener eye for plants. He has a very good knowledge of the flora and is very much interested in the scientific study of vegetation in the field. He is, in my opinion, a naturalist not only by training but by instinct.” Seward felt that the young Porsild was exceptionally well qualified to act as a leader of a scientific expedition, “qualified for his responsible duty not only by his scientific knowledge and enthusiasm but by his practical acquaintance with boats and engineering, and with other matters of importance to travelers in a country where success depends upon resourcefulness and self-reliance.... I feel confident that any expedition with which Mr. Erling Porsild is associated is likely to meet with success so far at least as success depends upon the personality of the leader.”⁹

Erling Porsild’s next project did not meet with success, however. In the winter of 1921–22, he and his older brother applied to the Danish Government for funds to conduct a re-location program of West Greenland families to the uninhabited east coast of Greenland. Setting a precedent for later work together, the project was divided between the brothers so that the more aggressive and outgoing Erling took on administration, including handling the press and meetings with government officials and politicians. Their father told Fernald that the matter had stirred the local press and public very vividly, but, “owing to the general shortness of money and also to political intrigues,” they did not succeed. Nevertheless, the project acted as a valuable training ground for future endeavours in which Erling would be the leader and spokesman and Robert Thorbjørn would act as second-in-command.

While the brothers were engaged in the re-location project, Morten Porsild made a trip to North America, stopping off at the Victoria Memorial Museum in Ottawa in March to see Dr. Rudolph M. Anderson, Chief of the Biology Division, and his old friend and botanical colleague, Dr. M. Oscar Malte, in charge



M. P. Porsild, Disko Island, Greenland, 1923 (Photo: Lt. L. T. Burwash, LAC, detail from PA-99032)

of the National Herbarium of Canada, before continuing on to Cambridge, Massachusetts, to see Professor Fernald, and to Chicago to visit Professor Cowles. From there he travelled to Sweden and finally Denmark, where he was required to write some reports about the northern station.

On 1 June 1922, he wrote to Fernald from Copenhagen to complain how difficult it was for a lover of nature to have to sit at a desk all summer and spend his time with “tedious administrative scribbling.” In the same letter, he said that his second son had asked him about the possibilities of continuing on with science in America. What opportunities would there be, he wondered, for Erling to study and at the same time earn his living in the “country of unlimited possibilities”? He regretted that, although his salary was sufficient for Greenland, it was not enough for him to help his children much.

“I especially remember you talked some times about your difficulties in getting young American students of Botany to keep to taxonomic and floristic investigations,” he said. “Do you think there would be any possibility for my son to exist in some university city by doing clerical work in botanical museums or in assisting professional men in their collecting and preparing plants for herbaria and so that there be time for studies too. As he is now only familiar with the arctic flora, there will be, for instance, in New England a great number of common plants unknown to him even to families. But in northern or alpine sections f. inst. [for instance] Labrador, Alaska or the Rockies I think he would be able to make useful collections at once.”

Morten Porsild also wrote to Cowles in Chicago, and Anderson and Malte in Ottawa, enclosing a copy of his letter to Fernald and Seward’s letter of recommendation. Malte replied 19 July 1922: “Concerning the possibility of finding a suitable position for your boy in Canada, I must frankly say that much to my regret I do not see any great prospects for such a proposition.” He felt that Harvard or Chicago would be more logical places for him to go as he would be able to avail himself of the educational facilities offered which he could not possibly do if engaged by the Museum in Ottawa where there was no university

that would suit his needs. He also mentioned that a law had been passed by the Canadian Parliament two years earlier to the effect that preference for appointments to Government positions had to be given to returned soldiers. "This means of course that at present there is practically no chance whatsoever for any one who is not a Canadian to obtain employment with the Government unless he possesses extraordinary qualifications."¹⁰

In the end, it was the older son, Robert Thorbjørn, who went to America, where he did a number of odd jobs in the Chicago area, including building shipping crates for Sears Roebuck. He began to call himself by his English-sounding first name, Robert, and soon became known as Bob Porsild.

Erling remained behind in Greenland. He became attached to a young Greenlandic midwife, Hjerte Jorgensen, who bore him a daughter whom they named Edith. The wedding was planned for when his father returned but Hjerte died of typhoid fever in Jacobshavn before it could take place.

In 1922, Erling was officially appointed to the position of assistant botanist at the Danish Biological Station, where he worked until 1925. His duties included field collection and original botanical research under the direction of his father, from whom he had already learned systematic botany, morphology, and ecology. He reported that he looked after the herbarium, took daily measurements of solar radiation and meteorological observations and did all the micro-photographic and photographic laboratory work.

To the young man who dreamed of travel and work in faraway, sunny lands, it must have seemed that he was destined to spend his life in Greenland forever, but, at last, in the winter of 1925–26, Erling finally got his wish to leave the northland to work and study at a southern university.

Leaving his little daughter in his family's care, he sailed for Denmark. Under Professor C. H. Ostenfeld, whose lectures in arctic systematic botany at the University of Copenhagen he audited that winter, he worked as Assistant Junior Curator at the Botanical Museum at Copenhagen. Ostenfeld wrote to Malte that his protégé was "very keen on arctic botany, but he wants a good humour and is rather suspicious."¹¹ Doubtless young Erling was trying too hard and seriously to fulfill his duties because he felt that time was passing him by and he seemed to have so little choice or opportunity for fulfillment. This might be his last chance to find employment in a field he understood outside of having to go back again to Greenland.



CHAPTER TWO

MALTE AND THE NATIONAL HERBARIUM

There is no question that the Chief Botanist of the National Herbarium of Canada would have liked to have Erling Porsild as his assistant in the summer of 1922. Apart from any wish to be helpful to his old friend Morten Porsild, Oscar Malte was, quite frankly, overwhelmed with work. Already he had spent many years, while Dominion Agrostologist at the Experimental Farm, assisting his predecessor with the herbarium overload. James Macoun complained in 1919 that since his father had gone to live in the west, he had been quite alone as far as botany was concerned so that in consequence unstudied collections had accumulated and he had done very little in the distribution of specimens. His death the following winter had left the botanical section of the Victoria Memorial Museum in an even greater state of disorganization. Additionally, as Rudolph Anderson, Chief of the Biological Division, lamented “It is a great loss to the institution and to science in general that Macoun had not got around to publish more.... Of course the specimens are here, but they can never be worked up so well without Macoun.”¹

In picking up the work of the herbarium on 1 November 1920, Malte was truly “quite alone.” Faced with a number of urgent tasks, he soon began to make it plain to his superiors that he needed more assistance. In the first place, he had found it might be necessary to revise an estimated 20–25 per cent of the names in the collection, a job entailing hours of work with the specimens involved, in response to changes in botanical nomenclature resulting from the adoption of rules passed by the International Congress of Vienna in 1905. Meanwhile, there was the regular work of the herbarium to attend to, which included exchanging plant specimens with institutions in the United States and Europe and



M. O. Malte (CMNA)

contributing botanical assistance, mainly in the area of identifying plants and giving expert advice, to other departments, private institutions, and individuals from all parts of the country. Recent collections from the Geological Survey and other parties had to be determined and incorporated into the permanent collection that now numbered around 100,000 sheets of vascular plants.

Malte estimated that some 60–70 per cent of the herbarium specimens had been collected by the two “indefatigable collectors,” Professor John Macoun and his son James. Most Dominion Government botanical survey work had been done by the Geological Survey, which had always been an exploring department in a wide sense. Parties from his division had not only studied geology and related subjects in all parts of Canada but had collected a great deal of information on the flora and fauna as well. Among notable explorers who had made useful contributions to the herbarium, Malte named G. M. Dawson, who had made extensive botanical collections in British Columbia, R. Bell in

the Northwest Territories adjacent to Hudson Bay, J. W. Tyrrell in the Northwest Territories, A. P. Low in the Labrador peninsula, and, more recently, D. D. Cairnes in the Yukon Territory. These men were all geologists, but nevertheless their contributions to the knowledge of Canadian flora were exceedingly valuable. In addition, the Canadian Arctic Expedition of 1913–18 had brought back a fair collection from the Arctic coast. In recent years, considerable botanical contributions had come from geological survey parties in the Mackenzie River district, Labrador, Baffin land, and Ellesmere land. Yet, so far, the surface had only been scratched in every district of Canada. As an example of how incomplete the surveys had been botanically, the Chief Botanist cited the results of a Gray Herbarium Expedition to Nova Scotia in 1920 that netted 122 additions to the flora of Nova Scotia. Of these, 110 were previously unknown in the flora of Canada. “And this in one of the oldest and best settled provinces,” he exclaimed. “Comment is unnecessary.”

Malte recognized that much more exploration and collection would have to be done by trained botanists in order to make the herbarium truly national in character and extent. Species known from several provinces were not represented in the collection. Using only Manitoba as an example, of 41 fern species reported only 22 were in the herbarium, and of 26 orchid species from the same province only 16 were represented among the sheets in Ottawa. Active field-work such as that done by the Macouns would have to be continued.

Above all, something would have to be done with the accumulated material to make it useful. He complained to Dr. Charles Camsell, Deputy Minister of the Department of Mines, 20 December 1924: “A Handbook of the Flora of Canada is badly needed but, without the help of competent assistance, I am afraid that it will take a long time before it can be completed. In the meantime students of Canadian botany will, as in the past, have to acquire botanical knowledge of their own country through the medium of floras published in the United States, a rather anomalous condition which, I may say prompted visitors to the meeting of the British Association for the Advancement of Science, held in Toronto last summer, to express astonishment, not to say amazement.”

Malte did not elaborate for Camsell the sad state of unwritten or unfinished Canadian Floras that he laid out for Professor F. J. Lewis of the University of Alberta in Edmonton, who would report on the botanical survey work of Canada at the Imperial Botanical Conference in London in the summer of 1924. Very little had been written by the Macouns since the publishing of *Catalogue of Canadian Plants*. Shortly before being stricken by paralysis in 1912,

Professor Macoun had had several Catalogues more or less ready for publication, including Floras of Nova Scotia, Ottawa District, and Vancouver Island. During his last years, James Macoun had been going over the material from the Canadian Arctic Expedition and working on the Flora of Jasper Park, but he left no manuscript on the subject. The most important recent contribution to the Flora of Canada had been Harold St. John's work on the north shore of the Gulf of St. Lawrence in 1922, and the reports of the Canadian Arctic Expedition (1913–18) of which two were still in press. Since becoming attached to the National Herbarium, Malte had been working on the Ottawa Flora, which he hoped to have ready for publication within a year.²

Publishing problems included not only lack of time and botanical assistance but the problem of nomenclature. Since 1905–6, botanists in North America had been caught between the dictates of the International Code from Vienna and the school of nomenclature known as the American Code which was championed by Nathaniel L. Britton of New York. As Malte explained it:

The necessity for an extensive revision of the names obviously means delay in the publication of monographs and sectional floras, and still more so in the publication of a revised Catalogue of Canadian plants. I may add that the publication, at present, of a list of all Canadian plants so far known, as has been suggested in some quarters, would place its author in a rather awkward position. As I have intimated, the National Herbarium is following the Vienna International rules of nomenclature. One of these rules stipulates that after Jan. 1st. 1908, all new species must be published with a diagnosis in Latin. Otherwise they are deemed invalid. As quite a number of species of Canadian plants have been described without a Latin diagnosis by United States botanists after Jan. 1st. 1908, it follows that these names are not acceptable to Canadian botanists following the Vienna rules. The position is rather awkward but it is hoped that the question of validation of the said names will be settled at the next International Botanical Congress which ... will be held in the United States sometime during 1926.³

In spite of the difficulties involved, Malte hoped that the National Herbarium would be able to promote the knowledge of Canadian botany not only by encouraging as complete a botanical survey of the Dominion as possible but also by publishing monographs of genera and families as represented in Canada

and by publishing or assisting in publishing sectional Floras which eventually could be consolidated into a complete Flora of Canada.

Along with outlining his hopes for the herbarium to the Deputy Minister of the Department of Mines in December, 1924, Malte reiterated his request for the assistance of a trained botanist, adding: "May I be permitted to say, quite frankly, that it is a physical impossibility for one man single-handed to cover a territory as large and as varied geographico-botanically as Europe. This was presumably also realized by the Department when I was appointed Chief Botanist, and not Botanist pure and simple." However, even when his request was approved, it soon became obvious that a good trained assistant would be hard to find. The qualifications of applicants in the summer of 1925 clearly demonstrated that systematic botany was not high in the priority of Canadian university students. Only one candidate had had any specific training in taxonomic botany. Two had made reasonable plant collections in two or more summers and one had made a small collection when attached to a topographical party. One was specializing in zoology and another had no field experience as a botanical collector.

The only possible candidate was a Mr. W. R. Watson of Toronto who had sent Malte a promising collection of grasses and sedges in the fall of 1922. By 1925, he had had three years experience in systematic collecting and plant taxonomy and was quite capable of independent botanical surveying. He was to prove a great help to Malte as a field assistant on a temporary basis, but even Watson's interest, enthusiasm and background studies were not enough for him to secure permanent employment in the herbarium. With the same regrets that he had had when writing to his old friend in Greenland at being unable to help his son Erling, Malte wrote to Watson's professor in Toronto: "Concerning Mr. Watson becoming attached to the National Herbarium at Ottawa in a permanent position, I may just as well be perfectly candid. His chances, to my opinion, are nil on a B. A. degree only, no matter how much I would personally like to have him join us." He felt that in order for Watson to have a scientific position with the National Herbarium he would need to have, if he had judged the signs of the times correctly, a PhD degree.⁴

Despite a lack of assistance, Malte remained hopeful that the day would come when he could complete some of the sectional Floras of Canada, even if it required outside expert help. He discussed this idea in 1925 with Professor Ostfeld of Copenhagen, under whom young Erling Porsild began to work and study that winter, and, in January 1926, Malte was given official approval of a

proposal that he and Ostenfeld would co-operate on a Flora of Arctic Canada. Writing on 2 February 1926 to his future co-author, a world authority on Arctic flora, Malte said: "You will no doubt be amused when you read from the [enclosed] memo that I 'can count on his (your) hearty co-operation,' as if I would be the chief contributor to the proposed publication. As you know, I have not been to the Arctic and could therefore not help you as much as I would wish to. However, I will do my best."

The first decision regarding the proposal involved defining the territory to be covered by the new Flora. "I suppose it would be all right," said Malte, to limit the territory to north of the tree line on continental Canada, extending from the mouth of the Mackenzie River east to Churchill, down the western shore of Hudson Bay to the entrance to James Bay (omitting the bay itself), up the east side of Hudson Bay to the mouth of Ungava Bay, then east and finally south along the Labrador coast as far as Hamilton Inlet. No mention was made at this time of including collections from Baffin Island or the small islands in Hudson Bay but there seemed to be tacit consent that this territory would be satisfactory.

By the time a formal agreement was put in place, the stated aim of the co-operative effort was to consolidate knowledge of the Canadian Arctic flora that was presently scattered around in various publications and herbaria. A complete list of Arctic literature would be included and a critical study made of all accessible herbarium material. Ostenfeld and Malte would divide the work, with the former mainly covering European sources and Malte concentrating on North America and Great Britain, plus each would tackle areas of his own botanical specialization. The Flora was to be competently illustrated, the language as simple as possible while still adhering strictly to scientific accuracy, and it was expected that the work would be completed about 1930.⁵

It depended on the territorial understanding as to whether Ostenfeld had the Flora of Arctic Canada in mind when he began to support a plan that winter for Erling Porsild to make a two-year botanical expedition to Baffin Island, recommending him to the Danish Government for the necessary financial support. It was certainly in the works when Erling left Copenhagen for Canada and the United States prior to March 1926 to prepare himself for the expedition. His first port of call was the National Herbarium in Ottawa, where he and Malte met for the first time. Then he was off to the Gray Herbarium at Harvard, the United States National Herbarium in Washington, D.C., and the herbaria of the New York Botanical Gardens and the University of Michigan in Ann Arbor.

These visits were valuable not only for viewing the Arctic collections, with species with which he might be familiar or unfamiliar, but also for the important scientific contacts he would make. Many of the herbarium botanists, like Malte, would be his father's old friends, of whom he had heard so much over the years but never met in person, and perhaps he could look to some of them for financial support.

While he waited to hear if his plan to work on Baffin Island would become possible, he visited his brother Bob in the Chicago area. As they talked about their lives and what might happen to them in the future, neither brother could have dreamed that during this brief period Erling had become the object of a frantic search by Malte on behalf of the Department of the Interior of Canada and that both of them were about to embark on the biggest botanical venture of their lives. Malte, should his search for Erling be successful, would get the collectors of his dreams for his Flora of Arctic Canada.

This extraordinary turn of events came in the form of a request from the Department of the Interior, asking Malte to undertake a search for two Canadian botanists, skilled in taxonomy, botanical collecting, and vegetation surveying, needed for a program of introducing reindeer into the Northwest Territories from Alaska. His first reaction was to suggest that the only man who was tailor-made for the job was the young Danish botanist from Greenland who had passed through Ottawa a few weeks earlier. His own experiences in looking for a herbarium assistant had shown him that there was little hope of finding a qualified candidate among recent Canadian graduates. On the other hand, his candidate, although he had specialized in Arctic botany under the finest tutors and had had the advantage of having lived in the Arctic a great part of his life, was not a Canadian, nor did he have a university degree of any kind, and as far as was known had had no experience with the reindeer industry.

The question of whether the candidate should be a good botanist or a good reindeer man had already come up for discussion. Implementing the recommendations of the Royal Commission to Investigate the Possibilities of the Reindeer and Musk-Ox Industries in the Arctic and Sub-Arctic Regions of Canada had fallen to the lot of a capable mining engineer who had recently been appointed Director of the newly created Northwest Territories Branch of the Department of the Interior. To O. S. Finnie went the job of creating sanctuaries for musk-oxen, investigation of the wild caribou herds, and, if botanical researches indicated that the project was feasible, the introduction of domesticated reindeer into the Canadian Arctic.

Finnie was a man with deep concerns about the people of the territory. He knew that the conditions reported by Knud Rasmussen's 1921–24 expedition to the Barren Lands were a national disgrace and that the government was shirking its responsibilities to its native peoples. However, his hopes of improving their health and welfare and educating and training them so that they could take part in the development of the Arctic on an equal footing with non-natives were frequently thwarted by the limits of his mandate to rule and by the insistence of his superiors that the Canadian Eskimos should be maintained in a status quo which would not entail considerable expenditure of public funds. In the Royal Commission measures he now had a tool for genuine conservation and training, of direct benefit to the local people, if they could be persuaded to take up reindeer herding as the Alaskan Eskimos had done.

One of his agents in the field, S. T. Wood, warned him on 1 December 1922 that, should the reindeer be placed at a site being considered on the east side of the Mackenzie River near Kittigazuit, a site chosen for a present lack of caribou and accessible to the transport of a domestic reindeer herd from Alaska, "it is not to be counted on that the Eskimos would look after them or could be encouraged to herd or care for them in any respect," a sensible warning in view of the length of historical time it could take for a traditional hunting people to be transformed into herders. Nevertheless, with the desperate need for reindeer meat and skins in areas like Yathkyed Lake where people starved to death nearly every winter for lack of the caribou on which they depended, the intention of the Department of the Interior was to establish a herd east of the Mackenzie River Delta and then move gradually further eastwards, distributing offshoot herds in a progressive pattern, moving towards the areas of real need as men were trained to do the herding job.⁶

Two proposals to deliver reindeer to the Mackenzie River Delta were received in 1925, of which the one from the Lomen Reindeer and Trading Corporation, offering to deliver not less than 2,000 animals to the chosen site at about \$125 a head, was the most attractive. In January 1926, W. W. Cory, Deputy Minister of the Interior, stopped off in New York to see the Lomen Brothers' representative, Leonard D. Baldwin, and confer with Dr. Nelson, the head of the U.S. Biological Survey in Washington, D.C., Cory was so impressed by the American officials and the apparent success of the Alaskan reindeer industry that Finnie was instructed immediately to consider the project as ready to proceed and asked to find a botanist, or someone who was thoroughly familiar with reindeer feed, who could be sent into the country and report whether it

contained sufficient forage. Malte's name was suggested as a botanist within the Department of Mines who might be able to do the reindeer work, but Finnie objected: "Dr. Malte ... may be a very good Botanist but he does not look to me like a particularly good traveler and I doubt if he has had any experience in reindeer work.... I am not altogether in favour of securing a Botanist from one of these Departments. I do not think the qualifications as a Botanist is sufficient. I believe we would get better results if we could get a practical reindeer man who knows the kind of feed that the reindeer live on, and one who is a good traveler and could go through the country and size up the situation accurately and quickly."⁷

A meeting was held on 2 March 1926 between officials of the Departments of Mines, Agriculture, and the Interior, to discuss the reindeer project. Conference members were informed that, on the advice of Dr. E. W. Nelson of the U.S. Biological Survey, it had been suggested that at least two competent botanists be secured in Canada to make a study of the kind of reindeer pasture and general range features of localities in Alaska where reindeer thrive, and then proceed to selected points in the North West Territories to decide, from their experience in Alaska, on the suitability of such areas for reindeer culture. Finnie's suggestion that a reindeer man might be more suitable for the task was obviously overridden as the officials of the Department of the Interior were inclined to treat the Americans as the unquestioned experts in the field.

Malte, who was present at the meeting and recognized the advantages to the National Museum, should a qualified Arctic botanist be employed in this little known terrain, pressed strongly that Erling Porsild's services should be obtained. There was no denying that if Finnie could not have his reindeer man, the next best thing would be to have a man who knew how to handle a dog team, could speak the Eskimo language, and was thoroughly versed in the hardships of the North as well as being well qualified botanically. It was decided that the Chief Botanist should write fully to the young Dane and ascertain whether he would be interested and what salary he would require. At the same time, since it was preferable that the work should be undertaken by a Canadian if at all possible, it would be proper to approach the different universities in Canada to see which graduates, if any, would be willing to undertake botanical research in the North for a period of two years.⁸

Malte duly wrote to all the major universities in Canada, with the predictable disappointing results. Professor MacClement at Queen's said "Systematic Botany is not recognized by our students as a profession, and as they are nearly

all looking forward to self support, they direct their courses in the line of practical self help. I think you will find few young men in this country with the qualifications you require, and who are at the same time unemployed or free to take a new position.” At the same time as writing to the Canadian universities, Malte also wrote to Professor J. M. Coulter at the University of Chicago, wondering if Erling had called at their herbarium to study their material or if Coulter would be able to help in locating him. “I am anxious to get in touch with him as soon as possible,” he said.⁹

There would be no reply from Coulter for three weeks while the negative replies from all the leading universities were piling up on Malte’s desk. That no graduate student could be found in the whole of Canada who was competent to undertake independent botanical field research warranted taking up the question of botanical training generally, Malte felt, and he pursued the subject with vigour from that date. Yet he could not help but feel that in the Canadian Reindeer Project he had found an unexpected gift from heaven. If by going out of the country to satisfy the needs of the Department of the Interior he succeeded in sending Morten Pedersen Porsild’s son, with all his inherited Arctic botanical experience, into the Continental Northwest, he would be assured of obtaining the best possible collection of arctic and subarctic plant specimens from what was then one of the least known botanical areas in Canada.



CHAPTER THREE

CALL OF THE NORTHWEST

It was 23 March 1926 before the Chief Botanist at the National Herbarium of Canada was able to write to his friend's son to ascertain his possible interest in the reindeer proposal.

"My dear Porsild," Oscar Malte wrote:

The Northwest Territories Branch of the Dominion Department of the Interior is now earnestly contemplating the question of stocking sections of arctic Canada, particularly to the east of the mouth of the Mackenzie river, with reindeer, probably from Alaska. The Department has communicated with the United States Government with the view of ascertaining the primary reasons why the raising of reindeer in Alaska proved a success right from the start and has been advised that one of the chief reasons was that trained botanists were employed to survey Alaska before the reindeer were introduced there. Profiting from this experience, the Canadian Government is anxious to engage two well trained botanists to explore sections of arctic Canada for the purpose of finding what parts, from a grazing point of view, might be suitable for reindeer raising. This investigation, it is estimated, will take two years. Previous to going to arctic Canada, however, the said botanists would take a trip to Alaska where arrangements have already been made for them to make themselves acquainted, under the guidance of U.S. reindeer experts, with the conditions under which reindeer raising is a success.

At a meeting held a short time ago in the office of the Deputy Minister of the Interior I mentioned you as in every way qualified for

the job and have been requested to ask you if the proposed trip to Alaska and ... two years' exploration in Arctic Canada would appeal to you. Please let me know, at your earliest convenience, if you would feel inclined to undertake the work in case the Department of the Interior should officially make you a definite offer.¹

Malte's letter reached Erling Porsild at a time when he was in dire need of encouragement. He had been ill with flu and his plans for Baffin Island had not been going well. Privately, he confessed to Malte that he had often wished to be back in Ottawa after arriving in Chicago, a town he was not "crazy about." He had heard nothing from home and felt that the chances were not great that they could or would be able to help him with his project. The offer from the Canadian Government and Malte's support had been the first light he had seen in a long time.

His official reply expressed interest but explained that he was not free to accept the offer immediately. "Ever since I left Ottawa," he said,

... I have been working hard to make it possible to make the expedition to Baffins Land, but I cannot say that hitherto my efforts have been leading towards an ultimate success. Most of the Museums to which I have applied for financial backing are quite willing to buy my collections when I come back, but very few want to advance me the money which I so badly need for equipment, and, I willingly admit, that sometimes I have been on the verge of giving up everything. The summertime to Ponds Inlet, however, I could arrange for now, but that would be rather unsatisfactory, because only part of my work would be completed during the three weeks I would have at my disposal. If, therefore, the Danish Government will not back me either, I shall be compelled to give up Baffins Land for the present anyway, and then, I think, nothing would appeal better to my desires than to take the trip to Alaska and the subsequent two years of exploration in Arctic Canada.

He was leaving the next day for the University of Michigan in Ann Arbor, where he was to give a lecture on Greenland botany at the invitation of Professor William H. Hobbs of the Geology Department. Hobbs had offered him a position as temporary assistant botanist and was trying to persuade him to

join his expedition to Greenland the following summer. Erling was not keen about the latter proposal but was inclined to accept the job offer to help with finances.²

Reaction to his letters followed swiftly. On April 3, Finnie cabled Erling Porsild, asking him if he could meet the Deputy Minister of the Interior in Chicago about April 7. According to Finnie, at their meeting Cory was “so impressed that he took Mr. Porsild to Washington and there interviewed the officials of the Biological Survey. They spent a whole day with these officials going into the reindeer question and were much impressed with the knowledge Mr. Porsild had of the North and his qualifications for investigating the reindeer problems. While at Chicago Mr. Cory also met Mr. Robert T. Porsild.... These brothers wish to work together and as it is necessary to have two men on this work we cannot do better than to employ them both.” After leaving Washington, Erling called on the Lomen Brothers in New York, where Baldwin was also impressed by the young man’s grasp of the situation. He also spent an evening with Vilhjalmur Stefansson, perhaps arranged by American company officials or possibly on his own.³

The suggestion that Erling should meet the charismatic and controversial Canadian Arctic explorer would certainly not have come from Finnie in the Department of the Interior, who knew only too well that Stefansson’s impetuous and precipitous plans for a reindeer industry on Baffin Island had led to the kind of disastrous failure that he was now trying to avoid by his careful planning with the Porsild brothers. Nor would it have come from Rudolph Anderson, Chief of Biology at the Victoria Memorial Museum, who had successfully accompanied Stefansson on their 1907–12 biological and archaeological collecting expedition (as described by Stefansson in “My Life with the Eskimo,” 1914) but had been a violently dissenting co-leader with him on the Canadian Arctic Expedition of 1913–18. That expedition had got off to a bad start due to Stefansson’s lack of organization and poor leadership skills and went from bad to worse when the leader deserted the group stuck on board an ice-bound ship and went off almost on his own, not for help but to live native-style on drifting ice to make triumphant discoveries of the last major land masses in the Arctic (Lougheed, Meighen, Borden, and Brock Islands) while several members of the party died. Anderson is reputed to have said bitterly to Stefansson at the end of the later expedition “I have wasted three years of my life with your fool ideas” and he never spoke to him again.

Erling would also have been aware of other controversies that raged around the reputation of his charming host, whose theories about a race of “blond Eskimos” and his book on apparently easy survival in “The Friendly Arctic” either had brought him public adulation or had been dismissed by other explorers such as Amundsen as “palpable nonsense” or “fantastic rot.” From his own experience in Greenland, Erling knew that it was perfectly possible to live like the northern people did, although like Amundsen, and indeed Stefansson himself, he was equally aware that sometimes the food sources failed and the stranded Arctic dwellers were known to starve to death in that often less than friendly land.

However, the meeting was obviously a success. Many years later Erling was to write to Stefansson’s widow that he was grateful for the friendly encouragement and wise counsel given to him by the older explorer that night in his Greenwich Village apartment. “Before leaving him late that evening he had told me so much about the parts of the Arctic that I was soon to see myself. With his farewell wishes he presented me with a set of his books, most of which followed me on my long trek by dogteam through Alaska and the Mackenzie District.”²⁴

The brothers reached Ottawa within the next two weeks and made a good impression on the officials in the Department of the Interior, where they were given temporary two-year appointments for the reindeer assignment. Erling as Botanist was to receive \$2,400 annually, Bob as Assistant Botanist \$1,920, plus all necessary travelling and living expenses from the moment they left Ottawa. Bob Porsild later said that he thought it was “a good offer for those days” and Malte said “Not too bad a proposition for two young fellows!”²⁵

They were well received in the Victoria Memorial Museum where they were not only reunited with Malte in the National Herbarium but were introduced to several members of the staff in the Anthropology, Biology, and Geology Departments. Although the impressive building on Metcalf was relatively new, the Museum itself was an old institution that had begun and still remained as part of the Geological Survey of Canada. For this reason, it was placed under the Department of Mines. Much of the Geological Survey mapping and contributions to science bulletins would be available for the Porsilds to take with them in their exploration in the north, and there would no doubt be some pressure for them to remember the Museum with bird and mammal and fossil collecting as a sideline to their botanical collecting and reindeer duties.

R. M. Anderson, in his capacity as Chief of the Biology Department but also because of his knowledge of much of the country that the Porsilds would



R. M. Anderson
(CMNA)

cover, was perhaps the most personally interested staff member at the Museum in the results of the investigation. In earlier years, he had covered the territory from Barrow in north Alaska to the Mackenzie River Delta, to Horton and Coppermine rivers east along the Arctic coast, and inland across the Barrens to Dease Bay on Great Bear Lake, while collecting natural history specimens in Stefansson's 1908–12 expedition to the area. He had returned to the north again for the Canadian Arctic Expedition of 1913–18 and knew only too well how much was left to be done in the collecting field. He was particularly interested in acquiring biological specimens from the area to be covered by the Porsilds' later reindeer pasture reconnaissance once they had left Alaska and encouraged them warmly to do what they could for the Museum.

It was Anderson who wrote to their father on June 25 with the news of their appointment, adding "Both of your sons were in Ottawa for some time this spring before they left for Alaska, studying museum material and gathering

equipment, and we got pretty well acquainted with them.” The opinion of all was that the young men were ideally qualified for the work for which they had been chosen.⁶

On learning of the official appointment, Malte had lost no time in asking the Acting Director of the Victoria Memorial Museum, Dr. W. H. Collins, to approach the Department of the Interior to request botanical collections for the Department of Mines. He pointed out that while he presumed that the principal task would be to locate suitable feeding grounds and areas best suited for raising reindeer, the very nature of the work would call for a close study of the vegetation in general. Since the Porsild brothers had been keen students of Arctic botany since childhood, “there is every reason to believe that they both could and would contribute much to our knowledge of Canadian Arctic botany if given reasonable opportunities to make botanical collections.”

Collins passed this request on to Cory on 22 April 1926. The Department of the Interior would be doing the National Herbarium of Canada a very great service by allowing the Porsilds to make systematic and full collections of botanical specimens so far as this would not interfere with their regular work. The value and completeness of the forthcoming Flora of Arctic Canada by Malte and Ostenfeld would be enhanced if additional information and specimens from Western Arctic Canada could be secured. If this collection was possible, the National Herbarium would gladly supply all necessary materials.⁷

When the permission was granted, Malte was more than glad to give Erling a small outfit to take with him to Alaska and a larger outfit to be sent to the RCMP in Aklavik to await his arrival the following spring. “Please keep in mind,” he told the young botanists, “when collecting for the National Herbarium, the advisability of always securing as abundant material as possible” so that duplicate sets could be deposited with the British Museum, Kew Gardens, the Botanical Museum in Copenhagen, the Danish Biological Station at Disko, and the United States National Herbarium. They should pay particular attention to critical genera, make notes as to frequency and edaphic preferences, and collect species from as many localities as possible so that adequate knowledge could be gained of the general distribution of the plants of Northwest Arctic America.⁸

Elated by the success of his efforts, Malte had had the difficult task of writing to tell Ostenfeld that he was sorry that news of the generous Carlsberg Fund grant of 5,200 Kr. secured for the Baffin Island expedition had arrived too late since Erling and Bob Porsild had been employed to do two years botanical

survey work in the Barren Grounds. He added: "You may rest assured that I have not lost any opportunity to impress upon the Department of the Interior the necessity for the Porsild brothers to make vast botanical collections.... With the collections in Copenhagen and Ottawa, with the additional material from Mr. Soper in Baffin Land, which I expect to have the coming fall, and from the Porsild brothers during the next two years, we should have some nice material for the 'Flora of Arctic Canada.'"⁹

It was then Finnie's turn to address them about their real mission in the Northwest. On the eve of their departure, he wrote:

The object of your investigation will be to ascertain the suitability of the northern part of the MacKenzie District for the maintenance of reindeer. It is felt that the Eskimo cannot survive in our Northern country unless there is abundance of caribou or reindeer for food and clothing, and without the Eskimo those areas will be of little value. We desire, therefore, to learn as much as possible of this country, with the object if your report is favourable, of purchasing herds in Alaska and driving them across country to whatever areas in the Mackenzie District may be selected by you....

It is thought that your investigations in Alaska will occupy five or six months and that you should, in proceeding to the Mackenzie District, cover, as far as possible, the ground which could ultimately be traveled by a herd in transit from Alaska to the Mackenzie District. However, this matter, as well as other details which must necessarily be decided on the ground, will be left to your discretion. You will be expected to report progress at intervals and whenever you can get in touch by wireless or other communication kindly furnish this office with a report.... This work, to which you have been detailed, is one of extreme importance to Canada, and to the Eskimo people, and I am sure with your knowledge and experience of the North, you will be able to carry it on with satisfaction to this Department and with credit to yourselves.¹⁰

The Porsilds left Ottawa by train on May 20 for Saskatoon, where they met with Seymour Hadwen of the University of Saskatchewan, formerly Chief Veterinarian and Parasitologist of the U.S. Bureau of Biological Survey in which capacity he had been sent to Alaska to investigate the reindeer industry in 1920. He

later told Finnie that he thought they would learn a lot during their visit to Alaska but had strongly advised them against starting out with a dog team from Kotzebue Sound in January for the Mackenzie River, as he felt it would be much safer for them to wait until March before undertaking such a trip.¹¹

From Saskatoon, the young men continued on to Seattle, where they temporarily joined a Lomen Corporation group waiting for the S.S. *Victoria* to sail for Nome. They left for Seward on May 29 where they were met a week later by Lawrence J. Palmer, Biologist in Charge of Reindeer Grazing Investigations for the U.S. Bureau of Biological Survey. They carried with them a letter for Palmer from Nelson in Washington, introducing them as employees of the Canadian Government who would join him in Fairbanks for the purpose of getting an insight into the reindeer business as it was conducted in Alaska.

“I trust you will give these gentlemen freely of the fund of information you have on the subject,” Nelson wrote,

... and that you will try to place them with different reindeer herds that are run in a competent way in order that they may see the practical working of the herds in the field. They should also be given an opportunity to attend a roundup and marking of herds ... to learn the most improved methods of corralling, capturing, and marking the animals. Also they should be shown how the castrating and branding of the reindeer is done, and should be taught as much as possible concerning the forage plants used by these animals, with a special view to the differences between the summer and winter forage and the need of safeguarding the winter forage areas from use in summer in order that the range may be perpetuated.... I am sure you will be able to give these gentlemen a very practical course in the reindeer industry so far as it is possible in the rather brief period they will be with you.¹²



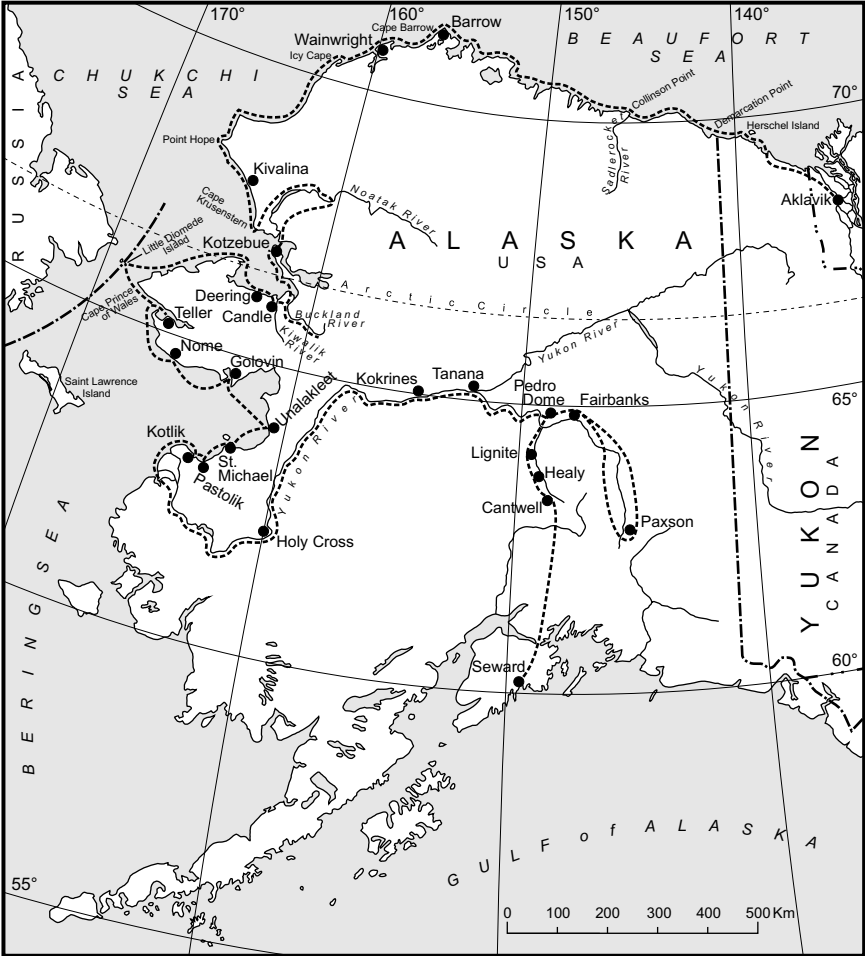
CHAPTER FOUR

IN SEARCH OF REINDEER¹

Lawrence J. Palmer began his reindeer introduction program in June 1926, at Cantwell, east of Mount McKinley National Park, where the Porsild brothers visited the U.S. Bureau of Education reindeer station and made extensive notes and collections.

It was the first time that they had seen the Alaskan reindeer, *Rangifer tarandus tarandus*. Erling Porsild later remarked that the Alaskan reindeer, or “domesticated caribou,” which was the same species as that found across Eurasia, compared favourably in size and weight with the woodland caribou, *Rangifer caribou sylvestris*, and was considerably larger than the barren ground caribou, *Rangifer arcticus arcticus*. The reindeer were generally darker in colour than the caribou, although white and spotted mutants were common in Alaskan herds, the white animals being smaller and less robust. Hadwen and Palmer disapproved of the native practice of keeping white and spotted deer for use in clothing but concurred with the Lapp herders that a few white animals made the herd easier to spot from a distance in summer.²

The animals in the Cantwell herd looked in poor health and were badly infested with parasites. Palmer attributed this to close herding, a practice he disparaged but which was necessary in this area due to the periodic proximity of large herds of caribou. The original herd of 1,200 deer had been driven by Ben B. Mozee from Good News Bay on the Kuskokwim in 1922. There had been maintenance problems when the original Eskimo herders had become homesick and the Indians tried as replacements did not care for the work, but Palmer felt that the present management of one Swede with a few Eskimo and Indian apprentices would succeed. In fact, with mounting problems of wolf predation, of reindeer desertion to the caribou herds when the animals were not given



Investigation route in Alaska, Canadian Reindeer Project, 1926–27 (Cartography: Ragnar Müller-Wille)

constant supervision, and of changes and flagging interest of personnel, the station would be closed down within the next two years.³

The interior rangeland around Cantwell was classified as dry tundra, characterized by woody vegetation (browse), sedge, and lichen that were all important for reindeer forage. The Porsilds made a sizeable collection of Cantwell lichens for identification in the reindeer work. On reaching Fairbanks, these

were sorted into eighty-two types with the help of a small collection that had been identified by G. K. Merrill of Rockland, Maine.

Palmer now suggested that Erling should accompany him on a trip some two hundred miles to the south of Fairbanks to help with grazing reconnaissance. He was looking at the forage value and carrying capacity of the area, in line with his hopes of developing the reindeer industry in the Interior. Since the main roundups on the coast did not start until the middle of July, Erling felt that this would be a good opportunity to learn the methods used in survey work while Bob went a hundred miles down the Yukon River to the Kokrines herd, reputed to be the largest and best managed herd in the Interior.

In his June report to Finnie, Erling said that he planned to spend the rest of the month with Palmer, who had been very kind to them, inviting them to stay at the Biological Station in Fairbanks and placing all kinds of information at their disposal. While carrying on the reindeer study, they were also making fairly extensive collections of lichens and vascular plants and already had about 1,500 herbarium specimens ready for shipment.⁴

To Malte he wrote proudly: "I feel sure you would appreciate the enthusiasm with which we attack the Flora of Alaska. I have just finished a nice job of putting nearly 1000 herbarium specimens on white sheets. At the same time I have been able to make the identification of nearly 90%, which is a good deal more than I expected.... We have about 500 more in the press and expect to get abt. 2500 from the interior before going out to the coast. Particularly the way the arctic and the boreal or rather temperate species are mixed up here in the interior makes the thing very complicated, but at the same time very interesting."⁵

From Fairbanks, the brothers extended their collecting up the hilly Fox road to Pedro Dome (2640') and along the Richardson Highway where the road was built through "low *Picea* swamps with an interesting *Carex* flora." After Bob left for Kokrines on June 17, Erling took the train south to the Broad Pass region and hiked and collected around Healy, climbing as high as 4,000' to almost above the line of vegetation, and returned four days later with five to six thousand specimens.

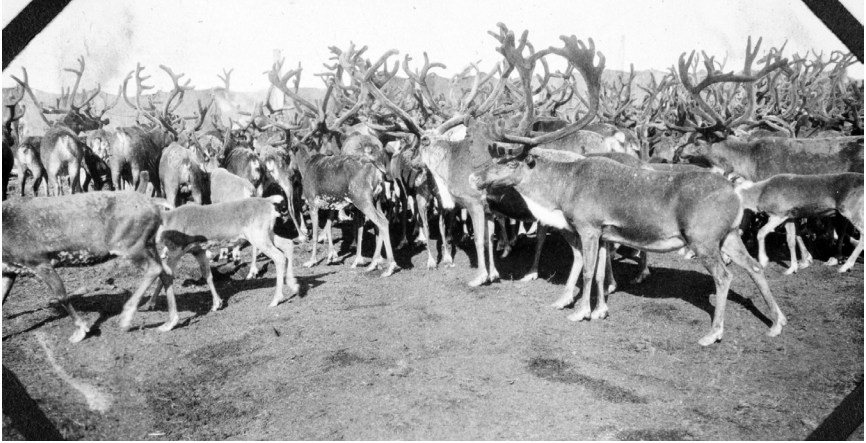
On June 24, he and Palmer set out again on the Richardson Highway, armed with provisions, camping equipment, and gasoline for five or six days. As they reached higher ground, they found that the rivers were swollen from glaciers melted in the hot weather. Roadbeds and bridges had been washed away and there were frequent slides.

Their second day was very difficult, with a wheel nearly falling off and a motor losing so much power that they had to push the car up some of the hills, with roads so narrow that in one eight-mile stretch it was necessary to toss with a driver from the other direction to see who would back up four miles or use pick and shovel to dig a place beside the road to make room for one car to pass. They slept that night at a roadhouse in Paxon where they were charged \$7.00 for the privilege of spreading sleeping bags on the attic floor. They woke to heavy rain, which continued all day. Erling wrote in his journal: "Botanizing is rather disagreeable work today."

By evening they camped at the foot of Miller and Castners glaciers, which they explored the next day. "From the glacier and the bordering hill we had a magnificent bird's-eye view of the Pass below. Country and flora very alpine. Elevation between 6,000–8,000 feet." Back at camp after a hike of at least twenty miles, they were "loaded with good specimens," ready for the return trip the next day. On the way back, they made frequent stops at alpine meadows and good reindeer pastures. With full vasculums and the back seat of the car used as an additional collecting case, they reached Fairbanks shortly after midnight on June 28.

Twenty years later, Erling Porsild was to comment: "My late friend Palmer was a very good reindeer man and possessed a very real and practical knowledge of grazing problems. He was no research man, however, and although he understood what the problems were, he did not know how to deal with the research end. In his grazing study ... he lacked the necessary botanical knowledge to describe the vegetation."⁶

More serious problems connected with Palmer would soon be apparent when he escorted his young charges to learn about reindeer work at Pastolik. Erling and Palmer left Fairbanks for Nenana by train on July 1, transferring to the S.S. *General Jeff C. Davis*, a sternwheeler of about 100 tons that was one of the last two riverboats to ply the Yukon River between Nenana and Holy Cross. Word came from Bob in Kokrines that he would join them in another week. Erling collected plants at the back of the village of Holy Cross until the arrival of the launch to take them downriver to Old Hamilton. Here they were met by Frank Williams, one of the owners of the Pastolik herd, in his tugboat *The Warrior*. By evening they were stormbound for a night and day in Kotlik, a native village and trading post further down the Yukon Delta, and Erling and Palmer hiked across the low marshy island examining and collecting the flora in the rain and wind. They eventually reached Pastolik the next morning.



High type reindeer, Pastolik, Alaska, 1926 (Photo: AEP, LAC, e010933866)

This was to be Erling Porsild's real initiation into reindeer work. The camp at Pastolik resembled a village, with about a dozen tents set up on the tundra near the corral. Several reindeer owners from around the coast had come down to attend the round-up, which lasted from 11–13 July. The herd was large, containing about 10,000 reindeer, owned by one white man (Williams) and a number of natives.

Even at this early stage of his apprenticeship, Erling was convinced that non-native leadership was necessary for successful reindeer management and he believed Palmer's methods to be the most efficient and effective. "This herd had been in bad shape some years ago because of mismanagement," he reported, "and the owners had sought the advice of the Biological Survey. When the recommendations of Mr. Palmer were carried out, the herd at once started to improve and was now considered one of the finest herds in the country. Of particular interest was the mixed ownership. The white man held the controlling interest and the natives left the entire management to him. Each native owner either paid herding expenses at a rate of \$1 a head per annum or else worked for a certain number of days as herder, according to the number of reindeer he owned."⁷

From these comments, it can be seen that the investigation in Alaska was already subtly changing the vision formed in Ottawa of reindeer in the service of the Canadian Eskimo. With the emphasis on management under non-native

supervision, concentrating on a large, efficient, southern stock-production approach, the young Porsilds were being encouraged to take note of the best herds, the best pasturage, and the most successful and modern methods of reindeer handling, to ensure that the Canadian industry would get a proper start.

Had even one of these two agents been an experienced reindeer man with local sympathies, such as Finnie had suggested, the investigation might have resulted in some sound advice on the need to examine the small, not so well run but workable reindeer herds managed under native ownership, with the view that the Canadian Eskimo might be interested in learning to herd in a way compatible with community and hunting interests. By sending in the two young Greenlandic Danes, familiar with arctic botany and paternal, colonial management of indigenous affairs, and giving them a mandate only to learn about large-scale reindeer operation and pasturage requirements for producing the best stock, the ground was being laid for the worst possible beginning for a cottage-type native industry across Arctic and Sub-Arctic Canada.

In addition to the problem with this type of initiation was the Porsilds' ignorance of Palmer's reputation among the native herders. The man chosen to be their mentor in the Alaskan reindeer industry was known to be personally honest and dedicated, and he was highly respected at government levels, but he was under suspicion in the native herder community for his promotion of corporation management and his close association with the unpopular Lomen family.

There were rising fears in some quarters that native owners were not always treated fairly in the corporation-owned enterprises that he supported. The open herding and percentage marking techniques that he was advocating seemed to make it easier for the Lomens and other corporations to add native deer to their stock by unfair tactics. Even Erling noted that the new system of percentage marking, whereby the total percentage of fawns was taken as a basis for increase to each owner corresponding to the number of does he owned instead of by the old system of earmarking the fawns like their mother, had many disadvantages and "endless disputes followed each round-up causing much ill-feeling and friction."⁸

By travelling everywhere around the country with Palmer, many problems in the industry, particularly native problems, were to escape the attention of the newcomers. However, as with their first native re-settlement venture in Greenland when they had been defeated by "political intrigues," unaware of the tensions that were hidden from them by the Alaskan Eskimo participants and



Reindeer chute, Unalakleet, Alaska, 1926 (Photo: AEP, LAC, e010933867)

dutifully obeying the orders they had been given, the Porsild brothers threw themselves into the activities of the round-up supervised by Palmer.

Erling took copious notes of the first day spent in rebuilding the chute section of a new corral. “The country is rather low rolling tundra with a few creeks running at right angle to the coast which is constantly being washed down by the action of the sea leaving a low cut bank showing the composition of the ground. On a substratum of clayey loam rests a layer of solid ice from a few feet to fourteen feet thick. On top of this is a layer of muck of considerable thickness. The maximum is everywhere frozen until within six to eight inches of the surface. The maximum thaw in an average summer probably never exceeds one and one-half feet.” Noting this carefully, he was particularly interested in the ground ice erosion around the old fence. “The old corral was built on low ground near the creek. After two years of use the trampling of the animals had cut up and totally destroyed the vegetation within the corral fence. The protective layer of vegetation destroyed, the thaw had penetrated down through the muck and caused the ground ice to subside and gradually disappear. In this particular place this caused a general sinking of four to six feet. The corral fence naturally fell in and at present the site of the old corral was transformed to a shallow pond.”



Reindeer emerging from chute,
Pastolik roundup, Alaska, 1926
(Photo: AEP, LAC, PA-112304)

After Bob arrived, the brothers hiked out across the tundra and found a couple of large mammoth tusks in the muck-cut bank two miles east of Pastolik. Ever faithful to his scientific curiosity, Erling again studied the ground ice exposure where the muck had been washed out by the rain, studies that were to prove useful later as they helped to build up his original theory of pingo formation.

Meanwhile, the roundup continued in the rain. Some 1,500 reindeer at a time were driven into the new corral on dry ground on a hilltop. Slowly, a few animals at a time were driven into a v-shaped chute through which they passed one at a time at the end gate. Here they were tallied, earmarked, and castrated, painted with a brush to show they had been through the chute, and the best bulls picked out for breeding, before passing into a holding pen until the day's work was done, then two or three herders were sent out with them to prevent them from being mixed up with the rest of the herd. Erling practised castration and roping and took active part in the work of handling 600 to 800 animals a day. He studied earmarks, general handling, and bookkeeping. The roundup finished, Erling later reported to Finnie that he had taken active part in the



L. J. Palmer, U.S. Biological Survey, emptying sealskin boots, and F. P. Williams, trader, doctoring blistered feet, Pastolik, Alaska, 1926 (Photo: AEP, LAC, PA-101828)

whole proceeding and learned more about reindeer and reindeer handling than by all the copious literature he had read to date on the topic.⁹

The Porsilds' introductory time with Palmer was nearly ended. Erling made one last botanizing trek with him across the wet tundra, characterized at Pastolik by a sedge-browse forage cover, to the winter range in the foothills some twenty to twenty-five miles from the coast, where a lichen cover predominated, with sedge and browse as secondary vegetation. The flat coastal area had been submerged in fairly recent time and Erling felt that a rise of sea level of only ten feet would bring the sea back to the foothills again. They collected at several places across the plain, reaching the hills (about 500–1000' above sea level) by afternoon. They made overnight camp in a hillside depression where they got fairly good shelter from mountain alder until it began to rain heavily. They started back at 3 a.m. in dense fog, led to the reindeer camp unerringly by their Alaskan Eskimo guide.

Palmer and the Porsilds left Pastolik on July 24 for St. Michael, where they met "the famous Sineruk Mary ... probably the biggest native reindeer owner" in Alaska. She was, he said, quite a personality. Speaking of her to Anderson in a letter dated December 14, he said "We had been introduced as 'white men from Canada' but were talking native and were treated to numerous native

dishes that white men usually do not care for, so after a while she observed, 'Mebbe you not white men, mebbe you halfbreed from Pt. Barrow!'" They had "a great time speaking Eskimo and eating dried fish."¹⁰

When they reached Unalakleet, Palmer went north for a few days with Alfred Lomen while the brothers arranged a short trip upriver to a spot where they hiked into low, partly forested hills. Finding the vegetation monotonous, they returned downriver by kayak, spending the night at a native camp where again they "talked Eskimo and had a good time" but again no mention was made of reindeer discussion.

From these entries, it would appear that the Porsilds simply relaxed and were comfortable in a situation where they could revert to the Eskimo ways they had known since childhood, but as all their encounters with Alaskan Eskimos in the southwest part of the state were described in similar light terms it is hard to believe that they ever took them seriously from a reindeer-herding perspective. Personally, Erling confessed in his letter to Anderson "I think we are both somewhat disappointed in Alaska Eskimos & are anxious to find out what they are like in northern Canada. A few of them are better off than their kinsmen in Greenland, but most of them have suffered too much by poor quality mission work and the influence of unscrupulous white traders and miners."

There was still hope that they would look more carefully at the smaller reindeer units in the native communities when they had left Palmer and the large corporations behind. In his last report to Finnie from Alaska in December, Erling would write of their trip to come by dog team around the north coast of Alaska from Barrow to the Yukon. Since all the Bering Sea coast as well as part of the north coast was stocked with reindeer, en route to their destination they would have a good opportunity to look into the industry in places where no white men supervised the natives and their way of handling the deer. They would also be able to see for themselves how the life and economy of the Alaska Eskimo had been influenced through the introduction of reindeer.

For the time being, Erling appears to have paid more attention to the Lapp reindeer herders, who ran their business on a smaller, more traditional scale than did the large corporations sponsored by the U.S. Bureau of Biological Survey. However, the Lapp herders avoided discussion. Unalakleet was their northern centre and Erling tried without success to get interviews with leading reindeer owners. On July 30, he and Bob hiked south about three miles to a large well-constructed corral, built on low tundra close to grass-covered sand dunes strewn with driftwood and flanked by shallow lagoons and sloughs, but

they had no luck with the Lapp owners. “The only subject they would freely discuss was conditions in Alaska compared with those in the ‘old country,’” he complained to Finnie.

By this time the young Porsilds had been given every opportunity of getting an insight into the Alaskan reindeer business according to Nelson’s instructions. Going north from Unalakleet, they were now entering Lomen terrain. At Golovin, the southern centre of the Lomen Company’s reindeer allotments, they looked at a modern cold storage plant and slaughterhouse and saw the process of breaking in reindeer to a pre-shipment grain-hay diet. Reaching Nome on August 1, they were invited to stay with Ralph Lomen and finally had to say goodbye to Palmer, who was leaving two days later to return to the interior. “He has done everything to help us out,” said Erling, “and I am almost sorry to see him leave. He is a very fine fellow and is very well thought of everywhere.”¹¹

From now on, they would be left to the heavy influence of the Lomen family and to their own resources in the Alaskan investigation.



CHAPTER FIVE

LITTLE DIOMEDE TO KOTZEBUE SOUND

The August 1926 stopover in Nome gave the Porsilds a needed break to catch up with mail and finances. They had long discussions with the Lomen family and were able to add to their already considerable plant collections. Bob went north up the coast with Ralph Lomen and returned with a large collection of interesting plants, with several species not seen around Nome, while Erling went out to Dexter Creek and walked two miles across the Anvil Mountains to collect at Copper Gulch and on the southern slope.

The time had come to make plans for the winter trip to investigate grazing conditions along a possible route for a large reindeer herd to be taken to Canada. Of the two available routes, the Porsilds chose the coastal trip around Northern Alaska instead of the alternate trek through the Brooks Range. Seymour Hadwen in Saskatchewan had strongly advised them that it would be safer if they waited until March to begin their trek, but with the confidence nurtured by their Greenland experience the brothers planned to set out by dog team from Kotzebue Sound in January.

The first order of business was to arrange with the captain of the Bureau of Education schooner “Boxer” to distribute 3,350 pounds of dried fish for trail supplies along the coast between Kotzebue and Barrow. This would give them plenty of time to visit the herds around Kotzebue Sound while working up notes and collections, preparing their outfit, making sleds, and buying and training dogs for the long trail. As Erling was to say later: “In the Arctic a man is only 33 per cent efficient, two thirds of his time being taken up by the chores of living under primitive conditions and by the business of getting from one place to another.”²¹



Diamond Jenness
(CMNA)

The chance arose to go to Teller via the Diomed Islands in Bering Strait. This was a golden opportunity to examine a previously uncollected flora and see what role the islands might have played in plant migration across the Beringian corridor between Asia and North America. Leaving Nome on the evening of August 12, they landed on Little Diomed the following evening. There they joined Diamond Jenness, the newly appointed Chief Anthropologist at the Victoria Memorial Museum in Ottawa, who was excavating the site of an ancient Eskimo village, tackling the problem of former migrations from an archaeological point of view.

Whether the meeting with Jenness was by accident or design, the young Porsilds were extremely fortunate to have made this timely contact with another man who was able to advise them about how to prepare for their hazardous trip around coastal Alaska. In 1913, as a young man himself, Jenness had been invited to join Stefansson on the Canadian Arctic Expedition and was fortunate to have been taken off the ill-fated “*Karluk*” before it was carried away

and crushed by the ice off the North Alaska coast. Instead of sharing a terrible end with those left on board, he had spent a brutal winter dog-sledding along the coast, arranging for fish supplies for the expedition party following behind him. Jenness was a mine of information about the Copper Eskimos, with whom he had lived and had already become famous in archaeological circles for his discovery of the ancient Dorset culture of Arctic Canada. Two years after this meeting with the Porsilds, he would publish *People of the Twilight* that Erling would consider the finest book ever written about Inuit culture.²

Erling described the Diomedes as a small group of rocky, inhospitable, and forbidding islands situated in the narrowest part of Bering Strait halfway between Cape Prince of Wales, the westernmost point of the North American continent, and Cape Dezhneva, the most easterly point of Asia. The Russian island of Ratmanof, or Big Diomedede, is the largest, with Little Diomedede next in size. Between the two islands lies a two-to-three-mile sound marking the boundary between Alaska and Siberia, as well as the International Date Line.

Strong reversing currents make crossing the sound difficult for small boats. Adverse weather meant that the brothers were not able to make a trip to Big Diomedede as hoped. Instead they were marooned on Little Diomedede for a week. The smaller island, roughly rhomboid in outline and about three miles wide, is formed of a dark, granite-like rock similar to that on each side of the strait. They could find no signs that it was ever subjected to glaciation. Erling wrote:

From the sea it rises on all sides in sheer rock walls, torn here and there by steep ravines and narrow chimneys. A steep scree or talus of huge, angular rocks in some places forms the shore, but in most places no foreland exists. The Eskimo village of Little Diomedede, inhabited by less than a hundred natives, is on the south-west corner of the island where the talus provides a precarious site for their almost subterranean dwellings, built into the talus. Only at this point is it possible to land from a boat, and then only when the sea is calm, which ... in Bering Strait is a rare occurrence.

Cold winds, icy fog, and wet stormy conditions made collecting difficult and dangerous. The brothers were disappointed by the paucity of the vegetation. Only in the steep talus slopes where incredible numbers of seabirds were nesting did they find a rank growth of grasses and artemisias while “large clumps of blue and white aconites, yellow dandelions, and delicate white and pink

flowered claytonias lent a touch of colour ... a peaty soil is formed here from the undecayed roots and other vegetable matter, mixed with bird manure, and in some places completely fills out the space between the rocks.”

Erling stopped at a rookery halfway up a coastal ravine, and crept down between the rocks to photograph the birds, which came as close as two feet away within half an hour. “Besides several species of auks and guillemots we saw numerous tufted and horned puffins ... that burrow into the turf of the slopes to make their nests, but by far the most common of the birds nesting here is the least auklet ... that with the crested auklet ... is of great importance in the economy of the islanders... The albatross (*Diomedea albatrus*) for which the islands were named is a summer visitor, but does not breed on the islands.”

Elsewhere on the 1,300'-high dome-shaped plateau on the top of the island that was expected to have a comparatively rich flora, they found it was relatively poor in species. The seventy-six species they recorded were common to both sides of the strait, and many anticipated circumpolar, arctic-boreal species were absent. It seemed strange to them that not a single member of families such as Polypodiaceae, Equisetaceae, Scrophulariaceae, Gentianaceae, Leguminosae, Onagraceae, Umbelliferae, or Liliaceae were represented. Only the lichen flora was rich and varied.³

During the week, they collected “Eskimo potatoes” (*Claytonia tuberosa*) for the Experimental Farm in Ottawa, gathered regularly by the local people and mixed, raw, with the leaves of *Oxyria digyna* and *Saxifraga punctata* and with seal blubber before being stored in sealskin containers and allowed to ferment before consumption. They hiked over the island and climbed the cliff along the east coast, slipping precariously on wet rocks and moss, collecting vascular plants, mosses, and lichens.

Erling also photographed the Chukchi traders who came in by umiak mid-week and were unable to leave because of the heavy seas. The Bering Strait was a regular trading route for the Chukchi and Siberian Eskimos who crossed over every summer from East Cape to Wales, Alaska, in their light but seaworthy skin canoes, using the Diomedes as “stepping stones” en route. Jenness reported that, although his island excavations that year yielded little evidence of any actual migration from Asia to America, in his opinion it was not only feasible but probable. He had found that on a clear day in spring and early summer, the inhabitants on both sides of the Bering Strait could see the other coast quite clearly.⁴

In company with Jenness, Erling and Bob visited two of the Diomedede houses, built of stone with an inside panel of driftwood and a seal-gut window in the roof. They were impressed by the long, 25–30' entrance and the fact that there was no sleeping platform. Due to lack of space, the present houses had been built over earlier ones, and Jenness thought that even older ones might be found underneath that layer, but the floors were inaccessible to him and the huge rocks that were continuously sliding down the mountainside in the empty spaces between the dwellings prevented normal archaeological excavation. He had been able to uncover some specimens at the entrance of three of the houses but many of the ivory and bone implements had decayed completely from exposure to air and water in the porous limestone rocks. Only in the outer rubbish heaps did he find perfectly preserved ivory artifacts where they had not already been removed and sold by the Diomedede villagers. From these ancient tools and weapons, compared with what he had earlier found in Wales, Alaska, he felt that he had found evidence of earlier trade and warfare connections across the Bering Strait although not enough for final conclusions.

During the time that they spent on Little Diomedede, Erling was concerned that "Mr. Jenness has been troubled with chronic appendicitis and has hardly been able to eat for the last two or three days. He is rather gloomy and worries a great deal. The 'Bear' had promised to take him back to Nome about the middle of August but has not showed up yet."

As Jenness would be going back to the Museum as soon as possible, Erling prepared a sample of the Diomedede "Eskimo potato" and wrote to Malte on August 18, saying that it was "probably an endemic *Claytonia*, but I'm not sure. I wish you would have somebody cultivate it out on the Exp. Farm. I would like to study it closer when I come back if nobody else will."⁵

The M.B. *Nunivak* showed up on August 20 to take them back to the mainland. It was to be a trying journey. Setting out the next day on a rough sea, most of the trip was spent facing headwind, heavy swell, fog, and rain. Everything in the inadequate vessel got wet. The boat leaked, the motor threatened to stop a couple of times, and the two Lapps in charge were not sailors at all. Erling said that if it had not been for Bob they probably would have been in serious trouble. "The prospect was not bright at 11 p.m. Bob was getting tired, he had had the wheel since we left Diomedede this morning and was wet and cold. I remember while winding up my watch that I wondered if it was any use. At 12 we got a little shelter and the Lapps could relieve Bob."

Reaching Teller at 4 a.m., Erling emptied his suitcase of wet clothes and film before falling into bed at the roadhouse. Two days later, with Jenness heading south to Nome and then back to Ottawa, the brothers continued up the coast on the *Silverwave*.

As luck would have it, one of the passengers was a Mr. Johnston who was in charge of the Kotzebue Sound reindeer station. They left the boat at Kiwalik and travelled with him in the Lomen Reindeer Company launch to Candle. By the end of the month, they reached the Lomen-run Buckland River reindeer camp. Johnston persuaded them to make this their headquarters for the next four months. He promised to build them a cabin in a couple of weeks that would be large enough for them to work up their collections and reports while giving them a good opportunity to see the herd from which the Canadian Government was likely to get reindeer, and observe the breaking in of sled deer, the winter range, and winter herding methods.

As Erling explained:

We shall be busy driving reindeer and mak[ing] preparations ... while the north wind sweeps the tundra and makes a nice hard trail. By interrupting our work a month ago we could have been on our way to Mackenzie by now going up to Fairbanks on the last Yukon boat and start out with dog team in November. But I think we would accomplish very little by doing so. Travelling and surveying at that time of the year is, if not necessarily impossible, at least a very disagreeable job, while by carrying out this program, we shall be experts in reindeer driving and herding, know a lot about the winter conditions on the north coast and save the expense of a guide from Fairbanks to Ft. McPherson at \$25 a day.⁶

Leaving Bob to sort things out at Buckland River, Erling returned to Nome to collect mail and belongings, settle accounts, and make further arrangements for the winter months. He was warmly welcomed back by Ralph and Alfred Lomen, and was delighted to receive a parcel from Malte containing the Floras that he had needed all summer, as well as two letters from home in Greenland, and a letter from Dr. Isaiah Bowman of the American Geographical Society asking his permission to bring up his name at the next election of Fellows of the Society.

He spent the rest of September purchasing and packing supplies and working on a plant collection made by Charles Thornton, a keen amateur botanist who had spent ten years collecting on the Seward Peninsula. Although he felt that quite a few species had been misnamed, Erling made notes and sketches to help with identifying their own collection. "The best part," he said, "is from a trip in the Sawtooth Mountains in 1919. I almost regret that we did not make that trip instead of going to the Diomedes. The Sawtooth Mountains are not very high but still there seems to be a unique and remarkable flora. A number of species ... has not been found anywhere else in Alaska and several I believe are endemics."

Their own vascular plant collection was shipped to Buckland for preliminary identification and Erling was confident that when he got through with them he would know more than 75 per cent of the species in Alaska and probably an even larger proportion of what they could expect in the Mackenzie and Yukon. He prepared to send the Cantwell lichen collection to Ottawa, holding back the type specimens sealed in airtight containers to carry to the North for use in the field, and asked Malte to send these "typical forage lichens from a winter range in the interior ... [to] a better man to check the naming" as he had no handbooks or keys to help him. "Our collections have been increasing all the time," he told him proudly, "and when we travel around people wonder whether we are in the express business or not. It has been hard sometimes to get the plants dry in reasonable time, and, owing to shortage of blotters, we had to take them out little by little. I shall have them in nice shape before we start north and could get them out this winter by shipping them as parcel post over the winter trail. I shall, however, not attempt that, as mails are lost every year when a sleigh breaks through the ice, and prefer to pack them in wooden boxes and take them to Nome, where they will be stored till next summer." With the lichen shipment, Erling sent a book to Jenness, and his regards to Anderson and the ladies of the herbarium.⁷

October came and the *Silverwave* returned. Erling left at midnight October 2 for the north, reaching Candle on October 11. Before setting out for Buckland, he studied the ground ice exposure he had noted a month earlier. The bottom gravel layer contained different kinds of prehistoric bones that he collected to send to Ottawa for dating. For once, there was no need to collect plants en route. Aided by lack of snow, Bob Porsild had collected extensively in the reindeer country between Candle and Buckland.

Back at the camp, they did their last “summer” plant collecting in Alaska on October 16, pulling out aquatic plants from the partly frozen lakes west of Buckland River. In the same week, Erling photographed ground ice formations at the string of lakes to the northwest of the camp, showing how the deterioration of the ice “probably starts as the typical polygonal fissures, and ... by thawing ends in changing the topography by opening up into lakes.”

By mid-November, they had finished cataloguing their Alaskan collections, giving them a total of 533 species and 5,200 specimens of vascular plants and about 1,000 lichen specimens. On November 13, Erling wrote to tell Malte that they were almost ready for shipment: “You may wonder why we have attempted an identification, that of course cannot be final and that in many cases undoubtedly is questionable. Still I believe that by doing so we have acquired a much better comprehension of the flora and have thus been able to make more complete thorough collections.... On a trip of this character where the collection of plants naturally had to come in the second line, the time we could devote to it often was inadequate, and, especially in the interior we have undoubtedly missed a good many species. Still I think we have succeeded in getting a valuable collection but shall leave that to your judgment.”

He was already hoping that his Alaska findings could be published when he returned. “I find the flora very complicated and it shows features of great interest. I hope to work that material up after I get back some time and you may find that it warrants a special publication.” He mentioned the visit to Little Diomedea where they had “obtained a very complete collection of vascular plants as well as of lichens and mosses. I find this particular collection the most interesting.”⁷⁸

To Finnie he wrote on December 12: “As it was understood that our main work in Alaska should primarily be to acquaint ourselves with everything of importance in the reindeer industry, the time we have been able to spend on collections has often been very limited. Still I believe that the collections represent the largest single one ever made in this country ... we have acquired a very good insight into the flora of the Alaska reindeer pasture of the different types and at the same time secured a valuable scientific collection containing several species that I believe are new to Science.”⁷⁹

Although Erling was incorrect in stating that their collection was the largest to come out of Alaska to date, an honour that belonged to the large scientific expedition organized by E. H. Harriman of New York City in 1899, in Ottawa Malte expressed satisfaction with the botanical work accomplished that summer. He told Ostenfeld that the brothers were doing well and had an



Dogteam team being broken to harness, Buckland River, Alaska, 1926 (Photo: AEP, LAC, e010933869)

estimated collection of 5,000 specimens to be shipped from Nome by the first steamer of the season. “Not too bad,” he commented happily. The collaboration agreement for the Flora of Arctic Canada had been formalized. Thanks to the additional material from the young Porsilds, the area to be covered, including the Canadian Arctic Archipelago and the arctic region of the North American mainland, was extended along the coast of Alaska down the Kotzebue Sound, and possibly as far south as Nome.¹⁰

Along with the identification of their plant collections, the brothers watched reindeer slaughtering activity about eight miles southwest of the camp on November 19 and busied themselves making sleds and buying and training the dogs for the long trip along the coast. By mid-November they had nine dogs coming on well. They attracted a great deal of attention by driving the dogs in fan shape in Greenland fashion and by using a Greenland-style harness that Bob made from bearded sealskin while Erling worked on their summer report.

All the systems of hitching dogs in Alaska had been tried by geologist Ernest de K. Leffingwell during the seven winters he had spent on the north coast between 1906 to 1914, and, as always, he was thorough in describing them in his U.S. Geology Report in 1919. “The Alaskan Eskimo hitch their dogs in

single line along a central towline,” he said, “but this is an awkward arrangement when there are many dogs. At Nome the dogs are hitched in pairs with traces about three feet long. A short line leads from each dog’s collar to the towline, so that they are kept in place. In many places in the interior, where the trails are narrow, the dogs are hitched tandem, between two long towlines. The Greenland Eskimo hitch each dog to the sled with a long trace, so that they are spread in fan shape. The leader is allowed a longer trace than the others.”

He found problems with each hitching method, depending on conditions. “When the trail is good and the dogs are well trained the tandem method is very good, but when one must use the average Eskimo dog it is sometimes difficult to untangle them after each halt. The same objection applies in less degree to the Nome method. In the method used by the Alaskan Eskimo there is the least difficulty... When the trail is crooked, any method in which the dogs are strung out is objectionable, for the lead dogs will pull the rear ones against obstructions when going around bends. If a hummock is encountered the rear dogs in the tandem may be pulled to the ground as they mount over it.” In summary, he preferred the Nome method for ordinary travel but over rough ice he found the fan-shaped Greenland system to be preferable because each dog was free to pick his own path. Of all the sleds he had tried, he found the Nome sled to be the best.¹¹

Erling said: “All the natives of this generation have adopted the Nome sled and most of the white man’s ‘improvements’ on harness and other things. The elder generation still know about the old style and are not so sceptical about our ways. The Nome ‘collar’ harness I believe is alright for a dog team traveling on a beaten trail but on a rough trail I shall always prefer the native harness.”

Snow was late in coming but the Porsilds took the dogs out frequently to prepare them for the trail. At the end of November they made a 300-mile trip to Kotzebue and the Noatak River to train the team and buy a second one, making a total of nineteen dogs in the two teams. While Erling was having a set of towlines made for his new team, Bob decided to give up driving Greenland style and made a towline for his team too. When they started back, Erling’s new team performed well but the snow was bad and it was very slippery on the river ice. “The dogs get very tired from slipping back and constantly get ice in their feet. I had to stop and remove the ice every ten minutes on the leader. He is a fine little dog and I think well worth the \$100 I paid for him.” Only one dog had cut his hind foot on a broken flask in Kotzebue and did not pull well, but their new owner was pleased that he had a good team for the winter trail ahead.

In his December report, Erling was proud to tell Finnie that since they had landed in Alaska, they had travelled about 7,000 miles by riverboat, motor launch, mail boat, automobile, railroad, kayak, dog team, and on foot, and they were grateful for the hospitality and courtesy they had received on all sides. Summarizing the results, he wrote: "On the reindeer industry we have a great number of notes, and, I feel confident in saying that we have let no opportunity pass to secure information and practical instruction as well. During the round-ups we have made a point of learning the different parts of the complicated trade. Even if we have not gained the skill of the trained reindeer men, we have learned enough to ascertain for ourselves if a herd is handled correctly and efficiently or not... We hope to be ready to start from here before Christmas in order to overtake the mail leaving Kotzebue for Barrow on January 1st."¹²

In Ottawa, Finnie was pleased with the first season of their investigation, satisfied that the brothers had done a tremendous amount of travelling and learned a great deal concerning the care and feeding of reindeer. The Department had heard earlier that Carl Lomen had returned to the States after seeing a great deal of the Porsilds in Alaska. "Mr. Lomen thinks that they are very much impressed with the success of the venture and the great herds of reindeer they see there," Baldwin wrote carefully to Cory, and, to press his advantage, wondered if there was anything that they could do at that time to advance the negotiations for the reindeer sale. But Cory was happy to bide his time and await results. Much more information would be needed from the Porsild brothers before any definite action could be taken on the reindeer purchase for Canada.¹³



CHAPTER SIX

COASTAL ALASKA BY DOGSLED

By the third week of December 1926, when the cold had set in hard and the whole Buckland valley was hazy from the vapour from the many wood-burning smokestacks, with the plant collections packed for shipment and all their preparations complete, the Porsild brothers were ready to embark on the difficult and dangerous trek by dog team around the north rim of Alaska that Hadwen had warned them not to take in midwinter.

Close to a thousand miles of coastline lay ahead of them before reaching the first RCMP post at Herschel Island on the Canadian side of the International Boundary. For most of the trip, they would be travelling along a fairly flat tundra plain, completely exposed to the punishing winds. They would have to cross the mouths of numerous rivers, moving over long low island reefs and sandspits formed by deposits of silt, sand, and gravel heaved up by the sea ice. They would have to face bitter winds and temperatures such as they had never before experienced, and they would test all their Greenland learning and abilities with dog teams and winter travel to reach their final destination at Aklavik on the Mackenzie River delta before the spring of 1927.

Listed in their equipment, in addition to a recent edition of *Eskimo Dictionary* by the Danish linguist and grammarian Samuel Kleinschmidt, were the three books undoubtedly given to Erling by Vilhjalmur Stefansson. *My Life with the Eskimo*, by Stefansson, included descriptions of his trips along that coast from 1908 to 1912. *The Canning River Region* by geologist Ernest de K. Leffingwell, whose Anglo-American Polar Expedition Stefansson had been invited but been unable to join in 1906, would prove invaluable for his maps of the coast to be traversed, and *A Winter Circuit*, an account by the late Archdeacon Stuck of Fort Yukon, who had escorted Stefansson to hospital at the

end of the Canadian Arctic Expedition and made the same trip along the coast some years previously, would also tell them much about what lay ahead.¹

They took leave of the supervisor of the Buckland reindeer camp on December 19 and crossed the Buckland range to Candle where they took 400 lbs of mail off their heavily loaded sleds. They reached Kotzebue, where Bob was to spend Christmas week, on December 24. Erling had arranged to take a trip up the Noatak River with Wheeler, the trapper who had sold him the second dog team, to look at the winter range of the Kotzebue and Kivalina reindeer herds. The area was rocky and partly timbered, with good-sized spruce growing up to a remarkably distinct timberline. Several plants could still be seen due to lack of snow cover, but Erling was surprised not to see "a single chunk of reindeer moss" in spite of evidence of reindeer having been in the area recently. To his regret, they did not see any deer as the herders had moved down to the coast for the holidays.

During the Noatak trip, they used a house-sled for camping. The trapper had added a light frame, covered with ten-ounce canvas, onto an ordinary 27" sled to create a 34" × 9½' cigar-shaped tent with one door on the side and another in the rear. A light camp stove used very little wood and heated the tent in five minutes. Erling was surprised to find the simple innovation extremely comfortable. There was ample room for two men, although some baggage and dog food had to be taken out at night. The great advantage was in having a ready camp when needed. Back in Kotzebue, a ten-day blizzard delayed the brothers' departure but gave them time to build their own sled shelters.

It was 11 January 1927 before the Porsilds were able to set out from Kotzebue. The blizzard was over but it was still blowing hard, the temperature about freezing point, and the snow drifting and sloppy. The trail north was marked by heavy stakes, driven into the ground the previous fall, and they followed it over the icy lagoons and along the open beaches. In some places there was too much snow. Erling's sled was top heavy and at one point it overturned and the grub-box contents spilled all over inside. When they camped under a bluff overnight, he found his sled was really too small for the new house-tent but eventually he was able to make himself reasonably comfortable.

By the time they reached Cape Krustenstern the next day, "The wind was so strong that we dared not travel on the clear ice of the lagoon and had to crawl around along the snowbank edges. At the promontory the bank was very rocky and we had a hard time getting the heavy sleds across the bare rocks." Erling's sled hit a rock and all the crossboards, made from soft red cedar, were cut half

through by the heavy weight over a sharp point. "Then came the six-mile portage. It was even worse." It was tiring work for the dogs picking their way over the snow-and-tussock covered terrain. The dog with the sore paw was played out by the end of the day so Erling let it go, hoping it would make its way back to its former owner.

They reached Kivalina on January 13 and were glad to exchange their tents for a stay at the school, rest the dogs for a day, and repair the damaged sled. They had their first meal of mountain sheep and found their fish cache in good condition. Rested and back in good order, they spent a calm and easy day travelling along the beach and on a string of lakes and lagoons, but the following morning the trail went uphill, taking a slow route to avoid a steep grade to 850' above sea level, and they struck hard going for the dogs along the top. "Some time in the fall a cover of sleet has encased the grass straws and made every little leaf of grass left to an icicle protruding from the ground.... The whole distance is 14 miles but it took us 4½ hours."

When they reached Port Hope, Erling turned down an offer of the school-room floor overnight because the judge in Nome had given him an introduction to the Episcopalian mission. When they got there, the Reverend seemed reluctant to offer them hospitality. Eventually he offered them the floor of his office and gave them a dish of tomato soup and crackers for their supper. They were dog-tired and hungry after fourteen hours without food, so when their good host went to bed, Erling went out to his sled and had a hearty meal of quag (frozen meat) before laying his sleeping bag down to sleep on the floor. "I believe that next time I will camp out sooner than bother one of the missionaries again," he said.

They were invited to a native dance down in the village the next night, which their host also attended. Stefansson had noted that these affairs were not really a dance, as the white men called it, but the most northeasterly variant of the British Columbian potlach. "The champion of this coast gave the first part and was followed by another man and two women," said Erling. "There were four drummers with fine big drums. The three first dancers conveyed no meaning to me at all while the last one was about whaling from the ice. It is a curious custom that the men have to wear gloves while they dance. The women dance without and were silent and danced with closed eyes. The dance stopped at 10.30 and was followed by a prayer joined by everybody in the house."

Their next fish cache was at Wainwright, about 250 miles northeast of Port Hope, so they took enough dog feed for fourteen days. As Bob Porsild later

remarked: “Arctic travelers can only go as far as their dogs take them, and so feed makes up a large part of any load.... Even though our sleds were heavy laden with close to 700 lbs each, we averaged 27 miles a day, the longest single day we made 40 miles; measured by an odometer mounted on a bicycle wheel behind AE’s sleigh which was read daily and averaged.”²²

To lighten their loads on the thirty-six-mile portage over the mountains, a dog team was hired to accompany them as far as an abandoned coal mine about seventy-five miles away. Travelling was fair until they rounded Cape Beaufort on January 21. Named after explorer Captain Beaufort who invented the Beaufort Scale of wind velocity, they found the name appropriate. “This place has a bad reputation for winds,” Erling said, “and sure enough, two hours after we rounded, we ran into a blizzard from north. Simultaneously the temperature dropped from a few degrees below zero to 24 below and traveling against the wind became unpleasant.... During the 16 years I have lived in the Arctic, I have never experienced a wind like this.” Generally in the Arctic the temperature went up as the wind increased, but here it went down as far as 45 degrees below Fahrenheit one day and stayed between 25–40 below while the wind was blowing 40–50 miles an hour. “Two days we managed to continue but at last the wind and the intense cold became too much for the dogs and we were ready to dig into a snow bank on the afternoon of the second day when we unexpectedly found an inhabited igloo. In this place we were stormbound for ten days.”

There were four families (fifteen people) living in the igloo. They were short of provisions and hunting was impossible out on the ice so they were soon all out of food and had to depend on the supply of fish the Porsilds carried for the dogs. The dogs suffered badly during the storm, and some died or had to be left behind later due to frost sores. By the end of a week the dogs had to go without food and were getting so weak that when the wind abated slightly the brothers decided to make a dash for Wainwright. Fortunately, they were able to buy or barter provisions and dog food from native trappers en route, but this was not an end to their growing miseries.

“Everybody down in the igloo had had colds,” Erling said:

I finally got one myself last night and was pretty bad today. I was breaking trail and had a hard time in keeping my face thawed. Stopped an hour midway ... to chop some walrus meat for the dogs. After we started again my half leader the little Siberian Rock froze his penis very badly. I gave him a piece of reindeer skin on it but was I am afraid



Igloo, Cape Simpson near Colville Delta, Alaska, 1927 (Photo: AEP, LAC, PA-101953)

too late. Later my leader too started freezing his penis and flank and would not go ahead. At 1 o'clock the wind was pretty bad and we stopped at the igloo at Segequaw.... At 3 o'clock the wind was the same and we decided to stop here for the night. My cold is of course much worse and I feel pretty miserable tonight.... We do not have very good luck lately. I hope it may change soon.

Perhaps the words he had heard earlier in the year came back to haunt him then as it did a few days later: "I cannot help thinking of old Dr. H[a]rdlicks whom I met this summer and who was advocating to pass a law prohibiting anybody from traveling in the Arctic during the winter. He said he did not believe that anybody who wants to go on a trip like this could be sane and consequently ought to be looked after."

The cold dashed his enthusiasm for collecting. For four days before reaching Icy Cape near Wainwright they travelled along a low sand spit where *Elymus*, the tall dune grass, a low *Oxytropis* and a "*Pedicularis* of *P. artica* type" were the most conspicuous species on protected dunes. In other places beyond Wainwright he found *Elymus* again common in suitable places, along with grasses he could not place or species he could not completely identify. He felt he should have collected some material but his fingers were too cold and his

face, which had recovered from an earlier freeze-up, was so tender that it froze again. At Icy Cape, he did collect a large dextral shell for the Museum and later learned that the people along the coast knew it well and had seen much larger examples.³

Icy Cape was the first location beyond Port Hope where native reindeer were herded. The Porsilds learned only that the deer did not increase much and the management in Wainwright was incapable of handling the proposition. On February 13, stormbound in Ataneq, about twenty miles beyond Wainwright, they saw their first reindeer in the north country. A small band of deer had become separated from the main herd and had wandered or had been driven towards the village, where they were butchered. They appeared to be smaller than the average deer seen below and were not in very good condition. Considering that they were not close-herded in any way, they were very tame, which Erling attributed to the bad weather as the deer, as well as caribou, were always less scared than when it was fine.

By now the Porsilds had been on the trail for over a month. Erling's cold was no better, and another of Bob's dogs had died and his team was not doing well. They were getting used to having their faces freeze in the headwind, but they could not get used to being over-charged for everything everywhere by everyone. "I ought to be used to it, but it gets my goat still," Erling complained, "when you see the way we are held up wherever we go. I suppose we are considered game because we are Government men. \$4.50 a day is more than we have paid any place in Alaska and the food we eat would be paid for by one dollar apiece.... We have not received much help or hospitality yet that we have not had to pay for beyond reason, and still the people act as if they were treating."

Finally, at 1 p.m. on February 17, they reached Point Barrow. They went through the village to the Cape Smythe Whaling and Trading Company to check on their fish cache and stopped there. "If we decide to stop for any length of time we should try to get a place of our own," said Erling.

That evening the wind that had been from the north changed round to the west. The thermometer rose to 3 degrees Fahrenheit above zero, a blip in the chart for it would soon drop down to a perishing 47 below. For the last month they had had 20 below twice and all the rest of the time it had been mostly between 25 to 40 degrees below. The distance they had covered from Kotzebue to Point Barrow, as reckoned by Erling's odometer, was 498 miles. He figured that they had travelled twenty days out of the thirty-eight, at an average of twenty-five miles a day. Of the eighteen days they had stopped, thirteen were caused by

bad weather and only five for resting days. They were halfway on their journey to Herschel Island on the Canadian side and they and the dogs needed time for a real rest. His dogs were all in good condition except for two that had slight cuts on their feet and Rock with the frozen penis. Bob's dogs were in poor shape but he hoped they would improve with the stopover.

Erling occupied himself with putting longer runners on his sled. In lengthening them, he could no longer fit the tent over the top, so he finally discarded it as he had already decided that it worked better in a forested area than it did along the exposed coast because of frost and condensation on the canvas. "On the trip to Noatak River we never had any trouble of this kind although the temperature was lower than it is now. I rather doubt if the camp sled is really suitable for traveling out of timber. It should have been built specially for the purpose and should have been about 2' longer and the canvas should have been double." He had a native trapper from the coast mark down all the native cabins he knew between Barrow and Barter Island.

Before he took the sled out for a trial run, he iced the new runners: "I put flour paste and ice on my runners – a very cold job. You take a basin with the flour and water and dip your hand into the paste and apply this to the runners. During the process you have to be careful not to let your hand freeze to the runner as the skin may come off. The warm palm of the hand makes a smooth surface that later is covered with a varnish of pure ice put on in the same way." He thought it helped the runners to move more easily, especially over hard terrain.

They were surprised to find how many people there were in Barrow. Twenty years earlier, Stefansson had noted a winter population of "over four hundred Eskimo," and the village now had a white doctor, nurse, Presbyterian minister and wife, school teacher and wife, and two men in charge of the Whaling and Trading Company store. Considering the fact that Leffingwell had estimated only seven years earlier that there were no more than a dozen permanent white dwellers on the north coast of America west of the Mackenzie, this was quite a large number, even if their stay in the north would only be temporary. Five days after the brothers arrived, they even went to a dinner party at the hospital.

Erling does not mention whether he and Bob met the legendary Charlie Brower, the American trader known for his part in saving the officers and crewmen from the ice-stranded whaling ships in the winter of 1897–98. For fifty years afterwards, he was the man that everyone wanted to meet, due to his success in organizing emergency housing and food in Point Barrow at that time. Brower had scoffed at the Overland Relief Expedition sent up from Cape Prince



Runner made smooth with plane before final coating of ice, Pullen Point, Alaska, 1927 (Photo: AEP, LAC, e010933871)

of Wales under the leadership of Tom Lopp to bring 438 reindeer for the unneeded relief of the “starving” seamen, but the reindeer expedition was of interest to the Porsilds because it showed that such a drive was possible around the coast in winter, and also because the original deer had been left behind to form the nucleus of the present-day native companies in that locality.⁴

They had several talks with native reindeer owners and the District Superintendent of the U.S. Bureau of Education who supervised the native-owned deer and the recently formed Eskimo Reindeer Company. As predicted, after his introduction to the “best herds” and the “best management methods” in Alaska, Erling was not impressed with what he saw in the North: “All the reindeer in the Point Barrow district are owned and managed by the natives. The lack of white initiative and of adequate supervision have caused some of the herds to be poorly managed and this may, to some extent, account for the decrease in size of the animals. Also the high price of white fox tempts the natives to neglect their reindeer. Several herds visited had shown a steady decrease in the last few years because the owners devoted most of their time to trapping, and depended on the reindeer all winter for dog feed.”⁵

From Barrow, the Porsilds looked eastward to Herschel Island, a distance of about 450 miles. With at least one side trip inland and allowance for delays,

they estimated it would take them about thirty days with no dependable supply of fresh dog food en route, so they would have to carry the ton of dry fish shipped in during the previous summer. Hiring an additional dog team to take a load about two hundred miles, they left Barrow March 2 with thirty-three dogs and about 2,400 pounds of baggage divided between them. "Tommy packs 600 lbs of our fish and is taking his wife and a one year old baby along. His wife, a fat young woman, sits on the load all the time and with his personal dog feed and dunnage his load must be well over 1100 lbs. He has a small sled and 13 dogs but makes as good speed as I; that is, about 4 miles an hour."

Tommy started first, with Erling behind him and lastly Bob followed. One of Erling's dogs began to have trouble with his leg. Not long after leaving Barrow, Erling noticed that his biggest dog was sick. By Cape Hallett his paw was coming off and Erling thought the dog was probably done for and wondered if he should shoot him. They found good going on the sea ice, but in sections the ice was rough and the surface snow was soft with small drifts made up frost crystals. "This kind of snow is very bad on the dog's feet and they are bleeding and sore all of them."

Bob was having even worse problems with his team. He had bought one dog and left another behind in Barrow, but the rest had not recovered enough from the earlier trip and he was travelling slowly even though the others had lightened his load. On March 9, "Bob left a dog on the trail a few miles from camp. It had a swollen leg and simply laid down to die." Before the next camp on March 10, the best of his dogs suddenly died in the harness.

On reaching Beechey Point on March 11, the hired team returned to Barrow and Erling was able to trade his big dog for another one in better shape, but began to think of continuing on alone to look for some dogs for Bob further east. "He has only seven dogs left and they are all played out and can not pull the sled to Mackenzie. We first thought of hiring a team, but it will be cheaper if we can buy the dogs." In the end, it was decided that Erling would go on and Bob would stay a couple of days and try to get a new team together and catch up with him later. There was also a chance that there might be dogs for sale further ahead that Erling could buy and bring back for him. They had the news that "One of Fred Hobson's boys died some time ago and his dogs may be for sale."

Before Erling left, he had a 10' x 8' sail made for his sled to take advantage of the wind on the trail, and made a trip to visit a herd of about a thousand reindeer owned by a native man who had been too independent to join the newly



80 sq. ft sail on sleigh off north coast Alaska, 1927 (Photo: AEP, LAC, e010933870)

formed Eskimo Reindeer Company in Barrow. En route, he “tied his dogs to Leffingwell’s cairn at Beechey Mound.”

Ernest de K. Leffingwell had worked extensively at mapping this area of the north coastline for the U.S. Geological Survey from 1906 to 1912 and had used an astonishing variety of markers for his triangulation stations above and below ground level. Seven of the stations were simply natural elevations, but for the other fifty he had used whatever he had at hand, which included poles, boulders, malted milk bottles filled with stones, an old Caribou antler rack, fish net weights, part of an Eskimo blubber lamp, a few twenty-penny nails, a square masthead, the vertebral disk of a whale, and one eight-foot cairn.

The geologist-mapmaker thought that Beechey Mound was about sixty feet high. Richardson had been the first to describe these Arctic geological features, east of the Mackenzie delta, in 1828, he said. In Alaska, “Where the coastal plain is wide isolated mounds scattered over the level surface of the tundra are common.... Most of these mounds are in the form of gentle domes less than 40 feet high.... Whatever the character of the material could be ascertained it was found to be either coarse gravel or else the usual coastal material of mud, sand,

and small pebbles. On a few mounds there was a capping of silt.” There were, he said, three hypotheses as to the origin of these mounds – erosion, glacial deposition, or the result of hydraulic pressure – of which he felt the last was the most likely. His thoughts about mounds would inspire Erling to make discoveries of his own down on the delta.

Leffingwell and Erling Porsild would have had much to debate on the subject of reindeer. “Domestic reindeer have for many years thrived in Arctic Alaska,” the former said in 1919, “but their number has not grown with the demands of the country. There is ample grazing ground for millions of reindeer and yet there is a shortage of fresh meat and deerskins. If the white men imported animals, this need could be met without in the least interfering with the native herds.”⁶

The question of interference with native reindeer would figure largely in the idea of a large herd of Canadian-purchased animals passing through on the north coast.

Leaving this to future speculation, with the dogs behind at the cairn on Beechey Mound, Erling walked on foot to where the nearest native herd of 600–800 animals was trekking slowly westward, accompanied by one man with two dogs. The deer were very docile and tame and he could walk right in and take pictures, but he found them “somewhat poor and undersize. Many are white and spotted almost 20%. Remarkably few bulls.... The herd has been kept on this ground for too long a time and the ground is overgrazed. They never get the chance to go back to the hills where grazing should be much better. The owner is keeping them close to his place in order to have the meat near at hand and is getting meat for his family as well as for the dogs from the herd. The deer has without doubt suffered much from mismanagement and could be improved much, I think.”

In his later report to Finnie, Erling used this man to illustrate the need for white supervision of the reindeer program: “He had moved his herd east to better grazing grounds but had encountered difficulties in getting herders and his deer were not doing well. He himself, when his herd was not doing well at once lost interest in it and though he was known as a very good reindeer man before, the herd suffered sadly from mismanagement. The case of Tarpoq is not unique. Similar cases have been met with in other places in Alaska, when an Eskimo, though a good reindeer man under the supervision of a white man, when left to himself, soon starts to neglect his herd when his increase and profits [are] not up to his expectations.”⁷

It is easy to judge in retrospect, yet if Erling Porsild had had any chance to change the course of the Canadian Reindeer Project other than giving the green light to the Department of the Interior plans, it would have been to have presented the case of Alaskan Eskimo reindeer ownership in a more sympathetic light.

With his knowledge of the north, he should have known that Palmer's fine stock production approach was inappropriate for the needs of the Eskimo individual and community. He must have known that the traditional demands and cultural ties of the family conflicted sharply with southern ideas of "good" management. He was certainly able to see that the isolation, insecurity, and low rewards of reindeer herding made it hard for the individual to resist the handsome rewards of white fox trapping. He even recognized the advantage to the native owner and his community of keeping the animals close at hand for a ready supply of meat in winter even if the deer were not being kept in peak condition because of overgrazing.

Perhaps it was too difficult for him to switch his focus from what he had just seen in southern Alaska, and from what he felt was expected of him in terms of advocating excellence, to suddenly find reasons to support a compromise situation. It does not appear that he was basically unsympathetic to the native individual or community but that, in the context of reindeer herding, he saw them in terms of the job rather than the job in terms of the people.



CHAPTER SEVEN

TRAVELLING ALONE: AN ACCIDENT AND ITS CONSEQUENCES

The herd at Beechey Point was Erling Porsild's last contact with the Alaskan reindeer industry until the pasture surveys in the Yukon and Northwest Territories had been completed. From now on, once the brothers had set up their headquarters at Aklavik on the Mackenzie River delta, their investigation would change to one of range and forage analysis and comparison as to suitability, and their only contact with deer would be with the wild caribou instead of tame reindeer.

Leaving his brother at Beechey Point to see what arrangements could be made to find new dogs for his ailing team, Erling set off alone on 15 March 1927, hoping that Bob would catch up with him by the time he reached Collinson Point. With newly iced runners, the sled was pulling well and he made four miles an hour in spite of a heavy load of salmon and grub for the next twenty days. At an igloo at Heald Point where he spent the night, the native owner, Pausanna, gave him a tip about the runner paste. He told him to use boiled flour instead of plain. Erling tried it out next morning. It was so cold that he had to go inside a few times when his hands started freezing, but once on the trail it seemed to last longer than when made with plain flour.

His next destination was Bullen Point at the cabin of Alfred Hobson, brother of the boy who died, in hopes of buying some dogs for Bob, but the trapper had no dogs for sale. The man had been ill and in a state of nerves since the funeral and was so anxious for company that Erling ended up staying a day with him. "I cannot do much for him," he regretted, "but it may help him psychologically." Another brother arrived from Beechey Point the next day. He

told Erling that Bob had hoped to come with him but had not been able to get ready in time.

Without Bob for company, it seemed that travelling alone for Erling meant a lot of stops for human contact. “Stopped at an igloo 9 miles from Flaxman and had a cup of tea. After that we sat for a while talking about the poor fox catch. Funny enough as we got out of the house we saw a big red fox coming down towards the house about 20 yards away. All the men grabbed their guns and started shooting but before first shot was fired the fox was far away.”

Further east, Erling stopped at Leffingwell’s old house on Flaxman Island, which had been the base for the geologist’s work while exploring and mapping the uncharted rivers and coastline for the U.S. Geological Survey. The original cabin on this site had been built from the interior woodwork of the expedition ship, the *Duchess of Redford*, after she had become unseaworthy and had to be dismantled the winter of 1906–1907. The crew had banked the cabin with sod and it had been comfortably warm but “so damp that instruments rusted and other articles became covered with mold.” Leffingwell’s party had all gone south in 1907 with co-leader Captain Ejnar Mikkelsen, but he had stayed on alone until forced to go back also to obtain better equipment. When he returned in 1909, “a substantial frame house was built at one end of the old cabin, so that the cabin might be used as an entryway.... A storehouse was erected about 30 feet from the opposite end of the old house, and joined to it by a shed.” Leffingwell was very proud of his new house. “In designing a house for the Arctic regions it is desirable to plan to enter the living room through a series of compartments so that the changes in temperature will be gradual.” He suggested an entry room kept at 0 degrees Fahrenheit, a passageway at 30 degrees, a workroom at 40 degrees and a living room at 70 degrees. The term ‘living room’ normally combined kitchen, dining and sleeping area, and he was insistent that sleeping bunks should always be placed against interior partitions as frost would form between bedding and outer walls.¹

A trader called Castell was wintering there with his family. “I wanted to go on a few miles more to Brownton Point but could not get away,” Erling said. “To-morrow I should make Collinson Point.” At Brownton Point, he stopped to see a trapper named Henry Chamberlin. “It delayed me nearly an hour. Later I stopped at the mouth of Canning River where a native has his camp. This man is a good hunter and has got 29 foxes. I took my grub box in but was not allowed to use it and had a lunch of stuff like canned fruit, jam, butter, nice crackers etc.

Lost another hour here and it was 6 o'clock when I got into Mr. Jack Smith's place at Collinson Point."

Erling spent three days in the area of Collinson Point. Somewhere in this snow-obscured land to the east or west of the point lay an area which has now become famous for the annual arrival of the vast Porcupine caribou herd from the Yukon at calving time. It is hard to say if this area would be used for that purpose in 1927. During his travels along that coast with Stefansson in 1908–9, Rudolph Anderson had noted: "Until a few years ago the coastal plain of Arctic Alaska, from Point Barrow to the Mackenzie, was the pasture of vast herds. Only an occasional scattered band is now seen." However, he had also seen that "there are places in the interior of Alaska which are more favored. In the southern foothills on the Endicott Mountains, on one of the northern tributaries of the Yukon, beyond the ordinary range of the Indians or the white prospectors, I saw in 1908 as many as one thousand caribou in a single herd. Further east, the caribou are much more plentiful."²²

Had Erling travelled that seacoast route at a more favourable time of the year, he might have found much to interest him in terms of reindeer pasturage, but as it was, in the depth of snow and bitter cold of winter, he was less interested in the coastal valley than in the higher land to the south that had a very different type of vegetation.

Leaving most of his dogs to rest, he set off for the foothills on March 22 with borrowed dogs, in company with a hired boy, for a closer look at what he could find. Digging down through one to two feet of snow, he was able to take a look at the plants in several places. He noted "*Saussurea*, *Saxifraga hirculus*, *Vaccinium vitis-idaea*, *Salix reticulata*, *Carex ? stylosa*, *Cassiope tetragona*, and *Eutrema Edwardsii*" in the low wet tundra before the first hills, leading up to a dry browse type with low, prostrate willows and *Oxytropis*, *Luzula*, *Poa* and *Pedicularis* species above, and finally in the highest, driest areas he found "*Saxifraga tricuspidata*, *Potentilla emarginata*, *Bupleurum americanum*, *Salix uva-ursi*, and *Tofieldia* and *Arenaria* species." "Very little 'moss' if anything," he said. He took a short walk to the low foothills behind the camp on March 23. "Lichens are more common here but only *Cetraria islandica* or *C. nivalis* is plentiful. In these hills, I am satisfied there is no possibilities of good moss and I think one has to go far back as to the basin behind the coast range to find better country."

When Bob still did not show up by March 24, Erling felt that he had to continue on without him. At Barter Island the next day, the wind was right for

setting his sail. He felt it made the difference of adding about five or six dogs to his team as he did about five miles an hour even over soft snowdrift. Again, his travels were slowed by stopping for company. "Stopped for tea at the mouth of Jago River where a white trapper lived in a shack dirtier than most of the native houses I have passed. Tried to pass up a small village some miles further up but the people stopped me in quest of news."

The trapping season had closed two weeks earlier than usual that year but the people up there had not had any news of the change so they were still trapping. "I do not know who is to blame," Erling said dryly, "but as there is no game warden in this district it seems as if the commissioner in Barrow should have sent a mail up the line. The commissioner, however, is manager for the N.W.T. Co, the largest fur buying concern on this coast, and naturally is interested in getting as many furs as possible."

On March 25, he spent the night in an igloo at Humphrey Point. "I could not get to bed last night as the people sat up talking to 2 a.m. and consequently this morning they did not get up till after 9. I generally do not mind sleeping in native houses but this house was almost too much for me. The owner had most of his dogs in the house too and I had to share the floor with 7 big pups that all night disturbed me by licking my face or pulling my hair and finally went to sleep on my chest." When he got away mid-morning, he set the sail until the wind died and had a rough trip to Icy Reef where he stopped at a small village on the west end. "The first people I have met on this coast that did not understand any English at all," he said. "At the same time probably the most hospitable I have met. When I came in after having fed my dogs I found them busy cooking feed for my dogs."

While there, Erling noted:

The old man here told me a lot about seal nets and showed me one and demonstrated its use. It is always made of seal line here even in recent days but the art of catching seals seems to be mostly practiced by the older generation. The nets are about 20 mesh deep and about 25 long, mesh $13\frac{1}{2}$ inch line thin as No. 2 cord. Suspended across a crack in the ice or sometimes like a hammock under a blowhole. Only seal caught is the natseq (*phoca hispida*)? The knots are tied double. Seals are here mostly caught in the spring out on the edge of new ice when a new crack is found and new ice is formed a net is set across. The knot used

is the ordinary fisherman knot only the end is tied twice around the loop instead of once because the seal line gets slippery when wet.

About 1 a.m., the woman of the house went out with a big pot of flour soup to feed Erling's dogs. She explained that she always liked to feed a stranger's dogs when he camped there. He was struck again by her kindness, although he found her human mealtime arrangements rather puzzling. "At mealtime everybody but the son of the house went over to eat at the neighbours and left us to eat alone. I tried to find out if that was a sort of courtesy but the boy evaded my question saying that they often did so. I have still salmon for 3 or 4 days and made a great hit by giving them a few salmon. The old man has eaten salmon once when a boy and the woman never. I did not get to bed till two o'clock here either." Before leaving, he was presented with a caribou tongue from the old woman and a brand new case for his snow-glasses from the boy. "I was quite touched and felt utterly poor myself having nothing to give in return except for a few cans of corned beef (that I know the natives do not care for, because it is too salty)."

Two days after leaving them, on 28 March 1927 Erling reached Demarcation Point where the Whaling and Trading Company had its last Alaska outpost. Another three and a half miles took him to the U.S./Canada border where he stopped to take pictures of the Canadian monument at the request of Mr. J. D. Craig of the International Boundary Commission. "The monument was in good shape. I dug out the concrete foundation that was drifted over with snow. There is one crack in the concrete on the south side and the upper section of the body is slightly loose."

After one hour of taking photographs, Erling's ten months in Alaska came to an end as he crossed the International Boundary Line into Canada. As he headed for Herschel Island, the famed Arctic destination of many an old whaling captain, he was anxious now to get a message to Finnie with the results of the Alaskan investigation.

This should have been a time when he looked back with satisfaction at what he had accomplished in Alaska and looked forward with some degree of pleasure at the thought of arriving at his first Arctic station on the Yukon side of the line. Unfortunately, around this time he "hurt himself lifting on the heavy sleigh" and was "bothered a good deal since." It would take him two more days of discomfort before he could reach the first settlement along the coast. He arrived at Herschel Island on March 30, where he discovered that he could not



Marker at U.S./Canada international boundary, 141st meridian, 1927 (Photo: AEP, LAC, e010933872)

send a report to Finnie because the wireless service had been discontinued. “To do so was one of my main reasons for leaving Bob and go on alone,” he lamented.

He gladly accepted an invitation to stay at the RCMP quarters, and retreated to bed as soon as possible. Erling confessed: “I felt kind of bad all day and in the evening found I had a temperature of 104 so deemed it best to take to bed till it got better.” The officers soon became alarmed when they saw that he appeared to be very ill.

After two days of rest he was no better and it was obvious that he needed medical attention. The nearest hospital was a week’s journey to the south and Erling could not make the trip on his own. Given no choice, Inspector Caulkin detailed Constable Tyack to drive their none-too-happy patient on his sled to the Anglican Mission Hospital in Aklavik. They followed the coast to Shingle Point where the Hudson’s Bay factor, Mr. A. A. Carroll, gave Erling “a bandage that helped me a lot, also a hyperdermic syringe in case I shall have to make an operation on myself before we get to Aklavik.”



Carroll, HBC manager, and RCMP Constable Tyack from Herschel Island, Shingle Point, Yukon, 1927 (Photo: AEP, LAC, PA-101956)

There is no sign of complaint in Erling's notes about the long and what must have been painful journey over uneven terrain. Because Aklavik was situated on the southwest side of the Mackenzie River delta, it was not necessary for the party to navigate the hundred-mile maze of islands and channels to the east and southeast of Herschel Island, but, en route, they crossed a series of lakes, lagoons and marshes and Erling merely noted "the amazing quickness with which this type of vegetation changes from high arctic into boreal or transit near the big river."

Fortunately, they reached the police barracks in Aklavik on April 9 without incident. The next day the doctor confirmed the diagnosis of a severe hernia from lifting the sled. "Too bad," Erling complained. "I really have no time to stay in hospital. Dr. Cook thinks operation not necessary and that I shall be in shape to continue travelling after one week.... Went to the Anglican Hospital in the afternoon and started serving my time."

Bob arrived to visit him the next day, having finally been able to get a better team together at Beechey Point. Another visitor to the hospital was the Hudson's Bay manager who thought there might be a chance for them to rent a house from him at the end of the month.



All Saints Hospital, Aklavik, NWT, 1930 (Photo: R. Finnie, LAC, e010933896)

A week and then a month passed and Erling's condition still did not improve, so eventually he was forced to undergo surgery. By May 21 he could write in his journal: "Am still in hospital but have been up a few hours the last three days and am scheduled to leave on Monday. (It seems to clear up fine and the Doctor is most enthusiastic.) Bob has been up the river about 8 miles from here the last week and is busy cutting wood for next winter. I have been busy making requisitions for next year and am wiring it out Monday. Spring is here now. There are open leads along the banks of the river and the ice may go out in the next two weeks time.... Ducks and geese and some cranes are passing every day. The first willows are in bloom."

Erling left the hospital on May 24 and went upriver to Bob's camp. Too weak to do much work, he took a holiday and studied wildlife with field glasses and a gun. With the Alaskan reindeer investigation behind them, from this time he began to make general bird and mammal observations that were to form the basis of his later publications on the wildlife of the Mackenzie River Delta.

Life in the newly ice-free delta lakes was interesting. Numerous ducks were passing. Bonaparte and herring gulls were frequently observed. The snow was still frozen near the ground but the vegetation was coming along fast. At their camp, Erling saw patches of a twenty-foot willow standing in three feet of snow and flowering, the only flower observed, and noted that all the catkins were blooming on the south side only. Growing stronger each day, he made notes of natural history interest, watching the many mice around the camp, especially a short-tailed species fond of fresh moss and wet *Cetraria* lichen.



Bob and Erling Porsild at Peel Channel camp, NWT, 1927 (Photo: AEP, LAC, e010933873)

It was ‘ratting’ time in the delta, when everyone was out hunting muskrats, which he noticed were evasive by day but easily approached at night. He thought they fed on rhizomes and stolons of *Menyanthes*, *Sparganium*, or *Carex*, but the contents of an opened stomach were too finely masticated to be determined. He and Bob hunted muskrats for the dogs, each rat yielding about 2–3 pounds, and later traded the skins for meat. “We need meat badly for the dogs. They have been subsisting for two months now on rice and oats and are getting sick, probably scurvy.” From now on, much of their time would be spent in providing food for them, which partly accounted for Erling’s decision to collect bird and mammal specimens and add scientific interest to the hunt, although he would need more arsenic in order to preserve specimens for Anderson at the Museum.

They decided to return to Aklavik on May 28 when Bob had finished cutting wood. The ice was beginning to break up on the river. “I am still too weak to do much work,” Erling said, “but want to do some.... Started breaking the camp in the evening. Had lots of difficulties getting the dogs down the steep cut bank into the canoe. The open lead between ice and bank is getting dangerous for a canoe, as bottom ice is coming up all the time. Going back we took a load of rafters to be used at the main camp. Pretty heavy load with the canoe on top. All 17 dogs lined up made quite a show.” The ice in the river started moving at 11 p.m. on June 1, jamming into the Aklavik side while the whole village was out ratting. By the next evening, the river was completely clear.

As spring was late that year, Erling's stay in hospital had not delayed their work appreciably. With the ice gone, the brothers now planned a canoe trip to make a thorough reconnaissance of the country lying east from the delta to where Anderson River flowed into Liverpool Bay. The first step would be to search for a portage into Eskimo Lakes, known locally as 'Husky Lakes,' being the string of water bodies that almost connected Liverpool Bay with the delta. This would add the aspect of mapping to their work as they felt, incorrectly as it turned out, that much of the terrain through which they would be travelling was unknown and un-surveyed. In fact, the portage via Gull River, Campbell and Sitidgi Lakes had been mapped and/or surveyed by Father Emile Petitot in 1869, Count de Sainville in 1898, and A. H. Harrison in 1908, but lacking that information they were keen to set out and explore the new territory for themselves.³

On June 7, just before leaving Aklavik, Erling collected his first plants of the year (*Arctostaphylos*, *Alnus*, *Salix*, *Anemone richardsonii*, *Stellaria longipes*, *Caltha palustris*, *Petasites*, and *Ribes*) in bloom in the snow. Three days later, they loaded the canoe with tent, supplies, guns and, plant presses and headed upriver for the junction with the East Branch.

The vegetation was ahead of Aklavik and was already green with many flowers, including a beautiful blue lupine adorning the dry cutbanks. Aspen and balsam poplar were common but no birch or tamarack were to be seen. They turned at the fork of the East Branch on June 14, continuing north to Gull Lake River, where they found a small lake close to limestone hills and collected and surveyed all day. The hills extended far to the northeast, while the Richardson Mountains to the west were quite clear. Gull and Campbell Lakes were visible to the southeast. No game was observed but they noticed many birds nesting and even collected butterflies.

The following day Erling went downriver to investigate several smaller lakes, noting not only the difference in the flora but again the remarkable absence of game. The Porsilds were later to discover that the whole area had been decimated by hunters supplying the whaling ships east of the delta from the late 1800s to less than twenty years previously. "This should be typical moose country," he puzzled. "Not even ptarmigan or grouse. Only land animals seen so far are mice. Saw one muskrat. Whole result of today's hunting was one mallard and two teals – not much for two hungry men and a dog."⁴

He had already had one unhappy encounter with a muskrat that he knew enough not to repeat. "Killed a muskrat for Junior last night. Thought him dead

and was not looking when I grabbed him. He was not dead however and took a good bite at my wrist where he cut one of the big arteries before I could shake him off. I knew you should never take a rat except by the tail but I thought the fellow entirely gone. It was bleeding badly but a light bandage stopped bleeding at once.”

On June 16, they continued upstream to Campbell Lake where they met fog, flooded willow swamps, and a channel blocked with ice. There was nothing for it but to drag the canoe over the ice and through the willows and set up camp on a rocky beach at the base of a limestone promontory.

By noon the next day, it was clear enough for Erling to climb up and follow the ridge to make a survey. Travelling over a rolling plateau covered with dense alder and willow brush intermixed with spruce and tamarack, he saw evidence of serious fire damage, warning of problems to come for reindeer pasturage in the area. “All this country has been burned probably 50 years or more ago. Once this was a dense spruce forest of which the burned and charred trunks and stumps bear evidence.... The hillsides undoubtedly were covered with lichens before, now the brush [mainly heath family] is becoming too thick for the lichens and no extensive patches were noticed.” From a tall spruce he could see two small lakes and a larger ice-covered one some ten to fifteen miles away that he took to be Sitidgi Lake. He took bearings, observations for latitude and time, and collected a few shell fossils before getting back to camp at 11:15 p.m.

Meanwhile, Bob had collected and pressed plants from the surrounding muskeg and overhauled the engine that had troubled them from the beginning of the trip. Battling with engine and ice, they continued to explore the lake and surrounding country, taking frequent bearings and trying to find the portage that they had seen was ice-bound. On June 20, they found a small, deep, very crooked river leading in the right direction. Tracking over a shallow rapid, they then encountered bad log jams. They had lost their axe and it was a hard and sometimes next to impossible job to break the jams by hand.

The creek grew very narrow. With a great deal of hard work, they finally reached the two lakes seen earlier, and, after an overnight camp, they set out on foot in hopes of reaching the shore of Sitidgi Lake. Two hours later, having skirted smaller lakes and a swamp, they were stopped on the banks of a small deep river fringed by tall white spruce. From one of these, Erling could see the lake about five miles to the east and thought it might be possible to make a portage from Eskimo Lakes by canoe in the fall.



Typical muskeg on portage Campbell – Eskimo Lakes, NWT, 1927 (Photo: AEP, LAC, e010933874)

Before going back, he tied a torn piece of cloth to a spruce that could easily be seen from the opposite direction. For the present, he had seen enough to conclude that this was excellent winter reindeer country, with snow cover no higher than two feet. “As a whole about 9/10 of the land has 100% forage value. On the higher plain there is good lichen range and except where the timber is too thick the ground birch and other browse is available.” Interestingly, they saw recent caribou droppings on their way back.

“Returning to camp,” he said, “the mosquitoes came up from the swamp in clouds. Travelling against the sun it looked like a thin haze so thick were they over the ground. In the middle of a swamp, with no clear water at all we found a swan’s nest. It was about 4 f. diameter built up about 2 f. over the swamp tufts of moss (*Sphagnum* mostly). The male left first before we saw the nest and the female when we approached. In the nest was 6 large uniform grey eggs – $4 \times 2\frac{3}{4}$ inch – in state of far advanced incubation.” Earlier in the day they had found an old-squaw’s nest with nine eggs and two Lapland longspur nests, one with two eggs hatched that day.

They broke camp on June 22 in no mood to dawdle while fighting the relentless mosquitoes. Still coping with more engine problems and navigating the unmarked channels of the river, they reached Aklavik at 8 a.m. on June 24,

satisfied that they had found their way through the maze of unmarked channels, lakes, rivers and creeks to their portage, however difficult it might be to use in the fall. What was even more important was that they had seen grazing land for reindeer equal to or better than any seen in Alaska. They had made a good collection of plants and lichens and “numerous notes of general scientific value, supported by samples and specimens.” Despite the setbacks with Erling’s health problems, their work in the Delta had had a good beginning.⁵



CHAPTER EIGHT

MAIL TIME IN AKLAVIK

The Porsild brothers were not to get much sleep on the day they returned to Aklavik. Mid-June to mid-July was the time of the annual fishing event for the people of the delta. They came upriver to fish for herring, whitefish, and ‘inconnu,’ Father Petitot had noted many years earlier. “The whole waterfront is covered with tents and dogs,” Erling said. “Besides our own 17 there is about a score more belonging to the owners of a schooner beached below our place. Dogs are breaking loose all the time and as soon as a dog runs about loose the whole bunch of them – there must be several hundred – begin to raise hell. About 2 p.m. I gave up the idea of sleep and started on clearing up after the trip.”

It was Rudolph Anderson, in his 1914 natural history report in Stefansson’s *My Life with the Eskimo*, who had said that fish probably played a more important part than anything else in the domestic economy of the Eskimo of the western Arctic coast. The delta was pre-eminently a fish country, with fish being the staple food throughout the year. The common method of fishing was by gill-nets, usually 2½” mesh, 5–6’ deep, and 100’ long, that were set along the shore or across the mouths of rivers and creeks, rigged with sinkers and floats, and set from a kayak or shoved out into the water with a very long pole made of driftwood sticks spliced together.

Once back in the village, Bob began getting fish nets in place so that they would have food for the dogs. “The point right below our house is a good ‘fish place’ but there are so many schooners and nets out that it is of little use to try here.” Erling looked after the plants from the trip and took a few out of the press that were already dry. “Rest of day occupied with different domestic duties,” he complained. “These things take too much of our time.” Fortunately, the mail



Eskimo schooners, Aklavik, NWT, 1927 (Photo: AEP, LAC, PA-172817)

boat was delayed because of the late spring, for there would be much official work to do when the Distributor arrived with letters that would need an urgent reply before they were again cut off from the outside world.

They were now involved in a strange affair with the RCMP. On their way back to Aklavik, they had met a white man rowing a small empty canoe, and about a quarter-mile behind him was what they thought was his Indian wife with a big canoe and outfit. They had stopped to talk to him for a few minutes but left soon after as he did not seem very communicative. A few hundred yards away from him, Bob heard a splash in the water behind their canoe and saw what he thought resembled the splash of a rifle bullet, but at the time he ascribed it to a jackfish. "When we came back we heard that this man had run away with an Indian's wife and that the Police had been called into action by the husband and had left this morning in pursuit of the fugitives accompanied by Corporal Belcher and the Police interpreter, who is reported to have said before leaving 'that he was going to clean his gun anyhow.' The offender, 'Shorty,' is said to be crazy and ready to shoot." In fact, when he heard the story, Bob was convinced that what he had heard had been the man firing a bullet after them. Unfortunately, he mentioned the episode to someone, to his brother's annoyance, and when the Corporal came back, declaring that the fugitive was not in the delta, Bob was called on to give evidence. All he could say was that

he did not know the man they met by name so he did not know if he was the one the police wanted. The only thing he could be certain about was that there had been a splash.

This odd business should have ended there but, whether or not it was in any way connected, the brothers were surprised to find that the RCMP in Aklavik suddenly became very officious with them. In the evening after the testimony, the Inspector took occasion to 'check' Bob for using a Greenland whip. "It was dangerous for passersby," he said. This was the same Inspector Caulkin who had been so kind to Erling when he was ill at Herschel Island, so it came as a further shock later that same evening when he sent word with the Corporal that he wanted to see Erling at his house, if it was convenient.

"I wondered if this is the custom in this country to send for a man you want to see," said Erling,

... but came over at once. The Inspector wanted to explain that he was not trying to be officious at all but thought the checking necessary and hoped it to be taken in good part. Also he wanted to inform me that I had been incorrect in not showing what permits and licenses I was holding. Though I was under the impression going by the text of the permits that say 'to be produced on demand by any Game Warden or Police Officer' it had been my intention to bring them to the Inspector and had them lying in top of my trunk when I arrived at Herschel Island. My subsequent sickness however, made me forget all about them. I was very much surprised by the present attitude of the Inspector. I had been under the impression that our standing with Police was the best possible and am certainly not aware of any misconduct on our part... We have received much help and hospitality from the police especially when we first came here. I very much appreciated this and first thing I did after leaving hospital was to tell the inspector so.

On 28 June 1927, they received a worried telegram from Ottawa. Finnie had learned of Erling's operation through an alarmist dispatch in the *Edmonton Journal* to the effect that his agent had undergone an operation and unless completely recovered would have to go out on the first steamer. He wired Aklavik for details at once, adding that he expected a full report of their investigation to date by the first boat, also all details of what they proposed to investigate for



S.S. "Distributor," Aklavik, NWT, n.d. (Photo: R. Finnie, LAC, PA-203572)

the next twelve months. Erling replied immediately with details of his illness, adding by way of reassurance:

OPERATION NOT SERIOUS AND RECOVERY COMPLETE STOP/ SHOULD HAVE INFORMED YOU AT ONCE BUT THOUGHT CASE TOO INSIGNIFICANT FIRST TO BOTHER STOP/ ONLY SLIGHT CHANGES IN PLANS CAUSED BY SICKNESS AND NO SERIOUS DELAYS IN OUR WORK STOP/ JUST BACK FROM FIFTEEN DAY CANOE TRIP TO INLAND EAST OF DELTA STOP/ HAVE FULL REPORTS OF PAST WORK AND OUTLINES WORK READY FOR MAIL BOAT. ¹

It was midnight on July 9 before the first boat finally arrived in Aklavik. Mail, which for the Porsilds went back almost a year and a half, was distributed at 4 a.m. and Erling worked night and day to answer the most important official and private letters before the *Distributor* departed on June 12. "Our spare parts did not come in, also a very important ms. sent through Mr. Finnie is not in the mail.... Wrote again all night," he said. "Delivered what was ready at 12 p.m. last night and continued until the second whistle of the boat."

One of Erling's letters went to Rudolph Anderson at the Museum, thanking him for the latest news from outside, which included Lindbergh's historic flight across the Atlantic in May and other long-distance attempts that had

failed. "I have never in all the years I have lived in the North felt so utterly out of everything," he said. "You never get anything over the wireless. I don't quite understand why." He apologized that he had not yet collected any animal specimens for the Museum and asked for more arsenic as most of their supply was lost in transit from Alaska. Although he thought that the areas they had managed to visit in spring excelled anything they had seen in Alaska, he worried that there would be time to do everything they hoped to accomplish.

"This is a fine country," he said, "but a very hard country to do anything in unless you are absolutely independent. It seems it is easier and cheaper to get white than native help. There is such an awful lot to do and it seems a pity that much time, that could be used to better advantage, has to be spent fishing or cutting or [hauling] wood because you cannot get anybody to do it."²

To Finnie, he sent his summary of their Alaska investigation:

The main object with our trip to Alaska, I understand, was to find out what conditions in general were required for reindeer in order later to ascertain if similar conditions were found on the Canadian side, so that it would be justified to expect that reindeer, if introduced, might find the country suitable and the industry meet with an ultimate success such as has been the case in most places in Alaska.

This important part, I believe ... we may now say that we understand thoroughly, but besides this we have also been able to give attention to other questions of vital importance to the sound growth of the industry, such as, 1) why the reindeer industry in Alaska had an exceptional good chance to become a success when started more than thirty years ago, 2) the effect of the reindeer industry on the country, and 3) on the population, 4) the failure of the U.S. Government through the Bureau of Education to maintain the reindeer for the natives or aborigines of the country and to have control over the deer, 5) the commercializing of the reindeer industry and its present difficulties and failure and probable ultimate success, 6) the aborigines of Alaska as live stock owners, 7) the work of the U.S. Bureau of Biology and 8) the probable future of the reindeer in Alaska. All these questions will sooner or later arrive in this country, if parts of it are to be stocked with reindeer, and I am satisfied that through finishing our work in Alaska a very important part of our task is done.

Regarding future plans to assess reindeer forage availability, Erling realized that they were looking at an area of 20,000 square miles to be covered in the spring and summer of 1927, of which a mere 300–400 miles were traversed in their recent canoe trip. He felt they would be handicapped by lack of transportation facilities and by a sparse population that, due to high fur prices, was generally unwilling to work for wages as guides and crews. By the middle of July, the ice should have gone out along the Arctic coast. As soon as possible, they would leave the dogs with a man fishing in Kittigazuit and make a survey of Richards Island and Kittigazuit before investigating the seacoast to the east as far as Liverpool Bay. If time permitted, a canoe trip up the Anderson River would be made. They would make a reconnaissance of Eskimo and Sitidgi Lakes, covering the land north and south of the lakes on foot and by canoe. By the end of September, they should be back in the delta. In winter, the same area could be traversed by dog team. As for their pasture reconnaissance in 1928, the best area appeared to be around Great Bear Lake but plans were still in the making.³

It would be the middle of August before Erling's reports reached Ottawa, but they undoubtedly met with approval in the North West Territories and Yukon Branch of the Department of the Interior. His important points to consider concerning the reindeer industry in Alaska and for future development domestically were underlined in an internal memo from W.H.B. Hoare to Finnie on August 16 with the comment that a knowledge of these important questions beforehand should secure against failure when the reindeer industry was begun in our Northwest. Yet in this and later official reports, there is no clue to the reasons Erling would give for the successful establishment of reindeer in Alaska or the real effects of the industry on the native population. It could be expected that he would deal negatively with native ownership and the Bureau of Education, positively with the large white-controlled corporations, the Bureau of Biology and the future of the industry in Alaska, as coloured by the influence of Palmer and white owners such as Williams and the Lomen family. There is nothing anywhere to indicate that the young Porsilds had any inkling of the problems facing the industry or of the disasters to come. It is possible that no one at that time could have predicted the imminent crash in the reindeer business in Alaska. It is also possible that the brothers discussed these matters between themselves and admitted to reservations in private, but Erling preferred to present an optimistic picture in public, avoiding anything that might reflect adversely on himself, his investigation, or the high hopes of Finnie and

the officials of the Department of the Interior for the introduction of a prosperous reindeer industry into Canada's Northland.

From the National Herbarium, there were two letters from Malte, who was hoping to receive the Alaskan collections during the summer and asked if they would collect seeds of *Papaver nudicaule* for Dr. Ljungdahl of Sweden. The Chief Botanist was looking forward to his first trip to the Arctic, travelling as part of the Canadian Arctic Expedition on the S.S. *Beothic*. He had already written to Ostenfeld: "The ship will leave Sydney, Nova Scotia, about the 15th of July, touching at Godhavn first. I have already sent Porsild a wireless from Pittsburgh announcing my coming to see him and warning him: 'Please be prepared for a hot time,' to which the radio operator added: 'This, I take it, is figuratively speaking?'" To the Porsild sons, he added the information that the radio message "was picked up in England, among other places, where they thought it sufficiently funny to be printed in the newspapers."

The first stop for the *Beothic* would be at Disko Island, Malte said, and he was looking forward with great pleasure to seeing their father and mother. "I am taking a couple of boxes of fruit of some kinds that do not grow in Greenland to your father.... Rest assured that I shall not forget to tell about your Alaska collections.... It is certainly a both imposing and interesting list of plants which you and your brother have managed to collect.... I surely appreciate your work."

He thought it would interest Erling to know that the Department had made final arrangements with Ostenfeld a short time before to cooperate in the preparation of the Flora of Arctic Canada, including the whole Arctic section of Canada from Ellesmere Island down to the tree-line. "With the collections we already have from the Arctic, including Mr. Soper's collections from Baffin Land, with the material from the Thule Expeditions in Copenhagen which are not yet worked up, with the collections I expect to make the coming summer and with the contributions from you and your brother we should have ample material for a flora of the type proposed. Incidentally and confidentially, I feel sure that you will be able to add a lot of records to those found in the Report of the Canadian Arctic Expedition, which were based on Johansen's apparently rather erratic collections."⁴

As Malte was leaving Ottawa for the summer, Erling did not need to answer by return mail. In any case, he needed a little time in order to reply carefully. He had received a great deal of help from Ostenfeld in Denmark. He was deeply indebted to Malte for the reindeer job recommendation. Yet it must have struck

him forcibly on reading Malte's letter that the ambitions of his sponsors for the Flora of Arctic Canada could very well clash with his own hopes for future work on the collections that he and his brother were making in the northwest.

On July 15, just before the brothers set out on their summer reconnaissance on the coast, Erling sat down to reply. He was delighted, he said, that Malte was going to have a look at the Arctic himself and would be able to stop in Godhavn. "I am sure they shall enjoy your visit. It is too bad that the boat only stops a day or so. I wish I could go myself." Regarding their collections in the Northwest, he said: "I sent a carbon of the Alaska catalogue to father, but all the comment he gives is, that he can see 'that we are not acquainted with the western types yet.' He spent lots of time this winter making us a sort of field key to the arctic and boreal part of the flora of this continent. As he shall know from my wire by now, something happened to the parcel in transit, for we have not received it, whereas the accompanying letter was received. I am sure he shall be just as sorry as we are."

About the Flora, he said carefully: "Of course I am also glad to hear of the arrangements with Ostenfeld. That sure will be some job before you get through with it and I do hope that it may take so long that I shall have a chance to work up our collections first."

As to their own news, they had recently made a nice little collection recently from a canoe trip to the country east of the delta. "Coming from the delta it was just as dropping into an all together different flora that scarcely had any types in common. It was rather early in the season; June 10–25, and we only noticed about 150 species of vascular plants." Still it was surprising that, although the season was very late this year, they had found about 33 per cent of the plants in flower and even a few in fruit.

"Very unfortunate it is that in the very best of the short season we have had to devote nearly three weeks to trivial duties as hauling of wood for next winter, fishing (it is impossible to hire a native) and to office work (mostly red tape). Lately we have been trying to make a deal about a boat for this and next summer's work, and we have been delayed nearly ten days waiting for approbation from the Department. Finally the deal went through yesterday, and now we are busy making everything ship-shape, and hope to leave for the coast tomorrow." Elaborating on the extent of the area they would be covering that summer, Erling added: "so you see we shall be able to cover lots of ground, so better consider an order for a new set of herbarium cases."⁵

The Herbarium would indeed be in need of new cases before that summer was over. About the time that Erling wrote to him from Aklavik, Malte had left his field assistant Watson to continue collecting in the area of St. Leonard, New Brunswick, and boarded the S.S. *Beothic* in North Sydney, Nova Scotia, where he was to share a cabin with none other than the celebrated Canadian artist A. Y. Jackson and share meals with a young doctor who would later become famous and knighted as Sir Frederick Banting for his discovery of insulin. He would write of the trip more seriously to his botanical colleagues, but to young Watson he sent a merry version of his great Arctic adventure.

“Five minutes after the *Beothic* left the wharf at North Sydney,” he said,

... a number of us threw overboard that symbol of social slavery called collar, and from that moment everybody was free and easy – and happy, thanking the Lord for at least a pro tem delivery from the shackles of conventionalism. The crossing from Nova Scotia to Disco in Greenland took a week. It was foggy most of the time, with for a while a sea that made the ship roll at least 30 degrees, sufficiently to make trunks, grips, and other loose things slide back and forth from one side of the cabin to the other for hours. If you think I got seasick you are mistaken. No, sir, four meals a day regularly, and a nightcap or two with relish every night. When we came to Disco, the whole population was excited; the Eskimisses had donned all their picturesque finery and the male natives wore a grin about a foot across. I met of course my old friend, Dr. Porsild who, contrary to all so-called decent rules of etiquette, treated me to Swedish Punch – a powerful and lovely liquor – long before lunch time. I could not possibly tell all that happened at Disco; suffice it to say that when the day was over, it was not the reflection from the midnight sun alone that made our faces look so radiant.

They saw little ice until reaching Baffin Island when they “got plenty of it, and had it with us all the time until we came back down to Hudson strait.” Their most anxious moment was off the Bache peninsula on Ellesmere Island where they were caught in pack-ice, varying in thickness from five to thirty feet, until the shifting tide and current released them “and, believe me, everybody drew a long, long breath of relief when we got out.... The only other time we were in danger of losing out against the ice was at Beechey Island, on the southwest



S.S. "Beothic," Eastern Arctic Patrol, Godhavn, Greenland, 1927. *L to R*: Dr. M. P. Porsild, Miss A. I. "Tulle" Porsild (daughter), Dr. F. H. Stringer, RCMP Inspector C. E. Wilcox, Governor P. R. Rosenthal, Dr. M. O. Malte, Captains L. D. Morin and E. Falk (Photo: R. Finnie, LAC, e010933898)

corner of Devon Island. Here we had to seek shelter against a gale in Erebus Bay – where Franklin wintered – and had to stay for about two days, with an immense ice-field drifting past the mouth of the bay and partly into the bay itself." Once out of the bay, they tried in vain to find a lead in the ice to reach Melville Island. "Nothing doing. After a couple of days of cruising up and down between Devon island and Cornwallis Island we had to acknowledge defeat and steer homeward, with, of course, the compasses as steady as drunken sailors."

In spite of the ice, the *Beothic* was able to call at fourteen stations in the Canadian Eastern Arctic, including North Devon, Ellesmere, North Somerset, and Baffin Islands and Hudson Strait, Quebec. With only a total of seventy-four hours ashore, Malte managed to collect over four thousand herbarium sheets in the immediate vicinity of the various RCMP posts, finding several species that had never been recorded for the archipelago. He told Watson that if he were to tell him everything about his Arctic trip, he would never finish his letter, but he ended with "One more thing. If you ask me which plant I found most lovely up there, I would be put up against it, but probably my choice would be *Saxifraga*

flagellaris, of which I saw an association numbering easily 1,000 individuals, crowded on a space about as large as the Herbarium room at the Museum.”⁶

It was December 2 before he wrote to tell Ostenfeld of the success of his trip north, attributing a lot of his good collection results to a new method recommended to him by Professor Fernald, who was used to handling plant collecting in difficult situations. Malte had used an old potato sack as a vasculum and wrapped each individual collection in paper before dumping it into the sack. For pressing, he had placed his collected plants between corrugated cardboards instead of the traditional felt separators, then stacked the boards and strapped them into a pile about a metre high and put them to dry on the grating over the boilers (known as fiddle ladders) in the ship’s engine room. He was delighted with the results of this new technique as the colours of flowers and foliage were well preserved.⁷

By return on 3 January 1928, Ostenfeld congratulated Malte on his achievements. “They show how much there is to be found and how scanty our knowledge of these regions still is. Now I think that the Barren Grounds and the central and western arctic islands remain to be botanically explored.”⁸



CHAPTER NINE

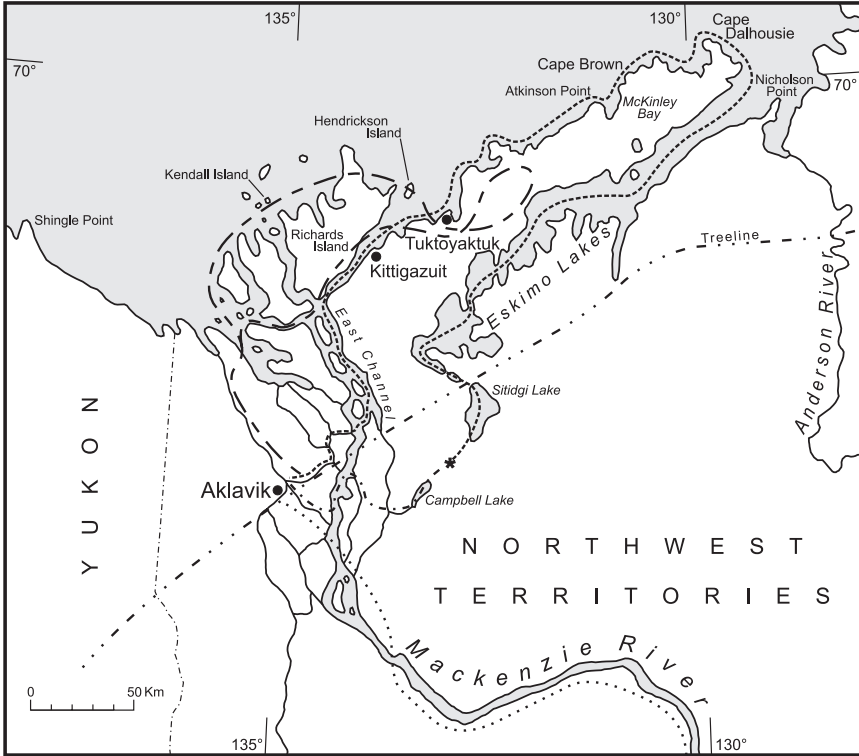
SCHOONER TRAVEL ON THE ARCTIC COAST

The Porsilds were anxious to get on with their 1927 pasture reconnaissance. “Since the *Distributor* left on Tuesday we have been very busy getting ready to leave for the coast,” Erling wrote in his journal on July 16.

Unfortunately, there were no eastbound schooners until August, so they were forced to abandon their earlier plans of being dropped off at Liverpool Bay to canoe down the Eskimo Lakes to Sitidgi Lake and the Campbell Lake portage. There seemed to be no boats available for regular charter so they talked to a man who had a boat for sale. He would not budge on his exorbitant price for it. “He is the kind of fellow who would rather give the boat away to somebody else than cut 10¢ off the price once mentioned. He had \$10,000 worth of fur on his boat and doesn’t need the money. We tried different ways but no use.”

The charter of the boat, with purchase in view, was finally agreed and approved in Ottawa, but the engine needed overhauling before they could leave. Bob took it apart with mechanical help. Something was wrong with the ignition. The crankcase was cleaned out and every part inspected, but in spite of all their work on it, the engine was to cause them nothing but trouble from beginning to end.

While Bob tried to get the boat ready, they hired an Indian boy, Jacob Drymeat, to act as their camp-hand for the summer, and Erling worked at getting their equipment and supplies in shape. “There are a tremendous lot of things needed for a trip like this. We made arrangements with the Eskimo, Dennis, from Richardson Island ... to wait and tow us down.” This gave them a pilot for the Kittigazuit channel, which was said to be the most difficult in the delta, but his 40/50 hp motor would cost them more in gas.



Investigation routes in the Mackenzie Delta, NWT, Canadian Reindeer Project, 1927
 (Cartography: Ragnar Müller-Wille)

Every detail of their plans seemed to have its flaws. “Some days ago I made arrangements with the manager of the H. B. Co’s post at Kittigazuit to take our dogs down. He was taking a small load in a big scow. Unfortunately he went on a big drunk the evening before and was brought unconscious on board and the boat pulled out on the order of the interpreter.”

So it was up to them to load seven dogs into their canoe and put the rest in and on the boat. With the long daylight, they left Aklavik at 10:30 p.m. on July 16 to begin the tortuous ride through the multitude of forks and channels of the delta, with Dennis’s boat pulling theirs, complete with two men and a boy, all the dogs, and all their gear. Erling took careful note of the navigable channels for their return. Left out of Aklavik, second left but keep to the right, right. A grizzly crossed the river a couple of hundred yards ahead of them. Four

channels now to choose from, then three. Left, right, right, right, left. "Cottonwood, alder and willows. Country very low.... Saw goose with four young still in down.... At five we entered a big channel and presently got stuck on a mud flat. Worked to 10 a.m. with no success. This engine don't differ from all the rest of them and the reverse was of no use. Tried an anchor with a pair of blocks on. Pulled our own boat off but the tug was about one foot down in the mud."

By unloading the contents of the tug into the skiff and moving cargo from stern to bow and thus trimming it, by continued use of engine and tackle, with Bob wading and digging all the time, they managed to get the boat off, only to have Dennis put it back on again. "Apparently he knows all the turns and shortcuts but evidently he does not know how much a boat of this size draws.... As soon as we [get] stuck he is through and does not know how to get off again and is perfectly helpless. Had we not been along he would probably have been on the first mud bank till the next storm raised the water in the river," Erling said. They were to get stuck three more times before they parted company with him down the delta.

At the south end of Richards Island, they went ashore for five hours. "Fine reindeer country," Erling pronounced, "But holy smoke; talk about flies. When we got back my arms were swollen as if I had elephantiasis, and my right eye had almost been closed from swelling of the upper lid. We made a good collection of plants. Found an old sled almost complete with the bones of the owner next to it. Numerous ground squirrel holes. Saw grouse with young."

They reached Kittigazuit at 4.p.m. on July 18 and continued east to the fish camp where they were to leave the dogs with Pete Stromberg. Erling decided to go out for a swim. "I had hardly got out before nearly the whole village joined me and later I saw some of the old men looking after their fish nets swimming around."¹

Back at Kittigazuit, they pressed their plant collections and went to bed. They woke to wind and rain, which did not let up for the next four days. Erling walked along the high sand bluff from Kittigazuit, then inland and back. It was interesting country, dry and firm and lacking the 'niggerheads,' or sedge hummocks, of the Alaskan tundra. Fine sand with few pebbles and very few boulders made up the hills. The ground was frozen but there were no traces of ground ice, although in several depressions the vegetation was wet and swampy and the polygonal structure was quite marked. He considered the solid ground cover of semi-arid heath plants would make good reindeer country for summer



Repairing nets and tools at fish camp east of Kittigazuit, NWT, July 1927 (Photo: AEP, LAC, PA-101960)

and fall. There were few lichens, but the other species were 50–75 per cent palatable. It would be a suitable place to build a corral.

The boat was so overloaded with gasoline, supplies, and plant collections that there was little room for people, yet the collecting had to continue. The following night, the brothers went back to the fish camp for another inland collecting trip, finding it much like Kittigazuit, with rolling sandhills tunneled through by ground squirrels and numerous lakes, but little swampy land. Again there were no traces of ground ice, although the soil was frozen to a depth of 8–10" in the depressions.

On July 21, the Porsilds and Jacob crossed back to Richards Island and spent their first three hours investigating beach flora and "a large grave where probably a score of people had been buried during some kind of epidemic. Age probably between 50–70 years. There were some fine kayaks and sleds. Took a few smaller things from large isolated grave of 'Chief' nearby. This grave I imagine is over 100 years old but contained iron things. I noticed fragments of a pot of burned clay."

They had difficulty finding a channel so had to anchor their boat some distance out from the shore where they set up their tent. The low-lying island was built up of sand and gravel overlain with a hard, uniform layer of turf. During

their three-day stay, while Jacob hunted and Erling shot a tern and a Golden Plover for his growing bird specimen collection and Bob worked on a stubborn Evinrude engine that refused to start, they also made a large collection of plants and did some ecological counting plots for vegetation types.

As a result of their botanical findings, Erling concluded that the island would be suitable for summer reindeer pasturage. He felt that, although the higher parts of the interior were not as rich in succulent grasses as the low, wet tundra to the east, the firm, dry tundra would be valuable in summer because it would not be damaged by close herding. However, the animals would have to be moved back to the mainland after the strait became solid around October because of the paucity of lichens and lack of timber for winter protection.²

When they returned to the Kittigazuit fish camp on July 24, they encountered Bishop Isaac Stringer, whose early Arctic plant collection in 1893–1900 was added to the reports of the Canadian Arctic Expedition. He was en route to Herschel Island, and Erling asked him to send a message to Finnie requesting copies of Knud Rasmussen's last report. Two days later, the brothers canoed to Kittigazuit to get supplies and wire the department of their whereabouts. John A. MacDougal, the District Agent who sent the message, added that they had asked for instruments to use in mapping.³

Delayed by strong winds and a faulty cylinder on which Bob worked for two days, Erling covered the area from the coastal bluff and sand dunes back to lagoons and saline to brackish marshes and beyond to dry semi-tundra. Behind the bluff, he noted a belt of almost pure *Dryas* intermixed with *Salix*, a few monocotyledons, and small patches of fruticose lichens. He found that the marshes were rather poor in species other than *Carex*, *Eriophorum*, and *Arctophila* and had a line of driftwood on the land side that was "probably old, as I hardly believe that the sea at present time will ever flood the dunes."

Ever curious, he dug up several Leguminosae to check for mycorrhiza, with the tap-rooted *Oxytropis* species having the fewest. "It is strange to notice that in spite of the fact that everybody states that the season is late, most of the plants have gone to seed and many have already scattered the seeds. Of course flowering individuals of most can still be found in places where much snow ... accumulated during winter. Such places to some degree resemble the 'Urtelis' of Greenland." He was interested to see how the vegetation changed three to four miles back from the coast. "On hills and hillsides about 50% are lichens and willows and heather that grows upright forming a dense browse of one to two feet.... In protected places *Alnus* forms dense copses five to six feet high.

Wonderful reindeer range. While cladonias are very scarce near the coast we find here abundance of *Cladonia rangiferina* and even *C. sylvatica* and *C. alpestris* are common in places.”

In the complex of lakes that made him believe that it would be possible to portage to Eskimo Lakes almost anywhere with a light canoe, he noted the abundance of bird life, including ducks and swans with young, terns nesting in colonies, as well as gulls, loons, and numerous species of small waders. Northern phalaropes were there in thousands, feeding near the outer border of the sedges and grasses. When disturbed, they alighted in swarms like mosquitoes. He tried to kill a single one for a specimen but could not get close enough and finally fired where the flock was thinnest and killed thirteen in one shot. He collected a couple of specimens of other shorebirds and noted a large flock of geese flying south before starting back to camp. “Wonder if they could possibly be going south or if they were just flying around like the eider ducks do.”

By the afternoon of July 29 the brothers decided that they were tired of the fish camp and were going to move on even if it was still pretty rough going. It looked as if they would have ample reason to remember Leffingwell’s ominous warning: “No boat should be used in the Arctic regions which can not be relied upon to make the land in offshore gales. Sooner or later a helpless motor boat will bring up against the ice pack and be wrecked, if it is not previously swamped.”

They managed to reach Atkinson Point by the next morning, despite a heavy sea, further ignition problems, and a battery that died for no apparent reason. Here there was a good harbour and they were able to buy batteries from Ole Andreason, a white trader who had accompanied Stefansson on his floating iceberg expedition to Banks Island and now lived at Atkinson Point with one or two other families.⁴

Again they were stormbound. The storm brought the ice in close to the shore and they saw several schooners pass the point, some quite far out and appearing to be fighting the ice, heading for Herschel Island. They were interested to learn from a man on a native schooner that he owned two or three reindeer in Alaska, bought for \$25 apiece from a promoter who had told him that “he ought to buy some and the Government was going to take some in directly.”

Erling was in a critical mood as he walked around what seemed to be a favourite summer camp. “These people have too much easy cash. All over the country you find guns, sewing machines, phonographs, and clothing thrown away either because the owner had no immediate use for it or because

something in the mechanism was broken.” Later, farther along the coast, he was to note the winter supplies unloaded from one of the native schooners and to comment:

They evidently depend very little on the country except for fur and have even provided for dog feed from the stores in form of flour, etc. It is hard to see what these people would do if there were no foxes or rather what they shall depend on after the foxes have been depleted – a calamity that I am afraid is not very far distant. On the north coast of Alaska practically every fox den is known by some trapper and, as the fox cannot breed out on the ice, the trappers will have to depend on foxes from other places as very few will have a chance to breed on that coast. Here of course it is somewhat different as the island supplies a large and partly undisturbed sanctuary for the white fox. Still, when the entire population of native and whites exclusively live on the fox it may become serious soon.

Erling’s comments were not unjustified. The Porsilds were seeing the last summer when native trappers were able to be so free with cash and belongings. The Hudson’s Bay Company began extending unlimited credit in exchange for white fox fur in the summer of 1924. Twenty-six schooners were bought along the coast for which the Eskimos had to pay very little in advance. Large outfits, including rifles, phonographs, cameras, fancy clothes and foods, were given on credit ranging as high as \$5,000 for the best hunters. However, by 1926 and 1927 there was a large influx of Alaskan Eskimos and white trappers. As Erling feared, the coast was trapped intensively and yields were lowered. In the winter ahead, traders would begin to cut down on credit. By the summer of 1928 some trappers would be refused credit while others would be cut down to more reasonable outfits.

At Atkinson Point, the Porsilds continued to make plant and bird collections while their camp-hand hunted for game, bringing in the first fresh meat they had had in a long time. They were surrounded by salt marshes full of brackish ponds that extended for about a mile inland with gradual transition into tundra. It was here that Erling Porsild made the first written reference in his diary to a Greenland Inuit term that he would later introduce into the English language for general usage. About seven to eight miles inland was a



Salt marshes and lagoons with two pingos on skyline, Atkinson Point, NWT, 1927 (Photo: AEP, LAC, e010933877)

large ice-cored hill that he called a ‘pingo,’ and on the afternoon of August 4 the brothers set out to reach it.

The object of their quest was one of Richardson’s, and Leffingwell’s, ‘mounds,’ like Beechey Mound in Alaska. Anderson had given a good description of these strange geologic features in 1914. “A conspicuous feature of the country east of the Mackenzie, near Kittigaryuit (Point Encounter), Toker Point, Warren Point, and to a lesser extent east of this region, are large rounded hills of mud or clay, rising from fifty to one hundred twenty-five feet in height from the flat plain surrounding. These hills, called *pi-nok-tja’luit* by the local Eskimo, are sometimes hemispherical, with either smooth or furrowed sides, and sometimes in the shape of a truncated cone, with a crater in the center, like an extinct volcano.” He called them ‘mud volcanoes’ and said that these most typically had a pool of water in the bottom in summer.⁵

To reach the Atkinson Point pingo, the brothers had to make long detours around lakes and swamps. After dry tundra with numerous water holes and small lakes, five miles from the coast the vegetation became more luxuriant. Willows began to grow upright to one and a half feet. From the top of the

mound, they could see the hills on the other side of Eskimo Lakes and practicable portage was suggested from the head of McKinley Bay via a number of inland water bodies. Bird life was abundant in the area they traversed. There were all kinds of small waders and on one of the big lakes they saw two pairs of swans. They killed four ptarmigan, a loon, and a duck, and for the first time Erling mentioned that they banded a juvenile Lapland Longspur as part of their scientific endeavours, giving it number 19152, which suggests that this was not the first time they had done this.

Overall, it had been a most successful hike. “Our trip added about twenty new species to our list of local flora now counting about 150 species,” Erling said. “As summer reindeer country this ranks with the best. Everywhere the ground is 100% covered and species of high utility as *Eriophorum*, *Betula*, *Puccinellia*, *Poa*, *Festuca*, carices, sage among others. are very abundant.”

At the end of a week, the collections they had made before and after reaching Atkinson Point, over a thousand herbarium specimens, were dry and ready to be cached. On August 6 they set off for Dalhousie, followed by two native schooners bound for Baillie Island. They saw seals for the first time and some belugas. The ice was in close and they had to find their way between or behind the stranded ice in water at times as shallow as three to four feet.

Off Cape Brown they began to have ignition and propeller problems. The new batteries refused to function. With a north wind blowing against a strong current running east, the passage became rough. They felt their way along the shore with a bamboo pole until they came to the Dalhousie entrance and thankfully entered good shelter with about two fathoms of water in the channel. The two schooners also stopped for the night.

They had hardly got the boat in shelter when another storm blew up from the northeast. For eight out of the next ten days it rained or snowed steadily. As there was a shortage of dry wood, they had trouble keeping their collections dry. They began to fear that they would have to give up their trip as the boat was proving so undependable.

After some discussion, the owner of one of the schooners agreed to rent his vessel, *Flying Cloud*, at \$10 a day exclusive of oil and gasoline, on condition that they take him and his family and dogs to a fish place on what was wrongly named Nicholson Island on the map, a peninsula cut off from the mainland at Liverpool Bay by a long, narrow isthmus that was not visible from a distance. As Leffingwell had pointed out, on the Arctic coast, the low-lying land

was impossible to see from a small boat two to three miles offshore, which accounted for many of the mistakes in early mapping.

The plan was that the Porsilds would leave their own boat behind and order new batteries to allow them to get back to the delta on their return, but while taking the *Elsie* round to the inner harbour for better shelter, the canoe got swamped and the Evinrude was nearly lost. They managed to salvage everything except one collecting vasculum that sank and could not be found again despite repeated searching. Eventually the gear was transferred to the new boat and Erling was satisfied that they could get their summer work finished if only they got a fair chance with the weather.

The time spent at Dalhousie was far from wasted. As well as having a suitable vessel with which to continue their exploration, they added new specimens to their collections while Erling made pioneer geographical and botanical observations. Geographically, he found the landscape interesting. With the exception of a few dunes indicating old shorelines, the country was so low that during high tides large areas were inundated and no fresh water could be found even at quite a distance from the coast, yet on August 10, he found a small lake containing pure, non-saline water. "This is in the very same level as the numerous briny lakes and ponds around it and I cannot in any way account for the freshness of its water," he puzzled.

Looking over the terrain, he could find little actual ground ice. "All these lakes appear to be formed by the breaking down of ancient frost cracks of the 'polygon field,'" he said.

There seems to be [a] kind of cycle in the topographical features of the tundra. To begin with it was all uniform mud- or sand-flats when left by the sea. During early frost action the topsoil was divided up in the characteristic polygonal structure. The vegetation entered and along the edges of the fissures it found better conditions than otherwise. This, combined with the raising action of the ice penetrating the fissures in the summer in the form of water raised the edges of the polygons to low ridges. The centre of the polygonal blocks accumulates water from the melting snow and ice and [is] generally swampy, at least in spring and early summer. Sometimes, if the surface of the country favours it, water will accumulate in the fissure too, and the ground ice, that I think here is eliminated to non-extensive wedges just under the crevice, and the ice and frozen edges deteriorate and gradually

transform the crevice into a pond and thus [destroy] the polygonal blocks. I am not sure if this is the general rule or if the well-established polygonal fields are the first form.

In spite of the low and saline soil, the ground was well covered with what Erling felt was a remarkably rich, almost entirely herbaceous vegetation that would afford abundant pasturage for reindeer from May to September. He noticed that, although the influence of the Mackenzie Delta was very strong, the vegetation composition had altered as they moved east along the coast, with the flora gradually becoming more and more "arctic." Some types dropped out and new ones came in. *Vaccinium vitis-idaea*, *Tofieldia*, *Rhododendron*, and *Ledum* were not seen at Dalhousie. Instead, he studied *Papaver*, *Saxifraga*, *Taraxacum*, *Agropyron*, *Poa*, and *Primula*. He collected some seed samples of the Arctic Poppy for Malte. "Although *Papaver* is quite abundant here, very few are maturing seed. All seems to come to flower, but although the sexual organs are present and apparently normally developed they are abortive and wither soon after flowering. Some succeed in developing a capsule, but it deteriorates or misdevelops and no seeds are produced."

On August 15 they started out for Liverpool Bay, following a dangerous reef about three to four miles off the coast. Outside of this, the bottom dropped from two to twenty-five feet, while inside, the water depth was about five to six feet, but there were few openings and these were hard to find unless an onshore wind marked the reef with heavy breakers. "Where the land trends to the west into Husky Inlet, we took bottom about 7 miles off the coast and found the end of the reef about half a mile off," Erling said. On reaching 'Nicholson's Island,' they took a set of compass bearings from the summit of the peninsula, looking east along the coastline to Cape Bathurst and south to the mouth of the Anderson River and beyond.

They left the next day, rounding the peninsula into Liverpool Bay. Up to now, they had been going along the coast in a north-easterly direction, but now the bay turned back to the southwest, taking them inland and parallel to the route they had just travelled. The entrance to Eskimo Lakes was barred by a series of high cutbank islands, but by following the most westerly channel they entered the long string of lakes that would continue to lead them southwesterly, almost as far south as Aklavik, to Sitidgi Lake.

After what they had been through on the coast, the trip down the lakes was easy going. They made several landings and took compass bearings and

observations for latitude as well as soundings and water temperature readings. At one landing place, Bob and Jacob went ashore while Erling decided that the time had come to wash himself and his clothes, having found out the night before that he was full of lice. "I think I collected over 60 big fat specimens," he noted. He decided to "fly-tox" all the bedding and the whole interior of the boat.

By the time they reached the third lake they no longer noticed an ingoing tide but the water was still too brackish to drink. The lakes abounded with fish, of which two species of whitefish were the most plentiful, and whenever they set a net they were rewarded with large catches. Numerous large lake trout were caught in the lower lakes. They found that the lakes were a natural sanctuary for countless species of waterbirds, of which the swans were the commonest and most abundant. Ptarmigan were common on land.

On August 20, they saw a grizzly sitting on top of the cutbank. "We all went in the canoe intending to give it a chase but Mr. Bear beat it before we got up to the place through dense bush," Erling said. They all returned to the boat but later he went for a walk and found the bear lying down eating berries. "We stopped and went in the canoe again. This time the bear, which turned out to be an old female, was more disposed for a meeting and came down to meet us. It walked quite placidly down the hill and came in a slow gait along the beach towards us. I took a photo at about thirty yards before we opened fire. It was rather a sorry-looking thing when we got it towed out and hauled on deck. Surprisingly small for an old bear and nearly toothless."

Wood was scarce until they reached the last lake, although they could see timber at some distance to the south. Where they found spruce it was only six to eight feet high and generally straggling. Low land was either lake or swamp. At first they found the hillsides facing south were densely covered with alder while the flat tops carried a profuse growth of heath plants intermixed with *Rosa*, *Salix*, and *Carex*, and in places an abundance of *Cladonia* and moss. Erling remarked that the 'muck' seemed to support the best Ericaceae cover. As they continued down the lakes, southern exposures became covered with a dense scrub of willows and alders thickly undergrown by heath family shrubs. He noted the absence of *Luzula nivalis*, *Saxifraga groenlandica*, *S. oppositifolia*, and *Androsace chamaejasme* as southern types came in and northern ones dropped out.

On August 21, they reached the head of the last Eskimo Lake where a small river, swift and winding, carried them to Sitidgi Lake. They anchored off a low island inhabited by nesting gulls where they found alders, willows, stunted

spruce, and, in places, a 75-percent cover of reindeer lichen. Several interesting aquatic plants were collected in a small pond. They tried to catch young gulls for banding without success. They had begun to see numerous grasshoppers and dragonflies and were pestered mercilessly by blackflies.

Erling was working on a map of the lakes and Liverpool Bay. "Even if I have missed a lot of details, especially in the larger lakes, I shall by the time we get out have a fairly correct map of the lakes and hope to connect with the map I made this spring of Campbell Lake and vicinity."

The next day, on the south-east side of Sitidgi Lake, he climbed the hills running parallel to the lake. "From here rolling partly timbered country as far as I could see," he reported. The timber consisted of black and white spruce that were mostly dwarfed and low where the ground was cold and wet, but on dry sandy ridges the white spruce grew up to fourteen feet high. The trees were nowhere growing densely so that a rich undergrowth of heath family plants flourished with lichens in between. It was the lichens that impressed him the most. "Magnificent lichen cover over vast areas 50 to 80% pure lichen.... *Cladonia rangiferina* and *C. sylvatica*. probably cover more ground than all the rest together. Some places *Cladonia rangiferina* quite pure formed uniform cover 14 inches thick resting direct on frozen ground. Lower eight to nine inches all decayed but plants still growing terminally." It was not hard for him to conclude that the area around the lake would be an ideal location for a winter reindeer camp.

From the south end of the lake, they ascended the 'Portage River' to a fork where the channel became too narrow for the schooner. On August 23, Erling and Jacob left Bob to work on their collections, now numbering several thousand, and took to the canoe for about five miles up a slow-moving side creek, overhung with birch and willow and choked with aquatic plants (pond lilies, *Sparganium* and *Potamogeton*), finding evidence of the damaging effects of the same fire that had swept Gull Lake country fifty years previously. Erling was interested to see how the useful lichens destroyed by the fire were replaced by species of little forage value. He tried to get an idea of the country by climbing a spruce tree without success but did notice that this area had not been decimated by hunters, for they saw several muskrats, beaver tracks with one dam, and numerous tracks of a couple of moose evidently living in that area.

On August 24, the Porsilds made ready for the portage up the main creek. Using the canoe with the Evinrude motor, they travelled about five miles from their 'Pond Lily Creek' to where the river forked. The right fork was muddy



“Flying Cloud” at end of navigable water, Pond Lily Creek, NWT, 1927 (Photo: AEP, LAC, PA-101964)

and trending towards the valley in the hills, while the left fork had clear water and was what they expected to be the river they had found on their spring trip, draining to the Sitidgi. They followed the left fork for about twenty miles. After many battles with log obstructions, the engine stopped. It was 5 p.m. They stopped for supper and Erling climbed a tall spruce to take a series of bearings and photos. At 7 p.m., they set off again, this time using paddles. The current was getting very swift and they had three hours of hard work before they finally reached the place where Erling had hung up half of an old handkerchief earlier that year. The circle of their exploration of the area had been completed.

“By then it was almost dark. I saw several beavers and numerous moose tracks. No *Nymphaea* in this creek. Made a fire and tried to sleep. We did not expect to stay out, as we did not bring any tent or blankets.” They started back to the boat at 5:20 a.m. and reached it by 10:15 pm. Erling wrote in his diary: “Drew up a sketch from my bearings from this spring from Campbell Lake and the portage and tried to work them into those from this trip. Slept.”



CHAPTER TEN

RETURN TO AKLAVIK

By completing the circle, the Porsild brothers had reached the end of their 1927 summer pasture survey. However, instead of the shorter portage directly to the delta, it was now necessary to make the long trip back via the Arctic coast.

It was to be a difficult trip. Sometime during the last struggle upstream, Erling had strained an adhesion from his spring operation and was in considerable pain. As they continued up the lakes, he noted that his condition did not seem to worsen and there was no fever, but he was in pain as soon as he left his berth. They got lost and could not find where they were. Bob thought the reason might be due to magnetic disturbance. They did find the ruin of an old igloo close to the water line that they believed was probably the place that Stefansson had visited in 1905–6 in the southeast corner of what he called the Second Eskimo Lake, but they were unable to find an inlet that they wanted to explore before finally discovering the outlet to the next lake.¹

One night at the north end of the lakes, the anchor dragged in a strong current and the fish net near the boat was lost. Bob had been setting this every night and had had big catches of whitefish, trout, and ‘crooked-backs.’ Further north, he had begun to catch bullhead and flounder for the first time. Not only was this useful for their own purposes but Erling felt it was important for future reference. “One thing is pretty safe to say, that almost any place on the lakes especially towards the entrance a man could easily with 5–6 nets in very short time provide for a whole winter’s dog feed. It would not be necessary to dry any at all. This would, of course, be of importance for a future reindeer industry as the [Eskimo Lakes] country would be the winter range, at least the south side, while the peninsula towards the sea would provide summer forage.”



Bob Porsild feeding the dogs, Eskimo Lakes, NWT, 1927 (Photo: AEP, LAC, e010933876)

The sea was too rough to travel on August 31 and Erling, now in constant pain, feared that the delay would mean that they could not reach Aklavik in time for him to catch the last boat if his condition worsened. On September 1, their father's birthday, they tried again to continue. With the wind increasing, they headed for the other side of Liverpool Bay but "set one sail too steady" and bent the centreboard with the violent movements of the boat so it could not be pulled up again. Following the west side of the inlet, they struck bottom on a shoal and did further damage to the centreboard. In rain, fog, and strong wind, they rounded the cape and reached Dalhousie at 8:30 p.m., where they got stuck in the entrance as it grew dark. It was 2 a.m. before the water rose high enough to enable them to drift into the harbour. After replacing the fuel they had used, they reckoned that their Eskimo Lakes trip had cost them an additional ninety gallons of gasoline plus costs for damage to the boat.

By now Erling was running a fever and they were anxious to move on but their spell of bad luck was not over. A message from the RCMP in Baillie was waiting for them in Dalhousie saying that no batteries could be obtained. They would have to try running the *Elsie* with the one they had. On September 3, the wind was strong and the tide was low as they tried to leave the harbour and again they were stuck for two hours in the entrance. Soon after they got away, the engine stopped. Luckily, a schooner had come in the night before and the skipper of the *Bonnie Belle* stood by with a line. The swells were getting heavier and once the line broke. The canoe got swamped but this time they were prepared and everything had been taken out. They managed to hoist it on the deck of the schooner. Eventually they reached Atkinson Point, where Bob arranged for the *Bonnie Belle* to tow them on to Kittigazuit.²

Even this solution did not mean smooth sailing. Erling fretted that they were ready to leave at 9 a.m., "but as always happens with these people, this morning, a family that had planned on wintering here, made up their minds to return to Tuktuayaktuk. The owner of the boat had given his consent but before the fellow had got his dogs and fish nets, and the hundred odds and ends out it was eleven, so I kind of doubt that we make Kittigazuit today." They reached Tuktoyaktuk at 9 p.m. and spent the evening visiting. It was noon the next day before the family's gear was unloaded. "Even then, we had to press the point to make the boat owner go on. 'He had not visited his uncle yet' he insisted, but finally consented to put it off till he returned from Kittigazuit."

When they finally reached Kittigazuit on September 5, the Hudson's Bay factor had already left for Aklavik to meet the last boat, and the owner of the

Bonnie Belle said it was too late in the season for him to take them further. So there was nothing for the Porsilds to do but to move into McAlpine's house and wait for him to return. Erling found "a well supplied First Aid chest. I fixed myself up as best I could and went to bed" where he stayed for three days until the factor got back and told them that the *Liard* had been delayed and would not be in until September 15. He could not spare his pilot and would be too busy fishing to take them to Aklavik himself but agreed to let them charter the Hudson's Bay boat on condition that Bob bring it back immediately.

"This arrangement," Erling said, "besides enabling us to take our boat up, also gives us a chance to catch the *Liard* in case the doctor thinks it unwise for me to stay in this winter." They hired a man who knew the delta well to be their pilot, and after a night of howling snowstorm they left the next afternoon, picked up their dogs from Pete Stromberg's place, and took a new route via the east channel above Tununeq to the middle and Aklavik channels, arriving there in another snowstorm at 2 p.m. on September 11.

All their stores were on the second boat. Once everything was unloaded, the house was full of stuff, including a pile of mail and telegrams that were waiting for them. Erling went immediately to meet and make an appointment with the new doctor, Dr. Ward. He had been improving daily since the rest in Kittigazuit so the doctor felt that he could stay in the north safely that winter but wanted him to have hospital treatment at once. Erling could not see any way he could do this until Bob had taken the rented boat back to McAlpine as promised.

When the high winds finally died down, Bob took off on the evening of September 13, taking the canoe and new Evinrude motor for his return and leaving his brother to cope with the dogs and the fish net. Fishing results were poor and it was all Erling could manage to do to mind the net and cook and feed seventeen dogs. One day he caught a beautiful 20-pound salmon trout in the net, the first he had seen, but he had nothing else for the dogs so he had no choice but to give it to them.

Meanwhile, in the brothers' absence, the mice had been having a great time in the house. "In every pocket of garment hanging on the wall and in every little fold of any clothing exposed and even in a cap hanging on a nail they have established caches of oatmeal," Erling said. "In the cap there was more than a handful. Unpacking the boxes with specimens cached at Kittigazuit I found that the mice had destroyed some bird skins in spite of the arsenic in the skins. I tried to get some traps but there is not a single trap to be had in town."



Porsild house, Aklavik, NWT, 1927 (Photo: AEP, LAC, PA-101968)

There was other urgent business to attend to. They had heard that the *Distributor* on her way back to Norman had passed the *Liard* laid up on the second day due to the storm so it would not be arriving until September 17. Erling worked hard to complete his reports and expense account in time for mailing.

On September 13, he wired the Department of the Interior: "RETURNED FROM EAST ELEVENTH INST. HAVING COMPLETED TRAVERSE OF COAST AND INLAND FROM MACKENZIE TO MOUTH OF ANDERSON APPROXIMATELY FIFTEEN THOUSAND SQUARE MILES OF REINDEER PASTURE RANGING IN EVERY RESPECT WITH BEST TYPES FOUND IN ALASKA /STOP/ THIS SECTION ALONE HAVE ROOM FOR QUARTER MILLION REINDEER AT CONSERVATIVE ESTIMATE /STOP/ BESIDES SEVERAL THOUSAND SCIENTIFIC SPECIMENS /STOP/." To answer Finnie's concerned questions about his spring operation, he added: "RECEIVED MEDICAL ATTENTION FROM DOCTOR COOK WHILE IN HOSPITAL INCLUDING MINOR OPERATION LOCAL ANAESTHETIC AND SUBSEQUENTLY FIVE CALLS OUT OF HOSPITAL DOCTOR MACBETH WAS CONSULTED AT MY REQUEST BEFORE OPERATION." Typically, he did not inform Finnie of his more recent health problems.³

When the *Liard* got in at 2 p.m. on September 17, he had until the next morning to reply to the later mail as well as get out his report on the summer's work. He got through reading the mail in the evening and wrote most of the night. "Delivered my mail at the post office at 8 a.m. I only got the most urgent

from hand and did not have time to type my preliminary report of the trip to Eskimo Lakes. That shall have to wait to the winter mail. The boat left at ten. Saw Mr. McDougal off. Mr. and Mrs. Stringer, the Bishop, are going back on that boat too. I am glad I am not going myself – hope I shall not have cause to regret that later.” He was delighted to receive new instruments for mapping: “a nice little mountain transit, sextant with artificial horizon and a 23 jewel Waltham mean time watch. I wish I had had those instruments this spring instead of now.”

On September 20, he wired the National Herbarium about their Alaska collection and Malte duly replied that their specimens had been shipped from Nome in August but had not yet arrived. The weather was cold and stormy as each day passed and he began to worry when Bob did not get back, hoping he was not having trouble with the new Evinrude. He went out one afternoon when the storms had passed to try and collect some seeds for Malte but found that there was very little left and hardly a leaf on the alders and poplars. “Autumn is very early here compared with Greenland,” he said. “In Greenland at the same latitude we seldom have continued frost in September and the best time to collect seeds is right now.”

He had found an Indian called Amos to cork the walls of their house and build them up with mud for winter protection. He repaired four windows and thought he had got out most of the mice. He skinned and stuffed some of the mice for Dr. Anderson at the Museum and packed the summer collections of insects and archaeological artifacts. He noted bands of geese passing southbound. “One night when it was a howling blizzard I could hear the birds as they passed and I have only seen few flocks in daytime. Today swarms of snow buntings passed and probably one band of redpolls. I wanted to shoot one or two for identification purposes but they were too high up. There are lots of ravens around but otherwise I have seen no birds.”

Meanwhile, he continued to tend the fish net and set a new one below the hospital because he was having much better luck than he did in the beginning. However, on September 24 when he went to check the new net, he had an annoying setback. “I made the surprising discovery that somebody had deliberately plugged all of my twelve floats with a .22 rifle,” he said. “I went ashore and found the tracks – 9 inch moccasin – white man, using Western ammunition that only two men have in this settlement. None of the traders carry it. I did a bit of detective work and found out who it was but could, of course, not do anything or carry the final proof without starting more [trouble] than it was

worth. The only satisfaction I had was in telling the story in the barracks when the man was present. Took the net home and made new, unsinkable floats.”

Three days later, he had to report a much more unpleasant situation involved with the net, although his story had an amusing ending:

I have, the last week, been attending fishnets together with one of the new wireless boys. He is not very experienced in a canoe and capsized one this summer. I was tying the net to the anchor line when suddenly the canoe went over. I do not know what the reason was, but the other day when I was taking a fish out of a net he suddenly bent over the side to push a stick from getting into the net and had I not made a jerk back we should have capsized then. We were above the net close to the anchor buoy. I held on to the canoe to see how the current was running and saw we had to go round the net in order not to be caught. I therefore yelled out to the fellow: ‘Watch out for the net – follow me!’ and started out for the shore. I wore heavy hip boots and was pretty busy attending to my own business and did not look back till I got in because I had seen that he could swim. Now when I looked back I saw he had tried to make a shortcut and had gone head first right into the middle of the net and was stuck. Fortunately a couple of canoes had seen us and came to the rescue just in time. I do not know what I should have done if they had not come to his help. The water was beastly cold and I was so tired from swimming with the heavy boots that I doubt that I could have gone out again even after removing the boots. I might have been able to pull the net ashore with him but the chances are that he would have been drowned before I could have dragged the heavy anchor in. I was glad to get a good stiff glass of whisky when I finally got home. Funny enough I did not get my head under at all and when I waded ashore I found myself still smoking my pipe. Somebody has remarked before that my pipe and I are inseparable.

That afternoon, when he went back to the nets he noticed a native schooner pulling in. When he got home, he found Bob was back at last. He had been delayed by bad weather and engine trouble. When the lower crankshaft bearing broke, he had been forced to charter the schooner. He had bought 150 fish from the owner of the boat and now proposed to leave this surplus as feed for the dogs and take four nets to a better fishing place about twenty miles below

Aklavik. Joe the baker would feed and look after the dogs while Erling went into the hospital for treatment. Although Erling wished that Bob could have somebody with him, he was no doubt feeling the effects of his cold swim. He put a new lock on the door and checked into the hospital at 10 a.m. on September 30 to begin 'serving his sentence.'

Bob left an hour after his brother went into hospital and was back three days later with 150 fish. He said he could not manage alone so he was going to move to a place nearer Aklavik. He had paddled all the way back because he had had trouble once again with the same bearing in the lower crankshaft. By combining parts from the new and old engine, he got the kicker working again, but he had no sooner set off for the camp on October 5 than he was back the next day paddling. This time, while he was tending the nets, his entire camp had burned down, with everything but his guns destroyed – tent, eiderdown sleeping bag, reindeer parka, personal suitcase with several garments inside; even the Evinrude motor that he had put in the tent were all gone.

That October, there were vast herds of caribou west of the delta. Some days they were as close as eight miles from Aklavik. From his bed in the hospital, Erling learned that, although the season was closed, natives and whites had been allowed to kill some for meat because the fishing had been poor. Until the RCMP intervened and restricted the kill to twelve per household, "Some hunters went out and killed as many as 20–30 in two days," Erling said. "Personally I do not see the use or advisability of the restrictions provided in the game laws as an effective closed season cannot very well be enforced. Usually the caribou are so scarce or are far from any habitation that the number killed is very low in ordinary years and the natives will reason that if they do not kill now, they will probably not get any when the season opens [December] 1st. Season opens September 1st to 30th and October and November is closed. Why I do not see. Rutting is probably over by end of September and the deer in best condition while in December they start getting poor." He said they were the only ones without meat as Bob had been fishing instead of hunting all fall.

Erling left the hospital at noon on October 22. He was not entirely healed but he felt he was getting weak from staying in bed and the doctor did not think it would do him any harm. Of course, the next day he went out on skis and found out just how weak he was. It was time to do odd jobs around the house, work on the collections, read McIntosh Bell's report on Great Bear Lake, and write some letters while Bob went out each day to the fish nets in various locations. The yields were quite successful in nearby creeks and lakes but there was



Fishing is a cold job in winter, Bob Porsild at the net near Aklavik, NWT, 1927 (Photo: AEP, LAC, e010933878)

such a constant demand for feed that they decided that they simply could not continue to look after so many dogs. Erling shot his old Jumbo on October 24 and they sold two more dogs to Dennis, the man who had piloted them down the delta in the summer, for about twice what they had paid for them in Alaska.

October passed into the first two weeks of November and one day went like the next, with nothing of particular interest happening. The temperature had dropped to well below zero at night so they added more mud to the walls of the house and covered the kitchen window with a 'double glazing' of ice, achieved by spraying the glass with water and letting it freeze, and repeating this until the whole pane was covered.

Bob went to his nets daily, taking the best part of the day and averaging about twenty-five whitefish a time. His catch had varied from the largest whitefish they had seen, a fish with a short downward pointing head and round nose, to smaller ones that they thought were probably a different species. When he suspected that he was losing a lot of small fish due to the large mesh in his regular nets, he put in a herring net with smaller holes and caught about thirty of these each day. As the season progressed, he occasionally found a net frozen into the ice and had to chop it out. Erling photographed and pickled unusual species of fish for the Museum.

By mid-November, they were both ice-fishing. The usual method of winter fishing on the delta was by 'jigging' through holes in the ice with barb-less hooks made of bone, ivory, or silver. On November 14, Erling wrote: "Fishing today from 2:30 p.m. to 10 p.m. It is very unaccountable how the fish come. I never changed my hole and caught steady while Bob had no luck at first and not until late did he get his pile. At times as much as twelve men were fishing, and during the night over 25 holes were used but none of us got a considerable number. People were cutting holes around mine as close as they could but there were nothing. We must have had well over 500 lbs. when we finally finished. Before it got dark we caught nine jack-fish and two connies, one of them 16 lbs."⁴

While Bob was fishing, it was Erling's job to do the housework, beginning with cooking for the dogs. To conserve their cache, he added cornmeal or oatmeal and tallow or lard to the fish feed, feeling there was more nourishment in the mixture than in the fish alone, although it was harder for the dogs to digest. He complained that he had no suitable pot to cook the feed so he had to use gasoline tins that were hard to keep clean. He was afraid that the two to three hours of cooking on the primus stove would burn out their generators and they would not be able to get extra ones. He said none of the traders carried primus stoves any more as everyone wanted the 'inferior' Coleman stove that costs more than twice to operate and is not nearly as dependable. He finally obtained a large boiler that he could use to cook on the camp stove. It was also his job to saw the wood needed for the stove and feed the dogs.

In his spare time, he worked on their plant collections from spring and summer and typed up his report for Finnie on the summer work. He hoped to make a last trip to the coast before the snow got too deep and was having someone fix up his toboggan, and he found a woman at the Roman Catholic Mission who could do sewing repairs and make new gear for them. They had brought furs with them from Alaska so she was able to do something with Bob's badly burned parka. "We never got any reindeer skins from the Lomen Company," Erling said, "and I have not even had a reply to my inquiry by cable over one month ago. Wonder if the Company has gone broke."



CHAPTER ELEVEN

COMPLETING THE 1927 RECONNAISSANCE

By 15 November 1927, the summer's report for the Department of the Interior had been typed and readied for the mail, to reach Finnie by the following spring. Elaborating on the results, Erling said that they had succeeded in carrying through their program in spite of weather conditions that had caused considerable delay and inconvenience. The distance covered was somewhat over 1,500 miles, of which approximately 175 were made by canoe. No opportunity had been missed for making natural history collections, with most attention given to the botanical collection which aggregated 4,500 vascular plants, cryptogams and phanerogams in addition to a collection of lichens of economic value.

He concluded from the sum of information gathered on the two trips to the east of the Mackenzie delta that the country was exceptionally well adapted for reindeer husbandry. The average range compared favourably with the best reindeer country seen anywhere in Alaska. Excellent summer pasture was found in abundance on Richards Island as well as on the coast of the Arctic Ocean from the delta to Liverpool Bay, while the hinterland, ten to fifteen miles from the sea, was well covered with willows, alders, and a fairly high percentage of lichens. The mainland from Point Separation to the mouth of Anderson River was partly timbered and good winter range, although large areas of the western part had been burned some fifty to sixty years ago and no heavy timber found. In many of the timbered areas, several species of reindeer lichens were exceedingly abundant.

He struck a cautionary note that the country differed materially from Alaska in the uniformity of the topography, giving few natural boundaries for future range units so that the herders would have to stay with the deer. He felt

that this would not cause hardships as the coast was windy and the flies never bad in summer while in the winter range the timber afforded good shelter and ample supply of fuel and logs for the construction of cabins.

As indicated in his earlier telegram, Erling was now in a position to make a crucial recommendation based on his botanical reconnaissance and the figures supplied by Palmer in Alaska on grazing potential. "After a conservative estimation," he said, "in this type of country forty acres would be a liberal allowance per head, and the acreage inclosed in the trapezoid country between lines from Point Separation to Richards Island and Anderson River to Cape Dalhousie would have a potential carrying capacity of at least 250,000 head of reindeer." These figures were to prove extremely optimistic. As more was learned of reindeer pasturage and the slow recovery of grazed lichens, grazing potential estimates were reduced. At that time, however, the figures were considered to be realistic.¹

Back in Ottawa, Finnie was delighted with the recommendation. He had passed Erling's telegram to Cory on September 14, expressing pleasure that "Evidently he found abundant fodder suitable for reindeer and that that particular district was capable of accommodating 250,000 animals." Of the full report that he received in the spring, he told Gibson that he found Erling's final conclusions "particularly reassuring."²

In order to complete the survey of the Mackenzie Delta area, a winter grazing reconnaissance trip now had to be organized. It was decided that Bob would stay and look after things at home while Erling went alone. He looked for a guide to accompany him, but it was difficult to find anybody at that time of year because all the men went trapping as soon as they had finished hunting. In order to be ready should the chance arise, Erling busied himself fixing a canvas top on his newly made toboggan and burned pine tar for the bottom of it, hoping that the tar would work as well for this as it did for the Lapps on their skis. He had had a set of collar-harnesses made for his dogs. "I do not like the collar-harness but I guess you have to use them in this country because you have to work your dogs tandem. If I were going to stay here I would try the Siberian harness."

Indoors, he and Bob continued to work on their summer collections, but one night they had the RCMP Corporal and Sergeant Gourley from the wireless station over for a game of bridge. They brought worrying news. "The Corporal just came back from a patrol to Herschel Island yesterday and reports distemper amongst the dogs on the island. He said he had kept his dogs separate from

the island dogs but doubt very much if he has avoided bringing the disease back with him. It will be bad to get it here for us also.”

On the evening of November 26, they went into the station to see if they could get anything broadcast to the north from WBZ. “Just when I came in I heard my [code] name,” Erling said, “and some other set in town interfered. I sat there for about an hour and heard several messages, but none were intelligible throughout. There are three more sets in town and especially in these evenings everybody is trying to beat the other to it and nobody got anything. Before I came in Mr. Clouff heard Mr. Finnie sending a bunch of messages, but he could not understand any of them.”

It was true that Finnie was beginning to be concerned about the lack of news from the north. On November 30 he scribbled an internal memo: “How long is it since we have heard from the Porsild brothers? Is there anything on file to show just what territory they are investigating now? Do you think it would be advisable to wire them at Aklavik and ask them what progress they are making?” As it happened, that same day Erling’s wait for a guide ended. A man named Lucas came in to Aklavik and it was arranged that Erling would go with him the next day. He wired Finnie that he was leaving to investigate winter grazing and herding conditions of the lower delta, islands, and coast east of Kittigazuit, portaging to Eskimo Lakes, and returning before Christmas. Plans for Great Bear Lake would follow.³

Erling left for Lucas’ camp on the Aklavik River on December 1. They reached the middle Mackenzie by December 3, having tried out his new tent, made by Woods in Hull after Dr. Anderson’s design. “It is just big enough for two but very good I think, only there ought to be some kind of protection around the stove pipe as sparks falling on the outer silk very easily takes fire. Although we were watching close this happened twice. It was doubtless below 40 at night but due to the double tent we were warm and comfortable and everything kept nice and dry inside.”

It was so cold when they set out the next day that at times the breath from the dogs was almost too thick for Erling to see the leader. They reached the slough into Pete Stromberg’s place on December 5 and stopped to see him. Over a cup of tea, Pete decided to go with them to Kittigazuit, just to have a chance to talk. “Pete is doing badly as usual. He is here all by himself and complained that he had been bad for a couple of days and ‘seen faces and all kinds of things.’ Poor old fellow, it must be a H. of a life.”

In Kittigazuit, Erling bought presents for his hosts in Tuktoyaktuk and three new collar-harnesses to replace the worst of the ones he had had made for him in Aklavik which he said were no good. They reached Tuktoyaktuk the next afternoon, only to find that all the men but one had gone out to set traps. Lucas decided that he wanted to stay longer with his family so Erling was forced to hire his young cousin, a lad of 14–15, to be his replacement guide to the Eskimo Lakes. Sometime before, the boy had trapped an animal not seen in that area before, a “funny-looking wolf that looked more like a dog” that turned out to be a coyote. Erling coveted, and finally got for the Museum, a skull from another one killed around that time.⁴

“Have been feasting tonight on ‘Tippy’ fish,” he said. “The taste is not as bad as the smell of it. I may get to like it before I am out of this country. The people here are still very primitive, by far the most primitive I have seen in this country as well as in Alaska and they use very little white man’s grub. The houses are large and well-built log cabins mostly papered inside and with wooden floors. The old style igdleq is still in use while most of the other places they now use outside made ‘spring beds’ even in their summer tents.”

All the men came back from their traps the next morning expecting bad weather but as it did not get worse Erling left with his young guide around 11 a.m. The boy was not much of a guide, although he knew the lake country reasonably well. “I wanted to take some wood,” Erling said, “but was told that we would pass a place where we could pick up some. I asked him about it before we got there but he told me we were not there yet. Later I saw the wood alright but as the boy did not say anything I naturally thought there was a place still closer, and passed. When I worried about it later he said that we passed long ago and that he thought I did not want any.” The result of this was that when they stopped for the night Erling was just able to make coffee from green willows but it was impossible to get the tent warm.

About four miles from the coast, he had been surprised to see good-sized willows and low alder and still more by seeing a muskrat house in a tiny little tundra pond. “In a large lake about ten miles inland I counted about a dozen houses. The natives know there are rats but never hunt them.” He found willows with a girth of 10–12 inches about six miles inland, and when they stopped for the night about fifteen to eighteen miles on they were in a country full of hills and lakes, all covered with willows and luxuriant heather. He dug down through the snow in several places and found abundant reindeer lichens. “We

have here excellent winter grazing grounds much closer to the coast than could be expected and besides such abundance of willows to afford good shelter.”

The next day he went over to a large lake that he thought was one of the longitudinal chain of lakes that ran the length of the Tuktoyaktuk peninsula, with an outlet in McKinley Bay that had been mistaken for the outlet from Eskimo Lakes on old maps. They had seen this from the pingo near Atkinson Point in the summer. Meanwhile, his young guide spent three hours trying unsuccessfully to make coffee with green willow.

“We gave up the attempt and started home. Dense fog all day. We lost our own trail twice and had to go back to get in it again. When it got dark I gave up trying to follow the trail and Junior who had not previously been interested in following the trail now had no trouble. He did not follow the trail but seemed to have a very distinct idea of where the village was. I took some compass bearings, and just kept checking on him but did not interfere, and he brought us right back.” It had been a frustrating trip for Erling, and he had not reached the Eskimo Lakes area as he had hoped, but he had seen enough on his short excursion to prove that winter grazing was indeed very good in this area.

Lucas was ready to leave his family, so on December 10, they left Tuktoyaktuk and headed across the bay for the portage across Richards Island to the place Erling and Bob had visited in the summer. About halfway across, they stopped at the pingos on Midway Island. “There are two conspicuous pingos on the island,” he said, “the most westerly is broken, i.e. crater-like. I went up to investigate about 40 feet high to the edge of the crater but it may have been considerably higher; diameter probably 400 by 600 feet. Inside is a lake about 8–10 feet above outside ground level.” He made a sketch of the broken pingo from the south side in his field journal.⁵

They stopped at a trapper’s house to pick up wood before continuing over a narrow portage to the big bay that cut south and west from the north end of Richards Island. There was plenty of wood where they camped that night so their precaution had been unnecessary, but doubtless Erling had no wish to repeat his previous cold night east of Tuktoyaktuk. Still, they were up at 4:30 a.m. to keep going, and daylight found them on the west side of the island in a bay full of old driftwood.

The wind increased with snowdrift and fog and they could see nothing. Islands, lakes, lagoons, inlets, bays – the delta was living up to its reputation of being nothing more than water lace-tatted with land. By the time they had travelled about twenty to twenty-five miles from the trapper’s house, they came

to an island with cutbank and sandspit facing south. It was getting dark and the dogs were tired of facing the wind. They made camp near where they saw an eider duck sitting on a snow bank and Erling wrote sourly in his field journal: "Nasty and disagreeable day that gives me vivid recollections of last winter's travel between Point Hope and Point Barrow. Kind of day that makes you wonder why foxes want to live here and why people live in such a God-forsaken place." He felt that the area was good for summer grazing but was quite unsuitable for winter use.

During the night, a howling blizzard blew up and they were forced to sit it out for two days. Snowdrifts built up around the tent. The wind blew with undiminished force, and when Erling went out to get and chop wood he was glad to get back inside. One dog was nearly buried alive and another almost strangled to death when its chain got too short. They ran out of dog feed, with only one herring per dog the first day and then nothing the next. Erling spent the time making a sketch of the portage across Richards Island and writing an essay in Danish on the formation of pingos. He was later to publish this in English and, in spite of a great deal of research on pingos in future years, Erling Porsild's theory regarding their formation is still considered to be valid.

They started digging out the tent early on the morning of December 14, having to cut the ropes on one side where the stakes were covered with eight feet of snow. The wind and snow had died down somewhat overnight but picked up again as they travelled on. They reached Ukivik on Kendall Island around noon, only to find that the man Erling had been expecting to see, Dennis, had been away to his traps for several days, probably caught in the same storm as they had. They stayed overnight with a man called Oliver but as they had very little fish in that house they did not like to stay longer. They managed to dry their tent, making it forty pounds lighter when the ice had gone.

Erling took a walk over the island. "Vegetation of the Richards Island type here while the whole south side is one large luxuriant meadow of several square miles. Grass abundant – 1–2 feet high. Noticed *Parrya nudicaulis* not seen before. Only one specimen seen. On the north coast facing the open sea saw one large slumping of about one acre. The island is evidently at least in places built up on ice."

Following the shore back, he found a Winchester .30–30 gun in apparently good condition. "Natives seldom use a gun more than a year or two and throw it away when rusty," he complained. "A gun like that would be worth several

blue foxes in Greenland, while here they would not even think of keeping it for spare parts or ordering a new barrel.”

They left Ukivik the next day, armed with twenty fish and three and a half gallons of seal oil. Lucas did not know the trail and they made several detours. The dogs were getting poor and they made little time. At the border of the delta on the west side, they reached a line of islands, some low and grass covered, some high with low willows and heather.

“A reindeer drive should follow this line of islands,” Erling decided, “starting out from Whitefish Station inside Shingle Point, cross the upper part of Richards Island, keeping well out of the willow belt that starts about 15 miles south of Kendall Island (Ukivik). The drive should not take place later than March unless the herd should summer on Richards Island. The fawning should take place on the mainland about 10–15 miles behind Kittigazuit.”

By four p.m. the next day, they had seen their first spruce, passed Tununeq, and reached a point on the Luis River near the east branch. “First place I have been at where nobody asked us in. All men gone; this probably is why. Our dogs were not fed either.” Their host was a big, fat man who said he could never get dogs strong enough to pull him so he had plans for an auto or a pair of horses. Like their last host, he owned reindeer at Port Hope and was anxious to get them. “He is a hustler,” Erling said, “besides being a thrifty man and covering a lot of ground trapping. He had about 16 foxes besides a good deal mink and some marten. Characteristic for him is that he is not using butter but the cheapest kind of shortening. I have not been in a native house here or in Alaska where butter was not used exclusively.”

Erling compared this man sharply with their next host closer to Aklavik. Fred Wolki was the mixed-blood son of Captain Wolki, whose schooner *Rosie H.* had been seen with frequency by Stefansson in 1908–9. “He must have been outside long and seems to be well educated. He is the man who got 322 white fox last year at Pierce Point. He came west last summer, married a halfbreed girl from the delta and is trading now. He is a very good example of the happy mixture of the white and Eskimo blood and the kind of fellow there ought to be more of.”

They reached Lucas’s trapline tent camp on the evening of December 18 and his house on the Aklavik River the next day. Lucas’s mother had some wolverine trimmings. “Funny the way these people figure things. She wanted \$4 for a set of face and hand trimmings which is very cheap compared with what I paid in Alaska where things are generally cheaper, but for sewing the trimmings on,

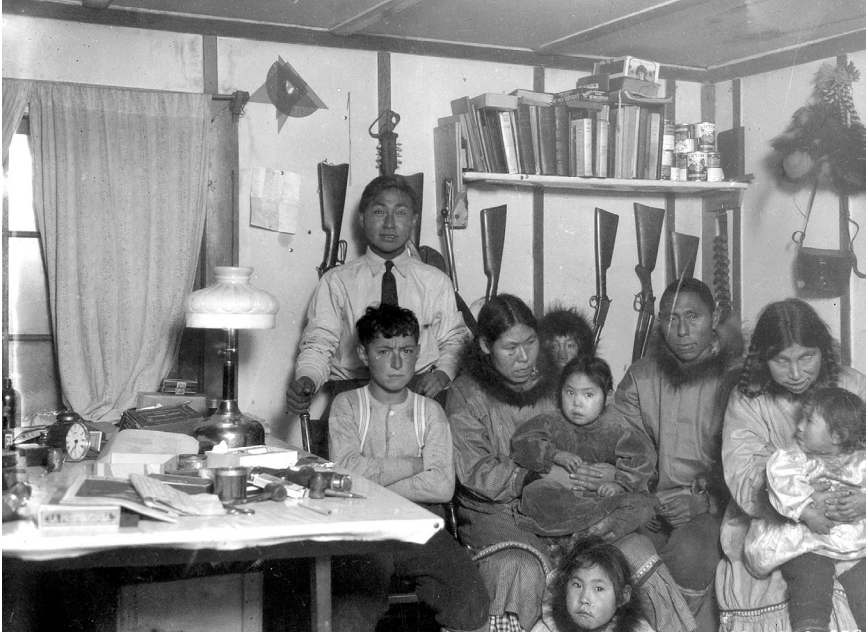
a job that took her half an hour she charged me \$2.00.” Although it blew hard from the north on December 20, he left Lucas’s house by daylight and was home in Aklavik before noon.

Bob had taken in his nets a few days before because the ice had got too thick for fishing. In the last three weeks, he had caught over 1,500 whitefish and jackfish from the lake but unfortunately they were all small. While he got feed ready for the dogs, Erling opened one of their cans of Gunn’s Dog Meal, and to his disgust it contained tallow. “This stuff,” he complained, “was shipped us by the [Hudson’s Bay Company] instead of Husky Dog Feed which is an altogether different thing containing about equal parts of fats, proteins and carbohydrates with only about 15 percent water and inorganic matter.”

The wrong dog food was not his only complaint with the company shipments:

Quite a number of articles sold by the H. B. has been found to differ materially from the articles in the specification – for instance I ordered ‘Eveready dry cells’ and instead they sent ‘Burgess.’ These I found much inferior for this country as they freeze more easily. Last year I used ‘Eveready’ only and in the morning put my flashlight into my warm sleeping bag where I kept [it] fairly warm all day and in the afternoon at dark it always was in working condition. When using it travelling I had the sleeve of my parka large enough so I could have the stock of the light kept warm by my arm. In this way I always managed to keep it in working condition indefinitely. With the Burgess cells on this trip I found the light absolutely dead already at noon though I always kept the light in my sleeping bag all night to have it warm in the morning when we broke camp. On this trip therefore I could only use the flashlight a few times and then only when first heating it up by putting it next to my body for some time.

He was also not very happy with the Hudson’s Bay Company all over the Christmas holidays. The temperature fell below 40 degrees Fahrenheit on December 22 and the next day was the coldest day of the year at 52 degrees below. They cut spruce boughs for shelter for the dogs and wood for the house. “This weather takes lots of wood. In the warmest of the rooms we cannot get the temperature above freezing near the floor even if it is about 130° 6 feet above the floor. And for this the H. B. charges us \$15.00 a month. I hardly think that anybody but



Christmas visitors, Aklavik, NWT, 1927 (Photo: AEP, LAC, PA-101973)

the H. B. Co. would charge anything at all for the house for having the trade with us.”

Visitors began pouring in to Aklavik for the holiday. The Wolkis came to the Porsild house before moving up to stay at the English hospital. They left their dogs behind so the brothers were now feeding twenty-five dogs. On Christmas Eve, Erling said they had a house full of natives all day and served tea and meals for myriads.

“I started counting them but gave it up. First of course came these people I had visited on my trip to the coast. I wish we could do more for some of them.” Some people in town gave up their entire house or small store to the visitors. One man cooked two whole caribou to feed his guests. “H. B. has decorated the store and guess they do some business too, especially with the Indians. I went up in the afternoon to get a few things – chocolate and fancy biscuits for our visitors. The place was almost empty and they do not accommodate anybody – Not the H. B. Co.” he could not resist adding.

There were Christmas festivities all over town. The Anglican Mission had a Christmas tree celebration for the children on the afternoon of Christmas Eve. In the evening there was a square dance in a house behind the Hudson's Bay store.

We went up there and looked on for 3–4 hours. It was something similar to the Greenland old time dances, but the time was much faster and the dancing I think better as far as the men goes. Constable Millen from Red River came in today. He is a good mixer and a very good dancer and stirred things up some. Evidently somebody had been moonshining for Christmas, for a few of the Indians were fairly well lit up. However, everybody behaved very nicely and probably would have to, even if the entire police force had not partaken in the dance. After the dance finished at midnight a few of the whites dropped into our place and we celebrated with a midnight lunch and a bottle of whisky afterward. Thus passed the third Christmas away from my home and family.

The town was very quiet the next day and church services seemed to be held continuously. The Porsild brothers had Christmas dinner at the wireless station, although Erling did not eat much. He had had no trouble with his "Tippy" diet while away but was having problems changing back. In the evening they attended the children's concert at the Roman Catholic Mission. "The whole town except the English Mission were present and seated according to rank. There was about a dozen pieces given by the children. Songs and physical exercises etc., and two educational or moralizing one act plays. They evidently enjoyed it immensely in spite of a little awkwardness at first due to 'stage fever.'" When the show was over one of the wireless people appeared as Santa Claus. He had been present in the audience and when he reappeared in costume the children immediately recognized him from his boots. "The children, about 25 boys and an equal number of girls, from 5–16 years were all healthy looking and not nearly as shy as Eskimo children of corresponding age."

More native visitors appeared at the Porsild house on Boxing Day, and there was a square dance at the Anglican Mission school where Erling noted that, although no Eskimo had participated in the previous dance and the Indians were still the most enthusiastic dancers at this one, at least all the Eskimo in town were present and danced several dances.



Bob Porsild entertaining children, nuns, and priest at the Catholic Mission, Aklavik, NWT, 1927 (Photo: AEP, LAC, PA-101971)

All their house guests left on December 28, including Wolki's dogs, so they were no longer cooking for strange dogs as well as their own. Most people were going to Fort MacPherson to celebrate New Year's Eve so Bob decided to go too. Erling cleared up the house and started to work on the botanical collections again. Numerous visitors were back to see him on December 31, but not as many as before, and as the new year began Erling noted: "I imagine the business has been pretty brisk in ammunition today judging from the number of shots that were fired at midnight."



CHAPTER TWELVE

LOOKING BACK AND FORWARD

The Porsilds' third season in the Continental Northwest was about to begin. They spent the first month and a half of 1928 finishing up their backlog of summer work, clearing the rented house of their belongings, and preparing to leave for Great Bear Lake to complete their reindeer pasture and collecting fieldwork.

In mid-January, Erling wrote to Malte that he had finished the preliminary work on their collection from the previous summer. Of about 4,100 vascular plants, represented by approximately 418 species and major varieties, he believed several were new to the flora of North America and a few might be undescribed species. The lichens consisted mainly of species of economic importance.

It had been an extremely wet summer and they had had a hard time keeping everything dry. The specimens stored at Atkinson Point had suffered from mould, and mice had also taken their toll, but on the whole the collection had not been damaged too badly. With the shipment, he was sending a catalogue, index of localities, and a list of seeds to aid in identifying critical species. This did not include the *Papaver* seeds that had been requested. "I am sorry we could not get more samples," he apologized. "For some reason *Papaver* is rather scarce due to a general failure of producing seeds. The reason for this I cannot explain. Though the flowers appear to be perfect a very low percentage get fertilized."¹

The boxes he was sending included the skull of the old female grizzly bear that they had shot on the Eskimo Lakes to be given to Dr. Anderson, and personal articles for safe-keeping in Ottawa. Everything they left would be shipped out by the Hudson's Bay Company agent in Aklavik on the first steamboat. In return, Erling asked Malte if he would be kind enough to ask the library to lend him M. L. Fernald's 1925 paper on "Persistence of plants in unglaciated

areas of boreal America.” Fernald’s theory of “nunataks” (refuges that escaped glaciation) was attracting a great deal of attention in the botanical world and would prove relevant to the area that Erling was investigating but he did not give Malte any further explanation of what he had found of special interest beyond the intriguing comment: “I think I have got the scent of something good but am not sure if I can follow it down to bedrock.”²²

Malte did not receive the letters or boxes until June. However, the Alaska shipment arrived, and on January 25 he wrote to Ostenfeld: “The Porsild brothers did well in Alaska in 1926. Their collections which I now have, include over 1,700 numbers of phanerogams and ferns which will make, I should judge, at least 5,000 herbarium sheets. Last summer they were working east of the Mackenzie River – and if we get these safely home we should have good material from the western Arctic mainland to work with.”

His own Arctic trip had been a great success. He had been working on his collection of over 4,000 herbarium sheets. “When I started out, I did not expect to add much to the knowledge of the flora of the Arctic Archipelago,” he said. “I was therefore very much delighted with the results. Outside of *Salix* which I have not had time to look over yet, I got about 30 additions to the flora of North Devon island and about as many as that of Baffin island. Among the Baffin island additions are several distinctly western arctic species, several species not recorded north of Hudson’s strait before, one new species of *Calamagrostis*, three species of *Antennaria* – only one has been recorded from there so far – and quite a lot of other interesting things.”

Ostenfeld had already congratulated Malte on the important collections the he had managed to make during his short visits to various places in arctic Canada. He had begun work on the collections from Knud Rasmussen’s Fifth Thule Expedition to the Barrenlands, which were rather incomplete as none of the collectors had been trained botanists. They agreed that this area and the central and western arctic islands were much in need of botanical exploration. In his letter of January 25, Malte laid out his plans to go north again in the coming summer, travelling on the S.S. *Nascopie* to Hudson Bay in July and August to try and fill in some of the botanical gaps between Baffin Island and western arctic Canada. “From what I can judge from my own collections,” he said, “there are, particularly in southern and western Baffin Island, a conspicuous number of mainland and western types which indicate a much closer botanical relationship between Baffin Island and the continent than, judging from existing plant-geographical records, we had so far thought there was. At

present we know of about 160 species growing on Baffin Island. Considering that from Southampton, Nottingham, Mansfield, and other islands in the south of Hudson Bay there are only a total of about 60 species recorded, I came to the conclusion, some time ago, that a botanical excursion to the latter islands ought to yield a rich harvest.³

As it happened, this was an area in which the Department of the Interior was also interested. In 1927, Finnie had heard from Leon J. Ladner, M.P. for Vancouver, regarding the lease of areas in the Northwest Territories to the Dominion Reindeer Company, an outfit that had negotiated with Waegter Brothers of Seattle for the purchase of 5,000 reindeer from Kokrines, Alaska. Ladner was told that no location could be recommended until the districts had been examined botanically, although it was possible that some portion of the west coast of Hudson Bay might be found to be suitable. Finnie had heard no further word but wished to know the grazing potential should new enquiries arise. He had also to consider the Royal Commission recommendation that Southampton, Mansel, and Coats Islands should be set aside as a reserve for reindeer and musk-ox. Coats Island had been suggested as a first site. He therefore approached the Director of the Museum, W. H. Collins, to see whether Dr. Malte could be asked to make a botanical investigation if the necessary arrangements could be made. In turn, Collins instructed Malte that, while studying plant life and collecting botanical specimens in the coastal region of Hudson Strait and northern Hudson Bay, he was to pay particular attention to matters of practical interest, such as grazing conditions for native or imported species of animals. Information about all natural history subjects, ethnology and physical conditions affecting exploration work in the north would be appreciated.⁴

These must have been trying times for Finnie, weighted down by his concern for the success of the reindeer introduction in the north and the need for action in the near future. By now, many years had elapsed since the Royal Commission had made its recommendations for northern development, based on hearings in Ottawa in 1920 and published in 1922, and so far there was nothing to show but unsuccessful efforts to create a reindeer industry in Canada.

Finnie had only to look backwards to reflect on a dismal history of failures. The first Canadian experiment had begun as early as 1908 when Dr. Wilfred Grenfell had bought 300 Norwegian reindeer and shipped them to St. Anthony, Newfoundland, in hopes of establishing a meat and dairy supply to reduce the high incidence of tuberculosis and infant mortality in the area. Initially, the herd did well under the supervision of four Lapp herders and by 1913 had

increased to 1,500 animals. However, when the herders objected to their low pay and returned home, Grenfell was already serving in World War I and was forced to leave the deer unattended. In his absence, poaching reduced the herd to 230 animals. Shortages of funds in the International Grenfell Association brought in the Department of Indian Affairs in 1917. The herd was transferred to the north shore of the St. Lawrence near St. Augustin, but the Indians who were supposed to look after the animals were untrained and allowed interference by people and dogs, and predation by wolves, until the Department stepped in again. The deer were moved again, this time to Anticosti Island, and released to run wild. By 1939, there were only seven reindeer left and were soon believed to be extinct.⁵

In 1911, there was another sorry attempt to create a new reindeer industry in western Canada by taking some of the Newfoundland herd to Fort Smith in the Northwest Territories. Many reindeer died en route. Those that reached their destination soon succumbed to disease and decline, due to various factors that may have included insufficient or unsuitable forage in winter and heat and fly torment in summer.⁶

These cautionary setbacks were somehow forgotten on Armistice Day in 1918 when an enthusiastic northern explorer named Vilhjalmur Stefansson made a speech to the Empire Club in Toronto in which he advocated the domestication of the musk-ox and the creation of a reindeer industry in Canada's "Friendly Arctic." His persuasive optimism undoubtedly helped to create the climate of public approval that led to the appointment on 20 May 1919 of a Royal Commission to Investigate the Possibilities of the Reindeer and Musk-Ox Industries in the Arctic and Sub-Arctic Regions of Canada, and ultimately pressure the Department of the Interior to proceed with the proper introduction of reindeer for the relief of native peoples in the Northwest Territories.

Thirty-five witnesses had testified at the Royal Commission hearings, all with some experience of the north in capacities ranging from missionary to scientist and whaling captain. The problems of the decreasing wild caribou and musk-ox herds took up a great deal of their time. Regarding the possibilities of reindeer herding, the difficulties that emerged included the need for suitable locations and grazing units, the necessity of reindeer restraint, the problems of parasites and flies, and the question of whether or not the Eskimos or Indians could be properly trained as herders. Only the last problem produced much conflicting evidence. Diamond Jenness, ethnologist with the Canadian Arctic Expedition, and Professor D. B. McMillan, who had accompanied several U.S.

Arctic expeditions, felt that the occupation of herding would be contrary to the native way of life. No representatives of the indigenous people were consulted.

While the hearings continued, Stefansson became impatient to get on with his own reindeer enterprise and resigned from the commission, citing conflict of interest. By the time the hearings were over, and in co-operation with the Hudson's Bay Company, he had launched into an ambitious reindeer scheme for Canada's Arctic, leasing 113,900 square miles on Baffin Island by 1 June 1920. By November he was a shareholder in and adviser to the newly formed Hudson's Bay Reindeer Company, and by December he had applied to the Canadian Government for reindeer-grazing rights at the mouth of the Mackenzie River and a lease on forested Quebec mainland adjacent to the Baffin Island range as a precaution against possible problems of exposure on the tundra for animals used to wintering in Norwegian forests. Since neither the Canadian Government nor the Hudson's Bay Reindeer Company was willing to expand reindeer operations before the Baffin Island scheme had even begun, plans for Baffin Island were then precipitated, leading to the kind of disaster that was becoming typical of the well-meaning but unhappy sagas of reindeer transfer and settlement in Canada.

A hasty and inadequate survey of the range was done by an ex-member of the Canadian Arctic Expedition who was neither a botanist nor a reindeer man. Storker T. Storkerson produced an effusive report and, encouraged by his advice, 667 reindeer were bought in Norway in the summer of 1921. Sixty died or were lost before they could be transferred, along with several Lapp families as herdsmen, on board the Canadian vessel *Nascopie*. Seventy-seven more animals died before reaching Baffin Island in November. Weakened by the long journey across the Atlantic, immediately on landing in Amadjuak Bay the herd scattered in search of food. No provision had been made for the herders who were forced to occupy themselves with building shelters. Once the herd was established, it was hard to round up the widely dispersed animals. The available forage failed to live up to the report in all seasons. Many animals perished or wandered off and ran wild with the caribou. In less than a year, only 180 reindeer could be counted. The last Lapps returned to Norway in the fall of 1923 and by the following winter most of the herd had vanished. Stefansson blamed the failure on mismanagement and called company officials to task for the early resignation of his trusted man Storkerson in a disagreement over the buying of the herd, but the Hudson's Bay Company, which closed down

reindeer operations in 1927, decided that the choice of the grazing lands had been unfortunate.⁷

By 1922, when the Royal Commission report was published, the discouraging problems with the latest Canadian reindeer experiment were becoming known. It seemed that only in Alaska was the reindeer industry a success in North America. Inspired by official U.S. reports and being in no position to judge that the success in Alaska was proudly counted in numbers while the mounting environmental and social problems were ignored or treated lightly, the Royal Commission recommended that small experimental reindeer herds should be established in Canadian locations that had been carefully chosen for greatest need for native food supply. The importance of obtaining skilled Lapp herders to train the northern people to care for the reindeer was emphasized, as was the need to take great care in selecting locations in which there would be no danger of conflict with the wild caribou and where the vegetation would provide ample sustenance for the herd. As had been done in Alaska some thirty years earlier, the co-operation of missionary bodies was to be requested in “the gradual working out of a system similar to that so successfully followed by the United States Government in Alaska, whereby small numbers of reindeer are given to the natives in recognition of the interest and industry which they show in the work.”⁸

Acting on the Royal Commission recommendations became the responsibility of the Department of the Interior. It was the driving force that had led to the hiring of the Porsild brothers to investigate reindeer conditions in Alaska and the Northwest Territories in 1926, and pressure to go on to the next phase of reindeer introduction was growing stronger in 1928. So far, the results of the Porsilds’ survey had been encouraging but slow. Conscious that time was passing all too quickly, Finnie was caught in the need to continue to proceed carefully and the urgency to get on with the job. On February 1, he sent a worried wire to Aklavik: “DO YOU EXPECT TO FINISH YOUR INVESTIGATIONAL WORK BY NEXT FALL” and was relieved to get a firm reply from Erling: “REACHING BEAR LAKE ULTIMO MARCH WE HOPE TO DO CONSIDERABLE TRAVELLING BY DOGS BEFORE ICE GOES OUT /STOP/ OPEN WATER WE CONTINUE WORKING WHEN PRACTICABLE IN TWO PARTIES HOPING THUS TO COVER ENTIRE COUNTRY NORTH AND EAST OF LAKE AND SHOULD BE READY TO LEAVE ON LAST BOAT HAVING FINISHED INVESTIGATION OUTLINED BY YOU.” On February 14, Finnie sent his last instructions to the Porsilds, ending with “GOOD LUCK.” He would not have to wait too much longer. By summer he would have detailed reports

of the previous season and by fall he would have the answers that he needed in order to proceed with the reindeer program.⁹

It was just as well that he was prepared with interim answers in the silence that was to follow the Porsilds' departure for Great Bear Lake because the pressure for the Department to act continued to escalate as winter passed into spring and summer. One witness, the Rev. W. G. Walton, continually besieged the department with requests to introduce reindeer on the east coast of Hudson Bay. Perhaps from the same source, the Hon. Arthur Meighen wrote to the Minister, drawing his attention to the necessity for relief measures among Eskimos in that area.

On June 6, around the time that Erling Porsild's January letters reached Ottawa from Aklavik, the question of reindeer introduction and northern relief arose in the House of Commons. The Leader of the Opposition, the Hon. R. B. Bennett, remarked that every winter there was considerable hardship endured by the Eskimos and the only remedy that had been suggested that would be at all equal to the demands made upon the Department of the Interior would be to import a number of reindeer from Norway, and to establish herds up there as had been done "so successfully by Mr. Lopp in Alaska."

The Minister of the Interior, the Hon. C. A. Stewart, replied that the importation of reindeer had been attempted on the east coast and was a failure. He understood this was because the animals had not been located on proper grazing grounds. Since that time attention had been directed to the fact that in Alaska the American government had made a great success of the rearing and domesticating of reindeer. Enlarging on the Alaskan success, he said: "There has been in the employ of the department for two years two gentlemen who have made a study of the food and other conditions of the reindeer, and it is hoped to make a success in that direction yet. They have been in the north now for a period of two years, and we shall soon have their report."

Stewart had not been too well briefed as he was not sure if the gentlemen concerned were "The Porsild brothers" as Bennett suggested but thought they were from the United States and had been working along the Coronation gulf. He mentioned the interest of the Dominion Reindeer Company in the west side of Hudson Bay, stating erroneously that arrangements for using that territory were almost complete. The herd would be run as a private enterprise, he said, but each year there would be a surplus of animals given to the Government to be turned over to Eskimos trained to establish small herds.

Unsatisfied, Bennett pursued the necessity for action to provide for the needs of the Eskimo people. Citing letters to the editor from Rev. Walton and R. H. Knowles and an editorial in the *Toronto Globe* to stress urgency, he added: "The movement of reindeer to the Mackenzie basin will not entirely meet the demand for further consideration by the aboriginal population in another section of the northwest. There are about six thousand souls in all, and the story told of their privations and sufferings demands that action be taken to prevent a recurrence of those conditions.... If we do not move now these people will die of starvation this winter."¹⁰



CHAPTER THIRTEEN

WINTER TRAIL TO GREAT BEAR LAKE

In the interim period when the Porsilds waited for the winter mail to arrive overland from Simpson before they left Aklavik for their 1928 season on Great Bear Lake, both the brothers sat down to write to Rudolph Anderson at the Museum.

Bob Porsild's communication after a long silence revealed how much of the success of the whole enterprise depended on the hard background work of the brother who was too busy fixing things to sit down and write letters. As he explained in his letter of February 8:

You are probably wondering at not having heard anything from me so far, and I feel that I owe you an explanation. Due to inability to obtain any manual help – practically – either from Eskimos or Indians, I have been rather overloaded with things as: providing dog-feed for our 15 dogs, cutting and hauling of wood for fuel for the winter months, 'mechanicking' and navigating our boat in the summer season, and accordingly have not had much time for anything else.

My brother's sickness in the spring of 1927 and long convalescence – hardly quite O.K. yet – forced him to be very careful, and therefore, he had been doing all the writing and homework, while I had the greatest part of the physical work to do; and I guess nobody knows that better than you, what that means up here, when the whole expedition consists of two men. We are both hoping he will be in good shape for the coming season on Bear Lake, as I may get a chance to do a little more mental work. – We have very little fish-literature and would ask you, if possible to send us something for fieldwork. I am

not acquainted with American literature but would like to have something for determinating [identification?] within this area, if not too voluminous.¹

Erling had already written to Anderson on January 15, telling him of his collections on the coast that would go out on the *Distributor's* first trip of the coming season. "I wish I had thought about asking you in Ottawa what was NOT worth the trouble of collecting," he said. "How about eggs? You never mentioned eggs. I understand considerable collections have been made by earlier collectors."

He told Anderson that they were hoping they would have everything ready to leave for Great Bear Lake in February.

Originally we had not planned to leave till open water, [he said,] but I am sure we can do a lot more up there in the spring and early summer, as I understand that travelling on the lake, like on the sea coast, is possible long after the snow is off the ground. Had I known six months ago what I know now, things could have been arranged in a more satisfactory way and a lot of our stuff could have been shipped up to Norman on the last boat... Many things could have been prearranged in a much better way, I admit; but you often have to follow the development of things instead of developing them to suit your own taste, at least in this country. I may not be the first to experience this, however. Fortunately, I do not think our work will be much impeded, while possibly our expenses will run somewhat higher than otherwise, and we may have to suffer some inconvenience and hard work ourselves.

One reason, of course has been my sickness from which I had a recurrence coming back from the trip east last fall. I thought I should have to go out for the winter, but as a change to the better took place before we got back, and the doctor was very optimistic, I decided to take a chance. I have not recovered though I can travel, but have to take care of myself. If nothing comes up I think I can finish the trip alright and go out next fall and get proper treatment, which I have not got here.²

On February 3, Erling could now report to Anderson that everything was ready to hand over to the Hudson's Bay Company for shipment but added a request for more information to be sent north. It was now almost two years since the

Porsilds had left Ottawa and both the brothers were feeling the lack of source material that they needed for their work. “I am sorry I haven’t got Richardson’s ‘Arctic Searching Expedition,’” Eling said. “I do not remember how much Richardson has about the lake.” He didn’t know Petitot’s works but he wondered if there might be something in ‘la région de grand lac des ours’ and ‘les grands Esquimaux.’ “I suppose you know all that has been written on that country by heart. Do you think any of them would be important to have on the trail this summer and in that case do you think the library would loan them to me.”⁷³

In asking for the works of Sir John Richardson and Father Emile Petitot, Erling had no idea how much weight he might be adding to his already overloaded gear for Great Bear Lake. Richardson’s expedition report, detailing his 1848–49 search for Franklin’s party missing since 1845, had been published in two heavy volumes in London in 1851. Father Petitot had been both an Oblate missionary and a prodigious writer who had lived and worked at Fort Good Hope and in the Athabaska-Mackenzie area from 1862 to 1882, travelling extensively with native guides down to the Mackenzie Delta to the Eskimo Lakes and beyond, as well as around Great Bear and Great Slave Lakes. He had established the first mission at Fort Franklin on Great Bear Lake in 1866. Among his many scientific and anthropological works, he had written *Les grands Esquimaux*, published in Paris in 1887, and *Exploration de la région du Grand Lac des Ours*, published in 1893, covering his missionary and exploratory journeys between 1866 and 1879. He had also produced a dictionary of the local Indian language, *Dictionnaire de la Langue Dene-Dindjie*, published in 1876, and was the first to recognize that, although the people of the lake were from several different Athabaskan tribes – Hare, Mountain, Dogrib, and Copper – they had formed an association of people centred around the lake with their own distinct identity and dialect. There was a chance that Erling might be able to look at Petitot’s writings at the Roman Catholic Mission in Fort Good Hope.

The Porsilds left Aklavik on 18 February 1928. Most of their gear for the summer had already been sent ahead to Fort Norman, plus a load of fish and equipment had gone to Arctic Red River for pick-up en route, but with deep snow and heavy loads they would have to take turns breaking trail, hard work for men and dogs, all the way to Fort Good Hope. Their route to the southeast was on the winter trail that crossed and re-crossed the Mackenzie River, avoiding rough ice but adding considerably to the distance. The two teams often lost sight of each other as one or other went ahead or took different riversides when



Bob Porsild and Constable Millan cooking dogfeed, RCMP barracks, Arctic Red River, NWT, 1928 (Photo: AEP, LAC, e010933879)

there was a choice. They reached Arctic Red River, where they stayed at the RCMP barracks, on February 21.

When the time came to pick up the feed and equipment that had been sent ahead, there were no Indians around to hire an additional team. Erling's sled weighed about four hundred pounds, with three bundles of fish, a trunk, and four bags, and Bob was equally weighted down, so they were more than relieved when the Hudson's Bay Company factor agreed to take some of their fish and accompany them for a couple of days.

Leaving on February 23, Erling said the first eight-mile portage was not too bad, although his overloaded, top-heavy toboggan capsized at least a dozen times, but they made good time on the river until they reached a steep trail leading up to their overnight cabin. "I could not take my sled right up and left it and the dogs below the last steep hill," he said, "while Dodman went right up. Going down [the next morning] his dogs were wild and he hit a tree and nearly smashed the front of his sled and hurt his side, though not badly." By the time they had travelled another eight to ten miles to the next cabin, Dodman decided to return to his post and could not be persuaded to go any further.

Faced with the departure of the Hudson's Bay sled, and no other help in sight, Erling and Bob were forced to unload the extra two hundred pounds of

fish onto their own already weighty sleds. Erling was disappointed that they had not had more assistance from the RCMP in Arctic Red River. "I had expected that the Police who have 16 dogs and nothing to do except cooking for the dogs and themselves might have offered to take some of our load for a few days," he said. "I think it would have been a very natural thing for them to do us this favour as there is nothing else to keep them busy."

A gruelling morning now lay ahead of them. It was almost impossible to keep the overloaded sleds on the trail that ran halfway up and along the bank, sidling towards the river, and dogs and men had to labour hard just to keep going. It took about three and a half hours to get to the next cabin eleven miles upriver and they were exhausted when they arrived. But their luck was about to change. Just as they were pulling out to try again, an Indian from Thunder River pulled in with fish for the woodcutters in the cabin and brought the glad tidings that the trail ahead was open and not too bad and he agreed to take three bales of fish for them the next day. As Erling said with relief: "Some luck today after all."

Their destination the next day was Clark's trading post on Thunder River. They left at nine. "From Adam's cabin the river trends from south east to north east," Erling said, "and as the predominant winds are north and south the snow never blows off the river. There is an old trail fairly hard with six inches of soft snow and a fresh toboggan trail on top. Our heavy loads crush the top trail and if not steered the sleds slide a little off and capsize into the two feet of soft snow. Snowshoeing nearly all day behind the sled."

When they stopped for a midday break, they noticed that the water in the river had dropped about twelve feet since the first freeze-up and all the sand bars were visible, looking like islands. They finished the day on a ridge of ice created by the drop and then descended to the river itself, crossing a stretch of rough ice when they reached the smaller river.

The trading post was beautifully located in a clump of tall spruce in a sheltered valley surrounded by hills. The Porsilds spent a restful day with "Mr. A. Clark," an old-timer from the Yukon who fed the dogs generously. It was warm and sunny and the snow was melting against the house. They saw a number of over-wintering chickadees, and Clark told them that he also had regular visits from what he called "the great owl and the mosquito owls."

With the loan from Clark of a young Indian named Timothe, a nice lad with three dogs who took a hundred and fifty pounds on his sled, the Porsilds left the post on a fine warm day on February 27. Their pattern of travelling

became more of the same routine each day as they followed good trails and bad trails, or no trails at all, keeping on or beside the main river from cabin to cabin until around nightfall. Sometimes the trappers or woodcutters were home when they pulled in and sometimes not, as when the Porsilds broke into a cabin that was locked when they arrived at night, only to find an arrow pointing to a camouflaged key in a crevice when they could see it the next morning. “We left an explanatory note,” said Erling. Timothe had to return to the trading post and they struggled on alone. The bottom fell out of the barometer, it got colder and snowed heavily, but somehow the miles each day got covered. Eventually, on March 4, after a particularly hard stretch of trail where Bob had to leave one of his dogs behind because it was completely played out, they reached Fort Good Hope.

“We were all tired when we finally saw the lights,” Erling said. “The trail led us to the [Hudson’s Bay post] where we were cordially greeted by the Inspector Gowan who invited us to stop with the Company. We had, however, planned on stopping with the Police, so Mr. Gowan accompanied us to the Barracks where we were hospitably received by Constable John Cummings. He told us that the patrol we had hoped to overtake and accompany from Good Hope to Norman had left that morning. He was alone in the Barracks and had lots of room.”

The brothers spent a week in Fort Good Hope, resting themselves and their dogs. Erling worked on getting Constable Cummings interested in natural history collecting for the Museum. “He is quite enthusiastic already – hope it will last. If so, he would have a wonderful opportunity here at Good Hope where he has hardly anything to do in the summer.... [He] showed me an owl that he had shot a few days ago. Probably the same species that I got from the delta before we left Aklavik. Skinned it to show Cummings how to make a skin. Also wrote some notes on collecting and what to collect. Gave him some arsenical soap for poisoning skins.”

There was some excitement to report while they were at the barracks.

Two native trappers, who were both Hudson’s Bay hunters and one their best man, arrived at the fort. Pulling in they passed the Company store and pulled up in front of the N.T. [Northern Traders]. The latter – Mr. Douglas, was not in so they temporarily put their sleds up at the Police warehouse. They brought a lot of moose meat and probably lots of fur too. The N.T. interpreter unfortunately was away so they did not want to do any business with them. They would not go to the H.B.

for some reason – ‘Because the boss did not treat them right last time.’ Cummings got a lot of meat and gave them the stuff they wanted in trade. The fur was cached and they went back. Gowan at the Bay of course is furious. N.T. has the last years been gaining in fast on the H.B. and the loss of these two men would be a blow to them – not only for the fur they produce but mostly for the influence they have with the rest.

The Porsilds were dickering with both companies for more fish for their dogs as they had been going through some of their load. “We have noted that there is quite a difference in the way business is run here compared with below. After we got out of the Western Arctic District going up river everybody seems to be a lot more accommodating. We had heard so much about the high prices up here but hitherto we have not noticed it.” As an example, he said that if you gave a native an order upriver for so many ‘skins,’ the traders gave him trade and charged it to you at the rate you were getting, so that an order on \$100 would only cost you \$65.75 if the native took groceries, and \$40.50 if he bought dry-goods. “In Aklavik we always were charged with the full amount.”

On March 9, Erling paid a visit to the Brother at the Roman Catholic Mission. “I had a hard time talking and understanding French but finally made him understand me. The Father at Aklavik kindly gave me a letter of introduction and he was quite willing to let us have some dry fish. I was trying to make him lend me some Emile Petitot[s] Books that Father Trocellier told me were here, but I guess he did not understand that I just wanted to borrow them and I did not get them.”

The Mission Brother gave Erling two bales of fish. He was able to get a small amount from the Hudson’s Bay and a large bale from Northern Traders as well as a new dog team for Bob, who had finally decided to give up his Nome harness and get a new set from an independent trader in the area. They tried to talk a native boy into going with them with a load of fish for two days, but without success.

The trail south from Fort Good Hope was in a little better shape than the one further north and on March 13 they made good time to the RCMP cabin about thirty miles further on. Erling complained that the cabin was not very well caulked and it was impossible to heat. “I suppose it is because one sleeps in a bunk in a cabin but on the snow floor in a tent, that you generally freeze in a cold cabin but not in a tent.”



Heavy trail on Mackenzie River, NWT, 1928
(Photo: AEP, LAC, e010933880)

Perhaps it was because he was cold in the bunk that the next day he had trouble with his knees. “I have been much troubled with rheumatism in my knees today. I snowshoed about ten miles this morning but in the afternoon the pain was so fierce that I could not walk or even bend my knees for a couple of hours.” Although the pain eased the next day, he was to continue to have problems with his knees further down the trail.

As they moved south, Erling noted how the vegetation had changed, with two or three species of birch largely replacing the alder of the lower river. “I think the *Alnus* here is a different species from that on the coast and probably also different from the Delta *Alnus*. The catkins are conspicuous and fully developed in the fall. I have not noticed that on the others.”

On March 15, when they stopped overnight at a trapper’s cabin, he noticed four coyote skins hanging on his cache. “The coyotes are fairly common all along the river,” he said,

... and all the trappers are much bothered with them and several seem to think they are more destructive than the wolf and bounty probably should be paid for them. To the foxes especially they are alleged to do much harm. One trapper told me they dug out fox dens whenever they found one, killed the young foxes, and stayed in the den. There had been few foxes on the river before we passed, but it appeared that they are running wild now when we passed. Probably the most tracks were seen from one day above Red River to a day below Good Hope then again from Good Hope till a few miles above Carcajou Ridge and from there to here I have not seen a fresh track. Sometimes one fox

will follow the trail for 10–20 miles digging up the droppings from the dogs. Saw one small white fox traded at the H. B. at Good Hope and saw one track yesterday that looks like white fox. The trappers tell me that a few [have been seen] coming through going west. Most come through when they are abundant on the coast.

By March 17, they reached a stopover cabin seventeen miles below Fort Norman. It was 6:30 p.m. and it had been a tough day so Bob opted to stay and rest his dogs. Erling decided to keep going as the trail ahead was reputed to be in better shape and he had a hunch that the mail would leave the fort the following day. Sometime after dark he lost the trail at Bear Rock on glare ice. “I crossed the river when I had the lights abreast. Hit rough ice from the B.[Bear] river. Arrived at the R.C.M.P. Barracks at 9:30.”

Mail had come in the day before and would leave in a few days time, giving him time to write letters to send downriver to Aklavik. Of the mail that had come in from the south, although he had wired the Department in the fall to send everything to Fort Norman, “there was not a piece of official mail so perhaps that has been sent somewhere else.”

When Bob pulled in the next day, they started to get together an outfit to take with them to Great Bear Lake. Except for a small bale of fish that they succeeded in getting from the Roman Catholic Mission, Erling complained that it was very hard to get what they needed as the traders either did not have it or they were holding it back for the spring trade. “We cannot get anything but lard and flour and 50 lbs. oatmeal here. I want to move on to the lake as soon as possible.”

Other arrangements went more smoothly. On March 19, a trader from Fort Franklin with whom Erling had been corresponding, A. W. Boland, arrived in Fort Norman and agreed to charter his forty-foot gasoline boat for travelling on the lake in the summer. A trapper named Louis Olmsted had just come in from the north shore of the lake and they arranged with him to borrow his canoe and use about three hundred and fifty pounds of food from his cache at Dease Bay. It turned out that the trapper and his partner had got into a poker game at Fort Norman in which “his partner found that he could do better playing poker than trapping on Bear Lake and quit him cold” so Erling hired him to work for them until the end of June. In payment, Olmsted would get his grub and Erling’s six dogs when they were no longer needed in summer. “I think he will

be a very good man for us," Erling said. "He wants to go into the country north of Dease Bay himself so this arrangement is very satisfactory to both parties."

A caravan of dog teams left Fort Norman on March 22. Besides the Porsilds, there were Boland, Olmsted, and three other teams, of which two were traders from the rival companies of Hudson's Bay and Northern Traders who agreed to carry some of the brothers' load. The trail, at first rough and hard, became a hard track over marshy lakes and swamps. Four teams ahead of the Porsilds had cut up the soft snow at the sides. With their heavy, bulky loads, if they tried to avoid a hole on one side of the trail, the sleds went into deep snow on the other side.

To make matters worse for Erling, his knees began to trouble him again and he had caught the cold from which everyone was suffering in Fort Norman. There was a tent set up about twelve miles out of the fort where they caught up with Olmsted. "I almost felt like caching some of my load. My cold is very bad too. Kind of 'kill' or 'cure' treatment this is. Fortunately the trail was much better in the afternoon mostly going through the timber where there was a good deep trail. I surely admire the dogs. The weight of the load does not stop them in spite of their sore feet. I cannot walk much on account of my knees and the dogs have to pull me too."

They camped with the company about twenty-five miles out of Fort Norman in a patch of burned-off timber with lots of dry wood. The next day was fair going. After climbing the plateau from the valley of the Martin River, the route led over small lakes and muskeg. Erling noted the abundance of birch, with some arborescent specimens measuring up to six to eight inches in diameter, and the first *Populus tremuloides* they had seen. Timber was generally sparse except in the river valleys and the spruce not heavy enough for cabin building. Digging down in the snow in open muskeg, he found a dense growth of *Ledum* with some *Cetraria nivalis* and *C. islandica*.

They reached Fort Franklin on March 24. "At Fort Franklin, named for Sir John Franklin who wintered there in 1826-27, we found ... that the fishing was on the decline but the nets set out ... were still averaging from 500 to 600 'herring' a day. This little whitefish, which was originally described from this place by Sir John Richardson, is caught in large numbers and is said to remain in the lake throughout the year. Four hundred and fifty fish, comprising a toboggan load, caught in this fishery were found to average 1½ pounds each, whereas those taken a month later at Dease Arm averaged only ¾ of a pound. Three or

four large Great Bear Lake herring per day will keep a hard-working dog in good condition.⁴

The Porsild dogs, for the first time since the previous summer, were given all the fish they could eat with a big feed of herring. “They were getting rather thin but a week’s rest at the fishery with all the fish they cared to eat improved them tremendously.” Ten days were spent in Fort Franklin resting the dogs and organizing the summer’s work. The plan was that Boland would accompany Erling and Olmsted as far as Etacho Point (known locally as “Big Point”) and Bob as far as Dease Bay, carrying the eighteen-hundred-pound load, mostly of dog food. Bob would return to Fort Franklin, which he would use as a base to explore as much of the west end of the lake as possible before the opening of navigation. At that time, he would meet the steamboat in Fort Norman and bring over their supplies about the last week of July. Meanwhile, Olmsted and Erling would survey the area east and northwest of Dease Arm.

In the report for Finnie that Bob would take to mail on the steamboat, Erling wrote:

From Dease Bay we go by way of Dismal lakes and the Coppermine river to Coronation Gulf, returning across the Barrens, striking south west towards the headwaters of the Horton river and from there across the divide to the lake. By June, as soon as the snow is off the ground, we go in again on foot with pack dogs, striking north towards Anderson river. By open water my brother is to pick me up ... with the boat and during the rest of the season we intend to circumnavigate the lake and possibly make one trip inland to the Barrens from McTavish Bay. I feel certain that, if everything goes well, by the end of navigation we shall have accumulated considerable amount of information and be down in Norman in time for the *Liard River* [steamboat], bringing all collections out this year as well... We shall proceed at once to Ottawa to report on our investigation.⁵



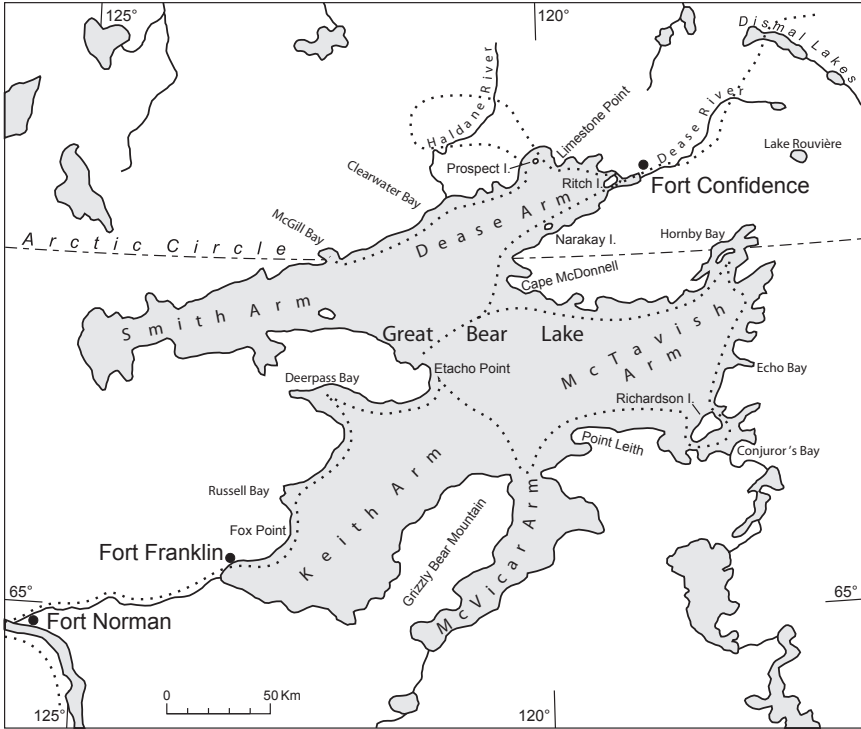
CHAPTER FOURTEEN

DEASE ARM AND THE NORTHEAST BARRENS

As with their previous summer's work, the territory that the Porsilds proposed to investigate in their 1928 season was immense. Great Bear Lake was the eighth largest lake in the world, the fourth largest in North America, and the largest lying totally inside Canada. North of Latitude 65, it had an approximate area of 12,200 square miles, including five arms in every direction – named Keith, Smith, Dease, McTavish, and McVicar after chief traders and factors in the Hudson's Bay Company who had helped with the early Franklin expedition – of which only the northerly Dease Arm was above the Arctic Circle.

Erling claimed that, in spite of the fact that the lake had been one of the easiest and best-known routes from the Mackenzie River to Coronation Gulf for many years, no accurate delineation of its shoreline had ever been made except for a few hundred miles of the western shore recently covered by the Topographical Survey. Maps of the time still depended on the 1825–26 pioneer work of Sir John Richardson, the surgeon/naturalist on the Franklin expeditions. In addition to their 1928 planned surveys of the lake itself, Erling hoped to cover large sections of the barrens to the north and as far northeast as Coronation Gulf.¹

The Porsilds, Boland, and Olmsted left Fort Franklin on April 3 with nineteen dogs and three sleds carrying eighteen hundred pounds, mostly of dog feed. With their heavy loads, they had to walk most of the time, following the north side of Keith Arm on the lake ice. By April 5 they reached the south side of Deerpass Bay, where they had the misfortune to damage one of the tents when they stopped for tea on the ice. "Last time put up our double silk tent for shelter," Erling mourned. "Boland's small stove was set up and got too hot. The



Investigation route around Great Bear Lake, NWT, Canadian Reindeer Project, 1928
 (Cartography: Ragnar Müller-Wille)

tent caught fire and though Bob and Boland were inside, the fire had spread so much before they saw it that the tent went up in flames. I was outside and pulled the tent down to lee and put out the fire by stamping. The tent however was gone or at least ruined as about two square yards were burned up.”

They continued walking across the ice to the north side of the bay and camped on the other side. On Good Friday, April 6, following the south side of the Scented Hills peninsula east to “the last wood,” they reached Etacho (“Big”) Point where they set up the remaining tents for the night and gave the dogs the last feed of fresh fish.

Erling found the place interesting. “Near the point there is a border of barrens along the beach, and to get to the timber we had to go up over a ridge running parallel to the coast. This ridge is probably about 50 feet and runs all

the way down to Deerpass Bay. Numerous small creeks cut through it. Right at the southwest corner there is an exposure of what Boland said was shale – a few hundred yards from a beacon or monument [Pearson’s] from the survey a few years ago. Stopped and took some sights here.” He thought the ridge was of glacial origin, with numerous gravel boulders. “The place we camped is noticeable from a distance by a peculiar-looking stunted spruce.... The trunk is about 8–10 inches at the butt, quite straight till about 12 feet above the ground where the top starts. This is almost globular and the branches are twisted in a peculiar way and looks about like one of those Japanese dwarf trees. All the spruce close to the lake are stunted in growth with a short but thick trunk and dense top, often bent by the wind.”

Boland began his return journey to Fort Franklin on April 7 while the Porsilds and Olmsted continued east across the lake. Forced to camp on the ice five miles from shore, they reached “Caribou Point” (Cape MacDonnel) the next morning. On April 10, along the peninsula on the south side of Dease Arm, they saw their first small band of caribou. “Bob continued to [the] first wood, and made tea while Olmsted and I went out to some small islands where we had seen many fresh traces through the field glasses,” Erling said. “We were a few hours late. With the field glasses I could see a band of twelve crossing to the north shore, probably about six miles out. They were just walking slowly and I do not think they had the wind of us. We could not possibly overtake them before they were over, so we went back to the sleds hoping they would stay on the north shore till we got time to go after them.”

They finished their journey the same day. Crossing the last bay, they saw a wolverine coming from the direction of Olmsted’s cache. “Not a very good sign,” Erling commented. “We pulled in at Lambson’s house, a good sized building where Boland used to live. Everything was in fine shape. Very cold. When I had unpacked I hung up the thermometer and found it to register 25° below, quite chilly for this time of year.” This was to be Erling’s base for further investigation until the ice went out of the lake in July.

The house was close to the site of old Fort Confidence at the mouth of the Dease River. The Hudson’s Bay Company ‘forts’ as seen along the Mackenzie and at Great Bear Lake were in no sense fortresses for protection as they might have been elsewhere but were simply a group of log cabins used to house the factor, store, and provisions. Fort Confidence was built in 1836 for Peter Warren Dease, fur trader and explorer for the later Franklin expeditions, and Thomas Simpson, who accompanied Dease on his Arctic explorations. They



Buildings owned by trader A. W. Boland, Dease Bay, NWT, 1928 (Photo: AEP, LAC, e010933884)

spent the winter there in 1837–38, and Simpson complained that it had been constructed with inadequate timber and insufficient roofing so the interiors were very cold. It was rebuilt in 1848 when it was used by Sir John Richardson during the winter after he returned from his search for Sir John Franklin between the Mackenzie and Coppermine rivers. Dr. John Rae used it for the same purpose the next winter. It was finally abandoned in 1853.

The buildings were still standing in 1902, as seen by David Hanbury when he passed through, but were destroyed by fire a few years later. By the time Vilhjalmur Stefansson visited Dease Arm with a party of Coppermine Eskimos in 1910, all that was left of the old fort was a pile of firewood left by Richardson's men and four stone chimneys that were still standing "like the monoliths of Salisbury Plain." Stefansson was amazed that the firewood, "chopped by Richardson's men, and piled up methodically after the nature of Englishmen, looked as if it had been chopped last year – a striking proof of the fact that in the northern regions decay is very slow." When George Douglas and his Coppermine expedition members camped on the site and photographed them in 1912, the four chimneys were still standing, but by 1928 when Erling and Olmsted arrived, only two chimneys were left upright.²



Two chimneys, all that was left of Old Fort Confidence, NWT, 1928 (Photo: AEP, LAC, e010933883)

A small trading settlement had grown up about half a mile from the old site in 1908, established by a well-known Hudson's Bay factor named James Mackinlay and two wealthy Englishmen turned trapper/hunters, John (Jack) Hornby and Cosmo Melvill. Melvill left in 1911, while Hornby stayed on and became very friendly with the Douglas brothers and functioned quite well during their stay, but, as Douglas remembered in later years, he began to show signs of mental deterioration at that time. Hornby left Dease Arm to join the army in France in World War I and was decorated for valour. When he returned to Great Bear Lake, he built an isolated cabin on the shore of what came to be named Hornby Bay in McTavish Arm and lived there alone for many years, gaining a mythic reputation as "Hornby of the North" for his hunting and survival prowess, as well as the strangeness that would lead to his downfall. At the time of the Porsilds' arrival on Great Bear Lake, he had disappeared into the Barrens with two young companions and had not been heard from for quite some time.³

The trading post itself had only recently been abandoned. In his report to the Department in 1929, Erling wrote: "Dease Arm and the plains to the north and east were formerly the home of vast herds of caribou. Consequently this district was the favourite hunting ground for the Great Bear Lake Indians, and

when, about ten years ago, a trading post was established at Dease Arm the Coronation Gulf Eskimos also frequented the east end of the lake. For the last few years, however, the caribou hunt has altogether failed and in 1927 the trading post was abandoned. The last Indians moved to the west end of the lake, where when hunting fails the fishing can always be depended upon.”²⁴

The first tasks in the next three days were to get wood for the house and for Erling and Olmsted to go out to check on the cache. They also needed to pick up a replacement tent. “The cache was on the north shore about ten miles from the houses. The wolverine had been there sure enough and had cleaned up on two fish caches, one on a stake and one in a tree. The main cache however was intact. Took a load of about 800 lbs. and returned after setting some traps for the wolverine.”

Bob left for Fort Franklin on April 15 while Erling and Olmsted set off on a hunting trip, following old tracks of caribou, and fresh ones of wolf and wolverine. They searched for two days without seeing anything, but on April 17 they caught up with a small herd of caribou on an island about a mile offshore. Erling had trouble with his gun but managed to get a doe that he later skinned for the Museum. On their way back, they climbed a high point of limestone and quartz that he thought must be Richardson’s Limestone Point and he took bearings and photographs of the Dease Valley below. Many expeditions had used this valley coming or going to Coronation Gulf, but Erling thought that the only accurate survey in recent times had been made by the Douglas brothers, as recounted by George Douglas in *Lands Forlorn* in 1914, during their trips to the Coppermine Mountains to investigate the potential for copper deposits reported in that area.

On reaching the house, Erling made the unpleasant discovery that he had lost his field diary and went back to find it by daylight. They spent several days getting organized for a three-week trip to the northeast barrens, during which time Erling again struggled with his problem transit and odometer while Olmsted managed to patch up the burned silk tent. They found where the trail started, but the weather brought a chinook from the southeast followed by thaw, which made the snow soft and travel impossible.

Bird life was starting up around Dease Bay and Erling noted that the Gray Jays were mating on April 21, a month later than stated by Frank M. Chapman in *Handbook of Birds of Eastern North America*. He tried to collect a pair but only succeeded in shooting the female. On April 25, he said he shot another whiskeyjack and made a skin of it. “I saw the first snowbird yesterday and a few

today. The jays are mating and so are the ptarmigan. Tonight we can hear the mating calls in all directions. Noticed the mating call is very different from that of the Greenland ptarmigan. Shot one male for a specimen back of the house.”

From a diabase rock to the north of the settlement, he took bearings for his map of the bay, noting bare spots where three days earlier there had been a foot of hard snow. “In the open flats the willows are nearly uncovered. I found four inches of water under the snow in the Mission creek. Noticed *Dryopteris fragrans*, *Juniperus communis*, and *Potentilla nivea* on the south side of the rock. What shows of the flora is very uninteresting so far.” By April 27, he said: “I have never seen anything like this. About two weeks ago we had 25° below and less than a week ago we had 15° below. On 23rd we had the first day with temperature above freezing at noon and today spring is fully established. We have had winds from every direction and they are all warm. Saw the first moth up in the bush today and lots of flies. I could smell the spring and noticed the change in the spruce.”

Their first attempt to leave for the Barrens ended in failure as they were forced to go back. “The snow would not carry [the sled] in the trail and the dogs broke through constantly. To break trail with the snowshoes would not help any as the snowshoe would only break through in places, viz., the sun side of the east-west-running trail. We were rather heavily loaded but even with a light load a few miles of this going would take all the hair and skin off the dog’s legs.”

During the night, it turned colder and was raw and cold all the next day, though still thawing in sunny places. Some of the dogs got loose overnight and chewed up one of Erling’s wet moose-skin snow-boots so he spent the day making a new one and a number of dog kamiks. Finally, on April 29, the thermometer read twelve degrees Fahrenheit, and a cold north-north-east wind was blowing when they set out for a second time along the Coppermine trail that Boland had sketched for them, following the lakeshore but in the shelter of timber. The thaw had made the snow so hard that it was rough on the sleigh but easy for the dogs to make good time across the barrens.

Five miles from Dease Arm they found three old caribou tracks and later one fresh one but otherwise the country was bare. Their route led over a low plain that was broken into rhomboid-shaped blocks. Erling noted that the valley and hillsides were well covered with heath scrub and lichens that he felt would afford splendid summer, spring, and fall grazing for reindeer. They climbed higher and crossed the divide the next afternoon, descending into a canyon with a creek flowing toward the Coppermine River via Dismal Lakes.



First spruce at Ukivik, A. W. Boland's road from Dease Bay to Coppermine, NWT, 1928 (Photo: AEP, LAC, e010933882)

The land was getting more broken and rough, with hilltops to the east in the order of two to three thousand feet, as they followed the creek to an area of good-sized spruce and camped in a narrow valley separated from another canyon by a ridge of high land.

They woke to soft snow and decided to wait until it had stopped before travelling on. Erling surveyed their position from a hill west of the junction of the two canyons, seeing what he thought was Lake Rouvière but unable to see Dismal Lakes behind the hills to the east. Morainic gravel deposits and glacial erratics were strewn on the hillsides where numerous ground squirrels were busy. He chased an arctic hare for some distance before killing it for a specimen and for dinner. While he was away, Olmsted found fresh tracks from three wolves that had circled a few hundred yards from their camp. There was no sign of caribou anywhere.

At 10:30 that night, when it was freezing hard again, they followed the creek about fifteen miles downstream, running out of hills and timber into a low flat in which a conical mountain barred a direct route to Dismal Lakes. Through the passage on either side of Teshierpi Mountain, they could see the lakes named by Dease and Simpson on their Arctic exploration for the second Franklin expedition between 1837 and 1839. "Looking down on the treeless

shore on a cold morning like this I do not think Simpson was wrong when he gave them this name," Erling said. They camped at the base of the mountain and next day climbed to the summit, which they calculated to be about eight hundred feet above Dismal Lakes, fifteen hundred feet above sea level.

From this vantage point on May 2, and from a similar peak to the north of Dismal Lakes on May 4, Erling was to make his entire survey of Kendall River, Rae River, and the land north and east to Coronation Gulf. "We could see the whole of Kendall River as well as its valley and junction with the Coppermine," he said. "Of the latter we could see what I take to be the September Mts. and the east side of the Copper Valley or Canyon. Apparently there is good travelling across the Copper Mountains almost anywhere. Aside from the Kendall River valley there is no timber seen across the lake except in the cirque near the east shore of the first lake." He thought he could see two or three small lakes at the head of Kendall River and to the northwest they could see where the lakes or basin trended towards the west.

They had seen a lot of good reindeer country but no caribou or signs of them since the first tracks at the beginning, but this was about to change as they travelled overnight down to Dismal Lakes and turned north along the lake ice. Soon after it got light, they came upon three caribou tracks about a day and a half old, followed by a lone wolf, going towards the south. After that, they saw two or three fresh wolf tracks, as well as one of wolverine and a number of fox tracks. It had been overcast all night but just after sunrise there was a hailstorm over the lakes, the first that Erling had seen in the Arctic in winter. About three a.m. they came to the narrows in the big lake and saw a number of fresh caribou tracks going north. Leaving the dogs tied to a big rock, they set off in pursuit, catching up with a small band of does with yearlings and two-year-old fawns.

We killed one two-year buck and two yearlings ditto and an adult female which was all the meat we would require, [said Erling]. Olmsted started skinning the two-year buck for a specimen while I went back for the dogs. When I came down over the hill I saw a caribou track going that direction; an animal that our shooting had driven back had gone right down towards the dogs. As might be expected they all went crazy and got the rope off that held them to the rock. I did not think the outlook the brightest when I started out on their trail. The trail led right across the lake and up over the mountains to the south. When I came over the foothills I could hear Junior bark but could not spot

them with the glasses for a while. Finally I saw them. The rope had caught on a rock. I started calling them and as soon as they saw me they started back and then got the rope loose. They were all dead tired and looked so guilty that I could not help laughing at them and forgive them the run they had given me.

It was noon before Erling got back to where he had left Olmsted with the caribou. "Olmsted had finished the specimen and another one, and after skinning the remaining two and feeding the waste to the dogs that were almost too tired to eat, we hauled the meat back and camped near the lake on a rocky ridge. At four p.m. cleaned the skin of blood and grubs and went to bed."

The next morning they headed for the end of the lake where they had noticed good spruce from the hills the day before. "It got pretty hot before we got there but the going on the lake was not bad though it was much too hot for the dogs." They went up a hill on the south side of the lake and saw three caribou in a broad valley leading towards the northwest but did not bother to go after them as they had enough meat for their needs.

By one p.m., they had set up camp at the end of the lake, and in the afternoon climbed a high hill to the northwest overlooking all the surrounding country. "The summit was 940 ft. above the lake. Away to the north we could see what may be the Rae River valley, to the south and west the whole Dease River basin. We found the latter only parted from the Dismal Lake basin about two miles, the watershed being about midway and very low." They built a five-foot cairn and left a note in a .30–30 shell that read: "Built this cairn today returning to Dease Bay from a reconnaissance trip to Kendall River and Dismal Lakes. Killed four caribou on the north shore of Dismal Lake. Elevation of this cairn 940 ft. above the lake." The note was dated May 4th, 1928.

Going down, the hillside facing south was almost bare in places and there were open buds on the willow, *Salix richardsonii*. Erling collected a curious *Cladonia*, growing on a gravel hill, as well as *Carex pedata* and *Carex misandra*, *Campanula uniflora*, *Potentilla* species, *Tofieldia coccinea*, *T. palustris*, "and all the ordinary things." They heard a wolf howling somewhere to the south. They slept well that night, although in the morning they found that the wolves had circled the camp overnight. When they started out in the morning, they realized that the wolves were following them.

The men were following a small creek through a valley that was high on the north side and low to the south. "The valley is only about 3 miles long and then

opens into a cirque formed by a broken ring of very beautiful and undisturbed moraines. The bottom of this cirque is a swamp with three or four waterholes." Because there was no distinct divide, Erling believed that the water from this swamp flowed to both the Mackenzie and the Coppermine rivers. "Our course of about 20 W. of S. (true) took us past several low isolated sand cliffs the west and south of which were timbered while the east side was badly eroded by the wind. We kept on till the snow got too soft and we camped alongside a small creek flowing through a low flat. We did not set up the tent and intended to make an early start tonight." Olmsted killed four ptarmigan and a ground squirrel that Erling skinned for a specimen. It was a fat male with a rather obnoxious smell, evidently already mating, and most of the dogs refused to eat it.

They started again as soon as the snow began to harden in the early evening. Their passage got worse when they came to low willow flats where the creek meandered between sandy cut-banks and became very crooked and flooded at the bends, so either they had to go through eight inches of water in the middle or over bare sand at the sides. Eventually they came down to what Erling thought was Lake Rouvière. It began to rain and hail alternately as they followed the lake and crossed a series of lakes all striking south to north. They passed a diabase dyke striking southwest but the visibility was too poor to see much from it. From the bottom of a well-timbered valley, they cut over to the side where the going was easier. It began to snow heavily. "Found enough brush for a camp though no shelter," Erling said. "Went to bed waiting for better weather."

The snow eased up as the day wore on, although there was still a strong wind. "In the afternoon about three p.m. we saw a small band of six caribou – three does and three yearling bucks coming down from the hillside towards our tent. They grazed undisturbed by our presence till they got about 150 yards to the leeward of the tent and got our scent. We had all the meat we could haul out and the season was so advanced that I thought it doubtful if we would be able to go in for another load of meat. We therefore left them alone."

Erling took a couple of photographs when they were close, although he had a hard time keeping some of the dogs quiet. He noticed that one of the does was lame in her right front leg. "If they are local caribou it must be an old injury as there have been no people here for a couple of years." As he and Olmsted were beginning to pack up to leave later that evening, he heard one of the dogs snarl on the windward side of the tent. "I looked up and saw what I at the first moment thought to be a caribou fawn or yearling but with the glasses at once saw

a lone grey wolf coming down with the wind. He evidently paid no attention to the dog but kept right on. I fired four shots at him but missed him.”

That night, with a good covering of snow and freezing temperatures, they crossed back over the divide and followed the higher land down the Dease Valley to the cabin by the shore of Great Bear Lake. Their reconnaissance trip to the northeast barrens had lasted ten days and covered about two hundred miles. Due to spring break up, they had not managed to get as far as Coronation Gulf as hoped, but Erling felt that he had gained much information about the country and its fauna. He concluded that the Dismal Lakes basin was a well-defined grazing area in which numerous caribou had been seen. Although the hills and high plateaus to the north and south of Dease Valley and Dismal Lakes were rocky and almost barren, they were interspersed with broad, fertile valleys where excellent summer pasture was found. He reported that a large system of valleys communicated with the Rae River valley from the west end of Dismal Lakes and thus offered an easy and convenient route for reindeer herds moving to the seacoast.⁵



CHAPTER FIFTEEN

CHANGING TIDES AND SEASONS

During the return trip from Dismal Lakes, Olmsted began to worry that bears might get at his cache, so as soon as they got back to Dease Arm they went over to check on it. At the same time, as spring was advancing and the lake ice thinning, they decided to set one or two fish nets in the north narrows. Winter ice fishing with nets usually involved cutting a series of holes a few feet apart and poking the net underneath with long curved willow poles. Alternatively, the line could be attached to a long stick float and worked along under the ice from hole to hole with another forked stick. Once the under-ice net was secured, it was easily cleared of fish by chopping open the end holes.

It was at the Dease Arm net on 9 May 1928 that Erling made an odd discovery about an apparent tidal occurrence on the lake:

We left at eleven and found the ice pretty rotten at this end of the narrows. Put a 19 fathom herring net in through the ice about 6–8 inches thick. Everything was O.K. at the cache. Took the last stuff – about 500 lbs. and one canoe that we left at the north end of the narrows where we found wide open water. I went across in the canoe to see if there was water enough for a net and found from 3–8 feet only. Coming back we looked the net over but found nothing in it. When we set the net there was a very distinct current or tide that swung the net about 1½ fathoms out of the line of our holes and made it hard to run the long pole through. Now the net was out to the other side – the current this time going roughly from west to east through the narrows. The narrows are here about ¼ mile wide and where the net is about 15 ft. deep. Cannot see what makes this current unless it is a regular tide caused

by flood and ebb. We must make some observations with two stations, one in each entrance to the bay and occupied at the same time with hourly readings.

Erling visited the net two days later and was pleased to find that they had caught thirteen small herring and one small trout. Again he observed the current running out at the north end of the narrows. More and more convinced about the tide phenomenon, having noted a decided bulging of the ice between some of the islands and cracking noises when the current changed, he resolved to try some measurements. On May 17 he tried out a measuring pole, which proved to be inadequate. The next day he replaced it with a better pole with an inch rule attached to it. They began to take hourly readings, putting a tent out on the ice over the tidal gauge so that the instrument could be read from a sleeping bag overnight. Olmsted took the midnight to four a.m. shift and Erling from then until noon. On May 20, three days before they discontinued observations, Erling noted: "The changes are very great today and the curve looks very peculiar."¹

It was time to turn their energy to planning their trip to the barrens north of Great Bear Lake, west of Dease Arm. Toboggan travel was impossible during the spring thaw, so Olmsted painted the canoes while Erling worked on a runner sledge for lake travel when conditions became suitable. One night they tried out the new sled, running upriver as far as the Douglas brothers' 'shack,' which they found still in good shape, although the windows and doors were missing. The cabin had been built by Lionel Douglas in 1911 while his brother George and the third member of the party, the chemist-metallurgist-geologist August Sandberg, were away on an extended reconnaissance of the Barrens in the direction of the Coppermine River. Jack Hornby, whom the Douglases had befriended while he was at Dease Bay and who joined their party for a while after Melvill left, thought it was the largest and most solid cabin he had ever seen. It was fourteen feet wide by sixteen feet long, and it boasted a fireplace that departed from the usual country style. Instead of being small and narrow with the logs needing to be burned standing on end, Lionel Douglas had made a regular wide and deep one with a slab of quartzite for a mantelpiece. "There is a very well built fireplace built in real style," said Erling, "and kindling was lying ready for starting a fire. We were cold and had a good fire before we left."

There was little to see botanically around Dease Arm, although from a high point on the south shore Erling noticed a few small birch (*Betula papyrifera*),

dwarfed aspen (*Populus tremuloides*), and the juniper (*Juniperus horizontalis*) that biologist Edward A. Preble had found on Leith Point on the south shore of Great Bear Lake in 1903. The birds were coming back daily and he continued to collect specimens. He saw his first Lapland longspur on May 14. The ravens were nesting and he found and photographed a nest before taking specimens of the adults and eggs. The first swans, herring gulls, and snow geese passed over on May 23, the day they discontinued the tidal observations.³

The ice on the bay became covered with water from the swollen, impassable creeks. Rain added to the water and slush. By May 27, several lakes and sloughs were partly open to the west of Dease River. "Spring is well established, the woods are full of birdlife and song and life," Erling wrote in his field diary. "Several flocks of snow geese passed. Saw first swallow. Still some snow in the bush especially on the north side. Grass has started to sprout and so has *Chamaenerium angustifolium* [fireweed]. All snow has rained off the lake ice and there are several holes, thawed through."

They decided to make a triangulation of Dease Bay for mapping purposes and set off on May 29. At the west end of the south narrows, Olmsted took the dogs to find a place to put in two fish nets while Erling put up the first of a number of flagpole signal stations on a hill at the first island. In a creek by the narrows he found six to eight muskrat push-ups and an otter track. The lake was open along the south shore, and hundreds of oldsquaws, black ducks, and other waterbirds had arrived. Other bird life was also plentiful – sparrow hawk, owl, whiskeyjack, robin – and, as for the vegetation, he made a note to himself to come back in the summer and look for *Triglochin* and *Juncus* species near the shore of their first island camp.

The triangulation exercise took them between Narakay (locally "Narqu") Island and Prospect ("Fat") Island, taking a number of sights from the hilltops and a series of soundings as they crossed the arm. On the mainland north of Prospect Island, they saw the first loons. On June 2, "the dogs woke us up at six and we found that two caribou out on the bay were inspecting the camp. The wind was from east and though the dogs were pretty noisy they did not have our wind and were not disturbed at all." Erling shot one caribou from the sled on the shore and wounded another. He chased it on foot until he caught up with it in the bush and killed it. "They were both yearlings and in pretty good shape. The meat was most welcome as we were out of meat and almost out of grub and dog feed. Besides, the dogs have been living on cornmeal since we came back from Dismal Lakes."

By June 4 the temperature was as high as 72° Fahrenheit in the afternoon. Mosquitoes, bumble bees, and grey moths were numerous and common. Erling said it was too hot to travel so he stayed in the camp all day, leaving Olmsted to cut up some of the caribou meat and put it up to dry. In the evening, he took the dogs and continued his survey of the area around the arm. "Climbed two hills to the east and got a fair idea of the land. No height over 200 ft. To the north the land rises in terraces to probably 600 ft. and is almost barren and rocky but not broken. The divide is probably about 6–8 miles from the shore."

When they broke camp the next day, they left the tent and some dry fish, about a hundred rounds of ammunition and some camp outfit to be used when they came back en route to the north shore. Erling intended to make the trip inland with pack dogs as soon as they could get ready and figured on remaining on the north shore until Bob arrived with the schooner in July.

Returning in the direction of the south narrows behind Midway Island, taking soundings as they travelled, they arrived at the west end where the ice was so rotten that they had to travel through the bush for about a mile until they found it was open enough to bring down the canoe. At the end of the open water where they had camped and set nets on their way out, they had a small catch of trout with some jackfish, whitefish, and bluefish. Olmsted took up the nets so they could set them nearer to the house. They needed fish for the dogs as all the meat they had left behind had spoiled. With the rising temperatures, meat spoiled in a day. Luckily, as the days continued, on June 9, Erling could report: "Fishing is excellent, we got about 25 fish a day and the dogs are all – even Wolli – too fat and can hardly eat all the fish. Our last meat is gone. Saw a fresh moose track in the mission creek. First night the sun didn't go down!"

Spring had advanced swiftly in the week they had been away. The head of the bay was open for about three quarters of a mile, the grass was green around the house, and a dozen plants were now in flower. Erling did some collecting on June 9, mostly lichens, and noted that *Stellaria longipes*, *Minuartia biflora*, two *Carex* and *Salix* species, *Anemone parviflora*, *Arctostaphylos rubra*, *Andromeda polifolia*, *Rhododendron lapponicum*, *Chrysosplenium tetrandrum*, *Eriophorum angustifolium*, *Petasites frigidus*, *Picea canadensis*, *Potentilla nivea*, *Saxifraga tricuspidata*, *Alnus crispa*, two species of *Betula*, and *Eleagnus* [*Shepherdia*] *canadensis* were all in some stage of bloom.

Final preparations for the trip to the north barrens began in earnest now that the tide and triangulation observations were complete. Erling worked on his triangulation notes and finished his map of Dease Bay ("I have now

sketched out as much as needed for the understanding of my notes,” he wrote) while Olmsted made pack sacks for the dogs on an old machine in the house that he had managed to get into shape after considerable trouble with the tension. The dogs would not enjoy this trip. Leffingwell had said that all sled dogs hated pack-saddles, which chafed them on the elbows until they became raw or bled, and if there was a wrinkle in the material their backs would become sore. The extra weight also tended to make them footsore.⁴

On June 12, it was raining and snowing in squalls but they were fully packed and prepared to leave in the morning. June 13 was a fine, sunny day. “Closed up the buildings and nailed the windows up, etc.” Erling said. “Loaded the two canoes up and left at 13:20. Had to round all the little bays as the ice was quite close after we got beyond Dease River. Stopped for lunch near the old chimneys of Fort Confidence built by Dease and Simpson.” The ice was solid at the end of the narrows so they had to transfer their two canoe loads, weighing about eight hundred pounds in total, to the sled that had been carried on top of one canoe. By the time they reached the camp on Prospect Island where they had earlier left their tent and gear, it was midnight and both men and dogs were exhausted from getting the heavily laden sled over the rough spring ice.

When they broke camp the next day, they had to add the gear that they had left on the island. They crossed to a large shallow bay on the north shore about ten miles west of the island. At the head of a smaller bay, a large creek ran over a rocky hillside in a series of waterfalls. While Olmsted set the fish net, Erling followed the creek to a small lake and then east through a willow flat in a rocky, broken plain, swampy, and sparsely wooded, seeing caribou and bear tracks on the lake shore coming back. In addition to the plants seen in bloom at Dease Bay, he noted more than one species of *Primula*, *Carex*, *Cassiope*, *Pedicularis lanata*, *Eriophorum vaginatum*, and *Dryas integrifolia* in flower. He also noted that the mosquitoes got busy as soon as the sun got hot the next morning.

As they had had no luck with their net, they decided to move across the bay to where there was deeper water near the waterfall creek. They explored the west side of the creek for a couple of miles, finding very sharp rocks all over that would be hard on the dogs’ feet but they hoped that this formation would change as they got further inland. There were tracks of bear, wolf, wolverine, and caribou along the lake shoreline.

Fishing near the camp was excellent. “Dogs cannot eat the fish as fast as we get them,” Erling said on June 16, “so Olmsted cut up most of this morning’s catch of two to three hundred pounds of fish and hung them up. I started on a



Erling Porsild's bear-proof cache, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, e010933888)

bear-proof cache by cutting the tops off two spruce about sixteen feet up. We notched holes through about twelve feet up and ran a cross piece through for beams and put a bottom up that protrudes four feet out from the tree.”

The next day was fine, calm, and hot, and the mosquitoes were “pretty aggressive” until a fresh wind sprang up in the evening. They finished the cache and packed up, putting everything into the two canoes and then putting them on top because, being freshly painted, they were attractive to bears. “Packed up grub, i.e., cereals, sugar, flour and grease, tea for about ten days. Dog feed, dry fish for about four days. We are not taking sleeping bags or tent but tarpaulins and mosquito bar. Took a feed of the still pretty fresh fish on the stage and left the rest to the bears.”

A little after midnight on July 17, they started up the vertical limestone hills near the lake, having trouble getting the dogs to go over the sharp rocks. Fortunately, it was not long before the formation changed from vertical to horizontal and they entered a low, wet system of large rock flats interspersed by creeks and long narrow lakes. About six miles from the lake, the limestone was replaced by soft, coarse, red sandstone, changing to fine-grained, hard, grey sandstone. They passed a number of creeks running parallel to the lakeshore. Erling remarked that *Betula glandulosa* was predominant on the plain. Spruce

were stunted, due to lack of soil, except in favourable locations. He found a few low aspen on a red sandstone hill.

After ten miles, they reached a large creek, which they forded the following night after camping for the day on the east shore. A number of small creeks were later crossed without problem. The sandstone formation changed to low rolling sand and gravel hills apparently of glacial origin, although in one or two places Erling thought he saw the remains of old shorelines. Timber was gradually disappearing and the draws were occupied by low willow brush. Since the snow had only just disappeared, it was wet going. "Had to go through much water and nearly all the stuff got wet some," he said. "One should have watertight grub sacks for this kind of travelling."

He found it interesting to notice how the vegetation was getting late as they moved only a short distance northwards. "Towards end of one day's journey only few flowers were out." Of particular interest were *Parrya nudicaulis* and *Eutrema Edwardsii* on the limestone, and *Poa alpina*, *Myrica gale*, and *Coralorhiza* sp. on the sandstone. He was surprised to see so little sign of caribou. Even the few tracks they saw were not fresh. Early on June 19 they reached an unusual hill first seen from Narakay Island. "At five [a.m.] we were stopped at the very foot of the hill by a veritable river over fifty yards across. Fording was out of the question as the water in the rapid was over three feet deep. We shall have to make a raft. All pretty tired so camped."

There were fresh tracks of wolf and fox on the riverbank, which showed signs that the water had been about eight feet higher only a few days earlier when the ice had gone out. Olmsted started cutting dry logs for a raft in the afternoon, a slow job as they had only brought a hatchet. The raft was built and at eleven p.m. they loaded it up and crossed the swollen creek with no difficulties. "Hauled the raft half out of water, loaded up the dogs and started up the 'two snowbank hill' that we have been travelling towards since we left the lake."

Erling felt that the hill, calculated by him to be latitude 67°12'38", deserved special description:

It is almost circular in outline and about two miles in diameter and probably stands about two hundred feet up from the surrounding plains, [he said]. It is doubtless a moraine and is built up of coarse sand, gravel and clay without any stratification. The boulders are of sandstone mostly but limestone, quartz, granite and porphyry is also found. Several parts of the hill have caved in leaving craters

and canyons, some of which dissects the hill, and the floor of which is occupied by water or swampy ground. The caving in undoubtedly occurred when a nucleus of the glacier (dead glacier) was left in the moraine and, covered by it, gradually thawed out. Except for the slopes the steeper of which have not been consolidated by vegetation yet, the hill is fairly covered with vegetation. A few stunted, almost prostrate spruce carry on a miserable existence. Many succumb in the fight with the northeast wind with no snow protection, but those surviving reproduce seed, and new growth is found in the shelter of the dead or dying ones. The bulk of the vegetation is formed by *Dryas integrifolia*. Densely overgrown with *Carex rupestris*.

From the hilltop, they had a commanding view of the country in every direction. They could see stunted spruce in protected places for about ten miles to the north and west. Timbered and barren areas were thickly dotted with small lakes. It was difficult to follow the watercourses. Erling thought the river they had just crossed went west as far as the foothills of the Centre Mountains and then either turned north or received a tributary from that direction.

“The whole shoreline of Dease Arm showed up plainly,” he wrote in his final report. “To the south we could see Cape McDonnell and the Scented Grass Hills as a low blue line. To the north and east the Great Northern Plains lay as low rolling country and to the far north a low streak of fog indicated the vicinity of the sea. These hills are the most easterly spur of a range of gravel hills more than a hundred miles long which runs about northeast-southwest and approaches the lake within a few miles of the north shore of Smith arm. To me they appear to be an enormous system of glacial moraines and are probably underlaid in places by remains of a glacier.”⁵

Seven to eight miles to the northwest, they could see another characteristic landmark, a pyramidal gravel hill on top of a low rounded formation that was slightly higher than their observation hill and of similar formation. They decided to head for “Pyramid Hill” the next day but in the meantime they would camp where they were and make one or two trips into the barrens from there. “Nothing could be learned by proceeding much further as the barrens undoubtedly are the same till about twenty miles from the coast where the proximity of the ocean would be noticeable.”

On June 20, they set out towards the pyramid-shaped hill to have a last look at the barrens and see if they could find any game. From a low hill about

six miles to the north they spotted five caribou grazing in a swampy flat to the northeast. “They were moving around quite a bit and were evidently bothered by mosquitoes,” Erling said. “I set out stalking three of them that grazed together. They were all bulls and very wild on account of the flies.” He shot and wounded a four-year-old bull, then had to follow it a couple of miles through swamps and lakes before he could finally finish it off. Wet and tired, he took as much of the meat as he could carry, leaving the rest in a cold stream until he could come back for it later with the dogs, and headed back to camp.

This was to be as far as they would go. Collecting plants in the vicinity of the “two snowbank hill” the next night, Erling said: “The wind went down and clouded up heavy in the evening. Very hot and flies terrible. Had intended to go over and get the rest of the meat but with the prospect of rain, no wind, and flies, the gain of one feed for the dogs hardly seemed to outweigh the expenditure of energy. Instead we broke camp and started back at 23:00. The raft was fine, and we crossed with little trouble.”

That night as they travelled south “the flies were a holy terror – almost as bad as Mackenzie delta,” making them anxious to keep on the move. Retracing the steps they had taken coming in, enduring the attacks of the flies when they stopped to rest, they made good travelling time. Erling noted a number of plants in flower that had not been blooming when they had gone in a few days earlier. By June 23 they were back at their cache at the lake. Everything was in order and no animal had been close. They took down the canoes, tent, and necessary supplies, and headed out to the western point of the bay to find a camping place with fewer mosquitoes.



CHAPTER SIXTEEN

OF ICE AND “FLIES” AND MISERABLE DOGS

“We are getting ready for a canoe trip up the coast as far as the entrance to Smith Bay about 75 miles from here,” Erling wrote in his field journal on 23 June 1928. “We are leaving one canoe and are, on account of the uncertain travelling, taking three weeks grub.” The trip would take them west along the north shore of Great Bear Lake to where Olmsted had a cabin he was anxious to check, giving Erling a chance to explore a shoreline that he felt had not been properly surveyed.

From their tent by the shore, it was not hard to see why the trip would involve uncertain conditions. As spring had turned into summer almost overnight, the lake ice had broken up and shifted, bringing a pile-up of ice floes that would create ever-present obstacles for movement by canoe. The weather had turned very hot and a thunderstorm blew up in the afternoon, followed by strong winds from the northeast that pinned the ice against the land and made travel out of the question for several days. At the height of the storm, the men nearly lost their tent until they tied it down more securely, and Erling’s canoe, although hauled out on the beach, was blown right across the small bay about a hundred yards to the west. The canvas was torn and three ribs were fractured, but fortunately the hole could be fixed with patch and shellac.

While they waited for the wind to change to a northwest direction and take the ice out further into the lake, they made several trips back to the cache to feed the dogs. Olmsted tended a fish net close to the mouth of a nearby creek and went west along the shore in search of game, while Erling banded white-crowned sparrows and robin nestlings, took flower photographs, and collected plants whenever the weather cleared. He laid out his plant specimens in the tent

in the evening. "A large per cent of the flora is flowering now," he commented. "*Dryas integrifolia*, *Rhododendron lapponicum*, *Pedicularis lanata*, *Anemone parviflora*. (the latter already going to seed) are brightening up the otherwise rather bleak country." He also collected Lepidoptera specimens and noted unhappily that the mosquitoes were as bad as ever, despite the wind.

They made their first abortive attempt to continue along the shore on June 27. "Wind went down in afternoon and went through south and west. Decided to take a chance on it staying in that corner so broke camp and portaged the outfit across to the west side of this point we are on. Before we had moved it all over, the wind however changed back to east. Since we had the stuff moved we went up as far as we could about one mile from next point and camped. Ice against the shore."

The next day was calm and hot and they tried again. The ice had loosened up a little and with a good deal of pushing they wormed their way for a few miles past the perpendicular cliff that they believed to be Richardson's Limestone Point. "After two hours we could go no further," Erling said, "and consequently after climbing the hill and finding the bay on the other side full of ice we camped. The ice in the whole of Dease Bay has broken up and that is what causes us trouble. Before there was a narrow belt of open water along all the shore and the islands in the bay were the 'nails' that held the ice. Then first some of the pressure ridges open up and gradually the whole bay breaks up in large strips from shore to shore. At present the central part is still composed of large ice fields while those towards the shore have been ground up in small cakes. Ice is yet about three feet thick."

Once again they were marooned for two days of calm with no movement in the ice. "The black flies have started too," Erling said. "This is the earliest I have ever seen them. With them and the mosquitoes I expect we can look forward to a pretty hot time." Just before midnight on June 30, a light west wind sprang up, the ice opened up slightly, and they tried again, but two miles to the west, after pulling the canoe around a number of ice-jammed areas, they gave up and camped. Shortly after midnight on July 2, they tried again to continue their tortuous journey but were no sooner around the first point when they found the ice fast against the shore and were forced to stop. It seemed hopeless, but it was necessary for them to keep trying to reach a river five miles to the west where they hoped to catch fish. The dogs had had nothing to eat since they left the camp near the cache. Although Erling and Olmsted managed to shoot five Canada geese, seen almost daily in large flocks, some of the dogs did not



Mosquitoes on tent, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, e010933885)

like fowl and refused to eat them even though starving. For the men, it was a welcome change. “The geese are pretty tough just now,” Erling said, “but tasted good all the same when you have lived on bannock, rice, and cornmeal for ten days.”

On July 3, it was calm and hot all day. “Mosquitoes are so thick that the dogs wander restless around and hardly ever stay in the same place for more than a few minutes. Their noses and eyebrows are swollen – poor brutes! Once in a while one will sit down and howl.” The only beings that appeared to benefit from the insect invasion were the redpolls. “In a stunted spruce behind the tent is a redpoll’s nest with five eggs that hatched today. We are getting to be on great terms with the parents,” Erling said. “When we come close to the nest the proud mother will even allow us to move the concealing branch though to do that my hand is a few inches from her and the nest. First time she was evidently ‘on the jump’ but after that she is quite at ease and looks up quite confident.”

Their tent and sleeping bags were a great feeding ground for several pairs of redpolls, picking off the mosquitoes that sometimes were so thick that it

looked from inside the tent as if an extra sheet of canvas had been laid over the top. Overnight, while they slept, the hungry dogs broke into their grub box and stole part of a can of butter and some lard and tore open several sacks and finished most of their uncooked rice.

A thick fog hung over the ice and visibility was low on July 4. In the afternoon, they decided to walk to the river, taking the fish net and dogs with them and figuring they could use a raft to set the net across the mouth. However, about one and one-half miles up, they found a small creek that they had seen in the winter and forgotten. Erling forded the creek with a line while Olmsted set the net, to be later rewarded with sixteen whitefish. Erling went back alone to the camp, hoping to bring the canoe [across] at first open water, but the weather continued still and hot with no sign of ice break-up.

When Olmsted arrived for a visit, a light northeast wind started blowing and they tried again. "The ice at once responded but jammed before we could get enough water to round the point. We had loaded up and forced our way down to the point by breaking the ice with a heavy pole. Here further progress however was stopped unless the wind got the ice moving again." Olmsted went back to his net.

Erling was able to get around the point when at last a wind sprang up and opened a lead. When it increased to a storm, he pulled the canoe onto a heavy ice-cake, feeling safe enough to drift down on it towards the open water in the bay. "The foot of the bay where the big river is was all closed by ice so we were content to remain here though there is much willow brush and consequently the flies are worse than ever, even with a storm blowing, but there are fish, and the dogs need them badly. They are all in bad shape on account of the mosquitoes and flies. They are all shedding and very short-haired."

When the wind went down, it started to rain, and it rained all day. When the rain stopped, it was calm and hot, and the dogs were more miserable than ever. On July 8, they were able to go past the first point beyond the river. They found a pair of nesting Canada geese and tried to band the five goslings but they were too small, so released them. "In another flock was one remarkable goose, smaller than the rest and with a body much like the Canada goose. Had yellow bill and feet and brown head and neck. It was in molt. Shot it for a specimen; the rest got on the wing before we had a chance." Olmsted went back to fishing while Erling walked inland for a couple of miles, banded a Long-tailed Jaeger, and collected a few plant specimens "in spite of the flies" that were making life unbearable. "Calm and hot," he wrote on July 9. "Bull dogs' [horse



Olmstead fishing, Cache Bay, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, e010933886)

flies?] are out now too. We have now besides the latter not less than three kinds of mosquitoes and the black flies ‘no see-um.’ What a life! My left eye was nearly closed by swelling from fly bites and several bumps adorn my forehead.”

He decided to go further by foot to explore the large river that he thought must be Richardson’s Haldane River, large enough to have a delta about half a mile deep with two or three channels and several small low islands covered with driftwood. Hiking up the east side, he said: “This is undoubtedly the river we rafted on the trip to the barrens. It forks, I think, at the foothills of Centre Mountains and our river is the northeast branch while the other drains the plain between Centre and East Hills.” He noted that the timber came to within a mile of the lake, unusual for the north shore, and there was a small grove of poplar about fifteen feet high. He saw fresh caribou tracks, and caught and banded a young ptarmigan, along with collecting plants.

July 9 was a day of good news. “Olmsted got about thirty fish today and pulled the net. Ice has melted away a lot these last two days and there is much open water. After attending to my plants from the trip today and skinning the goose we got the other day, broke camp and left at 22 o’clock. Had some trouble and delay getting dogs across the bay this side of the point. No serious delays from ice.” They made good progress across the open water except when they

had to get close to the shore to keep an eye on the dogs that were following by land. "A slight wind from east followed carrying a black cloud of mosquitoes with us," Erling said, but, by the time they reached a narrow strip of land that he christened Long Point, on the west side of the delta, they had actually covered twenty-two miles of which sixteen or seventeen could be pronounced "good."

A south wind now blew up that pinned them to the peninsula for a couple of days, during which time they had excellent catches of fish and appreciated the fact that the wind was too strong for the biting flies. "I am sure the dogs had their best day on this trip," Erling said. "They are all badly mosquito-bitten and have large ulcerating wounds but are picking up fine after the starvation." They saw a grey wolf but it got away before the dogs saw it. Erling continued to collect plants and birds. Seeing the 'West Mountains' across the next bay (probably the Big Spruce Hills, running parallel to the coast immediately west of Clearwater Bay), he wished they could make a trip up to a hill about ten miles away, but settled instead for watching the bird life and exploring a small pond near their campsite. "Few aquatic plants, and the result of my wadings were rather meagre: *Utricularia minor*, *Menyanthes*, *Ranunculus paucistamineus*, and a few bog plants."

They broke camp on July 13, portaging across the peninsula before taking to the canoe. To keep close to the dogs, they had to almost double the distance going around the following two bays. When they stopped, Erling took a short walk up a hill where he found a small grove of *Populus balsamifera* and "other things" of interest. "Soon after we got started again the wind without warning increased to a young gale. We were fortunately at the time at the foot of the bay. Tried to land but found a double sandbar; got over the first one but couldn't cross the second. Followed it with some danger of getting the canoe swamped. We finally got across by dragging the canoe but took little water. Camped up in a small creek. Had mushrooms for supper."

Prevented from moving on by a heavy swell from the gale, Erling and Olmsted climbed the foothills on July 14 for a view of Smith Arm and the surrounding country. "The 'mountains' are all gravel hills! Glacial moraines!" Erling exclaimed. To the south, Etacho ("Big") Point and the Scented Grass Hills showed up clearly. He was surprised to see a lot of open water and not much ice in the arm below. Boland had told him that the ice went out of Dease Arm first and most of the prevailing winds had been from the east. From the hilltop, they could see that the swell had gone down considerably so they hurried back to pack up and leave. West of the point, the coast was less indented so the dogs



Most westerly spurs of moraine hills east of Olmstead Bay, Great Bear Lake, 1928 (Photo: AEP, LAC, e010933890)

could follow without their having to detour into the bays. Covering a distance of about twenty-five miles, they stopped at a creek where the entrance boiled with trout. In the space of one hour, the net yielded about two hundred pounds of trout and two whitefish. The dogs were almost too tired to eat, but for the first time since the start of the trip they were not bothered by biting flies and they all got a good sleep that night.

On July 15 they headed overland for Olmsted's cabin, taking the dogs and hiking easily on old gravel beaches until, skirting some lakes, they crossed a low swamp, knee-deep in muck and moss. The last few miles were travelled through thick forest. The cabin was located at the head of a bay that Erling named after Olmsted (the name "Olmstead" was later retained for the creek running into what would be called McGill Bay), and it was in bad shape, so Erling left him to fix everything and went collecting. Shortly after eleven p.m. they took the trapper's 23-ft. canoe and two light oars and rowed back to camp, where they packed everything into it and put up a sail for the return journey.

Big canoes like Olmsted's were difficult to steer when heavily loaded and were almost unmanageable in a wind. With a fresh breeze catching the sail, the craft moved too fast for the dogs to keep up with them. Soon it became too rough to go inshore and pick them up, so the men were forced to continue

without them to the bay where they had camped two days earlier. By the time they got there, Erling reckoned that they had travelled ten miles on foot, seventeen miles rowing, and twenty-six sailing in the last two days; not a bad day's work.

“Laid out my specimens and went to bed. We are getting short on several – in fact most things. Had expected to find matches and tobacco at Olmsted's cabin but somebody cleaned them up and all we found was three boxes of matches and no tobacco at all. We have been splitting our matches for some time already but with the tobacco soon gone we shall probably have enough. We shall not be reduced to starvation although we may be living on fish exclusively before long.”

The dogs had still not showed up in the morning, and they wished they had taken them with them in the canoe. Erling fretted to move on. “Now we can do nothing except wait or go back for the dogs. We are used to the first alternative. Talked about going back with the canoe, but wind came round to south and we couldn't do that, so I guess we shall walk.” At midnight he started back alone to look for them. “Saw fresh caribou tracks about sixteen miles down and at once had the explanation of the dogs' absence. About two miles this side of the creek where we had stopped for supper, two or more caribou had travelled west and met the dogs just as they had crossed the creek. One buck had taken the water while the other turned inland, evidently pursued by the dogs as I could see no more tracks or signs of them.” He continued west for a few miles but there were no tracks going in that direction so he turned back, expecting to find them at the camp. “Back at 21 o'clock. No dogs! Distance travelled about 40 miles in 21 hours. All the results I had out of the trip was a few plants two of which viz., *Oxytropis arctobia* and *Botrychium lunaria* I had not found previously. Rather meagre results for the amount of work involved.”

A very tired and sore-footed Rock showed up just before midnight but there was no sign of the other dogs during the night. Erling walked about six miles to the east the next day looking for them, fording the creek where they had camped and going as far as the foot of the bay. “No fresh tracks of the dogs. So we know at least that they have not passed us. Dragged a rotten fish along to be sure that they would find my trail if they come out of the bush east of here.” He added *Arenaria humifusa* and *Stellaria* species to his plant list and a specimen of Northern Phalarope to the bird collection. After he got back, Olmsted took the small canoe and headed west again. “Our last meat is gone. Set a net across the creek before I went to bed and can hear the fish splashing out there now.”



Pack dogs, *L to R*: Silent, Naataq, Junior, Chaplin, and “Chief Botanist” Wolly, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, e010933889)

Erling’s day of wait was quite productive. He did some collecting and wrote field notes. He shot and made a specimen of a muskrat, only the first or second he had seen on the north shore, and got sixteen fish out of the net. He also made further tidal observations. They had camped by a slough enclosed between old beach-lines and backed by a number of small lakes and ponds. He noted a current running in and out four or five times a day, giving a rise and fall of a few inches each ‘tide.’ He thought that all the ice had gone out of the lake. “We have seen none since the 10th instant and am quite sure there is none in the northern part of the lake. Surprising to see how fast it disappeared after it started to break up.”

He had only been asleep for a few hours that night when Wolly’s long missed growl woke him up. “Sure enough there was Wolly out on the fish pile and Chaplin and Silent too. Shortly afterwards Harding and Junior came up and I had just started the fire when Olmsted came around the point at 4 a.m.” Olmsted had made a remarkable trip all the way to the cabin and back in thirty-one hours. He had found three of the dogs about twenty-three miles down the coast and the other two at their previous camp. “The dogs had evidently come out from the barrens to the north just when he found them. They must have

killed something since they were in good shape and not hungry though pretty sore-footed. Sure was a great relief to see them all back and safe and sound.”

With a light breeze from the east, they headed out, rowing, this time making sure of the dogs in the big canoe. They camped at Long Point, where Olmsted intended to come back in the fall and build a shack, and were off again as soon as the wind allowed the next day. It was July 23, the last flour had been baked, provisions were getting low, and Erling was hoping that the schooner might have arrived with Bob waiting for them at Dease Arm. One more camp stop was made necessary by the wind, with sleep disturbed by a wolf howling all night close behind the tent. On July 24, almost a month since they had started out, they reached the bear-proof cache they had used for the trip to the north barrens.

Everything was in order and they now had enough grub for the next day or two. Erling collected a number of plants that had not been out earlier, they loaded up what was left at the cache and were off again by evening. By midnight they had reached Prospect (Fat) Island and by the afternoon of July 25 they stopped briefly at the site of the old chimneys at Fort Confidence to look for the “White Arctic Poppy” mentioned in that location by geologist J. Mackintosh Bell when he and Charles Camsell visited the lake in 1899. Erling had read Bell’s Geological Survey report on the topography and geology of Great Bear Lake before leaving Aklavik and now commented sharply: “I have not seen any *Papaver* as yet and of course failed to find it here. I believe Mr. Bell’s ‘poppies’ very likely were *Parnassia palustris*. Also in other places I think Bell is very inaccurate.”¹

There was no sign of the schooner when they reached the houses in Dease Arm. Erling set about collecting plants in the vicinity and worked on his trip collections, taking out specimens and drying papers. Going over his observations for latitude and time, he confirmed his suspicion that they had got one day ahead of time while held up by the ice on the north shore. He thought it had happened at the small creek that he called Mosquito Creek where they first fished.

Still no sign of the boat, so on July 26 Erling decided to make one last trip up the Dease valley before Bob arrived. He packed up a tarpaulin and mosquito bar, along with provisions for three days, and set out alone with three of the dogs. The trail that they had had such difficulty finding in winter, the trail that was wet and impassable in spring, was now dry and well worn and easy to follow. In the low sandy hills a few miles up he saw good examples of an area

of recuperating *Cladonia alpestris* that he felt must have been closely cropped by caribou about twenty years previously. The grazing situation was complicated by the fact that he had also observed ground squirrels eating the lichen. He found *Lycopodium complanatum* that he had not seen before and *Tofieldia coccinea* on the first barrens. On July 27 he climbed "Observation Hill" at the head of the valley and then cut back to Dease River, which was much smaller than he had thought earlier, but found no sign of caribou. At a junction with a creek, he did some plant collecting on July 28 and then headed back to Dease Arm.

Erling had now completed his reconnaissance of the Dease Valley and the barrens to the east and north of Great Bear Lake. In his final report, he was to conclude:

In the early spring and in the fall when the fly pest is over, Dease valley is one of the finest reindeer ranges I have seen. In this open, wind-swept country, with its inconsiderable snow-cover, a crust is formed which makes travelling easy without causing the deer any trouble when feeding. The numerous small stands of timber afford excellent shelter for herders and deer during severe weather, besides being ample for the construction of shelter-cabins, corrals, etc. This valley is a natural grazing unit, being closed in on all sides. Numerous isolated hills or drumlins which stand out above the floor of the valley would afford good look-outs whence the movement of reindeer herds could be easily followed by the herders. The pasture is mostly of the browse type with a good intermixture of lichens and sedges in places. It is estimated that the Dease valley covers an area of about 800 square miles available to reindeer and capable of supporting 10,000 to 15,000 head...

The pasturable country suitable for tame reindeer north and east of Great Bear Lake may be roughly described as a triangle, the south edge of which follows the direction of the north shore of the lake from Haldane River eastward to the mouth of the Coppermine, a distance of about 200 miles. The west side is formed by a line running north-northwest about 250 miles from the mouth of Haldane River ... to Franklin bay on the Arctic coast. The coast from Franklin Bay eastward to the mouth of the Coppermine constitutes the third side. This triangle comprises about 38,000 square miles or about 125,000 acres. In this type of country probably as much as 60 acres should be allowed

per head of reindeer. How large a percentage of this unmapped country is occupied by lakes and streams is impossible to estimate at the present, but it is probable that as much as one-tenth should be deducted. This would leave room for over 100,000 reindeer.

Erling's recommendation did not come without warnings. Apart from the problems with biting flies, the caribou they had taken north of Dismal Lakes were heavily infested with warble and nostril flies. Olmsted had told him of seeing wolves in packs of twenty or more in the winter of 1927–28 and he felt that the grey wolf constituted a serious menace to future reindeer herds in the Great Bear District.

“During all our travels on Great Bear Lake, both in summer and winter, we were followed by wolves,” Erling wrote:

Generally two animals travelled together and only once did I see tracks of more than two at one time. In several places we saw evidence of caribou killed by wolves. Grey wolves are very hard animals to trap, and poisoning is probably the only way to control them effectively. Barren Ground grizzly bears are fairly common on Great Bear lake and the other larger lakes. Although fresh tracks were seen almost daily no animals were encountered. My companion killed four bears on the north shore in the fall of 1927. Bears probably never bother wild caribou, but in Alaska they kill a number of reindeer each year. Wolverines are quite common and are hard to keep out of caches or deserted cabins. Golden eagles occur in the district and in Alaska are reported to kill young fawns every season.

As good reindeer rangeland without competition from caribou, and wolves had already been established in the Mackenzie Delta region, the exploration to the east and north of Great Bear Lake added little to the reindeer introduction program, although it was later seriously considered for expansion of the project. For Erling, the country had proved difficult to traverse and there had been no compensating discoveries of particularly interesting flora. However, he had completed his mandate and investigated the area for its reindeer herding suitability, and he felt that his pioneer exploration and extensive biological collections had contributed more than anyone since Richardson to the scientific

knowledge of the relatively unknown north shore from Dease Arm to the entrance to Smith Bay.²

On a personal and professional level, his original observations of tidal currents in the lake would form the basis of an interesting paper on the subject, published in the *Geographical Review* in 1932 under the heading “Notes on the seiches and currents of Great Bear Lake.”



CHAPTER SEVENTEEN

MCTAVISH ARM AND CONJUROR BAY

Boland's schooner *Star* was in dock when Erling got back to the Dease Bay house soon after midnight on 29 July 1928. With its arrival, the last lap of the Porsild brothers' two-year reconnaissance began. It would be the easiest summer they would have since the beginning of their reindeer investigation and one they would look back on with interest as the pristine east side of Great Bear Lake that they were about to explore began to change beyond recognition.

Bob had had a good trip over from Fort Franklin, crossing the lake in only three days. With him was Cornelius Osgood, a young anthropologist from the Department of Mines who had recently arrived to study the Bear Lake Indians. He was anxious to see the lake, so Bob had invited him to go along with them, taking his turn with the chores. Many years later, Erling would tell George Douglas that in 1928 the young man had very little money and Diamond Jenness had secured for him a small supplementary grant from the National Museum "Realizing that he would be on Boland's hands all summer and since we needed an extra hand who could look after camp and cook, etc., we somewhat reluctantly gave Osgood a job for the summer paying him \$100 a month."¹

Bob and Osgood had brought very bad news with them. The *Distributor* had arrived at Norman on July 1st and returned from Aklavik on the 13th. "The boat brought the 'flu' in and the Indians are dying like flies along the river. At Norman 25 already, some places larger numbers," said Erling. "One sometimes wonders if the medical service of this country is not neglected and if a few more doctors instead of R.C.M.P.'s wouldn't prove more beneficial to the country." The north had had its problems with disease from time to time since the coming of the white man, but the 1928 influenza strain, like the Spanish flu of 1918, was to be a disaster that would devastate the indigenous population all down

the river and delta and beyond, wiping out small communities or drastically reducing them. Although the native people were the hardest hit, everyone in contact had come down with this flu, some worse than others. Boland was ill for some time while Bob had had it but was fortunate to recover quite quickly.²

It was the first time in months that Erling had received news of the outside world and he stayed up all night reading his mail. He was very relieved that Bob had brought the needed supplies for his trapper companion. "The replacement of Olmsted's stuff has been weighing on my mind ever since we got here," he said. "Bob had done very well indeed and managed to get everything so that part is o.k. In lieu of wages Olmsted received the six of my dogs (all except Junior) and toboggan, harness, etc., besides \$100 in merchandise and cash."

They had promised Boland that they would take back as much of his stuff as conveniently possible. On July 30, they stowed everything they could carry on board. "The dogs evidently had a hunch that something was going on," Erling said, "and when Olmsted tied them up they were most miserable and howled every time I went down to the boat. We pulled out about midnight and could for a long time hear the dogs howling out their disapproval of my sneaking away. Sorry too to leave the best dogs I ever drove or ever will drive. Olmsted has been trying hard to get Junior too but I made up my mind a long time ago that he was to stay with me."

Sad as it was for Erling to leave his team behind, it would in fact lift a great load off his shoulders. From the time that the Porsild brothers had bought their two teams in Kotzebue to the moment of leaving Erling's team at Dease Arm, they had had to spend an inordinate part of their time hunting and fishing in order to feed an army of dogs or else worry about buying or preparing mountains of dog-feed. Without the need to set nets and fish at every stop, the rest of the summer's work could return to the character of the earlier investigation in Alaska when they were free to concentrate on their collections and observations without distraction.

At the south narrows, Erling finished his work at the triangulation station before they left for Narakay Island, where they spent the afternoon collecting. By the time they reached Cape MacDonnel (Caribou Point) which marked the southeast end of the arm, they had moved south of the Arctic Circle, the first time for Erling since crossing the lake from Fort Franklin in April. They collected plants and took the mast, sail, and ropes off a stranded schooner they had seen on their way to Dease Bay.

On August 3 they entered McTavish Arm, the most easterly arm of the lake. Most of this long bay lay south of the Arctic Circle except at the extreme tip that curved northwards at the end of Hornby Bay. "This part of the lake is the least known," Erling said, "and the outline appearing on the existing maps only vaguely indicates the general trend of the arm. While the shores of the rest of the lake are low and receding, the Laurentian cliffs in McTavish arm stand boldly out of the crystal clear water of the lake and in some places rise to nearly 1,000 feet. Long, narrow fjords striking northeast-southwest cut the land up into rhomboid blocks, and the general appearance of the country is not unlike the west coast of Norway. From the head of the deepest fjords the distance to the Coppermine is short, as that river in this latitude takes a sharp bend to the west."

Going ashore at a small creek on the north side of the arm, they found fresh caribou and bear tracks near "a peculiar looking spring in a crater-like top of a sand cone" that was well known to the Bear Lake Indians. Bob had been talking to their chief, Chief Jimmy Soldat, and learned about the spring before he left Fort Franklin. "Very little water comes out at this time of the year," Erling noted, "but I believe considerable volume of water comes out earlier. The spring is 'boiling' i.e., gas bubbles up in the well and the Indians claim that at times black sooty stuff comes up with the water." He tasted the water and found that it "did not taste salty but undoubtedly contains some mineral in solution (Magnesium sulph. or Alum?) as the vegetation is much affected and on the low half barren plain the sand is white with encrustation. Flora all halophytes: *Plantago maritima*, *Carex incurva*, *Sagina nodosa*, *Pleurogyne rotatum*, *Aster sibiricus*, *Taraxacum sp.*, *Puccinellia sp.* Also the caribou tracks indicated that this spring was much resorted to by these salt-hungry animals." They collected a number of birds and plants. Few trees were seen, although Erling saw *Larix* for the first time since leaving Keith Arm. He remarked that the barrens extended down to about fifty miles south of Cape MacDonnel, varying in width from one to seven miles except at the head of timbered bays.

Still following the north shore of the arm, they continued east in the direction of Hornby Bay, going ashore periodically to check the vegetation. On August 5, they moored in a protected harbour. The next day, Bob went out to a hilly point and collected plants on the boundary between the limestone and Pre-Cambrian formations while Erling took the canoe into the bay, following the shore, and ascended a small river for about three quarters of a mile. "It drained a rather complicated system of lakes," he said.

Farther up, he climbed a high hill of Laurentian rocks that marked the western edge of the Canadian Shield, which he was seeing for the first time. "The Pre-Cambrian rocks crop out under the limestone and although most of the hills are capped by columnar (dolomite?) the lowland and some of the hills are now PreCambrian. I have only seen granite in drift and the rock is everywhere (quartzite) (with veins of quartz). As might be expected the change of geological formation also affects the flora considerably and I found a number of species that I have not met with before on Bear Lake. Several were indeed even new to the Mackenzie District. *Drosera longifolia*, *Pinguicula villosa*, *Utricularia vulgaris*. Took a number of photos of raised shore lines found as high as four to five hundred feet above shore level. Also curious lichen formation. Took series of bearings."

Back at the schooner, on August 7 they continued east to a small river where they saw a cabin and another log building where they thought Boland had wintered some years earlier. They went ashore for a few hours and did some collecting but did not find much of interest. Shortly afterwards, they "passed Hornby's old cabin but did not stop."

There was no reason for the Porsilds to go ashore at the cabin except out of curiosity, although it is hard to imagine that they would not have stopped if they had seen any signs of life. Many stories were circulating in the north that summer about the eccentric hermit trapper who had disappeared into the barrens in the summer of 1926 with a teenage cousin, Edgar Christian, and young friend, Harold Adelard. Last seen, they had been heading for the Thelon River via Great Slave Lake and had not been heard from since. Opinions varied as to whether Jack Hornby, the wealthy upper-class Englishman turned bushman who boasted of his prowess as a hunter and trapper and his ability to survive anywhere Indian-style in the wild, had really known what he was letting himself in for when he headed overconfidently into the barrens without being fully equipped and with two young greenhorns as his only companions. When months and a year began to stretch into two years and there was still no word of them, people like George Douglas and Vilhjalmur Stefansson, who had befriended Hornby in his early years at Dease Arm, began to raise alarms that someone should go in and look for them. At the Department of the Interior, Finnie was beginning to get increasingly concerned by the summer of 1928. Two days after the Porsilds passed the cabin, he wrote to the Police Commissioner at Fort Reliance, "It is beginning to look as if Hornby and his companions have perished somewhere in the vicinity of the Thelon Game Sanctuary."



Greenstone hill, McTavish Bay, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, e010933892)

Ironically, that very same day, Staff Sergeant Joyce at Chesterfield Inlet was taking a statement from a mining engineer from the Ontario-based Nipissing Mining Company, Harry S. Wilson. He and three other prospectors had found the bodies of the three men on July 21 in a shack near the Thelon River. They had all starved to death the previous year when the migrating caribou herd that they had been expecting failed to appear.³

Unaware of the drama unfolding in the distance, and perhaps missing something of historic interest had they gone ashore to look inside the Hornby cabin, the Porsilds continued to the foot of the bay where they anchored just before dark in “a lake-like pocket” or “w-formed bay” connected to the main bay by a narrow channel through which the tide ran up to about one or two knots. They went ashore the next morning. Spruce and birch were taller than in Dease Bay. Erling noted that the lowest rock formation was a conglomerate of quartz overlaid by greenstone similar to that found in the highland south of Dismal Lakes. He shot a couple of birds for his collection while Bob had several interesting plant finds from a high moor behind the coast hills.

In the afternoon, they followed the coast to a small harbour. While Bob explored the south shore by canoe, Osgood and Erling climbed a hill about 850 ft. high on the north side to take bearings and make a sketch of the bay. They had a “splendid view from the top,” from which they could see that the green rock formation extended from the shore to the highest elevation above the lake. To the south they could see a lake and mountain where Bob and Erling portaged

the next day to collect on the south slope, finding the valleys heavily timbered with good-sized spruce and canoe birch. It was obvious that they were moving south as the ravines abounded with raspberries, red currants, and blueberries.

The deeply indented, rocky greenstone shoreline continued as they moved down the southeast side of McTavish Arm. On August 10, they stopped to look at a small “glacier,” apparently emerging from a large spring in the bottom of a pond. “Vast masses of ice must have been accumulated here during the winter,” Erling said. A mass of thick ice still covered the pond and inlet, visible across the bay. White mineral deposits, which he speculated were probably mostly gypsum, remained where the ice had disappeared and on top of the ice itself. The water had a peculiar, rather pleasant taste. They took specimens of the residue and of some of the minerals in the vicinity and also collected a few plants before continuing, crossing the mouth of two inlets they had seen from the hills the previous day then entering a third fjord where they spent the night in the shelter of an island.

The island was composed of granite, the first they had seen. They found several interesting specimens there, including *Cryptogramma*, *Limosella*, *Agrostis borealis*, and *Corydalis*. Behind the island was a deep, winding channel, well-protected from the main lake. Soundings went as deep as 75 fathoms. On August 12, Erling and Bob climbed a hill north of their anchorage at latitude 66°08'25". “We found that we were anchored on the north end of what looked like a small island, evidently in the south side of the bay or fjord complex that we have been in for the last few days. Beautiful sounds and rocky precipitous islands. Deep blue water and good size timber on all suitable places. If the surface of the islands and the almost total absence of little streams [had] not indicated a very dry climate the resemblance of the coast of B.C. and S.E. Alaska would be striking.”

When they moved out into the bay, the fog closed in. When it lifted, they were only an hour and a half down the coast when they ran out of the greenstone formation as suddenly as they had entered it. In doing so, they left behind them an area that within the next five years would become famous beyond their dreams. Looking back, Bob Porsild was later to remember: “Even without much geological experience we knew there was something spectacular about the area and it was at that place the first radium mine was started up by Gilbert Labine.” Their island shelter on the last night of the “greenstones” was at the entrance to Echo Bay.⁴

Twenty years earlier, two other young men had travelled through this area by canoe. James MacIntosh Bell, a recent geology graduate from Queen's University, and his assistant Charles Camsell, the mining engineer son of a Hudson's Bay factor in Fort Simpson and the future Deputy Minister of Mines, had surveyed this area geologically in 1900. In the Geological Survey the following year, Bell reported that "in the greenstones of east McTavish Bay occur numerous interrupted stringers of calc-spar containing chalcopyrite, and the steep rocky shores which here present themselves to the lake are often stained with cobalt-bloom or copper-green."⁵

His report attracted the attention of the owner of a failing mining company called Eldorado Gold Mines in Manitoba. In 1929, when the north began to open up with access by air, Gilbert Labine made his first prospecting trip to Great Bear Lake. Pioneer aviator Punch Dickens, described by Pierre Berton as the "little pilot with the perennially boyish grin," remembered taking three prospectors into McTavish Arm the summer after the Porsilds left. It was his first flight to the lake and he was filled with astonishment at its size and the grandeur of the cliffs and fjords of the eastern shoreline. The following year, Labine returned with another prospector who was snow-blind at the time of the spectacular discovery of a rich vein of pitchblende, streaked with silver and copper, at the entrance to Echo Bay.

When the news of Labine's claim leaked to the outside world, the rush began. Frederick Watt was in Edmonton when it happened. It was Depression time, and pitchblende, processed into radium and previously only obtainable from the Belgian Congo, fetched enormous prices in the world market for its uses in medicine. Although the Eldorado company was first, Watt and dozens of other prospectors headed for the area in droves, mostly flown in on the fragile planes, drawn to the magic of future riches. Tents and makeshift cabins went up everywhere along the greenstone shore. Pilot after pilot dropped in with more hopeful men, sometimes also bringing curious visitors like George Douglas on his way to Hornby Bay. As the prospecting frenzy continued, Bolland and some of the men from Fort Norman made the two-hundred mile journey over the iced-over winter lake by dog-team to stake and trade. The Bear Lake Indians and Chief Jimmy Soldat came too, giving the prospectors an unforgettable Easter experience as they sang hymns in harmony in a tent at De Melt Cove, until the winter when there was no meat or fish to be had and the Indians returned to Fort Franklin before they and their dogs faced starvation.

The Eldorado mining operation and the first settlement at Port Radium began in 1932. Watt described what was inside the fifteen-foot mining trench at the base of Labine's legendary hanging wall. "The entire wall might have been taken from a crazy miner's dream," he said, with silver in leaf and wire forms, and copper cropping out like gold bricks, and pitchblende, black and glossy, present in startling quantities.

Port Radium continued with heavy mining activity for pitchblende until it was closed down and then re-opened in World War II, mainly to meet American demands for uranium, which ultimately led to the atomic bomb explosion at Hiroshima. With the development of the mining industry came huge changes to Great Bear Lake. By 1945, a large motor vessel plied the waters between Fort Franklin and Port Radium and small planes regularly connected McTavish Arm with the outside world. Fishing lodges and camps followed as civilization moved in, even though between 1932 and 1960 it has been claimed that more than 7,000 tonnes of heavy sacks of radioactive material were being transported to Fort Franklin by the Bear Lake Indians and another 1.7 million tonnes of waste was being dumped into McTavish Arm. The mine was finally closed in 1960 but not before the land and lake around Echo Bay had been seriously contaminated and the terrible effects on the health of the First Nations people of Great Bear Lake were still to be documented.⁶

So it is interesting to note that as the Porsilds and Osgood continued quietly along the shore away from Echo Bay in that summer of 1928, little dreaming of what was to follow them in the very near future, they were making the last exploration of McTavish Arm before the eager prospectors and the advent of the bush plane opened up the unknown waters they had left behind. Gilbert Labine and Punch Dickens would bring in the commercial future; they were wrapping up the untouched pioneer past.

The summer season was coming to an end as they neared the southeast corner of McTavish Arm on August 13. It was almost dark at midnight and all the stars were out. "Auroras tonight," said Erling. The character of the coastline changed as the rock formation became granite with only a few boulders of limestone and greenstone. The land was lower, and the fjords and valleys not as marked. August 14 dawned fine and clear. "Followed an open coast till we at noon were abreast of what looked like a sound going about southeast. Stopped under a high hill at north side of entrance and climbed it to see what was at the end of it. After a fairly narrow strait of a couple of miles the sound opened up to a lake-like body of water dotted by numerous rocky islands. No doubt this was Conjuror Bay."



Schooner “Star” in Conjuror Bay, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, e010933891)

For the young anthropologist who was travelling with them and studying the Bear Lake Indians, Conjuror Bay should have been more of interest than a place to gather bird, plant, and rock material, but at no time in the several days that Osgood and the Porsilds spent around the elaborate bay system looking for the entrance to Camsell River, exploring the terrain and collecting specimens, is there any mention of coming across a historic cave. When Thomas Simpson explored the southern area of McTavish Arm in 1838, he was told that in one of the bays at Conjuror Bay there was a cave where “the Indian Shamans practised their most solemn necromancy.” It is possible that this was not its exact location as Father Petitot had found the only cave he had seen in these regions in the limestone rocks further west on Keith Arm, but the name Simpson gave it suggests that in any case there may have been some significant shaman activity in the area of Conjuror Bay.⁷

The Indians of Great Bear Lake originated from four main tribal groups: the Mountain (or Slave) around the Bear River to the west, the Hare to the west and northwest of the lake, the Copper (or Yellow-knife) to the northeast, and the Dogrib to the south. Conjuror Bay was located at the most northeasterly corner of the Dogrib territory. According to Jenness in his classic study of the Indians of Canada, the Dogrib “made offerings to local spirits, especially to spirits supposed to haunt lakes and rapids, [and] placed their main reliance on their medicine-men to prophesy and to inflict and cure diseases.... The scaffolds on which they deposited their dead carried streamers to amuse the

shades of the deceased and retain them near their resting places; the mourners, as usual, destroyed all or most of their property, and the women gashed themselves in token of their grief. A year after the funeral they uncovered the remains, renewed their death chants, and held a memorial feast." The memorial feast may have been the "solemn necromancy" purported to be practised in some part of this region.⁸

Unlike the Bear Lake people, it seemed that the Dogrib were not very partial to fish and depended for their main supply of food on the herds of barren-ground caribou, which they snared in pounds and speared in lakes as did the Chipewyan and Copper tribes. At the bottom of the first rapid up the Camsell River, which seemed to be one continuous rapid all the way up to the first lake, Erling found an old Indian tepee and signs of hunting. "Old caribou horns are found quite commonly especially on the more or less barren hill tops but no fresh signs of anything except moose or bear. I doubt if this country is frequented by any barren-land caribou at all at the present time."

During their time in the bay, they were running short of meat. Erling shot eight ducks as well as doing some aquatic plant collecting and making tidal observations in the south narrows, while Bob ranged far and wide exploring and collecting plant specimens. They heard wolves howling one night from the schooner and recorded the first tree squirrel. "There are none in Dease Bay though there used to be some as I found old nests and caches occasionally," Erling said.

Rain and wind held them in Conjuror Bay until August 22. The deck of the schooner leaked badly and they had to cover everything up and sleep under tarpaulins themselves. "Everything is wet and miserable," Erling said on August 17. "Found that one corner of my trunk from touching the side of the boat had got full of water and my slide rule thus got thoroughly soaked and ruined. A box with films also was in the water but thanks to the cartridges of which I still have some left, the films were o.k."

When the rain cleared on August 20, they set up a tent in order to work on the plant specimens. "The boat is too damp for drying and the plants take too long to dry," he said. They dried some over the stove and laid earlier ones in folders. They tried to move on the next day but the lake was too rough to continue so they were forced to shelter again inside the south narrows. "At once after landing we set up a tent and I started to go through the six feet of fresh or dry plants in the presses. It took me seven hours to go through them." While Bob went off to do some more exploring, Osgood helped Erling with drying the



Drying out equipment and specimens at camp, Conjuror Bay, NWT, 1928 (Photo: AEP, LAC, PA-101054)

blotting paper sheets that were used in the presses and collected spruce seeds for him. They opened up the hatches to dry out the boat and took all their bedding ashore for a much needed airing and drying.

By now, Erling must have been feeling that it was time to leave Great Bear Lake. He had been surveying and collecting diligently around the lake for five months without a break. The terrain around Conjuror Bay did not seem as promising for reindeer herding as the land he had seen around Dease Bay. He looked at the timbered lowlands and thought that the timber was no better than usual except in particularly favoured locations, nor did he feel it was of any economical value, “contrary,” he could not resist adding, “to the opinions of J. M. Bell.” Two days before setting up the drying tent, on August 19 he and Bob had climbed the high hill south of the outlet of the narrows. “Magnificent view from the top that is one of the highest points in the whole bay. Could see Keith Point, Caribou Point and the whole north shore of McTavish Bay, most of the bay behind [Conjuror Bay] and the first string of lakes on Camsell River portage and to the left what I expect to be Hottah Lake. We couldn’t see the outlet of Camsell River. Built a cairn and returned.”

The Porsilds’ cairn brought finality to the exploration of the south shore. In all their reconnaissance travels, once Erling had climbed a hill that was high

enough to survey the whole area, he was satisfied that he had seen enough of the essential geographical features, as well as the frequency and type of vegetative terrain, to make his assessment. He concluded his last hilltop survey with a negative recommendation. “Large tracts of excellent feeding grounds for caribou exist to the south and west of the lake, but that part of the country may never become available for domesticated reindeer because it is either too broken or rugged or else too heavily timbered to make herding and control of tame reindeer practicable.”



CHAPTER EIGHTEEN

END OF THE INVESTIGATION

Only one small arm of Great Bear Lake, McVicar Arm, remained to be explored by the Porsilds before leaving the south shore, and the survey would be cursory because of what they had seen from the hill where they had left the cairn.

They broke camp on 22 August 1928 and moved out of the Conjuror Bay narrows into the lake with a fresh breeze blowing from the northwest. Several flocks of brant took off as they approached a small sheltered bay. Commenting on the shallow coast, Erling said:

A ‘continental shelf’ extends from a few to five or eight miles out averaging from about five to eight fathoms, and from that point there is a sudden drop on to deep blue water while the water on the shelf is milky blue, much lighter coloured than on the deep water. There [are] a number of bars and islands. Several fairly good harbours, though of course nothing like McTavish Bay. The geological formation changed as soon as we got out of the narrows to limestone of a similar type as Dease Bay or the north shore of Smith Bay. Consequently the character of the country is much the same, only most of the shore is much better wooded than one would gather from Edward Preble.

Although Erling does not mention it by name, it is obvious from his notes that they were looking for McVicar Arm as they went inside several shallow bays before finding “the right sound” and anchored behind “the island.” He noted that most of the low islands on the south and north shore were built up from lake sediment, not from corals but from ice pressure. “The process is undoubtedly exceedingly slow but every winter a layer or a row of new boulders are shoved



Cornelius Osgood and Bob Porsild at end of summer, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, PA-101053)

up on already existing reefs or shores.” They found the island uninteresting except for the flora. Although the bedrock was limestone, the bulk of the boulders were of quartzite and other siliceous rocks. Crossing by canoe to the mainland, Erling went about six miles up the bay, noting swampy, densely timbered country with quite large trees of which tamarack was very abundant. Of the flora collected that day, he listed the most interesting as “*Tofieldia glutinosa*, *Viola* species, *Selaginella selaginoides*, *Habenaria hyperborea*, *Pyrola chlorantha*, *P. minor*, *Utricularia intermedia*, *U. minor*, *Pedicularis flammea*, *Carex flava* or [C.] *Oederi*, etc.”

Back at the schooner with the south shore investigation now complete, the Porsilds and Osgood made an early start at 4 a.m. on August 4 and headed west, straight across the lake to Etacho (“Big”) Point for a final look around the area that according to Hanbury had been burned off in 1902.

Judging from old stumps and charred logs the country had previously carried the ordinary growth of stunted or rather scraggy Canadian spruce. Now the country had an open and park-like appearance. Thickets of willows, alder and birch alternated with beautiful verdant meadows, here and there with a solitary well-shaped spruce and

tamarack 15 to 20 feet high. In this case the effect of the burn on this well-drained, fertile area had been a most beneficial one. Otherwise, in the muskeg country, a forest fire usually leaves the soil almost sterile and the country probably returns to the original muskeg state after a certain time.

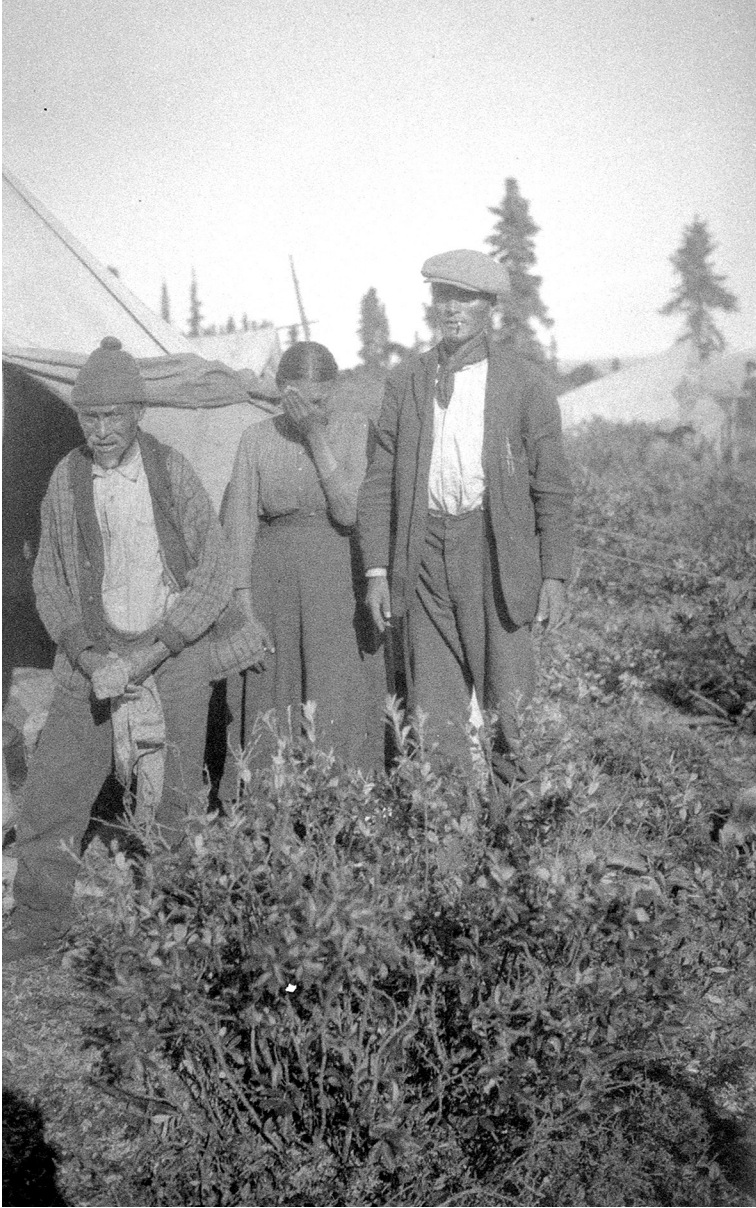
Bob started out for the highest point on the peninsula about six to ten miles back from the coast while Erling, who was concerned that their anchorage was not very good, walked along the shore near the boat. When Bob returned late in the evening, he had reached the top of the hill, nearly 1,500 feet above the lake. At timberline, around 800 feet, he had found a series of terraced alpine meadows covered with a flora distinctly different from anything they had seen before.

The lake was like a millpond on August 25. Rounding the point to the north side of Deerpass Bay, they went ashore for a tiresome hike through heavily timbered and swampy terraces, with an almost impenetrable undergrowth of willow, alder, and birch, and found numerous signs of Indian habitation, some old enough to be pre-Franklin.

Crossing to the other side of the bay in the evening, they found a small Indian encampment. According to George Douglas, it was usual for the Indians to come to this part of the lake to fish after the first boat of the season had passed Fort Norman. "First Indian I have seen since April 1st," Erling said. "One old woman (who lost her husband during the flu this spring) accompanied by three boys and three little children. They could understand no English." This was an interesting encounter because it raised the question of the role of the older women during and after the flu epidemic as they took over the care of orphaned children.

The Porsilds and Osgood were to encounter a larger group of Bear Lake Indians and learn more about the effects of the flu on the native population as they rounded the coast from Deerpass Bay and entered Russel Bay on August 28. "Saw a large camp of eight Indian tents and stopped for two hours. It turned out to be the chief, Jimmy Soldat, and a bunch of the survivors from the flu disaster bound for Big Point or Deerpass Bay. One woman was very sick yet and the chief expected her to die any time. A lot of them were still coughing badly and they were all poor physically but improving."

The people they were now encountering on the west side of the lake were mainly of Hare origin. According to Osgood, the Satudene, or people who had



Chief Jimmy Soldat and family, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, PA-101059)

become so closely connected with Great Bear Lake that they had become a politically autonomous unit, were probably more closely related to the Hares than to any other local tribe, although they were politically, socially, and linguistically differentiated from them and more often associated and intermarried with the Dogribs. "It is uncertain whether [the Satudene] were always an independent group or whether they have become such during the past hundred years, due to conditions created by Europeans," Osgood said.

He also commented on the title of "Chief" for the man leading the group in Russel Bay. "Chiefs, such as are among more highly organized tribes, probably never existed among the Satudene. Authority lay with such heads of families as were the best hunters, generally older men whose experience was considered necessary for the guidance of the group. Through courage, prestige in hunting, and leadership, head men came to exercise, for a time presumably, the authority of chiefs, but that authority was probably neither officialized nor inherited." With the Hare people, the "Oldest Man" sometimes was considered an unofficial chief and it was unlucky not to obey him. A second, lesser chief was the "Best Hunter" of moose and caribou and he was consulted if needed but never equalled the first chief in power. Osgood noted that chieftainships had sometimes been inaugurated by the fur traders to create a position through which the Indians could be reached but it had little basis in fact and some of these honorary chiefs thought that the office brought them nothing but bad luck.¹

However he had earned his title, Chief Jimmy Soldat was the best known of the Bear Lake people. Frederick Watt, who was to meet him at McTavish Arm in 1932, said that as early as 1908 Melvill and Hornby had written of their appreciation of his vigour and knowledge of the country. "Stefansson and Douglas had depended on him," he said. "Where Indians generally had stopped short their caribou hunting in the barrens when they reached the Dismal Lakes – the instinctive dividing line between themselves and the Eskimos – Jimmy had pressed on to establish friendship with the traditional enemies of his people. By any measure, he was a formidable man." Stefansson, who was with Jimmy Soldat at the time of the historic meeting, told a rather different story. He had met the Indian party in the area of Dismal Lakes and taken them to his Coppermine friends who were as reluctant as the Indians to make contact except at his insistence. When both parties remained friendly in Stefansson's presence, Jimmy had proceeded to tell the Eskimos that he was an ambassador of a bishop of the Roman Catholic Church and, to Stefansson's chagrin, he had distributed packages of saints and holy men that would protect them from all



A. W. Boland and family, Fort Franklin, Great Bear Lake, NWT, 1928 (Photo: AEP, LAC, PA-101033)

evil. It was not long after this meeting that the Roman Catholic Church sent in their first missionary, Father Rouvier, who was later to die at the hands of some of his Coppermine converts, but it was Jimmy Soldat whose reputation spread far and wide as the first Indian known to have friendly contact with the Eskimo and to have brought the faith to them.²

At Russel Bay, Erling noticed that one of the younger men in the Chief's group had an eight-horse-power Johnson motor on his twenty-two-foot canoe while the rest seemed to have the usual two or two and a half horsepower motors. Knowing the distances they would have to travel across the remote lake and the inconvenience of carrying a lot of fuel, and with his dislike of unscrupulous traders who took advantage of the native people, he fumed: "This engine they told us burned two gallons of gas per hour. Fine job to sell an Indian such things!"

It appears that they must have left Osgood with Jimmy Soldat, for his name was not mentioned again. They were quite glad to be rid of him because, as Erling told George Douglas in October 1953, he had turned out to be one of the "know it all boys" and had not been much of an asset as a travelling companion. "Still, we got along fairly well," he said, "but I remember being somewhat surprised when on parting he showed me a little red book in which he claimed

he had recorded in detail the numerous instances during the summer when we had ‘insulted and humiliated’ him.”³

It was the last stop for the schooner until they reached the fishery at Fort Franklin that afternoon. “We unloaded the boat, put up a tent, etc., etc. Boland came in the evening. We got our mail from the second boat and sat up talking most of the night.” After cleaning out the boat and settling up with Boland, who took some of their used but re-usable equipment in part exchange for his services, the brothers prepared the rest of their gear and collections ready for shipment. Boland would take the heaviest stuff down by boat while they canoed the Bear River to Fort Norman, ready to leave on the *Distributor* on her way back from the Delta on September 10.

The Porsilds left Great Bear Lake in their canoe on the last day of August. Their tent had blown down overnight and the wind was still blowing hard from the northwest as they worked their way downriver. En route they climbed Mount Charles but did not see much as visibility was poor. Erling made the comment that for two days they could see smoke from some large fire to the southeast, which may have been a forest fire in the mountains.

When they arrived at Fort Norman on September 3, after forty miles of paddling, much of it into the wind, they were aghast to learn that the steamboat had been badly delayed and was still upstream of the fort. Having sold or packed up their equipment, with ten boxes of specimens to go to the Museum, they were not in a position to make further trips. When the boat finally arrived, it would have to continue down to Aklavik before heading south, and they would have to move out of the Fort Norman house they had been loaned by the Hudson’s Bay Company. “The R.C.M.P. undoubtedly would house us,” Erling said, “but as the Corporal is married and they have a couple of prisoners I don’t like to draw on their hospitality.” They were still packing and settling accounts when the boat arrived on the afternoon of September 6. She was leaving for Fort Good Hope at daybreak. “I had always wanted to get a few days at Good Hope so we boarded the boat,” Erling said.

It was like old times when they arrived at Fort Good Hope. They were heartily welcomed back by Constable Cummings of the RCMP who had been their generous host in the winter. The next evening, two ‘gas boats’ (motor boats) arrived from upriver bringing Dodman, the Hudson’s Bay Company factor who had accompanied them for part of the trail up the Mackenzie until he was injured and had to return to Arctic Red River. It seemed that he was having his usual run of bad luck. Coming through the Rampart Rapid with the



A. E. Porsild, Mt. St. Charles, NWT, 1928 (Photo: R. T. Porsild, LAC, PA-101036)

two boats lashed together side by side they had lost control of the boats and in an attempt to reach the channel they drifted side-wise over the east side of the rapid where there was a distinct drop of several feet. A kettle of boiling water was upset over the engineer's right foot scalding it rather badly. The boats "suffered a few bumps" but were otherwise not damaged.

An earlier traveller down the Mackenzie had commented on the Rampart Rapid in her travel story called *A Woman in the Mackenzie Delta*. Travelling downriver in 1894 in her outfit made for her in Paris by a seamstress who bemoaned the fact that she did not want even a "little train" on her long skirt, carrying poison bottles for butterflies, materials for drying plants and preserving bird-skins, camera and stew-pans, hats and frying pans, field-glasses and boots, blankets, medicines, and artist's materials in addition to a scanty wardrobe, the whole packed into waterproof bags or gunny sacks, this nineteenth-century Elizabeth Taylor had been the ideal naturalist as she set off for the delta as the only woman in the party unless a mission nun or wife of a company officer joined them between one fort or another.



R. T. Porsild, Mt. St. Charles, NWT, 1928 (Photo: AEP, LAC, PA-101035)

Her delightfully illustrated account includes a description of the Rampart Rapid that Dodman had just encountered, a place where the Porsilds were unknowingly about to spend several days. “The ‘Ramparts’ of the Mackenzie begin a few miles above Fort Good Hope,” she said. “The river contracts until it is only five hundred yards wide, and on either side the vertical cliffs of limestone and shale rise in heights varying from one hundred and fifty to two hundred feet, crowned by the stunted evergreens. In some places the cliffs seem to hang over the water, and are worn into strange shapes, such as turrets and little towers and columns. As one approaches the Ramparts the river seems to be barred by the creamy white walls, no sign of the channel being visible; then, as the boat comes nearer, an opening is seen extending to the east for several miles.”

As her steamboat passed through the lower end of the chute, she could see Fort Good Hope “prettily situated on a fertile point of land” and was amazed by the luxuriant vegetation she found there. Although one suspects that Erling Porsild would have dismissed the list of wildflowers that she gathered and

pressed there as the work of a mere female amateur, he would probably have agreed with her remarks about the renowned Good Hope gardens growing on permafrost so far up north.⁴

While they waited for the *Distributor* to return, he went with a knowledgeable old-timer to his homestead on the Rabbitskin River.

Furlong broke this garden this spring and is having wonderful results. The potatoes are of the old famous Good Hope stock. For some reason they keep better than any other potatoes I have seen and the skin even in spring is quite thin and smooth. Another peculiar thing Mr. Furlong brought to my attention is, that the seed potatoes apparently remain quite unchanged and can only be told from the new crop by a slightly thickened skin. Besides potatoes he had some wonderful cabbage, good size carrots, lettuce, radish, beets, spinach, etc.... Furlong is very much interested in natural history and I have hopes that he will do some collecting here in the future.... We have had several good talks. I showed him how to make bird skins and am leaving my collecting outfit here, also the handbooks I have brought down here.

The *Distributor* arrived at 6 p.m. on September 14 and left an hour later with sixty-two passengers on board including the Porsilds. She went only as far as the Rampart Rapid and anchored below it for the night. In the morning, she tried to go up the rapid but failed. She was towing a barge, so after a while they took the barge to the bank and tried the boat alone, but still she could not make it. In the evening, a twenty-eight-hundred-foot steel cable was taken a distance above the rapid. The plan for the next morning was to try and let the boat drag the cable out to the channel about a thousand feet out from the bank. What followed would have done justice to an old comedy movie.

At the first attempt on September 16, the cable caught on a rock and broke. "A boat was lined up to the upper end of the cable," Erling said,

... to try to bring it out to the channel and drift down shore. A light line with buoy was attached to the end of the steel cable. None of the crew knew how to use an oar. It was decided that the boat crew should be volunteers. Bob and I joined and with two deck hands and the two mates started out. The cable weighed about two tons and was very hard to handle especially after we got out into swift water. Things were not

very well arranged. On account of the weight the cable had to be in the back ... [because] a kink caught in the boat would most likely cause the boat to upset. Also we had not power enough on the oars to tow the heavy cable and keep the boat up. However, we managed to get out to the channel and [were] swept down with a tremendous speed. Had the cable caught we certainly would have been in a bad way.

In the meantime, the *Distributor* was supposed to come out and be waiting below the channel to pick up the float, but when the small unsteady boat shot out through the chute with the massive cable, the steamboat was not there. She was stuck in the bar below the eddy. They worked all day to get her off the bar. Nothing worked. Cables kept breaking and the boat worked itself further and further up the bar. By next day, they finally got her off, and they tried the cable procedure again. No luck. Apparently the buoy was not big enough for the boat to pick up. They dredged for two hours with hooks and anchors without success.

Again the boat was pulled to the bank, and this time the lifeboat was lined up for action. Erling reported their orders. "We should try to follow the cable out and attach a heavy 800 foot rope to the end of the steel cable as we drifted through the rapid. Then we should hang on to the rope till the steamboat picked us up and the rope." They started out with the same boat crew. "Found the cable caught under a rock or in a crevice just above the rapid in the swift water. Tried to work it loose for about an hour but had to give up. We were too far down to be able to go back so we had to go through [the rapid] a second time. Cable is probably lost. Boat went back to Good Hope to get a gas-boat. The mate was to go up to Norman where it is hoped that we can get a cable at the oil well. The *Liard* should have been down by this time. I'm afraid we are out of luck if the *Liard* is stuck above." There was no question of an exchange of passengers and freight when the smaller vessel arrived as she carried only six passengers compared to sixty-two on the *Distributor*.

On September 18, the fourth day since they reached the bottom of the rapid, Bob was appointed "mate" in the absence of the regular one and was leading operations for salvaging the cable. He rigged up tackles and with the combined forces of crew and passengers managed to salvage two thousand feet of the heavy cable. At the first splice, the cable caught on a rock and the splice pulled out the remainder – eight hundred feet lighter cable thus lost. Erling's entire

entry for September 19 said it all. "Waiting for the *Liard River*. Collected seeds and took a series of photographs."

The M.S. *Liard River* showed up on the evening of the sixth day, bringing the mate of the *Distributor* and a two-thousand-foot cable from the Imperial Oil Well. On the following morning, the seventh day at Rampart Rapid, the attempt was made again to go up. The *Liard* laid out four thousand feet of cable to just above the chute and dropped a lifeboat down the channel with a rope. This time the old steamboat was ready and after many clumsy attempts picked up the line and started winching in on the cable. Everything went well and the *Distributor* was almost up through the rapid when her engines stopped.

"I was ashore taking photos," Erling said, "and expected the cable to break any time. I learned later that the flues were stopped (caused by sand from the driftwood we have been burning the last few days) and accordingly the steam went down from 200 to 50 lbs. pressure. It took them about 1½ hours to fix it up. Fortunately the cable held and the boat continued upstream inch by inch and finally was up and safe."

Of course, this was not the end of it. There was still the problem of what to do about the barge with all the freight, tied up by the bank below the rapid. "It was quite late then and a council was held between the various pilots and experts as to whether the barge could be taken up or not. The consensus of opinion was that although it could be done it would greatly hazard the safety of the steamboat and the safe passage of the passengers and fur. The *Liard* leaving her barge went down and took the little freight up through the rapid that we had left behind in the barge. First, of course, they had to relay the cable."

It was decided that the barge would be towed back up the rapid by the *Liard River* on her return from Aklavik and left to freeze in the Rabbitskin River for the winter. On September 22, Erling could write: "Finally we could continue our much delayed journey up river." The old steamboat headed south to the first woodpile up the river to pick up three cords of wood. They had only one stick of wood left when they got there.

Of the rest of the trip, Erling found little to say until they reached Great Slave Lake except that they travelled for two days through a sand and dust storm to Fort Norman and once again were affected by the smoke ("It must be a tremendous fire in the mountains") en route to Fort Simpson, where they heard that a government plane had been lost on the Peace River a few days earlier but they could not send or receive any messages as the radio station was being moved. Throughout the entire trip, Erling makes no mention of any other

passengers, but Bishop Fleming was later to recall discussing Greenland and its people with the “eminent Porsild brothers [who] were returning from a survey of the country on either side of the Mackenzie Delta and were to give a detailed report to the Government at Ottawa as to its possible use for the development of herds of reindeer.” The bishop also remembered talking to prospectors who came on board at Fort Simpson, men who talked of all the mineral riches to be found in the out-croppings of the Canadian Shield and what had to be done to develop the North. What struck Fleming the most was that the men had taken three hours to fly into the headquarters of the Nahanni River as against ten days to return by canoe.⁵

It was in crossing Great Slave Lake that Erling was to realize the full joy of travelling on the old steamboat.

Saturday, Sept 29. Started early for Hay River, got a fresh breeze out on the lake. The water soon got rough and the old boat began to work in a most unpleasant way. The sea was on our beam which is the worst place it can hit us so we had to tack. First the top of the boat began to work sideways at the upper deck 6 to 8 inches with the rolling of the boat. Worse, however, was that the boat also warped and worked lengthwise in a most sickening way. When one sat in front of the smoking room and looked down through the dining room, the floor, i.e. second deck moved so much that at times a man sitting in the far end of the dining room was only visible from the knees up. I can better understand now the old Mackenzie River yarn about the old ‘Trader’ that got her propeller shaft bent going over the Rampart Falls! ... The chief engineer claimed that the lower deck on this crossing bent over 1½ feet and he was consequently much worried about his steampipe that runs the whole length of the boat.

They were stormbound for two days in Hay River, where Erling visited the Anglican Mission School, and arrived at Fort Resolution shortly after noon on October 3.

Took a stroll up through town. There is a very large Roman Catholic mission, new and well-kept buildings. In the boarding school are 87 children, one father told me. A striking feature of the place is the long new government-built pier with a lighthouse at the end. The town has

electric light. Characteristic for the country is the way things are going. When I was uptown at the mission, the ship blew three whistles and I hurried back. There was however no sign of pulling out yet. The pier was full of people chattering with passengers. Nothing happened. Some freight was on the pier waiting to be loaded. Half an hour later some of the deckhands loaded some on the boat. More blasts of the whistle. Ropes were cast off and the plank drawn in when it was discovered that we had some freight for this place. Gangplank put out again. Freight unloaded. More blasts. Boat pulled out a quarter of an hour later.

They reached Fort Smith on October 4 only to learn that the S.S. *Athabasca River*, unable to wait any longer with no boat in sight, had just left Fitzgerald. During the three-day wait for a substitute "vessel" that would prove to be two motorboats with two covered scows and a number of rough bunks, the brothers were able to arrange a trip by horseback into Wood Buffalo Park. This was the summer botanical territory of Hugh and Lucy Raup who had been working there for two years on their own, but in 1928 Malte had persuaded the Department to give "Mr. Raup of the Carnegie Institute, Pittsburgh," a temporary position in order to get at least one full set of the specimens collected. The Raups had already left for the season so the Porsilds did not meet them on this occasion, but they did see one magnificent bull buffalo and a number of beaver that were expanding in the protected area.⁶

They reached Edmonton on the evening of October 19 and tried to get into the MacDonald Hotel without success.

Probably we looked too disreputable, [Erling said]. We were still in our field clothes and moccasins and I was dragging Junior around on a rope. Succeeded at the Royal George which we found to be a kind of northern hotel where all the northerners met. Much like the Frye's Hotel in Seattle. We were constantly meeting friends and asked to come over for drinks. One of the prospector's party from Nahanni River, Morrison, evidently is a man of some influence. He had us meet a number of prominent western men, mostly politicians. Went out in the evening, wired the office, talked for half an hour to a man from *Edmonton Journal* who got a story suitable for printing. While I was talking to him a man came up and showed me a wire he had just received

from Mr. Finnie. There had been rumours in the Copenhagen press to the effect that we were reported lost and Mr. Finnie was anxious to find out if anything had happened.

While in Edmonton, Erling contacted Francis Lewis, the botanist at the University of Alberta who had been corresponding with Malte for many years and went out with him to see some muskegs outside of town. He found the flora surprisingly similar to that of the north and was interested in Lewis's work and observations on the recession of *Sphagnum* peat. Leaving Edmonton by train on October 22, Erling was met at the Saskatoon station by Seymour Hadwen who took him out to the university where they had "a good long reindeer talk" and he found a place to leave his dog. The train left for Ottawa the next afternoon, thus ending thirty months of travel during which Erling reckoned they had covered approximately 15,000 miles by every imaginable kind of northern transport except the new-fangled aircraft.

Part Two

CANADA'S
REINDEER HERD,
1929-1935



CHAPTER NINETEEN

RESULTS OF THE SURVEY

When the Porsild brothers reached Ottawa in October 1928, there was an urgent need for them to write up their official reports on the reindeer investigation, as well as much to be done with their enormous scientific collections in the field. By mutual agreement, the bulk of the reindeer industry evaluation was left to Erling, with his talent for writing and his senior position in the investigation, leaving Bob with little to do except tidy up their plant collection once it had been transferred to the National Herbarium.

Unlike his brother, Bob Porsild showed little interest in working up the collection for publication and was soon restless at the inactivity. “We spent the winter in Ottawa while AE wrote up a full report from our diaries and the 1,100 photos he had taken,” he later remembered. “There wasn’t much for me to do so I took a leave of absence in the early spring of 1929, returning home to Greenland via Denmark. I visited my parents and got engaged before returning to Ottawa, January 1930.” The engagement came at the end of a whirlwind courtship. While in Sorø, Bob went to see the parents of an old school chum, Svend Rothe-Hanson, and they gave him their daughter’s address in Copenhagen. Elly Roth-Hanson was working as a receptionist in a steamship office when he found her. Three weeks after they met, just before Bob had to leave Denmark, she agreed to come to Canada to marry him.¹

Meanwhile, back in the Herbarium, Erling found that he had plenty of time to work up their plant collections before they were incorporated into the Flora of Arctic Canada. Both Ostenfeld and Malte were having health difficulties and their work was going very slowly. In Copenhagen, Ostenfeld had broken down from overwork at the beginning of March 1928 and had been unable to do anything until September. In Ottawa, Malte was suffering from a bad cold that left

him still feeling weak and tired long after he had got over it, but he was still in good spirits from the success of his second collecting trip to the Arctic. Earlier in the year, he had left Montreal on the Hudson's Bay supply ship, the S.S. *Nascopie*, bound for one post in Labrador and ten in Hudson Strait and the northern parts of Hudson Bay. The vessel had spent two or more days at each stop before returning to St. John's, Newfoundland, in September. Eight months after his return, he would write to Frère Marie-Victorin that since the *Nascopie* made very short stops at each port of call he had had time to explore only limited areas in the immediate vicinity of the various Mounted Police posts on his first trip to the Arctic. However, on this second trip he had realized that "collecting at a certain place at a certain time of the year in one year only may give a rather imperfect or even misleading idea of the flora." Having visited Lake Harbour on Baffin Island in 1927 when the vegetation was at its prime and yielded an exceedingly rich harvest, he was amazed to visit the same place on the same date in 1928 and find the season two or three weeks earlier, giving an impoverished impression. Fortunately, he had had more time on the second trip and was able to go further afield to add to his collections from that place.²

Malte was delighted with the botanical results of the Porsilds' reindeer investigation and immediately tried to use the situation to his advantage. Within three weeks of their return to Ottawa, the Chief Botanist wrote a memo to the Director of the Museum requesting Herbarium assistance, couching his application in terms that would allow for the hiring of both brothers if they were interested.

He began by citing the incompleteness of the national collection of Canadian flora that underlined the need for more collecting assistance since there were vast areas of Canada that were unknown botanically, e.g., the whole of northern British Columbia and practically the whole of the Yukon Territory, and it was plain that much field work was necessary to bring the botanical collections up to a state of completeness which one might reasonably expect from a National Herbarium. "It is equally plain," he said, "that having to cover a territory as large and as varied as the whole of Europe, much headway in botanical explorations cannot be expected, as long as the National Herbarium has to its disposal the service of only one permanent botanist."

Not only was there a need to collect more Canadian material but the many new records from the field work in New Brunswick and the Arctic between 1926 and 1928 meant that the Herbarium was badly in need of a thorough revision.

Such a revision not only calls for a critical examination of the material on hand but also for an extensive study of the botanical literature – in many cases – material in other herbaria, as our own may not be sufficient for satisfactory identification.... The task of revising the Herbarium and working up collections preparatory to publishing scientific papers, regional floras of Canada, and the like, is one that necessarily must take much time. Indeed, the work is so slow, that, if it is to be at all creditable to the National Museum, much headway can hardly be expected as long as only one man is engaged in the work.

I would therefore, most strongly, emphasize the urgent necessity of securing qualified assistance for the Herbarium. With qualified assistance I mean, in this connection, highly trained botanists competent to undertake, under direction, scientific research work in connection with the survey and study of the flora of Canada.³

Malte's additional request for a Herbarium Assistant to replace Miss Stewart, who had recently retired, was eventually granted, but his larger plea for help in the collecting field, and qualified assistance with his huge collection overload in the Herbarium, was denied. From a department perspective, it appears, in fact, to be an odd request, as on the one hand it asks for more collectors and collections, and on the other states that the Chief Botanist is already overwhelmed with work and unable to catch up with the material already collected. He might, perhaps, have had more success if he had merely asked for help with the Herbarium material overload but, as it turned out, for the time being at least, there could be no new offer of work at or for the Herbarium for either Bob or Erling Porsild.

There was still work ahead for both brothers to do in the introduction of reindeer into northern Canada, however. Erling presented his interim report on the reindeer investigation to Finnie on 31 October 1928:

We are satisfied that the country between the Mackenzie and Coppermine River visited by Robert T. Porsild and myself during the 1927–1928 season is nearly all good reindeer country capable of supporting vast herds of domestic reindeer indefinitely. Speaking in general terms, we found that the country compared favourably with the best grazing grounds in Alaska. Sufficient timber within easy reach of the summer range affords excellent shelter for herds during the winter, also ample

material for construction of cabins, corrals, etc. Ten to twenty miles south of the northern limit of tree growth the timber is open enough to allow efficient handling of herds. We, therefore, think it perfectly safe to bring any number of reindeer into this part of the country. The country east of the Mackenzie delta is the natural place to land a reindeer herd and to establish the first reindeer station.

He advised that the best and largest animals were to be found in the southern part of Alaska, Kuskokwim, Norton Sound, and Kotzebue Sound. From these regions, he recommended either overland transport around the coast via Point Barrow, starting after the rutting season in September and taking two winters and one summer to land the herd east of the Mackenzie before fawning season in April, or by scow up the Yukon and Porcupine Rivers after the fawning season, with one winter in the mountains after freeze up before reaching the Mackenzie. He felt that the second route would be more likely to result in stock injury and parasite infection and also would be more expensive than the overland drive which should have the advantage of insuring healthy stock on arrival. A third possible method of transport could be made by boat around the northern coast in favourable seasons. It is interesting that at no time did he mention either the pros or cons of the route that would eventually be chosen to drive the herd through the Brooks Range. He noted that nearer herds along the north coast of Alaska could not be purchased as they were all native owned and in any case were smaller animals.

Whatever transportation method was used, the Porsilds believed that purchase should include delivery. They recommended that the contract should call for delivery before fawning season at a place near Kittigazuit east of the Mackenzie delta, that the herd should consist of select, healthy breeding stock at a ratio of not more than eight bulls to one hundred does, that two picked Alaskan herders from the drive should stay on with the herd for two years, and that prices should be considerably under the quote from the Lomen Brothers of \$125 a head.⁴

To these remarks Erling later added:

It is now so long since we had any quotations on reindeer from Alaska, that I think first of all the reindeer owners in Alaska might be approached again. Since this matter was first taken up by the Department several other private companies, besides the Lomen Bros., have

acquired large herds. Some of these people might be in a position to take up the proposition, although, undoubtedly, the Lomens are the leading concern.

Several individual reindeer owners that we met in Alaska in 1926 were anxious to sell their entire herd. Some of these people would probably be able to handle a drive of reindeer into Canada successfully, but I think it inadvisable to deal with anybody but a large company with sufficient financial backing to put up some sort of guarantee for the first instalment to be paid down. A payment down when the herd had been selected and the drive organized, would be asked for and the balance to be paid when the herd is received at its destination. This first payment should not, even if a large company like the Lomens are to make the drive, exceed, say 25%. An additional payment will probably be asked for when the herd has passed Barrow. This I would not recommend as considerable difficulties are apt to arise on the last part of the drive that may seriously threaten the welfare of the entire herd.⁵

The fact that Erling already was able to foresee difficulties at the end of the drive and thus could warn the Department not to make heavy financial commitments in advance of delivery suggests that he realized that the hardest section would be across the Mackenzie River Delta where the drive was ultimately held up for two years. In their follow-up negotiations to purchase 3,000 deer, the Canadian Government heeded his advice to insist on delivery east of the delta and to pay less than \$125 a head, securing the herd for \$195,000, or \$65 a head, but agreed to three payments – the first on 1 August 1929 for \$30,000, the second on 1 August 1930 for \$82,500, and the final instalment upon delivery at Kittigazuit for a further \$82,500.⁶

Although it was suggested that Alaskan herders should stay on temporarily, Erling did not recommend looking for permanent herders from the north coast as he felt they were making good money trapping white fox and had almost entirely given up the old way of living, adopting white man's food and methods. However, noting that the RCMP had had a tendency in recent years to restrict the immigration of Alaskan Eskimos into the Northwest Territories to "save the Canadian Eskimos from too keen competition in trapping from these more advanced and energetic people," Erling made the surprising recommendation that it might be advantageous to encourage the entrance of individual

Alaskan Eskimo reindeer owners, since the country was now underpopulated due to epidemics.

Preferable to engaging Alaskan Eskimo as herders and reindeer men on a salary basis [he said] would be allowing and encouraging individual Alaska reindeer owners to move along with a future Government herd and settle on the Canadian side. Since the decline of the whaling industry on the north coast of Alaska, trapping and reindeer raising has also here largely taken its place. At present there are too many trappers there and the maximum carrying capacity of the grazing land has probably been reached. The reindeer owned by the natives on the north coast are far inferior to the stock from below. It would be an easy matter to keep any native owned reindeer separated from the future Government herd or rather to have them separated when the latter were taken over by the Government. Also several Canadian Eskimo now own reindeer in Alaska and have for years been paying herding expenses but without getting their proper increase. These people want to get their stock into Canada, but have not been able to do so. A clause could probably be put into the contract with the company to make the drive of the Government herd to take these deer along free of charge. The total of these Canadian owned deer probably does not exceed 50 head.⁷

In view of Erling Porsild's complete endorsement of the large stock-raising industry of southern Alaska and his negative attitude to the Alaska reindeer herdsmen and their animals, this was a surprising proposal and one that clearly demonstrated his ability to take a pragmatic approach. Had this advice been followed, the Canadian reindeer industry might have had a real chance of success at an indigenous level. The delta community might have had far more interest in the business of reindeer herding if the program of introduction had contained two complementary strategies, in which one part consisted of a large, experimental reindeer herd owned and operated by the Dominion Government and the other part set up to encourage a small, quiet reindeer herding migration at a natural and local level. As it stood, the Department appears to have put this suggestion aside and thus lost a valuable opportunity for success.

Far more official attention was paid to Erling's predictably frank and pessimistic recommendation, following the lines of what he had observed in the

Alaskan situation and the advice of the Royal Commission, to hire reindeer herders from Lapland to manage the Government herd:

I think it would be very good to have at least two young Lapp couples or families brought over from northern Sweden. Not because the Lapp way of handling deer is superior to the modern Alaska methods, but because the Lapps are born reindeer men and because a worthwhile white man could never be expected to remain in the North as a chief herder. I have no doubt that Alaskan Eskimos would be just as good or even better than the Lapps at first. But how good an Eskimo may be for a job like that, he is only good as long as he has a white man to keep him on the job. When things go wrong for an Eskimo once or twice, he will become despondent and give up. Also you can not make a contract with an Eskimo that he does not think himself free to break if it suits him and he thinks he can make better money by trapping. Young Lapps with a good instructor would soon learn the modern way of handling deer. They are very thrifty people and a steadily growing bank account would be the best inducement to make a Lapp stay on the job. Also by being so far away from home the Government would have much better hold on such an employee. Although the Lapps in Alaska, where they were taken by the U.S. Government, and where they have been employed by the U.S. Government and others later as herders, think themselves superior to the Eskimo, the two get along very well.⁸

Considering site requirements, Erling suggested that a corral and holding pasture should be erected prior to the arrival of the herd at a suitable place near the Hudson's Bay Trading Post at Kittigazuit. The trading post was closed or maintained as an out-post and he felt that it might be possible to buy the buildings reasonably as they were suitable for a reindeer station. A good-sized scow and tug boat would be required. He estimated the costs of 3,000 head of breeding stock landed on the delta at \$75 each would be \$225,000, and total costs for equipment, building construction, salaries, rations, and incidentals \$276,000. These figures were not to be unreasonably far off the mark but his final optimistic forecast would be viewed with increasing cynicism in later years as the costs of running the Canadian Reindeer herd grew higher and higher. Erling

felt that “a well-managed herd of 3,000 would be self-supporting after the first couple of years.”⁹

Baldwin would get his wish, even if he was soon disturbed to learn that Erling Porsild would aid in the selection of the deer. He and the Lomens feared that Erling could be “technical and arbitrary” on occasion and probably hoped to have a less critical agent to oversee the choosing of the animals.¹⁰

There was no doubt that the Lomen brothers appeared to be in the strongest position to make the sale, although Erling had supplied the names and addresses of four major reindeer companies in Alaska – the Lomen Reindeer Corporation, Frank P. Williams, Waegter Brothers, and A. D. Williams – which Palmer recommended as being capable of bidding on a shipment of reindeer to Canada. However, the Lomen family’s success carried a strong warning to the Canadian Government of the dangers of large-scale reindeer herding, a warning that would not be heeded. As Palmer put it to Erling in a letter that was circulated to Finnie and Cory in February 1929:

The Lomens are now very well capitalized and are very strongly established not only in reindeer raising but in general trading and shipping as well. They are now successfully competing against the Alaska Steamship Co. in carrying freight to Bering Sea and Arctic points. Last year they held the bulk of the freighting business. They own and operate several trading posts and to the reindeer business have added a canning plant and by-products plant. A very large increase over past years was made in meat shipment and to this was added for the first time by-products such as hides, blood meal, hair, etc. At the present stage the shipping and trading activities carries the reindeer business. In due time the reindeer industry should become self sustaining. It is the harder game of the two presenting the most difficulties. Upon the success of the Lomens in the shipping and marketing field depends the future growth and welfare of the Alaska reindeer industry.¹¹

Unaware that within a very short period of time both the Lomen Reindeer Corporation and the Alaskan reindeer industry would be in serious trouble, satisfied that the requirements had been met in order to begin the reindeer introduction program in Canada but with no apparent plans to prepare the people of the Mackenzie River delta for their arrival, the Department of the Interior was ready to go ahead with the purchase of the herd. Finnie felt that

they would have to send one of the Porsilds and “somebody like Dr. Hadwen to examine the animals with a view to securing only those which are in the best physical condition” to Alaska to make the purchase and organize the drive. Requesting permission to place the amount of the part payment, \$100,000, in the yearly estimates, on 18 December 1928 he commented to Cory: “I have taken it for granted that we will proceed with the introduction of the reindeer in the Mackenzie District and that a start will be made in the purchase and driving of a herd in the very near future, that is, within the next fiscal year.”¹²

The agreement was signed in New York 8 May 1929. The Lomen Reindeer Corporation agreed to deliver no less than 3,000 reindeer to the east side of the Mackenzie Delta at or near Kittigazuit. The drive would commence no later than 15 October 1929. Selection would have to be approved by a representative of the Canadian Government. The company agreed to furnish a bond or securities to return the money if the deer were not delivered, but excess deer would be purchased by the Canadian Government. “Time shall be the essence of this contract.”¹³



CHAPTER TWENTY

“THE BEST LAID PLANS”

Oscar Malte was in hospital by the time the contract for the purchase of Canada's future reindeer herd had been signed in May 1929. All through the winter when Erling Porsild had been able to spend time in the Herbarium looking over the collections from Alaska and the Northwest Territories, Malte said that he had felt increasingly tired, “losing all pep and having little or no inclination to work.” On May 13, Malte wrote to young Watson, who had been re-hired to be his field assistant again that summer, telling him of his illness in November and how he had hoped that he would gradually get better but instead had got worse.

Finally I did what I should have done long before, viz., see a doctor. It was then discovered that I had so-called glycosuria, which is merely a polite word for diabetes. I am glad to say, however, that after three weeks in the hospital, where, by the way, I still reside, the doctor is congratulating me on the way I am getting along. It is apparently a mild case and, if I don't take a turn for the worse, I probably will not have to take insulin. A proper diet, however, must rigidly be kept, for how long a time I do not know. Beer is taboo and for once I shall have the unique opportunity of setting you a good example. If I am making progress at the rate I am doing now, there is nothing to prevent me from going to New Brunswick with you next July. I shall probably not be able to go to places where walking is difficult or tiresome but I hope to be able to poke around a bit, leaving you to do the places which may require youth and strength.¹

Malte's fondness for beer and good companionship had won him many friends at the inn where he and Watson usually stayed in New Brunswick. He was also popular among jollier members of the staff at the Museum, as witnessed by the letter he received from Wyatt Malcolm on May 2 at the Ottawa Civic Hospital. "There is one little formality that we usually ask to be attended to by our friends who enjoy the privilege and luxury of residing in that very fine red brick building in the western part of the City – the doctor's certificate. I am enclosing forms herewith.... Without deserving to give you cause to be unduly inflated I may say that we miss your boyish rubicund countenance, your flaxen locks, the twinkle in your eye and the chuckle of your laugh around this dreary institution, and hope that you will bring them back very soon."²

While in hospital, Malte heard that Ostenfeld expected to come to Ottawa in the middle of August, bringing his wife with him, in order to work through the collection of their common Flora of Arctic Canada. Malte replied on May 13, telling him that he planned to spend some time in New Brunswick the coming summer but would be at his disposal at any time he could come to Canada. "Please arrange to take plenty of time for the stay in Ottawa, for I have a rich material from the Arctic collected 1927 and 1928 – some ten thousand herbarium sheets – which contains many things which, I venture to say, will both interest and surprise you." He told Ostenfeld about his trip to the doctor but added: "I am glad to say, however, that it is a rather mild case and that it is unlikely that the ailment will, to any appreciable extent, interfere with my normal work, providing I keep a strict diet." On May 18 he wrote again, repeating his delight about the visit and adding: "I am leaving the hospital in a day or two, feeling in first class condition." He repeated his suggestion that Ostenfeld take plenty of time in Ottawa as "I certainly have some interesting things to show you. In my last letter I believe I did not mention the Porsild collections from Western Arctic Canada, but I suppose that Thorbjørn Porsild spoke to you about them when, some time ago, he passed through Copenhagen on his way to Greenland. I shall arrange to have the Porsild brothers' collection ready for your examination when you arrive."³

Ostenfeld had received both letters when he wrote back on June 3. He was sorry to hear that Malte had been ill for such a long time and hoped his health was now quite well again. "As to my health, it has improved very much since last year, but I must be cautious and not overdo work, eating and drinking. We feel that we are getting older."

He and his wife would be leaving Europe at the beginning of August and go straight to Ottawa via Montreal. "No doubt the young Porsilds have collected a good deal on their long trip and part of it must have been taken north of the tree limit and consequently belong to our area. It may raise the number of species a good deal and make the work more difficult. On the other hand it shall be quite interesting to see their results. I do not know anything about them, as I did not see Thorbjorn on his visit here on the way to Greenland; they are funny people, all the Porsilds."⁴

The Ostenfelds, husband and wife, arrived in Ottawa in August. Malte was still feeling under the weather since returning from the collecting trip to New Brunswick but commented enthusiastically to Watson on October 11: "Professor Ostenfeld has spent a month with us and much work on the Arctic flora has been accomplished. A critical examination of the collections, new and old, has shown that we have quite a few new species from the Arctic and a very large number of new and rather astonishing plant-geographical records."⁵

Erling Porsild was sorry not to see Ostenfeld during his visit but he had already left for a botanical and reconnaissance trip to Charlton, Akimiski, and Fort George islands in James Bay. The Department of the Interior had been inspired by the seeming success of the reindeer project and were now looking at other sources for development in the north. This time, Erling was sent to look into the possibilities for beaver farming in the James Bay islands. When asked by Gibson some years later if he thought Fort George Island would be suitable for the introduction of either caribou or reindeer, he was not hopeful for any of the islands in that vicinity, as he could not find the right forage, and the area was small and would be land-fast after freeze-up in winter so the animals would cross the ice and become lost.⁶

Erling's next letter to Malte came from Elephant Point, Alaska. It was October 1929, the month when North America was reeling from the stock market crash, when negotiations began for the selection of 3,434 animals from Lomen Reindeer Corporation at the head of Kotzebue Sound, and Erling Porsild had been called to be present on behalf of the Canadian Government to supervise the selection. The letter was written on October 26 and addressed to "My dear Oscar," indicative of the time they had spent together in the herbarium:

I have often for the last few months been wondering how you are getting along and how CHO's [C. H. Ostenfeld's] visit came off. I have also been cursing those reindeer people in New York, who thought this



Asta and Erling Porsild in their cabin, Elephant Point, Alaska, November 1929 (Photo: AEP, LAC, PA-101031)

drive would be organized and started in less time than it would take to say Jack Robinson. I had my suspicions at the time, but of course had to act upon the information we had been given. In fact I could quite safely have spent another six weeks in Ottawa and still been in plenty of time. The thing hasn't even started yet and here I am with no authority and nothing whatever to say, just because it was deemed necessary to have somebody representing, in case things went wrong. However, I suppose that is what K.G. [King George] is paying me for and in the end I suppose things will get going. I am putting in my time learning what I can about how to herd reindeer and am trying to get as much out of my time as possible.⁷

Surprisingly, Erling was not alone at Elephant Point in Alaska as he cooled his heels waiting for the negotiations to begin. With him was his new Danish wife, Asta. She had been Asta Kofoed Hansen, the daughter of an Admiral in the Royal Danish Navy, when they were married in Ottawa that summer. It seemed that, in 1929, between engagement and marriage, the Porsild brothers had been very busy with personal business in the winter, spring, and summer since the reindeer investigation had ended.⁸

According to Erling, things had also developed in the reindeer business during the last three years at a quite astonishing rate. "At Elephant Point, which is the largest reindeer camp in Alaska, there is a very modern plant which will butcher and pack 15,000 head of reindeer before Xmas. There has been quite a boom lately when they found reindeer meat was very good – in fact much better than cat's meat for the sausage industry and everything is now turned into sausages. I suppose we will see a tremendous increase in the cat population of N. America." He told Malte that he had had a good visit with his old friend and local botanist Charles Thornton, "the inventor of the colour classification system, according to which all yellow 'flowers' belong to one family, the blue flowers go into another family and so forth" and had typical "botanical gossip" to pass on. "He has had a good visit from the late Fr. Enander and was very sorry to hear about his demise. Enander had got him interested in *Salix*, a genus he had hitherto neglected, and Mr. Thornton had a beautiful collection of *Salix*, made this summer for Enander."⁹

Malte had run into Enander in Montreal before leaving for Hudson Bay the previous summer. He told Selim Birger in Stockholm that the man was certainly a peculiar duck.

He was then making all kinds of more or less impossible plans to visit outlying districts of this continent... When death reached him in Victoria, British Columbia, he was, according to newspapers, on his way to California from where he intended to travel to Asia. How he met death is, as far as I know, not quite clear yet, except that he died from gas poisoning. He was, as you know, exceedingly economical and had the habit of stopping at the very cheapest and consequently very poorest hotels. He apparently did so in Victoria, but how he could hunt up a hotel without electric lights in that city is a thing that I myself hardly could have done, although I have been there a dozen times. I wonder what is to become of the continuation of his *Salix* investigations.¹⁰

In Alaska, Erling was now a complete convert to a new mode of travel. "I have seen a good deal of the country from the air since I arrived here," he told Malte. "I don't look forward to future years of travelling with pack dogs over our Canadian niggerhead tundra. One sure can see a tremendous lot in this type of country from a plane."



Standing in front of survey plane, *L to R* Andrew Bahr, pilot F. Dorbandt, Mrs. Porsild, Alfred Lomen and Dan Crowley, Elephant Point, Alaska, 1929 (Photo: AEP, LAC, PA-101032)

Accustomed to making vegetation surveys from the hills above the tundra and barrens around the Mackenzie delta and Great Bear Lake, Erling soon saw that it was possible to recognize important forage cover with surprising accuracy from an altitude of 1,000–3,000 feet. He had already been on a reconnaissance flight to check the route that the Canadian reindeer herd would be taking. Against his advice, the route along the coast that he and his brother had covered in the winter of 1926–1927 had been discarded in favour of a shorter inland passage through the Brooks Range. The new route was chosen by Alfred Lomen and herd superintendent Daniel J. Crowley, who had both been placed in charge of company details of the Canadian drive. Ostensibly, the Brooks Range passage would avoid the danger of mix-ups with the native-owned herds of the north slope, but it is likely that the real reason was that they felt that it would cut down the distance involved by some five hundred miles.

Erling blamed the choice of route on Andrew Bahr, the veteran Lapp herder whom Finnie had earlier recommended to do the reindeer pasture investigation and who had recently been hired by the Lomens to lead the reindeer drive to Canada. “I had strongly advised against this plan,” Erling said, “because I feared that Andrew might run into difficulties in the timbered valleys of the south slope of the mountains where deep snow would make travelling slow and

where the deer might be lost in the timber. My recommended route, and the one I had carefully surveyed in the winter of 1926–1927, was along the west and north coast where, moreover, the drive at no time would be far from villages, wireless stations, and supply centres.”¹¹

Erling’s flight over the Brooks Range brought him rather more excitement than he had anticipated. He told Malte:

I had quite an interesting experience the other day when I returned from an airplane trip to the east, where I had accompanied the Lapp Andrew Bahr on a reconnaissance trip over the route by which the trek will be made. Flying at about 1,000 feet altitude the pilot spotted a monster grizzly bear with her cubs. They were following a reindeer herd on which they undoubtedly had been living all summer. The pilot who is an old war time flier at once got up the fighting spirit. He nose-dived till his wheels or the wings scratched the bears on the back then climbed up and nosed down again. The first attack threw the bears prostrate on the ground paralysed with fear, but when we did not actually land on them, they got up and started for the hills going almost as fast as we could follow. All the while they were looking back to keep an eye on us and occasionally turning somersaults over the niggerheads. It was extremely amusing although I don’t think the bears thought so. The pilot finally went quite amuck and most of the time I didn’t know what was up and what was down. Sometimes I saw the bear over my head and sometimes they were sliding down a perpendicular skyline. How long it lasted I don’t know but all of a sudden the pilot observed that he was nearly out of gas and in fact barely had enough to take us back to camp.

I am glad I got away from Nome. It is a wicked place. Since the mining activities closed down for the winter everybody has been engaged in making what they call ‘Bolchewick.’ It has a most peculiar effect and makes you feel like I did in the aeroplane when we were chasing the bears.... P.S. I haven’t had anything but ‘Bolchewick’ since I left Vancouver, so just imagine how I feel and here we haven’t even got Bolchewick.¹²

The selection of the Canadian reindeer herd began at the end of November, and it was soon obvious that the rosy period of friendly Palmer-Lomen-Porsild



Lomen Reindeer Corporation plant, Elephant Point, Alaska, 1929 (Photo: AEP, LAC, e010933894)

reindeer initiation was over as Erling drove a hard bargain for his government. It was also quickly obvious that he did not always agree with the leader of the drive. The Lomens had signed an agreement with Andrew Bahr on July 6 for \$5 a day from the time of leaving Seattle, Washington, until reaching Kotzebue, Alaska, after which time he would be paid \$250 a month until 3,000 or more reindeer were delivered to representatives of the Canadian Government or “until said enterprise or expedition shall be abandoned by the first party” (i.e., Lomen Reindeer Corporation). He was expected to devote his entire time, energy, and ability to properly arrange all details for the gathering, herding, driving, and making delivery of said reindeer and assume the entire responsibility of equipping said expedition for which all expenses would be paid by the company. From early to mid-December 1929, the Canadian deer were chosen by Erling under the handicap of snowstorms that daily scattered the herd. Bahr complained that, not only would the heavy snows make the drive difficult from the very beginning, but: “The man was very poticly [particular] to pick the deer. I had a hard time with him too.”¹³

It was true that Erling’s insistence that only the best and healthiest animals should be chosen would lead to problems for Bahr once the drive started because the high proportion of young healthy animals tended to make the herd

unruly and excitable. It was also true that there was a problem in the overall choice of a large group artificially composed of many individuals that had been separated from their accustomed units and grazing territory, so that, when a blizzard struck, or when the new pasture proved to be poor, part or all of the herd would attempt to stampede back to the range and herd unit with which they were familiar. Another problem that was not of Erling's making was the sheer size of the new Canadian herd, which might be easy to keep together in one place with suitable terrain and pasture but quite another to control while crossing a thousand miles or more of unfamiliar mountain, coastal plain, and delta.

Added to the problems with the herd itself was the fact that the man that the Lomens trusted implicitly to lead the drive would have difficulties controlling both the herd and the hired herdsmen, and, right from the start, there was a lack of trained personnel, dogs, and sled deer. Bahr had arrived at the camp in the Napaktolik Mountains too late to break in the fifty sled deer. The dogs had been trained only to handle sheep in the Midwest states. Most of the men were new hands. Thus the drive began on December 26 with Bahr having to say: "We are now just training: Training the herd, training dogs, and training men."

The drive began by heading for the Kobuk River and the mouth of one of its tributaries, the Hunt River. From there, the plan was to take the reindeer up the Hunt River, cross the Brooks Range divide, continue down the Colville River to the north coast and then travel east to the Mackenzie Delta. The company expected that the drive would be over within a year, but the route would be fraught with difficulties from beginning to end. There would be all the problems that the Porsilds had hoped the drive could avoid by choosing the coastal route. There would be the problem of crossing rivers and vertical rocky terrain as well as the formidable distance. There would be heavy snows and wolves and bears, as well as low brush and lack of suitable forage that would make it difficult for the movement of deer, supplies, and equipment. Once over the mountains, the route would not completely avoid mix-ups with the native herds because the drive would still have to pass by some of the native herds that the Porsilds had seen along the northeast coast. Lastly, there would be the final problem of moving the huge herd across the Mackenzie River delta for delivery on the east side.¹⁴

Once back in Ottawa, it would be hard for Erling to share Finnie's optimism about the chance of the reindeer arriving at the Mackenzie delta by the following spring as the company had prophesied. However, he was glad to see

that the drive was at last on its way, and he was satisfied that he had picked out the best possible animals to start the new Canadian herd. It was now necessary for him to plan, as stated in a later 1931 report, the establishment of “the first Government reindeer station, to be built on the East Branch of the Mackenzie Delta where buildings and corrals had to be ready to receive the reindeer.” Bob Porsild returned to Ottawa in January 1930, bringing the news of his engagement to Elly Rothe-Hanson as well as greetings from their father who was spending the winter in Denmark. Since Bob had worked in the construction business in Michigan and was still under contract for the reindeer project, he and Erling were soon deep in practical planning. Materials for the station were ordered to be shipped to Aklavik that summer, together with a nine-ton tug-boat, built in Vancouver to their specifications. Bob was to leave for Aklavik early in spring to supervise the building of the station, construction of corrals, driving fences, etc. To help with this he was authorized to engage local “carpenters” in the Delta.¹⁵

Erling, meanwhile, continued to work on the plant collections in the Herbarium where Malte was expecting a visitor. Ostenfeld had written on January 10: “Porsild, the father, is here in Copenhagen this winter, he is coming to you later on. He has a paper on some Greenland antennarias ready for printing and he has asked me to assist him in getting it published.” Ostenfeld “had the idea” that he would act as co-author and needed Malte’s permission to publish the new Arctic antennarias he had described that summer, as well as looking at them again. He added another idea. “What would you say if I (personally) get some assistance from Porsild for our Flora; it would help me a good deal and spare my time.”¹⁶

Malte agreed with his proposition regarding the antennarias but his letter of February 1 carefully avoided the subject of including Morten Porsild’s assistance with the work of the Arctic Flora. As the winter progressed, he was to write about *Antennaria* material and the exciting news that he had been authorized to attend the International Botanical Congress in Cambridge, England, and spend three months in Europe, of which at least two weeks could be used for study at the herbarium in Copenhagen, but he made no mention of “father Porsild” until March 20 when he added a postscript to his latest letter: “When is Porsild coming?”¹⁷

It was March 26 before he got his answer from Copenhagen, confirming his private fears that Morten Porsild’s characteristic “assistance” with the Flora might be more of a hindrance than a help. Although Ostenfeld was pleased



Downed plane on which Bob Porsild was one of the passengers, Fort Norman, NWT, 1930
(Photo: R. T. Porsild, LAC, PA-101090)

that he and Malte would meet in Cambridge that summer, and welcomed the idea of their working together on the *Flora* in Copenhagen as long as possible, he warned: “Porsild is going to leave us now for Canada, and you will find him full of interest and critic as usual and also full of time to have a long talk, not treating absent persons too amiably. He has assisted me to some degree in making descriptions of Primulaceae and Gentianaceae for our flora, but he wishes to take much more into the flora than we intend. Especially with regard to the Alaska he goes as far as to the Bering Islands and nearly to the south coast. Towards east he takes Labrador.” It seemed that, as usual, Morten Porsild was pushing to promote his sons’ interests, and Malte would be in for a painful spring. The last thing that he and Ostenfeld needed, between overwork and ill health, was to enlarge the *Flora* of Arctic Canada.¹⁸

Things were also not going very well with the reindeer drive in Alaska that March. Bahr was already having troubles with his men, and by March 22 the herd had reached only as far as the mouth of the Hunt River where it would have to remain for the fawning season. Fifteen hundred fawns were delivered. The Lomen company obviously considered that these were in excess of their delivery agreement, so a small herd of five hundred does and their fawns were driven back to Napaktolik.¹⁹

However, the Department of the Interior in Ottawa optimistically continued with their plans to receive the deer as expected the following year. As soon as the weather allowed, Bob Porsild left the capital to begin the reindeer station construction work. He was heading north in one of the two mail planes that now had a regular service to Aklavik when they hit blizzard conditions trying to land at Fort Norman. With not enough gas to turn back, the pilots of both planes attempted to land. One pilot landed without problems but Bob's plane came down about three miles from the regular landing area, breaking a tail and a landing ski, buckling both ends of the propeller, and damaging a wing. Pilots, mechanics, and passengers worked to get the plane mended and were able to take off soon after the storm ended.²⁰

Carrying on down to the delta, Bob chose a site for the new reindeer station near Kittigazuit, opposite Richards Island, where the water was deep enough for boats and the land high enough to avoid flooding. Happy to be working on practical details, he was soon hard at work. This time he could have an assistant and was able to hire a competent local man. He and Matthew Hatting cut the first logs in early spring and moved them down to the site. When they started construction, Bob had two priorities in mind and both were equally important to him. They needed to build a corral to receive the deer, and a house so that he and Elly would have a place to live when they got married.



CHAPTER TWENTY-ONE

FIELD REPORTS, 1930

In the summer of 1930, the fieldwork for the National Herbarium covered four main plant-collecting areas across the vast landscape of Canada. It would be the last summer in the Depression years when funds could be made available for the purpose of bringing in more material from the lands close to the treeline in the centre and west and from the Maritimes in the east, which were to be used for the first two Floras of Canada that had so far been proposed by Malte.

In the west, Hugh and Lucy Raup continued their work around Great Slave and Athabaska Lakes, with some discussion as to whether their forthcoming report should be incorporated with the records of the Porsild brothers and other past or future investigators. Looking east, a new man, Harrison Lewis, worked at collecting along the north shore of the Saint Lawrence, while Jacques Rousseau, a protégé of Frère Marie-Victorin in Montreal, was hired to take Watson's place in the Maritimes. Rousseau surveyed five areas in Nova Scotia until the end of July when most of his equipment and his entire collection of 1,000 sheets were lost in a fire at Musquodoboit Harbour, forcing him to collect in the same areas again for the rest of the season.¹

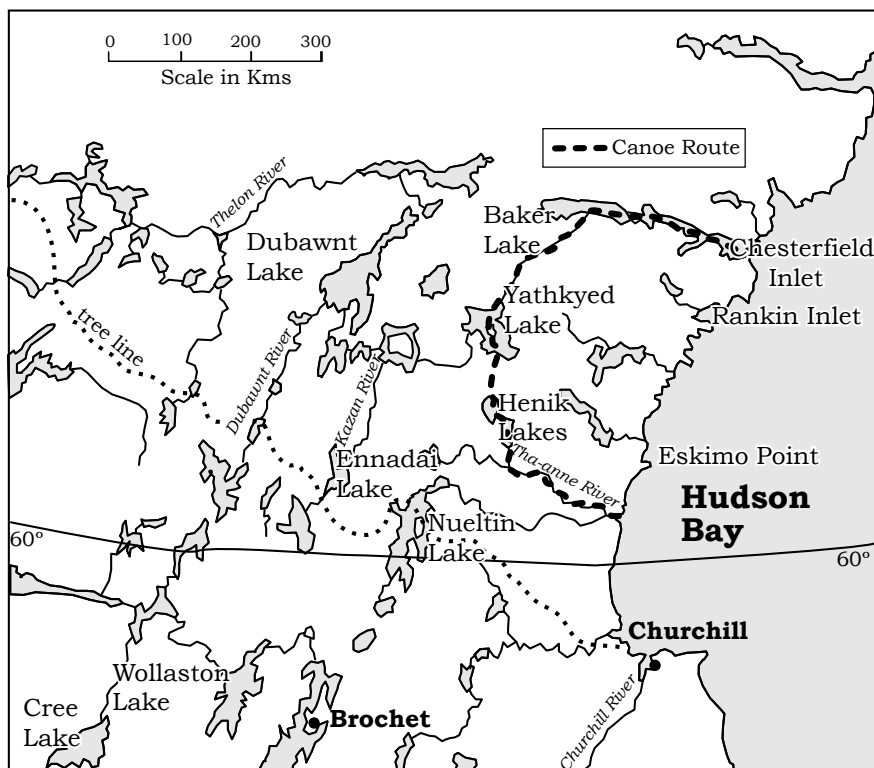
Malte had been intending to accompany Rousseau at the start of the collection period in Nova Scotia, but there was too much to be done in Ottawa before he left for England on July 30 to attend the International Botanical Congress in Cambridge. He remained in Europe until October 1, visiting Kew, Berlin, Copenhagen, and other Museum herbaria to study the material to be dealt with in the Flora of Arctic Canada. As well as spending a good deal of time with Ostenfeld in Denmark, he took a personal leave of absence for which he had applied in January and was given permission to take a month's leave with pay that summer. "I would very much appreciate the opportunity to visit my native

country, Sweden,” he said, “where my aged mother is still living and where I have many botanical friends.”²

Erling Porsild collected plants around Yathkyed and Baker Lakes in the Keewatin District that August, under the aegis of the North West Territories Branch of the Department of the Interior. Since his collections from this and the previous year were going to be identified and labelled by him “with the assistance of his father” and with the view of turning them over to the National Herbarium, it was felt in the Department of Mines, under which the Museum was placed, that possibly “an arrangement could be made with the North West Territories branch for the continuation of this work which would be contributing to another of the several of the regional Floras that Dr. Malte has in mind.” As this was readily agreed, on June 26 before he left for Europe, Malte arranged with Ralph Parsons at the Hudson’s Bay Company for the *Nascopie* to ship a small package of pressing material to Chesterfield Inlet to be delivered to Baker Lake by the middle of August.³

In the Department of the Interior, Finnie was pleased with the reports of the ongoing movement of the reindeer herd in Alaska and the preparations for the new receiving station on the East Branch of the Mackenzie River delta, but there had been much forward-looking discussion over the winter about the need to extend the pasture surveys east of the Coppermine River to Hudson Bay. The relatively unknown area of Keewatin was the part of his territory that most worried him, since it was there that he had had so many reports about starvation among the Eskimo people. Should the reindeer industry in Canada become as successful as it had been in Alaska, it was time to consider whether new experimental reindeer stations could be established across the whole northern part of the North-West Territories. It was logical, therefore, that in 1930 Erling was instructed to make a grazing survey of the central Keewatin District between Churchill and Chesterfield Inlet on the west side of Hudson Bay, west to the Kazan river.

The Keewatin District was as vast as the collecting areas covered by the Porsild brothers in 1927 and 1928, but since time was pressing and the work had to be completed in only one season, the Department had arranged for two Royal Canadian Air Force aeroplanes to be made available to them during the early part of the survey. Erling had used this pasture survey technique in Alaska, and it was later used successfully in Russia for the same purpose. Erling left for Churchill towards the end of June after choosing W. H. Bryenton, of The Pas, Manitoba, known to him as “a cheerful companion and a resourceful



Canoe routes taken by A. E. Porsild and R. Bryenton, Keewatin, NWT, 1930 (Cartography: Faith Carlson)

traveller of great experience in northern work,” to go with him. They spent nearly two weeks in the vicinity of Churchill while they waited for the lakes to open up in the interior. From there, they took the reconnaissance flights, covering the area from Churchill up the Tha-Anne River, east to Eskimo Point and Mistake Bay on the Hudson Bay coast, north to Rankin Inlet, then due west to Yathkyed Lake on the Kazan River. Several landings were made during the reconnaissance, and the flights were made at a fairly low altitude when flying conditions permitted.

In his talk to the Geographic Society in July 1936, entitled “The reindeer industry and the Canadian Eskimo,” Erling outlined in detail the results of his aerial survey, of which some would prove to be very disappointing.

As I had experienced on earlier flights in Alaska in 1929 it was possible from altitudes of 1,000 to 3,000 feet to recognize with surprising accuracy the more important plant formations as well as forage cover. The flights showed that, generally speaking, the area comprising the northern part of the west coast of Hudson Bay from Chesterfield south to Dawson Inlet, and inland as far west as the outlet of Baker Lake, is entirely unsuited to reindeer.

This area is a low peneplain having a maximum altitude of perhaps less than 1,000 feet. The rocks are pre-Cambrian and everywhere show abundance of glacial striation. Moraines and other forms of glacial deposits are rarely seen here. Viewed from an aeroplane, the almost total absence of soil and closed plant cover is most striking. Black rock lichens here and there lend a sombre tinge to the land, but in most places the grey or light-red colour of the gneiss and granite is dominant. North of this area the narrow fjord of Chesterfield Inlet, which is continued by Baker Lake, penetrates 200 miles into the heart of the 'Barren Grounds.' The inlet is navigable by sea-going vessels to the very head of Baker Lake.

South of Dawson Inlet the character of the country changes. The pre-Cambrian rocks are well covered by a thick mantle of glacial till, and but here and there are rock exposures seen. The country rises from the low and shallow west coast of Hudson Bay in a series of almost level prairie-like, lake-filled plains to the height of land towards the Kazan river. Viewed from the air the most striking feature of this 100–150-mile wide coastal plain is the great abundance of lakes and the total absence of well-defined drainage systems. The waters from one lake merely spill over a rocky ledge into the next lake, and even from the air it is with the greatest difficulty that the rivers can be followed. With its countless lakes, which cover more than half the surface, the country strangely resembles a tidal flat which has just been exposed by the receding tide. No doubt owing to the variation in their flora of algae and diatoms, the waters of no two of these lakes are of the same colour. Some are almost black, but most are yellowish-brown, and some even milky white. In none of them are the waters clear and transparent to a depth of over a few feet.

The aerial surveys were completed by July 30. The RCAF planes returned to their base at Cormorant Lake, Manitoba, after dropping Erling and Bryenton with their canoe, equipment and supplies at the outlet of Yathkyed Lake. Their canoe had had to be carried by air so a type especially designed for this purpose was chosen for the expedition.

This canoe fits snugly against the underside of the fuselage of the aircraft. It is 18 feet long and fairly narrow, very low, and nearly flat-bottomed. It has a square stem and is built for a light outboard engine. With a minimum of freeboard it will carry a load of 800 lbs., and with a light-weight 1½-horsepower outboard engine will make from 5 to 6 miles per hour, according to load and weather.

Due to the square stern and the absence of a keel the canoe does not paddle well. A great improvement was made on this canoe by the fastening of strips of waterproofed canvas 2 feet wide to the gunwale of the canoe. The inside edge of this canvas was provided with brass eyelets, so that when loaded the canvas could be lashed over the load leaving an opening for each of the crew. With this arrangement the canoe was made much more seaworthy, and with as little as two to three inches of freeboard was comparatively safe even in fairly rough water.

The month of August was spent in making a ground survey of the land bordering Yathkyed Lake, Lower Kazan River, and Baker Lake, territory previously covered by J. B. Tyrrell in 1894 and the Fifth Thule Expedition in 1921-24. A few white travellers, mostly officials of the RCMP, Department of the Interior, or trading companies, had traversed the territory over the winter. Yet, despite these efforts, Erling felt that "our knowledge of that country still remains fragmentary."

"Yathkyed Lake, also known by its Eskimo name Hikoligjuaq (which means 'large, ice-filled') is approximately 53 miles long with a maximum width of 22 miles near its north-west end," Erling said. He determined its elevation to be about 500 feet above sea level. Although they took no soundings in the middle of the lake, it appeared nowhere to be deeper than fifty feet.

A large island of granite cut by numerous dykes of diabase almost separates the south-eastern arm from the main body of the lake. Large numbers of small islands, some rocky and some mere heaps of

boulders, are seen everywhere in the lake. Some of the boulder islands are annular in outline, with a truncate, crater-like top. These, as well as numerous reefs and boulder walls, which in many places form the shore-line of this and other lakes on the Kazan are formed of angular boulders in which small pebbles and sand are entirely absent, and no doubt have been pushed up from the shallow lake bottom by lateral pressure....

The mechanics of this pressure are not clearly understood, but it is well known by all travellers that pressure ridges occur in all large northern lakes in certain places against the shore, or between two opposite points in the lake where early in the winter a fissure will be formed. This fissure or lead expands and contracts with changing temperature. Upon contracting the ice formed in the lead will be crushed, and at the end of the winter a pressure ridge, often five to ten feet high, is formed. Pressure ridges are formed in the same place each winter. The boulder walls' shores in Yathkyed Lake are generally 10 to 30 feet high. The side facing the lake is always entirely devoid of lichens or moss, while the inside of the wall is well covered by these plants. Disturbances in the walls are frequent and may easily be noted by the orientation of the lichen-covered face of the boulders on the inside wall.

The Kazan River enters Yathkyed Lake on the west side and flows through to the outlet on the north side through a broad channel which almost immediately opens into another lake bordered by low, grassy meadows. Past that, Erling and Bryenton found the river became narrow and swift with numerous rapids, some of which they could not navigate. The river entered another lake, twelve miles long by three to five miles wide, before passing through a range of low but very rugged granite hills at the north end. Further north of the range, the river bent sharply east and entered a long, narrow lake, thirty miles long and no more than a quarter of a mile to two miles wide, bordered on both sides by low, rocky hills about 100–200 feet high.

The only tributary of fair size enters the Kazan from the west at the head of the lake. "A short distance north of the outlet of this lake, the river drops about 30 feet through a long, cascade-like rapid," Erling reported. "Below the rapid it continues for 12 miles, and then through a series of rapids the channel contracts abruptly, and through three channels, formed by one large and one

small rocky island, the river drops over the Kazan Falls into a narrow canyon between perpendicular walls from 50 to 75 feet in height.”

There was an easy portage around the falls, about three quarters of a mile down a winding stairway formed by the erosion of a soft vein of pegmatite, and they followed a “native,” whom they met at the top, to the “surging maelstrom at the foot. In a deep and clear pool he showed us where the natives spear salmon trout. On the bottom of the pool we saw several of these large and beautiful fish, that ascend the Kazan from the sea as far as the falls, but according to our native informant are never taken above the falls.”

Below the falls the river continues its turbulent course for about a mile through the canyon before it emerges into a broad and shallow valley and winds its way between the gravelly banks towards Baker Lake. Erling estimated that the total drop from the head of the rapid above the falls to the foot of the canyon was at least a hundred feet. He said that the current had been swift everywhere between the lakes along the Kazan, ranging from four to eight miles an hour. Apart from the portage around the Kazan Falls, they had descended all fifteen rapids encountered, of which “all but two could be navigated by lowering the canoe at the end of a line.”

“A short distance below the fall the Archean rocks are overlain by a soft, bright vermilion sandstone,” Erling said. “From a hill 600 feet high a short distance east of the river, Sugar Loaf Mountain on the south shore of Baker Lake was visible. The slopes of the first-mentioned hill as well as the very crest showed series of raised shore-lines formed of boulders similar to the boulder reefs observed on Yathkyed Lake. [Along] the last 20 or 30 miles before entering Baker Lake the banks of the Kazan are formed of blue boulder clay rich in marine shells.”

As well as plant collecting at Baker Lake, true to form, Erling climbed “the very conspicuous and isolated Sugar Loaf Mountain” on the south shore, from which “one commands an excellent view of the eastern portion of Baker Lake and the country far to the south. On a clear day the buildings at Baker Lake post and the mouth and lower courses of the Doobaunt River are clearly visible.” He argued with both Tyrell and Birket-Smith, who had given elevation readings of 1,200 and 360 feet respectively, by giving his reading as 600 feet.⁴

As he had done on his earlier investigations, he made notes of physiographic interest and collections of birds, animals, and plants that he felt added to the knowledge of the country. He found the flora strikingly young and uniform, composed mainly of plants adapted to drought in summer and lack of



A. E. Porsild giving out emergency rations, Kazan River, Keewatin, NWT, 1930 (Photo: R. Bryenton, LAC, PA-101018)

snow cover in winter. Many years later, he was to comment to Professor William Hobbs in the Department of Geology at the University of Michigan, that it was a wonderful place for a Pleistocene geologist because nearly all the hills showed beautiful terracing that would “provide easy means of checking problems of isostasy.”⁵

Somewhere on the Barrenlands between Yathkyed Lake and Chesterfield Inlet, notwithstanding the meeting with the “native” at Kazan Falls where large fish were available, for the first time in his extensive surveys, Erling finally encountered starving Eskimo people. All the people that he had met and befriended along the Arctic coast, from Cape Beaufort east to Atkinson Point, had had times of deprivation, but for the most part they had done well off the country in one way or another. Fish was abundant even if the caribou had failed. The contrast in the Keewatin District was striking and desperate. Whenever and wherever he could, Erling handed out relief rations, but having seen the need firsthand it was doubly hard for him to look around at the desolate land and be forced to admit that, although most of the available pasturage could be utilized by migrating caribou, it was unsuited for year-round maintenance of reindeer because it lacked the luxuriant lichen heath and sedge tussock tundra of his earlier investigations. It seems ironic that at the very time that more than three

thousand newly purchased reindeer “for the relief of the starving Eskimos” were on their way across Alaska, it should be discovered that there could be no way that the hoped-for reindeer industry could possibly spread into the areas of greatest need, due to lack of suitable forage.⁶

Erling and Bryenton returned on the S.S. *Beothic* on her annual inspection tour of the Eastern Arctic, leaving from Chesterfield Inlet on September 13 and making a survey of Coats Island en route east. Back in Ottawa, Erling was expecting to spend the winter working hard in the herbarium on all the botanical collections made in recent years. Finnie would not be happy about the results of the Keewatin investigation, nor with the news of the reindeer drive that reached the Department in bits and pieces with little good to report as the herd continued to make its way painfully across the Brooks Range in Alaska, suffering a miserable summer of “flies,” stampedes, and predation as it headed slowly for the Colville River.

There was, however, much happier news from Bob Porsild on the Mackenzie delta. He and Hatting had accomplished a great deal of work at the reindeer receiving station that summer, although he was no longer there in the middle of September. He was standing on the wharf at Aklavik when his fiancée arrived from Denmark on the *Distributor* on September 17.

According to her grand-daughter, Ellen Davignon, Elly Rothe-Hanson had been staying with Erling and Asta Porsild in their Rockcliffe Park home in Ottawa since her arrival in Canada, and she had been taking English lessons in readiness for her new life in the North. In other ways, however, she was well prepared for what lay ahead. She was twenty-seven years old, cheerful, fun-loving, and optimistic. As second oldest in a family of nine children whom she had helped to look after, she had been a housekeeper, governess, nurse, and stenographer before she left Denmark.⁷

Years after her arrival in Aklavik, Elly was to tell the *Yukon News* what she remembered of that amazing day. She said she was met by Bob and “the whole population of whites and Eskimos”:

I shook hands with everyone, and was told to invite them all to our wedding the following day. The invitation was gleefully accepted by all. The wedding took place in the small Anglican church with Rev. Bill Murray officiating. A tall mountie in full regalia took me up to the altar where Bob and his best man, Hans Hansen, another Dane, waited. We were duly declared man and wife. When we were in signing the

register, we heard the shout "Steamboat!" and when we came out, the church was empty. Bob quickly turned me over to the bridesmaid, a nurse from the hospital, and he and Hans also went down to the boat to see if the balance of our winter's supply had arrived and last but not least, the bottles of booze that each family was entitled to and which arrived on the last boat. All that was more exciting than a mere wedding though it was the first white one Aklavik had seen.

The owners of the only roadhouse, Mr. and Mrs. Kost, had arranged the wedding dinner for us; caribou roast with all the trimming and a wedding cake with icing so hard it took our combined efforts to cut through it. There were 30 white people and a very happy feast it was, with speeches and songs (Bob had been there a year and was very popular with all) and later, the 35 Eskimos were served, two settings, but there was plenty of food for all.

We all proceeded to an empty warehouse, its floor freshly painted. Three Eskimo fiddlers started the music and Bob and I danced the first waltz, then he disappeared to play host to our guests with the contents of some of his 12 bottles. The Eskimos were wonderful dancers, so light on their feet no matter how big and fat they were, and being a good dancer myself, I made many new friends that evening. They are a jolly people, always smiling and happy. The language barrier was no problem; smiles and nods were all that were necessary... At midnight we were invited to the wireless station for tea and huge ham sandwiches. It just hit the spot. Bob was available again and we danced till 4 a.m.

With happy promises to come back for Christmas, the newly-weds left Aklavik the next day in their station tugboat, towing a small barge with their supplies. They were accompanied by Hans and a young Eskimo boy, Donald, who was going to help at the reindeer station for the winter. As they travelled downriver, Elly was anxious about what she thought would be her new log-cabin home but Bob had worked hard to surprise her.

Two days later we arrived in the Mackenzie Delta, where our two-storey house, built high up on the bank, awaited its master and mistress. Bob carried me over the door step as custom demanded, and with a kiss, put me down to explore my new domain. The view from the windows was grand; water for miles and miles and the mountains

in the background. There were no trees, just some wind-blown willow bushes. There were no neighbours for 15 miles, no radio, no telephone. We were alone.

At this phase of the station construction, the Department provided their food supply, as ordered, via the Hudson's Bay Company. Elly was a good cook and she enjoyed the challenge of experimenting with all the canned food (butter, bacon, meat, vegetables, and condensed milk all came in cans) as well as eggs preserved in salt and boxes of dried ingredients such as onions, potatoes, flour, sugar, and Baker's chocolate, but she thought that fresh whitefish and the occasional ptarmigan made a welcome addition to their otherwise limited menu.⁸

Bob wrote to the Andersons on November 20 to tell them that he and his wife were now "safely tucked away" in their new home "far from the buzzing world" after their wedding on September 18. He was trying to collect bears for Anderson but regretted to say that not a single bear – black, brown, or grizzly – had been killed in the area that summer. "I have told everybody about the Museum's anxiety to secure specimens of grizzlies, so hope to get whatever may be killed here." He had had a very busy summer and was hardly through yet, but at least most of the outside work at the station had been finished. "The winter is well started, and in a few days I go to Aklavik by dogteam to bring our first winter mail in."⁹

What he neglected to tell Anderson was that, just three weeks after the wedding, he had nearly lost his new wife. Early in October, the group at the station, including Elly, had taken the boat seven miles down the delta to put it up for the winter. It was decided that Hans and Donald would take Elly back home by dogsled and then go back the next day for Bob, who would stay behind to tie up all the loose ends.

Elly told the ensuing tragic story simply:

Away we went, Hans behind, Donald ahead and me sitting like a queen in the sledge. The boys decided to take a short cut over the ice; the sledge broke through and Donald and the dogs drowned. Hans and I floundered around in the ice-cold water, trying to get our hands on solid ice. We finally succeeded and half crawling, half walking, freezing and crying, we made our way back to a white-faced and horrified Bob, who quickly got a fire going so we could get dry and warm. Next morning we walked back, only stopping for a lunch of canned sardines

which we carried under our shirts to thaw them. It was a sad little trio that trudged the long way home.

Elly was to show that she was not only very brave in the face of disaster, but she was made of fine pioneer stuff. “Before the ice closed the river, we carried water up the 70 foot cutbank using a yoke and two five-gallon cans hanging on hooks. It was usually Bob’s job but I took my turn too. My pails were only half full though, otherwise, as I explained, I would spill too much. Later when the snow came, and it was my task to fill the large water barrel which stood beside our big woodstove so it would melt, that was a thankless job because it seemed no matter how much snow I dumped, there never seemed to be much water.”

They used gasoline lamps to light the house after dark and Elly said that from November 15, when the sun disappeared, until January 19, when it came back, the lamps were in almost constant use.

At Christmas we went to Aklavik, as promised, with Hans’ dogteam, collected our sacks of mail which was a real treat since we hadn’t had any since September, and had a gay old time. Hans lost his heart to an Eskimo girl and stayed behind. We borrowed four dogs (the sledge was ours) and got safely home. The winter passed in peace and quietness; we had a gramophone and lots of records, many books, Bob’s guitar, and lots of letters to write. I learned how to make snowshoes, to make ammunition for the gun and to fire it. Once in a while we had visitors and we entertained them royally. They usually stayed overnight so we’d have a sing-song of sorts in the evening.

One group of Eskimo visitors took their borrowed dogs back for them, leaving them with eight pups to teach how to pull a sled. “Bob walked behind and I ran ahead, dangling a frozen white fish before them to make them run faster. Sometimes they weren’t hungry and didn’t respond but eventually, they learned their jobs.”

To feed the dogs and add variety to their meals, Bob shot ptarmigan – two per dog and two for themselves – with Elly’s assistance. “That was a total of 18 birds and it went like this: Bob went ahead and shot them, making sure that I noticed where they fell. Then I would pick them up and put them in a sack

which I carried over my shoulder. My steps got slower and slower; the load got heavier and heavier; I didn't even get any offer to carry them home for me. Why do women always carry the heaviest burden? I only ask."

Elly did not always put up with this male off-hand thoughtlessness meekly.

One afternoon I got offended at some trivial remark Bob had made, took my parka and went out. "I'm not going to stay with such a brute." I knew there was an empty cabin 12 miles away; that was my goal. It got darker, I didn't like it one bit and once when I turned around to see how far I'd gone, I saw the lights from the windows high up there in my home. That put an end to my attempted run-away. I went back, prepared to be forgiving but the monster hadn't even noticed I had left him. He was so engrossed in his book-keeping and was unaware of any wrong-doing on his part. It was several months before I told him the story.

After all she had gone through in her first few months in the Mackenzie delta, Elly Porsild's first year in the far north should have continued without any major trials. Winter passed and spring came without mishap, but as the days lengthened and their lives should have become easier, on June 3, at 7 a.m. on a grey and rainy morning, their beautiful first house, of which she and Bob were so proud, burned to the ground.

"It was a near disaster," Elly said, "as we lost everything and only had the clothes we had hastily donned. Bob got his face burned and his red hair singed when he tried, in vain, to get into the burning house to save something. But, as always, God looked after us as he always has. Some Eskimos came along who had food to spare and helped to get the boat out so we could get to Aklavik."

There was an urgent need for them to get to the hospital in Aklavik. Elly gave birth to their first child, a daughter named Betty, three weeks later.¹⁰



CHAPTER TWENTY-TWO

SAD NEWS AND SUMMER IN SCANDINAVIA

The new year of 1931 could not have started worse for Oscar Malte. In a letter dated January 19, he heard from the herbarium in Copenhagen that Ostenfeld had died on January 16 after a month's illness. "To all appearances he was improving rapidly but a blood-clot caused his weak heart to give out. His death is a great loss to all of us here and especially to our Museum which through him has become one of the centrals for the exploration of the arctic flora. He no doubt leaves a large material for the Flora Arctica, but I don't know anything about it. I would therefore like to ask if you know how far his work had proceeded and also to ask your advice as to what we should do."¹

Stunned, Malte sent an immediate cable to Mrs. Ostenfeld, followed by a letter on February 24 in which he offered his deepest sympathy to her and her daughter:

It was sad news, indeed, and I felt the shock the more as he apparently was steadily improving and in such excellent spirits when I left Copenhagen last fall. His death is a mighty blow to botany and especially to the Botanical Museum at Copenhagen.

Ever since I got Dr. Christensen's letter I have been worried about the fate of the Flora of Arctic Canada on which we were working so harmoniously. I am determined to go ahead with it, but the rate of progress will to some extent depend on what disposition you care to make of the ms. Carl left in addition to what he turned over to me when he was in Ottawa in 1929. Our Museum would be glad to have it and we feel disposed to offer you adequate compensation.²

The amount of the compensation could only be determined after Malte had been able to examine and appraise the documents, so he hoped that Mrs. Ostenfeld would send all her husband's notes and papers to him for valuation. As Ostenfeld had already been paid \$7,500 for his share of the Flora to date, when the remainder was examined it was valued at only \$600. Aware of all the delays in the project from both sides of the Atlantic, on December 5, Mrs. Ostenfeld sensibly asked to be paid at once instead of waiting until the Flora had been completed. Unfortunately, her payment could not be paid in advance under the terms of the agreement, and, as it turned out, it would never be paid because Malte would also die before the Flora could be ready for publication.³

Malte was still working on the Flora two years later when he wrote to Ostenfeld's widow for the last time on January 14, 1933. He said he had been making good progress but, as always, complained that it was "of necessity somewhat slow. I have found a surprisingly large number of inaccuracies in the arctic literature, with the result that practically every species has to be investigated very carefully. Such investigations of course take time and particularly so because in many instances I have to borrow authentic specimens from other places, e.g. from Greenland, Stockholm, Upsala." It is noteworthy that Malte no longer relied on Copenhagen for his "authentic specimens."⁴

He would have company in Ottawa in the winter of 1931 while Erling worked on his collections, having been given approval to study until such time as he was needed for the reindeer work. Travel, however, was a different matter. Still under contract with the Department of the Interior, Erling needed Malte's support to write to Finnie in March: "I fully concur with Mr. A. E. Porsild that, in order satisfactorily to work up the vast collections of botanical specimens made in the north of Canada by him and his brother, it will be necessary to consult the large herbaria and botanical libraries of Harvard University, Boston, and the U.S. National Herbarium, Washington."⁵

By the end of the winter, Erling had done a considerable amount of work on the classification but there was still much more to be completed. However, it was time to leave the botanical work and turn to the reindeer business again. As he had feared from what he had seen of the beginning of the drive and the route that would be taken, the herd would be very far from arriving on time at the new receiving station.

"New and perplexing problems were encountered, due to the depth of snow in the mountain valleys and the consequent difficulty of transporting the

supplies and equipment of the expedition,” he said in his speech to the Geographical Society in February 1936:

The vendors originally had planned to use reindeer steers only for hauling the supplies. So much time however was lost in breaking steers to harness and in the daily routine of harnessing the fifty sledge deer required to haul the equipment that this plan was soon abandoned. An attempt was made to use aeroplanes for placing advance caches of supplies along the route of travel, but the hazard of flying across the but partly mapped Brooks Range during the dark period of the year, coupled with the excessive cost, put great obstacles in the way of carrying out this plan. Eventually the time-honoured dog-team transport solved the problem. For a time fifteen dog-teams were employed for relaying supplies across the divide to the Etivluk river, a tributary of the Colville river.

By June 1931, he said, “the ‘Reindeer Drive’ which started from the head of Kotzebue Sound, Alaska, in December 1929, had been ‘on its way’ for 18 months... Such reports as we had received from the Lomen Company thus far, indicated that Andrew was making very slow progress indeed, and that he had not yet reached the north slope of Alaska. The Lomens, however, kept assuring us that all was well and that, as soon as Andrew was ‘out of the woods,’ rapid progress would be made.”⁶

In fact, the herd had reached the Colville flats on the north coast by the time of the second fawning, but with all the drive delays, the Lomens had begun to worry about what lay ahead at the Mackenzie Delta and already demonstrated their lack of faith in Erling Porsild by contacting Vilhjalmur Stefansson for his suggestions as to the best route for making the crossing. When he was unable to be helpful, they were forced to turn back to the Canadians for their assistance.⁷

Baldwin wrote to Finnie on May 7, suggesting that, “since the herd was so close to the Canadian border,” it might be advisable to send Erling “with three or four natives” to join the herd sometime in the summer to familiarize themselves with the deer and their summer handling, and to furnish Bahr with details and maps of the best route for crossing the delta. In fact, the herd was a long way from the Canadian border, and there would be plenty of time for the Porsilds to meet Bahr at a much later date. A month later, at a meeting with Finnie and Erling, Baldwin was persuaded to send word to the Lomens to do their

best to “enthuse Andrew with the idea that he is near the end of the drive, that guides and assistants and the Porsilds will meet him at the Canadian Line and help him through to his destination.”⁸

Erling would not, in any case, be in a position to join the herd at that point in time. On June 13, he left Ottawa on the train for Quebec City, where he boarded the S.S. *Empress of France*, bound for Europe. As he explained in his journal dated June to October, 1931:

Soon after the contract for delivery of the reindeer had been signed, I had made plans for obtaining experienced Lapp reindeer herders from Lapland who were to train the young Eskimo in the art of reindeer handling. I had been in correspondence with several people in Norway and Sweden who were well informed about reindeer, among them one Isaac Hatta, a veteran reindeer Lapp who had spent many years in Alaska where I had met him in 1926. He had since ‘retired’ and returned to his native town of Kautokeino in Norwegian Lapland. I knew Hatta would be a valuable man in making contacts with young reindeer in the Kautokeino district and had already received encouraging reports from him.

Meanwhile several other plans had been suggested to the Canadian Government by well-meaning ‘promoters’ in Canada, United States, and elsewhere. One was a Mr. Grimley in Norway who in some way was connected with a Norwegian outfit said to own reindeer in the mountains of southern Norway. This outfit at one time had offered to supply reindeer to the Canadian Government and, when this was declined, was now anxious to supply experienced herders to train our Eskimo... Happily, the Department had given me a very free hand in making my own decisions and selections and I was confident that I would be able to obtain impartial advice through several of my connections in Denmark, Sweden, and Norway.

In Copenhagen on June 24, Erling planned to consult several people that he knew were well informed about Lapps and reindeer, among them Professor and Mrs. Godmund Hatt, Knud Rasmussen, and the Rev. H. Ostermann. Rasmussen was out of town, but Erling was able to arrange a meeting on June 26 with the Rev. Ostermann who had recently returned from Lapland. He at once put Erling in touch with his good friend the Rt. Rev. Domprost Nissen of Tromsø,

a retired inspector of the reindeer industry in Troms Fylke, who perhaps knew “every reindeer Lapp in Norway and Sweden” as he was a member of the Permanent Norwegian-Swedish and Finnish Reindeer Committee. Erling said they had a three-hour interview during which he “got much valuable information.”

In company with his younger brother Sten, who was just finishing school in Denmark, Erling took the night train to Oslo where he contacted the British Minister’s office and the Canadian Trade Commission on June 27 with regard to obtaining a permit to engage and expatriate Norwegian Lapps. The Trade Commissioner was of the opinion that it was prohibited to induce any Norwegian subject to emigrate to a foreign country. He spoke very highly of the representative of the Canadian National Railway, Mr. O. B. Grimley, who he said had already taken the matter up with the Norwegian authorities.

Accompanied by an officer from the Trade Commission, Erling called on Grimley but he felt it was largely a waste of time. As he had suspected, the Canadian Government contact was chiefly interested in providing transportation for “our Lapp herders” from Halifax to the end of steel (since the C.N.R. had no ocean transport between Europe and Canada), and the Lapps that he particularly recommended as herders were not Lapps but Norwegians, located far from Oslo, who had been unsuccessful in establishing a profitable industry in the mountains of southern Norway.

He and Sten took the train to Stockholm that night. The next morning, he contacted Lappologist Ossian Elgström, an old friend who had an intimate knowledge of the Lapps and their reindeer industry. After their discussion over lunch, he went to the Riksmuseum to meet the Director of the National Herbarium, Dr. Samuelsson, and was told that Dr. Floderus, “the world specialist on *Salix*” was anxious to meet him. He had dinner that night with Floderus, had “a most interesting talk,” then left Stockholm again on the night train bound for Narvik.

After a day and another night on board, the train stopped for half an hour at 6 a.m. on July 1 at Kiruna, the centre for the Swedish iron mines situated north of the Arctic Circle. The ore was taken from huge mountain terraces, crushed, and shipped to Narvik over more than a thousand kilometres of electric rail. Erling and Sten found themselves in a model town created by the Swedish iron king, Dr. Hjalmar Sundohm, and were surprised to see a well-built depot with a small adjoining park that contained “beautiful hedges and fair lawns and fine flower beds with geranium, begonias, tulips, etc.” They saw few conifers, but

tall white birch trees, *Betula odorata*, had been planted everywhere along the streets of the town.

They ended their train journey at Narvik at 11:03 on July 1. After a hasty lunch, they crossed the fjord by ferry and found that their motor car, arranged by Domprost Nissen, was waiting to meet them at Öfjord to take them on a 150-kilometre winding drive through magnificent mountain scenery. They saw few cars on the newly-completed macadam road, which was so narrow that in a few places one car had to stop if another was trying to pass from the other direction. Above the tree-line in places, they could see huge drifts of snow still remaining at altitudes of about 1,000 feet.

They arrived at Finseness just as their boat docked. They had reached a long stretch of coastline, over a thousand miles, between Bergen and Varanger Fjord at the Norwegian-Russian boundary east of North Cape, that was maintained by a fleet of small, fast passenger and mail boats heavily subsidized by the Norwegian government. The "Hurtigroute" service was excellent and was maintained throughout the year since no ice conditions were known along this coast. They reached Tromsö that night and went to the "Grand Hotel" where rooms had been arranged for them.

They were now further north than Point Barrow, Alaska, and the contrast between what Erling and his older brother had found there and what he and his younger brother were discovering in this high latitude of Norway was incredible. "Tromsö," Erling wrote, "is situated on a small island in lat. 70° and is a busy fishing town of over 10,000. It boasts a well built museum, 2 cinemas – one known as the 'World Theater,' an excellent harbour, a dry dock, high school and a fine large hospital, experimental farm, etc. No spruce or conifer grows here due to the damp, raw climate, but birch (*Betula odorata*), mountain ash (*Sorbus*) and several arboreous willows grow to fine sized trees, covering all lowland mountain sides and up to 6–800 feet above sea level."

They called on Domprost Nissen at 10 a.m. on July 2 and spent the day with him. Erling was highly impressed with him. "The Rt. Rev. Nissen is a man of most versatile ability. He is not only a man of great importance in the Church but is also a historian, a linguist well known in Science. Besides he holds 10 or 12 other offices and is naturally a very busy man. For 12 years he was 'Reininspektör' for Norway and perhaps knows more about reindeer and reindeer Lapps than any other Norwegian government official... Without his advice and support I should not have been able to conclude negotiations in Lapland so speedily, or to avoid long delays due to various government red tape."

At Domprost Nissen's suggestion, they talked over the telephone to "the Herredsfogded in Karasjok and Kautokeino who told us that there were several Lapps from Kautokeino that were suitable and also likely to be willing to go. After talking things over we again telephoned Kautokeino and arranged that Isaac Hatta should come down to Bosekop and meet me there."

Several parties had been active already in that part of the country during the last year trying to secure Lapps. The local agent of the North American line had had inquiries sent out to Karasjok so Erling went down to see if by any means he could trace the source. "He first said that his company had received a request from the Can. Government but by going over the files we found that the thing had been started from Grimley in Oslo who apparently had almost engaged people and given them to understand that he was authorized to make all arrangements." The Reverend told Erling that the family chosen by Grimley were reliable people but more settled and 'civilized' than the northern Lapps.

Erling indulged himself in Tromsø by buying a pair of hiking shoes and having a bath – "a luxury that I have not been able to get for some time. Tromsø boasts a fine public bath with tubs and steam bath as well and has a saltwater swimming pool about eight × 20 ft., which of course is the pride of the town. The Grand Hotel only has one bath tub and a bath must be ordered one day ahead. The public bath is fine but, however, has the drawback that it is open once a week only!"

The brothers returned to the Hurtigroute ferry on Friday, July 4, after Erling managed to wire Finnie of his progress, and travelled north to Oxford, a small fishing village with a factory manufacturing oil from waste products from the fisheries. They had to wait here for a local boat to continue so they took a short walk over a narrow mountain path. Commenting on the "rich assortment of smells" also produced by the plant, Erling noted: "The population is but a few hundred rather primitive looking fisher people. It was rather a surprise therefore when passing on the mountain path I surprised a young lady sitting on a rock, with a vanity case on her lap, in the act of painting her lips."

The boat stopped at every farm house as it went to the head of Langfjord and back. They arrived at Bosekop at 8 p.m. where they found Isaac Hatta waiting. They talked into the small hours of the night. "He thinks my best chance will be to go up to Kautokeino where there are some young Lapps that he thinks would likely go to Canada."

They had made arrangements with the mail carrier to take them by car for forty-six kilometres to the end of the motor road.

He was to come at two p.m. but when he did not show up we got hold of another chap who, however, was unable to go till 20 o'clock. Still we have 24 hours daylight so it does not matter much when we go. Motored 7 km. to the next town Elvebakken, where Isaac has some business. He is going with me to Kautokeino and will, of course, be of great help in selecting the people.

At 20 the car came but now Isaac failed to show up. I had been out walking in the afternoon looking over the country and it turned out that Isaac being lonesome had got hold of a couple of bottles and was rather the worse for drink when we found him. Thought it best to get him out of town and loaded him on the car. The first 20 km. of the road is quite good but soon after commenced to get very narrow. Climbed to about 400 m. travelling near the snow limit for about 15 km. Then we dropped down into the valley of the Kautokeino River. Arrived at Solovopmi Fjeldshus, i.e. a Government roadhouse at about midnight. We had planned to walk the next ten km. cross country to the river where Isaac had a boat and then go 20 km. by lake and river to a village about half way to Kautokeino town. Isaac, however, was not in a condition to walk so I decided we had better stay at the roadhouse till next morning.

They set out on the ten-kilometre hike from the roadhouse the next morning and found the boat before noon, "a rather peculiar, very long and narrow Finnish river boat, abt. 25 feet long and 20 inches wide. This type of boat seems to be the only one in use in this country. Isaac also had an outboard motor."

The lake was long and narrow, enclosed between high, rocky, birch-covered banks. When they reached the foot of a long rapid below the village, they found two husky-looking Lapps waiting to take charge of the boat and pole it through the rapid while the Porsilds and Hatta walked the two kilometres to the village. Above the village there were about twenty kilometres of rather swift water with numerous rapids where it was again necessary to pole.

In a couple of places Isaac and I walked while the two Lapps poled the boat. We then came to a fall where it was necessary to portage the whole outfit half a kilometer. Above the falls is a narrow canyon through which the Lapps poled the boat while Isaac and I walked. At

the end of the 2 km. canyon we made coffee and here met the mail going down the river. One man was discharged here and returned to the village with the mail men.

We had then about 20 km. of swift water with many steep rapids, most of which we managed to pole using the line but twice. We then came to a long lake about 25 km. long and sent back the other man. We told him that if he would wait 3 or 4 hours the Kautokeino school teacher would be coming down on his way to Bosekop, but he answered "it is only 45 km. to the village so it would hardly be worth waiting" so he started back on foot.

Hatta had a large, fine house in Kautokeino village. They arrived at 3:30 a.m., had hearty meal, and went to bed. The house was a very well built, two-storied log cabin but Erling complained: "The windows are hermetically sealed and when the sun got on my side of the house nearly cooked me. Mrs. Isaac had been most considerate and provided me with a large heavy down quilt. It got stifling hot during the day with an occasional shower and distant thunder. Thermometer rose to 28–30° C."

The village consisted of several groups of houses, including farms, a church, and a school, and on July 8 Erling saw several people that Hatta considered suitable. "Two of these make a very favourable impression, and, I think, may want to go. One is 26 years old and has three children – two boys and a girl. The other is unmarried, but as Isaac remarked, 'we can fix that in half an hour, lots a females around this place!' There is another man below the village who might go. He is married and has one child – a girl of seven. These people all talk Norwegian, and I have no difficulty in talking to them."

The prospective herders hung around all the next day and "we did a lot of talking. Drew up a contract form setting out in simple language the work required and the conditions I offered them are \$40 per month and \$200 worth of grub per annum plus a bonus of 50 [cents] for each fawn marked at the spring round-up, the total to be divided in equal shares between the herders that have been permanently employed at the ranch."

Aslak Mikkelsen Tornensis signed the first contract on Friday, July 10. "He lives 20 km. down the river and wants to go home to get things ready to leave. Telephoned Doctor Lund in Bosekop, to find out if it was advisable to have him come here to make a medical examination of these people. He declared, however, that there was no need for such examination since there was

no contagious disease in the district and, what I was particularly glad to know, there is no venereal disease anywhere in Kautokeino district. Of course, I shall have to get them examined before leaving Göteborg [Gothenburg].”

Once the herders had been hired, Erling planned to have the families travel overland to Karasuando on the Swedish side, from where he thought they could go to Kiruna by car and south by train to Göteborg. “These people think they can be ready in about two week’s time.... Like the Alaskan Lapps, these folk take a long time to make up their minds and do an ungodly lot of talking.”

He went with Aslak on July 11 to the office of the “Lensmand,” the local Government official who, as Chief of Police, Notary, and “Lappfoged,” witnessed the signatures and affixed his seal to make the documents legal and official. The Lensmand was also empowered to issue passports but since there was no local photographer, Erling would have to take the necessary photographs and carry them to Tromsö to have the film developed and made into prints.

Mikkel Pulk and Mathis Hatta are both willing to sign now and our only difficulty is that Mathis hasn’t got a wife and I insist that he must have one. He has a girl alright but either she is not very keen on him or else she is merely pretending to be too bashful to declare herself willing to marry with so short notice. The whole thing is most amusing, except for the bridegroom-to-be who is constantly receiving advice from all the other girls. Isaac is acting as marriage counsellor and is having long talks with both parties, both singly and together. Mathis’ younger brother Isaac Hatta junior, also unmarried, told me today that if Mathis cannot get married, he will go to Canada in his place and get married right away. Perhaps this will make Mathis’s girl make up her mind.

Erling left with the mail on July 13 and got back from Tromsö with the passport photos on July 16. In his brief absence, things had indeed worked out as he expected. “Mathis’s and Inga’s wedding date had been set and preparations for it were already under way. In fact, knowing that there would be a wedding, I had in Tromsö bought a suitable wedding dress, not knowing precisely whether it was to be worn by Inga or Sofy. It would have made little difference. At any rate Inga was delighted when I showed it to her and told her that this was to be my wedding gift. For the wedding she would actually be dressed in her native

National costume, but for the party following the ceremony, would change into the fine one I had bought her.”

In the short time that was left, the three couples needed some time to prepare themselves for the long journey to far away Canada, to say good-bye to all their friends and relatives and to dispose of such property as could not be brought to Canada, including the few head of reindeer each couple owned. It was now agreed that Sten would remain behind as Erling’s representative. He was to accompany the party travelling from Kautokeino to the nearest railroad at Kiruna, about 180 miles south, by packhorse and small river boat. The trip would take a week, during which Sten was to pay the rent of the pack-horses and boats, and the cost of food and shelter en route. Isaac Hatta was hired as travel leader and manager, and, to make sure that there would be no last-minute backing out after Erling left, a contract was drawn up in which he undertook to “deliver” all the Lapps in Kiruna or forfeit his pay.

It was now left to Erling to travel south and make further necessary travel arrangements. From Tromsö he caught the fast coastal steamer to Narvik. “Stopping over one day in Kiruna I made arrangements to have the Lapps housed and fed upon arrival and even called at the principal local store where, according to the contract, I was to buy them suitable clothing and shoes for the travel by train to Gothenburg, for the trip across the Atlantic and from Halifax to Ottawa. It now only remained for me to arrange the ocean transportation with the Stockholm agent of the Swedish America Line and, in a long telegram to Ottawa, report that thus far my mission had been successful.”

This left nearly two weeks before he had to be back in Kiruna to meet the Lapp families. Some of this time was spent in Stockholm where almost daily he visited the National Herbarium in the Riksmuseum. He also made a side trip to Lund where he claimed to have received an interesting offer from the eminent Swedish botanist [Eric Hultén] who had been making a name for himself in the Kamchatka area.

According to the introduction to Erling’s 1931 trip journal, written as late as 1939 or after, he said:

I also made a visit to Lund to see Professor Hulten who then was planning a large work on the flora of Alaska and Yukon in the preparation of which he had offered me co-authorship. It was, however, clear to me that the reindeer business would leave me very little time and opportunity for writing during the next few years, and also that,

perhaps, Professor Hultén's principal motive in making this offer was that under the agreement he suggested, I was to turn over to him now the large collections of plants my brother and I had made in Alaska in 1926–27. However, I had already done a good deal of work on this material which I hoped to publish on myself.

It is a great pity that the original journal entries concerning this visit to Lund and Hultén's "offer of co-authorship" are not included in the final typed document. 1931 was an early date for Hultén to be contemplating "a large work on the flora of Alaska and Yukon" when he had as yet done no work on the Alaskan side of the Bering Strait. Also in 1931, Erling did not expect the reindeer business to extend for much more than another year. By the time the introduction was written, around eight or nine years later, Erling had published a work on the Alaskan flora over which he and Hultén were in serious disagreement, so it would appear that some of these remarks could have been written to justify a later position.

However the interview actually went, there was certainly no resulting agreement on a co-authored treatise on the Flora of Alaska and Yukon. Hultén would continue without him on his collections in the Aleutian Islands in 1932, leading to his interest in the Beringian corridor for the spread of Arctic and sub-Arctic flora across the continental division, and Erling would continue to work alone on his and Bob's collections whenever he had time after he returned to Ottawa. Meanwhile, his main priority now was to go back to Kiruna to meet the Lapp families, escort them to the ship at Gothenburg, and see them safely to and across Canada and up to the new reindeer station on the delta by the end of summer.⁹



CHAPTER TWENTY-THREE

DESTINATION REINDEER STATION¹

By the third week in August 1931, Erling Porsild was ready to start out from Ottawa to take a dozen people on the train heading west to Edmonton. From there, they would be travelling by various methods of transport going north towards the newly built Government reindeer station on the East Branch of the Mackenzie River delta. The group consisted of Erling, his wife Asta, and his daughter Edith who had come from Greenland to live with them, as well as the three Lapp reindeer herders – Aslak Mikkelsen Tornensis, Mikkel Pulk, and Mathis Hatta – and their wives and families. Of the four children travelling with their parents, only newlyweds Mathis and Inga Hatta had none.

The new permanent staff and family members would all need reasonable accommodation on arrival at the station, as Bob Porsild knew only too well at the receiving end of their journey. Down on the East Branch, he had been busy building shelters for over a year now, and there is no doubt that everything would have been ready for the main staff contingent if it had not been for the fire that had completely burned down the main house two months earlier. The disaster had not only slowed down the work and destroyed all of Bob and Elly's possessions and a lot of his equipment, but the happy event three weeks after the fire meant that there was also a new baby's needs to be considered at the site. Housing for both Porsild families and the newcomers from Norway was now a pressing priority.

It was the beginning of July before the *Distributor* made her first appearance at Aklavik that season and there had been no lumber for Bob on board, which meant that no building supplies had been or could have been received until her second arrival on August 16. With Erling and the rest of the incoming staff due to arrive by September, Bob spent the rest of the summer frantically



Lapp families, *L to R*: Mikkel Pulk, Nels Pulk (son), Isaac Pulk, Mathis Hatta, Inga Hatta, Anna Pulk (baby Ellen not shown on bottom of photo), Aslak Tornensis, Sussanna Tornensis, Anna Sussanna Tornensis, Ottawa, August 1931 (Photo: AEP, LAC, PA-100690)

at work with two carpenters and two handymen, doing what he could to build, re-build, and prepare the station while having to make do without the new and replacement material that he desperately needed.

Another Government-ordered shipment that was expected to arrive in Aklavik before the end of the season also did not arrive. During the winter, Erling had made requisitions for food, fuel, and other supplies needed for the station during the first year. These goods, approximately sixteen tons of them, were supposed to have been shipped to Aklavik during the summer by the regular Mackenzie River boats, but after he left Ottawa, on his trip to Norway to hire the Lapland herders, he found that “the procurement of these supplies somehow had bogged down.” On July 1, at Narvik above the Arctic circle, he received a cablegram advising him that it would not be possible to obtain space on the last river boat for their supplies, which, he supposed, meant that they had not been ordered in time to reach the last boat.

I was thus faced with the alternative of wintering my Lapp reindeer herders at Fort Smith or somewhere else where supplies could be

obtained during the winter, or to have a river scow built at Ft. Smith in which to bring the Lapps and our 16 tons of supplies down the river, either under its own power or with the aid of some power boat. The latter scheme, although risky, would be feasible, provided a scow could be provided early enough to make the trip in late August or early September. I did not very much like the prospect of a late trip by scow with the possibility of freezing in somewhere on the river but, on the other hand, at least some of the supplies would be urgently needed at the new stations Bob was building; also I did not much like the idea of having the herders and their families spend the winter in idleness at Fort Smith. Accordingly I had requested that a 48-ft. river scow be built at Fort Smith.

The reindeer station group arrived at Edmonton at 10 p.m. on August 23. They were met at the train by officers of the Department of Immigration who helped to escort the Lapps to the "Immigration Hall" where they were comfortably housed for the next two nights. Meanwhile, the Porsild family retired to the MacDonald Hotel where Erling and the manager of the Hudson's Bay Company sat up until 2 a.m. going over the list and requisitions that had to be filled the next day.

"Had a busy day looking after the Lapps and trying to get the hundreds of odds and ends together that we need for next winter and spring," Erling said. "With the exception of a few things of less importance which couldn't be procured in the short time available, I think we managed to get most of the things on our list."

By train, barge, boat, and car, the party finally reached Fort Smith on August 30, but not before Captain Williscroft at Fort McMurray had informed Erling that "he would have me fined if not arrested for taking these people of mine down river without having a pilot's license. Told him to study his laws and regulations, but to save later explanations sent a wire to Finnie informing him of Capt. Williscroft's actions and a wire to Edmonton authorities in order to forestall later difficulties."

Erling had earlier telephoned the District Agent, a Mr. McDougal, who arranged for the Lapps to use an empty ranger's cabin on the Government lot in Fort Smith. After installing them for the night, Erling went down with McDougal to look at the scow, now nearing completion. He was horrified by what he saw. "It is made of green, native spruce with very few bolts, perhaps less

than 1 doz. Although I definitely had expressed my desire of having it made for outboard motors, if such were to be used – the stern of it was made just like an ordinary barge, leaving no place for the motors. At both ends twelve feet were taken up by a deck leaving no place for accommodation of passengers.”

After discussing things with McDougal, who was not sure whether changes could be made because the scow was on the whole as specified by the Department, Erling asked to have at least a few alterations made. “The fore and aft decks were to be taken out and in their place a built-up top 24 inches high and completely roofed over was to be constructed for accommodation of passengers and crew.” McDougal kindly let them have one of his men who was handy with tools and who at once started making the necessary alterations, assisted by the three Lapp herders.

Two home-made pumps had been furnished for the scow, not as stipulated in the contract by the builder and neither in working condition. A new factory-made cistern pump was now supplied by the District Agent office, also necessary tarpaulin, rope, etc. A more serious problem lay with the engines. The Department had supplied two seven-horsepower engines as requested, but they turned out to be short-shafted models for speed boats and were entirely unsuitable for use on a scow. From the Supervisor’s office they could get only two long-shafted engines with a total of 5½ horsepower, a poor substitute for the more powerful combination of 14 horsepower. They also “received from mining office a 19 foot canoe and four-horsepower Johnson motor and a number of other articles as arranged from Ottawa.”

To add to his frustrations, Erling now found that all their kitchenware, which was to be supplied from Marshall Wells Store in Edmonton, had not come.

Although my requisition had gone in about July 1st, the Purchasing Division had, in spite of my earnest request for having the stuff in Ft. Smith in plenty of time, had spent the time up to my return from Europe taking tenders and the order finally was placed by telegraph the day before I left Ottawa. All the other things, however, from the H. B. Co. and Ashdowns Hardware had been shipped. Tried to get the outfit at Ft. Smith but found all the stores were almost out of hardware at the time. Managed, however, to get some of the most essential partly second hand and at prices about ten times over what the same goods could have been bought for outside.

By now, everybody was warning them against proceeding under their own power to Aklavik with the scow at this time of the year without escort. After going over the boat and cargo carefully, Erling realized that, while the boat was large enough to carry the cargo, the sheer bulk of their supplies would make it difficult to find accommodation for thirteen people as well.

McDougal informed him that Northern Waterways were going down to Aklavik with a convoy of scows as soon as their manager, Mr. York, was back from a business trip. This company had made several propositions to the Department of the Interior earlier in the summer, including one to take the complete outfit down to the delta, including meals. When York returned, he agreed to tow them down on condition that they unloaded part of their cargo which he would carry separately. Erling thought the overall price was reasonable under the circumstances, subject to Departmental approval.

The convoy left Fort Smith at five a.m. on September 5, and it was not an easy trip. York's pilots frequently refused to continue because of adverse weather conditions. For the next two weeks, nearly every daily entry in Erling's journal read "Wind" until they reached Fort Norman on September 18. He saw a number of old friends in Norman but was sorry to miss Boland who had left for the lake the previous week. Further downriver, when they reached the rapid above Fort Good Hope where he and Bob had spent so much time with the stranded riverboat in 1928, they had to make two attempts to get downstream as it was very rough at the first try and knocked several boards loose in the bottom of their scow.

At Arctic Red River on September 22, Erling said: "York wanted us to stay here and get a tug boat from here on, but when I refused, decided to go on. Wanted to leave us in a poor and unprotected place below Separation, but again when I insisted agreed to leave us behind the first island below Separation if I would act as pilot. We landed here in a well sheltered spot at about ten p.m. after travelling about 170 miles."

They were all up at 4 a.m. and had everything unloaded before daylight. "York was so much in a hurry that we did not even have a chance of checking our stuff and merely had to content ourselves with a mere count of pieces. Not very satisfactory, but there was so little freight left on his boat that I could very quickly check up on what was left. York pulled out at once. While we were loading, his men saw the opportunity of swiping our four long poles, leaving us without a stick long enough to push away from the beach."

As they re-packed and loaded the scow with the five tons of their cargo that York's men had left on the beach, they found everything intact, but now a strong west wind sprang up.

We were ready to leave at eleven a.m. but waited one hour to see if the wind would increase. It was really too strong to travel with the power we had, but I was afraid the wind might swing around to north, which would be very bad for us since we had little shelter from that direction. I hoped to be able to get into the much smaller East Branch so we pulled out.

We soon found that the water got so rough that the four horsepower motor which I had had to rig up inside the boat in the well I had cut in the bottom was not enough to give us steerage so we merely drifted sidewise with the current, dodging the sandbars as best we could. Five miles above the East Branch we finally stranded on a rough stone beach. Riggged the motor on the 19 foot canoe and took the anchor out with a long rope and in this way managed to warp the scow away from the shore.

The wind calmed down a little in the evening. "A couple of Indians were camped about a mile above. When I passed I noticed they had a small, heavy, life boat which would be more suitable for towing than our canoe. Walked back and after considerable pow wow induced one young fellow who owned the boat to come down and give us a hand towing the scow. This we managed well enough and were soon safe in the East Branch." For their help, Erling paid the Indian and his helper 1½ gallons of gasoline, 50 pounds of flour, five pounds of sugar, three pounds of lard, and ½ pound of tobacco.

There was not much further to go now that they had reached the East Branch. They travelled until an hour after dark that night, making excellent speed with the large motor on the scow and the smaller one pushing in the canoe. The next day, they increased their speed materially by rigging both motors on the canoe and travelled from daylight till well after dark. They tied up below Oniah Channel on September 24.

Erling now began to scout for new building sites for the reindeer station. Ever since he had heard of the site Bob had chosen, he had wished that it was not so far down the delta. He thought of the Kittigazuit area as being suitable for the summer corral but it lacked shelter for the winter. He had been in Lapland

when the news reached him that the main building had been completely destroyed by fire. "I at once wired Bob suggesting the new camp be moved up river into the timber to some place ... at least 50 miles closer to Aklavik where the chief market from the reindeer herd will be found. Unfortunately this wire reached Bob so late that he claims no change could be made." From the scow, Erling studied the banks carefully. "Saw many fine building sites and a good deal of fine birch for wood." He also saw many thousands of ptarmigans, mostly flying south in huge flocks, and shot about a dozen from the boat.

He was up early on September 25, their last day on the scow before reaching the station, and climbed the high bank on the east side. "Stopped at the last timber about 15 miles above Tununek and again climbed the bank. Looked for building sites. Several were found which would do but not much level ground. Sufficient timber for cabins could be gotten here but in case we did move the station I believe our logs should be taken further up where long and straight building logs could be obtained more easily. Also got a couple of Xmas trees. Bad headwind all afternoon. Arrived at the camp, which is about nine miles above Kittigazuit at ten p.m."

The new station had been built on the top of a hill about 150 feet high on the north side of a small creek which would have been readily navigable for small boats except for a sandbar closing the entrance. At extremely high water, a scow drawing two feet of water could be brought into the creek but ordinarily a loaded scow had to be unloaded by wading out about fifty feet from the shore. On the cold and windy morning of September 26, the Lapps began to move some of their immediate belongings ashore while Bob's two carpenters started making beds and furniture for their new homes.

It could not have been a happy reunion between the brothers for Erling was in as "critic" a mood as his father had been with Ostenfeld in Copenhagen. He was to devote more than five pages of his journal to his complaints:

Instead of a cabin for each family as planned, and for which lumber had been sent to be used for roofs and floors while the walls were to be logs, [only] one cabin 36 × 12 feet, divided into three rooms each 11 × 12 feet had been built.... Bob had the two carpenters on hand, and some logs which were cut early this summer for two additional cabins, before the new building programme had been received. The cabins as planned by me were to be 16 × 18 ft., one for each family. The three room apartment house is very inadequate as it only leaves each family

a small room 11 × 12 ft., and has doors opening direct out even without a storm-shed or double door to break the wind. The logs used are small 4–6 inch stuff and of course couldn't be squared or even grooved. It will be very difficult to cork the walls well and I'm afraid they will be very cold in the winter...

Besides the above mentioned cabin for the Lapps, two frame buildings 18 × 24 ft. had been erected as per specifications, one for Bob and one for myself. The outside and most of the inside were finished but no painting had been done except one coat on the outside of both buildings. A two room cabin about 28 × 12 ft. and a small tool shop 10 × 10 ft. remained from last year. One room in the larger cabin had been occupied by Bob and his family since the fire while the other room had served as bunk house for the two carpenters and two handymen who had worked here all summer. As there are no storage facilities or warehouse I think the large cabin will have to be made into a warehouse.

Poor Elly. Instead of her beautiful house with all her lovely possessions, happily alone with Bob in their peaceful isolation, after the fire she had had to move into one cramped room with a harassed husband and new baby and proceed to cook for themselves and the work gang all summer. One of the hired men had left before the large group arrived, but now, with both Porsild families plus the two carpenters and one handyman, she would be cooking for eight people. At least Erling was appreciative that this was "Quite a job in a small 10 × 11 foot cabin with a small camp stove."

And poor Bob. While they waited for the tide to rise in order to bring the scow close to the shore, he and Erling went down to the corral, about a mile and a half from the camp while Erling continued his litany of complaints. They took the tugboat, the "Ram," that Bob designed and had built specially for the station at Vancouver, BC. Said Erling: "This boat is small, but very sturdy and heavy and looked like a good boat for our purpose, i.e., pushing scows, etc. It seems to me it is unnecessarily heavy weighing 8 tons although it is but 30 ft. long. It is equipped with a 25 horsepower Frisco Standard 2-cylinder motor, which is a heavy duty marine type but it is entirely without accommodation for crew and passengers."

The corral had not yet been built but sufficient poles for the main corral and the chute had been hauled up from the beach, also about five thousand feet of rough lumber for corral sections. The holes for the main corral, which was

circular and a hundred and fifty feet in diameter, had been dug and the poles had been carried to their places. Erling was satisfied that all that remained to be done was to put the poles in place, which would not take long. The ground had not thawed more than eighteen inches on the average, although the site was fairly dry and well drained. The chute and a number of holding pens would need to be built and two wing fences leading into the corral. Since the corral was situated about three hundred yards from the river and about the same from a two-and-a-half-mile lake, it would be necessary to put up a fence between the corral and the lake.

If Bob had Erling's grudging approval of the corral, the station site was a different story. Erling said:

As far as I have been able to gather, this proximity [to the corral] has been a determining factor in building the main camp here. In my opinion, however, this proximity is of no importance since the corral will be used only once or twice a year and then just for a few days. And when in use most likely – at least in the summer, those working in the corral at the roundups will most likely use tents rather than walk back and forth several times a day. As the present camp site is at least 15–20 miles from the winter range proper, where the herd will be the greater part of the year; as there is no shelter whatever; as water, firewood and all supplies have to be hauled up a steep hill 100–150 ft., I think the site chosen is most unsuitable for a permanent, central camp.

It is true that there are few suitable building sites on the East Branch, below Tununek, but I cannot on the other hand see why the winter camp should not be far above Tununek, right in the timber where not only building material can be obtained but where there is good shelter and plenty of firewood, and a large choice of suitable building sites.

There is, at least now, plenty of driftwood within a distance of 3–4 miles of the present camp. But not only does it involve much more work to gather this than if it could be cut right in one place and loaded on a scow [but] burning driftwood requires at least twice the amount of wood and, what is worse, the annual supply will each year have to be hauled further and further since in most years the normal quantity stranded naturally will not be enough for a camp of this size.

With all its disadvantages, Erling concluded that it was most unfortunate that Bob had not relocated the camp after the fire. He said: "I am perfectly satisfied the present site is unsuitable and that the camp will have to be moved sooner or later."

When the brothers returned from the corral, the water was high in the channel below the station and they were able, after a good deal of trouble, to haul the fully loaded scow over the sandbar into the creek. The next day was spent in unloading most of the cargo. The carpenters worked on the building while everyone else carried and unloaded freight. They carried about two tons of it to the top of the hill and put it under a tarpaulin while the rest was left below on a small sandspit. The following day, they used a team of dogs with a toboggan to help haul the last of the cargo up the hill "but even this is almost killing on the 100 ft. lift."

Bob left for Aklavik on September 29, taking his three helpers with him as they were all under contract to be brought back to their camps not later than October 1. The last summer mail was also due on that date, and it seems likely that Bob was happy to get away for a break.

After the working gang left, there was more time for Elly to spend with the baby, for the older children to explore the site and the newly arrived wives to settle themselves as best they could in their unfamiliar surroundings, while Erling took the men down to the corral and worked all day putting up fence posts. They dug holes for the wire fence from the main corral to the lake and carried green poles from the riverbank across the tundra. As they were thirty poles short for the wire fence, they had to bring them from the camp the next day, but the wire could not be stretched until the poles were securely frozen in their holes.

On the morning of October 1, the weather was fine and Erling decided to take Aslak and Mathis on a fishing trip, travelling in the big canoe and towing the five-ton flat boat. "We have no fresh fish and I wished to make an attempt of getting some although it is really too late as it may turn cold at any time. The fishing place is 4 miles past Kittigazuit on the coast, in all twelve miles from here by water." They reached the fish place with no difficulty and pitched their tent on the low sand spit, but before the tent was even up, the weather changed and it started to blow and snow from the northwest. They spent an uncomfortable night on the beach before deciding to leave in a howling blizzard and "beastly cold weather" the next day as fishing, of course, was out of the question. They managed to return to Kittigazuit where they were told that fishing

had been good for the last four days. "I wish we could have been down a few days earlier," Erling said.

When the weather turned fair, they made one last try at the fish camp. Leaving the two Lapps to set the nets and load the fish in the flat boat, Erling returned to the station for two days. Ice had already formed along the shore of the river when he and Mikkel worked at the corral digging holes and putting in poles for the chute and holding pens, placing altogether about fifty poles. Mikkel cleaned out one of the two river fishnets that they barely managed to salvage from under a mass of slush ice.

Erling was up early on October 6 as he started for the coast, with both outboard motors on the large canoe, to see how the two fishermen were getting on.

Had but little difficulty with ice until I reached Kittigazuit where I had to break ice for about one mile to get in. Lots of drifting new ice outside. Landed for a few minutes. The small river was completely frozen and the people there doubted if I would be able to reach the fishery going outside the island. It took me nearly two hours but the ice was getting more slack when an offshore wind came up. Reached the fishery and found the flat boat frozen in in the entrance to the river. The Lapps apparently had completely given up all hope. No water could be seen yesterday. They had lost two nets but managed to salvage three. Fortunately the long 90-yard net they had not set. They had caught only a few fish and, of course, were very much worried.

Erling too was worried that the river would freeze up at any minute. They managed to get the boat out and started back, pushing against the wind through slush ice, but at Kittigazuit he realized they would have to leave it below the Hudson's Bay post, securely anchored on the shelf ice where he felt it was safe for the time being.

They had no problem going back except that ice formed on the sides of the canoe. There was no sign of Bob until the next day when he arrived with the mail from the last plane, "however, not the one scheduled to arrive October first." He had found lots of snow at Aklavik and the river was partly frozen when he pulled out.

This time it was Bob's turn to complain that it was very inconvenient for the flat boat to be left at Kittigazuit, and he wanted it moved to a deep place about a quarter of a mile below the station. To get the boat out, they really

needed a winch but would have to settle for three sets of double blocks and tackle. "Bob claims this can be done," Erling said,

I do not like the scheme at all but, not knowing the local conditions, I cannot properly judge the pros and cons of the plan. Anyway, we [went] down in the p.m., put in the necessary 'dead men' and with a good deal of difficulty managed to haul the boat, which weighs eight tons, out of the water using the three sets of blocks and tackle all connected up – the large set pulling directly, the medium one pulling on this, and the smallest pulling on the medium. In this way we were able to move the boat at a rate of about 4 ft. an hour, changing blocks continuously and wearing blisters in our hands from pulling on the wet, frozen, sandy ropes.

Winter was closing in on the delta, although there was very little snow as yet. On October 9, they tore down the two cabins that they had built on the scow at Fort Smith in order to use the lumber to make three storm sheds for the Lapp cabin. While two of the Lapps worked at building the 8 × 6 feet sheds, Bob went fishing with the other one and set three nets on some lakes a few miles from camp. He had caught more than five hundred large whitefish in one of these lakes the previous fall. Erling walked about six miles cross country on Sunday, September 11, and looked over the "wood situation" on his way back. "There is quite a lot of driftwood along this beach and the best of it has been marked so it is easy to find after the first snow comes. Unfortunately, however, it has to be sawn up in suitable lengths and hauled back to camp." Again he saw "thousands and thousands of ptarmigans on the large willow island, but as usual when they occur in large flock, were very 'wild' and quite unapproachable."

The Lapps needed hay for their "komags" (shoes) which had to have a generous filling before they could be used. Also, they wanted hay for their beds, so they went across the river in the big canoe on October 12 taking scythes and rakes. They succeeded in cutting quite a supply on the natural hay-meadows there. "The hay should, of course, have been cut late in August when large quantities could be secured here quite easily," Erling said. Ever the botanist, he added, "The hay is chiefly one or two species of *Carex*, probably *C. aquatilis* and one tall *Carex* of the 'stans' 'salina' group and *Dupontia Fisheri* and one or two species of *Calamagrostis*."



Christmas with Lapp families, Asta Porsild (standing) and Edith Porsild (centre front), Reindeer Station, NWT, 1932 (Photo: AEP, LAC, PA-101114)

Many years later, writing to Dr. C. L. Porter at Rocky Mountain Herbarium at the University of Wyoming on May 2, 1949, Erling described the method of stuffing the Lapp shoes with what was termed “Senne-grass.” He had found that if it was properly used, it was superior to fur or wool socks, but it needed considerable skill and care to be successful.

The sedge used in Lapland is *Carex Goodenoughii* in which the leaves are long, tough and rather soft. Lapps connected with the reindeer work in Alaska and Canada have successfully used the leaves of *Carex aquatilis*, *C. lugens*, and possibly other species. The ‘hay’ is cut while the leaves are still green and after drying is carded with a comb-like tool until the leaves are split into a fine fibre. This material is then very carefully worked into the boot as a lining so as to leave an even thickness around the naked foot. This is the difficult part, for if the hay

shifts and becomes lumpy one can very easily freeze a toe or a heel. Senne-grass, too, in my experience, can only be used in the peculiar type of boots used by the Lapps (komag and skalie) and I have noticed in Alaska and Canada that when the Lapps there adopt Eskimo or other kind of foot gear, they also give up the use of Senne-grass. Incidentally, the purpose of the Senne-grass is a two-fold one (1) to provide insulation and cushioning and (2) to absorb the moisture from the foot. The grass, therefore has to be taken out every night to dry.²

Erling had another use for the material that had been gathered that October, because he wanted some of the hay for a drainage pit. "I dug a fair sized ditch through one and a half feet of frozen ground and then about two feet of thawed sand. In this ditch I made a drain and a tank to which I then lay a rubber hose connected with the kitchen sink. If the grade was sufficient and the ditch had been dug early enough I think it would be able to take care of the waste water from the kitchen all winter, since the warm water would keep the drain open in spite of the ground being frozen all around. Now I am rather sceptical but wanted to try it out anyway."

Since they were short of insulation, they were all putting up beaverboard on the inside of the roofs of the cabins. On October 15, the day of Erling's last entry in his "Lapland" journal, Mikkel helped him put up a small 8 × 8 foot room upstairs in his house using the short-changed "Celotex," which ensured that one room at least would be warmly protected.

The Lapp families would have beaverboard enough to line the inside of their roof but not the rough log walls, which would have to be chinked as well and as soon as possible against the north wind to come. They would be needing their warm hay when the temperatures dropped in the weeks ahead, and be grateful for the storm shed entrances that would keep the bitter wind out of their rooms. Their first Christmas in Canada was not all that many weeks away. In December, they would remember their festivities from Norway, and they would gather with the Porsilds around the Christmas tree that they had cut on the route down the delta and celebrate a new life in a new land far from home, with, so far, no reindeer.



CHAPTER TWENTY-FOUR

THE DRIVE CONTINUES

1931 had not been a happy year for the Lomen Brothers in Alaska. Their financial and other problems that had gone un-noticed by the Porsilds and the Canadian government officials at earlier times, now began to escalate. By October 15 they were anxious enough about the slow progress of the reindeer to make a second plea for Erling Porsild and his Lapps to join the drive to assist Bahr.¹

In Ottawa, Finnie was having problems of his own, with his whole department about to be swept away by the broom of a new political administration. However, looking at the request from the Lomens for perhaps the last time, he was faced with another pressing problem. He realized the implications of interfering with the delivery responsibilities of the company should he send men from the Canadian side to take over the drive, but he at last agreed to send one of the Porsilds and some of the Lapps to join the herd as long as the company continued to be responsible.²

On November 29, he learned that Bob Porsild had arrived in Aklavik to pick up the mail. Finnie at once wired him to proceed with the Lapps as soon as possible to meet the reindeer herd and render what assistance they could as far as their destination. On December 1, he received an ambiguous reply from Bob saying that “a party from Herschel Island had just reported that the reindeer were about two days travelling west of Demarcation Point and that he was leaving as soon as possible.”³

Somehow this message was interpreted that Bob had made the journey to see the herd while he waited for the mail to arrive. When he returned to the station, this unfortunate misunderstanding was carried over to one between the brothers. Erling decided to see for himself what was happening, and, accompanied by one of the Lapp herders, made a two-month trip to Alaska to

find the herd. When he returned, on March 22, he sent a curt apology for his brother's unauthorized report, saying: "It would hardly have been possible for R. T. Porsild, while waiting for the arrival of the mail plane, to make a trip from Aklavik to Demarcation Point, since such a trip would have taken about three weeks, but he certainly should have stated that the report was merely based on hearsay, and that the truth of it could not be vouched for." According to Elly Porsild, the brothers were so angry about the affair that they refused to speak to each other for several months.⁴

The trip to Alaska had been a disagreeable and disappointing one for Erling. In January 1932, he and the Lapp herder left Kittigazuit and started by dog-team to meet the Canadian herd. "Owing to the scarcity that winter of dogs and dog-feed in northern Alaska we found it impossible to secure dog-feed along the route or to engage dog-teams to assist us in hauling our supplies. Leaving Herschel Island we were therefore compelled to carry supplies and dog-feed for forty days." After a three-week journey, they found the reindeer a short distance east of the Colville Delta at Sagirovirk River, about seventy-five miles southwest of Tealman Island and much further west than Bob had reported.

There were only nine hundred deer at the Lomen camp, with three native herders in charge. Bahr and the rest of the herders had left with half the herd on November 15 to search for deer that had been lost around the Upper Colville River several months earlier. They had not been seen since. Erling did not at all like what he heard about the lack of progress or camp conditions.

The previous summer Andrew Bahr ... had experienced great difficulties with his men. Of the ten Lapp and Eskimo herders that had started with the herd from Napaktolik none was left. Because of inexperienced and insufficient help during the previous autumn about one-third of the herd had wandered off. After a search of two months the missing animals had been located in the mountains far to the south, but it had not been found possible to drive them back to the Colville Delta with the number of men available. Bahr therefore decided to give up further attempts and to depend on the next year's increase to build up the remaining herd, then estimated at somewhat over two thousand head. Bahr had managed to secure a new crew of Eskimo herders from Kobuk and from the Point Barrow region, but as some of these boys were quite young and inexperienced he did not expect to make much further progress that winter.

Since nothing more could be accomplished by staying at the camp, Erling left a note for Bahr urging him to press on to the sheltered valleys behind Herschel Island for the fawning season, and to take the herd to the island for the summer pasture before proceeding to move them slowly towards the delta preparatory to crossing when conditions were most favourable after freeze-up in early November. After his return to the Mackenzie station, in his report to the new "Commissioner, Dominion Lands Branch," on March 13, he made it plain that he would take his Lapp herders to the Eskimo Lakes in the spring to familiarize them with that territory instead of returning to the reindeer camp where he had heard unsatisfactory reports of personnel problems and work conditions.

Bahr was able only to recover less than a third of his strays. When he returned to the camp at the Colville Delta, he discounted Erling's advice, which from later reports he appears to have misunderstood, and decided to remain in the area to improve herd condition and increase the numbers, despite his complaints that the country was too flat, too watery, and had no feed and lots of wolves. Even after fawning, a few months later the entire herd was counted at only 2,500 animals.⁵

The figures were so low that the Lomens began to consider buying reindeer from native herds along the way, a policy that was to prove totally unacceptable to Erling and was coldly received in the native communities along the coast. An anonymous warning was circulated to all the native owners, believed to have been done by George Morelander but unsigned and undated, that read:

Lomans sold to the Canadian Government a big bunch of deer, drove them through a pass in the Endicott mountains, and after getting them far to the eastward deserted them on one plea [excuse] or another. Now, if in time they send men to round up their deer, and if they discover, as is likely, that their deer have joined other deer, or taken unto themselves double, triple or quadruple their number of deer [belonging] to the natives of this coast, will the Lomans claim the entire number? Loudly it is whispered that this is their scheme oft times worked to the South. However, it is not impossible that even the Lomans may learn that the Northern Eskimo is of another stripe, not nearly so docile or [non-combative] as is his Southern brother, so long domineered over and harassed and browbeaten by the white man. The northcoast Eskimo is honest and wishes to be treated fairly and honestly, and will be so treated or will know the reason why.⁶

Dan Crowley was certainly aware of the situation when he joined the drive later for he wrote to Ralph Lomen on August 23, 1934, to warn him that “all the herds along the Arctic coast were circularized by Morelander, to beware of the Lomen Canadian Drive, to extend no courtesies, and to watch their herds closely or the Lomens would take them. Of course this has prejudiced the natives, and especially the herd owners, against us. They think we are a bunch of crooks and robbers. One trader and herd owner, a white man by the name of Tom Gordon located at Barter Island, says he received instructions to shoot all Lomen stray deer.... It shows the feeling that exists.”⁷⁷

The Alaskan reindeer owners were not the only ones who were unhappy with the whole drive situation. Morten Porsild told Anderson (July 1) that they had had only one letter from Aklavik, written in March, “in which Erling seems to face the possibility that the drive and the delivery of the huge herd of half domesticated reindeer may turn out to be a failure. The first consequence, he says, will be the bankruptcy of the Lomen firm, the next may be that the present Canadian Government, having removed men like Mr. Finnie and Mr. G. Mackenzie from the office of the N.W.T., will give up or postpone the whole reindeer schedule. In this case my sons have spent some years of their life to very little use which could easier have been borne if they had been given facilities to get their scientific results worked up for publication.”⁷⁸

Erling described the problems with the drive in his July 1936 speech to the Geographic Society. As he put it,

Andrew Bahr ... was an old man when the drive started; how old he does not know himself, and conditions on the north coast of Alaska were entirely unknown to him. It should be remembered also that a great many difficulties are encountered on a trek such as this, through an uninhabited and inhospitable country; that the climate of northern Alaska is perhaps the most severe on the North American continent; that in the winter months during the entire drive bands of wolves harassed the herd, at times taking a great toll and compelling the herders to remain on watch day and night.

Above all, it should be remembered that it is during but a few months each year that it is possible to move a large herd of reindeer any great distance. Whereas in northern Europe the fawns are born in May and June, in Alaska the first fawns appear early in April, and from the middle of March the cows are unable to stand the hardships of

daily moving. The fawning is over by the end of May. In July the fawns are strong enough to travel and to cross fair-sized rivers, but at this time of the year the mosquitoes and flies are at their worst and the animals have to be driven out to the sea-coast or to some high mountain in order to escape their tormentors. For a short period during August the herd may be moved if some means are available for moving the camp equipment. Towards the end of August the rutting commences and continues during the month of September. October is the month of freeze-up, but the ice is not sufficiently strong on the rivers and lakes to permit this crossing of the herd.

There remains, then, but little more than four months during which it is possible to move the herd. But on the north coast of Alaska, north of the 70th parallel of latitude, the sun is below the horizon for over two months, and because of the shortness of the days all travelling has to be done around the period of the full moon. Furthermore, because of the proximity of open water, at this time, since the Arctic Ocean is only partly frozen, December and January are the stormiest and most unpleasant months of the year. Fuel exists along the coast only in the shape of driftwood, and more often than not is completely covered by huge snowdrifts. At some distance from the coast, where the best winter pasturage is found, the traveller must content himself with the insufficient heat supplied by an oil stove, which source of heat moreover is quite unsuitable for the drying of wet fur clothes.⁹

It can thus be seen that by deciding to stay in the Canning River region during the 1932 fawning season, there would be little chance for Andrew Bahr to move the herd as far as the Canadian border before the rutting time in September and then there would be further delays and it would be another winter before he could hope to reach anywhere near the Mackenzie River delta.

Meanwhile, there was much to do down on the delta as spring turned into summer. Erling wrote to Anderson on June 9: "We are building a new camp on the East Branch above the tree line and are looking forward to a busy summer." He had just come in from a strenuous canoe trip of twenty-four hours from Kittigazuit in order to catch the first outgoing mail and was sending him one Brown Bear specimen and a lot of salted bird skins. He hoped to have more to send the Museum before the last boat, but it would all depend on how things went with the new construction.¹⁰



Bird's eye view of Reindeer Station, NWT, 1932 (Photo: AEP, LAC, PA-130444)

The new station would mean a shorter canoe trip to Aklavik in future. As expected, he had chosen the site to be nearer to the winter pasturage for the reindeer after they arrived and close to needed timber for fuel and shelter, and to be lacking all the disadvantages he had listed for the site Bob had chosen. It is not hard to imagine that Bob Porsild would resent the move but would be overridden by the brother in charge. At the new site, Erling built his house with the help of a hired man from Aklavik while the Lapp herders and Bob and Elly built their own. When it was finished, there was again nothing to do but wait for the reindeer, even if the time was passed in fishing and hunting for supplies and specimens for the Museum.¹¹

Nothing much was heard from the reindeer herd in the summer but in the fall, when the rutting season was nearly over, the Lomens again pressured the Canadian government for assistance with the drive. On October 21, Baldwin met with Canadian officials in Ottawa, and it was decided that Erling Porsild would be requested for the third time to join the herd with his Lapp herders and remain with them until the drive was completed. Bahr was to remain in

charge of the drive and “Porsild, subject to his reasonable direction, and Porsild’s Lapps as well.” Not surprisingly, given these conditions, Erling refused to join the drive. Eventually it was agreed that the Lapps would join the drive as it entered Canadian territory and Bob Porsild would undertake the transport of equipment and supplies.¹²

As told many years afterwards in the *Alaska Journal*, Bob duly received his instructions from Ottawa on November 15, giving him the exact location of the herd and telling him to proceed immediately for the west and do everything he could to speed up the drive so that delivery could be completed before fawning time in April 1933. He estimated that it would take fifteen or sixteen days to reach the herd by dog-team. He would take his sled and be accompanied by two Eskimos with their sleds, each of which would carry one Lapp herder as passenger, so the party would consist of six men, three sleds, and twenty dogs. They also carried bedrolls, food, and some dried fish for the dogs. Leaving on November 22, they expected to have no trouble buying additional fresh dog food from Eskimos camping en route. However, everyone they met told them of the poor hunting season for fish, seals, and Arctic fox. The further they went, the worse conditions seemed to be. On December 2, they crossed the boundary line and stopped the next night at a camp with three families on the Alaska side.

With a heavy heart, realizing how difficult it was for them to get food to feed themselves that winter, Bob asked if the families could spare a seal for their dogs, in order to be able to reach the herd a few days to the west. The leading man turned down Bob’s offer of fifty dollars (paper money would not feed his hungry family in their isolation), but with typical Eskimo hospitality, as they were his guests, he gave them “one seal for the Canadian Government.” When Bob reached the herd, he knew how he could repay his host’s generosity. He gave Andrew Bahr specific instructions that as he neared the border he was to watch out for the camp of Aklak, “The Black Bear,” and he was to leave with him two full-grown reindeer with the compliments of a grateful Canadian Government.¹³

With Bob and the Lapp herders gone from Reindeer Station without him, and having once again turned down his government’s orders to travel with the reindeer herd under Bahr’s jurisdiction, Erling was left behind to seriously consider his future with the Canadian Reindeer Project and his options if he were to leave it. On November 25, he sat down to write to Malte, enclosing a letter for the Director of the Museum in which he outlined the botanical work that had been accomplished since 1926, plus four papers that could come out of it, and

asked Collins' advice with regard to his possible future at the Museum or other scientific institutions in Eastern Canada:

I have reasons to believe, that the Department when the reindeer arrive will wish me to continue in charge of the reindeer development, in which case I shall find myself more or less permanently domiciled in the Mackenzie District. While I have always taken a deep interest in the future of the Eskimo people and perhaps better than anyone else realize the great cultural and economic possibilities of the reindeer experiment for Arctic Canada and its people, I feel that I should hardly be satisfied to give up my botanical work. Nor do I find that a prolonged residence in the North would be fair to my family or to myself.

When the herd finally arrives this winter and I have received it on behalf of the Department, I shall likely want to leave the actual management of the herd and station to somebody else. I have recently been offered a position in Alaska which is financially more attractive than anything I could reasonably expect in the Department of the Interior for a good many years to come. The work, however is chiefly administrative. Finally, when a year ago, I passed through Copenhagen, the Greenland administration wished to secure my services, should I wish to return to Denmark. I find, however, that the botanical material which I already have on hand is too important to abandon now, and also that the material should be published in Canada, if possible. Also that Canada offers so many important problems to a systematic botanist and that surely, in the future, there will be ways and means for continuing this work. Should I decide to leave the service of the Department of the Interior, I should likely wish to return to college which would likely take two or three years.¹⁴

Malte received the letter just before Christmas, while Collins was away, and hastened to reply on January 4, 1933. He urged Erling to hang on to his reindeer job for the time being and say nothing to his Department about his chances to go to Alaska or Denmark as conditions in the Civil Service were pretty bad at that time. He had lost his Herbarium Assistant and was not sure whether the position would be refilled. "I agree with you, as you of course know, that you should be given the opportunity to work up the beautiful collections you and Bob have made," Malte concurred. "It would, in my opinion, be a scientific

crime if they were allowed to go to waste.” He cautioned, however, that as things were at that time there was little possibility of his being put in a position to engage in scientific research exclusively or of being transferred to the Museum at present, although eighteen months previously when positions began to be cut in the Department of the Interior, Malte had found Collins personally in favour of transferring Erling Porsild to the Museum. As with the reindeer drive, if Erling wished to find a job in Canada, there was nothing to do but to wait.¹⁵

And wait they continued to do at Reindeer Station, although Bob made numerous trips back and forth to carry supplies to the drive throughout the rest of the winter. With all his staff absent, Erling told Anderson that he had little time for “scientific work.” In his letter of February 3, he said he was sorry that Anderson thought he had paid too much for the bear specimens he had sent to the Museum but added:

While no doubt prices in the North, compared with those of ‘outside,’ have been ‘inflated’ to some extent during the past years, one must not forget that the price of \$40.00 which I had to pay for those bear skins will buy no more flour at Aklavik than will \$10.00 in Ottawa. In other words, the purchasing power of the dollar at Aklavik, is for a number of articles, such as gasoline, flour, sugar, lumber etc. no more than one fourth of what it is in Ottawa.

I realize, of course the hopeless conditions you are up against with regard to appropriations for maintenance of the scientific collections at the Museum and for purchase of new material. Don’t you think that this may be one of the reasons why in the past, as you say, most of the Canadian material has gone elsewhere?

I think, though, that you are quite right, that there are few public-minded citizens throughout Canada, when it comes to donating specimens. I have occasionally touched upon this subject when talking to trappers and traders of the North, but have invariably been told, that the people of the North have very little reason for being ‘public-spirited.’ At the present time the poorest trapper has to pay from 10–33% fur export tax to the Government for every pelt he secures. On top of this he pays \$150.00 for his trapping license if he is non-British, \$75. if he is British, but not a resident of the District. Besides he pays the ordinary Federal income taxes, and, of course all indirect taxes. For all this he gets precious little return, besides “Police protection”

which he does not need and does not understand the need for. He has no representation in Parliament, no schools for his children.

Erling concluded that he might be able to get some specimens of bears for the Museum for less than \$40 if Anderson agreed and might be able to get some of the western brown bears for him next spring if he only had a chance to make a trip to the mountains west of the delta. "I have planned such a trip since I first came here, but have never found the time to do it. There would be a lot of valuable stuff to be had in that region, and it would not cost very much to get in there for anybody who was already in Aklavik. I wish I could take a month off from about June 15 to July 15."¹⁶

Such a trip might become possible for him if the reindeer arrived in spring, and at last there seemed some hope that this might happen. With the added help of the three Lapp herders, the reindeer finally crossed the Alaska-Yukon border and reached Shingle Point by March 7. At this point, however, contrary to Erling's insistence that the deer should be delivered immediately, before the fawning season, both Bob Porsild and Andrew Bahr decided that it was too late to make the delta crossing safely, a decision made partly by Bahr's wish to hold back and increase herd numbers before delivery.¹⁷

It was to be Bob Porsild's last major decision for the Canadian Reindeer Project. For Erling, Bob's collusion with Bahr to postpone the arrival of the deer for another whole year was almost unendurable, while the same could be said for Bob about his feeling of always being in the wrong where his brother was concerned. He made his last trip to the herd at Shingle Point in April and sent a letter to the department asking for an increase in salary and some changes to be made at the station.

In a personal letter to Oscar Malte on June 23, Erling outlined his side of the story of what had been happening at Reindeer Station, showing how far apart the brothers had grown since both of them had married and chosen different pathways:

I am sorry to tell you [Erling said] that I have been having a most unpleasant time with Bob since I came North two years ago. It seems to me that since he was married he has changed a lot, and, I think, on the whole has been a whole lot harder to get along with.... He has been of no help here whatever, and has by his most extraordinary and often

most irregular actions made things most unpleasant for everybody, including yours truly.

This spring he sent an ultimatum to Ottawa making his continued stay in the Service conditional upon the immediate fulfilment of a number of, to put it mildly, most extraordinary demands. And still he was quite surprised when Ottawa called his bluff and accepted his resignation from July 1.

While I very much regret that our association in this work should terminate in this way, I cannot help feeling it as a tremendous relief. At the same time Bob has never taken the remotest interest in this work. He has always felt that he was getting a dirty deal from Ottawa, from myself, and everyone else. He has managed to get in wrong with every person down here with whom he has had any dealings, so I really think it will be the best thing for himself to get out of it now.

His letter also carried a caution for Malte:

Bob has on various occasions intimated that he considered his contribution to our joint collection of plants from Alaska and the Northwest Territory 1926–28 his personal property. I am telling you this, because my experience with him the past two years has shown that he might wish to, *mir nichts, dir nichts*, to possess himself of what he considers his rightful loot. Naturally the entire collection belongs to the Department of the Interior, who, as you know, have promised to present it to the Museum; and the collection should, of course, at least until it has been worked up, be kept intact. The collection, as you will remember, when I left was in the process of being worked up and is therefore not in shape for examination or study by anyone not familiar with the system or with the previous work done on it. I would therefore very much prefer that Bob not be given access to the collection for the time being, even if it be for the purpose of study only.

On a happier note, Erling wished Malte well on his forthcoming trip on the *Nascopie* and told him he was hoping to make a trip to the Richardson Mountains that summer:

I had a chance this winter to look over some collections made a few years ago by an amateur, in the mountains west of Aklavik. The collector was an entomologist and the collection was originally started merely as a “collection of flowers visited by insects.” Later he decided to take everything.... I have always wanted to make a trip to those mountains and cannot help wondering if there should not be a lot more if this chap managed to get 103 flowering plants. For my work on his collection I was permitted to take a few duplicates for the National Museum. It looks though, as if my trip might materialize this summer, so I am all excited.

He closed with the note that the boat would soon be arriving with his order of six bottles of Alborg Akvavit. “By the way, how would it strike you to live in a country where you are supposed to get along on two gallons of liquor a year, ‘for medicinal purposes only’? Here is best of luck and regards to yourself, Sam and the cat (whoever she may be) As ever, Erling.”¹⁸

It would be his last letter to his and his father’s old friend, the man who had been the greatest supporter of his botanical aspirations. In July, Malte got his wish to go north again to continue his Eastern Arctic field investigations in the region of James Bay, but on August 24 a sad letter went out from the Biological Division of the National Museum, signed by P. M. Hulbert, to Professor J. E. Howitt, with whom Malte had been corresponding, at the Department of Botany, Agricultural College, Guelph, Ontario.

“Dear Sir,” the letter read. “Dr. Malte sailed on the S.S. *Nascopie* on July 10th for the Arctic to be away for three months, but took suddenly ill at Charlton Island, in the southern part of James Bay. The Doctor on board the ship advised that Dr. Malte be taken to Moosenee, Ontario, the end of steel [railroad]. From there he came by train on a stretcher to Ottawa, but passed away half an hour before reaching here on Aug. 12th. Dr. Malte had been troubled with diabetes for the last few years and with that fatal disease he also had anaemia at the last, which caused his sudden death. We have all been greatly shocked at our loss in losing Dr. Malte.”¹⁹



CHAPTER TWENTY-FIVE

THE END OF THE PROJECT

Erling Porsild had never been more alone than he was in the summer of 1933. Within the space of a few months he had lost the three men who had been closest to him throughout the reindeer investigation period. Although he and his brother had had their disagreements at the station, they had worked together loyally for the years beforehand. In the Department of the Interior in Ottawa, O. S. Finnie had been a rock of support with all the reindeer decisions, and at the National Herbarium he had always been able to look to Oscar Malte for encouragement and assistance with working up his botanical collections. Rudolph Anderson was now the only person left in Ottawa with whom he could share his honest thoughts about his uncertain future as they exchanged letters about collecting specimens for the Museum. For the rest, he would have to fight for support of his hopes and decisions with officials who would be far less understanding, and far less personally involved in helping him.

His parents had been sad to learn about Bob's departure from Reindeer Station. Writing to Anderson later that year, Morten Porsild said "We are all well here but somewhat concerned about our son Robert's giving up his service for the Government. I had hoped he would accomplish the Reindeer task so Erling could be relieved. I hope he shall not repent this step too bitterly."¹

Anderson's reply to Greenland on December 13 was full of cheerful news to allay their fears as he told the story from Bob's perspective:

Your son Robert turned up rather unexpectedly at Ottawa in August and was here for a week or two straightening up his affairs with the Dominion Lands Administration. Apparently he was not satisfied with the way things were running, and resigned, and the resignation was accepted. He seemed rather cheerful about coming out, as he did

not like government work and thought it was a good time to get out and into private business. We hear that he has gone into marine insurance in Vancouver, and with his knowledge of coast shipping, and of the North, as well as knowledge of Scandinavians who are largely interested in shipping on the West coast, he will at least be able to make a living, and the prospects are not very good for doing more than that in Government service. As he was apparently not very much interested in the reindeer, and did not intend to make it a permanent life work, probably he did the best thing for himself by getting out.²

Meanwhile, for Erling, it had been another waiting summer, with the drive stalled on the west side of the delta. They had moved to Kay Point but by June things were not going smoothly at the Lomen camp. The Lapp herders deserted the herd, claiming the reason as unsatisfactory conditions, with Bahr out of control and having made no serious effort to speed up the drive the previous winter. Although sympathetic, Erling reprimanded them for leaving, and persuaded them to return to the camp.

He was concerned enough about Bahr to wire his department, however:

PERSONAL CONTACT WITH BAHR WHO IN APRIL VISITED STATION ONE WEEK CONVINCES ME THAT HE IS NO LONGER CAPABLE OF MAINTAINING DISCIPLINE OR HANDLING SITUATION /STOP/ WHEN DRIVE STARTED WAS TOO OLD AND SINCE HAS AGED SO MUCH HE IS NOT EVEN CAPABLE OF CARRYING ON INTELLIGENT CONVERSATIONS.³

The relay via Ottawa of Erling's remarks about Bahr brought a wave of anxiety and anger to the Lomen brothers, who were already not only worried about the drive but were having increased financial difficulties as well as being in the midst of a legal battle facing charges against their reindeer business practices. Their original drive planner, Dan Crowley, had left their employment, but they decided to contact him and see if he would join the herd and take over if Bahr's condition warranted it.⁴

Carl Lomen wrote to his brother Ralph in Seattle in July, expressing the Lomen family's position regarding Erling Porsild:

The last mail brought copies of Andrew's letters written during March and May of this year; we consider these letters very good from Andrew's

viewpoint, and they do not show that he has weakened in any way. On the other hand, Porsild has always been opposed to Andrew, and long ago notified the Canadian government that we had made a poor selection in our leader. Again, Porsild has made recommendations to Andrew which if followed would have cost us the larger number of the deer now on the drive. The officials at Ottawa are not sold on Porsild, but are in the same position as we are unable to change their leader at this time.... We feel that Porsild is a stubborn Dane and that he will continue to oppose Andrew, lining up his Lapps against our people, and this might cause great losses to the herd and to us....

Advise Dan that Porsild recommended crossing the delta of the Mackenzie during the fawning season, refused to make the trip across the line to meet Andrew a year ago because of hazards, and does not stand well with his own government officials. Caution Dan not to be guided by Porsild's recommendations unless he fully agrees with his point of view. We are banking on Dan's judgment and not on Porsild's. If he considers that Porsild has been an agitator, Dan should notify him to return to his headquarters, together with any of the Lapps lined up with him as opposed to our people, and there await the coming of the herd. There is a chance that Porsild has made statements to the Canadian government and is trying to prove his case, even to the detriment of the drive.⁵

It is obvious that the Lomens had been misinformed about many of their suspicions, for Erling Porsild had certainly not recommended that the herd be taken across the delta during the fawning season nor did he refuse to join Bahr because of "hazards" and he had never encouraged his herders to oppose Bahr, whatever he thought of him, but the Lomens' belief in their leader remained unshakeable and they seem not to have realized that many of the delays and personnel problems of the drive were caused by their chosen man.

Fortunately, Crowley's arrival on the delta at the end of August brought a welcome reduction in tensions all round. He enjoyed meeting Erling and his wife in Aklavik and discussed the best route for crossing the delta with him. Dr. Urquhart, the medical officer in Aklavik who would have a great deal of influence later in the reindeer program, told him that he had visited the reindeer camp a week earlier and found Bahr in better spirits than he had been in the spring. On reaching the reindeer camp on September 8, Crowley had



Reindeer herd in vicinity of Shingle Point, Yukon, 1933 (Photo: AEP, LAC, PA-130443)

encouraging words to say about Bahr and how everything was being run, and continued to send optimistic reports to the Lomens as they headed towards “the big jump,” pushing for the earliest possible crossing.⁶

His optimism that the drive would soon be over was short-lived, however. According to Erling, it was the coldest, stormiest winter ever recorded in the Mackenzie Delta. In January 1934, the drive to cross the delta began when

... an ill-fated attempt was made to make a non-stop dash across Mackenzie Bay from Shingle Point to the north end of Richards Island. In a straight line the distance is but 50 miles, but it was thought that the deer, then in good shape, would stand the trip without food and without rest.

Half-way across, a gale sprang up. The temperature was 48 degrees below zero, and when the herders had travelled for a day and a half without rest and without food they were compelled to give up the drive and save their own lives. In the blizzard the herd split up into numerous small bands. After the storm two hundred reindeer were thought to have perished on the ice due to the cold and to exhaustion, and the rest were scattered over a distance of 50 miles along the west side of the delta. Bahr and his Eskimo guide lost their way and very nearly froze

to death, whilst three of the herders had their hands and feet severely frozen. When three weeks later the herd had again been rounded up the animals had become so poor in condition that further attempts at crossing the Mackenzie that winter had to be abandoned.⁷

Bahr blamed Crowley for not waiting until the weather was suitable. Crowley wired the Lomens that the crossing was much more difficult and complicated than he had anticipated, that he had left too much to Bahr's organization but now agreed with Erling Porsild that Bahr lacked the ability to plan and organize the crossing. Next year, he vowed, it would be handled differently if he were in charge. He proposed a staked trail and feeding stations for men and sled deer even though Bahr opposed the idea as expensive and unnecessary. The Lomen reply was succinct: "YOU PLAN ANDREW EXECUTE."⁸

Another hopeless winter, another year of waiting for the deer to arrive. At the end of March, still hoping that he would be able to come out in the fall after the reindeer had been delivered, Erling boarded a plane leaving Aklavik and headed for Ottawa, where he spent a month having interviews with Dr. W. H. Collins, Acting Director of the National Museum, and Dr. Charles Camsell, Deputy Minister of the Department of Mines.

Anderson told Morten Porsild on July 31 that they hoped that something could be done for Erling at the Museum so he would have a chance to work on his arctic plants when he came south in the fall, "however, there is nothing at all definite." He was answering an earlier letter from Greenland regarding the vacant position in the Herbarium after Malte's death:

I am sorry to have to say that it has been impossible to do anything about appointing a successor to the late Dr. M. O. Malte. As you know, the field of systematic botanists in this country is very limited and the policy is not to make haste in making selections. Furthermore, the necessity for economy is very great, and when a position becomes vacant the tendency is to let it remain unfilled until great urgency compels something to be done. For the present fiscal year, no appropriation was made for payment of any salary for the position of Chief Botanist, and naturally no appointment can be made to the position.⁹

He did not tell the elder Porsild that during the time Erling was in Ottawa he "voluntarily stated that he did not feel qualified to fill Dr. Malte's position, but

would like work as assistant to another qualified man, suggesting Dr. Raup as the best man he knew for the position,” an interesting suggestion as Raup would later be seriously considered for the appointment.¹⁰

In the Herbarium, Erling found things much as Anderson had described to Raup:

Things are moving rather slowly in the Museum. We have not been able to do any field work, except a small amount of local work at our own expense, for two or three years. We are trying to bring office and laboratory work up to date. It is hard to do much with the Herbarium without Dr. Malte, whose sound advice on many subjects outside of botany has been very much missed. No active steps have been taken to fill the position. We have one herbarium assistant, Miss Harkness, who has been with us nearly a year, and while she is not a trained botanist, she is an industrious and careful worker, who is doing good work mounting and filing specimens.¹¹

Professor Fernald had been there for a few days in February and was editing some of Malte's manuscript on Arctic plants for publication in *Rhodora*.

Back at Reindeer Station after his trip, on August 9 Erling wrote to Anderson: “We have had a very favourable summer, with practically no rain. I made one trip to the coast as far as Kay Pt. and have two more trips to make. While the flies have not bothered us here at the Reindeer Station, which is well up the East Branch, the flies on the coast were as thick as I have ever seen them. In spite of the flies I managed to get a fair-sized collection of plants from this part of the District which fills in a gap in my previous collection. One species at least is new and several are new to Canada.” He was happy to tell him that his bird catalogue was steadily increasing in volume, and should, when completed, give a fair list of the birds of the Delta. He had a reasonable collection of bird skins, partly his own and partly ones given to him by a Mr. Lang who had become keenly interested in birds but was holding it until he could get the Eskimo names for some of the species during the winter. He was sending him some skeletal material and, as an experiment, a few mice placed in strong brine to see if this kind of temporary preservation of small animals was practical. All were taken at the Reindeer Station during July that year.¹²

Anderson, it seems, was keeping in touch with all the Porsild family. Bob Porsild had passed through in August, leaving a Greenland kayak at the

Museum which he expected them to purchase. On October 12, Anderson told Bob that Mrs. A. E. Porsild came to Ottawa that week, although they had not seen her yet. "She has put Edith in school somewhere and I understand that she is going to Europe for a visit." He hoped that Bob was doing well in the wharfing business in Vancouver. Mrs. Anderson was happy to hear from Elly that she was enjoying the life and surroundings of Vancouver.¹³

There was no possibility that Erling would be getting out of the reindeer project in the fall as he had hoped, but as winter began to settle into the delta, all the preparations were made ready for the final reindeer push from west to east. Dan Crowley had followed up with his new plan with admirable thoroughness. Every precaution that might ensure success had been taken. Caches of food for the herders, as well as great piles of reindeer 'moss' for the train of sledge deer that were hauling the camp gear, had been established at short intervals along the proposed route across the edge of the Mackenzie Delta. Unfortunately, freeze-up came so late that it was impossible for the crossing to be made in November. Erling said:

The winter of 1934–35 was exceptionally mild, and the Mackenzie river delta froze a month later than usual. The weather remained pleasant and settled throughout November and December, and everything looked as though the herd might finally reach "the promised land." Everything was ready for an early start the first week of December, when a foehn or chinook changed everything. For a fortnight the temperature remained above freezing. All the snow disappeared from land and ice. Although the sun had disappeared below the horizon the willows along the river banks dropped their bud scales. On the sea a narrow rim of ice remained along the shore to the edge of the shallow water, but here as well as on the rivers it was smooth and slippery and entirely impassable for hooved animals. Farther out the sea was clear of ice as far as one could see from an aeroplane flying at an altitude of 5,000 feet. New snow eventually fell, but it would not stick to the smooth ice. Nothing could be done but wait. Any one who has to deal with reindeer must, like the Lapp, possess an infinite stock of patience. Whether this is natural to the Lapp or whether the trait has been developed through countless generations of reindeer herders I am not prepared to say. The fact however remains that the Lapp possesses an



A. E. Porsild in front of main building, Reindeer Station, NWT, 1935 (Photo: AEP, LAC, PA-130437)

amazing capacity for waiting, and in this quality even surpasses the stoical Eskimo.¹⁴

All January they waited. While Erling waited with less than stoical patience, a paper he had written on the nesting areas of the Mackenzie Delta waterfowl was being read at the American Game Conference, January 21–23, in New York, indicative of the importance he placed on his bird and mammal studies in the delta and his anxiety to be relieved of the reindeer situation in order to give full priority to his scientific work.¹⁵

“Finally in February an abundance of snow fell,” he said, “and on February 18 the drive across the delta commenced. In record marches the herd crossed without incident in three days; but it had taken two years before conditions were ideal for such an undertaking.” They were just in time to catch the only available window in the weather that year. “One week later gales again swept the ice, leaving it snowless for the remainder of the winter.”¹⁶

On February 25, Crowley wired Carl Lomen triumphantly:

ARRIVED RICHARDS ISLAND TWENTY FIRST VERY SUCCESSFUL CROSS-
ING SIXTY HOURS EN ROUTE STORMY TOUGH TRIP BUT ACCOUNT

PRELIMINARY WORK DONE AND SHELTERED ROUTE NO MISHAPS DEER
CAME THROUGH FINE SHAPE BUT WEAK NOW /STOP/ CARRYING MANY
ON SLEDS TODAY NECESSARY REMAIN HERE ONE WEEK BEFORE PRO-
CEEDING KITTIGAZUIT.¹⁷

It took another two weeks to rest the herd and move it slowly to the corrals at Kittigazuit where on March 6, 1935, Erling Porsild, Superintendent of the Department of the Interior Reindeer Station, officially received 2,370 reindeer from the Northwestern Livestock Corporation of Seattle, Washington, U.S.A. "The great day had arrived," said Erling, "the day that marked the end of this long and trying journey which had been so fraught with disappointment, had caused so much waste of time and effort, and which had so often taxed our patience almost to the point of breaking – an Arctic Odyssey which had ended happily." Of the 2,370 reindeer received, 1,500 were females. Only one-fifth remained of the original stock selected at Napaktolik five years earlier. Some of the missing deer had been returned to the home range or had strayed away while others had fallen prey to wolves, blizzards, starvation, or other accidents. The other four-fifths were young animals born during the trek, and Erling could think of no better guarantee that the animals received were strong and healthy, truly 'a survival of the fittest.'¹⁸

Said Anderson on March 11, "We were pleased to read in the papers last month that the reindeer drive across the Delta had been successful, and with few casualties among the reindeer. The *Ottawa Citizen* had quite a long account, and my wife sent copies of the paper to your wife and daughter, as we knew they would be interested. One may be inclined to doubt whether the Eskimos have all been sitting around with bated breath waiting for the 'thundering herd' to arrive and save them from imminent starvation, but I have no doubt that in the future they will be glad to have the reindeer in the country."¹⁹

It would be the end of summer before Erling could finish the work at Reindeer Station and hand it over to a new Supervisor. An area east of the delta had been set aside as a grazing reservation for the first experimental reindeer herd. Known as the Kittigazuit Reindeer Grazing Preserve, Erling said it covered roughly 6,000 square miles and was surveyed in the summer by oblique aerial photographs. "The reindeer herd, following delivery in March 1935, was placed in the new Grazing Preserve, where it has since been maintained under close supervision. Until the herd has become well established and the homing



Part of female reindeer herd, Kittigazuit, NWT, May 1935 (Photo: AEP, LAC, PA-130436)

instinct developed, herders are watching the movements of the deer day and night.”

About one thousand fawns were born in the first fawning season at Kittigazuit. Erling anticipated that in a few years the herd would increase to about five thousand, which number was sufficient to provide a surplus of a thousand steers annually. Not being gifted with a telepathic view into all the reindeer problems of the future, he was only thankful that the herd had finally arrived and was successfully established, and he was free to leave with the satisfied conclusion that “under the tuition of experienced reindeer herders in the Government service young Eskimo apprentices are being taught to take care of the reindeer, and when they gain skill and experience the next stage will be entered upon in the development of the reindeer industry.”²⁰

At last, Erling could turn his thoughts south to his future in the botanical field, although nothing definite had been decided about working in the National Herbarium for any length of time. On reaching Ottawa in October, he was forced to spend the month writing reindeer reports, but on October 19 he sat down to write to Hugh Raup at the Arnold Arboretum, Harvard University, to ask if he could come and see him:

I returned from the Mackenzie Delta a short time ago and am now winding up my business with the Interior Department. I went up to see Dr. Camsell and from his remarks I gather that you know what they plan to do with regard to the herbarium. For the balance of the present year I am being "loaned" to the Mines Dept. I have about three and a half months holidays coming and both departments advise me to take it now. My wife who was with me for three years in the North went back home last year due to failing health and has been in the hands of the doctors since – so I am anxious to go back to Europe for a trip during my holidays. There are, of course, a number of things I want to look up while I am over there. With regard to the herbarium there are a great many sides to the question that I am rather a bit doubtful about. You have been good enough on earlier occasions to discuss matters and I believe could give me some very valuable advice. Would you be able to spend a few hours with me if I came down before going to Europe?²¹



Hugh Raup (Photo: James Soper)

Raup's reply on October 21 was both sympathetic and welcoming. "I am sorry to hear of your wife's illness, and hope that nothing serious will develop from it," he said. "If there is anything that I can contribute toward the solution of your problems with regard to the herbarium, I shall be only too glad to do so, and quite apart from that, both Mrs. Raup and I would be delighted to see you and talk over our northern botanical experiences. We had an intensely interesting trip this past summer in Lake Athabaska. If you would care to stay in our house while you are here we would be most pleased."²²

Anderson told Raup on November 4 that “Mr. Porsild” had only been over to the Museum for an hour or two before leaving for Denmark. He was due to sail from New York on November 7 and was not expected to return until the middle of February when he would be able to work in the Herbarium on a temporary basis. This was the only plan that could be approved at that time, “partly because something was due to him for making a large collection of arctic and sub-arctic plants while on reindeer investigations for the Department of the Interior, and secondly (probably most important) because while he would be finished with the reindeer business this autumn as expected, the Department of the Interior is paying his salary until next April 1st.”

Anderson said that their Department was asking that Erling be approved as an Associate Botanist for next year, giving him a chance to make a report on his arctic collections:

I was told that he was given to understand that this did not mean that he was considered eligible timber for Chief Botanist, unless he was able to take some more advanced work and get credit at some University for it to meet the requirements of the Civil Service regulations. He accepted these conditions, but I do not know whether he has much chance of filling the bill.... Personally, I think he is torn between two fires ... he wants to come back and finish his report on Arctic botany, that is, he feels that he has spent nearly ten years without getting any scientific results to his credit if he does not work up the botanical material.... On the other hand, there is a possibility that he may get a good offer from the Danish Government to go to Greenland. He spent many years of his life in Greenland, knows the language and the natives, and has been successful as an administrator in the field over here, and there has been talk about Greenland being a suitable field for reindeer. He will of course come back here to finish his year with the Department of the Interior, and he will be free to leave as his position has never been made permanent. The question is whether the Greenland job will pay enough to make it more attractive than a doubtful temporary position in the National Herbarium.

Anderson had had a long conference with Mr. F.C.C. Lynch, Economic Director of the National Museum, about the status of the Herbarium and its prospects. He wrote to Raup:

He told me that it is the intention of the Department to keep the National Herbarium as an essential part of the National Museum, partly from historical reasons, as the Department of Mines has built up the National Museum, and partly because it is a natural history museum, and botany is an important branch of natural history. However, he is fully aware of the necessity of getting a botanist in very soon to “hold the fort.” He remembered you very well and was favourably impressed with you during your interview with him in September, saying that you had given him a “mild scolding” about the National Herbarium, which he took in very good part, as he was sure that you knew what you were talking about.

If Porsild does not care to stay here after next spring, our Department has nobody in view for the Herbarium, and it is very undesirable to have no botanist here, and I am informed that the sentiment may not be very pronounced against bringing in a botanist from the United States in the emergency. This has often been done in the past, when a suitable candidate was not available in Canada.... Prof. Thomson knows of your work very well, and spoke very highly of it, saying that you were well known to the botanists of Canada, and that you have shown your interest in Canadian botany by working so many years in Canada that he thinks the leading botanists of Canada would approve of you coming here as Chief Botanist. The nationalistic feeling is not so strong among scientific men, and the University botanists are keen about getting a thoroughly qualified man in to look after the National Herbarium, no matter where he comes from. Many of them think that a botanist from the United States, if a Canadian is not available, would be much better than a botanist from overseas, as an American would be more familiar with North American botany, which is more or less the same on either side of the International Boundary line.

Mr. Lynch suggested that I might sound you out, and see if you would be available for carrying on field work for the National Herbarium next summer, perhaps in continuation of the work you have been doing. He is trying to get an appropriation for carrying on field work next year at least on the scale of normal years in the past. This could be carried on whether we get anybody else in here or not. Another suggestion made by him is to find out whether you would consider

coming up here next summer and make suggestions for the future of the National Herbarium, perhaps overhaul it, and do what you can to put it on its feet. If you could take a temporary job like this, and make a success of it as I know you could do, it might lead to your being appointed to a regular position on the staff if you wanted it. I may say that Prof. Fernald recommended you as the most suitable man for the position when he was up here last year, and a number of others have come around to that viewpoint since that time. It is understood all around that a botanist in this position should have at least one or two scientific assistants, in addition to a herbarium assistant for mounting plants, and a stenographer, and if we can get a man in who will boost for it, the additions will probably come in time.²³

Raup replied to Anderson's "informative and suggestive letter" on November 12 that he had known for some time through roundabout channels that he was being considered for Dr. Malte's position, "but the questions raised by it are none the less difficult of solution." He would be pleased to make suggestions concerning the herbarium and he would think about the propositions for work there and in the field:

I am very much interested personally in the position of Chief Botanist. I think it offers rare opportunities for the development of Canadian botany. With the material at hand, and with a little organization, I believe it would be possible to develop a group of young collectors and students which would advance our knowledge of the flora of the dominion very rapidly. Also there are excellent opportunities to make a popular showing in a short time through the national parks. The herbarium itself, as you know, needs to renew its contacts with other institutions, straighten out its exchange accounts, and clear up its loans. The specimens need study and in many cases redetermination.

Raup felt that he had to balance the offer against the fact that his present situation at Harvard was rather a promising one, and one that he liked very much. "The libraries and collections, and the host of people with whom I come in contact, both in my own and other fields, are constant sources of stimulation. Also there is abundant outlet for my energies in research along ecological lines as well as in systematic botany and plant geography." All he could say at that

time was that he was quite undecided which course to pursue and needed a good deal of time to think it over and get a clearer understanding of reasonable prospects in either case.

Raup continued:

It may interest you to know that Porsild stopped here on his way to New York, and I had some long talks with him concerning his plans. In fact, he was here when your letter came, but I rather carefully avoided letting him know anything about it. As you say, he appears to be undecided as to what he will do. He wants to work up his northern material, but I do not think that he intends to go further with the academic work which an advanced position in the herbarium would require. He is entirely frank in discussing his suitability or unsuitability for the place, and recognizes quite clearly his lack of training. All of which is in his favor.²⁴

When Erling Porsild returned from Denmark in the winter of 1936, having turned down the offer to go back to Greenland, he would need all the patience that he should have acquired from the reindeer wait while he waited again for the decisions that would seal his fate at the National Herbarium in Ottawa. By this time, Raup had decided to stay at Harvard and suggested that they should look at the possibility of hiring Porsild instead. Anderson sent a note to Raup on May 6: "Mr. A. E. Porsild came back from Europe late in February, and his reindeer work being finished, presumably, he has continued in his old title of 'Investigator,' and allowed to work in the National Herbarium, beginning March 31st, 1936. He has begun sorting his large collection of arctic and sub-arctic plants."²⁵

Note: Erling Porsild had always been referred to as "Mr. Porsild" or "Porsild" in Ottawa, but out in the field there had been the need to differentiate between the two "Mr. Porsilds," sometimes using initials as Anderson had done. With Bob Porsild out of the picture, from now on, there would only be one brother working for the Herbarium, where he was always referred to by his surname as was customary at that time. For convenience, even if somewhat awkward at times, the use of his Christian name has been continued in the text.

Part Three

THE NATIONAL HERBARIUM
IN PEACE AND WAR,
1936-1977

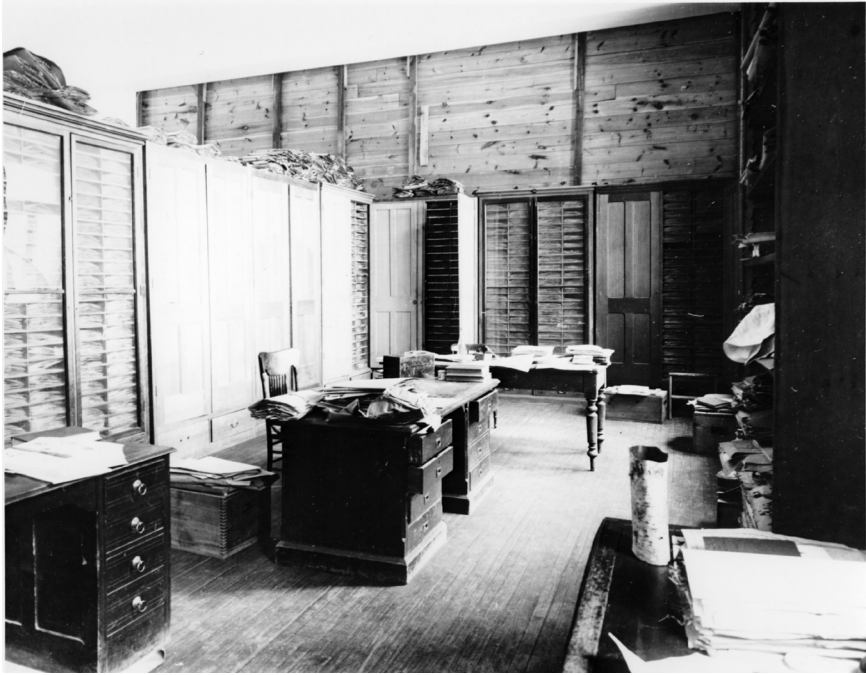


CHAPTER TWENTY-SIX

THE NATIONAL HERBARIUM

In 1936, the National Herbarium of Canada was seriously in need of a botanically trained curator. That treasure-trove of dried plants, dating back to the Geological Survey days when an enthusiastic young Irishman named John Macoun had leapt from a prairie wagon-train to stuff his collecting vasculum with flowers, mosses, and grasses, had been housed in the Victoria Memorial Museum in Ottawa since January 1911. Due to lack of space, however, the entire Division of Biology, including the Herbarium, was moved to the Motor Building in 1935, and when Erling Porsild started his temporary appointment in 1936, he was faced with the daunting task of sorting out the mess that had been left after years of neglect. There were bundles of newspapers with loose dried plants, or cabinets filled with large sheets of heavy paper to which were glued flattened specimens and faded labels that gave the date and place of collection but with names that no longer applied. No one had touched the collections since Oscar Malte had died in 1933, and before that the Chief Botanist had been a sick man and unable to keep up with the work piling up in front of him.

Malte had divided the collections into four separate divisions – CANADA, UNITED STATES, EUROPE, and OTTAWA DISTRICT – and, as Erling described them, they were “sorely in need of revision.” In order to do any serious work on them, he needed reference books and indices close at hand, but the problem was that the library had remained behind in the Museum. Erling’s request to the Director for essential reading matter to be re-located to his office was turned down on the grounds that housing the necessary books and material where they could be used by other scientists instead of just one man had been a satisfactory arrangement with his predecessor and, in any case, it was expected that the Herbarium would be moved back to the Museum “within a few years.”



National Herbarium, Ottawa, ca. 1935 (CNMA)

Obtaining furniture like a proper working desk and needed storage cabinets in these tough depression times was out of the question. In other words, he was expected to put up with the way things were and not complain about it.¹

Erling was not alone in needing the reference material to be located in the Herbarium when he started work. On April 14, Anderson wrote to Professor Fernald at the Gray Herbarium:

Nicholas Polunin has been here for some time and has been delving deeply into our arctic plants. He is a prodigious worker and apparently tireless in energy, and says that he is finding many interesting things. He has met most of our officials who are interested in his work, and I think he has made a very good impression on everyone. As you suggest, he would be an admirable man to get into the Herbarium here, but from what he has told me, he feels at the present time that University work is more attractive. He can go back to Oxford and teach

at intervals, alternating the teaching work with botanical expeditions to different places where there are botanical problems to be solved. I do not think he is the 'adventurer explorer' type, but he is young yet and wants to do something in the difficult field work while he is still able to make the trips. The lack of adequate assistance here and the difficulty of contact with other capable botanists are other drawbacks here. However, I am doing all that I can to forward his arctic botanical work.²

Nicholas Polunin had originally approached Oscar Malte for his chances of going on the Eastern Arctic Patrol in 1933. Malte wrote to John Ramsbottom, Keeper of Botany at the British Museum, to ask about the young man's qualifications and was told that he was a young Oxford student of Russian descent. "I believe his father had something to do with the Russian ballet," Ramsbottom wrote on March 7.

He is keen on exploring and has been on several of the Oxford University expeditions. His main interest so far has been in ecology on a somewhat broad basis and he has paid little attention to pure taxonomy; his collections have been very scrappy as he has been more concerned in getting names for his lists than good herbarium specimens. He is very interested in arctic vegetation and I think will take pains now to make a good collection of plants. If he is given permission to go by the Government steamer to the Eastern Canadian Arctic it is his intention to present a set of plants to your Department, and a second set to us. He has recently been awarded a Henry Fellowship at Yale where he is to study ecology under Professor Nicholls. In the vacation he plans to study taxonomy under Professor Fernald at the Gray Herbarium making his collections the basis of his study.³

Malte, who was still hoping that his own trip would not be cancelled because of stringent cuts in expenditures, wrote back to Ramsbottom on March 28 to state firmly that the patrol ship only stopped for forty-eight hours at each place touched, which was long enough for a man devoting all his time to collecting if he knew all the arctic plants by sight and knew beforehand exactly what should be collected but was much too short a time to make an ecological survey

worthwhile. He thought that Mr. Polunin had very little chance of being taken on by the Canadian Government as a scientist on the Eastern Arctic Patrol that year.⁴

In the end, Polunin had headed for Spitsbergen that summer while Malte was finally given approval to go on the patrol himself in 1933. This was the trip that would cost Malte his life, perhaps due to all his hard work collecting at the short stops en route, for when writing to Eric Hultén at the University of Lund in August 1933, Anderson had said:

While Dr. Malte had been in rather poor health for about three years, he had been feeling much better during the past winter and spring. He wished to make another visit to certain points in the North, and also collect specimens at other critical points which he had not visited, and the 1933 voyage of the S.S. *Nascopie* seemed to offer that opportunity. It was also thought that the sea voyage would improve his health. In fact, the last letter which he wrote me ... on east side of Hudson Bay ... stated that everything was all right and that the botanical results had been beyond his expectations. He had collected about 1,500 liberal herbarium sheets up to that time. In my opinion, the probability is that on account of the ship being in the different posts not more than two or three days, that Dr. Malte was unable to resist the temptation to overwork during the long days, and the strain brought on his collapse.⁵

Polunin got his wish to go to the Canadian north on the Hudson Bay Company's supply ship the following year. By 1936, he had put in his year of looking at the arctic material in the Gray Herbarium under Fernald and was now in the National Herbarium in Ottawa looking at Malte's 10,000 or more sheets of Arctic plants. Since it was felt in official circles that there was no one who was in a better position to pick up the work on the Flora of the Eastern Arctic at that time, the Museum offered to publish his findings when he had completed his work.

Polunin's arrival in the field of Eastern Arctic Botany left open by Malte's untimely demise was opportune for him but most unfortunate for Erling Persild. With Erling's so-newly-appointed tenuous position, it must have been hard enough for him to look at this supremely confident young man as a potential rival in the Herbarium, but to avoid being accused of professional jealousy he would never be able to state how much he resented Polunin's territorial

takeover just as he himself was at last in a position not only to work up his collections from the western Arctic but to pick up the work in the Eastern Arctic done by himself and his father in Greenland and his old friends and advisors in the field, Oscar Malte in Ottawa and Professor Ostenfeld in Copenhagen.

Years later, when Wynne-Edwards asked Erling for his frank opinion of “Nic Polunin” as a candidate for the Chair of Botany at McGill University in 1945, he wrote:

Personally I do not think there is any doubt that Polunin is a good taxonomist; in fact, Fernald, ten years ago expected him to do great things. I know that Raup thinks he is alright too as an ecologist. He is a good collector with a very ‘keen nose,’ but makes lousy specimens. As a museum man I find myself somewhat shocked by the careless way in which he handles his own and other people’s stuff. He has a very charming and winning personality and seems to be well enough thought of at his own college, at the British Museum and at Kew. He is very ambitious and I have sometimes suspected that he is the kind of chap who will permit very little to stand in his way.... Personally I used to be somewhat annoyed by Polunin’s perhaps youthful cocksureness and somewhat patronizing manners, and I have also thought that he was a good deal of a snob. I remember back in 1936 I asked his age to which he replied ‘twenty-six – and a half,’ and then blushed violently. Another time he cautioned me not to let myself become too overly impressed by the array of letters that ‘some people place behind their names.’ ... He is a man who always has a dozen or more irons in the fire, and who perhaps because of his excess of energy sometimes over estimates his own capacity.⁶

Whatever the relationship between these two men at this time, Polunin had left Ottawa by the end of April and Erling could settle down to proving his worth to his new superiors. On May 12, he sent a memo to Director Dr. Collins with an outline of botanical work that might be carried out in the coming season. He had, of course, his own 30,000 or so sheets from his ten-year collection period in Alaska, arctic Canada, and arctic Europe, from which he hoped to bring out four publications. He had not yet had time to examine five of the tall herbarium cases filled with specimens from New Brunswick and western Alberta collected by Malte and others, but it seemed to him that it would be best to tie in the next

season's fieldwork with earlier work. He suggested that he should begin looking at the plants in the Ottawa valley since he had limited experience with the southern flora and it was important to familiarize himself as soon as possible with the collections in the general herbarium. "Since the survey of the Ottawa district was originally started many years ago by the Macouns, the influence of cultivation of course has spread a great deal and for this reason and because of the present day transportation facilities, it might be desirable to increase the scope of the survey beyond the original thirty mile radius," he said.⁷

By August, he could tell Anderson that he had spent most of his weekends and holidays that spring and summer collecting in the Ottawa valley and was proposing a trip to Algonquin Park later that month at the invitation of Dr. Carl Heimburger of the Forestry Branch. He had been combining his work in the field with diligent work in the Herbarium.

When in May this year I was transferred from the Interior Department to the National Herbarium it was realized at once that, in order to have the use of the four herbaria kept here, it would be necessary to make a more or less complete revision and rearrangement of the collection since it was found that in a great many groups all revisions and changes made during the last 10 or 15 years by monographers and specialists throughout the world had not yet been incorporated in our collection. Thus, in some instances a single species was found in the collections distributed under as many as a dozen different names. The greater part of my time since I came here has been employed in this work and to date has resulted in the changing of over one thousand labels.⁸

He was hoping that he would be permitted, "while carrying out the routine curatorial management of the National Herbarium," to complete the research work on his arctic collections, with publication in view, by visiting the Gray Herbarium in Cambridge, Massachusetts, and the U.S. National Herbarium in Washington, D.C. He had hoped to go in the fall, but as he had earlier warned Heimburger re: the Algonquin Park canoe trip, he had a hernia that was bothering him a bit and would be "afraid of long and strenuous portages," although apart from "being pretty soft" he was otherwise in fair shape to go. His health had worsened after the trip, and in a letter to Raup Dec. 6, he said:

I have been laid up for nearly six weeks following an operation for a hernia I managed to develop on my very last sledge journey in the north. I am on my feet again now and hope to be back to the office before Xmas. To pass the time I have been trying to do a little writing, and, amongst other things have tried to plan a tentative list of 1) plants new to N. Am. and 2) plants new to the N.W.T. So far I have only got through the Monocots, but find that I have here about a dozen of the former and about 75 of the latter. These figures will probably have to be modified when I get access to more lit. [literature]. As you perhaps remember we only have vol. I of Hooker's *Flora Boreali-Americana* in Ottawa. Scandalous isn't it? You don't happen to know of a copy that is for sale?

He still had Polunin in mind when he added: "Since I don't know when I shall be able to get my flora out I have been thinking of getting out a preliminary list of some of the more important finds in order to forestall somebody else from doing it. Lately such has happened, e.g. *Carex holostoma*, *Epilobium arcticum* that Bob and I found years before Malte and Polunin got them. Do you think this desirable or does it detract too much from the value of the main publication?"

He reported that changes were going on in his Administration. Camsell had been appointed Deputy Minister of the new Mines and Resources with five directors under him, McLeish as Director of the Geological Survey, Lynch as head of the Museum with Malcolm as Assistant Curator, Collins as Consulting Geologist, and Bolton as Assistant Director of the Survey. "The legislation which amalgamates four of our Departments, including Mines and Interior has finally been enacted but a number of less important details have not yet been announced and I do not know yet to what extent the herbarium or my position there has been affected. For that matter I don't even know if I have one."⁹

By February 2, 1937, still on temporary appointment under the new Mines and Resources Department, Erling was discussing with Anderson the need for Polunin to return the 1,079 sheets of mounted and unmounted plants borrowed from the National Herbarium in August in connection with his studies of the flora of Baffin Island. "It is not customary for botanical museums, except under exceptional circumstances, such as the case of Mr. Polunin, to permit a large part of its collections, and particularly not such that are not classified or mounted, to be taken from the premises. It would appear advisable therefore

that for the protection of the museum and Mr. Polunin as well that the plants should be returned to the museum by Mr. Polunin to be carefully checked.”¹⁰

He had been working hard on his publications. He had finished the first draft of his manuscript on the Flora of Little Diomed Island and passed it to Diamond Jenness who commented: “To myself it is very interesting, but I don’t know if it will be as interesting to the layman who knows nothing of the country. Much will depend on what precedes or follows.” By mid-February, he had completed another manuscript on “Edible Plants and Berries in Northern Canada,” some twenty or so plants known from his personal experience to be edible.¹¹

Erling left Ottawa soon after his approval came for his six-week study period in Boston, New York, and Washington. He was sorry, he said, to miss Polunin who “actually left Cambridge the day before” he arrived, but from the Gray Herbarium on March 7, he wrote enthusiastically to Anderson: “I have been having a grand time since I came here and everyone in the herbarium has been very good to me. Prof. Fernald at once extended to me the ‘Freedom of the City’ and I have been able to come and go as I wanted.” He was only feeling a bit discouraged because, although he had been working late every night, and Saturdays and Sundays as well, he did not seem to have got very far. “The trouble is, of course, that one problem always leads to a dozen more, and when you have the good fortune to be in a place like the Gray Herbarium with its unique botanical library, it seems a pity not to make the most of it.”¹²

On March 20, he wrote to Anderson from New York City, where he was working at the New York Botanical Gardens (which he did not like nearly as much as the Gray Herbarium), and said he had been delighted to run into his “old friend Peter Freuchen who lectured at the Explorers’ Club” the night before. His later stay in Washington also did not measure up to the rewarding time spent at the Gray Herbarium, but William Maxon, Curator of the U.S. National Herbarium, promised to fill in some of the gaps in the literature on file in the Ottawa museum library.¹³

Back in Ottawa in April, Erling wrote to thank Maxon for his kindness to him during his “much too short visit” but worried that he had given him the wrong impression about his relationship with another of his rivals in the field of Arctic Botany. “Since I returned I have sometimes wondered whether I left the impression in your mind that my professed interest in your Alaska collection was a poorly camouflaged reconnoitre in connection with a possible collaboration on a Flora of Alaska between Hultén and myself. It really wasn’t. When I

came I had hoped to find some of the critical groups in better shape. When I found that the collection in that respect was of little or no help I limited myself to the checking of distribution of new or interesting material against my own findings.” Curious about what was happening with Hultén’s proposed Flora of Alaska, he added: “Has any new development occurred in this matter?”¹⁴

Three days later, Maxon sent him a rare copy of *Contributions from the U.S. National Herbarium* (“Vol. 1, no. 1, which by good luck we happen to have on hand”) and three Canadian specimens of *Nymphaea tetragona* on loan, and assured him that he was under no misapprehension as to Erling’s personal interest with regard to work on the Alaskan flora. On April 24, Maxon wrote again to tell him that a general letter of inquiry had gone out to Hultén as to his plans for preparing a descriptive flora, offering to place their extensive Alaskan material at his disposal for study in Washington:

Having spent a week in going over our Alaskan collection, you are of course in a position to give Dr. Hultén helpful information as to the richness of our collection, and I should think it a good idea for you to write him at this time. You doubtless know the main sources of the material that has been available to him thus far, and can explain advantageously the value of the numerous collections represented in our so-called Alaskan Herbarium. You will recollect our estimate that it contains pretty close to 25,000 specimens. I think it would be best to write Dr. Hultén without delay, so that he may have the benefit of your information in replying to Dr. Stejneger’s letter.¹⁵

It was one month after this exchange of letters that Eric Hultén was to publicly defend his doctoral thesis at the University of Lund in Sweden, on the *Outline of the History of Arctic and Boreal Biota during the Quaternary Period*. This massive tome purported to look at the evolution of these species during and after the glacial period as indicated by their present forms and distribution. Hultén also had in the works the “Flora of the Aleutians and Westernmost Alaska Peninsula with notes on the flora of Commander Islands” after a summer spent in the Aleutians in 1932, but by now he was ready to look at the idea of doing a larger Flora of the Alaskan side of the Bering Sea in order to complete the overall picture he was forming in his plant-geographical studies begun on the Kamchatka side.



Eric Hultén (Photo: William A. Weber, taken during the International Botanical Excursion to the Arctic, August 1959)

This was the Flora that Erling said he had discussed with Hultén in Lund when he had gone to Scandinavia to hire the reindeer herders for the Mackenzie River Delta reindeer station in the summer of 1931. There had been a suggestion of handing over the collections he and Bob had made in Alaska to Hultén at that time, with some thought of co-authorship on a smaller scale, which Erling had rejected as he wanted to work up their collection himself. As it now appeared that Hultén would be working on an encompassing Flora of Alaska and Yukon in the near future, the pressure was mounting on Erling to get their work in print as soon as possible. It was not to be expected that he would be delighted to offer Hultén every help he could give him with his rival publication until he was ready with his own, but he did write and offer to send him sheets from the Aleutians and Macoun's collection from the Pribilof Islands.¹⁶

He was, in fact, very busy with publications when he got back from his trip south. He wrote to tell Raup in May that his chapter on the Flora of Northwest

Territories for the Department of the Interior Bluebook had probably gone to print. "I wish I could have had time to send it to you first for comment, but they were clamouring for it when I came back. I am not any too pleased with it and found it a lot harder to write than I had anticipated. Since I got that off my hands I have enlarged and completely rewritten the paper on the 'Earth Mounds.' I am sending it to the American Geographical Review one of these days."¹⁷

Putting the reindeer work behind him was not going to be easy either. On June 23, he received a memo from Malcolm that he had been added to the committee of Departmental officials familiar with the development of the reindeer herd at the mouth of the Mackenzie River. He had been attending their meetings since coming to Ottawa and was continuing to get reports from the Reindeer Depot where the herd was still doing well but there had been a change of administration. Of the three Lapp herders he had hired in Norway, no difficulty had been experienced in retaining Mikkel Pulk and Aslak Tornensis on a new two-year contract. "With regard to [Mathis] Hatta, however, matters were somewhat different," reported the Medical Health Officer, J. A. Urquhart, September 15, 1936:

This man has two small children and disliked intensely being separated from his family for fairly long periods. He also had decided during the winter that he would return to his own country and wavered considerably before coming to a final decision. At the last minute I believe it would have been possible to retain his services had I continued to urge him to stay. In the meantime, however, I discovered that there was a certain amount of friction between himself and the other two Lapps and taking that into consideration in addition to the fact that he was undoubtedly the poorest man of the three and was the ring leader in their threat to leave two years ago at the expiration of their original contracts, I concluded that there was little to be gained by retaining his service.¹⁸

Erling was hoping to go on a collecting trip to Jasper Park that summer, but just as that fell through he received an invitation from Captain Bob Bartlett to join his expedition to Greenland, offering to land him at Disko Island on his way north and to pick him up when he returned a month later. He immediately applied for permission to go on the expedition in order to visit his parents whom

he had not seen for twelve years, leaving Ottawa on July 1 and returning on September 4. The ship sailed from Brigus, Newfoundland, on July 8. On July 14, under the heading of “at sea,” Erling wrote jubilantly to Anderson:

The good ship *Morrissey* is rolling its way up the Labrador coast and tonight we are expected to make a landfall at Turnovik. We have had head winds since we left Brigus and for 2½ days had to run in for shelter. Now finally it looks like we might enjoy calm weather for a spell. I managed to get ashore a few hours when we were tied up (most of the time it was too rough even to launch a boat) and I got quite an interesting collection of plants from a small outlying island. To my great surprise the flora was entirely without arctic elements, in fact less arctic than that of the north shore of the Gulf.

I am enjoying the trip immensely. There are lots of bergs (the first honest to God bergs I have seen since I left Greenland 12 years ago). For awhile we saw lots of *Balaenoptera sibbaldii* [Blue Whales] & as far north as lat 53° had water keeping around 50°; from then it dropped very suddenly & for the last day or two has been about 36–37°. We are quite a crowd on board – 25 in all. Twelve are merely high school kids and are having a wonderful time. At times I think they have the Captain worried with all their pranks. It is a rare crowd! They are all armed to the teeth and I am sure that not even Captain Kidd’s crew could have mustered such a display of six-shooters of all kinds & makes from venerable old blunderbusses from the Mexican war to up-to-date automatics. Pity the polar bear that ever goes near the *Morrissey*!¹⁹

It is obvious from the tone of his letter that he was enjoying a real vacation. He was going home. It might be the Greenland that he was so anxious to leave all those years ago but this was the renewal that he needed after all he had gone through since then. When the ship reached Godhavn, he would have his father to talk to frankly, however “critic” he might be, about his professional trials and disappointments and fears, as well as his successes and hopes for the future. He would have his mother’s sympathy regarding his failed marriage, for Asta Porsild remained in Denmark and would do so for the rest of her life, and receive support for how he was handling his life domestically looking after himself and his growing daughter in Ottawa. In a later letter to his old Greenland adventurer from Cambridge, England, now Professor Sir Albert Seward, he said that



Dr. and Mrs. M. P. Porsild, Godhavn, Greenland, September 1932 (Photo: D. L. McKeand, LAC, PA-138962)

he had found his parents “grown quite old in looks, if less so in spirit” while he told Raup on September 12 that “I got badly spoiled during my month at home. I had not seen mother or my sister for twelve years and you know what mothers and sisters will do under such circumstances.”

He was very interested in the changes he found in the vegetation due to climatic warming. He told Raup:

From Disko I got material for a small paper on “Botanical evidence of recent changes in climate.” Having been away for twelve years a number of changes in distribution of the southern element of the flora were most striking, although Dad at first would not hear of it (on principle, I believe). I could, of course, not get away on any extended trips, so concentrated on the local flora which from boyhood I know very well. It is, of course, well known that some climatic changes have taken place recently and that this, no doubt caused by the increased temperatures of the waters of Davis Strait. The change is most strikingly illustrated in the distribution of the cod and a number of other fishes. Although Disko bay, when we crossed in July, was full of bergs, we recorded at

surface temperature of 50° F. No one, however, so far has noted changes in the flora.

To Seward, who was also familiar with the areas that they had seen together in the past, he said “Skarvefjaeld was green almost to the summit and many of the rare plants of Engelskmandan’s Havn and Lyngmarken, that I knew so well as a boy, had spread at a surprising rate. In many places where willows and ground birch used to hug the ground I found small thickets. I hope sometime to publish a short notice of my findings.”

During the voyage along the Labrador coast, he had twelve hours ashore in four locations while the ship was getting fresh water. He told Raup, “I just saw enough to realize how much there is to be done there. I am working on my list now and believe that I have a few additions to the flora. Since so little has been done on that coast I suppose I am justified in getting out a list. My collections were made on three small islands and one at least, I think I can say is 95% complete with 120-odd species. Incidentally I have about 50 sheets of willows.”²⁰

When “Dr. A. E. Porsild” returned to Ottawa at the beginning of September, it was reported in the *Ottawa Journal* that his bulky “Arctic holiday luggage” contained more than 3,000 sheets of rare Labrador and Greenland plants,

... including one supposed to be new to North America and another from Greenland that will probably prove to be altogether new to science.... Dr. Porsild did not find any evidence of the depression in Greenland and noted many changes since his last visit 12 years ago. He found that the pretty and picturesque native dresses of the Eskimo belles were replaced by stylish imported dresses and silk stockings. A soccer game was arranged at Godhavn between a native team and the younger members of the Bartlett expedition. Midnight sun shone on the icebergs in Disco Bay while the game was played. A surprise was in store for the American team as soon as the game started. The entire population of Godhavn viewed the game, cheering both sides with great impartiality when a goal was scored. The upshot was a 12-2 victory for the Greenlanders.

The article went on to state that Dr. Porsild had addressed the Greenland Parliament in Eskimo on the results of the reindeer experiment, and his father had presented him with a telescope used by Admiral Sir Leopold McClintock

during his famous voyage in the *Fox* in 1857–59 when the fate of the Franklin Expedition was solved in all its tragic details. The telescope had been given to McClintock's Danish interpreter and dog-driver, Carl Petersen, and through his descendants had finally reached Dr. Morten Porsild. It was expected that it would be presented to the Dominion Archives.²¹

While Erling was at Disko, Nicholas Polunin had also been collecting in Greenland but had received Erling's letter too late to head north to meet him. In fact, he had not gone north at all as there was "far too much to do in the Julianehaab District" and he hoped to return there sometime. Like Erling, he reported that he had

... found several species new to Greenland and there must be many more. Also did some fairly intensive ecological work – but time was all too short. I am going to turn over my records to your father so that he can use them for his flora.... Yes I did a lot of work at the Gray – but what I did at New York was hardly work, but rather a rush through what I could do in a few days. Isn't it a terrible place! In nomenclature and determinations I generally follow Fernald wherever possible; I do wish you would let me know where you disagree seriously, it would be invaluable for my work to have your opinion. I have of course considered it in such cases as *Ledum decumbens*, where, however, we shall never agree I fear.²²

With Erling's trip behind him, except for a talk that he would give to the Ottawa Naturalist's Club at their annual meeting on December 7 on "Botanizing in Labrador and Greenland," he settled back to work in earnest in the Herbarium, trying to bring some form of order in the large material of unnamed plants in seven double herbarium cases, dating back to Malte's collections from Alberta and New Brunswick and other important ones from various parts of Canada. The older collections, including a large one by Professor John Macoun, had been laid out and wrapped in newsprint that was coming to pieces due to age.

By December 14, he could also tell Raup that "I have been plugging along with the Northwest Territories Flora since I returned from Greenland. Various byproducts have seen the light in the process. One is to appear in *Geographical Review* January and another whenever space permits. A revision of the Canadian Cranberry may appear soon in the *Ottawa Field Naturalist*. Today I have started on my antennarias but I have not yet arrived at the point so commonly

found in German texts where the author with glee declares, – ‘*Nun sieht man leicht.*’” Raup had been pressing him to go down to the Gray Herbarium that winter, where he could stay with them and have an opportunity for “some old-fashioned rag-chewing,” but Erling did not think Mr. Malcolm would see the necessity for him to make the trip. Perhaps the Raups would like to come up to Ottawa to stay with him instead? He might find some interesting willows in the National Herbarium?²³

Meanwhile, they had both been reading Vero Wynne-Edwards’ recent paper entitled *Isolated Arctic-Alpine Floras in Eastern North America*, which rejected Fernald’s theory of “nunataks” (taken from an Eskimo word for a mountain projecting above an ice-cap) that attempted to explain the disjointed distribution of plants across northern North America. This uneven plant distribution was a current problem under discussion in botanical circles. Most scientists generally accepted the fact that there were large areas across the north that had served as plant refugia and escaped glaciation in the form of an arc from west to east over Alaska, Yukon, the northern islands in the Arctic archipelago, and perhaps even the northern mountains in Labrador, but it still did not explain some rare western species growing in the East with no continental connection with the same species growing widely in the West. The nunatak theory proposed the idea that the plants were relicts of a time when they had spread across the continent but had escaped being wiped out in central areas only by being in isolated high areas above the continental ice sheet. Wynne-Edwards’ new paper postulated that the uneven distribution had more to do with the rare plants being lime-loving species that remained in suitable isolated habitats but died out in the more acidic soils of the Canadian Shield, thus breaking the connection.

Erling said: “I think on the whole that he is right, and Fernald probably realizes that some of his relict theories have to be somewhat modified. I myself never did believe in his ‘Nunatak refuges’ and had he ever himself visited Greenland or Labrador, he would have realized the impossibility.” To which Raup replied:

I have read Wynne-Edwards paper; in fact, I saw it in manuscript some time ago. I think it is very good so far as it goes, and no one is more willing that I am to examine critically Professor Fernald’s Nunatak hypothesis. However, as I told Wynne-Edwards, I have a very good idea of the quality of the steel in Professor Fernald’s armament. There

is one serious weakness in the paper, and that is that he has left out of the picture entirely those phases of the Nunatak theory that have to do with the coastal plain flora. I am inclined to think he would not have such an easy time in dealing with these.²⁴

Erling was still wondering what to do about his Alaska collection in September. He told Raup that he expected soon to have his summer's work written up and could then "revise my paper on the Diomedea Flora and try to get out something on the most interesting novelties in my Alaska collection before Hultén describes it all." The burning question of what to do about Alaska became even more heated on December 17 when Raup wrote to say that a chap named Dr. George Neville Jones had turned up at the Gray Herbarium and he was interested in doing the flora of Alaska. "Do you know," he asked Erling, "whether Hultén is actually planning a flora of Alaska? — Personally I am inclined to think that Hultén should not attempt a flora of Alaska unless he is willing and able to come to America for a considerable time to study the American affinities of that flora."²⁵

It would be January before Erling would reply:

My reasons for not answering your letter before is first that I was laid up most of the Xmas week and partly because I did not then know what Hultén's plans were. But I did have a long letter the other day. Hultén is coming over some time this winter, and if Washington wants to go ahead with the Flora, Hultén is prepared to spend four to six months going over the various collections. I do not know Jones but I do think Hultén is exceptionally well qualified for that job (wouldn't expect one Scandinavian to knock another even if he happens to be a d ... d Swede!). I wrote Hultén that he had better plan on six rather than four months.

To which Raup added: "I think it is fine that he is coming over here, and I hope that he will stretch his six months to a considerably longer time. I doubt whether he knows what problems he is going to run into when he comes to study the American continental relationships of the Alaskan flora."²⁶



CHAPTER TWENTY-SEVEN

“PUBLISH OR PERISH”

Erling Porsild started his 1938 year by sending out duplicates of his Labrador and Greenland trip. “Did I tell you that we had a general housecleaning before Xmas,” he told Raup in January, “and now have the unnamed material sorted out after a fashion? There is almost a case of unnamed Macoun plants. Most of them were lying on newspapers and it was often very difficult to make out the pencil annotations on the edge. There were a couple of small collections from the Mackenzie basin – one from the Lower Liard but I did not see anything from the Peace. But lots from Yukon including some by Malte and some by Macoun that looked interesting. In all there are seven double cases of unnamed and unpublished material besides my own. And that does not include Cryptogams.”¹

His news brought a welcome response from Raup:

I am very much interested in those seven double cases of undetermined plants, and wish that somehow we here at the Gray and Arboretum could have access to them.... Here is a suggestion. Do you suppose it could be arranged for us to acquire a set of duplicates out of this mass of undetermined material if we were to undertake a considerable part of the determination? If it could be so arranged, I think I could spend a couple of weeks at Ottawa this winter running through it. If we could work together on it, I think we could get sight duplicates which I could bring here and work on further. Do you think this would be feasible? I do not know what the situation is with relation to the management of the herbarium’s affairs since your reorganization, but presume that you either have the authority to make such a deal, or could get it.²

Erling immediately sent a memo to Assistant Curator Wyatt Malcolm who passed the word on to John McLeish, the new Director of Mines and Geology Branch under which the Herbarium was now administered, that

Dr. H. M. Raup of the Arnold Arboretum, who has spent several summers making botanical surveys in Canada and who is regarded by Canadian and American botanists as a very competent taxonomist, has offered to come to Ottawa for two weeks this winter and assist in putting our British Columbia material in good order. This will be without cost to the Canadian Government and will be done on condition that he be permitted to take duplicate specimens to the Gray Herbarium. There has always been very free exchange with the Gray Herbarium and we had on more than one occasion been under obligation to Dr. Fernald of Harvard for much needed advice. This has in all cases been most generously given. We recommend that Dr. Raup's offer be accepted.³

Erling figured it would take a month to get the material ready once the offer was accepted and told Raup that he was happy to extend the offer of his 'igloo' if the Raups cared to share it with him – it was “small and primitive” but no worse than camping in Wood Buffalo Park. Raup, who could not get away before mid-February, replied: “I should very much like to stay at your house provided it wouldn't be too much of an inconvenience. Mrs. Raup would like very much to come along, but I don't know whether we could manage it or not.... Incidentally, what is the state of your duplicate material in the lichen collection? Could she undertake a program in the interest of the Farlow Herbarium similar to the one I have suggested with regard to the flowering plants? She is much interested in doing this if it could be arranged, and if she could get up there to do it.”⁴

Lucy Raup had been working on Erling's lichens from Little Diomedé Island so Erling was certainly interested. The lichens in the herbarium were still in the same shape as when Professor Macoun died, with the addition of fifteen fat bundles of lichens all determined and placed in envelopes. “You probably have a very fair idea as to what shape things were in when I came here, so I trust you will understand why nothing has been done with these collections. We should, of course, have a cryptogamic botanist in the Museum, but I do not imagine that we shall have one soon. It has even been suggested that I should



Lucy Raup gathering lichens helped by son Dave in the Canadian Northwest, NWT, July 1939
(Photo: James Soper)

be able to take care of cryptogamic botany, as well as paleobotany, peat and pollen analysis.”⁵

In the end, Hugh Raup came alone on the working trip in February, but much was accomplished in the short time at their disposal in going over the undetermined material in the seven cases and parcelling up duplicate sheets to be taken back to the Gray Herbarium for further identification, while Erling’s technical assistant, Miss Hilda Harkness, did what she could to help speed things along. When he got back to Cambridge, Raup wrote a long and significant letter to the Director of Mines and Geology on March 17.

I have recently spent two weeks in botanical research at the National Museum of Canada, associating with the botanist there, Mr. A. E. Porsild. May I take occasion to express my gratitude for many kindnesses received from the National Museum, and refer particularly to

the excellent co-operation I had from the botanical staff. I have been interested for a number of years in the development of the National Herbarium, both on account of my own studies on the plants of north-western Canada, and also because of the importance of this herbarium to the advancement of botanical knowledge in all of Canadian America. I hope it will not be out of order for me to make a few comments regarding the present situation based upon my observations over the past decade.

May I say that the herbarium has been vastly improved during the past few years. Its present quarters in the Motor Building are well chosen, and although its separation from the library of the museum is a disadvantage, I understand that this difficulty is fairly well taken care of by adequate messenger service, and arrangements for the loan of certain much used books and periodicals. The herbarium itself is undergoing a highly desirable and efficient reorganization to make it more usable locally and for visiting botanists. A particularly useful project of late has been the sorting out of the great quantities of unstudied material which have been in storage for many years. Some of the most valuable collections which the herbarium possesses are in this mass of undetermined, undistributed material.

Mr. Porsild has obviously been responsible for this development, and I sincerely hope that the very real progress which he has made will be recognized. He is adequately trained for the work which is to be done in the herbarium. His knowledge of plants in the field is extensive and accurate, and he is well trained in herbarium techniques. I understand that his present position is an entirely temporary one, due not only to certain rules regarding the number of permanent employees in such institutions as this, but also to his lack of formally acquired university degrees. Upon the workings of the former I cannot intelligently comment, but I cannot help decrying the latter. At present there are very few young men who are as well trained in systematic botany and herbarium methods as Mr. Porsild, whether they have university degrees or not; and above all, men who are as well equipped for the field study of botany are extremely rare.

Such special branches of science as Mr. Porsild represents are very commonly mastered by people whose formal training is not large, and I can cite many cases of men in high positions of responsibility in the

biological and other fields of science who do not have these degrees. The present dean of the graduate school of Johns Hopkins University does not have even a bachelor's degree. The late C. D. Wolcott, who was for many years at the head of the Smithsonian Institution in Washington, was also without formal degrees. One of the more recent appointments to the staff of the Botanical Museum at Harvard is in the important and complex field of paleobotany. The appointee is a young man who has no degrees beyond a bachelor's. Nevertheless his mastery of his field and his obvious teaching ability have made him a very desirable and useful addition to our organization. The present director of the Arnold Arboretum, who is also the Administrator of all botanical collections at Harvard University, has no earned academic degrees beyond that of Bachelor of Science. Likewise the present director of the Gray Herbarium has only the academically earned degree of Bachelor of Science. It seems to me that in the light of these things, and in the light of Mr. Porsild's obvious ability and promise, the rules might well be interpreted broadly and a somewhat more permanent position be given him. This would not only enable him to manipulate the affairs of the herbarium more efficiently, but give him a greater feeling of security in planning long-time projects.

The National Herbarium is one of the most valuable possessions of the National Museum of Canada. The material in it will be the foundation upon which botanical knowledge of the vast regions of western and northwestern Canada must be built. The economic utilization of a great deal of this region must rest upon an adequate knowledge of the natural flora and plant associations which cover it now or have covered it in the past. The late John Macoun contributed valuable pioneer efforts in this direction, but anyone who has studied the northern and western floras with any degree of detail knows that a great amount of work is yet to be done before this knowledge is codified and made usable. Particularly useful would be floras, carefully worked out on a sound systematic basis, of the prairie provinces and of the national parks. These can be done either directly from the National Herbarium or in close collaboration with it. The Herbarium, with its rich collections, has lain fallow for many years. Dr. Malte, the late Chief Botanist, though a brilliant student, was unable to accomplish much due to failing health. Now that a man of ability and accomplishments is at

hand – one who is particularly well prepared for this work – it seems that he should be given adequate support, not only with a position of greater permanence, but also by means of sufficient funds to carry on.⁶

Raup's letter to McLeish was extraordinary for several reasons. No qualified outsider had expressed more clearly the need for recognition of the important pioneer collection work of the National Herbarium of Canada and the useful attributes and organizational abilities of its temporary curator at that time, but in his careful letter he also disclosed incredible details of this transition period in the field of science in North America, where men with talent who lacked the necessary "pieces of paper" at a university level could still be successful and make considerable contributions in their chosen arenas.

For the time being, Raup's plea to give Erling a permanent position would make no difference to the hiring rules at the Museum, but at least the letter had created a favourable impression and would be on file for later reference. Erling did not find out about it until two weeks later, although he began to get hints from Museum staff. On March 29, he wrote:

The other day I met Lynch at some official function, when, in passing, he commented on something you had told him about the herbarium and my work there. Later I saw Jenness at a committee meeting and he said some more. Finally this morning a copy of your letter to the Director was sent over 'for my information,' so now the 'cat is out of the bag' and did I blush! I wish I could believe it all. You certainly made out a very good case for me and for the herbarium – as Jenness put it: 'It certainly can do no harm.' It was certainly a fine thing to do and whether it is going to help or not I wish to assure you of my appreciation. I only hope that you do not think I had any thing like that in mind, when I asked you, before you went to see Malcolm, if the opportunity arose, to say a good word for the herbarium – and that you did not perjure yourself in thinking up so many laudatory adjectives. In the end the 'joke' may be on me in living up to it all.⁷

Raup seems to have been energized by his trip north. After seeing the extent of the boreal material in the National Herbarium, and with his large new collection from the Peace area that he had brought down from Ottawa to determine in addition to his own collections from Wood Buffalo Park, on April 22, he

wrote: "I have been having some more wild ideas, as you will see from the enclosed prospectus. I have had the seeds of the plan in mind for some time, but sort of let them rest until this spring when the warm weather appears to have made them germinate!" His proposal was to have a group of specialists work on a new Flora of Boreal America. "I hope you will read the proposal as critically as possible," he asked Erling, "give me any suggestions you may have as to changes or additions, and then let me know if you are willing to collaborate. I talked it over with Hultén when he was here, but have only recently got it down on paper. He seemed ready to cooperate, and was rather enthusiastic about it. Dr. Jones has also signified his willingness to go into the project, and we have Dr. Merrill's hearty support for the whole thing."⁸

"Your plan certainly is an ambitious one," Erling replied, "but, there is no denying, also a fascinating one. I admire your courage in wishing to tackle a job of such magnitude – for it is no use thinking that it is not going to be a big job.... I am naturally keenly interested, and, although, as you know, a born sceptic and pessimist, more than willing to co-operate as fully as circumstances will permit me." He assumed that the flora would be descriptive rather than a listing of species, and would require a revision of a great many groups by a number of specialists. "A strong point for your plan, I think, is that the proposed sponsors are all private institutions, and as much as I should have liked to see a work of this kind emanate from Canada, I realize fully that we shall not live to see that happen." He wished there might be a way to get some kind of grant from Canada without strings attached, and he understood why the National Museum of Canada was not included in the list of sponsors, although its co-operation would be very much needed since the bulk of the material for the flora would be found there. He did not think Malte and Ostenfeld's papers were going to be of any help due to their narrowly defined arctic flora and because most of their notes were merely citations from their own herbaria. "Between ourselves," he added, "I wonder to what extent Hultén would actually be willing to co-operate. Would he be willing to shelve his Alaska flora?"⁹

Earlier that winter there had been an exchange of letters between Erling and Hultén in which the latter had told him of his plans to visit the North American herbaria shortly and his progress with keys and maps for his Alaska Flora but he was hoping to have some of the Porsild material to be included. As he said on December 18, 1937: "I hope you soon will have your papers on the Alaska flora in print. I am longing for them." And on February 14, 1938: "I am most curious on your flora of the Barren Grounds. It is for the present the most

unknown gap in the arctic flora. When do you think that it can be expected?" By May 10, Hultén had been in Washington for six weeks. As Raup had predicted, he was finding the North American material more of a challenge than he had expected. He was quite tired after working for four months continuously from early morning to late in the evening but he thought he would be finished with his Alaska studies by the end of the month. "I have had a hard job to go through all in Gray Herbarium and here but I think that I have got most everything from Alaska in these herbaria now," he wrote. "There are now things that apparently are found in Ottawa that I should like to see and I therefore plan to go to Ottawa when I am through here. I intend for stay only for some few days, however as I hardly expect to find so much that I have not already seen. Naturally I should like to discuss things with you and I therefore ask if you will be in Ottawa end of this month and if it will be convenient for you."¹⁰

Hultén had not arrived by May 30, when Erling told Raup that he had read his paper on Little Diomed Island for the Royal Society meeting earlier that week "and the next day the Canadian Press credited me with the discovery of a former land connection between Asia and America," but arrived in Ottawa June 2. He was still there when Erling wrote to Raup: "Hultén has been here for about ten days and is staying with us. He is now working on *Pedicularis*. I expect it will take him another week to finish. When he came he said he expected to finish the job in a 'couple of days.'" Although Hultén was later to express his "deep gratitude for the pleasant days" in the Porsild home in Ottawa and for everything during his visit there, during the time he spent in the National Herbarium he was still pressing to be given the Alaska material that Erling wanted to write up himself, and in Hultén's introduction to his eventual "Flora of Alaska and Yukon" he noted: "The sets of plants collected by Dr. M. O. Malte and that of the Porsild brothers preserved in the Nat. Herb. Ottawa, were at the time of my visit to Ottawa not inserted in the herbarium and I had no opportunity of examining them, which is much to be regretted."¹¹

Erling was expecting the Raups in June on a family visit. They had been discussing the idea of going to the Green or White Mountains together on their return south, but he was now hoping to persuade them to join him on the Gaspé Peninsula. "I am quite sick for a whiff of kelp and salt water," he said. "What do you think of it? A week would not give us much time for botanical collecting but we could make a trip inland to see what the plateau flora looks like." Raup was not sure if they could manage the time or money but they were coming up at the end of the month for the meeting of the American Association for



H. and L. Raup with sons Karl and Dave in the Canadian Northwest, NWT, July 1939 (Photo: James Soper)

the Advancement of Science being held in Ottawa June 27–July 2, in which he would be giving a symposium and Erling a field trip to Mer Bleue bog on the outskirts of the city, and it could all be “chewed over” when they got there. “Give our very best regards to Hultén,” Raup said, giving an arrival date of June 28. “We hope to see him again before he goes back to Sweden.”¹²

Once the meetings in Ottawa were over and Hultén was on his way back home from New York on the Swedish ship *Gripsholm*, “Mr. Porsild” was not in the Herbarium for the next ten days or so. He and his teenaged daughter joined the Raups and their two young children on a happy camping and collecting holiday around the Gaspé Peninsula, where they were able to see for themselves some of the rare disjunct species discussed in Fernald’s and Wynne-Edwards’ papers. When it was over, Edith went back to Massachusetts to stay with the Raups for the rest of the summer while her father returned to Ottawa with a car “full of *Empetrum* and codfish,” which left the others to wonder what his

vehicle smelled like when he got back home. It is worth noting that this holiday marked the consolidation of a real friendship between the Porsild and Raup families. For the first time in Erling's official correspondence, he was comfortable enough to include personal references to his daughter, even though she had been with him all through the Reindeer Station and early Ottawa years. In a personal interview in 1985, Edith Porsild (by then Karin Lumsden) said she certainly was present during Hultén's visit to their home in 1938. For her, it had been far from a pleasant visit because she dreaded the silent mealtimes and the evenings when the men retired to her father's study for long and angry arguments. All through that ensuing summer, official letters between Erling and the Raups included news of Edith and how she was enjoying Boston until she returned home safely on August 22 "with just a trace of New England accent."¹³

While Erling was away, Nicholas Polunin's first manuscript on the flora of the Eastern Arctic had arrived on Anderson's desk with a request to have Mr. Porsild look it over and express his opinions as to whether the Museum should proceed with the publication. Erling immediately sat down to pay serious attention to "Botany of the Canadian Eastern Arctic in 4 parts," Part I, dealing with the vascular plants. The manuscript consisted of nearly 600 typewritten pages, roughly 180,000 words, beginning with a general introduction outlining the scope of the paper and the history of previous botanical exploration, and continuing with a discussion of the 297 species now recognized from the area. He looked first at its strengths. "The work evidently is the result of much painstaking research," Erling wrote to Malcolm on July 19, "involving critical examination of practically all existing material from the region, deposited in the leading herbaria of the New and Old World and also of a great deal of library research. It consolidates and brings up to date our knowledge of the vascular flora of the Eastern Arctic." Having given credit where it was due, he then looked at the paper's weaknesses, finding its failures to be much in line with the author's youth and inexperience combined with over-confidence as were noted from personal observation in the Herbarium the year before:

In his taxonomical treatment and delimitation of species the author, on the whole, appears to be rather conservative. He has undertaken to deal with the entire flora himself, rather than enlist the assistance of specialists for the most critical groups. Notwithstanding the author's claim to greater conformity resulting from this procedure, in view of his youth and necessarily somewhat limited experience this departure

may, perhaps, tend to weaken the treatment under discussion. In the general discussion, given under each species, the author quite often indulges in a good deal of youthful, and in some cases quite unnecessary and undignified whimsicality and at times, unfair criticism of previous workers and authors; also, it seems that often a great deal of space is given to elaboration of commonplace and seemingly unimportant and irrelevant detail.

Despite technical deficiencies in the manuscript, such as not giving the collector's number for specific specimens, using personal abbreviations in citing herbaria instead of those proposed by international agreement, and a carelessly prepared typescript with numerous corrections and additions in often unintelligible handwriting making it unsuitable for editing, Erling concluded that it still showed that the author had a "remarkably good understanding of the taxonomical and phytogeographical problems involved" and the paper was most decidedly worthy of publication, although its scientific value would not be impaired if it was thoroughly edited and considerably reduced in size.¹⁴

When he had finished his critique of Polunin's work, it was time for Erling to re-examine his own publishing priorities. Up to this point, as expected by his Department officials, he had been putting most of his major emphasis on his *Flora of Northwest Canada*, but he was beginning to realize that if he did not get out his paper on Alaska soon, the early collecting work that he and Bob had done would be by-passed by Hultén's forthcoming and more encompassing flora. He felt it was imperative that the new records they had made, particularly in the interior, should be made by him first, and could then be included in the larger work belonging to someone else. He must have discussed his need for this publication with Raup, for on July 28 he wrote:

I guess your visit here and the trip to Gaspé did me a world of good and I have been feeling quite energetic and am going after the Alaska paper in earnest. I have made quite satisfactory arrangements with the [Ottawa Field Naturalists]. They have even promised to print the first instalment in the September number, but I can see now that I won't have it ready. Like all that kind of papers it is going to take a lot more space than I thought first. I had hoped to be able to write the general part – about 5,000 words for the first instalment, but I find it tough

going without the catalogue, so I am doing that now and have got to the end of Cyperaceae.¹⁵

A week later, he could report that with any luck the first instalment should appear in the October number of "*The Naturalist*." [The journal to which Erling was referring was originally called "The Ottawa Naturalist" but later became "The Canadian Field-Naturalist," although still based in Ottawa.]

They have agreed to run 5,000 words monthly if I can deliver the goods. That, I think, is most satisfactory and as good an arrangement as I could possibly hope to make anywhere. What I am trying to do is this: In the first and general part I endeavour to give a general ecological-floristical description of the places visited by us and that have not been published before. I cannot, however, hope to include everything and do not attempt to do that, only such things that I happen to have looked up at Gray, N.Y. and U.S. Nat. Herb. I am giving only the most necessary bibliographical citations and synonyms because Hultén will do that. And I give the briefest possible notes on general distribution. Nevertheless the paper is going to be a long one, longer than I first realized. The number of species will aggregate 500 and the paper perhaps 30,000 words. I shall have to describe half a dozen 'new' species. I am not sure how I shall manage the Latin, but if I can do no better, I shall even attempt to do it myself.... I couldn't inveigle you to read the ms critically – the whole ms, I mean?

He had sent the final manuscript of the "Diomedé list" to his father, who had been in Denmark since the previous fall, and was agreeably surprised by the recently returned comments as he had been wondering whether it was worth publishing or not.¹⁶

Erling had told his father's old friend Elmer Ekblaw, Professor of Geography at Clark University in Worcester, Massachusetts, in February:

Dad had planned to retire next year and ... went to Denmark on a year's 'furlough' ... to prepare the publication of his life-work on the Greenland flora.... In each new letter I can read between the lines that his resolution of retiring next year is gradually weakening and that at heart he is 'homesick' for his beloved 'Station.' The trouble is, of

course, that after having spent a life time in Greenland he finds so many things changed at home. Also, I think, perhaps that in these days of breathless scurry for the sensational he finds himself a 'forgotten man.' He no doubt realizes that he has stayed too long in Greenland and that life has passed by. He has to go back to Greenland for a year to wind up his work at Disko, but I sincerely hope that he will not stay on. Thirty-two years in Greenland are altogether too many and I think that after a year or two in Denmark he would be able to adjust himself to the change. At any rate mother has found the last few years in the North very hard, and I am sure, should not go back for an indefinite period.¹⁷

It would not be long before his parents returned to Greenland, and Erling would tell Seward November 29:

From his letters I gather that his year in Denmark had been a disappointment and that he was glad to go back.... In a way I am sorry to see him go back because he has already spent too many years in Greenland. For many years he has worked on his two large papers "Fruits of Arctic Plants" and "Flora of Greenland." But he needs a larger library and herbarium and above all new contacts and new points of view that he cannot have at Disko. But I can well understand that he did not find working conditions congenial in the very cramped offices of the Copenhagen Museum, where a visiting botanist is fortunate if he can obtain for himself the use of a card table and a 10 Watt light in a dark secluded corner of the Arctic Herbarium.¹⁸

Although Erling was concerned about the welfare of his elderly parents, the most disturbing news of his summer came in the form of Museum developments in the middle of August. It looked as if Erling's job in the Herbarium was in jeopardy. "Mr. Malcolm came to see me this afternoon and said that he was somewhat worried about me," he told Raup on August 16:

You know M. well enough to know that he does not always tell you everything, but this was the message that he conveyed. Being a temporary, my certificate has to be renewed each six months and the last time the Civil Service Commission put their backs up urging that

something be done about the position I was filling. They thought that if I was not qualified to be permanently appointed the position ought to be advertised and thrown open to free competition. If advertised for the classification of "Botanist" – the title I now hold – a great many botanists including plant pathologists were eligible; for this reason the Bureau thought they might have it changed to that of Associate Botanist with Taxonomy as main line of training.

That was the preliminaries and now comes the rub. Mr. M. did not say whether the Bureau or the C.S.C. in looking over my qualifications had been apprehensive of the lack of impressive letters but they were worrying about it. In other words they did not know what to think of me. I had come to the Museum through irregular channels and not with the benediction of some Scientific Board appointed by the C.S.C. to pass on my qualifications. And since no one in the Museum were in a position to check up on me, no one, to use M.'s words were in a position to say whether I were actually doing bona fide scientific work or merely "putting over a big bluff." I had now been at work at the Herbarium for two years and a half and while M. himself did not doubt that I was doing good work, there was really nothing to show for it.

That all, of course, merely boiled down to what you were telling me last winter, that I very badly need some worth while publication to consolidate my position, to wit, my long overdue Flora of Northwest Canada. Mr. M. thought it would be a fine thing if I could very soon have the finished ms. to show for my two and a half years of work at the herbarium. I realized that it would be useless to try and show Mr. M. what had been done in the herbarium since I came here, so instead I told him that I did have quite a few publications that I thought any unbiased body perhaps would accept as proof of my qualifications as a taxonomic botanist. I also told him about the ms. of the Flora of Alaska. I had spoken to him about that before, but he had not realized that it was so big a thing. I also told him what I had thought of doing with it.

Mr. M. thought that a 35,000 word paper on the flora of Alaska, while not as good as a completed Flora of Northwest Canada, might be a very useful thing for me, and he made one observation also which is the real reason for this letter. He said in substance; That neither he, nor the director, nor the C.S.C. would be in a position to pass on the merits

of such a paper. That he realized the expedience of having it published in the Ottawa Field Naturalist, but that to a body like the C.S.C. the fact that it was published there and not in a prominent botanical magazine would very much detract from it, or, even worse, he thought that it might to them even signify that the paper had not been deemed worthy of publication in a botanical magazine. This is an angle I had not thought of, but I do think that M. is quite right. I explained to him that few botanical magazines probably would consider a paper of 35,000 words, and that at any rate it would take a terribly long time to get it out that way, whereas in the Ottawa Field Naturalist I would be able to get it out in five or six instalments. Now, the more I think about this point of view the more I get M's point and I now want to ask you what you think about it. M. has a very high opinion of Fernald's views and thought that the place for me to have this published would be in *Rhodora*. Then I could stand back and say "Gentlemen, this paper was considered worthy of publication by Fernald, so it must be good and I must be a great taxonomist." I realize, of course, that *Rhodora* would be a much better place to get the paper published and I also realize that Fernald's O.K. would mean a lot, not only with regard to the C.S.C., and the O.K. of the O. F-N editor very little.

Before I do anything about it would you let me have your reactions? And also what you think F's reactions would be. I think when we discussed this possibility before you said that it might be possible to speed up publications in *Rhodora* by making a contribution towards the cost of publication. If the cost of doing this would be within my means I suppose that would be money well spent. Needless to say I would not be afraid of competing for the position in a regular way, that is to say if I thought that the board of examiners were in a position to judge my work on its merits. On the other hand I should probably stand a small chance with a board of Canadian University Professors who had one or several of their own candidates running. To them, I feel, that whatever work I have done in botany would count little against my missing letters. Malcolm did not say so, but I had the feeling during the interview that the Bureau were all for me and wanted me to get the permanent appointment, but, that since things are the way they are, to protect themselves, they very much feel the need for some one of great authority to O.K. me scientifically. Do you think

Fernald would do that if approached by the C.S.C. or the Bureau, or would he think that a great imposition.¹⁹

Raup was sorry to hear that Erling was worried over his appointment but guessed he would have to meet that sort of difficulty. To answer his questions, he said:

Personally I don't know that publication in *Rhodora* is so much better than in the C.F.N. After all, the circulation of *Rhodora* is not large, though it is rather wide, the only advantage would be, as you suggest, that if M.L.F. put his seal on the ms. to the extent of accepting it – that would be “something” in the eyes of your officials. If you want to try it, I see no reason for your not sounding out Prof. Fernald. You could write him saying that you have the ms. which for geographic reasons won't be published by the Can. Government, and that you are willing to help in the financing in order to expedite publication. If he is willing to talk business at all he will tell you in jig time what the cost would be. In laying the matter before him I think it would be well to state rather clearly why you want to publish it now – that you are not competing with Hultén in his work on a larger Alaskan flora, but rather that this is the result of your own work over a period of years, and that by getting it out you not only do justice to yourself, but you make the material readily available to Hultén. Please take this only as a suggestion!

With regard to the C.S.C. approaching Prof. Fernald, I can see no reason why he should react unfavourably. It seems to me the scheme to make a new title – Associate Botanist etc. – is a good one. Something should be done to protect the position. I personally hope something is done about the whole thing pretty soon, before some outsider who isn't up to it is hastily groomed for the job. Suggestions are easy and cheap, but I hope you'll forgive me if I make another. I think it wouldn't hurt any if you made a valiant attempt to demonstrate to the Museum people, the C.S.C., and to whoever else will listen – what you've done in the herbarium. That herbarium when in running order has a real function, and you are getting it in running order – so why not say so!! You may have to lineup a little preachment about its significance and general workings of the place before you begin tooting your own horn, but that won't do any damage.²⁰

Given Raup's wise counsel, Erling immediately wrote to Professor Fernald at the Gray Herbarium, telling him of the work he had been doing for some years, with publication in view, on the vascular plants that he and his brother had collected in Alaska in 1926, stating that it was probably the largest single collection made there outside S.E. Alaska and the Aleutian chain. "In view of Hultén's forthcoming Flora of Alaska, I realized when he came here last spring that I must make this collection available forthwith. The simplest way, and perhaps the most satisfactory, would be to turn the entire collection over to Hultén but, because of the large amount of work already done on it before Hultén even became interested in the Alaska flora, and because this work was practically in shape for publication, I was naturally reluctant to do that."

He was careful to dismiss any danger of competing with Hultén in his own work: "I give a brief ecological description of the places visited but, because of the nature of the work and because of Hultén's forthcoming flora, I have abstained from any phytogeographical discussion of the material. In the annotated list I cite all our own collection and only such additional ones that are of particular interest and which are from the same localities visited by us and that have not been published elsewhere. But, because Hultén can do that better than I, no attempt has been made to make it a complete list of the plants known from the entire region visited."

He had looked at different ways to publish his Alaska material. It could not be published as a National Museum Bulletin as the region covered was outside Canada. A second possibility was in the *Ottawa Field-Naturalist*, but before committing to that he wanted to sound out the possibility of having it published in *Rhodora*. "I fully realize that the size of the paper strongly militates against it and also that *Rhodora* probably is tied up for a long time in advance, so that it would not be possible to publish it there in time to make it useful to Hultén." If it should prove acceptable, however, he would be glad to contribute towards the cost to expedite publication.

Getting the work out in time for Hultén was not the only reason that he was anxious to get his paper out now, Erling said. There was another reason that was inherent with the set-up and management of the National Museum with which he believed that Fernald was quite familiar:

When I came to the National Herbarium two and a half years ago I at once realized that to do any serious work there it would be necessary first to put in a lot of time placing the herbarium in working order. In

making this statement I do not in the least wish to minimize or criticize the work done by Dr. Malte but, as you know, Dr. Malte during the last years of his life was very seriously handicapped, not alone by poor health but also by the total lack of trained botanical assistance and even by the lack of a capable technical assistant. Moreover, the herbarium had, since Malte's death, been transferred to another building and for more than two years to all practical purposes closed up.

I at once explained these matters to the Museum direction, but at the time well realized that the amount of work actually needed to do this was not at all clear to them.

He had started by incorporating into the herbarium the numerous monographical treatments and revisions of genera and families that had been made during the last ten to fifteen years, involving corrections and revisions of several thousand sheets. While the task was not yet completed, he had made much needed rearrangements, particularly in the Canadian collections, to place the largest families in systematical order and indexed. In addition to the above there had been the usual routine of re-establishing and handling exchanges totalling 13,000 sheets, herbarium loans totalling 5,482 and the mounting and insertion of about 16,500 sheets, etc. etc.

In the latter I have been fortunate in having a very efficient and capable technical assistant but these routine matters, nevertheless, because no botanical assistance is available, have taken up much of my time. While very important to the herbarium, much of the above mentioned work has been of a nature that is not very easily demonstrated to a non-botanical direction, or for that matter to anyone not familiar with herbarium practise and it has, of course, very much delayed the research and writing of what is officially considered my primary task – the writing of my “Flora of N.W. Mackenzie.”

That work was progressing well and he hoped to complete it by the end of the coming winter, but meanwhile his position in the herbarium was still a temporary one and it was expected that, in view of legislation passed in Spring, a permanent appointment to the Herbarium would soon have to be made. “Personally,” he said,

... I feel that my past and present experience and work in systematic botany makes me fully qualified for this position but I fully realize that, to the Museum management and to the Civil Service Commission who jointly will make the appointment, my limited academic attainments seriously militate against me. I do have a dozen or so of botanical papers to my credit and I feel also that my northern grazing survey and my administration of the reindeer experiment, on which I spent ten years, is being recognized but I feel also that when the appointment is to be considered this winter some tangible evidence of my work in the herbarium would have been highly desirable.²¹

When Erling had finished his long letter to Fernald, he sent a copy to Raup saying he thought it was three pages too long and thus ran the danger of Fernald not bothering to read it, but thanking him for his prompt help with the matter and apologizing for giving the impression that he was much worried about the appointment. "Really I am not. I am a fatalist and have a strong belief that things in the end always work out the best possible way."²²

He did not have long to wait for a reply from Fernald, who, after all, had been concerned about how to help the son of his old friend Morten Porsild all the way back to 1925, and who knew how much his old friend Oscar Malte had valued the Porsild brothers' contributions from Alaska in 1926. He also knew how much Hultén wanted to see their results and what Raup had told him of the improvements in the National Herbarium since Erling Porsild had worked there. Like Raup, he was not happy with the idea of someone being appointed to the Canadian Herbarium who was not suitable, just because of having the university qualifications.

On August 29, he sent Erling the following:

Mr. Weatherby and I have carefully considered the possibility of publishing your Alaska paper in *Rhodora*. As you say, the journal is pretty thoroughly booked up for many months ahead, but it would be possible, by putting in extra paging, to get your paper into print during the spring months. There are several long papers already pledged to be published in the early months. The region is far outside that usually covered by *Rhodora*, which holds itself responsible for the northeastern section of the continent, but we realize the importance of your having proper publication, and are ready to do our part to help you.

Looking at ways to reduce the paper in the publication, he said:

If you could raise \$100.00 towards the cost of extra paging we could push the paper along as soon as possible. If this meets your wishes we can give you a letter upon receipt of the manuscript accepting the paper for publication, which would serve your purposes in showing the Museum management that this long paper is about to be published. We fully agree with you that your own long experience and your very detailed work should be published under your own name rather than to be turned over to some one else to be merged in his work.²³

Erling was overjoyed by Fernald's favourable reaction to his *Rhodora* proposal. He told Raup September 2: "I showed the letter to Mr. Malcolm today and I think he was quite impressed by the fact that Prof. Fernald would even discuss publication before he had seen the M.S." In turn, Malcolm sent a copy of Fernald's letter to McLeish the next day, adding: "The paper referred to is a taxonomic work on the plants collected in Alaska by Mr. Porsild during his investigations for the Department of the Interior. It is a much longer paper than is usually printed in a botanical journal and it is very interesting to know that Dr. Fernald whose opinion commands great respect in our Department is ready to go out of his way to provide for its early publication. This is a strong piece of evidence of Mr. Porsild's qualifications as a taxonomist."²⁴

Erling spent the next two months in a fever of work to complete the manuscript in the short time available. Raup pronounced the first part "first-rate, and should not only make a notable contribution to the Alaska flora, but also it will grace the pages of *Rhodora* to good purpose." He thought it would be a good thing if Erling told Hultén what he intended to do, so on October 13, Erling wrote to Sweden to tell Hultén that since the visit to Ottawa he had realized that he should make his Alaska collections available to him without further delay and had put aside all other matters and worked very hard day and night. "Realizing the importance of getting this publication out as quickly as possible I put the matter before Professor Fernald who accepted the paper for publication in *Rhodora*.... In the catalogue, between 550 and 600 species are enumerated, including a large number which are new to the flora of Alaska. In view of your forthcoming monograph, I have only tried to cover the region visited by myself but I make no claim of having included all species known from that region."²⁵

Erling drove down to Boston on October 31 and reported to Malcolm that the following three weeks were spent in herbaria and library research at the Gray Herbarium, Cambridge, and the Arnold Arboretum, Jamaica Plain. “On November 7th, at the invitation of Dr. E. D. Merrill, Director of Harvard Botanical Institutions and President of the New England Botanical Club, I addressed a meeting of taxonomists, held under the auspices of the New England Botanical Club at the American Academy of Arts and Sciences. My subject was the Flora of Alaska. On November 8th I submitted my manuscript entitled ‘Contribution to the Flora of Alaska’ to Professor M. L. Fernald, Editor-in-Chief of the Journal of the New England Botanical Club, who, having read the paper, accepted it for publication in *Rhodora*.”²⁶



CHAPTER TWENTY-EIGHT

RUMBLES ON THE HORIZON

When the snow fell on Ottawa's Peace Tower at the beginning of 1939, no one could imagine that before the next New Year Canada would be at war and the long Depression of the Dirty Thirties would be over. So many difficult years had passed and still seemed as if they would never end that January, with on-going tough times for a nation struggling with financial problems and widespread unemployment and hardship, times when men like Erling Porsild had been extremely fortunate to have a job at all, however temporary it seemed. As Pierre Berton put it: "One million Canadians were still on relief. Jobs remained hard to get, even though many who had them were overworked. Social workers had too many desperate cases, doctors too many indigent patients, teachers too many ragged students crammed into rundown classrooms. Since 1930, the country had been living from hand to mouth. The government had shovelled nine hundred million dollars into direct-aid works and projects for unemployment relief and agricultural distress and had precious little to show for it. The number of people dependent on public funds was still rising, yet the nation's leaders seemed incapable of effective planning."¹

In retrospect, despite the widespread and desperate need across the country, the decade had not been a bad one for people who were lucky enough to be working and living comfortably in a world of low expectations. In the National Museum, relatively safe under the umbrella of the Government of Canada, there had been cutbacks in research and personnel, and there was a need to hold everything as close to the bare essentials as possible, but the Depression amounted to not much more than stringent checks on expenses and a tight rein on anything that was deemed to be more than absolutely necessary. Curtailment of field costs was definitely part of the order of the day, so in discussing

the Raups' summer field work in their January exchange of letters, Erling felt he would not be able to join them however much he would like to do so.

The Raups' proposal was certainly enticing. They were aiming for the South Nahanni River country in the Mackenzie Mountains north of the Liard River, a region that they claimed was not only a part of the vast botanical "terra incognita" of northern Canada, but lay in a position intermediate between the somewhat better-known districts of the Mackenzie basin and Alaska. Their purpose would be to make a study of the mountain flora of the northern Rockies in the light of its relation to the floras of the central Rocky Mountains, the Arctic Coast, and the Bering Sea region, and to accumulate geographic data for the study of plant ranges on a broad scale in the northwestern part of the continent. They thought it was especially desirable for them to learn the phytogeographical relations of the unglaciated portions of the far-northern cordillera.²

Erling would have liked nothing better than to join them. He had told Hultén in December that he would be starting to write up his Flora of the Northwest Mackenzie in the new year, and Fernald and Raup had been urging him, if at all possible, to take in all the Northwest Territories west of Hudson Bay, rather than limiting himself to the somewhat artificial boundaries of the region which his own work had covered. "I have not spoken to anyone yet about field work this summer," he told Raup January 12,

... I think I would like to get out to where I can see some real mountains. I have now cleaned up all the Yukon collection – in all about 500–600 numbers. There was more in Malte's collection than I had thought first.... If I cannot go with you, I think I should like to go to the Yukon. I should not want to try and do too much. I should like to get in to Dawson and cover as much of the vicinity as possible and then make a trip up into the Ogilvie mountains. An alternative would be to go to Mayo. From here I can go to Mayo Lake by car and get into mountains 6,000–7,000 feet high. There will be much activity this summer in the Mayo section and I could perhaps get co-operation from one or several of our field parties. Either project, for a three month's season, with one extra man picked up in Vancouver, would cost about \$2,000.00.³

There were, however, other concerns to ponder that January. For the first time in his correspondence with Raup, on January 23, Erling mentioned emerging problems between the National Herbarium and the Botany Division of the

Central Experimental Farm in Ottawa, beginning with a very critical personal appraisal of newcomer Howard Senn. He had been watching Senn with keen interest since he arrived, he said, had sized him up as a smooth-talking climber with a great capacity for work, and suspected that he was “something of a bluffer” who had been “strutting his stuff” at the Farm. It seemed that Senn had been casting covetous eyes in the direction of the National Herbarium, although Erling was hoping that he would be prevented from launching any major schemes by the fact that his Experimental Farm Chief, H. T. Gussow, was presently under a cloud for preaching fascism rather too openly in the feelings of the day.

“I think I told you of the first scheme,” Erling said, “in which G[ussow], no doubt at S[enn’s] suggestion, proposed to the Museum that, since the Museum had shown itself unable to do anything with the large collections from the Ottawa district, to have these transferred to the Farm. This plan was rather coldly received at the Museum. My recommendation was that this material could not be worked up to better advantage anywhere else than at the National Herbarium. We did not have the staff to do it at present, but if Gussow could furnish somebody capable of doing the job, we should be glad to publish a flora of the Ottawa District.”

He was having some amusement at Senn’s expense. There had been a round-table meeting the previous fall in which it was realized that there were a number of people in Ottawa who were more or less interested in botany but were frightened by keys and manuals and technical terms. It was agreed that those people should be given some guidance with an informal Botany Class meeting once a week. Senn had been made chairman to allot lectures and demonstrations to various specialists, so Erling was surprised to find when he got back from Boston in November that Senn had decided to give a full-blown course in Plant Taxonomy in a series of thirty-six lectures.

Erling attended two of the lectures and thought it all a waste of time for everybody. They consisted of a more or less verbatim rendering of one of the modern texts, and the students were expected to make very full notes spelling out all the names he put on the blackboard for them. “It was very funny to watch the proceedings,” Erling reported not too kindly to Raup. “About half the class was girls of Miss Harkness caliber, mostly from the Seed Branch and from the Farm. They came armed with hand lenses, expecting to be shown how to find the petals and stamens in a flower. They all sat greatly awed filling page after page with long Latin names of fossil cryptogams or with names of Cuban

ferns. When the modern ferns were discussed, only one or two Canadian species were mentioned. Each of them were afraid to admit to the other that all these names were not 'household words' to such as her."

He was even more amused to receive a circular letter addressed to all who had attended the lectures asking them to show their appreciation to Senn "for giving up so freely of his time" by giving him a Fellowship in the Linnean Society.

I am afraid that I have made myself very unpopular by ... suggesting that for our "group" to "present" fellowships in the L.S., might possibly invite uncomplimentary comment and by suggesting as an alternative to present Senn with a Life-membership in the Ottawa Field-Naturalist's Club. I don't want you to get the impression from the above that "I don't like Senn" or that I am lacking in co-operative spirit. On the contrary. And I very much realize that we need somebody here in Ottawa with a little pep. On the other hand I think, as Malcolm said of Polunin: "You know, Porsild, Polunin is a young man," and I think his ascent on the firmament should not be too rapid.

A propos Polunin – the second part of "his" Flora of the Eastern Arctic has appeared in a 2,000 page typescript. It deals with the cryptogams. I have not actually counted the pages and there is no pagination – but the stack measures six inches. Future collectors of cryptogams do not need to bother about the Eastern Arctic. "10:45 P.M. – There, the pond-weeds are done fairly."⁴

On March 2, he wrote: "Fernald for some time has been sending me a daily greeting by postcard or letter with suggestions and comments on my Alaska ms. which finally has gone to print with his unequivocal blessings. I think he realized he had been too lenient at first, although I must say I think he has treated me leniently." He was going to get his wish to see mountains even if he could not join the Raups that summer. "I am leaving for Banff tonight on an eighteen day ski excursion in order to use up my statutory leave and at the same time shake some of the Ottawa dust off my brains. I shall have ten days at a ski chalet at 7,800 feet with hills back of it reaching 9,000 feet. How does that strike you?"

By the end of April he could report that the ski trip had been a great success. He and Carl Heimburger had decided that they had to do it on a shoestring so

they had gone by 'colonist car' on the train, taking sleeping bags. The first night was quite an experience as the passengers were of very diverse nationalities and tongues. They included two men who had just returned from the Spanish Civil War, and three Ukrainians who were met at each station by a deputation that gave them a speech and then embraced and kissed all around. "Heimy got a big kick out of it because he could understand the Ukrainian speeches but I for my part very much disliked Ukrainian speeches at all hours of the night. I finally rolled up my bag and withdrew to the daycoach and found it to be almost empty and slept like a top. I slept there during the rest of the trip and said 'grrrrrrr' when anyone came near my section. It worked beautifully."

From Banff they covered fifteen miles by snowmobile before doing the last 2,000 feet on skis "over a most awe inspiring trail, through primeval forest" of spruce, pine, and a very few poplars. He and Heimburger spent some time trying to figure out what *Picea albertiana* [Alberta Spruce] was. "What impressed me as being very strange was that nowhere did we see any underbrush. I don't remember seeing a single willow! ... Above the timberline we saw that curious tree, *Larix Lyallii* [Alpine larch], that looks like it comes out of a book on pre-historic trees. It must be hardier than the most hardy arctic willows. Why don't we get that in Alaska or in the Arctic?"

Sunshine Chalet, a rough log building with accommodation for about sixty guests, lay at timberline at an elevation of 7,200 feet. "The place was extremely well run and the atmosphere very friendly – a sort of skiers' free-masonry," Erling said.

Everybody was on first name already the first day. This was a new experience to me because Canadians are generally a trifle stiff and when they do let themselves go, incline to overdo it. The skiing was the very best. As a matter of fact I have seen no ski country anywhere that can touch the country out there. Five to six feet of snow on the level and always at least six inches of honest-to-goodness powder snow of the kind you see in ski advertisements. And there were ski slopes for every taste and inclination from the most impossible to the gentle rolling kind. Brewster Mt. (9,400) started right at the door and from its top we could schuss to the door in two and a half minutes over as many miles. What fun! I have never before experienced the sensation of having my skis actually hum due to vibration.... The 'Chalet' is open year round and I should love to go there in summer. The rates are very reasonable.

We paid \$4.50 per day, including transportation from Banff, guides etc. We stayed there ten days and were loath to leave. Ottawa seemed very far away and a very undesirable place to go back to.

When he returned to the Herbarium, Miss Harkness was just completing the labelling of the Malte-Watson collection from Banff that Raup had returned to them. Erling was looking forward to going over it but doubted if he would have any constructive comments to make. "You certainly fixed things up very nicely for us," he said, "and the material, when mounted and inserted will be no end of help to us. Thanks a lot."⁵

By May 10, the Raups were expecting to be passing through on their way north any day and Erling said that Ottawa was "upside down" over the Royal visit of King George VI and Queen Elizabeth. "I shall be glad when it is all over," he said. On May 15, he wrote to tell them that due to the delay of the Royal party, the Ottawa schedule had been changed. "Sunday is going to be the big day," he said. "I had planned to meet your train but that will be quite impossible now because I wouldn't get within six blocks of the Station. All private cars are banned from the city streets and no one will be permitted to enter the station except on business. The train service, however, as far as I know will not be affected. The best thing for you to do is to leave the station by the front and to take a Lindenlea car that passes right in front and get off at Acacia."⁶

Raup was still looking for help with their field work and mentioned "a chap named Soper at McMaster University" who was going down to the Gray Herbarium to do graduate work in the fall. "I suppose he would have to be paid a salary if he is planning to go to school next year. He has a scholarship here which will cover part of the expenses." "Soper spent a few days here," Erling said May 15, "working on some Lake Erie problem. He impressed me as a nice very quiet chap, so quiet as a matter of fact that his speech was literally limited to 'Yes - Yes and No - No.' He seemed rather young - around twenty one I should say." He suggested that Raup might like to try a man called August Breitung for field help as he had received some excellent material from him recently. "He is 27 and entirely self-taught. He has had five years experience in N. Saskatchewan and seems to know his local flora very well and to tackle his problems in a very proficient way." Professor Fraser of the University of Saskatchewan had told him: "Mr. Breitung as an observer and collector approaches, if he does not reach, genius. He is thoroughly trustworthy in his observations and in other respects."⁷

When Raup got through all the barriers erected during the visit of their Majesties, there would be much to talk over about the summer's field work, including his choice of taking James Soper in the field with him, but there was also the latest startling salvo from the Farm front. On May 12, on the day when Erling could report to the Department that the first instalment of his "Contributions to the Flora of Alaska" had finally appeared in print on May 1 in *Rhodora* and ask for help with supplying reprints, he and Malcolm had a lengthy discussion concerning a report that the Experimental Farm was pressing for the National Herbarium to be taken out of the Museum and run by the Farm under the Department of Agriculture.

Erling immediately marshaled his arguments against the alarming idea. On a sheet of paper that was half typed, half scribbled over, he wrote them all down to have ready in his files. "Transfer would mean a calamity for the Herbarium," he wrote.

Bot. Div. of Central Experimental Farm is chiefly interested and equipped for work on plant pathology and weed survey – they are not interested in taxonomic botany, nor in botanical surveys and have had no experience in such work. During all the years they have had two systematic botanists who have so far managed to build up a pitifully small collection of weed and forage plants. Those that have succeeded in seeing this herbarium agreed that it was more or less a "joke." Why now this sudden interest in systematic botany? Of late, within the last six or eight months they have added two more systematic botanists to their staff. Ostensibly now they have the men, they must create work for them. The National Herbarium is by far the largest and most important scientific collection of Canadian plants and can only be maintained as such under a Museum set-up. If made an adjunct to a division of economic botany, under a plant pathologist it would soon lose its scientific value and standing. With all respect to Dr. G. [Gussow] as a plant pathologist – he never was a taxonomic botanist and knows nothing of the problems of plant geography. [Transfer would mean] dismemberment of the National Museum of which the National Herbarium is one of the most important parts. The National Herbarium is being used increasingly by other Departments, and by Canadian and foreign institutions and botanists. The Forestry Branch uses it far more than botanists from the Farm. Experience elsewhere [i.e., in

Washington] has shown that large herbaria when placed under economic botanists soon become merely collections of weed and forage plants. A herbarium of the size of the National Herbarium is not needed by the Farm or for any branch of the Department of Agriculture.

There was no adequate housing at the Farm, he added, concluding his notes with a barely decipherable scribble: "It looks to me & I think to any unbiased observer as if the question to transfer Herbarium & to set up a Botanical Garden is merely a grand gesture of Gussow, who has long wished to erect a memorial to his own glorification."⁸

Erling wisely put these angry personal notes away and prepared a five-page report on the "The National Herbarium of Canada" for use by his superiors, completed June 30. In summary, he started with a definition that stated that the functions of a National Herbarium were "to gather and record botanical knowledge in the form of specimens of wild plants; to study and map their distribution; to conduct and promote purely scientific researches in taxonomic botany and to describe new species of wild plants; to prepare publications on the wild flora of Canada; to prepare suitable exhibits; and to make all such botanical information available to all workers in Natural History." He continued with the point that "the maintaining of a National Herbarium is a museum activity and is recognized as such in all civilized countries." It had been clearly stated in the Revised Statutes of Canada in 1927 that the functions of the Geological Survey were "to collect and classify, and arrange for exhibit in the Victoria Memorial Museum such specimens as are necessary to afford a complete and exact knowledge of the geology, mineralogy, palaeontology, ethnology, and fauna and flora of Canada, etc."

The primary function of the National Herbarium, founded in 1882, was to provide "a permanent and safe repository for representative collections of wild plants from all parts of the Dominion," where they were classified, catalogued, and arranged in scientific order for reference. Its "rich and irreplaceable collections" now numbered over 150,000 specimens, and its valuable "type specimens," i.e., those first collected and described for a new species, could be considered a national treasure, and the whole collection should be safeguarded as such.

With a continued emphasis on wild as against cultivated plants or weed species, Erling said that the National Herbarium of Canada "has in its possession the largest and most comprehensive collections of wild Canadian plants

to be found anywhere.” He discussed in general the botanical surveys that had been done and the usefulness of these in advance of cultivation, and outlined the wide and numerous branches of the Government who made use of the Herbarium to study plants as they affected their own interests. These included the Geological Survey, Forest Service, National Parks Bureau, Indian Affairs, Bureau of Northwest Territories and Yukon, Fisheries Department, and the National Research Council in addition to the Department of Agriculture, and it was in the best interest of the many branches of Government that the Herbarium should be maintained where there was a tradition for such museum activity, with adequate botanical library facilities, where advantage could be taken of general reference collections such as birds and mammals, and where contacts were available with men in other biological sections.

With regard to the Department of Agriculture taking over the Herbarium, there was no logical reason for the lesser special interest of one department to take precedence over the greater general one in which many departments were concerned. If there was duplication of herbarium activities at the Museum and the Farm, it was certainly not on the part of the Museum which was carrying out an activity provided for by Parliament and recognized by all countries of the world, not as an agricultural problem but as a museum activity. “The maintaining of a Dominion-wide collection of wild plants and the promotion of botanical surveys is not an Agricultural activity,” Erling said. “It is further respectfully submitted that what is needed by the Department of Agriculture is a small, well-named reference collection of plants of strictly economic importance, such as fodders and range plants, weeds, poisonous plants, and soil indicator plants, to serve for immediate and rapid consultation, thus aiding the botanist engaged in agricultural or economic botany. The present case has an illuminating parallel in the United States where the National Herbarium founded and maintained by the Smithsonian Institution was in 1868 transferred to the Department of Agriculture. This arrangement proved unsatisfactory and in 1896 was returned to the Smithsonian Institution where it has remained since.”⁹

It was certainly to be expected that this careful and comprehensive defence of the Museum position would be useful ammunition for the Department of Mines and Resources. Nothing more on this subject appeared in Erling’s Herbarium file until the Fall, when it became obvious that much rival activity was still going on in the background at the Farm. Meanwhile, there had been suggestions that he should go up to the Mackenzie River Delta area to assess the

lichen grazing situation at Reindeer Station, but in the end Seymour Hadwen, Director of the Department of Pathology and Bacteriology at the Ontario Research Station in Toronto, whom the Porsild brothers had met during the 1926–28 investigation, went north in early July to give his assessment of what had happened to Canada's reindeer herd since Erling had left the station in 1935.

When he arrived on the Mackenzie River Delta, Hadwen found the herd on Richards Island remarkably fine and healthy-looking. "As previously reported," he said, "the original herd doubled in size in the first three years despite the fact that about 300 were killed each year to furnish food and clothing for the herders, and meat for the two mission hospitals and residential schools in Ak-lavik. As well as the herd on Richards Island, a new herd had been located at Anderson River on the mainland about 160 miles east of the Mackenzie River. These two herds together now number over 5,000." The Anderson herd was native-owned under the supervision of one white man.

Hadwen preferred not to commit himself about the carrying capacity of Richards Island because some of the coastal ranges in Alaska had shown changes and the disappearance of certain plants, especially lichens. Grazing areas in Lapland, once thought to have much larger possibilities for reindeer, had also shown signs of deterioration.

In other words, the grazing capacity of the ranges has been over-estimated. In Lapland it is now believed that 50 to 60 acres per animal are required for permanent grazing, the former estimates being half that amount. In Canada we are fortunate in being forewarned about this matter and it is to be hoped that we shall never overstock our ranges. The danger of over-stocking the summer pastures near the sea may not be so great, according to Mr. A. E. Porsild who surveyed the area, because many of the forage plants are annuals. Nevertheless, we are concerned with what the ranges will be like many years hence and must do our utmost to protect them.¹⁰

The second of the Lapp herders hired in Norway had gone home the previous fall at the expiration of his contract, leaving behind only one of the three Laplanders who had come to "teach our natives how to herd the reindeer, and to instruct them in throwing the lasso, breaking and driving the deer, training and using herd dogs, and many other methods which Lapps had learned from their forebears." Erling had translated a letter for Gibson in December from Aslak

Tornensis, who had arrived safely in Norway with his family the previous November. They had been fortunate in being able to travel to their home by motor car “over a new road which has been made since you were there. There was so little snow that the motor car could cross the mountain without any difficulty.” He was anxious to hear how the Canadian herd was doing, especially the drive they were going to make to Anderson River “for the Eskimo.” In conclusion, he said, “I want to thank you again for all you have done for me and I ask you to be good enough to extend my respectful thanks to the officials at the Ottawa office for all you and they did for myself and my family.”¹¹

So now Mikkel Pulk was the only Lapp herder left in Canada with his family, and the native herders were mainly doing the work independently under the supervision of three white supervisors acting under instruction from Ottawa. “The Eskimos make excellent herders,” Hadwen said, “as was to be expected because they had done so well in Alaska. In this connection it should be pointed out that reindeer raising is a specialty of the polar races, the last remaining gap to be filled being in Canada. It is rather surprising that the North American Eskimos did not domesticate caribou, seeing that the Chukchi reindeer people are very close to them in Alaska, and the Lapps and Novaya Zemlyans were on the other side, although the gap here was much wider.”

Since the idea of expanding reindeer ownership for Canada’s northern people was always under question, Hadwen noted that, although there was no doubt that the reindeer was a descendant of the caribou, it could not be said that where caribou were found reindeer herding would succeed.

To make a success of reindeer raising, the pastures must be of the best and the situation chosen should have certain advantages, such as accessibility. The wild caribou have the migratory habit and cover large tracts of land quite unsuited to reindeer. Besides, they seldom approach the reindeer as regards fatness. Reindeer steers, on the other hand, like other domesticated animals, become very fat in the autumn and cannot be driven for long distances without losing weight.

There was also a concern that if wild caribou joined the herd, the caribou might cross with the reindeer, but he felt that there was no cause to worry as the reindeer had an earlier rutting season and crossing had been rare in Alaska. To prevent the reindeer from joining the caribou in migration, it was only necessary

to keep them under control at all seasons of the year, and wild caribou that strayed into the herd were always shot because of their unpredictable behaviour.

Hadwen felt that the management of the Canadian herd was satisfactory and the native herders were anxious to qualify for herd ownership, especially since the Anderson River herd had been started. He strongly advocated that Canada should follow Lapland's lead in banning non-native or company ownership as this had caused trouble in reindeer countries. "Government supervision of our native herds will always be necessary," he concluded, in the continuing vein of the philosophy of the Canadian Reindeer Project from its inception, "especially to assist in applying scientific methods to the industry and to act *in loco parentis* as far as the Eskimo are concerned. A benevolent, paternal administration of native requirements should be our aim." Doubtless, this remark would reflect the sentiments of the Department of the Interior and meet with full approval in Ottawa.¹²

The update on the situation at Reindeer Station closed the end of the last peaceful summer before World War II began. As early as March 29, Erling had received a letter from his father's old friend Professor Elmer Ekblaw of Clark University who said: "The situation in Europe seems to improve very little, if at all. Denmark, and for that matter all the Scandinavian countries, are in a rather precarious situation right now, and I fear that they will find it difficult to oppose the imperialistic expansion of Germany, both economically and territorially. I am inclined to the belief that it will be difficult to escape war this coming summer. I wonder what Canadians are thinking about it at the present time."¹³

Canada had enjoyed the golden optimism of the Royal Tour, that smiling cross-country break in the tired Depression hopelessness that ended with the triumphal departure of the *Empress of Britain* on June 15, but another and far more terrible visit had gone practically unnoticed. With bitter irony, Pierre Berton noted that the shy King and his charming Queen arrived back in England one day before another boat returned to Europe, one that had sailed from Hamburg on the same day as the royal couple reached Canada. The luxury liner *St. Louis* was filled with 907 German Jewish refugees who had desperately cruised the Atlantic Ocean all during the month-long regal tour and had heart-breakingly been refused entry into every country in the New World, including Canada, where they had begged for assistance.¹⁴

It seemed that practically no one in Canada believed that a major war was possible in that summer of 1939, and practically everyone believed that peace negotiations would win out, but Czechoslovakia had fallen to the Nazis in the

spring and Poland fell as summer ended. Britain and France declared war on September 3. On September 10, Canada was at war with Hitler's Germany.

It is amazing to think of the speed at which Canada was put into action, down to the smallest details. Two days before war was declared in Ottawa, Malcolm sent a memo to Erling: "We are informed by Mr. C. W. Jackson, Chief Executive Assistant, that it is proposed to commence immediately a postal censorship of mails and it is requested that your services be reserved for this work. For the present at least your salary will continue to be paid by this Department. I understand that you have already started this work as a result of a telephone message two or three days ago." Erling's work for the post office would effectively consume all of his daytime hours from September 6 to October 17. On October 6, he wrote to J. A. Munro, Chief Federal Migratory Bird Officer in British Columbia, with whom he had a friendly correspondence: "Since war broke out I have been assigned special work & I only get to my own office after regular hours, in order to take care of the most urgent matters." However, Erling reported to Raup on October 31: "On the whole Ottawa has settled down more or less to normal business and the war does not seem to have affected things as much as one might have expected. There is even talk of a general election in the spring."¹⁵

Meanwhile, the minor skirmishes between the Museum and the Farm were continuing on and off the screen.

With regard to the Herbarium there really has been no new development and although pessimist that I am I somehow do not believe myself that 'they' will succeed in making the 'steal.' Nevertheless they are working hard at it. I am hoping that the war will tend to make things harder for the 'enemy.' Gussow, since the war broke out has been more or less under a cloud, because of his outspokenness in certain matters, but Swaine, who is director of the new 'Science Service' of the Agr. Dept. is firmly sold on the idea that the Herbarium ought to be at the Farm. And he is a great pusher. Senn told me the other day, quite unintentionally I believe, that for some time the plans for the new wing to the botany building at the farm had been held up by Gussow because he hoped to have the matter in the bag, so that he could make room for the herbarium. Now it looked as if the war sort of has pigeonholed the plans and Senn admitted, that even the small plan, providing for a herbarium 16 x 32 feet in two stories had not been finally o.k.'ed. This

information was more or less pried loose and Senn did not actually make the statement as I have rendered it.

He was sending Raup a copy of a twenty-five-page 'white paper' that he had written that he thought would surely convince the most sceptical that the Herbarium should remain within the jurisdiction of the Museum. He felt that that combined with the yearly record of field work "ought to show Gussow that his suggestion that we should 'start' a botanical survey of Canada is somewhat passé." He had talked to Taverner and Jenness earlier that day "and we all agree that the view of some outside botanist, who has no axe to grind and with authority can speak for the world botanists, probably would be of great help to us and would be appreciated by the head of our Department in future dealings with the Civil Service Comm." He was hesitant to ask him to do more since he had done a great deal for them already; however, if Raup did wish to write, Erling suggested he write to Dr. Camsell, as he knew him personally, with copies to other interests involved.¹⁶

Erling's 'white paper,' completed October 30, had been written in response to a memo dated October 12. McLeish wanted to know to what extent the collections in the National Herbarium were consulted by officers of the departments of Agriculture, Forestry, and others and by private individuals and representatives of other organizations, to which Erling gave him a complete list of visitors to date in 1939. McLeish's second question concerned the percentage of the National Herbarium collection that would be of definite interest to Agriculture, to which he replied that it was very difficult, if not impossible, to give a definite answer but since the majority of the collections were from wild areas that preceded cultivation, possibly only the weed species and a portion of the grasses and sedges used for fodder would be of interest to agriculturalists. "I believe that I am justified in stating that only a very small part of the collections in the National Herbarium are of any importance whatever to agricultural botanists engaged in economic applied botany," he said. "The negligible use made in the past of the collections in the National Herbarium by our agricultural botanists would seem amply to bear out this contention." Question number three asked him to compile a review of all the field studies in connection with botanical surveys that had been made by the Geological Survey and the National Herbarium, which was answered by an appendix of six detailed pages of botanical field work. A final request for a list of publications dealing with botanical surveys and studies published by the same took another twelve pages.¹⁷

While Erling was compiling his answers to the memo from McLeish, he received an unexpected letter from the Farm. "Dear Mr. Porsild," Gussow wrote October 19. "I enclose for your confidential information a copy of a letter I am sending today to Dr. J. M. Swaine, Director, Science Service, Department of Agriculture." His letter to Swaine read:

We view with regret the formation of an impression that owing to a proposal to consider the final disposition of the National Herbarium Mr. Porsild's promotion may have possibly been affected. May I point out that I am emphatically in favour of the long overdue promotion of so able a botanist as Mr. Porsild. I wish to make clear that under no circumstances should Mr. Porsild's promotion be held up for whatever final decision may be arrived at as a result of our proposal. As we have pointed out Mr. Porsild should be transferred to the Department of Agriculture with the identical future prospects he may have had in the herbarium under the Department of Mines and Resources.

We have been aware of Porsild's work for many years, as well as the reputation which he has established for himself among his own peers and I certainly desire to place myself on record in stating that the delay in recognizing the services of a man of so unique experience and training is considered definitely unfortunate and its continuation not in the best interests of the public. I am enclosing two copies of this letter and would request you to kindly forward them to the Civil Service Commission and to the authorities of the Department of Mines and Resources.¹⁸

Erling took some time to reply to Gussow's letter. The personal recommendations were flattering but he was astute enough to wonder if this was not merely a ploy to gain his support for the Herbarium transfer. On November 18, he answered carefully but briefly, regarding the confidential letters "concerning my position and other matters related to the National Herbarium. Your stand in the matter has been noted with appreciation and I thank you sincerely for your thoughtfulness in keeping me informed. The Government's policy in relation to the National Herbarium is, of course, decided by others, but my interest is, naturally, in seeing that the best decision for the good of plant geography and taxonomy in Canada be reached."¹⁹

Gussow was not to be deterred from trying to get him on side. "I have your letter of Nov. 18th," he said on November 21, "and wish to assure you that as with you, my earnest desire is that the best interests of Canada, of Canadian botany and of the services which botany can and should render to the national welfare, be served as efficiently and adequately as possible. It is to this end that we have made the proposals for the amalgamation of the herbaria under the control of the Dominion Government, not with the idea of interfering in any way with well-merited promotions of those associated with the herbaria. Indeed the centralization and setting up of adequate facilities for this work should materially improve the opportunity for advancement of those associated with it."²⁰

No mention of Gussow's letters appeared in Erling's letter to Raup on November 26, thanking him for his supportive letters to Camsell and Harry Snyder, a private individual whom the Raups had met at Brintnell Lake in the summer. It seemed from the latter letter that more than the National Herbarium was at stake that fall, for Raup told Snyder that it was the interest and support of such men as himself that were most necessary for the development of the National Museum.

I believe that if you could get together a small group of people, private citizens who would take a personal and dynamic interest in the affairs of the Museum, that it would very quickly acquire a new lease on life. Once under way, with the public's attention drawn to it, I am confident it would have ample public support. Museums everywhere have had to go through much difficult periods as this, and the good ones have come through with flying colours. There is at the Museum now a nucleus of fine men who are well able to handle this development. I speak particularly of Dr. Jenness, Mr. Taverner, Mr. Porsild, and Dr. Anderson. As I think I suggested, I think Dr. Jenness is the logical man to direct the whole Museum.

Erling thought it would be interesting to see what Snyder's reaction would be and said Raup's letter to Camsell was a masterpiece. From the odd remarks he had heard,

... it seems to be bringing home a few of the points that we have been trying to make.... Meanwhile I have managed to get our only M.P.

who is interested in botany worked up over the Museum situation. It is Mrs. Black from the Yukon. She may not be a botanist although she is genuinely interested in wild flowers and writes about them. I got her so interested that she listened to me for four hours straight the other day. I talked to her for two hours about the life and work of John Macoun whom she knew. She thought it was “the most thrilling” story she had ever heard. Mrs. B. is a very shrewd woman and she may do some good too. At the moment she is sold on the idea that the Gov’t must implement the report of recommendation of the Royal Society the essence of which is that the Museum should be placed under an independent board of directors. This will not cost anything and would be the first step towards placing the Museum on a sound basis.²¹

The cannons had definitely been loaded on the Ottawa scene and seem to have had the desired effect. The absence of further comment in the correspondence and the continuance of regular unrelated memos from the Department of Mines and Resources clearly demonstrate that the internal domestic war between the Herbarium and the Farm was over, with the Museum status quo intact, but in the meantime the real war over the Atlantic had only just begun.



CHAPTER TWENTY-NINE

THE PROBLEM OF GREENLAND

The year 1940 began peacefully enough in Ottawa, although there had been an ice storm over the holidays that had done a great deal of damage to street and garden trees and shrubs, not to mention downed power lines and over 5,000 telephones being out of order for a few days. The usually open ski trails in the Gatineau hills looked more like rabbit runs through tunnels, Erling told Raup on New Years Day, and this had made for some rather exciting skiing. He was looking forward to seeing him in March. "Someone at head office told me last Saturday, unofficially, that my trip to Boston has been approved," he said. "My informant was as surprised as I am myself. It means that I can get three weeks before the end of March and my expenses paid." He also had some holiday time to use up so he might even try to get to New York if he could swing the expense. He had been trying to get grant money for publication from the American Academy of Science without success and wondered if it was worth another try.¹

He had been in touch with Wynne-Edwards and was about to travel to Montreal where he had been invited by Professor Scarth to speak at McGill University on January 8 on "Flora of the Northwest Territories." He gave the same lecture the next day at l'Université de Montréal, which gave him a chance to talk to some of the Quebec botanists. Frère Marie-Victorin had been anxious to spend as much time as possible with him and Jacques Rousseau wanted to show him around the Botanical Gardens. In between the university lectures, on the evening of June 8, he talked to the Province of Quebec Bird Society about his "18 years in the Arctic." As he told his hosts, the Wynne-Edwards, on February 4, he had a good time in Montreal.²

He left Ottawa mid-February for Boston in order to spend four weeks doing library and herbarium research at the Gray Herbarium and Arnold Arboretum

and wrote to Diamond Jenness March 6: "I have been having a very busy and, I hope, fruitful sojourn in this most remarkable institution. I do not believe that there are any places in the world just like it. The only trouble with it is that it is so very hard to resist the temptation to digress. One starts with the very best of intentions to look up just the one thing, but almost at once other things turn up that one had not thought of but that one has wanted to look into for years."³

Boston was as enjoyable as ever and little had changed because America was not at war, but shortly after his return to Canada, everything went from normalcy to urgency in the back rooms of Ottawa. On the morning of April 9, the radio crackled with the news that Hitler's army had occupied Denmark in the space of a few hours, setting in motion a level of External Affairs activity that would affect Erling personally in a very short time. At 7:56 that morning, Prime Minister Mackenzie King received a telegram from a Lieut. Col. C. H. Reason in London, Ontario: "STRONGLY URGE OCCUPATION OF GREENLAND BY CANADA," while the news of the capitulation of Denmark was greeted with particular panic in one company in Montreal where at 7 a.m. that morning the President of Alcan, R. E. Powell, was immediately on the phone to "Scot-tie" Bruce in Ottawa to ask who was going to stop the Nazis from disrupting their supply of cryolite from Greenland. Cryolite, composed mainly of sodium-aluminum-fluoride and called 'ice rock' for its lustrous qualities, was a natural ore that was vitally needed in the electrolysis process in the manufacture of aluminum, which in turn was vitally needed in the war effort, and its only commercial source of supply was from a mine in Ivigtut, situated close to the coast of a fjord in southwest Greenland. The company had purchased 3,000 tons of the ore from the Ivigtut mine for delivery in the summer, had expected to purchase the same amount again, and more would be needed in the expansion for the war, Bruce informed Norman Robertson at External Affairs, so the company was deeply disturbed to learn of the German occupation of Greenland's parent country that morning.⁴

Naval intelligence reports were quickly added to Alcan's concern, because a telegram went out from the Secretary of State for External Affairs in Ottawa to the Secretary of State for Dominion Affairs in London the same day: "Reports of enemy ships heading in direction of Iceland and Southern Greenland force consideration of risks of enemy interference with cryolite production at Ivigtut, Greenland, upon which maintenance of essential aluminum depends. Understand that winter's production is awaiting shipment from Ivigtut and that destruction of stocks accumulated there would seriously threaten planned

rate of aluminum production in Canada, other allied countries and the United States.”⁵

Germany’s takeover of Denmark affected not only Greenland but also Iceland and the Faroe Islands under Danish sovereignty, all of which added dangers to trans-Atlantic shipping for the Allies. Because the Faroes were so close to Scotland, Great Britain was immediately co-operating with the Governor to ensure that German occupation was not possible. Similar measures were being suggested to the Iceland government. The idea of a Nazi-controlled Greenland, in addition to the concern about Alcan’s cryolite supply, was particularly worrisome for Canada because of its proximity to North America and its many fjords and harbours as potential shelter for German submarines and its land area for possible air bases.

The war was suddenly coming closer to Canada. Headlines in the *Toronto Star* on April 10 blazoned the concern: “SUGGEST CANADA MAY SET WATCH OVER GREENLAND. Possibility of Germans Establishing Air Bases Cannot Be Overlooked. OTTAWA SILENT.” The article continued:

Immediate fate of Greenland, a Danish possession, now that Germany has overrun Denmark, is a problem under discussion here. The external affairs department declined today to comment on whether Canada would take over supervision of this territory. Impression here is that Greenland cannot be neglected because of the danger of its being used as a submarine or air base for Nazi activities. The decision will be whether it can be best patrolled from Great Britain or Canada. This Dominion already has advantages in its Hudson Strait radio stations and facilities at the eastern end of the strait, from which the Canadian fliers operated when making a weather survey of the strait... Possibility that conditions in northern Europe might encourage enemy expeditions from Greenland aimed at northern Canada has been contemplated and prepared for in plans of the RCAF. Possibility of enemy air forays against central Canada from ships entering Hudson Bay or far northern bases has been raised.⁶

In the office of the High Commission for Canada at Canada House in London, England, First Secretary Lester Pearson received notice from Hume Wrong on April 10 that Dr. Nicholas Polunin, a young scientist from the Department of Botany at Oxford who had extensive knowledge of Norway, Greenland, and

the Canadian Arctic, had come in with regard to the position of Greenland and Iceland. "He wanted assurance that due consideration was being given to the position of Greenland and Iceland in view of the German occupation of Denmark," Wrong said. "I told him that he could rest assured that this was not being overlooked either in Ottawa or in London. He says that at present only the extreme southern tip of Greenland is accessible and on the east coast harbours will be icebound until July. He was anxious that some record should be kept of his name and address in case there was any need for the services of a person with his special knowledge of these regions. I promised him that this would be done."⁷

Lengthy discussions continued in Ottawa about the problem of Greenland and its scattered population of 400 Danes and 16,000 Eskimo. When ownership of the territory had been settled between Denmark and Norway in 1920, the British Foreign Office had sent a communication to the Danish Minister in London stating that His Majesty's Government recognized His Danish Majesty's sovereignty over Greenland, but in view of its geographical proximity to the Dominion of Canada, His Majesty's Government reserved the right to be consulted should the Danish Government at any time contemplate alienation of this territory. Since an unexpected kind of alienation had now occurred without consultation, the question arose as to whether Great Britain or Canada should do something about its defence. If any action was contemplated, and if Canada was in a position to occupy strategic coastal points, it might be more acceptable to United States opinion in view of the Monroe Doctrine and the general political attitude against European intervention on the American continent. No such action could be considered unless control of the North Atlantic remained with British and French navies, and in any case it was desirable to discuss the matter not only with London but also with Washington.⁸

Washington was certainly aware of the problem. The *New York Times*, April 11, cried: "GREENLAND RAISES HEMISPHERE ISSUE. Monroe Doctrine To Be Applied If It Is Necessary – Danish Envoy Sees Roosevelt." On leaving the White House, Henrik Kauffman would only say: "We agreed, of course, that Greenland belongs to the American continent." The Monroe Doctrine, 1823, was originally intended as a protection measure for the Spanish American republics, and set in law by Congress the principle whereby "the American continents were not to be considered as subjects for future colonization by any European power," although this did not apply to existing colonies. The Doctrine could be interpreted in different ways depending on circumstances, and

one fear in Washington was that if the United States or Canada took control in Greenland, the Japanese might see that as international approval for taking over the Dutch East Indies if the low country also fell to Germany.⁹

Another missive from Alcan applied further urgent pressure on External Affairs on April 11. The company had received a message from His Majesty's Ministry of Supply that Britain needed shipments of refined Greenland cryolite that was no longer available from Denmark or Norway. There were only two places in North America that took the raw cryolite from Greenland and converted it for use in aluminum smelters, one being Penn-Salt, the Pennsylvania Salt Manufacturing Company in Philadelphia, and the other being Alcan's plant at Arvida in Canada. Alcan was very worried about the safety of the Ivigtut mine in Greenland because the shaft was two hundred feet deep and only fifty feet from the sea, protected merely by a bank of waste rock that could easily be sabotaged, and there was the question of the operation of the mine, which Alcan had said earlier they would be prepared to run if needed, because the Danish company usually sent a ship in the spring with "some 75 labourers and technicians, who mine the bulk of the tonnage produced. Only some 15 men stay through the winter and, presumably, carry out a certain amount of mining. It will be appreciated, therefore, that aside from sabotage, steps must be taken quickly to ensure that mining operations are preceded with this Summer."¹⁰

On April 12, the Department of National Defence (Naval and Air) was contacted for a report on the possibilities of any action by Canadian forces in Greenland, and Dr. Hugh Keenleyside at External Affairs was asked to get in touch with the Royal Canadian Mounted Police and the Northwest Territories Branch of the Department of Mines and Resources for information from these sources. Keenleyside, at Gibson's suggestion, immediately called in the botanist from the National Herbarium who had spent a considerable part of his life in Greenland.

In their discussion, Erling Porsild confirmed many of the Departmental fears, and a long memorandum was later circulated through External Affairs with the information they had obtained from him, expanding on possible solutions. There were many communities along the west Greenland coast but few on the east, he had told them, and there were many safe harbours or havens that could be utilized by German submarines or surface raiders. There were no roads connecting the communities, and no airfields anywhere in Greenland. The cryolite mine at Ivigtut on the southwest coast was almost on the shoreline and navigation to the entrance of the mine was open at all times of the year, so

it would be easy for a submarine or raider to come in at any time. It would not be practical to station a patrol boat offshore throughout the year, and the use of sea planes was out of the question due to fog in summer and rough weather in winter, so it seemed that the only way to defend the mine was to mount guns on land.

There were two radio stations, one at Julianehaab and one at Godhavn that were sufficiently powerful to engage in trans-Atlantic communication. There were many small schooners along the coast and the Danish Government sent two patrol vessels each summer, although it was improbable that they had left Denmark that year. Erling's personal concern, especially for his family in Disko, was that the people of Greenland were entirely dependent, except for meat, fish, and domestic coal, on supplies sent out by ship from Denmark.

Fairly large supplies of most commodities are generally kept on hand, and it might be possible for the population to go through one year without additional aid except in the matter of fuel oil. This, however, is by no means certain. Practically all of the trade is carried out by barter as there are no banks and little use for money. All trade is handled through the Home Office of the Danish Government and is operated as a state monopoly... There are two centres of administration – Godhavn for the north province, and Godthaab for the south. There are no police and no military defences, except for the two Danish Coastguards. Practically the whole population live in European style, and almost all of them have European blood. There is little or no illiteracy. The natives can be expected to be sympathetic to the Allies and would be most useful for the supplying of information about raiders or suspicious vessels.¹¹

Telegrams went back and forth across the Atlantic on April 12, trying to decide what steps should be taken if Canadian intervention in Greenland became necessary, how to protect the mine at Ivigtut, and whether to take on civil administration by providing food and fishing supplies and the marketing of furs that was normally done under Danish Government monopoly, while stressing that this was merely a temporary situation. O. D. Skelton reported in an internal memo April 12 that "The Prime Minister stated today that we should not jump into the position of announcing that we were ready to take over Greenland. It was impossible to foresee the implications both during the war and after the

war of such an undertaking. It might involve similar action regarding Newfoundland. It would be sufficient to let the British Govt. know of the danger that existed and let them take necessary action. There was the danger also of disturbing American opinion. The recent developments in Europe were likely to lead to demands for sending more contingents to Europe and we should keep this in mind." It was still proposed that action should be taken to protect the cryolite mine, but the suggestion of providing the "native inhabitants" of Greenland with usual supplies met with Mackenzie King's disapproval. "The unemployed in Canada would criticize looking after Esquimaux in Greenland's icy mountains, or India's coral strand, rather than Canadians at home," he said.¹²

The *New York Times* reported that America was also not anxious to do anything about the icy land to the north at that time. Roosevelt told the press that, after studying the atlas, he was satisfied that Greenland belonged to North America, and he had checked with the Red Cross about humanitarian aid and been told that there was no need at present, and it was hypothetical and premature to contemplate a Greenland dominated by Germany.¹³

Meanwhile, the Canadian High Commissioner in London, Vincent Massey, sent a telegram to Ottawa to the effect that the United Kingdom Government had expressed their appreciation of Canada's proposals and hoped Canada would proceed with "any plans that were feasible." The United Kingdom Government would like to be informed before any action was taken and would notify their United States Ambassador to keep in touch with the Canadian Minister in Washington prior to any United States notification and stressed the temporary nature of any occupation as well as the intent to purchase cryolite at current price and reimburse the rightful owners as soon as Denmark regained independence. It was considered highly improbable that Germany would attempt to seize the mine, although they might have tried to destroy export facilities with a scale of attack ranging from bombardment by armoured ship to destruction by landing party. An air attack was an extremely remote possibility, and the coast might be used for fuelling raiders or subs, but there was no greater likelihood of this than before the occupation of Denmark. "It is not considered there is sufficient likelihood of a German attack on Ivigtut to warrant provisions of defences which would be necessary to meet the scale of attack which is actually possible. In view, however, of importance attached to mines, it is thought that despatch of a small detachment to act as a deterrent would be justified. There would also be some advantage in watching the Greenland coast

either by naval or air patrols, more especially when German submarines are known to be operating in North Atlantic waters.”¹⁴

It was time to test the waters of American opinion. A telegram went out from External Affairs on April 15 to Loring Christie in the Canadian Legation in Washington, informing the Minister of their official concerns and, “as a result of this situation, whether it would be necessary to send to Greenland a small defence force to guard against the above mentioned dangers and to cooperate with the local administrations in North and South Greenland in providing for the needs of the native inhabitants. These measures would not be intended as affording the basis for any future claim to acquire a title of sovereignty but would be purely of an emergency character. For the duration of the war the Canadian Government would be acting as trustee for a restored and independent Danish Government and full accounting would be maintained for that Government.” Christie duly passed the message on to the State Department the next day and was impressed by how cautiously the Canadian representations were received, leaving with the feeling that the United States was already seriously contemplating the possibility of taking some action in Greenland themselves. He sent a secret and personal message on April 17 that he had been told off the record: “The United States does not want Canada to take the proposed action in Greenland.... The western hemisphere is the only part of the world where the U.S. has a positive policy and they want to keep it consistent.”¹⁵

Two of the reasons for the State Department’s wary reaction to Canada’s proposals regarding any interference in Greenland involved their constant contact with Penn-Salt, Alcan’s rival company in the North American refined cryolite market, and their close association with Kauffman, the Danish Minister, who was actively negotiating with the local authorities in Greenland whom he regarded as the supreme authority during Denmark’s occupation. Telegrams to Greenland from Penn-Salt and the Minister were routinely intercepted, translated, and examined before being sent on by Canada’s cable censors, so Ottawa was able to confirm that Kauffman’s messages were helpful on the whole. However, an internal memo on April 27 noted that Canadian radio stations had been picking up a number of Kauffman’s messages in the last two days insistently demanding an answer but none had come. It was questioned whether German sympathizers in Greenland, with or without assistance, had taken some action there, though this was regarded as improbable, or whether the local authorities had been receiving messages and instructions from Copenhagen

as well as from the Danish Minister in Washington and were undecided what to do so were sitting tight.¹⁶

By April 27, Washington was buzzing with activity on behalf of Greenland. An American-Danish Committee had been formed, it was announced in the *Washington Post*, with two of its members being Captain Bob Bartlett, “explorer,” and Leonard Beale, President of Penn-Salt, to take charge of some of the commercial and humanitarian aspects of the Greenland situation. A delegation from Greenland to see Kauffman was expected in Washington, and a confidential memo was circulating about the appointment of a U.S. Consul to Greenland subject to the consent of the Danish Minister. By April 30, a message from Kauffman to the Southern Administrator in Godhavn was picked up that, at the suggestion of the President, the American Red Cross proposed to send a delegate with coastguard cutter on a short visit to Greenland to ascertain the need for medical supplies, etc., and regarded the visit as a chance for him to welcome them. The U.S. Consul would also arrive at that time and probably remain in Greenland for the summer and desired a house of his own if possible.¹⁷

The official announcement came in the *New York Times* on May 2 that a U.S. Consulate was to be established provisionally at Godthaab, and James K. Penfield, Consul, and George L. West Jr, Vice Consul, would be sailing on the coastguard cutter *Comanche* on May 10. Mackenzie King met with President Roosevelt on May 2 to discuss the Greenland situation. Roosevelt confirmed the consular appointment and thought that the Canadian Government might consider taking similar action as “such action would not interfere in any way with the administration or control of the local authorities.” The Prime Minister’s general impression was that the United States was “quite prepared for parallel action by our two countries in the way of observation and economic assistance” while the President said that they “might” send a revenue cutter to Greenland – the need there was communications, and it “might” take up radio sets and binoculars so that the coast could be watched and alarm given, fires “might” be started on hill tops, etc. Canada’s annual patrol of the Canadian Eastern Arctic was approved as possibly calling in Greenland, although it was suggested that the captains of the *Comanche* and the *Nascopie* should confer in Montreal or elsewhere before setting off.¹⁸

Keenleyside had already had meetings with Ralph Parsons, the Fur Trade Commissioner of the Hudson’s Bay Company, and Captain Smellie, Master of the *Nascopie*, two days earlier, and Parsons had laid out a proposal whereby the *Nascopie* could pick up food and medical supplies in Churchill for delivery in

Greenland and bring back cryolite on his return home that summer. He had also proposed an additional trip later in the year. Keenleyside suggested that an immediate telegram should be sent to the authorities in Greenland to assure them of Canadian interest in their welfare and invite their views on any steps Canada might take to contribute to the independence and happiness of their people, and in addition that officials from the Canadian and U.S. Governments should meet with the Danish Minister, a delegate from Greenland, the American-Danish Committee, and representatives from Alcan and Penn-Salt, for a free exchange of views and a basis for solving problems. Once that meeting had occurred, the *Nascopie* could be sent on a brief survey trip, leaving "an accredited representative" in Greenland to co-operate with local authorities. "It is suggested that only through such a programme as that outlined above can the Canadian Government avoid a loss of prestige and at the same time ensure, through a mutually satisfactory co-operative agreement with the other interested parties, that the essential supplies of cryolite will be available for Canadian industry."¹⁹

On May 2, External Affairs received a secret cipher from Vincent Massey conveying a message from Anthony Eden in the Dominion Office on Downing Street, saying that the United Kingdom Government felt that it was within the legal rights of the Allies to protect the mine at Ivigtut. The Japanese could use British occupation of the Faroe Islands as a pretext in Netherlands East Indies but in United Kingdom opinion their principle deterrent would be their fear of United States action. The United Kingdom would be glad if the Canadian Government would consider the immediate despatch of an expedition to Greenland for the purpose of taking control of cryolite mines. To meet points raised by the U.S. Secretary of State, the expedition could be described as a Relief Expedition and could carry supplies for local population in the area. The object would be to ensure continued production of cryolite and consequently aluminium in Canada and other parts of the Empire and in United States, and to take the necessary measures to guard against danger of enemy action by sabotage or other means.

It was also stated that the United Kingdom did not think it was necessary to inform the U.S. Government before the expedition was despatched, but they thought it might be "useful" (someone in External Affairs added an exclamation mark) to tell them as soon as it had arrived and offer to concert with them in further humanitarian matters and for disposal of cryolite as far as U.S. requirements were concerned. As Mackenzie King's deputy minister Dr. O. D.

Skelton noted confidentially to Christie at the Canadian Legation in Washington, with the need to keep the United States informed, "The mentality revealed by this telegram must be that of the genius who organized the campaign in Norway," referring to the hastily assembled and disastrous plan to land Allied troops, including the Canadian force based at Aldershot, in Norwegian fishing ports after Germany's attack on neutral Norway on April 9.²⁰

By May 3, it was learned that the U.S. Consular appointments were causing concern in Nazi-occupied Denmark that the United States was getting too interested in Greenland and they were considering sending a commission to the United States to take care of Danish interests in Greenland. However, Christie was told by the State Department that it would be impossible for such a commission to enter without a visa, of which they had control. Meanwhile, Lester Pearson in the High Commission for Canada in London heard that the Chief Officer of the *Julius Thomsen*, the supply ship jointly owned by the Cryolite Mining Company and the Danish Government, had "approached our naval authorities with regard to the protection of the cryolite mines at Ivigtut." The vessel, originally on a voyage to Ivigtut with workers and supplies, was now detained at Kirkwall. The Chief Officer "would be willing and able to pilot in any of our warships through the fjord, which is very deep... There is, incidentally, a wireless telegraph station there."²¹

Keenleyside worked on press release proposals for a "Canadian Policy Relating to Greenland" in Ottawa from May 4–6. Although the question of general defence of Greenland was now not considered to be a very great danger, the cryolite supply was of the utmost importance. The American Red Cross had already made plans for humanitarian aid, but it was probably desirable for Canada to assist in relief program. There was the question of national prestige, as the Canadian Government would be exposed to criticism at home and abroad if Ottawa let Washington handle the whole problem. Canada had been put in an uncomfortable position over the important cryolite supply because, while the United Kingdom was urging that Canada should send a defensive unit "and would hold her responsible if she does not and the mine is lost," the United States was "insistently anxious" that Canada should not send a defensive expedition to Greenland. Keenleyside suggested that they should contact the Greenland officials, send the *Nascopie* ostensibly on her annual voyage with supplies and bring back cryolite, and send a Consul to Greenland on the *Nascopie* to keep Canada informed on developments. He felt that they should tell the UK that it would be a serious mistake to disregard American views,

that Canada was sending up the *Nascopie* and the Consul, and to hold the *Julius Thomsen* in Kirkwall until after the *Nascopie* had arrived in Greenland, and they should tell the United States that, although they understood the importance of their views, “we are still concerned about the vulnerability of the mines,” and tell them about *Nascopie* and Consul and also set up a meeting of all the representatives interested.²²

It seems likely that Keenleyside had Erling Porsild in mind for the Consular appointment when he added: “Consideration might be given to the selection of a Canadian of Scandinavian background – preferably Icelandic or Danish – for appointment to this post.” Even if Erling was not to be given a consular post, it was possible that he might be or had already been asked to accompany the *Nascopie* on her trip north as an interpreter, because, on May 6, Ralph Parsons sent a message to Gibson: “Would you please ascertain from Mr. Porsild the form of address to the Governor of Greenland, in the event that we may wish to telegraph him, asking him if he wishes us to bring a quantity of supplies from Churchill to Godhavn in exchange for furs and other country produce that he may have on hand, presuming that the Canadian Government would have no objection to such a proposal.” Gibson passed the letter to Keenleyside to “indicate the nature of the reply that should be made.”²³

On May 10, a long missive went out from Ottawa to inform the High Commission for Canada in London that in the opinion of the Canadian Government it was of the greatest importance that direct and friendly interest of the United States in the Western Pacific as well as in Greenland should be maintained. While informing Washington that Canada was holding in abeyance plans for sending to Greenland a defensive guard for the cryolite mines,

... we are pointing out that no alternative measures for preventing a sudden raid on and destruction of the mine at Ivigtut has been suggested by the United States. We have drawn particular attention to the fact that the problem of securing the cryolite supply cannot be met by measures which would take effect only after a raid has occurred... You will realize, in view of general friendly relations of the United Kingdom and Canada with the United States and their readiness to discuss freely this special situation, it would appear to be most inadvisable to carry out the suggestion that the United States Government should be advised only after action has been taken by Canada.... We propose to

inform the Greenland authorities that we intend to send a Consul to Greenland as soon as an appointment can be made.²⁴

On May 10, the day that Hitler's army advanced on Holland, Belgium, Luxembourg, and France, the day that Winston Churchill became Prime Minister of Britain, a press release was personally delivered by Kauffman to the Canadian Legation in Washington containing a resolution adopted by the United Greenland Council at their meeting at Godhavn on May 3.

We, the people of Greenland, have witnessed with profound grief the aggression to which our mother country Denmark has fallen prey. At the same time it has caused us grave concern to see Denmark cut off from the work which she has been doing for the people of Greenland for more than two hundred years. It is our sincere hope that the day is not far off when peace and justice will be restored and when a free Denmark will be able to resume this work. It has been necessary for the authorities charged with the responsibility for Greenland to seek new routes for our vital connection with the outside world. In these circumstances it has made us extremely happy to learn of the sympathy expressed officially and unofficially by the Government and the people of the United States, a sympathy which has found its latest expression in the establishment of an American Consulate in Greenland and the dispatch of U.S. Coast Guard cutters to visit Greenland. It is our hope that, for as long as we remain cut off from our mother country, the United States Government will continue to hold in mind the exposed position of the Danish flag in Greenland, of the native Greenland and Danish population, and of established public order. We hope that the United States Government, taking our isolated geographical position, will facilitate the import of necessities and the export of our products. While reiterating to our rightful King Christian X of Denmark our oath of allegiance, which will be kept unswervingly, we desire in this grave hour to convey to the President of the United States the deepfelt thanks of the people of Greenland for the sympathy with our cause and the respect for our freedom which the great American nation has proved so amply in these dark days.²⁵

Although there was much further interchange of telegrams on all fronts, it seemed that the stage was set for United States activity in Greenland, and, it was

hoped, for Canada also. There was a discussion about whether the Greenland administration would agree to mount guns at Ivigtut, supplied by either the United States or Canada, and what guns should be mounted on the *Nascopie* before her voyage and how it should be done. Skelton received notice from the Department of National Defence on May 13 that the naval authorities in Halifax had been instructed to put a 4" gun and 2 rifles on board the vessel, "which is that provided for all Defensively Equipped Merchant Ships and recognized in International Law," and three naval ratings would be placed on board to "fight the gun." He was warned that there was a possibility that, should additional armament or personnel be placed on board, this might be considered as altering her status as a merchant ship. However, the difficulty might quite properly be overcome by putting aboard the required number of RCMP personnel as opposed to members of the Fighting Forces of Canada.²⁶

Skelton informed the Prime Minister on May 14 that the *Nascopie* was being rapidly put into shape and should be ready to sail shortly from Halifax. It was suggested that she should make a thirty-day trip, chartered by the Government at \$550 a day including crew, plus insurance, and carry about nine hundred tons of Hudson Bay Company supplies of salt, oil, flour, potatoes, sugar, and other foods, and plan to bring back a cargo of cryolite. She could be accompanied by four members of the RCMP. Re: the appointment of Consul: "If a competent Canadian of Danish or Icelandic descent is available, that might be appropriate. He could be accompanied say by Porsild, a very reliable Greenlandic who is in the Canadian Government Service, and thoroughly familiar with the Danish and Esquimaux languages."²⁷

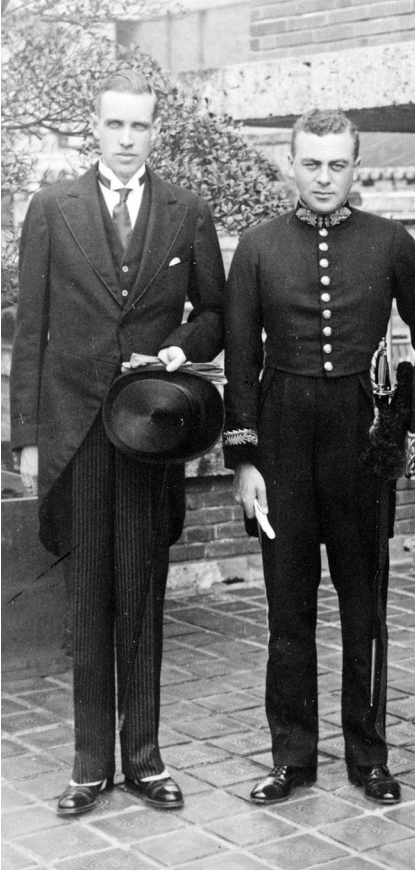
It was Robert Bothwell, in his biography of Lester Pearson, who stated that "the calibre of the Canadian foreign service created by Dr. Skelton was extraordinarily high; stocked with talented lawyers, professors, and poets manqué," but it was Pearson himself who noted that the service from time to time appointed an outsider with special skills and experience for a particular post, unlike the British who were overly concerned with keeping all appointments within the Foreign Office and the Americans who went to the opposite extreme. The results, on the whole, had been good, he said. An unsigned letter was put into External Affairs files on May 15 entitled "Looking at men for consideration as Consul." Among those suggested for the Greenland post was Diamond Jenness, Anthropologist at the Museum, for his Arctic experience (but not in Greenland). However, the unknown author concluded,

... it is possible we have been attaching too much importance to the question of language and not enough [to] experience in international work. It had seemed to me that it was not possible to spare any man from our services or to get him to Greenland in time. It now seems the best solution might be to send [Kenneth] Kirkwood to Greenland. Since the occupation of Holland, he is without duties of importance, and is now in London. He has had long experience in Japan and Holland, and is a level-headed, careful fellow. He served in the last war and is a bachelor. If the Danish supply ship, *Julius Thomsen*, now at Kirkwall, is to be sent out to Greenland shortly, with a British guard on board, it would seem possible to have Kirkwood go to Greenland direct on her. Porsild, a native Greenlander, now in Mines and Resources, who is said to be a competent man and who knows Eskimo as well as Danish, could perhaps remain as assistant to Kirkwood and supply the local and language knowledge required.²⁸

On the same day, Erling Porsild was asked to translate into Danish a telegram to the Danish authorities in Greenland: Eske Brun in Godhavn, North Greenland, and Aksel Svane, Godthaab, South Greenland – carefully informing them that:

In common with all other free and democratic States, Canada has been greatly disturbed by the invasion of Denmark and the subjugation of its Government to an alien dictatorship. The Canadian Government understands that pending the restoration of Danish freedom the local authorities in North and South Greenland have decided to administer their territories on their own responsibility and to refuse to accept instructions forwarded under compulsion from Copenhagen. On the understanding that this is the case the Government of Canada is prepared, if so desired, to co-operate with and assist the Greenland authorities in promoting the welfare of their people.

Canada would be glad to consider their suggestions as to the best co-operation and assistance they needed, it continued, and could be contacted either by wireless to Ottawa or to their representatives on the ship *Nascopie*, “which carries supplies annually to the Canadian Northwest Territories outposts and which has called at Greenland posts in other years” and would be leaving



K. Kirkwood and H. Keenleyside, Canadian Legation, Tokyo, Japan 1929 (LAC, detail from PA-120407)

Halifax about May 20th with the usual supply of goods if all or part of these would be required. "Canada is greatly interested in the security of the cryolite mines at Ivigtut and is hopeful that the ore production this year may be considerably increased. It is hoped that early consultation with the Greenland and U.S. authorities in regard to production, transportation and marketing of this ore may be arranged. In this connection consideration might be given to the possibility of having the *Nascopie* bring back a cargo of cryolite on her present trip.... The Danish Consul General at Montreal and the Danish Minister at Washington are being informed of the contents of this telegram."²⁹

The combined response from both Governors on May 17 was equally careful. They accepted with thanks Canada's kind offer of supplies on the *Nascopie*. The cryolite mine was in full operation and they anticipated a normal production, they said, adding a cryptic "About this later" to which Erling added

after translation "Meaning we shall inform you in detail about this at a later date." They were thankful regarding export to Canada of other Greenland products but reserved decision until later in summer.³⁰

The Governors also sent immediate welcoming letters to Ken Kirkwood and Erling Porsild when their appointments as Consul and Vice-Consul were announced on May 20, but to External Affairs the welcome was tempered with a problem: "The Consul shall be very welcome but it will be necessary to call the attention to the fact that, after the establishment of the U.S. Consulate and of a

Central Office for Greenland no housing accommodation is available, so it will be necessary to build a special house. Fitted boards, timber etc. together with plans for a house must therefore be brought along whereupon the house shall be built immediately. Temporary but less satisfactory accommodation can be counted upon.” It had been noted in an earlier missive from Washington that the U.S. Consul and Vice-Consul would be taking all the supplies they needed for a year, in order not to be a burden on the Greenland people during these trying times, and before leaving London on May 23, Kirkwood was preparing for the isolation post by asking if he could have by the next Government opportunity “a general atlas, year books, Canadian almanac and a useful book on Greenland” and, at his own expense, he would appreciate a portable gramophone with symphony records, a medium-size Kodak camera with supply of film, and an oil painting kit and small oil boards.³¹

The High Commissioner in London informed Ottawa May 22 that the *Julius Thomsen* would be sailing from Kirkwall on May 23 or 24 with Kirkwood on board. She would carry thirty-three persons, all connected with the mines, and supplies of hardware and canned goods, under the surveillance of “the guard.”³²

In Ottawa, Erling Porsild had little time to prepare to reach Sydney, Nova Scotia, by May 23, ready to leave on the *Nascopie* on May 24, and certainly not enough time to assemble material for building a Consular house in Godthaab, but it was noted in the Annual Report from the National Herbarium for 1940–41 that “From April 12, Mr. Porsild was detailed to special duty outside the department but until May 20th, when he left to take up the post of Vice-Consul to Greenland, continued to attend to routine matters in the herbarium.” It would be up to Hilda Harkness, as with so many women in wartime Canada and elsewhere, to hold the fort with routine matters in the National Herbarium until he returned from Greenland.

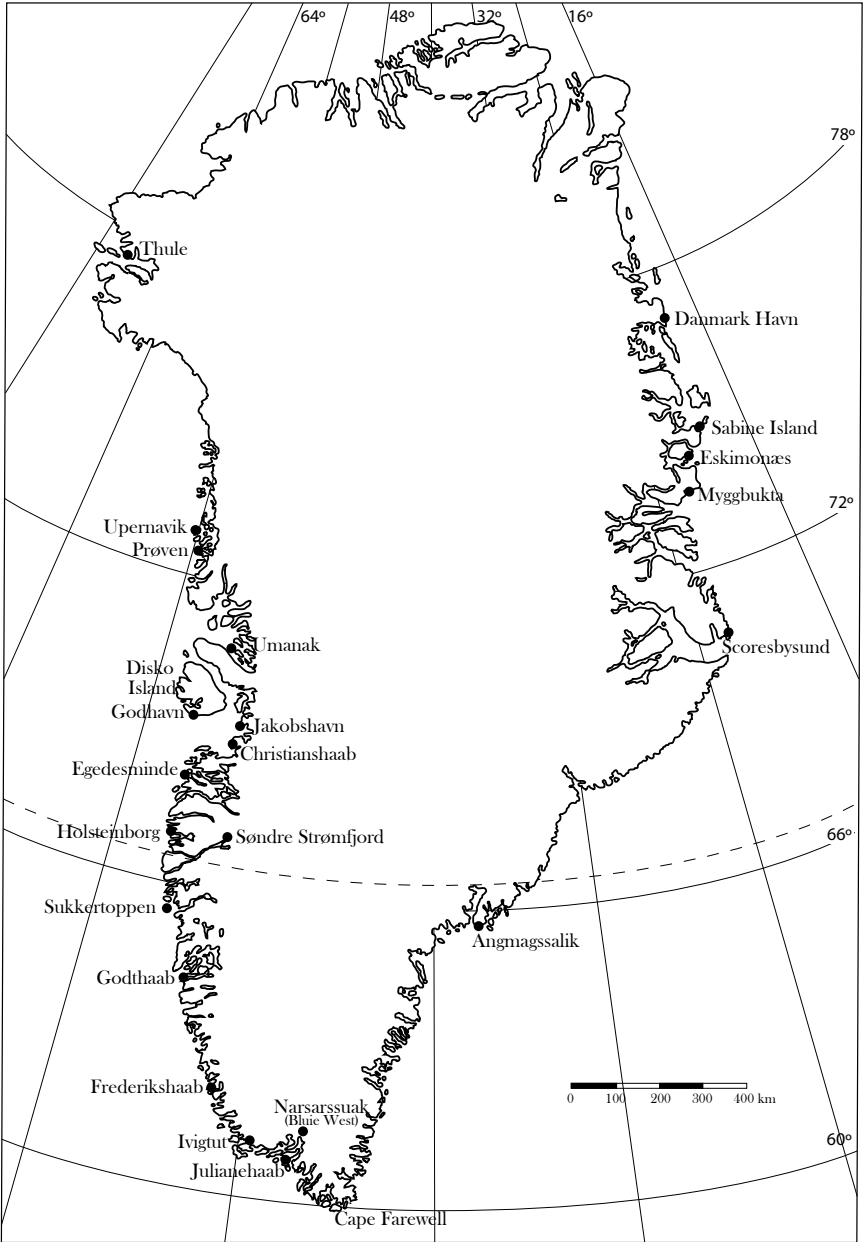


CHAPTER THIRTY

CONSULAR GREENLAND

The boarding party that assembled at Sydney, Nova Scotia, ready for the departure of the Hudson's Bay Company vessel *Nascopie* on 24 May 1940, should have made it obvious to all but a casual observer that this was no ordinary supply trip to the Canadian Arctic. Captain Smellie, her regular skipper, was in charge of the ship as usual, but the actual expedition was under the command of Major D. L. McKeand, superintendent of the Eastern Arctic, with second-in-command Major C.L.M. Macdonald, Royal Canadian Artillery, assisted by non-uniformed Royal Canadian Mounted Police Constables J.S.C. Skeel and I. O. Smistad, and Special Constables C. B. Holmes, R. Young, S. Marks, and A. Hooper. There was even an accountant from the RCMP listed in the company, J. E. Dancy. Other Government officials ready to board included Erling Porsild, the new Vice Consul to Ivigtut, Greenland, and more usual party members such as F.R.E. Sparks, Postmaster of the Eastern Arctic, Dr. F. S. Parney, Government Surgeon, and O. M. Demment from the Hudson's Bay Company. Two representatives from Alcan completed the party – H. J. Hendra, who had been manager of Alcan's bauxite mining operations in British Guiana [Guyana] in the early thirties, and D. W. Miller, a young mining engineer. The company men were supposed to act only as observers and to obtain information about the cryolite production, but the President of Alcan had said to them, "Don't come back unless you bring cryolite."¹

One of the Alcan men was certainly more aware than Erling Porsild seems to have been of his company's competition for cryolite with Penn-Salt in Pennsylvania. In a letter that Hendra wrote to Alcan's Vice President O. M. Montgomery from the Isle Royale Hotel in Sydney, May 23, and a later report to the company July 6, he said that he and Erling and Major McKeand had been



Greenland in the early 1940s (Cartography: Faith Carlson)

talking the night before sailing when the subject turned to wireless communications and receiving mail.

Dr. Porsild asked the Major how he could receive mail from Philadelphia. Major McKeand asked why he wanted mail from there, and he said he was asked by the people in Philadelphia how they could get mail to him in Greenland. I asked him if he was referring to the Pennsylvania Salt Co. and he said yes, he had been communicating with them for some time. 'Does Ottawa know this?' the Major asked, and Dr. Porsild said 'I don't know.' The Major seemed angry and told Dr. Porsild that if he was receiving information from these people he should have informed the External Affairs Department.

Hendra was disturbed enough to call the Alcan Vice President at 9 a.m. the next morning and repeat the conversation of the previous evening. Montgomery called him back two hours later and told him Powell was very concerned about Dr. Porsild's communications with Penn. Salt Co. and suggested that "AEP" be recalled if possible. Hendra advised against any alteration but suggested that, since "Dr. P." had been appointed censor for Ivigtut, any mail from the United States should be censored in Ottawa.²

It seems extraordinary, in view of all the worries at External Affairs about Alcan and cryolite supply in relation to the United States and Penn-Salt, that Erling Porsild had not been put completely into the picture so that this kind of suspicion could have been avoided. There seemed to be no need to suspect any untoward rival interests on his part, as witnessed by his open question about receiving mail, although it is obvious that the American company had approached him with what could be interpreted as questionable intent, thereby raising doubts about Erling's loyalty to Canada in the minds of Alcan and McKeand right at the beginning of his consular term, but it was the kind of misunderstanding that was to dog the whole Greenland expedition for the next few weeks. Kirkwood was to complain to the Department later that it was unfortunate that all the material relevant to the mine at Ivigtut, "said to be available in Ottawa," had not been provided to the newly arriving Consul and Vice-Consul, or to the leader of the Government party on the *Nascopie* (who showed [him] his notes on Ivigtut, supplied by Ottawa departments, which were both erroneous and obsolete), or to the two representatives of the Aluminum Company of Canada who were sent to examine and collect data on the mine. In addition,



Ivigtut, Greenland, 1940 (LAC, e010864039_s2)

no preliminary understanding or prearrangements had apparently been made with the Ivigtut authorities and the “absence of instructions to the Canadian party or consular officers created much uncertainty on their part and on the part of their perspective hosts. The whole chain of events ... as well as the misgivings as to the *Nascopie*’s character, caused hesitation and delay and created at first sight a natural reluctance of the Danish authorities to impart at first sight full information to foreign visitors.”³

Unaware of the tangle of uncertainty that lay ahead, the Hudson’s Bay Company ship duly set sail from Sydney with her cargo of necessary supplies from the Canadian Government and “a cabin full of liquor from Alcan.” The voyage to Greenland was uneventful, held up only slightly on May 30 by fog, and Hendra reported that the ship proceeded up Arsuq Fjord to Ivigtut harbour, a run of about three hours, in the early morning of June 1. The U.S. Coast-guard Cutter *Comanche* was at anchor when the *Nascopie* arrived. At 8:30 a.m. the Danish Government Controller for Ivigtut, Albrecht Fischer, and the Assistant Mine Manager, Hasselback, came on board, and McKeand explained the reason for the visit was as a relief expedition to open trade negotiations between Greenland and Canada. Fischer invited Hendra ashore to view the plant but the Major thought the party should not go ashore before Kirkwood arrived on the *Julius Thomsen*.⁴

Perhaps if Hendra had managed to go ashore at that time, he might have been able to allay anxiety on the part of the local officials, relayed to Governor Svane in Godthaab and from there to the Danish Minister in Washington, about the presence of the people on board the *Nascopie* whose arrival they had not expected. The *Julius Thomsen*, carrying the new Canadian Consul, did not arrive for another three days, by which time news had reached the U.S. State Department that it was beginning to look as if Canada intended to take over the mine and occupy Greenland.

An angry Adolf Berle Jr., U.S. Secretary of State, called on M. M. Mahoney, Chargé d’Affaires for Canada in Washington, who reported the interview to Ottawa on June 3: “Mr. Berle stated that up to the present the United States and the Canadian Governments had been working in harmony over Greenland. The problem of the production and distribution of cryolite was, he understood, being satisfactorily ironed out, though the Aluminum Company of Canada had apparently had the idea that they had fallen heir to the cryolite mines in Greenland. At the suggestion of the Canadian Government, the United States Government had drawn up a defence project for Greenland. The armaments for this project had been supplied by the United States at a nominal price and were now on their way to Greenland.” The State Department had, however, received information of two developments which might complicate the problem. They had been informed when the *Julius Thomsen* had passed Ireland that there were not only the Canadian Consul but three naval officers on board; and the *Nascopie*, which had arrived in Greenland,

... had on board not only the Canadian Vice Consul but an artillery officer, some officials of the RCMP, two mining engineers from AL-CAN and some soldiers. The Canadian Government had informed them only of one artillery officer in mufti and mining engineers to look over conditions at the mine and return to Arvida immediately. Berle admitted that perhaps the RCMP formed part of the normal complement of the *Nascopie* but could not see the need for the engineers or the rest.

He said the State Department was disturbed by this information. They felt that the presence of these people in Greenland, as well as the presence of three United Kingdom naval officers, might be interpreted as meaning that the Canadian Government intended to assume control in Greenland. He wanted to be informed if they were to stay or

would return to Canada shortly. He said, "I am being very blunt about this, and I could put our feelings in more diplomatic language, but I feel I should report to you that I have discussed the matter with the President and he said he would be 'very angry' if the Canadian Government attempted to occupy Greenland."

Mr. Berle said that this was not the time for this type of 1890 imperialism and that the days of Cecil Rhodes had passed. He said that the mining engineers were from the Alcan, and he indicated his belief that Alcan was trying to take advantage of the present situation in order to get control of the cryolite mines. He said that after all there were very few white people in Greenland, and that a few armed men from another country could quite easily assume control. He did not see that the presence of these men was necessary in Greenland in order to protect the cryolite mines against attack. Minor attacks could be dealt with by the local Greenland authorities with the material with which they had now been provided. Major attacks could not be prevented unless a first-class base were established in Greenland and "we had not yet got around to that." If and until the situation changed then the Canadian and United States Governments would have to get together to reconsider the matter but until such time the United States wanted to keep the status quo in Greenland as much as possible.⁵

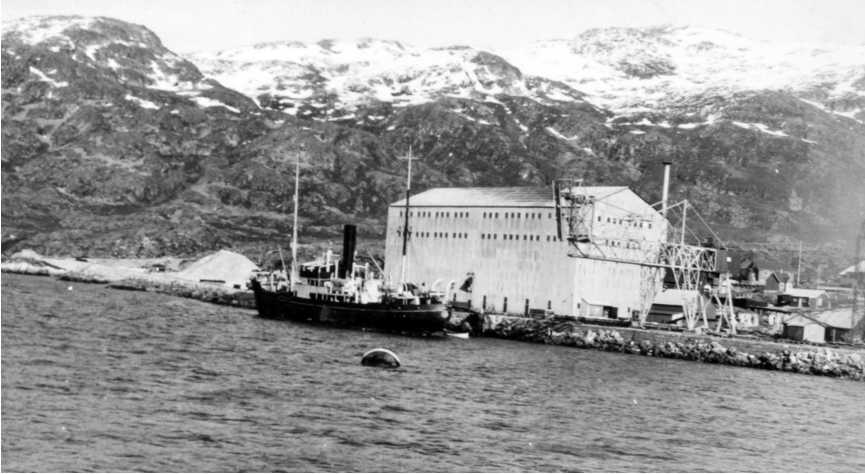
In Ottawa, where they had been so careful not to have more than one member of the armed forces on board the *Nascopie* precisely because they did not want to upset Washington, Skelton sent the original telegram to Mackenzie King with the comment "I think his [Berle's] tone is wholly unwarranted," and sent a prompt response to Mahoney on June 4 asking him to send a copy of the reply to the British Embassy and the Danish Minister and to make an immediate appointment with Mr. Berle to give him the following information:

(1) *Julius Thomsen*. We have been informed that the United Kingdom placed a temporary guard on the vessel to prevent sabotage and to see that it did in fact go to Greenland as ordered. This seems to us to a reasonable precaution. (2) We did not state that there would be artillery 'officers' on the *Nascopie*. We informed Mr. Berle that one such 'officer' in plain clothes would make the round trip. This is what is being done. (3) There is no RCMP Officer on the *Nascopie*. Two constables

were sent and four civilians deputized to assist in handling the two machine guns which with one spare and a few rifles constituted the total defensive equipment carried by the *Nascopie*. (This of course does not in any way compare with the armament carried by the U.S. Coast Guard cutters.) The *Nascopie* always carries members of the RCMP on its northern trips. (4) There are no soldiers on the *Nascopie* other than the one officer referred to above. (5) The whole complement of the *Nascopie* will return on that ship. (6) The only way in which the Aluminum Company of Canada enters the picture is in connection with the negotiations regarding the division of the cryolite which are now proceeding with Penn Salt, the outcome of which, as Mr. Berle knows, is subject to revision by both Governments. (7) Even if the erroneous reports received by the State Department were true it is difficult to see how they could be interpreted as a Canadian attempt 'to occupy Greenland.' We have already informed the United States that we have no intention of occupying Greenland. You may add that from the first the Canadian Government has kept the Government of the United States fully informed of all its plans relating to Greenland. In return, we feel justified in asking that our statements be accepted by the officials of the State Department.⁶

Once Berle and the Danish Minister were relieved of their concerns about the possibility of Canada occupying Greenland, events began to move more smoothly at Ivigtut, albeit slowly. The *Julius Thomsen* came in on June 4 and the naval commander expressed his satisfaction as to the loyalty and reliability of the crew and passengers on board. Erling left the *Nascopie* on June 5 to join Ken Kirkwood in their consular duties, making courtesy calls on the local administration and mine officials at Ivigtut on June 6, although "in view of some uncertainty [in] recent administrative and diplomatic developments," the people on shore asked to defer conversations with the Canadian party on the *Nascopie* until the arrival of the Governor of South Greenland from Godthaab. Another week passed before Governor Svane and U.S. Consul Penfield arrived, at which time some of the Canadian supplies were able to be off-loaded at Ivigtut while the rest would have to wait for another vessel to transport the goods further north.

The U.S. coastguard ship *Campbell* docked June 12 and off-loaded Greenland supplies and an anti-aircraft gun and machine guns for the defence of



S.S. "Julius Thomsen" arrived from England, Ivigtut, Greenland, 1940 (LAC, e010864040_s4)

the mine. As further security, fifteen members from the cutter were quietly seconded and temporarily "hired" as "mine guards." Kirkwood told Hendra on June 14 that the mine manager, a Swedish engineer named Corp, seemed willing to talk to Alcan about supplying cryolite and had signed a one-year contract with Penn Salt in April.⁷

To date, no member of the Government party except the Vice Consul and the doctor had gone ashore in fourteen days, but Kirkwood said: "Governor Svane, after long delayed arrival here, is now displaying energy in all outstanding matters, in conjunction with mine officials who, since my arrival have been anxious to co-operate with Canadian representatives and interests, but lacked the necessary authority until now." There was no real progress, however, until it was learned in Ottawa on June 17 that Alcan and Penn-Salt agreed to a fair division of the cryolite supply, with Penn-Salt to handle United States needs and Alcan to have the larger share in order to be able to look after the needs of the United Kingdom, France, and other Allies, and each company would buy direct from Greenland. As soon as news of the settlement reached Ivigtut, on June 19, McKeand and Hendra were able to pay an official call on Governor Svane and the mine manager and hold preliminary discussions concerning cryolite supplies to Alcan.⁸

Three long, trying weeks after the arrival of the Hudson's Bay vessel at Ivigtut, on the evening of June 22, eleven members of the Canadian party, including Captain Smellie and the Chief Officers, went ashore for a social evening at which the liquor consignment from Alcan was a well-received contribution. Members of the party were invited to inspect the mine workings the next day, and from then until the *Nascopie* sailed on June 29 with her cargo of cryolite for Arvida, well overdue for her annual Arctic patrol, the Alcan representatives were able to take photographs, collect samples, and make at least a cursory investigation of the mining plant and operation.⁹

While the consular representatives waited for the *Nascopie* to complete her mission, Kirkwood cabled Ottawa on June 21 concerning the location of the new Canadian Consulate. The U.S. Consulate had been set up at the administrative centre of Godthaab further north, and Governor Svane had repeatedly expressed the opinion that the Canadian Consulate should also be situated at Godthaab instead of at Ivigtut, a view endorsed by the U.S. Consul, some of the mine officials, and Erling. Their own house would be needed in either place, as well as essential furniture and a year's supply of food, and the house had to be erected before September freeze-up made the ground unworkable for a foundation. In response, Keenleyside assured Kirkwood on June 24 that they were arranging to "send a house and necessary food and equipment," and he asked them to postpone a visit to Godthaab until the *Nascopie* had left, and to keep the Department informed of their whereabouts at all times.¹⁰

At Kirkwood's suggestion, because he could stay behind and keep an eye on things at Ivigtut while his Vice Consul's language skills and familiarity with North Greenland would be helpful to "wave the flag" for Canada, Erling left for Godthaab with Governor Svane on the day the vessel sailed and was proceeding north to visit his family in Godhavn on July 6 when Kirkwood told Keenleyside that he would go up to Godthaab himself on July 8 and return to Ivigtut in about a month. Seeing that the Consul was alone in Ivigtut, Keenleyside sent a secret code message July 7 to be decoded by Kirkwood personally: "Please let me have brief but candid appreciation of attitude of Brun, Corp, Fischer, and any other member of Greenland Delegation of importance. Indirect suggestion received from McKeand that Porsild may not be wholly loyal to Canadian interests and that you might prefer to get along without him. Does that represent your view?"¹¹

Although Kirkwood's reply is missing from the file, subsequent letters do not suggest that he believed that Erling was opposed to Canadian interests; quite the opposite. Ken Kirkwood was quickly proving that he had been a good choice for the Greenland post at a time when the needs for diplomacy and ability to smooth over difficult negotiations were at their highest. Max Dunbar, who met him at his home in 1941, described him as a "scholar, writer, and professional diplomat who was highly gifted, utterly charming and devoted to his calling." Kirkwood would have recognized from the start that his Vice Consul was perhaps not the kind of man who excelled in pouring diplomatic oil on troubled waters, that at heart he was a loner, a pragmatist, and above all a botanist yearning to be doing his botanical work that had been interrupted once again by the war, but he was conscientious about doing his duty for the Department and the new Consul certainly needed his help for his knowledge of Greenland and his cordial ease with the people and the language and local conditions under normal circumstances.¹²

When Erling got back to Godthaab, there was a letter waiting from Anderson. Wartime pressure for office space was creating chaos in Ottawa. They had been able to keep the reference collection of the Herbarium clear and available for use, but the vacant space left by the staff of the Fuel Board was awaiting new temporary occupants, and they had had to move some of the herbarium furniture and other material out of immediate use in order to make room for employees of another branch. It was not necessary to move the systematic collection so Miss Harkness had been able to continue work in the reduced quarters. After a month, the other branch moved out so "today we had some of our stuff put back again." Otherwise, all was well, including Edith whom his wife had seen just before she left to spend the summer with the Raups.¹³

Erling was glad to hear that the Herbarium and the rest of the Division had weathered the storm intact and trusted that the new wing was now occupied to everyone's satisfaction and that "no more covetous looks are being directed our way." He was grateful to Anderson for sending him Polunin's opus. "I have travelled about a good deal this summer and visited many places and interviewed a great many people," he said.

A great many changes have taken place, some of which I am dubious about but others no doubt are most desirable. A new generation of technicians have developed and the ability and skill of some of these young Greenlanders impressed me very much. At Holstenborg there

is a small shipyard capable of hauling boats up to 200 tons. It is entirely operated by natives (although owned by the Government). The machines (all electric) were all humming and the place looked very busy.... I have had a visit with my folks now. They are both well but, of course, are getting quite old, especially Mother. Dad is working hard on his two large volumes on the Greenland flora but, like myself, finds it hard not to digress into related matters.¹⁴

It was the last time Erling saw his mother for she died before his return to Greenland the next year.

On July 17 Kirkwood wrote to Ottawa from Godthaab, where he was staying with U.S. Vice Consul West:

I understand that a suggestion was made to Porsild that he might be permitted to return to Canada later this year to attend to personal matters and redirect work of his assistant at the National Museum. Such a visit, in my opinion, would be most useful for reporting and consultation with Dept. of External Affairs, securing of supplementary supplies, etc. Visit should be made if possible in August or September. Are we to understand that we are both to remain here through the winter? Question of location and condition of Consulate, site of house and equipment and supplies are influenced by decision on this point. U.S. Consulate have not yet had instructions on this question on their part.

While they waited for answers, there was much consular travelling still to be done. Erling and Kirkwood rendezvous-ed in Godthaab on August 10 and made a trip together to Ivigtut and Julianehaab from August 27 to September 12. Erling left Ivigtut for Godthaab on September 24, leaving Kirkwood to continue to monitor shipments of cryolite for Arvida. By the time Kirkwood arrived in Godthaab on November 23, he could report that, either alone or together, Canada's two consular officials had visited, made personal contacts, and studied local conditions in all the communities on the west coast of Greenland except for Umanak, Upernavik, and Thule, and they had maintained consular representation concurrently at Ivigtut, the chief economic and shipping centre, and Godthaab, the administrative centre.¹⁵

In an interview for the *Toronto Star* shortly after his return to Ottawa for the winter, Erling was quoted as saying:

Mr. Kirkwood and I went all over the settled part of Greenland. There are no long roads and no railways. We travelled along the shore by boat, sometimes in government boats, sometimes on fishing craft. Our object was to meet people, find out what was going on, explain the objectives of our government in sending us there. We would first call on the government administrator in each section, the “kolonibestyrelser” and the medical officer, and then gradually meet the inhabitants. My knowledge of the languages came in handy. All government officials came from Denmark and speak Danish. The Greenlanders, a “mixed race” part Danish and part Eskimo, talk in the Eskimo language and many of them have learned Danish as well. These people could easily be subversive but they have no desire to do anything of the kind.

The newspaper article in the *Toronto Star*, dramatically headed “CANADIAN GREENLANDER’ THWARTS GERMAN PLANS,” included a photograph of Erling smoking his pipe and some of the photographs he had taken of people in Greenland unloading Canadian supplies. The heading referred to the various reasons that Nazi Germany would have liked to gain control of Greenland when Denmark was conquered, including “those weather forecasts so useful to Nazi raiders engaged in the Battle of Britain, [that] ceased to be broadcast from Greenland some time last summer. The Nazis made one effort to do something about it – sent up radio experts with short wave sets in a Norwegian boat, represented as a supply ship to provision some Norwegian scientists who were really in Greenland. But the Greenland government seized the ship, interned the Germans.”¹⁶

The fear of Nazi activity in Greenland undoubtedly inspired two despatches from Kirkwood, dated September 18 and October 27, informing Ottawa of the history of suspected German spies in pre-war Greenland. Among the most notable was a German army officer known to the Danish officials as Dr. Max Gruenewald from Kiel, who passed himself off with inconsistent stories as being a member of the German Polar Party and was suspected of being a spy in 1932 when he came to supervise the building of a meteorological and magnetic station on Kajartalik island, an island with a natural harbour for small boats situated in a strategic position commanding the entrance to Arsuk Fjord on which the Ivigtut cryolite mine was located. His unpleasant successor, a

Dr. Paul Burkert (who was there with his wife, since believed to have divorced him), spent considerable time making studies of the fjord, its currents and marine topography, travelling around Greenland waters in a fast motor launch supplied by the German navy in 1933. He was refused hospitality by Corp, the Manager at Ivigtut, because he was regarded as a German spy, which appeared to be confirmed a few years later when a Danish official, on a visit to Germany in 1938, accidentally met Burkert wearing a German officer's uniform and driving an official Gestapo car. Corp and Governor Svane had both expressed their opinion to Kirkwood that if any German action was taken in Greenland, Dr. Burkert would doubtless be among those directing it.

Since the Battle of Britain, that fierce aerial war that began over England in July, the subject of establishing an air base, aircraft wireless and meteorological stations in Greenland had already begun to be discussed in Ottawa. It was noted by Kirkwood that a German cinematograph party had come to Greenland a few years earlier and made a feature film, *S.O.S. Iceberg* with some remarkable scenes of dare-devil flying among the icebergs and in the fjords. The pilot and leader of the party was the German aviator Udet. "On July 13th this year, a German wireless despatch from Berlin mentioned that Lieutenant-General Ernst Udet, chief of the German Air Force's technical department, was the most prominent of Germany's war fliers, and was largely responsible for building up the present German Air Force. It is believed that he is principally responsible for parachute development."¹⁷

While all the talk and fear of Nazi undercover activity was going on, the Canadian Consulate move to Godthaab had been approved during the summer but there was no sign of the new "house" until the beginning of October. Erling told Anderson: "The material for our consulate building came two weeks ago on the *Nascopie* after having completed the round trip to the Eastern Arctic. Too bad. There have been a number of ships going to Greenland from Canadian ports, all in ballast and it would have been ever so much nicer to have had the material before winter set in. The Greenland Government, who had promised to have the house built for us, now decided that it was too late and in consequence I have had to be my own contractor." According to what Erling later told the reporter for the *Toronto Star*, "The job was done by his instructing the local carpenters in person how to put together a Canadian frame house, something quite new to them. He gave the local inhabitants a demonstration, in which they were enthusiastically interested, of this type of construction, of central heating, and of laid in water, which he achieved by digging a well for his water supply."

The Consulate was not completed before Erling left, however, because Kirkwood complained that the late delivery of the lumber had meant that they had had to make do with “inadequate temporary quarters in a native Greenlander’s leased house throughout the winter of 1940–41 until the late summer of 1941.”¹⁸

Anderson’s letter of August 20, to which Erling was replying in October, brought him welcome news of what was happening in the world of Botany during his absence. The Chief of the Division of Biology was glad to hear that Erling was getting around Greenland,

... and without doubt you can find time to observe botanical phenomena now and then out of the corner of your eye without neglecting affairs of State, and perhaps ‘pick a few flowers’ occasionally. You might even be able to press a few in the pages of your ‘*Hellige Skrift*’ or weight them down under the massive files of consular reports.

The National Herbarium is getting along as well as can be expected. The Postal Censorship branch moved into the new wing in June, reserving only a small square at the south end of the ‘L’ which was partitioned off for storage of some of their stationery. Two or three weeks [ago] they had an increase in their force and had to take over the long corridor of the ‘Annex’ again. Miss Harkness had to move her desk into your office again, but work is not interfered with. Some of the metal storage cases in the ‘L’ had to be put in the middle of the corridor, but the tall row of fibreboard cases were left intact along the south wall as they were not in the way of progress.

Miss Harkness was on duty “somewhere in the city” for three days assisting in the National Registration work, so Anderson had put Miss Hurlbert to work on sorting and filing the Gray Herbarium Card Index, of which two new series had been received recently. The botanists at the Jardin Botanique had been inquiring about it and Frère Marie-Victorin wanted to come to Ottawa and talk over Herbarium matters, so Anderson had invited them to his country place at “Blue Sea Lake” for the weekend if they wanted to see that part of Quebec before returning to Ottawa. The party had consisted of Frère Marie-Victorin, Dr. and Mme Jacques Rousseau, M. Charbonneau who drove their car, and Marcel Raymond, a young botanist working on Carices who “did a little botanising” and later sent a list of over fifty species of plants that he collected on the island.

Frère Victorin had recently returned from Cuba where he had spent the winter. He had been in poor health but has improved in health and was looking well, although he could not walk very far. He is a very interesting man, and has travelled extensively in Africa and other parts of the world, including several trips to the West Indies. The main point of their visit at the time was to devise some plan of making use of the Card Index. The Jardin Botanique is short of funds as usual, but can get quite a bit of clerical help, and the suggestion was made that some people might be sent over and copy some of the cards which were most needed.

Anderson had not heard anything from Montreal for a month, but Miss Harkness told him after they left that she saw an item in one of the Ottawa papers that the Jardin Botanique had received a grant of several thousand dollars from the Carnegie Foundation to help out on some of their projects.¹⁹

Anderson would not have been Anderson if he had not immediately plunged into the possibility of Erling collecting “a few mammal specimens” for the National Museum of Canada. Erling quickly cut down the list of what could be collected for the Museum in Greenland. The natural history teacher at the college in Godthaab, a Greenlander, said he could get him skulls of some of the mammals mentioned, but there were no lemmings, weasels, wolves, or musk-oxen on the West Coast. “Skulls of seals are, naturally, hard to get because they are invariably shot in the head when taken from the kayak. In North Greenland many are taken in nets, however. There are no dogs in south Greenland, because of the sheep industry and because there is no winter ice and, therefore, no travel by dog team.” He had, as Anderson had guessed, managed to “pick a few flowers by the roadside” that summer, “about one thousand, including a number of rare ones that we did not have in our collection of Greenland plants,” and he was glad to hear that “we still have a National Herbarium and that things at the Museum are not in too bad a way. As far as I know now I am not to spend the winter here and you may see me back on the job some time before Xmas. This place is quite a little town and almost too civilized. People here are amazed that I did not bring a dinner coat.”²⁰

The “dinner coat” comment was great ammunition for Anderson in his November 14 return letter where he could chaff the new Vice Consul about giving himself away as an “amateur diplomat” by not arriving in Greenland properly prepared. He was glad Erling had managed to arrange to get some

mammals for him and to hear that he had done well collecting, but his latest news of the Herbarium, which was “still functioning,” described what amounted to a curator’s nightmare.

His account began gently. The postal branch, with whom they were on friendly terms, was still occupying part of Erling’s old quarters. The main collection was in his old office where Miss Harkness was also working, and the tall metal-sheathed cases containing mosses and “unfinished business” were stored in the ‘L’ with locks on the doors but the material was readily accessible if wanted. The only trouble they had had was with the stack of 185 corrugated fibreboard cartons stacked along the south wall of the corridor in the ‘Annex.’ They were not in the way and had been allowed to remain in place.

However, there were many traces of holes in the walls made by various plumbers, steam-fitters, electricians, and telephone men, and about two or three weeks ago the Blackburn Estate, owners of the Motor Building, decided to decorate the ceilings and walls on second floor as far east as the ‘Annex’ extends. I talked with the decorators when they began work in your office, washing the ceiling and walls before putting on the ‘Alabastine’ and ‘Muresco,’ and they said that they did not have to move the storage cases, as they would paint the ceiling white, and tint the walls as far as they could reach down the tops of the cases. That was all right as far as we were concerned and Miss Harkness was able to continue work by moving around as the work progressed.

However, on last Monday, November 11th, Remembrance Day, a holiday in most branches, none of our staff were in the building. I came down in the morning to do a spot of work undisturbed, but the place was locked, and after attending the exercises at the Memorial, I went home. The next morning Miss Harkness was much disturbed to find that the decorators had been working on the holiday, and had pulled out the stack of 185 cartons, which were glued together to prevent them from sliding, ripped them apart and chucked them on top of the cases in the other room, disturbing the order, and even piling some of the cartons on edge. Where the cartons were filled and the parcels well tied up, I do not think that there was much slipping of specimens from between the drying sheets, but there certainly [was] a tremendous hazard for the smaller lots which were kept separately, as when unglued specimens get the corners and edges slipped out

of the papers they are apt to get broken off and pulverized. From brief examinations of some of the cartons, the damage was not as great as might have been expected, but of course the total effects will not be known until all the contents of the cartons have been examined.

Anderson said he

... took occasion to write a strong memorandum of protest against disturbance of the herbarium in the absence of some member of the biological staff, as well as the risk involved to valuable specimens stored in buildings which are not under more than nominal control of departmental officials. In this case, I suppose that the Blackburn people had authority to clean and decorate the rooms. They were considerate of our wishes when we were around, but we could not anticipate overhauling during nights, Sundays, or holidays. The last blitz-krieg before this one was on Victoria Day, the same week you left, and that was by our own departmental people, who came near moving out the whole biological division during my short absence of four days, but that was compromised and modified in time by the Director of the Branch. Of course we all recognize the necessity of sacrificing various kinds of work on account of the war, but at the same time it is rather short-sighted to scrap arbitrarily collections of specimens and scientific records which have taken sixty years to build up. The British Museum people put much of their most valuable material in as safe 'caches' as possible at the outbreak of the war. I understand that they lost some material by bombing in London, and a considerable amount of botanical material and many thousand volumes of books were lost in an unnamed British institution. Under the circumstances it behooves us to salvage all we can in this country for post-war use.

In addition to the unfortunate physical upheaval in the Herbarium, in the past week there had been another "little flurry" about the National Museum, started by a dispatch from Toronto stating that the late J. H. Fleming in his will had left his collection and library to the National Museum at Ottawa. This was contradicted in Ottawa paper the next day, stating that Ottawa could not meet his conditions, and explaining that the Victoria Memorial Museum was pretty good, but the specimens and library appraised at \$60,000, had been turned over

to the Royal Ontario Museum of Zoology in Toronto. In Anderson's opinion, the collection alone was worth \$50,000 and there was nothing like it in Canada, and the library had

... old books galore, bales of pamphlets and separates. Four or five years ago, the owner told me that he was rather hard up from the depression, with income cut, and was "thinking long" before he felt he could afford to buy one book which he had been trailing for years, but he bought it anyway, for \$1,000. Some collection.

Mr. F. was not so much concerned about the building (the V.M.M.), which he knew was after all as sound and fireproof as most public building (much more so, in fact) when it is not cluttered up with business offices and beaverboard cubbyholes. His real consideration was permanence of organization, with scientific persons in control of the general management, and as another important essential, the development of a continuing policy by training junior assistants to take over and carry on the work as the older men died or were superannuated without leaving an interim when the work was interrupted and the collections in jeopardy. It was no news to me, as I have agitated these points for twenty years, and I presume F. gave it up years ago. The whole business will leave some black marks of omission in the history of the N.M.C. [National Museum of Canada], which will not be forgotten, but the bringing up of the subject to attention again may have some slight effect in causing authorities to hesitate about scrapping what little is left of the museum. On the other hand, it might give some ammunition to your agricultural botanist friend, if he were in a position to use it. He seems to have dropped out of sight and sound, as the conditions are hardly propitious for his expansionist activities. Otherwise he might make out a case for "protective" occupation.²¹

If Erling Porsild had been anxiously wanting to get back home to attend to regular matters in the herbarium and see his daughter again after her summer with the Raups, the news from Anderson would have been an even greater incentive to get back to Ottawa to check the damaged boxes and get up to date on what was happening with Museum politics. His return to Canada for the winter months had been proposed and approved in order for him to have

closer contact with External Affairs in Ottawa during the period when exchanges, visits, and mail between Greenland and Canada had to be suspended or discontinued.

Before Erling left Ivigtut on November 20, Kirkwood was taking what seemed to be his last chance to send mail from Greenland to Canada. To Prime Minister Mackenzie King, he sent the customary expression of kind regards and best wishes for Christmas and the New Year. "You will have followed the developments in Greenland this summer with closest attention," he said, "and no doubt have shared in the reports and letters sent to the Department of External Affairs from this post.... This rather unique diplomatic post has been one full of interest; progress has been made in uniting in cordiality and goodwill the orphaned Danish community here and Canada; and, on a more material basis, the cryolite resources of Greenland, so important to our industrial war-effort, have been successfully placed at the disposal of Canada and our friendly neighbours to the south." He was greatly conscious of the honour of having been appointed one of the first Canadian Consuls to this special post, "where I believe I shall be, on the departure of Mr. Porsild, the sole diplomatic representative of the Allied nations in almost the whole of the Arctic. I humbly recognize the unique and responsible assignment, and deeply appreciate the confidence which supported it. I am also grateful to the association and invaluable help of Mr. A. E. Porsild, whose selection as Vice-Consul was ideal and whose services here since last June have been indispensable and very highly appreciated."²²

To Under-Secretary of State O. D. Skelton he repeated his warmest personal greetings and best wishes for the season, thanking him and his department for their continuous consideration and helpfulness in assisting in the establishment of this remote official outpost. "What had by necessity to be rather an improvised post last June under a war-time emergency has been greatly aided by the support – both official and personal – of the Department and the supplies which arrived later to add to our comfort and facilitate our work," he said. "I am now looking forward without any apprehension or anxiety to a self-contained winter in Godthaab." The past summer had gradually witnessed a general improvement in Canada's relations with the Greenland authorities who had evinced doubt and distrust in the early stages but their confidence had slowly been built up and their confidence restored. The various comings and goings had served to maintain a close contact with Canada with favourable results. "I am convinced that the progress made during the difficult period of this past summer – difficult in our own functions, but especially difficult to the

Greenland authorities during a transitional improvisation of their independent government – is in the right direction and is of utmost value. Building bridges across currents of distrust and uncertainty necessarily takes time, but I think these bridges have been built.”

Turning to the subject of his assistant, Kirkwood was too much the perfect diplomat to say that in his long and distinguished career in polished consular circles, he had never had a Vice-Consul quite like Erling Porsild, who would be bringing back to Canada, in lieu of interesting “objets d’art” for display in an elegant drawing room, some twenty-five hundred dried plants he had gathered “by the roadside” and a number of nasty-looking skulls for the National Museum of Canada, all of which had been collected over their consular summer in Greenland. What Kirkwood did say, with characteristic generosity, was: “May I repeat how very much I have valued the collaboration and companionship of Mr. Porsild in the duties with which we were rather suddenly confronted. He has done much, on his part, to improve the cordiality of spirit between the Danish and Greenland community here and Canada. I need not say how much he has done to aid me personally in a new and unaccustomed sphere of official work in our entirely unfamiliar part of the world.”²³

By November 23, the soon-to-be “Sole Diplomatic Representative of the Allied Nations in almost the whole of the Arctic” was requesting Ottawa to approach Washington for permission for Erling to return via the coastguard boat *Northland* to a U.S. port, possibly leaving Greenland sooner than early in December. Erling received a note from Anderson dated December 9, stating that the Treasury Board had authorized extension of his temporary position as botanist to March 31, 1941, “you may be interested in knowing that you still have a job of sorts even if External Affairs does not need your services any more. I assure you that we shall be glad to see you back again.” On December 28, a cable was received in the office of External Affairs, Ottawa: “ARRD BOSTON TODAY OTTAWA SUNDAY REPORT ON MONDAY. PORSILD.”²⁴



CHAPTER THIRTY-ONE

HERBARIUM INTERLUDE

Erling Porsild was free to get back to his regular duties in the Herbarium at the beginning of 1941, after updating the External Affairs office on confidential matters he had discussed with Ken Kirkwood prior to leaving Godthaab. He could see for himself how Miss Harkness had got on in his absence, check the herbarium sheets in the damaged cardboard boxes, and get to his correspondence. However, it was still wartime, and his newspaper-established reputation as “The Canadian Greenlander who had thwarted German Plans” gave him something of the aura of the hero returned from the front, a hero whose knowledge of the Eskimo language had made him “a valuable asset in establishing Canada’s new consulate” and personally responsible for creating “a nice little trade with Greenland, replacing Denmark in shipping food and supplies it has always been necessary to import.” Erling was always amused by newspaper reports that made extravagant claims on his behalf, including an earlier one written in Danish that had given him credit for transporting Canada’s three and a half thousand reindeer single-handedly over the Rocky Mountains to the Mackenzie River Delta, but there was no doubt that his consular appointment had increased his reputation in Ottawa as a man who really knew the North, with important contacts beyond those he had already made in the Department of Mines and Resources.¹

Trying to get back to work as usual, there would have been no way that the “Vice Consul to Greenland *cum* Botanist (Temporary)” could settle down to his “Flora of the Northwest Territories,” not with his continuing consular appointment re-confirmed for later in the year, and not with the lack of department money to get down to the Gray Herbarium for further research. He had two manuscripts by Polunin and Raup on his desk to read and on which to make

comments. Polunin's opus had just been published, and he sent him a brief note with greetings from mutual friends in Greenland, using an Eskimo expression to "add my small voice to the din of others" to congratulate him on his "fine" *Botany of the Canadian Eastern Arctic* that he thought would prove "a most useful and much quoted manual for time to come." That done, he could spend more time on the unpublished manuscript that he had just received from Raup, which would need his total attention because it summarized some of the most important concepts in botanical circles for the last decade.²

Raup had been grappling since the previous summer with an article he had promised the *Botanical Review*. "I wish you were available to make comments about it and tell me what is wrong with it," he had written to Erling in Greenland on July 18, when, as so often between them, he had combined serious intellectual discussion with news in a lighter vein. They had had a family camping trip with Edith to the Adirondacks when they had often wished he had been with them

... if only to laugh at us. It was by all odds the wettest camping trip we ever had. After picking up Charles Denny at Hanover, we drove to the foot of Mt. Marcy and stayed in a tourist camp for the night. The next day we walked to the highest point where camping was feasible below the summit. Most of the timber was scrubby, and balsam. When we got there towards the evening we were in a cloud, and remained either in the cloud or in hard rain practically all the rest of the time we were there. The camp site and the trails were seas of mud, and in one occasion we worked for three hours trying to start a fire. We learned later that the balsam that grows up there is known locally as "the fire-proof balsam." We stayed until all our footgear got soggy, most of our clothes, and one of the sleeping bags. Charles and I made one trip to the summit and saw enough to make us want to go back. He showed me things in the way of frost action phenomena that were quite new to me, and I think there is a nice set of botanical problems related to movement of surface soils by frost.³

Raup's long manuscript on "Botanical problems in boreal America" had taken him six weeks longer to finish than he had expected, but it was a brave and timely attempt to cover all the phytogeographical problems that botanists working with the Arctic and Boreal flora had been encountering for years.

Earlier botanists had been concerned only with collecting unknown plants from widely unknown areas and bringing them to where they could be examined and catalogued, so it was not until the exploration period was well advanced in the first quarter of the twentieth century that the possibility of looking at plant origin and distribution could begin to be considered in detail. By the end of the 1930s, it seemed that the more that was known about the flora of North America, the more questions were being raised about how it got there, especially in parts of the continent where there were inexplicable species that belonged somewhere else.

To look briefly at Raup's paper, it can be seen that his "Boreal America" could be somewhat arbitrarily defined as the band of forested land from below the tree-line to the north and fairly well-marked from west to east across central Canada and the Canadian Shield, but it was a little harder to define in the high elevations of the Rockies and Eastern Canada and was more conveniently bounded to the south by what he could only call "botanical convenience" from what was known of the flora. As he had constantly outlined in his proposals for field work, much work was still needed to be done with botanical surveys in that vast inland area, virtually unknown biologically, that a botanist was soon "lost in a maze of problems concerning the origin, age, and stage of development of the land area."

The biggest problem to be considered was the history of the Pleistocene ice age, because the wholesale destruction of vegetation, and the rearranging of soils, topography, and climates, was inseparable from the history and distribution of plants. Arguments had been going on for years as to how far the ice sheet extended; what areas were not glaciated and might have served as refugia for plants; how marine shorelines were affected, including along lakes and the Champlain Sea as the ice melted, advanced, or retreated; how many interglacial periods with warmer weather had occurred; how plants had survived in some areas and not in others or had survived on mountain islands (nunataks) hundreds of miles apart; why some plants could migrate and others seemed to stay in one place or in several isolated places; whether plants could have migrated from west to east across a non-glaciated arch to the north of the continental ice sheet (as in the Arctic archipelago that was not glaciated), or to the south along the shores of the Champlain Sea; or whether they had arisen in a central area and spread outwards before being wiped out by the ice in the centre.

Despite the huge size of the area, the number of species in the boreal flora was relatively small, and a large percentage might be termed "fluid" because of

poorly defined structural differences between closely related plants. Genetic research was proving helpful, but for characteristics that could be seen out in the field as well as under the microscope, as Polunin had said of *Poa glauca* in the Eastern Arctic, “the transition forms were so abundant and the characters were so unstable that the task seemed futile, and I soon came to agree with Porsild ... that *Poa glauca* ‘varies without limits according to the quality of the place.’” There were few endemic boreal species and those that were known were widely separated from each other.

Looking at the welter of ideas and theories that had arisen in order to attempt to explain the present distribution of plants in the boreal flora, Raup noted that it was Darwin who had emphasized the idea of “persistence” of plants in suitable localities after their former continuous ranges had been broken, and it was Fernald who had proposed that isolated communities of plants had survived as relics before the last advance of the Pleistocene in ice-free lands in the arctic and on “nunataks” in or near the margin of the ice sheet, and described these old, pre-glacial species as “conservative” or “non-aggressive” in that they were able to persist in areas that they might otherwise not have been able to pioneer. There had been arguments, both geologically and botanically, as to whether such mountain refuges from the ice had really existed in Eastern Canada, including the contention of Ernst Abbe, who worked in the Torngat area of northern Quebec-Labrador where it had been found that the mountain tops had been glaciated, that some of these plants must have survived in lower areas near the coast, suggesting that they had been protected at the head of fjords, or migrated north from refuges in the south during postglacial warmer climate changes, a hypothesis already proposed by Morten Porsild to account for the southern elements in the flora of Greenland.

Wynne-Edwards had criticized Fernald’s nunatak theory on several counts and proposed returning to the classic concept of Hooker: “that the arctic-alpine flora of eastern North America has formed a single unit since pre-Wisconsin times; that in those times it occupied suitable habitats in latitudes similar or higher than now; that with the advance of the Wisconsin glaciation it was driven southwards and outwards; and finally with the retreat of the ice a recolonization of suitable habitats took place.” He relied on soil preference, isolation, and time to account for disrupted relics or spread of ranges. Marie-Victorin, tactful as ever, had summed it up by saying that there was much truth in both Fernald’s and Wynne-Edwards’ theories, and perhaps the situation was “much too complex for one good simple, schematic and dogmatic explanation.” He

still clung to the idea of the persistence of relics in the Mingan and Anticosti Islands as being shielded between tongues of the glacier during the Wisconsin glaciation and spared during the invasion of the Champlain Sea by a smaller submergence than had been thought. He felt that the arctic-alpine plants either had wide limits of climatic tolerance or were narrowly confined to the non-glaciated marginal “rainbow” above the ice sheet that had been lower on the east and west sides. Arid and calcareous soils might have been more important than low temperatures in explaining the continuing existence of some arctic plants in certain areas, and migration could have occurred in post-glacial time along the shores of the Champlain Sea or in the “dry unforested belt that must have existed along a receding ice-front, as a kind of side-walk extending from the Rockies to the Gulf of St. Lawrence.”

On the other side of the Atlantic, Eric Hultén had come up with an entirely new perspective on the problem of arctic-boreal plant distribution. Working from surface-true polar projection maps rather than the Mercator maps that enlarged and distorted the countries around the north pole, he was much more able to look at the problem as within the smaller space of a circumpolar one. In his 1937 *Outline of the History of Arctic and Boreal Biota during the Quarternary Period* after his studies in Kamchatka and the Aleutian Islands, he had started with a proposal for centres of origin for boreal species as being found in central Russia, North-East Siberia, Manchuria, Japan, and the northern part of the Bering Sea area. Long before there was any proof for his hypothesis but based on his observations of the flora, he saw the Bering Sea area as being an unglaciated land bridge between Asia and North America that he called “Beringia.” There were no centres of boreal plant origin in North America or Europe because they were covered with ice during the maximum Pleistocene glaciation. Out of the described Asian and Beringian centres, arctic-alpine species that he called “radiants” had radiated northwards and outwards symmetrically, west across Arctic Asia and Europe and east towards Arctic America. From Beringia and then refugia in Alaska and Yukon, radiants from secondary centres could move across the unglaciated Arctic Archipelago and down the Rocky Mountains along the edges of the continental ice sheet much in the same way that he had observed on the sides of contemporary retreating glaciers. To explain the problems of uneven plant dispersal, like Fernald he recognized species that were “plastic” and able to freely adapt and move to new locations and ones that were “rigid” and had lost their ability to do this. He was the first to recognize the significance of small refugia, such as those found in Eastern Canada, versus

large refugia, such as those found in the Yukon and Arctic Archipelago, because of the loss of genetic variance that affected spreading capacity for plant communities in small areas as against greater possibilities in larger refugia.⁴

Raup had made a masterful presentation of all these ideas as he looked at them critically. "I am more convinced than ever that this man Fernald has made a pretty big splash in the phytogeographical waters," he told Erling.

As nearly as I can figure out, his ideas of senescence or non-aggressiveness as applied to living species and modern distribution was a new departure – a new premise which became necessary when he began to have relic colonies of plants so close together that their failure to occupy intervening country couldn't be explained in any other way.... Have you seen Brother Victorin's paper, published in the *American Midland Naturalist*, on phytogeographic problems in eastern Canada? He has an excellent discussion of the whole problem up to and including Wynne-Edwards, but even then it isn't as clear and incisive as Abbe's. None of these three has yet considered Hultén seriously enough.⁵

Erling finished reading Raup's manuscript on January 16, after making notes "for what they were worth." Looking at his clean personal copy, it is obvious that his notes must have been written on another sheet, but it can safely be assumed that they would not be like the critical ones in the margins of his copies of both Polunin's and Hultén's manuscripts that included a number of exclamation and question marks and interjections like "No! Nonsense! Not true! Weak argument!" to express his disbelief or disapproval. He thought Raup had done a splendid job of it.

Within the necessarily limited space available you have managed to give what will prove to be a most useful and badly needed review of the knotty problems of Boreal and Arctic Botany. Your excellent arrangement and marshalling of the problems and your very clear and concise elucidation of some of the little understood ideas, for example in Hultén's paper, has helped me get a much better view of the whole situation.... I cannot help feeling that you are, perhaps, somewhat biased in your treatment of Wynne-Edwards in favour of Hultén, but that may be because I myself disagree with a good many of Hultén's ideas. Still, I

think you are immanently right that Hultén's contribution is the most important one in a century and ought not to remain so largely ignored as it has been so far.

Erling was sorry he had not included some European botanical theories.

I cannot see that you can entirely ignore Steffen or Wulff. Hultén does, but whether one believes Wegener's theory as a working hypothesis or not, your Review of the Botanical Problems of North America is decidedly incomplete without it. With regards to Greenland I can readily see that it is a great temptation not to "invoke the Monroe Doctrine." I realize that at this time you cannot very well do anything about it but I do think that it is a pity that you could not have seen your way to incorporate briefly some of the more important works and thoughts. Warming's ecological paper on the Vegetation of Greenland is fundamental and, I should think, even if in some respects out-of-date, rates higher than Polunin's on Akpatok Island which, after all, was the first field work done by a 20-year-old lad.⁶

"You were quite right about Steffen and Wulff," Raup concurred. "They should be in the paper somewhere." He had contacted the editor but most of it had gone back to the printer and he was too late for anything except an insertion in his discussion of plant communities in Part II. He was able to add some additional references, including Warming, and Morten Porsild's paper on Disko. It would have been fine if he could have included more discussion of Greenland problems and if Erling had been available he might have had the courage to tackle them, but the paper would have been considerably longer and taken a lot more time. As it was, it was four times the length of the average paper in *Botanical Review*.

In answer to one of Erling's queries, he said:

There is a tremendous lot of evidence for a post-glacial warm period. Circumstantial? Yes, a good deal of it! But how much worse is it than a lot of the evidence we work with all the time? ... It is true that Polunin was a young man when he did the field work at Akapatok Island, but after reading his papers on it, and considering the way in which they were prepared, I have come to have a pretty high regard for them. I

suspect that they were edited rather carefully by Tansley at Oxford and by Nichols at Yale, and of all the modern ecologists, I have more regard for these two than any. I do not agree with Polunin's final interpretation of much of the dynamics of the vegetation at Akapatok, but it seems to me that the descriptive matter will stand.... One thing I am sorry about is that I can't put you in the acknowledgements, which come at the beginning of this paper. You have contributed more than anyone else who has read it.⁷

"My query regarding the postglacial warm period of the Neartic was not meant to imply that I did not believe in it," Erling answered. "I merely wondered if any proof or evidence had ever been published.... The evidence that I found in the Mackenzie Delta, (Earth Mounds which you cite), was both post- and interglacial. My impression is that there is a recent amelioration in temperature in that region and that the tree-line is now advancing." He had just been down to Montreal for a few days where he had "a nice chat" with Wynne-Edwards, Mousley, Gibbs and "with the crowd at the Montreal Botanical Garden." "Victorin told me that he thought they would 'weather the storm.' 'The secret is,' he said, 'that if you only make such a place big and expensive enough, nobody dares to interfere too much. A \$110,000 place can be scrapped – but not one that cost six millions.' No doubt there is a lot of truth in that."⁸

The skiing had been grand since he got back to Ottawa but both he and Edith had had an accident on the slopes. Edith had got by with a sprained knee and ankle that would keep her grounded for the rest of the season, but on March 13 he was

... enjoying a forced holiday following a skiing mishap which occurred about a month ago, when for no good reason I fell and 'busted' my knee. I have taken worse spills before and I did not think this was anything but a bit of a sprain, but it turned out that I had torn or dislocated the cartilage in the knee joint, causing the knee to lock. This meant having the d—d thing cut open. My doctor tells me that everything is okay now and that I shall have no after effects if I will only have patience and give the cut ligaments time to heal. I have been back from hospital for almost a week and can hobble around on a pair of crutches.... I am very much afraid that my mishap is going to interfere with my chances

for getting a trip down your way, so I guess you were right that I should have taken the chance when I had it.⁹

“Can’t you come down here anyway, even for a short time, perhaps in the course of your recuperation?”, Raup asked. He had just seen an article that must have been picked up from the one in the *Toronto Star*. “I almost forgot to mention the wonderful picture of you that appeared this week in the *Christian Science Monitor*, along with a little story about your Greenland experiences. There is no question now but that we will have to arrange to shoot off those four guns (or whatever the number is) when you arrive at our house! Would it be acceptable if done with fire crackers?”¹⁰

There would, of course, be no chance of a trip to Boston that spring. The Raups were sorry to miss seeing him before he left for Greenland and offered to have his daughter again for the summer but she opted to take a job in Ottawa instead. Erling was back in the office by March 30 when the President of Alcan, R. E. Powell, gave a radio talk on aluminum entitled “The Tools of War,” and by April 21 he could write: “Things are beginning to move. I have been appointed Consul for Greenland and I expect to be leaving to resume my duties there next month, probably in the latter part of the month.”¹¹

Erling did not tell Raup that there had been another interdepartmental broadside fired from the Central Experimental Farm. On March 24, Anderson received a letter from H. T. Gussow, Dominion Botanist, stressing their need for an Ottawa district flora that he claimed had been started by Dr. Malte when he was still part of their department and contributed to by members of the Farm staff.

Since Dr. Malte’s untimely death, I understand that Mr. Porsild took over the MS and aimed at the preparation of the proposed flora. That was a good many years ago, meanwhile members of my staff continued the study of the flora of the district, since such information is fundamental to much of our work in Agriculture – but we feel that since Mr. Porsild is contemplating such a publication, we cannot proceed with such a project ourselves. What we need is an Ottawa district flora and it is immaterial to us who publishes it, as long as the project is not shelved much longer. What would you feel about Mr. Porsild and our organization joining forces and collaborating on the preparation and publication of the material on hand and to issue a joint publication?¹²

If a Flora of the Ottawa District was truly needed at the Central Experimental Farm, it is a great pity that it was prevented from going to an early completion by the continuing suspicion on the part of the Museum and lack of real co-operation between the two departments. It would be years before Erling could contemplate such work, but his irritated response was reflected in a confidential memo to Anderson in which he noted that Gussow himself, at the time of Malte's appointment to the National Herbarium, had written to the then Director of the Farm to say that their botanical service should be devoted primarily to agricultural and generally applied related science and "that phase of work relating to systematic and taxonomic botany, botanical surveys and herbarium work," should no longer be included in their Division. "The present, and apparently urgent desire of Mr. Gussow's division to commence work on such a large and ambitious project," said Erling, "seems to indicate that there is not sufficient problems in 'agriculture and generally applied related science' for the two systematic botanists that have in the last year or two been added to the staff of the Central Experimental Farm."¹³

His official memorandum, forwarded to Gussow with Anderson's reply, noted that the only manuscript on the Ottawa Flora in the Herbarium files was that done entirely by Professor John Macoun and his son J. M. Macoun. It contained skeleton keys to genera and species and a catalogue listing 671 species, supplemented by notes on distribution by the Macouns collected no later than 1911. It had last been updated in 1919 so was now mainly of historical interest. Dr. Malte, who had worked at the Farm from 1912 until his appointment to the National Herbarium in 1921, had added some 10,000 Ottawa District specimens to the Macoun collections between 1922 and 1926, but like the earlier ones his collections were still unnamed and to Erling's knowledge Malte had left no manuscript. Before any new flora was contemplated, it would be necessary to re-examine every specimen in the Herbarium and implement all the revisions of the last thirty years. Erling had also collected in the district since 1936 and concluded that there was much work still to be done before a worthwhile flora could be published. Since he had been away and would again be away the coming summer on special duty in connection with the war, and the National Herbarium was greatly understaffed, he doubted that funds could be made available for publication at the present time, but needless to say they would welcome any collaboration from Mr. Gussow's staff which might include revision or determination of critical material made by Dr. Malte. "We can easily supply temporary working accommodation for one or two men in the National

Herbarium,” he suggested disingenuously, an offer also extended by Anderson, and there the matter seems to have ended, at least for the time being.¹⁴

Before Erling left for his summer duties in Greenland, he was able to tell Fernald that at last he had found the time to distribute the long overdue duplicates from his Alaska collection. By a bit of “stretching” he had managed to make six sets, the best for the Gray Herbarium containing, with very few exceptions, representative material of all species collected by his brother and himself, including duplicates of all types. “You may find some of the numbers small and scrappy, but it must be remembered that often the collection was done under most difficult conditions, and that transportation and caring for the material always entailed serious problems because botanical collecting was not the primary objective of our expedition.” The second set was being held for the Copenhagen Museum, and, due to the war, “the next few months may decide whether it will ever go there.” The same applied to a third set for Hultén in Lund. The fourth set would go to the U.S. National Museum, and the fifth and sixth to Montreal and Kew respectively. “I have been appointed Canadian Consul to Greenland for the summer,” he added, “and I expect to leave shortly to take up my post at Godthaab. I hope this summer to be able to devote at least some time to botanical work, particularly in the Godthaab district which has been largely neglected botanically since the days of Jens Vahl. Some of Vahl’s best collections came from Ameralik Fjord which has not since been visited by any trained botanist.”¹⁵

The official appointment as Acting Consul suggested that Ken Kirkwood would be leaving Greenland permanently as soon as Erling replaced him, and a new Vice Consul might be needed. On April 27, Erling received a long letter from a likeable young biologist named Maxwell John Dunbar in the Department of Zoology at McGill who wanted very much to go to Greenland. Max Dunbar was already a protégé of Taverner’s and had met Erling earlier. “You asked me to send you information about myself which might be relevant to my possibly going to Greenland this summer with you,” he wrote. “I need not stress the great interest I have in Greenland from every point of view.” He had spent two summers in Greenland, one on a mapping expedition to Søndre Strømfjord in 1935, and one to Ata Sound northeast of Disko Bay to study fjord plankton and inshore benthonic fauna and the mechanisms of the bird-feeding zones caused by local upwelling at the faces of the tidal glaciers, and he had two published papers on that work to date. He had spent the summer of 1938 in Glacier Bay, S. Alaska, doing “nothing much more than looking at birds”

that were new to him because transport difficulties and a rapidly warming climate had made work on glaciers impossible. "As you know, in 1939 and 1940, I was marine biologist in the Canadian Eastern Arctic Patrol in the 'Nascopie.' I worked at Lake Harbour and Clyde River while the ship went into Hudson Bay and up to Craig Harbour and Fort Ross." Two papers on the food of seals and the breeding cycle in *Sagitta* were in process of publication and others would appear in due course.

"I am very keen to work on the economy of seals in Greenland, in particular the harp and fjord seals," he said:

Very little is known about their food. This can be done from one place, given the possibility of getting the Greenlanders to bring me the stomachs of the seals they kill, and of my being able to see at least some of the seals they come from. I find that the natives never make a mistake in identification of seals. The plankton of west Greenland has had much attention, but it seems that the hydrographic conditions along the coast have been changing in recent years, and it would probably be useful to keep a plankton survey going, say once a week or once in two weeks, if it is possible to arrange this. I could adapt my work, both on seals and on plankton, to fit in with any movements that I should make up or down the coast during the summer.

Dunbar said he was currently working on a National Research Council (Ottawa) studentship, and had been elected three weeks earlier to a Royal Society of Canada Fellowship to continue the work in Arctic Oceanography that he had begun. He would be free to go anywhere after the first week in June, or earlier if need be, and it did not matter when he got back. On a personal note, he said: "I play the piano and the guitar. This is all I can think of, except that I am a product of Edinburgh, Oxford, Yale and McGill. I spent a year on a Henry Fellowship at Yale before coming up here two years ago. My religion is agnostic or rather stronger, and my politics are anti-old school tie. I hope this is the sort of material you wanted; and I hope also that I shall see more of you soon."¹⁶

Whether a candidate for the consular service should be anti-old school tie was debatable, but Erling was certainly keen to have him as his assistant on all counts. He told Keenleyside April 28 that he had been to Montreal to see him,

... telling him briefly what the situation was, that nothing definite had been decided upon, and that I was not in a position to make any promises... His scientific standing is very high and at McGill he is extremely well thought of. I might add that Dunbar impressed me as being a thoroughly dependable person of sound judgment. He has had considerable experience in travelling in the Arctic and knows Greenland conditions very well. He reads Danish and can make himself understood in that language and has a fair knowledge of the Eskimo language. He is twenty six years of age, single and unattached. It seems to me that Dunbar is "just the answer" and I should be very glad to have him along as my assistant.¹⁷

The importance of biological collections for Canada was now being added to the need for cryolite delivery from Greenland, and several voices were heard in support of Dunbar joining Porsild in the consular service. "Greenland is one of the key regions in arctic biology in which we as Canadians are specially interested," wrote W. B. Timm, Acting Director of Mines and Geology Branch to Dr. Charles Camsell, Deputy Minister for the Department of Mines and Resources, on May 15,

... the more so as I know of no particular collections of Greenland birds in any American Museum. In our arctic studies we are greatly in need of Greenland material. Through Mr. Porsild's agency we have arranged a small exchange for such specimens as the Greenland College Museum at Godthaab has in duplicate but many more are desirable. Conditions have been such that foreign collecting in this country has been very difficult if not impossible, and it seems that Mr. Porsild's coming residence there is a providential opportunity for us to make up important deficiencies, and one that may never occur again. As Mr. Porsild will have other onerous duties, he will probably not have a great deal of opportunity of collecting and preparing specimens personally, but he will have many contacts with natives and residents, and through them could obtain much valuable material at little cost.

He proposed giving him a small sum for this purpose, originally proposed as \$50, which received another exclamation point from Erling, and was raised to \$100.

Since the appointment of an assistant to Mr. Porsild was contemplated, Timm felt that it would be in the interests of the National Museum if someone could be appointed to the post who could make use of incidental opportunities to the advantage of Canadian Science. "I am advised that there is just such a man available in the person of Dr. Max Dunbar, PhD, of McGill University," he said.

Dr. Dunbar has had some arctic experience and is deeply interested in certain fundamental arctic biological problems such as arctic plankton and the food of marine animals, both of extreme practical as well as speculative interest in Canada, the fisheries and the fur trade. He has further, and most importantly, a working knowledge of both Eskimo and Danish languages, is a man of enthusiasm and initiative and without family responsibilities. On the face of it, he seems ideal for the purpose, his linguistic and scientific attainments being outstanding qualifications. If no better qualified candidate is in view I should suggest that this Department urge Dr. Dunbar's appointment as strongly as under the circumstances is consistent with official procedure.¹⁸

Sadly, Dr. Skelton would no longer be there to decide on the suitability of Max Dunbar for his group of elite diplomats. In January 1941, on his way back to work after lunch, he had collapsed and died at the wheel of his car. Lester Pearson wrote movingly of him in his memoirs, saying that this quiet, unobtrusive, retiring man, with a first-class, well-trained mind and relentless capacity for work as Mackenzie King's right-hand man in External Affairs, had been one of a half-dozen most powerful men in the country but few Canadians had ever heard of him. "He had worked himself to death and was as much a casualty of the war he so deeply hated, and had hoped Canada could avoid, as any soldier killed in action. He was the firm foundation of our department, at home and abroad. He was more. He was at the centre of all its decisions and of many of those of the government. He appeared to be irreplaceable. Of course, he was not – no man ever is – but his death left a gaping void." Although Pearson had hoped for the job, Norman Robertson was appointed as Dr. Skelton's successor. There were other significant changes in appointments and positions at External Affairs since Loring Christie, the Canadian Minister in Washington, had become mortally ill and had had to be replaced by Leighton McCarthy, a prominent Liberal and personal friend of President Roosevelt. Lester Pearson

was recalled from London to assist Robertson in Ottawa, although eventually he would go to Washington to assist McCarthy.¹⁹

It would be some months before the vice-consular appointment to Greenland could be settled and Erling would have to sail north alone. On June 27, Keenleyside wrote to Dunbar to tell him that his name was among three that were being considered but a final decision would have to wait for Kirkwood's return from Greenland.²⁰



CHAPTER THIRTY-TWO

GREENLAND'S WAR OF NERVES

“Greenland taken as a whole has enjoyed a quiet and undisturbed winter,” Kenneth Kirkwood reported to Hugh Keenleyside on March 27, 1941. “There is general approbation of the policy followed by the Administration in its external relations; its strict neutrality, and its essential but cautious contacts with the United States and Canada. Unless the theatre of war or hostile raids should spread to this region during this year, there is thought to be no reason for worry, although everyone is anxious and at times jumpy when he hears of occasional enemy flights over Iceland or torpedo-ings in the West Atlantic; the ‘guerre des nerfs’ sometimes reaches even to this region.”

Life in Godthaab had been quiet with everyone going about their own tasks, the only discontent being among Danish teachers, doctors, pastors and colony managers who had been shifted and transferred in a game of musical chairs that pleased nobody as it appeared to have been based on intrigues, private favours, or prejudices – “a situation pretty much the same the whole world over, especially in small circles.” Much of the blame for the unhappy changes was being laid on the doorstep of Governor Svane, whose industrious but single-handed efforts to deal with all administrative matters, both major and minor, with sometimes inept results, were often criticized. Although Kirkwood had managed to stay on mutually friendly terms with him and his wife, they were not generally popular in Greenland. They planned to leave for Canada and the United States on a visit in the spring, and Governor Brun, now at Ivigtut, would transfer himself and his family to Godthaab to take over in Governor Svane’s absence.

Kirkwood had participated in some of the usual social activities in Godthaab, although he had felt it wiser to follow a quiet and non-assertive course

because of the nervousness and tension of the Danish population, arising from the general political situation. This seemed to have had a favourable effect and everyone had been generously friendly. "The Greenlanders themselves are now very interested in Canada," he said,

... and show a smiling disposition towards myself. Porsild was able to work happily with them, and probably helped to promote their cordiality, which I have capitalized wherever possible. On the Greenlanders' public notice board have been pinned large magazine photographs of King George VI, of Queen Mary, of Mr. Churchill, the Dionnes going to confirmation, Niagara Falls and other Canadian scenes, etc. etc. Interest is shown on the Canadian flag at our Consulate; and some natives have recognized the British national anthem when they hear it on the radio.

It had become fashionable for most of the Danes to study English that winter and he and James Penfield and George West had each been giving private lessons to individuals who requested them. "This English fad partly was initiated by the frequent visits of the Coast Guard vessels here last summer, and by the presence of the Consular officials; but is also a reflection of the subconscious feeling here (sometimes expressed but often not admitted) of a possible future drift of Greenland into a North American orbit, and misgivings as to Greenland's future political affiliation." He had been approached about the possibility of sending older children to school in Canada since it was no longer possible to send them to Denmark and he could report by the summer that many families had been helped to do this.

War news on the radio was listened to regularly from Germany, Denmark, and Iceland, as well as England, the United States and Canada, since the more educated Danes were familiar with all the languages.

Naturally the conflicting news and propaganda unsettles them, and the German boasts or threats disturb them a good deal. They usually discuss this political news freely but anxiously with me or with Penfield and West. They are frankly conscious of the fact that Denmark, by submission to Germany, has put herself technically on the enemy side and away from the Allies, though their sympathies here are pro-Allied and they feel that the Allies are in principle fighting

on behalf of all small ex-neutral countries overrun by Germany and for the ultimate liberation of the enchained European states. Therefore they regard Great Britain as a friend rather than as hostile to Denmark, and the Allied cause as their own hope. This feeling is not strong enough, however, to make them welcome any Allied action or intervention in Greenland, which they would strongly deprecate unless it were to counteract an actual enemy attack. On this point they are most sensitive.¹

This sensitivity was about to be tested, however, because, over the winter, Keenleyside had been deeply engrossed in discussions regarding the need to establish an air base, aircraft wireless station, and meteorological stations in Greenland. Urgent telegrams had been sent to Kirkwood to obtain information on the location and power of radio stations either in operation or established but not operating, and the length, breadth, depth, type of bottom, and the prevailing winds of the freshwater lakes located immediately behind Julianehaab as they were considering a landing strip in that vicinity.²

Wartime orders for aircraft to be built in Canada were on the increase. Alcan was feverishly producing sheet metal for the British aircraft manufacture of Hurricanes and Spitfires, and simultaneously for the Canadian Car and Foundry Company in Fort William, which had managed to send some of their Hawker Hurricane fighter planes in time for service in the Battle of Britain the previous year and had stepped up their production considerably since then. On January 4, Keenleyside's message to the Canadian Minister in Washington stressed the need for an air base in Greenland by saying that:

During the current year ten to twelve thousand short range planes must be forwarded to the United Kingdom. It will be exceedingly difficult to obtain shipping space for these planes in crates. Alternative is to fly the planes, but their range will be little over one thousand miles. This will necessitate establishment of landing field and highly efficient meteorological and wireless service on southern tip of Greenland. We would like to send a Canadian expedition to examine the possibilities of such establishments at once. Please place these views before the United States authorities and invite their assistance in working out a scheme which would meet their approval and accomplish the ends which we desire. Every day that can be saved will be of value.³

It would be over a month before the reply came from Washington that the United States Government had decided to act on its own to negotiate with the Greenland Government over the establishment of air bases, to give them financial and technical assistance “to assimilate any scheme of hemisphere defence in the spirit of the Act of Havana,” thereby making facilities available to all American nations including Canada, and to send up expert expeditions as soon as possible, which could include one from Canada. “The formula under which Canada will use air base and Greenland will preserve some colour of neutrality has not been decided on, but decision will probably be to apply to aircraft from Canada the rule governing the use of neutral ports by belligerent warships.” A notice from Mahoney on February 15 said that the British Embassy staff doubted the wisdom of the proposed formula, fearing that Germany might then argue that German service aircraft forced down in a neutral country, such as Turkey, should not be interned but given twenty-four hours to leave.⁴

The whole situation had to be carefully thought out by all concerned, because the establishment of any air base had enormous implications for Greenland, affecting both its neutrality and its isolation policies. As Governor Eske Brun pointed out many years later, the first negotiations with the United States had clearly stated that no soldiers would be stationed in Greenland and no warships would visit the country. The establishment of air bases with military personnel “could well have totally disrupted the established social patterns of the population,” he said.

For centuries, Danish policy in Greenland had been based on the principle that the Greenlanders were to be protected against unfortunate outside influences.... Now, suddenly, a military force, that in number exceeded the entire adult male population, had to be incorporated into this system. It was only too clear that an uncontrolled and overwhelming influx of foreign impulses would bring about incalculable and irreparable damage – irrespective of doubts as to the efficacy of the old policy of isolation under modern conditions, and regardless of arguments in favour of a more liberal approach. From the first, the administration was fully aware of the need for stringent controls. Therefore, it was immediately agreed that the bases be located in unpopulated districts, far from any settlement and cut-off from all contact with the population.⁵

The site chosen for a new air base was in an area near the southernmost tip of Greenland called Narssarsuaq, a Greenlandic term meaning “the great plain,” and would be given the code name of “Blue West One” when the airfield had been constructed. A report on the first scouting expedition to South Greenland from Canada was sent to the British Embassy in Washington on May 19, stating that the site was “far better than was anticipated and the difficulties of construction not abnormal.” Three runways were possible, and the first two (4,000 feet unsurfaced) could be ready in five months. Meanwhile, Kirkwood reported that meteorological reports for Canadian and British use were arranged through the United States Consulate during the winter. The stations, so important for forecasting the weather for air operations over the Atlantic and in Europe, were being set up or upgraded by the Greenland Administration with the aid of American equipment, with a careful eye on the northeast coast where German planes had been seen flying over Scoresby Sound. There was some suspicion of men sent to Ivigtut and Godthaab with the knowledge and consent of the German authorities in Denmark, and the U.S. State Department had been informed that the Germans were buying numerous sets of detailed maps of Greenland in Denmark. The long, virtually uninhabited east coast, practically inaccessible for most months of the year, was a prime attraction for possible German activity. Brun claimed that in 1941 “The administration felt that it would be possible to play an active role in the area against the German war effort” and thus succeeded in organizing “The North-East Greenland Sledge Patrol” to patrol the east coast, somewhat like the RCMP in Canada, and draw up weather reports there for the Allies.⁶

Meanwhile, the British Military Mission to Washington in April, aware that Germany had developed the technique of manufacturing artificial cryolite on a large scale while Canada and the United Kingdom continued to use the raw material, was still concerned about the safety of the mine at Ivigtut. No news or gossip had reached Kirkwood since the close of coastal navigation at the end of the year but he was under the impression that all was quiet on that front. Governor Brun had been there all winter. The chief of the United States police guard, who had “lacked the capacities or resources for amusing himself soberly or for inspiring his men during a rather isolated life,” had gone south for the winter, but the next senior enlisted man, a good RCMP type, had taken charge, and as far as he knew they had had no trouble and there was no news of importance on the side of the miners. “I understand that various protective measures have been taken at Ivigtut,” Kirkwood said, “including a look-out

station at Arsuk at the entrance to the fjord, with a small wireless set communicating with Ivigtut, and a patrol motor-boat stationed at Arsuk or vicinity, used I think by police guard personnel. Regulations have been issued for controlling the entrance of shipping to Ivigtut. Ivigtut itself has relieved the greatly overworked solitary wireless operator, a competent and pleasant Dane, by providing him with a Greenlander assistant ... the first Greenlander to be employed at Ivigtut." Ever the gently optimistic diplomat, he added: "Reports of recent submarine activities south of Iceland or toward this side of the Atlantic have created some nervousness here; but some of the worrying is the result of a winter of isolation, rumination, and vitamin depression, which will be dispelled when Coast Guard ships appear again and restore moral confidence or good cheer."⁷

In further exchanges in May, Ottawa again suggested that "a Canadian garrison" could be set up to guard the mine, which was immediately turned down in Washington since, as Berle said, the United States had taken on the complete defence of Greenland under agreement with the Danish Minister, the Germans knew that any attack on Greenland would bring the United States into the war, which was a very strong deterrent, that further defence plans would be forthcoming but meanwhile the defence of the mine to date was adequate. In Ottawa, Erling Porsild was not so sure. He had been going into the External Affairs office since the end of April to go over recent files on Greenland matters, and on May 27 he sent a memo to Keenleyside:

When looking over the files in your office on 'Greenland Defence' I noticed that additional guns were contemplated for Ivigtut Mine but that no important changes had actually been made since I left in December last. In view of my knowledge of local conditions at Ivigtut, the personnel and the topography of the country I feel it is my duty to point out, before leaving for Greenland, that in my opinion the present defence measures at Ivigtut are so utterly inadequate that a landing party of no more than six men, armed with tommy guns, from a vessel no larger than a small, armed trawler, could capture and destroy the mine, even if a U.S. Coast Guard cutter should happen to be in the port at the time.... If you feel that the question is of any importance I shall be very glad to explain fully how such a capture could be effected.⁸

After looking over Erling's ingenious plan of attack on the part of possible invaders, based on the fact that suspected German spies had made a thorough

reconnaissance of the mine and fjord two years before the war started, it is tempting to suggest that he had seen too many war movies while in Ottawa over the winter, but the scenario of German spies entering coastal areas in disguise, which had been reported on occasion, was a current wartime pre-occupation. The "defence plan" that he presented to Keenleyside on June 5, complete with sketch map, began by noting that ships entering the fjord in the open summer season usually proceeded south of Arsuk Island en route to the mine, although there was a much narrower but equally safe channel on the north side used chiefly by local ships.

At present an observation post has been established at the native village of Arsuk, near the north entrance to the fjord. A Danish store-keeper and former wireless operator is the only white man in the village. He is an employee of the Greenland Government and has been provided with a wireless telephone set. All ships and boats bound for Ivigtut have been instructed to report at Arsuk before proceeding up the fjord. In addition a 12-ton motor boat, also equipped with radio, is available for patrol work.

The main defence at Ivigtut consists of one 4-inch gun mounted on a rocky point across the fjord from the mine. It commands the approach to the mine as well as the mine and town and roadstead and harbour, but when I left Ivigtut, in December, no radio or telephone communication had yet been established between the gun and the mine. In addition there were three machine guns and a number of rifles at the mine. Although the distance from the gun to the town in direct line across the water is no more than three miles, a telephone cable cannot be laid across the fjord because of icebergs fouling the cable. A land line also would be impossible because of a glacier at the head of the fjord.

My contention is that the present defence is utterly inadequate and that it would be entirely ineffective unless the enemy approached in broad daylight up the main channel. Fogs, however, are frequent near the entrance to the fjord, due to the presence of the ice-pack, and on most days a vessel could easily slip past Arsuk unobserved. A more likely way of attack would for a vessel to approach Arsuk from the north, from which direction a ship cannot be seen from the village, and to have a couple of men arrive at Arsuk on foot. If these men spoke

English and pretended to be shipwrecked fishermen who wished to report to Ivigtut they would arouse no suspicion among the natives and would have no difficulty in gaining control of the radio telephone.

Via a short-cut overland, from an inlet directly back of the gun, a small landing party could capture the gun from behind while perhaps other attackers, disguised as native fishermen, attacked the gun position from the sea, using a native fishing boat from Arsuk. Once the gun was captured, the mine and any ship that happened to be in the roadstead could be speedily destroyed. Even a coast guard cutter, if taken by surprise, would have no defence against a shore gun. Once the mine was captured, by a landing party attacking across the hills from Ika inlet while the town was being shelled, a few charges of dynamite would destroy the coffer dam which protects the mine from the sea. The pit, which is 300 feet below sea-level, would thus be flooded. Mining machinery and power plant likewise could easily be destroyed and a ship could be sunk along the loading pier. In this way the mine could be put out of operation for at least six months and a whole year would elapse before shipping could be resumed.⁹

A copy of Erling's report was despatched to Washington on June 9, two days after he set sail for Godthaab. It seemed that his information had been received seriously, for Keenleyside noted in his accompanying message that by June 7 there were several defences already in the planning stages for Greenland that included intermediate landing fields for planes being flown to Britain, to be established about seventy-five miles east of Ivigtut and ready for use by August, while naval patrols would be maintained at Ivigtut with a battery of two guns to command the channels plus a small garrison as local defence.¹⁰

The reaction to the Canadian proposals for the landing strip and defence of the mine was decisive and almost overwhelming in its speed and scope. Six weeks later, word came back from Washington to the effect that the United States Government had undertaken the sole defence of Greenland and no assistance from Canadian forces would be required. "A force of the United States Army Engineers, together with certain limited ground forces for local defense, has arrived in Greenland. The construction forces are engaged in the construction of defense facilities in the vicinity of Julianehaab and Ivigtut." When the air bases were completed, a fair distance from either of the towns, it was estimated that there would be 2,000 officers and men at Julianehaab and 500

officers and men at Ivigtut. Additional forces would be sent if need became apparent, plus naval forces of the Atlantic Fleet were prepared to prevent access to Arsuk Fjord by any hostile elements and to support the Army in its defence of the mine.¹¹

The arrival of the first troops was announced in the *New York Times* on August 6 with a photograph captioned “The Long Arm of US Defense Reaches Greenland” plus an explanatory note “Supply ships escorted by destroyers and a coast guard cutter enter the harbour at Bluie West, the name of the new Naval Base. Troops aboard a transport shown in foreground.” The code name “Bluie West” for all the military instalments in Greenland, which included the new naval establishment at Ivigtut, had apparently been kept secret from everyone but the *Times* correspondent. Wrote Keenleyside to the Chargé d’Affaires on August 8: “Will you please ascertain and report the location of Bluie West?” to which the Canadian Minister replied: “Mr. Cumming of the State Department who is well posted in Greenland geography, said that he had never heard of such a place and the Geographer of the Department on being consulted, could find no such reference in any of his maps. It looks as though the *New York Times* had invented the name, possibly in the interests of secrecy.” There was considerable concern that the photograph had been smuggled out of Greenland on either the cutter or the destroyer on its return journey and would not have been released for publication if the authorities in Washington had known about it.¹²

Meanwhile, Erling Porsild joined Kirkwood in Godthaab on June 23, arriving on the S.S. *Sarniadoc* and bringing materials to complete the consular house along with other supplies. It is interesting to note that he reported “an uneventful crossing,” because for years afterwards Trevor Lloyd, later Consul to Godthaab, enjoyed repeating a great story Erling had told him about that trip. “The captain had never been on the ocean before,” Lloyd said, “didn’t know how to do it, was drunk from the estuary onwards, didn’t have a proper chart, so Erling and a crew member navigated by way of an old school atlas that he had in his luggage.” Certainly Erling’s letter to Anderson on July 7 confirmed that the captain had never made the trip before, for he said “My ship was a lake freighter which for the first time was in salt water since many years ago she came across from Glasgow. I learned later that when we steamed up the Godthaab fiord the natives reported that two ships were coming, one little one pushing a big ship backwards (all the lake freighters have the smoke stack near the stern and the bridge way up forwards).”¹³

Alcan's shipping company, Saguenay Terminals Ltd., was having problems finding suitable ships to transport both the badly needed bauxite from Guyana and the badly needed cryolite from Greenland, since almost every available vessel was being impounded for war use with the loss of so many merchant ships to the increased U-boat sinkings in the North Atlantic. Out of desperation, the company had had to settle for the long, flat-bottomed, under-powered, canal-type Peterson Line lakers even if they were unsuitable for use in Arctic waters. Erling reported that the captain of another ship had spotted the *Sarniadoc* outside Sydney on her return trip "with her decks awash and the flag half-mast" but the full story was never explained, while on November 3, there was a near disaster with a sister ship, the *Lawrendoc* en route to Ivigtut from Godthaab, that had been unable to cope with heavy weather due to the same faulty design. She had undergone an amazing five-day saga in a southwest gale that increased to hurricane strength, and her captain had had to cope with a snapped anchor chain, flooded hold, broken cables, and damaged or destroyed cargo, but she was eventually floated and sent on her way, miraculously undamaged. "Had it not been for the sound sense and seamanship of her master, and for the willing help of the Greenlanders, the episode would not have ended so harmlessly," said Erling.¹⁴

Leaving Erling in charge in Godthaab, Kirkwood was on board the *Julius Thomsen* en route for New York when the ship collided with an iceberg in dense fog in the Strait of Belle Isle, damaging its bow plates above the waterline. The accident, though fortunately not dangerous, would result in a delay for repairs when she reached port. Conscious of what this delay would mean to the already-stressed system of coastal supply deliveries, he immediately sat down to write a report outlining the shipping problems they had been having that summer in Greenland.

He began by noting the dependency of the settlements on both east and west coasts for the distribution of supplies by steamer or motor-schooner during the open navigation season. Every principle settlement had its own motor-schooner for this critical task, but there was an extreme shortage of vessels in 1941 since one had been lost with all hands that summer, one had been taken over as a police-guard patrol boat for Ivigtut, two others had been continuously in the service of the United States defensive programs for survey work and the transport of officials, and a small steam whaler was lying decommissioned at Sukkertoppen since the war began because of the lack of any qualified engineer. Three larger steamers, the *Gertrude Rask*, the *Hans Egede*, and the Ivigtut

steamer *Julius Thomsen*, had been commandeered for coastal relief deliveries when they were not making trips with cryolite to the United States, but they had all had accidents that summer – on May 12, the *Gertrude Rask* was caught in the ice-pack on her return trip from Philadelphia and then hit a rock, and, although fortunately released and escorted back, her repairs had delayed her for two months; the *Hans Egede* ran on a rock off Godthaab on July 9 and had been repaired locally but her service was still somewhat delayed; and now the *Julius Thomsen* was not only delayed by escorting the *Gertrude Rask* but after the accident on July 20 was expected to be in dry dock for at least a week for repairs. All of these incidents were making the delivery of supplies difficult as well as making the Greenlanders extremely anxious.

It had been suggested that the *Nascopie* would be available to distribute coastal supplies in April and May, an offer that was warmly welcomed by the Greenland authorities. However, it later transpired that she would not be available after all, which created a great deal of disappointment. “The reputed reason – namely, that the Hudson’s Bay Company was asking an extortionate charterage rate for the *Nascopie* – created even more of an unfavourable impression,” said Kirkwood.

The only time that I have seen the characteristic good nature and friendly attitude of Governor Brun transformed into a rather bitter irritation was when he called on Mr. Porsild and myself on June 24th, and in great petulance asked why the rate dispute between two powerful Canadian private commercial companies should be allowed to tie up a very badly needed ship. In view of the general shortage of shipping, he said, it seemed disgraceful to immobilize the *Nascopie* because of a clash of private interests or commercial dickering; “the war,” he exclaimed, “cannot be won by the Allies if such pettifogging private price-disputes are permitted to tie up shipping or obstruct marine services.” Governor Brun’s ruffled temper was allayed during our conversation, but indicated an underlying annoyance. The spring services of the *Nascopie* would have been an exceedingly welcome cooperation with the Greenland authorities.¹⁵

As it turned out, the problem with the *Nascopie* had nothing to do with a rate dispute. It was regrettable that her unavailability to help with coastal deliveries had caused worry and disappointment, but the Hudson’s Bay Company had

refused to charter her for Greenland, “not because they desired an exorbitant charter rate,” explained Bruce MacDonald, Secretary to the Canadian Shipping Board, August 12, “but because they were unwilling to risk, in belligerent waters, a vessel which had been built especially for their own Arctic service.” However, as the situation changed in Greenland waters later that summer, the *Nascopie* was permitted to call at Ivigtut on her way back from the Canadian Arctic Patrol to pick up cryolite for Arvida.¹⁶

The 1941 shipping season was marked by favourable weather conditions and an almost total absence of pack ice on the west coast of Greenland, Erling noted. There were more ships than in any previous year, due to the establishment of the United States Naval and Air bases and the considerable amount of naval patrolling of Greenland waters by the United States Coast Guard and Navy. There had been one naval incident in September when the U.S. coast guard cutter *Northland* had intercepted and examined a Norwegian vessel suspected of subversive intentions in Scoresby Sound on the east coast, but otherwise it had gone well. Between June and November, twenty-five ocean ships entered and cleared from the port of Godthaab, in addition to a much larger number of smaller, coastal schooners of 200 tons or less chiefly engaged in distributing supplies to secondary ports and in distributing coal from the Greenland coal mine at Qudtligssat. In addition to the Canadian freighters chartered by the Aluminum Company, there had been about half a dozen former Danish ships under Panamanian registry making voyages between Greenland and North American ports. Eighteen fishing boats from neutral Portugal were known to have fished on the Greenland banks. One cargo ship had brought salt and taken back salt cod, and a Portuguese Naval hospital ship tending their fishing fleet on the Greenland and Newfoundland banks had called at Godhavn. Consular duties now included services to all Canadian and some Greenland ships during the shipping season, including Marine Protests and issuing Certificates of Origin and Interest. Erling dealt with an increasing number of inquiries related to trade and shipping, including some from British firms and individuals addressed to the American Consulate “because the existence of a Canadian Consulate in Greenland apparently is not well known outside of Canada.”¹⁷

In Godthaab on July 7, Erling had written to tell Anderson of his progress with building the Canadian Consulate. “My colleague has now left,” he said,

... and I am slowly getting things ship-shape and the work on the consulate under way. At present the men are toiling with the plumbing

which is all new and wonderful to the Greenland builders who have never seen a W.C. before, in fact the Canadian Consulate will be the first house in Greenland, outside the Ivigtut Cryolite Mine (which is even more modern than most American or Canadian mining towns) to have running water and modern “inside plumbing.” In Greenland I could not permit myself to take active part in this work without “losing face” so I have to content myself with explaining things to my head carpenter who, incidentally understands no Danish.

Max Dunbar supplied additional details. The carpenter’s name was Peter Lynge, and the house, which included very handsome British Columbia lumber, was situated on Skibshavenvej (Skip Harbour Road), then the only road of any length leading out of Godthaab. The Consulate, and the home of Handelsinspektør Axel Malmquist, were the only two houses on the road between the radio station and the home of a sheep farmer named Lambert. The harbour was a mile or so further on. The only other landmark was Kleinschmidt’s Pael, the post on which the Moravian missionary used to hang his lantern when going to the village to find his way back at night. The Mission was on the seashore at the end of a side road. The Consulate was not built on rock, as were all the other houses in Godthaab, but on sand and gravel, so that it had a full, man-high basement with a septic tank and drainage, and an electric power generator. “Luxury at that time,” Dunbar commented. When Trevor Lloyd did his term as Consul, he noted that the house was made from the same materials as for Reindeer Station, and the basement, dug Canadian style, created amazement on behalf of the Greenlanders who were sure it would sink. “But Erling,” they cried. “All houses in Greenland are built on rock!” Kirkwood reported on his return to Ottawa that the Canadian model Arctic house installed by Mr. Porsild had the following unique points of interest to Greenland: a) Erection on gravel foundation instead of rock; with special ground drainage; b) best design, lumber, insulation, minimum cost for maximum space; c) best septic tank system in Greenland; d) first hot-air central heating system in Greenland; and e) first Delco lighting system in Greenland when completed by installation of Delco generating plant.¹⁸

In his final report to Ottawa on July 26, Kenneth Kirkwood summed up the problems and achievements of the first year of the first Canadian Consulate in Greenland. He was satisfied with what they had managed to accomplish, despite the lack of advice or instruction to Consular officials on arrival that had



Canadian Consulate, Godthaab, Greenland, ca. 1942 (LAC, C-66860)

created the unfavourable attitude and suspicion toward Canada in the beginning; despite the lack of food supplies for four months that had forced them to be dependent on the Cryolite Mine at Ivigtut, the U.S. Consulate at Godthaab, and private Danish hospitality at Julianehaab; despite the lack of needed office and other equipment for an entire year and the serious delays in supplying the building materials for the Consular house; and finally despite the paucity of information of all kinds and at all levels which proved to be a considerable handicap in providing Consular services. However, the early impediments were ultimately remedied and could now be considered as merely of historical interest, as part of the task of setting up an improvised Arctic diplomatic outpost without prior preparation or full consideration of requirements.

At the end of the year he could report that cordial and friendly relations had been established on a solid basis between the Greenland Government and Canada. An apparently adequate supply of cryolite to the Canadian aluminum

industry had been obtained in 1940 and was assured for 1941, dependent on shipping facilities. Greenland imports from Canada were estimated at about \$330,000 for 1941. In some sixty official communications, the Consulate had furnished the Canadian Government with considerable general information on Greenland conditions and internal matters while handling many matters of Canadian interest, such as meteorological organization and reports, provision of special codes, defence matters, airways, etc. Further progress in the forthcoming year should be merely a development and extension of the foundations already laid, with the one exception being the new and unforeseen problems of defence arrangements including Allied use of United States air bases in Greenland.¹⁹

Kirkwood's Arctic Outpost year was over and he would not be returning as Consul to Greenland for the coming winter. On August 2 he cabled Max Dunbar to arrange a meeting. Describing Kirkwood as "a truly remarkable and most unusual man," Dunbar said later: "I met him first in 1941 ... at his home in Ottawa. I have in my library a treasured copy of his *Excursions Among Books*, which contains a biographical study of Lafcadio Hearn and essays on literature in general, including the best study of Robert Burns I have seen. Diplomat, traveller and writer, he was a shy and modest man, 'whose modest mien belied his power.' There is also a chapter entitled 'On Reading in the Arctic,' from his Greenland winter of 1940-41. Both in his diplomatic career and as an author, he was a connoisseur's man."²⁰

On August 19 Keenleyside wrote to Dunbar: "After thoroughly canvassing the whole Greenland situation with Mr. Kirkwood and others it has been decided to offer you an appointment for the current year as Vice Consul and Acting Consul at Godthaab, Greenland. The proposal is that you should go North sometime before the middle of September and that Mr. Porsild should return leaving you in charge sometime about the middle of November." To Erling, he sent word that Kirkwood was being assigned to another post and instructions would follow regarding his personal effects. Dunbar had been appointed and would proceed north probably in September. "It is intended that you will return to Canada toward the end of the year leaving Dunbar in charge of Consulate as Vice Consul. Please inform Greenland Governor. You may also inform the United States Consul. Please advise as to ration requirements or other supplies needed at earliest possible opportunity."²¹

On August 29, Keenleyside approached R. E. Powell, President of Alcan, to inform him of the new appointment and ask if they had passage for Dunbar

on a ship leaving for Greenland in the near future. "I hope that he may meet the officers of your company before he leaves," he said. The company had been complaining to the Greenland Delegation in New York about the quality of the cryolite that they had been receiving, that it was not up to the 80 per cent specified in their contract. They would also have had the ear of Governor Svane who had decided to remain in the United States, leaving Governor Brun to be the sole Governor of and in Greenland for what would turn out to be the rest of the war. By October, Alcan was complaining about the quantity as well as the quality of cryolite they were receiving because the shipments were not pure and they were being short-shipped in favour of Penn-Salt. Another meeting was pending with Penn-Salt, but there is no doubt that Dunbar would have been fully informed of the latest problems with cryolite by the time he reached Godthaab on the Alcan-charted *Lawrendoc*.²²

Meanwhile, Keenleyside cabled Erling on October 16 for an appreciation of the situation in Greenland with reference to the work of the Consulate and how it related to his personal programme. "Have matters developed in such a way as to make it safe and feasible for you to return to Canada before Christmas leaving Dunbar in charge? Is the Consulate building adequately equipped for the winter months? Your views on these and related questions will be received with interest."²³

Erling's views were that the Greenland Administration of life and trade seemed to have adjusted to the changed conditions and were running more efficiently under Governor Brun alone at Ivigtut and elsewhere. Cordial relations were continuing with the Greenland Administration as well as with American colleagues and he was being informed on all important matters. "The shipping season now almost at an end, and unless new aerodromes require to be visited by Canadian representatives, there would seem to be no action to be taken during the winter that Dunbar could not attend to alone, provided that he arrives here in time to become familiarized with the general situation. The new building is very satisfactory and comfortable, and, with supplies now on their way, we are well equipped for remainder of the winter months. While I am prepared to remain, if necessary, I feel that probably I would be more useful in my Department at home during the winter."²⁴

His next communication was headed "Re: Dunbar. Since his arrival October 20th has fully familiarized himself with work here, and with Greenland situations in general. He has been very well received by Greenland Administration, American Consul, as well as can be expected in the Colony, and I am fully

satisfied that because of his sound judgment and winning personality, and his knowledge of Danish, he is not likely to experience any difficulty if he is left in charge of Consulate during the winter.” If Keenleyside agreed to his leaving, Erling requested permission to return to Canada via New York on the last boat of the season to leave Godthaab as it was too late to connect with the last direct ship from Ivigtut.²⁵

On December 1, Dunbar wrote his first letter to Ottawa as Acting Consul. “Porsild will be leaving very soon now, in a flurry of snow,” he told Keenleyside.

He has shown me the ropes to such effect that I do not expect any situation to arise with which I shall not be able to deal.... The social round here is wearing. Conversation topics seem to be limited, and talk is very small. The Danes have a great genius for talking about food without apparently getting tired of it. The complex here being colonial rather than frontier, the formalities of Danish manners and conversation are intensified; but I think that my lapses into Canadian casualness are a relief rather than a shock to them. Godthaab is almost small enough to be “so small that there is no gossip; everybody knows,” but not quite, and to sit by and look on from a Consulate is more fun than taking part in it. Certainly there is lots of room for a Laughing Diplomat here. Nothing but the economy of Godthaab is taken very seriously, and the war is just too bad. I do not believe that the majority are aware that the ships that bring supplies to Greenland are fair game for submarines.²⁶

They would be even fairer game in less than a week. Erling left Godthaab on the last vessel to travel between the neutral countries of Greenland and the United States of America. The ship was still in or not far from Arctic waters when the Japanese attacked Pearl Harbor on December 7, and Hong Kong on December 8, when Britain and America declared war on Japan. She was steaming as fast as possible for New York when Hitler declared war on the United States on December 11 and began readying his U-boats to attack all shipping along the eastern seaboard. It remained to be seen whether ocean-going vessels of any type would be able to deliver Greenland’s precious supplies or transport the crucial cryolite back to North America safely in the year ahead. The building of the big United States “Blue West” air and naval bases had come just in time.



CHAPTER THIRTY-THREE

UNCERTAINTIES IN WARTIME OTTAWA

On his way back to Ottawa in December 1941, Erling took the opportunity to spend a night with the Raups and visit the Gray Herbarium in Boston. In meetings with Raup and other botanists on staff as well as Gray Herbarium Director Professor Fernald and Arnold Arboretum Director Dr. Merrill, he was strongly urged to publish his long-awaited flora of the Continental Northwest Territories, if for no other reason than because their work, and the work of a number of other plant geographers, was being held up by lack of information from the region covered in his monograph. Raup especially, having led an expedition to the Nahanni region three years earlier, needed data from the northern parts of the Mackenzie District, and he had a number of new species in his collections that Erling had described but not published which, from consideration of collegueship, he was reluctant to describe and publish himself. It was decided that Erling should at least put together his descriptions of new species, revision of genera, and the most important aspects of geographical distribution for immediate publication.¹

When he got back to Ottawa at the end of the month, confirmation that these “novelties” could be published came from Raup that Fernald was quite willing to publish the new species in *Rhodora* as long as they did not run into a long paper. Erling had since gone over his manuscript notes. “Frankly I am now awed by finding that I have no less than thirteen new species, two new varieties and four transfers in addition to about 125 important range extensions that ought to be published. To include the latter at this time would probably make quite a large paper and I think I had better forget about that. Even getting the novelties ready for publication is quite a chore; the translation of the [Latin] diagnoses especially is going to worry me a lot – couldn’t I do them in Eskimo?”

However, I'll get busy." Raup had mentioned that Ernst Abbe from the Gray Herbarium was hoping to get up to Ottawa to do some work under his Guggenheim Fellowship grant on the Flora of the Richmond Gulf area, so Erling wrote to Abbe on January 2 to tell him that the National Herbarium was "still there and 'doing business.' Our office space has been somewhat reduced but we can still give you a desk and a chair to sit on if you wish to come here to work on your arctic plants."²

It was amazing that the Herbarium was still there, given the ever-increasing pressure for office space in wartime Ottawa. Anderson had written to Erling back in August to tell him that "The Postal Censorship Branch, after many delays, finally moved out of the Motor Building on July 19th and 20th, and the herbarium question was in suspense for a week, until on July 29th the Wireless Section, Canadian Corps of Signals, moved into the rooms in the new part of the flat south of the herbarium quarters." For two days, carpenters, painters and decorators were busy putting up a long partition running the whole length of the 'Annex' as far as the National Herbarium wall, divided into offices, leaving a narrow corridor giving access to the Herbarium and to the offices in the new part. "None of our stuff was moved except the two large cases of pamphlets and separates which we moved into the Herbarium office."

Five days later, Anderson wrote to tell Erling of official approval of \$100 for bird specimens acquired in Greenland and added:

Of course there may not be any Museum or any place to put specimens by the time you return to Ottawa.... Yesterday morning Mr. Lynch came over and said that there is a drive from more quarters for Unemployment Insurance Board, and that it is almost certain that Patch and Sternberg's quarters on the ground floor will have to be vacated, with a strong possibility that when they get in they will want to "get together" and the National Herbarium, mammal room and bird room will have to be cleared out. Yesterday afternoon, Lynch asked Sternberg to take Patch and myself over to Hull to look at a building which might be offered to us, corner of Dupont and Frontenac Street. It is a fairly new two-story brick veneer building, but with flimsy wooden supports in basement, and with typical Hull wooden fire-traps on all four sides. Sternberg does not like to move, but if he has to move would like to drag all the rest of us along. He could stand it, as he does not have much more than a lot of heavy machinery which are not in use, but if

we have to move the mammal, bird and plant collections over into the heart of Hull, the authorities are certainly taking an indefensible fire risk. There will probably be a fine bonfire, and they are “asking for it.”

Two other alternatives were being suggested, but “There is not much we can do about it, as any branch engaged in activities connected with war or postwar activities, has ‘priority’ in everything.”³

There had been no move for the Herbarium up to January 1942 but the possibility continued to hang uneasily in the air. Erling had told Abbe on January 2 that

Due to war congestion you may find it difficult to get a room in town, but if you are willing to put up with a poor bed at my place, we should be very glad to have you. I have no housekeeper and Edith and I take turns with the preparing of meals, etc., so you may want to get your dinners in town. I may take Edith somewhere skiing at the end of the month or in February when snow conditions improve, so if you can it might be best if you could come here this month. However, we have made no definite plans as yet, so if January does not suit you we may be able to plan our trip accordingly.

By February 26, Erling could tell Raup that he had been “working overtime” to get his notes in shape for publication. “Watching the way the ‘stuff’ is piling up is beginning to make me jittery,” he said,

... not to mention the fact that it seems that on almost every page I have to take “pot shots” at Fernald. Frankly this is worrying me a great deal. It seems like heaping insult upon injury to ask him to publish in his journal criticism of his own work. Still, what can I do if I am in the unfortunate position “not always able to agree”? Abbe left this morning. We have enjoyed having him here and we have had many stimulating discussions about many things. My only regret is that I feel that he should have stayed longer, and that he should have taken the time to clear up a number of problems that I think are better solved here than at the Gray. It is too bad that, having said he would be here for two weeks, he felt that he must not overstay.⁴

Abbe had said that he did not know how he could repay Erling's hospitality, but later that year, while writing up his report to the Guggenheim Foundation, he wrote an appreciation that amply rewarded his host for his generosity. He enclosed his remarks to the Foundation in a letter to the Director of the National Museum of Canada. "During February I spent two weeks at Ottawa," he said,

to make a search through the National Herbarium of Canada for material from the Richmond Gulf and nearby areas. My experience there may be of interest to the Foundation, since the National Herbarium of Canada has had in the past the reputation of being poorly organized, and therefore difficult to do efficient research in. I was very pleasantly surprised then to find that in spite of the very small staff for an institution of its international importance and extensive collections, that it is in an eminently useful state. This is really a tribute to the Curator, A. E. Porsild, because it is entirely due to his efforts that the National Herbarium is now a useful scientific instrument. There is not a group of plants in the herbarium which did not give evidence of having been carefully revised by Porsild during his curatorship. I would like to emphasize my opinion that under Porsild's influence the National Herbarium of Canada has become a real and productive scientific institution, and that it is a research institution well-adapted therefore to the needs of advance workers. I noticed during my stay there that the library facilities are excellent, and that an intelligent librarian is in charge of the biological books at the National Museum. I was able to add very nearly a thousand new records to my own by my research through the National Herbarium of Canada.⁵

It is unfortunate that this letter had not reached the Director as soon as Abbe returned to Cambridge as Erling was already exchanging memos with "Mr. Lynch" about his status at the Museum. On February 27, he was writing to defend his reasons for not accounting for the \$100 he had received for the purchase of specimens in Greenland:

When leaving Greenland in December orders had been placed with a number of native collectors in the outlying districts for birds, skeletons and skulls of seals. These specimens had not yet been received and, thus, could not be paid for. I therefore left the unexpended balance

(\$86.16) with Dr. Max Dunbar, Vice-Consul, in order that he might pay for the specimens when received and because he would be able to secure much additional material during the winter.... I might say that this advance was made when it was assumed that Dr. Dunbar, who is a zoologist, was to join me early last summer. Dr. Dunbar did not arrive at Godthaab until November, and during the summer other duties made it impossible for me to give much time to the collection of specimens. About 30 bird skins, in addition to a collection obtained by exchange, was turned over to Mr. Taverner upon my return from Greenland. In compliance with your instructions I am enclosing herewith an account for \$13.84 with my cheque for \$86.16 covering the unexpended balance. In refunding the unexpended balance may I have the assurance that the Museum will be prepared to reimburse me for whatever amounts (not exceeding \$86.16) Dr. Dunbar, during my absence, may have paid for specimens ordered on behalf of the Museum by me.

The mean-spiritedness of the demand must have rankled with Erling, as well as the usual year-end concern about the extension or otherwise of his position as Temporary Botanist. A week later, he was picking up the pen again, although there was every reason to believe that his questions regarding a full time appointment would once again be shelved since nothing could be changed during the war. He had been to see the Deputy Minister of the Department of Mines and Resources shortly after he returned from Greenland and presented him with a piece of pure cryolite carved in the form of a polar bear. "During the conversation," Erling told Lynch,

Dr. Camsell expressed surprise on learning that "I was still on a temporary appointment" and he suggested that I should at once see Mr. Timm. I spoke to Mr. Timm and he in turn sent me to talk to Mr. Pratt. This was in January and I have heard nothing further in the matter. You are, of course, familiar with the facts involved and there is no need to review the matter, but the fact remains that as far as I am concerned, after 16 years with the Government, my position as a "temporary" is frankly a most discouraging one. It is not for me to suggest the method of remedy, but I noticed the other day in the press that since the war started many thousands of "Orders-in-Council" had been passed.

Erling wrote another memo to Lynch the same day to ask if the accumulated holidays of the present and previous year could be carried over for another year as he wished to spend all the time he could spare from catching up with routine herbarium matters in the preparation of a paper on the Northwest Flora. "You may remember that when the war broke out my work of many years, on the Northwest Flora, had reached the point where the final writing for publication was to commence... Work on this project has largely been suspended because of special duties outside the herbarium."

Last December, when he passed through Boston on his return from Greenland, Professor Fernald of Harvard University, Editor-in-Chief of *Rhodora*, the leading journal in plant taxonomy, had suggested that Erling should prepare a shorter work for publication, and if publication in Canada was not possible at that time, he would be prepared to bring it out there. It was for these reasons that he wished not to take his holidays at this time.

On March 7, Erling had a fourth memo for Lynch, this time to say that it had been pointed out to him that for the last two editions of the Government Telephone Directory his name had been dropped from the alphabetical list and that of the National Herbarium had also been dropped from the National Museum section where his name also used to appear. "Even though I have been absent in Greenland on special duty part of the time, the National Herbarium is still functioning and I think ought to be listed in the directory, and also, since to a number of people interested in botany my name would be synonymous with the herbarium, it also ought to be included in the next edition."⁶

It seemed that no one fought harder than Erling for due recognition from Government departments. On April 7, he was writing to Keenleyside to know the date of departure if he was to return to Greenland in spring and he needed time to prepare if he was to stay over the winter to allow Dunbar to return to Canada. "If I am returning to Greenland should I not be 'promoted' from Vice-Consul to Consul (non career)?" he asked. He believed that in the past there had not been sufficient actual consular work for two men at Godthaab, but if they were to keep themselves fully informed about shipping conditions and activities at the mine and air and naval bases, it would be advisable to have one man travelling as much as possible while the other remained in Godthaab, as was done by the American Consuls.

In looking at this memo from Erling, it is interesting to wonder if anyone at External Affairs would have noted that it would be equally in the interests of two scientists stationed in Greenland to be able to travel and collect specimens

for their botanical and zoological work, but, with no comment on either side, the word came back on April 11 that the question of appointment to "Consul" would be considered, dependent to some extent on what was done in other branches of External Affairs, and it was suggested that if it met his convenience he should return to Greenland sometime in July, and Dunbar should leave on the last boat before Christmas and be back to relieve him in the spring.⁷

In April, Erling was asked to read a paper on "Reindeer and caribou grazing in Canada," illustrated by lantern slides, at the 7th North American Wildlife Conference at the Royal York Hotel in Toronto, April 8–10. In his lecture, he was at pains to correct the common misconception that areas that would support the wild caribou would be suitable for tame reindeer, because the former could roam at length over sparse pasturage while the latter needed better forage density in order to be close-herded in one location for longer periods of time. Although the bulk of reindeer and caribou food consisted of lichens in winter, the belief that they lived exclusively on "moss" was erroneous. "In summer their food consists largely of the grasses and sedges of the arctic tundra to which, depending on the type of pasture, are added young twigs of willow, dwarf shrubs, and a variable amount of lichen and green herbage. Lichens (reindeer 'moss') are not necessary for the deer in summer but are readily eaten when moist. All kinds of fleshy fungi are greedily eaten as are birds' eggs and even dead mice or birds." Recent range studies in Norway and Alaska had shown the damage that could be done to lichens with over-grazing but in Canada the allowance of forty acres for each reindeer appeared to be ample on the winter range. Recent aerial mapping surveys, not available in 1927 and 1928, had shown that the area between the Mackenzie River Delta and Great Bear Lake was composed of far more lakes and ponds than he had been able to ascertain from the ground, so he felt that his estimation of the carrying capacity for reindeer would have to be adjusted accordingly.

Regarding the effects on wildlife, in Alaska it had been found that caribou usually disappeared from areas occupied by reindeer, but foxes, wolves, bears, and ravens were attracted by them. Foxes were not a problem, and barren ground bears were not numerous so only a few were shot by herders each year for killing the occasional reindeer, but ravens, "that began to congregate from all over the Western Arctic at the Mackenzie Reindeer Reserve soon after the first herd arrived," were a great nuisance because they quickly devoured any meat left unprotected and occasionally killed young fawns. Wolves were most destructive and had to be hunted relentlessly by the herders because ordinary

trapping and poisoning methods were dangerous for the reindeer. Canada's reindeer herd had prospered since its introduction "and in time will furnish an increasing part of the meat and skins used for food and clothing by the inhabitants of the North, thereby decreasing the demands made on caribou and other fur-bearing animals of the Arctic."⁸

Erling's expenses for the Conference had to be explained to W. B. Timm, April 25, and he said that a number of technical sessions dealing with range management and forest and soil conservation had been of particular interest to him. His paper was well attended and a number of questions asked, particularly about wolves. "During the meeting I met a number of people; of particular value to my work and to the National Herbarium were contacts made with botanists in the University of Toronto. Between sessions of the Conference, several visits were made to the Department of Botany at the University where a number of problems were discussed at some length with Professors Jackson, Bailey and Taylor."

He had no sooner returned to Ottawa than he had to leave again for the Second Annual Meeting of the Canadian Conservation Association held in the Botanical Laboratories of the University of Montreal on April 13 and 14. "Most of the papers presented were of very direct interest and importance since botanical surveys and plant geography is very closely related to problems of conservation," he told Timm. "The meeting on the whole must be considered a very successful one although I came away with the impression that the Association, being still a very young one, has not quite 'found' itself and its place and scope of operation. As with the Toronto meeting some of the most valuable results of this meeting were the renewal of former contacts and the establishment of new ones. Some time between meetings was devoted to examination of botanical material in the fine herbarium of the Botanical Laboratories."⁹

It must have been very clear by now to the Department of Mines and Resources that Erling Porsild was making a name for himself in several important fields and they still had a problem on their hands as to what to do with him. Lynch went to see him on April 22 and asked him to prepare a brief outline of his services with the former Department of the Interior and the Department of Mines and Resources. The result was a list of accomplishments that included the years spent with the Reindeer Project, which herd now numbered over 10,000 animals, seven years in the National Herbarium filling the position left by the late Dr. Malte "without, however, being given the appointment of Chief Botanist," the publication of some thirty papers mostly on arctic flora,

and, since the war began, a short service with the Postal Censorship and two years doing Consular work in Greenland. "I am informed that my services will again be requested by the Department of External Affairs during the coming year. Although I have now been in the service for 16 years, during which time I have constantly been assigned to highly specialized work requiring very special training, I am still a temporary, receiving the same salary with which I started in the Service 16 years ago, namely \$2,520.00 per annum." This last piece of information was particularly shocking, considering how proud Malte had been that the Porsild brothers were being given a generous salary in 1926 and comparing this with the lack of appreciation for Erling's considerable work and achievements in the long period since that time, and it certainly should have given the Department an incentive for serious appraisal of his situation.

Since it had been expected when Erling was hired at the Herbarium in 1936 that he would be working on the flora of the Northwest Territories, he wrote a second memo to Lynch on April 23 to explain how the project had been stopped since the war took up all his time, but now it had been pointed out to him how much it was needed by other botanists working on Canadian problems. For example, Professor Fernald was working on the Flora of Eastern North America, Dr. Raup was continuing his work on the Flora of the Upper Mackenzie basin and Mackenzie Mountains, Dr. Abbe on the Flora of the Richmond Gulf area, while Dr. Hultén, in spite of the war, was going ahead with the publication of his large Flora of Alaska and Yukon. "To these scientists and others who for years, independently or in collaboration with Canadian botanists and institutions, have worked on problems of great importance to Canada, continental Northwest Territories largely remains a blank space on the map, and until my report is published the information which they urgently need, and which we have here, will not be available." Because it had been suggested that he publish at least the more important new material, he had been working hard to prepare a paper for publication in *Rhodora*, provided that part of the cost of approximately \$250 including the cost of 200 reprints "could be financed from here... An alternative would be publication in the Museum Bulletin Series or as separate publication which, if put out on cheaper paper and without illustrations, would not cost a great deal. While presenting the above suggestions for your information and consideration, I am, of course, fully aware that, due to war conditions, publication in any sort of form may, perhaps, be entirely out of the question."¹⁰

Erling had already completed his manuscript “Contributions to a flora of the Northwest Territories” to the point where he thought he could mail it to Fernald for his reactions before finishing the rest, he told Raup on April 7. It totalled 28,000 words, or 75 printed pages in *Rhodora* with 31 pages more to come. He had rewritten some parts a number of times and reduced others to a minimum in order to boil it down, but the completed list came to 12 new species and varieties, 1 new combination, 77 species new to the Northwest Territories, 13 new to Canada, 19 not previously recorded north of Great Slave Lake, and 29 new to Mackenzie District.

The paper contains a few controversial matters that I know Fernald will not like. Thus I endeavour to show that his *Lychnis* ‘*furcata*’ is quite unnecessary and probably not at all what Rafinesque was writing about. Also I have taken other ‘pokes’ at Fernald that I could not possibly avoid taking... I had first planned to send the ms. to you, but then I thought Fernald might prefer to have the “first look.” I have not attempted to write the Latin descriptions because it would have to be done by someone else in any event. Naturally I am very curious to know what Fernald’s reactions are going to be and if you go over to the Gray you had better prepare yourself to pour oil on the troubled waters.¹¹

Professor Fernald did not have much to say about the manuscript to Erling on April 11 except to comment that it was much more extensive than he had anticipated and *Rhodora* was not in a position to pay the full price for a single long paper. “I would be safe in saying that *Rhodora*, which is published at great financial loss and which has perpetually to fight the Customs authorities to get its copies into Canada and then often without success, would undertake to meet one-third the expense, but that it would not undertake the clearing of customs in getting the copies into Canada; that would have to be handled from the Canadian side.” He added as a postscript: “If you can accomplish anything with the Government which perpetually blocks *Rhodora*, then lets it in, then blocks it again, causing unlimited annoyance to those who give their time and services, we shall appreciate it!”

Fernald made no reference to the controversial aspects in the paper, except to say that in glancing at the manuscript, he had noted a mistaken claim for *Selaginella selaginoides* as being new to the flora of Labrador that he had

personally collected there and had a lot of material of that species in the Gray Herbarium, which suggested that perhaps Erling's statements of broad ranges or of novelty needed checking on material not necessarily at Ottawa. "Most of the groups treated by you are on our second or third floors so that I have not climbed up to check them, but almost immediately at my elbow is *Sibbaldia*, for which you seem to give southern limits in Alberta, British Columbia and California, and not to note the occurrence in Newfoundland. We have plenty of material from Montana, Idaho, Wyoming, Colorado and Utah. It would obviously greatly strengthen the paper if the extra-limital ranges were checked."

A month later, Erling had taken note of Fernald's comments. *Selaginella selaginoides* was obviously *not* new to the Labrador coast and with *Sibbaldia* he had merely intended to give the southern limit in a general way, but he would check this point carefully. "I thank you for calling it to my attention. With regard to the difficulties caused by Canadian Customs in passing *Rhodora*, I expect that the matter can be straightened up simply by having *Rhodora* placed on a preferred list. The Department of Agriculture already have made some enquiries."¹²

There would be no National Herbarium field trips to check the flora that summer but Erling noted that the war was affecting botanizing trips everywhere. Lincoln Constance wrote from Berkeley, California, on May 27: "I trust you are finding it possible to carry on your activities despite the war? Of course, curtailment of tires and gasoline is tending to decrease our field work, but if we suffer no more serious handicaps, I feel that we can consider ourselves to be extremely fortunate." A letter from Abbe on June 15 suggested that Fernald was as easily disturbed by local officialdom on a recent field excursion as he had been with the Canadian border dispute. "Fernald and I came to an agreement whereby he was to look over a lot of my plants, and I was in return to take him on a trip to Virginia in my car," Abbe said.

Of course we nearly got arrested as German spies because I got out the big Graflex and photographed some *Iris verna* beside a main highway – and unknown to us there were some gas tanks back of us. A local, loyal citizen promptly assumed that we were planning to blow up the gas tanks, reported us to the state police, and we were hunted all over the state of Virginia by the police for the rest of the day. Although we did not know that we were being hunted, Fernald is so familiar with the back roads that we evaded the police just in the ordinary course

of our botanizing trip. However, when we got back to town for supper, about 8 o'clock that evening there was a state trooper waiting for us [although by then] he had already satisfied himself that we were harmless. Nevertheless Professor Fernald was quite upset, and it was not until after he had showed the policeman his fourth set of credentials from the National Academy of Sciences that the state policeman said "Yes, Professor Fernald, we must take VERY good care of you, MUSTN'T we," that the Professor calmed down. Otherwise it was a quiet and uneventful trip.¹³

By the end of May, Lynch and other Department officials had come to the conclusion that there was nothing that could be done about Erling's appointment as Chief Botanist until the war ended, and even then there was still the problem of his lack of university qualifications. However, since it was obvious that they owed him something tangible, it was decided that they could publish his manuscript. Erling wrote to Raup on May 31 that he had put it to the Department about raising the money for *Rhodora* publication

... but it was obvious from the first that, owing to foreign exchange regulations, little hope was held out that the matter would go through. But instead, to my considerable surprise, it was felt that, war or no war, it was desirable to have a Museum publication out, and today I have been informed that publication of the paper has been approved as a regular Museum Bulletin. I should have preferred to have it in *Rhodora*, but seeing that that was impossible I am, of course, very pleased with the alternative solution, especially since they will print 2,000 copies of the paper. It will probably take some time to get it out and the fact that I will be in Greenland will delay such matters as proof-reading and checking. I am in doubt as to what to do with my latin descriptions. If I cannot do better I will write them myself and get my clerical friend to weed out the worst grammatical blunders. Do you know of anyone down your way who might be prevailed upon to do the translation? I do not think I should like to ask Fernald or Weatherby.¹⁴

Raup had not been able to accomplish much about "pouring oil on troubled waters" at the Gray Herbarium after Erling's paper arrived.

This was due in some measure to timing. If I had had a little warning, I could have prepared the ground, but I learned about the whole business for the first time ... before I had your letter. By that time Professor Fernald had been through the ms. and had already begun to form his ideas, so there wasn't much I could do. Anyway, it seems to be coming out all right, and I think it is fine that the paper can be published by the Museum, even though it doesn't get so wide an immediate circulation.... With regard to the Latin descriptions, I will get that done or checked over here at the Arboretum. Dr. Merrill suggests that you put them first into some sort of Latin before you send them down, and then we will straighten out any kinks. Croizat is pretty good at that sort of thing, but it is best to have the principal ideas down in Latin first.... I will be more than pleased to go over the ms. I only had a glance at it while it was at the Gray. Would it help any, in furthering the publication, if I could get the proof-reading done for you, and generally see the paper through the press?

He was involved in a new mapping project that Abbe may have told him about, making 'spot range maps' for all the species collected in the Mackenzie Mountains for their distribution in all of Canada and parts of the northern States. "It is one of the most interesting and profitable things I have ever done in this line, as the characteristics and affinities of that flora begin to come out very clearly. Likewise, I am learning a great deal about the ranges of many common northern species – peculiarities that I didn't know existed.... A lot of your records will surely clarify these range patterns."¹⁵

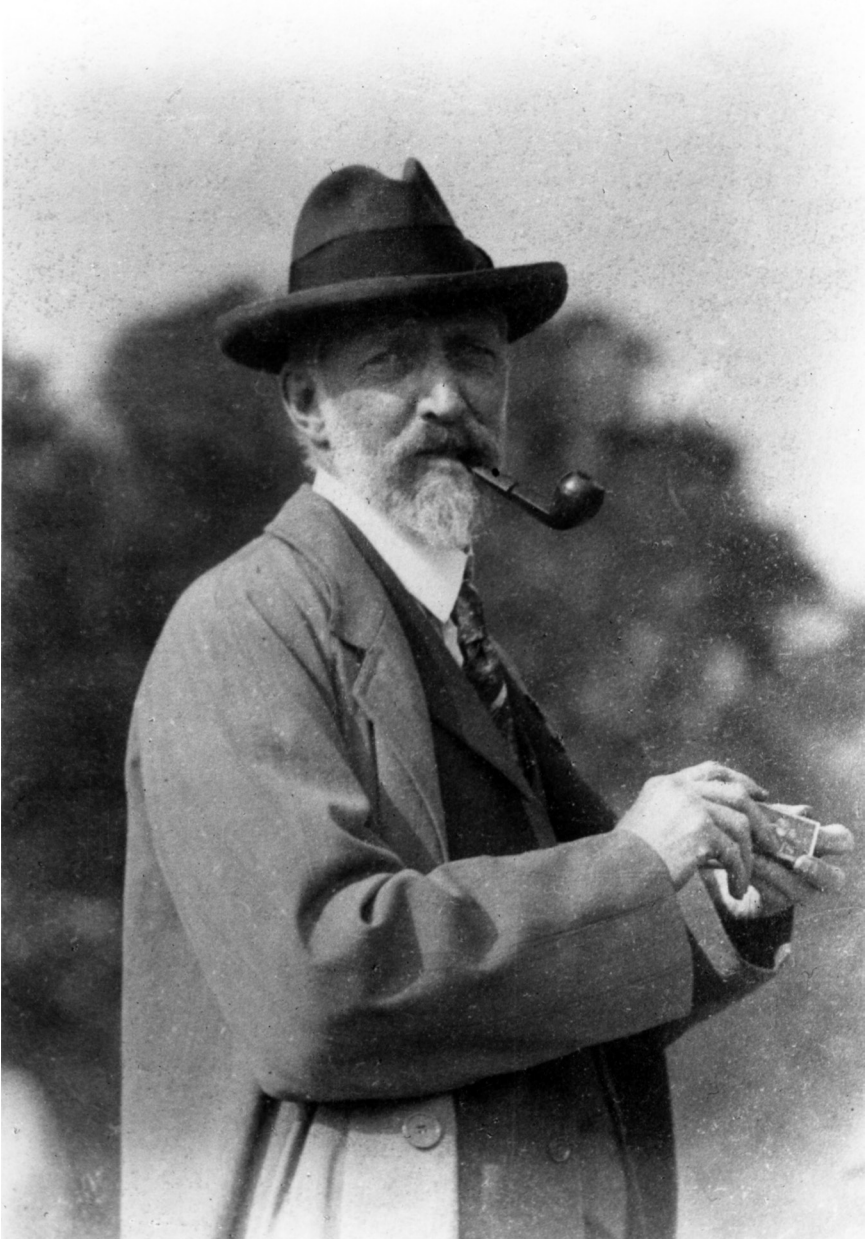
Erling was very grateful for both offers but unable to answer before June 11 as they had been "up to their necks" in moving the Herbarium. "We were 'blitzed' out of the Motor Building with very short notice although the possibility had been recognized almost for a year or two. Fortunately the only space available was in the National Museum where the 2nd floor has been partly closed to the public and given over to the Biological Division. We have grand quarters in the Indian Hall where we have about 33% more floor space than before. A sign over my office reads 'Indians.' Everything here is still in a mess although the actual moving took very little time." (He was to tell Fernald the same day that "In the last war, when our Parliament was destroyed by fire, the Senate was moved into a hall in the Museum which someone thought was appropriately marked 'Vertebrate Fossils.'")

The date of his departure for Greenland had not yet been fixed but it could be almost any day and there was a good chance that he might go by air, which was fine except that he would be separated from his baggage. He had sold his house and hoped to build something more to his taste when the war was over, meanwhile Edith was getting along well in her course and had been offered a job on the laboratory staff at the hospital when finished. "She will get \$70.00 per month and naturally is quite thrilled. She will go and live with a very fine old lady who lives near the hospital."¹⁶

His good friend and colleague Percy Taverner was retiring from the Museum after thirty-one years, and Erling told Lynch that a "most appropriate and thoroughly deserved recognition would be to appoint him as Honorary Curator of Ornithology" as he was not only the leading Canadian ornithologist of the day but through his bird books he had done more than anyone else toward making the National Museum 'bird conscious.' "In my travels in the United States and in Europe I have constantly been reminded that, as a scientist, Mr. Taverner is even better known abroad than he is at home and that his bird books there, as elsewhere, have achieved universal and deserved popularity. In his long association with the National Museum Mr. Taverner more than anyone now living has had the interest and future of the Museum at heart. As an Honorary Curator his advice and continued interest would for many years be available to the Museum."¹⁷

By June 24, Erling's request for the title of "Consul" in Greenland had officially been turned down, although Keenleyside thought it was not unreasonable in view of his experience and the fact that his much younger American counterpart had been given the full title. Robertson noted at the end of Keenleyside's memo of June 13: "When the whole Service is frozen in pre-war classifications, I don't think a case can be made for stepping Porsild's honorific up to a full Consul for Greenland." Erling told Keenleyside on June 25 that he was surprised and disappointed because he felt that the fact of his not being accorded the same title as his predecessor would reflect unfavourably on himself and his Government's confidence in him.

The decision is the more unexpected since no question of salary, allowance or pension is involved, my salary being paid by my own Department. The whole question is, perhaps, of no great consequence and cannot now materially influence my willingness to go to Greenland because the decision was reached at a time when, in preparation for my



Percy Taverner (CMNA)

return to Greenland for one year, I had already completed all my personal plans, sold my house, completed all arrangements for my family, and, besides, shipped my baggage to Greenland. I should like to be given a few days 'warning' for last-minute preparations but, otherwise, I am ready to leave for Greenland whenever air transportation can be arranged for.¹⁸

Erling left Ottawa for Greenland on July 5, unaware that the refusal of Consular title was not to be his final disappointment from Government quarters in 1942. Two days after his departure, Anderson received a copy of a memo from the office of the Deputy Minister of Mines and Resources to Mr. W. B. Timm, dated July 7, to inform him that, although the publication of Porsild's "Contributions to a flora of the Northwest Territories" had been approved earlier in the year, it was felt that "in view of present conditions and the need for exercising every possible economy, no harm would be occasioned if its printing was postponed until after the war."¹⁹

It would be two months before the upsetting news reached Erling in Greenland. In a long letter on October 3 to Charles Camsell, Deputy Minister for Mines and Resources, Erling emphasized the importance of the paper being published sooner rather than later and the missed opportunity of having it printed in *Rhodora*. If the Department had not expressed its willingness to publish this abstract in the Museum Series, he said, he would have found the means somehow to accept Professor Fernald's offer, but

... in view of the definite understanding that publication would be made possible in the Museum Series, I informed Professor Fernald that the space which had tentatively been reserved would not be needed. From January to the end of May this year, I then spent all available time, including nearly all my evenings and holidays preparing the manuscript, in order that it might reach the Departmental editor in time before I would have to leave for my post in Greenland. It seems unfortunate, therefore, that the decision to stop publication was reached only two days after I had left for Greenland, because if it had been made earlier I might otherwise, if permitted to do so, have made arrangements to publish elsewhere.²⁰

He was not the only person who was aggrieved about the manuscript, printed or otherwise. Miss Harkness received a letter from someone who had written on August 12 to say that, knowing that Mr. Porsild was in Greenland, he still wanted to have it acknowledged that he, “not Fernald, Weatherby or Raup (Dr. Raup being thoroughly and absolutely innocent of any Latin and the like),” had revised Mr. Porsild’s Latin, “which was not a simple affair,” and he had taken the liberty of inserting into the manuscript “the bare truth” that: “The Latin diagnoses have been [kindly] revised by Dr. Leon Croizat of the Arnold Arboretum of Harvard University.”²¹



CHAPTER THIRTY-FOUR

ACTING CONSULS DUNBAR AND PORSILD

On July 5, 1942, Max Dunbar was typing up his official report on what had been happening in Greenland during the first six months of his consular Arctic service. It was Lester Pearson's biographer, Robert Bothwell, who commented on the incessant need for Canadian diplomats, particularly junior diplomats, to write endless memoranda for their department that were "painstaking, idealistic and largely fruitless," and he labelled them "the epitaph of their generation," yet in places as remote and inaccessible as Greenland they were useful for enlightening what otherwise would have remained largely unknown. In his later memoirs, Dunbar noted that part of his assignment was to write dispatches that were "no longer important," but his honest and irreverent memories of the Greenland experiences, combined with his official report, paint an interesting picture of his life in Godthaab.¹

As had been expected, there had not been much for Dunbar to do in Godthaab beyond the usual winter entertaining "in which the Consulate had taken its full share," although the Danish population had increased so much in the last two years, and was still increasing, that it was gradually becoming impossible for the whole colony to function as a unit in this respect. He was absolutely right in his earlier report when he remarked that the isolated Danish colony was badly in need of a "Laughing Diplomat," which quickly became apparent in the new tone at the Canadian Consulate. In 1995, he remembered that he had no sooner taken over the Consulate in the fall of 1941 than he noticed an "alarming smell" in the basement that grew stronger as the weeks went by, which made him wonder whether Erling's septic tank was going to give trouble so soon.



M. J. Dunbar, Canadian vice-consul and consul (1941–46), Godthaab, Greenland (Photo: in the Arctic, after 1935, unknown photographer)

But it was no more than an enormous Oka cheese from Quebec, which he had not told me about, and which I quickly managed to consume with the enthusiastic help of the Kolonibestyner [Colony Manager] Thorvald Hedemand, during the next few weeks. Fortunately I had a dissecting microscope upstairs, so that we could examine the cheesemites at the dinner table. Hedemand was delighted, and remarked that all well-equipped homes should have a microscope handy for that very purpose.

“One of my most vivid memories of those Greenland winters was skiing,” Dunbar said, “skiing without benefit of ski-tows or ski-lifts, just skiing up and skiing down those 2000-ft. hills, usually in bright sunlight and well on into July. The ski is, in fact, a means of enjoyable transportation in mountainous country, and many of the Godthaab community enjoyed it to the full.” (It was hard work skiing uphill and one of the United States Vice-Consuls was heard to mutter to the rhythm of the task: “The Danes they are a hardy race; try to keep up and fall flat on your face.”)

Dunbar had instant rapport with James Penfield, the young American Consul, who, he said,

... handled the protocol and the problems of grafting a U.S. military organization on to Greenland, for temporary purposes, with great skill and with straightforward courage. For my part (I was only 26 years old when I first occupied the Canadian Consulate) he volunteered to teach me the skills of consular work and the tedious necessities of protocol, an offer that I accepted at once.... We had long conversations about the situation we found ourselves in, and we understood each other. Together we worked out a ‘code’ for local radio communication (a code that any idiot could have broken in 15 minutes) involving the substitution of letters against sentences agreed upon to begin with. One of the sentences he offered, late in the afternoon, was ‘time for a drink.’

He had got to know Finn and Bente Gad over that first winter. Finn Gad was a college teacher who would later write a scholarly book in Danish on the history of Greenland in three volumes, published after the war. “Both of them agreed that whenever we met, on whatever occasion, we should speak only Danish,

and one may be able to imagine the mental exhaustion I suffered (but happily) after a whole evening of philosophical discussion with the two of them, in Danish. I shall always be grateful to them. This process resulted also in the organization of our musical evenings ‘Musikaftener.’” The Gads and Dunbar planned the programs based on what gramophone records were available in several homes in Godthaab. Despite the fact that he found the Consulate small for entertaining (“four is the limit of comfort, eight the limit of possibility; the handicap, however, has its advantages”), he said: “It was fun. I even managed to get Eske Brun to our musical evenings, which if I remember rightly took place in the Consulate and in the Gads’ home alternately, once a week. Thorvald Hedemand in particular had a large collection of music which we drew upon, and so did the Fuglsang-Damgaards [who] tried to teach me how to behave in Greenland. I never learned.”

In spite of the Consular duties that he was performing dutifully, he had been able to continue with his marine biological and oceanographic work, receiving every encouragement from the Greenland Administration in the person of Governor Eske Brun, whom Dunbar considered the most important and necessary man in Greenland during the whole of the war, “a big man in all senses of the word,” with a friendly disposition, dry humour and good sense, and one who was at all times practical. “Motor boats were always made available every two weeks for me to sail up Godthaab Fjord (one of Greenland’s very best, one of the best in the world) to haul my plankton nets and measure temperatures and salinities. To be able to follow the biological cycle in the sea throughout a full twelve-month period in the North is not an opportunity that comes often.”

There was bad news in his official Consular Report that Greenland had suffered the loss of two of her most important ships in the first six months of the year. Cryolite ore weighing 24,260 metric tons for the United States and 5,200 metric tons for Canada had left Ivigtut that year, but the *Hans Egede*, carrying 560 U.S. tons, had been given up for lost since she had not been heard from since she sailed for Philadelphia on February 27. Also in February, the *Gertrude Rask* had gone aground near Baccaro Point, Nova Scotia, and was abandoned, although no lives were lost and the mail was apparently recovered, while the returned captain had been appointed inspector of coastal shipping. The resulting shortage of tonnage for the transport of general goods to Greenland, especially fresh vegetables and fruit, had caused the Administration to

charter a Norwegian freighter, the *Bencas*, in May. She left Ivigtut on June 13 with a cargo of cryolite for Port Alfred.

The *Villa Franca*, a Portuguese ship, had arrived with a load of salt and had taken back the most valuable cargo ever to leave Greenland, with over 2,000 metric tons of salt codfish, and small amounts of salt halibut, salmon-trout, lamb, and walrus hides. In an outlying fog, with pilot on board, she had struck a rock at the mouth of Godthaab Fjord, but no damage was sustained and after waiting at anchor for twenty-four hours she continued her voyage. Other ships, a trawler and six schooners presumed to be Portuguese, had been seen fishing on the banks in June, and several United States Naval and Coastguard vessels had called at Godthaab in May and June, one leaving a buoy in the harbour for the use of patrol flying boats. "With the United States air bases now functioning according to plan, there has been during the past months considerable evidence of activity in the air. Transports, bombers, and patrol planes are frequent visitors over Godthaab, and the flying boats have called several times. On three occasions officers from these machines have stayed overnight at the Canadian Consulate." One visitor had been Squadron Leader R. H. Brown, commander of the RAF base at Reykjavik, who was interested in information about any Greenland or foreign schooners, fishing vessels, or larger ships that might possibly be in the northeast region during the summer, as any ship unknown to the RAF would be liable to be attacked on sight.

Radio communication between Ottawa and Godthaab via Resolution Island had been satisfactory over the winter. In Godthaab, there was a new magazine called *Grønlands-posten* which had reached its eighth issue and was considered a great success, the first such periodical to appear in Greenland in the Danish language. Another innovation had been the daily news bulletin, broadcast in both Danish and Greenlandic, with reports from various parts of the world. Two members of the Greenland Delegation had arrived from New York and were making a complete survey of all the technical and mechanical equipment in Greenland, including radio installations, electric lighting and power plants, blacksmiths' equipment, and the mechanical outfittings of the coastal schooners, in order to make every possible use of present material and to be in a position to advise on future purchases. It had been decided that a self-sufficient carding, spinning, and weaving industry planned for the Julianehaab district could not be built or operated with the present facilities, and it was too expensive a risk to import the required electrical equipment, so the wool was being shipped to Canada instead. Cod fishing had been sporadic during March

but had been rapidly gaining momentum and all signs pointed to another record season's yield. The decrease in the seal fishery off north Newfoundland in wartime probably explained the increase in harp seals, and there had been exceptional hunting of fjord [ringed] seal at Egedesminde and Scoresby Sound over the winter.²

There is every reason to believe that Erling's arrival at Godthaab in July was a welcome one, although it may have needed some adjustment on the part of Dunbar. He had been very much the junior partner when he had started his consular apprenticeship in Greenland under Erling's guidance, but a winter had passed during which he had grown comfortably into the job of Acting Consul on his own terms. However, it appears to have been amicably decided that Erling would take over the consular duties in Godthaab, to give him the opportunity of settling back and making his duty calls as well as continuing to make plant collections in that area (even though, as he complained to Polunin in 1944, he "could not go far from a wireless station"), while Dunbar would be free to go up the coast to visit the northern communities on behalf of Canada and look at the harp and fjord seal situation as part of his scientific interests.³

There had been a number of reports of submarine sightings along the west coast in spring and summer, and when Dunbar arrived at Sukkertoppen on July 23, the colony manager informed him that on July 21 a native had reported seeing one while he was fishing. "He described it as 'lying very low in the water, making a noise like an airplane, and with foam round its bows.' It was heading south." This sighting, however, could be explained as something other than a submarine, for on July 22 at 8 o'clock in the morning, Dunbar had seen a powerful U.S. Navy patrol motor launch come into Godthaab from the north. "She travelled fast, lay low in the water, and the noise of her engines could be heard a long way off. It is very likely that this launch caused the Greenlander's excitement at Sukkertoppen."

The next stop, at Holsteinsborg, marked the most northerly settlement in the administrative division of South Greenland. From there they travelled to Egedesminde, located in North Greenland, which differed not only politically from South Greenland but in having less snowfall, lower temperatures, coastal water frozen in winter, fewer Atlantic cod and therefore lesser importance of the cod fishery to the natives, a much larger seal population with good hunting especially in winter and spring, winter travel by dog-sledge, a slightly smaller native population, lower mountains, and closer proximity of the inland ice to the coast. In general, North Greenland was less affected by the war than

the rest of the country. Ships other than coastal steamers were very rare, except in Egedesminde and Godhavn, and Jakobshavn and Upernavik had seen no ocean-going ship that year before the arrival of the *Julius Thomsen* in late August. Egedesminde, as distribution centre for the whole of North Greenland, had a busier life now than it had in peace-time. In the early spring, a U.S. "Flying Fortress" B-17 bomber had run out of fuel and crash-landed outside the colony, although no one was hurt and any undamaged material had been salvaged.⁴

Before the war, the political centre and residence of the Governor of North Greenland had always been at Godhavn on Disko Island. Much of the settlement's importance was due to the Danish Arctic Research Station under the direction of Dr. Morten Porsild, who was very influential in Greenland politics, according to Trevor Lloyd. "He used to go to meetings and sit with the Governor on one side and he on the other with the Greenlanders, discussing everything with them in Greenlandic, which infuriated the Governor because he had no idea what was going on." Dunbar, who reached Godhavn on August 12, remembered in 1995: "I was able also to visit Erling's father, Dr. Morten Porsild, the 'grand old man' of Greenland biological science. I was even able to borrow from him two deep-sea thermometers to take back to Godthaab, and to work in the Godhavn area in Disko Fjord. He told me, in his direct manner, that he didn't like my methods, but I went on doing them as usual just the same. Methods, like everything else, change with time."⁵

Godhavn had sprung into general notice that fall since it was chosen as the site of a U.S. Army Meteorological Base. "It is understood that accommodation is being built for twenty men," Dunbar reported, "so that the base will be more than a mere recording and reporting weather station. This development is worthy of special interest in that it is the first army outpost to be established at one of the West Greenland colonies ... [bringing] the occupation and defense of Greenland into Disko Bay. The effect on the life of the colony will be watched with interest." This base was comparable to a similar one at Angmagssalik in East Greenland where relations between American and Danish authorities were excellent, so "given the same good will and good humour as exist there, the Godhavn venture will doubtless turn out as well."

At Jakobshavn inside Disko Bay, Dunbar visited the new salting station, "probably the most methodical and efficient in the country," built for hellefisk (arctic halibut), which was still lucrative in winter but in summer had given ground to cod which had been increasing all along the coast. Sharks were also

caught in Disko Bay and the oil was an important product. Through the kindness of Aage Knudson, he was able to have another look at the glacier, Eqip Sermia, where he had worked in 1936. "The ice-free upwelling zone, which is a most interesting ecological phenomenon, was still there as usual, feeding the birds and the seals." By August 27, the Vice-Consul's travels had taken him to the coal-mining colony of Kutdligssat and as far up the coast as Upernavik, an area rich in fjord seals, calling en route at many "usteds" (small "out places") where life was lived in the old Greenland pattern. From Upernavik he picked up passage on the *Julius Thomsen* and travelled back to Godthaab, which he reached September 12 in time to consider making arrangements for his return to Canada for the winter.⁶

Back in Godthaab while Dunbar was away, Erling Porsild had not heard the news of the postponement of publication of his Northwest Territories paper. Anderson had sent a copy of the memo from Timm and written to both Erling and Raup on July 24, saying: "It was quite a disappointment to all of us that there will be a delay of uncertain length." Raup and Abbe were particularly sorry to hear the news because they each had papers coming up soon in which they needed to use the very material that Porsild had in his article. However, Raup said he would still go ahead and get the manuscript in shape as though it was to be printed. On September 19, he wrote to say that they were seriously considering an attempt to publish it either at the Arboretum or the Gray Herbarium, but would have to do it with funds raised outside their regular printing budget. "I do not know as yet whether this will be possible, but we are working on it and hope to be able to do something. I have written Porsild to this effect, but have not heard from him as to his reaction."⁷

Erling left Godthaab towards the end of August, heading for Ivigtut where he spent ten days talking to mine manager, Mr. O. Corp, and to the miners. Ore production that season had been the highest in the history of the mine, and by the end of the year would probably reach a total tonnage almost double what had been shipped in any previous year. There was some concern about the extent of cryolite reserves, given the heavy demand on the available supply, so during the summer, at the request of Mr. Corp and the recommendation of geologist Dr. Edmund Harder at Alcan, measurements of known ore bodies and prospecting for new deposits had been inaugurated under the direction of Mr. Hans Lundberg of Toronto, assisted by two young graduate students from the University of Toronto.

Erling reported that operation and conditions generally at the mine appeared to be quite satisfactory in spite of some shortage of labour due to the almost doubled production and the increasing need for vacations for miners who had been there too long. About 150 miners were now at work and the mine operated twenty hours a day with three shifts. He got the impression that a good deal of the unrest of the past two years had been taken care of to some extent by the longer working hours. A number of miners and employees had expressed a desire to emigrate to Canada. He was discouraging this in favour of making it easy for them to take a holiday in Canada, preferably during winter when little or no ore was shipped.

“In my opinion,” he said,

... the threat of serious labour troubles at Ivigtut, or, as has even been suggested in some quarters, of attempts of sabotage, does not exist. Such fears may have been caused by an inadequate understanding of the temperament and personality of Danish labourers. As a class, the miners at Ivigtut perhaps have been spoiled and pampered by too much luxury, too much money in their pockets and, at times, by too much leisure. Without exception I find that the miners take considerable pride in the mine and in their own work and for this reason would not likely do anything that would interfere with the production and life of the mine.

The presence of several hundred Americans in the Ivigtut U.S. Army camp presented a problem, but it was difficult at the present time to foresee to what extent their presence would affect the mine workers. So far, relations between soldiers and miners had been amicable on the whole, and if sufficient discipline was maintained at the camp such friendly relations might well continue.⁸

Like Dunbar, Erling was not about to waste his scientific time entirely in consular activities at Ivigtut. From August 28 to September 4, he decided to make a list of all the introduced weeds from Denmark, Scotland, and North America that had established themselves in the sixty years since August Berlin had made the first weed survey in that area. The arrival and spread of weeds was always an interesting study, and ever since the first foreign ship arrived in Ivigtut in 1854 there had been a considerable tonnage of sand, gravel, bricks, and building stone brought in as ballast, as well as shiploads of garden soil and feed, grain, and hay for poultry and livestock. Since 1940, there had been a

chance of North American ships inadvertently bringing in weeds from a new source, so it was an opportunity to study the extent to which the arrivals had established themselves and the impact, if any, on the wild flora.

In 1926, in his *Flora of Greenland*, Ostenfeld had proposed that an eighth of Greenland's present native flora had been brought there by the Norse settlers, but Morten Porsild later demonstrated that the introduced species were largely unable to compete with the stable native species. Erling, in his survey at Ivigtut, came to the same conclusion. With the thirty-four introduced species he saw in 1942, he found that not one roadside or garden weed had been able to spread and become established outside the narrowly defined town limits. Since the Ivigtut livestock was stable-fed and never permitted to graze, since there were no birds or animals that would contribute to weed seed distribution, and since the surrounding rocky area gave few opportunities for growth except for hardy native species that were holding their own, he felt that this lack of weed spread had much to do with the absence of cleared agricultural land, grazing animals, and roads and railroads. He thought it would be interesting to observe how the modern sheep industry in Greenland would affect the native flora.⁹

There were no introduced or wild dandelions listed in his weed survey at Ivigtut. A call had gone out from the Farm on May 18 for seeds of Canadian arctic and sub-arctic species, because a Russian dandelion, *Taraxacum kok-saghyz*, from a remote area at fairly high altitude near the Chinese border, had been found to have a 25 per cent rubber content. The United States had lost 90 per cent of its source of natural rubber as a result of the Japanese invasion and control of lands and plantations in the southwestern Pacific and the hunt was on for plants that would make up the shortfall. In 1942, some five tons of the Russian dandelion seeds had been sent to America from the Soviet Union for cultivation but the yield from these plants was so low and costs of culture and harvest so high that the plant was considered an uneconomical source of rubber, even in wartime. Nevertheless, it was being grown experimentally in forty-two states including Alaska, and also in Australia and Canada. Asked about the possibilities of Canadian species, Erling had sent a memo before he left Ottawa to say that all Arctic species of dandelions needed at least three years to reach maturity, which seemed to make them less promising as a possible source of rubber. He heard from Senn in March the following year that nothing they had found so far had proved as good as the Russian species but they were still interested in obtaining seeds and dried roots for analysis of the common dandelion of Greenland.¹⁰

There was still no news from Ottawa when Erling got back to Godthaab from Ivigtut, but, on September 12, when Dunbar got back to the office, Erling wrote to tell Anderson that his letter of July 24 had just reached him: "Needless to say I feel rather badly about my paper and perhaps most of all over the way the matter was handled. I am, of course, not suggesting that the fact that the plans were changed the day after I had left was anything but a coincidence, but I do think it would have been more considerate if in the first place the thing was turned down because at that time the paper had been accepted by Fernald and would have appeared in *Rhodora*. I shall write Dr. Camsell about this later although I do not suppose he was even consulted about the matter." It had been a cool, wet summer, and he had had very little time for collecting because "we have been kept quite busy at the office. Still I have added a number of worth while things to my collection of Greenland plants. A few days ago father celebrated his 70th birthday and in that connection was much feted as 'Greenland's Grand Old Man.' I wished I could have gone to Godhavn to be with him but travelling in Greenland is getting to be very much of a problem and besides I could not take the time. I hope the family is well and that everything at the Museum is status quo with no more 'Blitzes.'"11

Anderson, who was relieved that the scientific collections in the Museum were in better shape for study and much safer than they had been before their move in June, told Raup on October 3 that it had occurred to him when he heard the news of the postponement of Porsild's paper that

... it might be possible to print at least the descriptions of new forms, a practice which is frequently followed when a large publication is delayed. It is, however, something I did not care to suggest without consulting Porsild.... I do not [think] that there will be any trouble about obtaining permission to have the paper published elsewhere. Even before the beginning of the war, the matter of publishing Government records was difficult. On the other hand, the attitude towards 'outside' publication seemed to have relaxed, and the impression which I received was that the Department was glad not to have the trouble of publishing scientific papers, and if the author could get publication outside it was all to the good. For a good many years it has been very difficult to get publication of anything that is not ECONOMIC, and in the Branch with which we are connected that means geology and mining in particular.... If you have any reasonable plan for publishing the

Porsild manuscript, I shall do what I can to facilitate the matter with the authorities here, and I do not anticipate any difficulty in getting the manuscript released by the Department.

Porsild did not submit any illustrations, Anderson said, but “if necessary we could probably get the plates for a base map of the area covered by the report. I think a good map adds much to the value of a zoogeographical or phytogeographical paper, and is a great help to the reader.”¹²

After writing his letter to Camsell on October 3, there was nothing that Erling could do from Greenland about the manuscript problem, so he would have to leave it to Raup and Merrill at the Arnold Arboretum to see what arrangements could be made to make it accessible. With his ebullient Vice-Consul heading back to Canada, he would have a quiet winter alone to work on his plant collections and needed reports. It seemed everyone else was leaving. The mine manager, Corp, was leaving for the United States to confer with the Greenland Delegation, and possibly he would also be visiting business interests in Canada. Max Dunbar left for Ivigtut on November 9, where it was expected that he would be delayed for a week before flying out of U.S. Bluie West 1 to Goose Bay, Labrador, and from there by the RCAF to Montreal. Soon after he departed, the long-serving U.S. Consul, James Penfield, left for good on December 23, and before his transfer to his next post in Chungking, he paid tribute to Dunbar in a letter to Kirkwood which reached Keenleyside in March: “He was extremely well suited for the job and made an extraordinarily pleasant soul to have in town.... I was constantly grateful to you for your part in sending Max up there; he turned out to be an extremely happy choice, both from the Canadian Government standpoint and from my personal point of view.”¹³

Back in Canada, Max Dunbar continued to report to Ottawa at the beginning of 1943, which was shaping up to be a very different year in Greenland. 1942 had been distinguished by worries not only about ship losses and deliveries but about the extent of the remaining ore body at the cryolite mine while at the same time production had been pushed to the limit. By January 1943, cryolite had gone from a sellers’ to a buyers’ market. “The present price of cryolite was higher than the cost of producing a synthetic flux, and the Cryolite Company no longer had the world by the ears,” said Dunbar, “although both the Penn Salt Company and the Aluminum Company of Canada still needed certain amounts of the natural product.” Both companies appeared to have over-stocked in 1942 and had no need of supplies in 1943.¹⁴

Discussions were already beginning in External Affairs about the continuing need of maintaining a Canadian Consulate in Greenland in view of the enormous American military and naval presence, the scaled-back needs of Alcan for cryolite ore, and the political future of the country when the war ended. With the Casablanca conference between Roosevelt and Churchill in January and the first big reversal of Hitler's armies at Stalingrad in February, there was a beginning hope that the tide of war might be turning towards different priorities. Phrases such as "When the war is over" and "With the cessation of hostilities" were beginning to appear in official memos, and it was given to Dunbar on February 17 to prepare a document to describe the activities of the Greenland Consulate to date and to justify its continued existence while at the same time giving possible movements of the Canadian representatives during the 1943 season.

Dunbar's report was clear and persuasive, saying that he thought that the reasons for setting up the Consulate in 1940 were no less pertinent and compelling in 1943 than they had been in 1940, i.e., a channel of assistance to Greenland, a constant reminder of Canadian interest in Greenland, and a means of promoting and protecting that interest. "Greenland's geographical position makes it essential, from considerations both of national prestige and of national interest, that Canada should maintain representation in Greenland during wartime, even though the actual defense of Greenland is in United States hands. It forms too close and too obvious a brace over northern Canada to be ignored."

Although the United States Consulate was in a much better position to advise the Greenland Government and to give effective and immediate aide to the people of Greenland, the Canadian Consulate was no whit less justified. Only the Canadian Consulate could supply the Canadian Government with information on political developments from inside Greenland, and from that inside point of view he noted that "the people of Greenland would feel badly let down if the present convenient means of obtaining information on Canada and permission to visit Canada or to emigrate to Canada were suddenly removed before the end of the war. To transfer this service to the Legation in Washington would be, in practice, to discontinue it, for the Danes would by simple physical law turn to the closer United States Consulate and go to the States instead."

Greenland trade with Canada had grown steadily and at present the bulk of her supplies were bought from Canada. "Although this trade with Canada was stimulated in a large part by the researches of the Greenland Delegation and

the co-operation of the Aluminum Company of Canada, who act as purchasing agents for Greenland in Canada, it entailed, and still entails, the services of the Consulate acting in an advisory capacity to the Trade Manager in Greenland. The advice of the Canadian Consul is also constantly sought by private citizens ... as to the possibilities of obtaining their varied requirements in Canada. The trade with Eaton's and Simpson's mail order houses is increasing in quantity."

Shipping, in one way or another, occupied more of the Consulate's time than any other heading. "This is directly a war matter," Dunbar said.

Reports of ship movements to and from, and between, ports in Greenland have been sent to Ottawa since 1941, all arrivals and departures of ocean-going vessels of all nationalities being grist to this particular mill. Since November 1941, 113 telegrams reporting ship movements have been sent from Godthaab. This work is at its heaviest in the summer and fall. Portuguese vessels, twice or three times a year, have been taking out cargoes of salt fish from Greenland to Lisbon, and will doubtless continue to do so. These ships require certificates of origin and interest and navicerts from the Canadian Consulate.... The Naval authorities have expressed their satisfaction with the reporting of ship movements from Greenland, mentioning its indispensability and pointing out that the Canadian Consulate at Godthaab is the only available source of information on much of the shipping, and the only source of immediate information on all of it. The importance to Naval Intelligence of knowing just where allied shipping is at a given time does not require elaboration.¹⁵

In order to have reliable information in a country as large as Greenland with its scattered population, it had been necessary to have two representatives in order for one to remain in Godthaab and the other to travel to some extent.

This has in the past made possible the preparation of more comprehensive and informed reports than would have been possible without first-hand observation.... In view of the astonishing amount of misinformation supplied to governments and to peoples on the subject of the north in general, even by experts in northern matters, it is surely of use to maintain, if only for the duration of the war, the Consulate in Greenland as a source of information on the maintenance and

development of the native population in Greenland, the policies of the Danes, the economy of the country, and related subjects which must be of singular interest to Canada above all other countries. We will then, in later years and for purpose of reference, at least know what the situation was in Greenland during the war years.

Information about Greenland would only be valuable as long as it was kept in mind that it was dated, and that it applied to 1940 or 1943 and not 1950, Dunbar cautioned. There were three causes for the current misinformation about the north and they included the expert on one part of the north as being assumed to be expert on all areas while not attempting to correct the assumption, the popular writer who had to deal in palatable falsehood in order to sell his book, and the current books and articles using bibliographic material or memories dated 1920, 1900, or earlier, as if in the present, which was clearly unsound and particularly so in the case of Greenland where the climate and the economy had changed so greatly in the past twenty-five years. "For reasons of this order, and in view of the growing use of northern lands and waters it would seem good practice for the future to maintain, or to send out at intervals, Canadian observers, not only to Greenland but to Alaska and arctic Russia, and to encourage reciprocal observers from the United States, Russia and Denmark."¹⁶

It was difficult for him to draw up a summer schedule of consular movements for the coming summer as plans would naturally depend on local developments, but in view of the fact that the Aluminum Company of Canada did not intend to import any cryolite that year, although they were willing to stockpile it at the mine for shipment perhaps in 1944, this would make Ivigtut a more or less interesting place to visit depending on point of view. "The pressure of production at the Mine will probably be relieved somewhat, and Ivigtut might not therefore be the all-important place in Greenland from the Canadian angle. On the other hand, this very slackening of the speed of production at the Mine may lead to some unrest among the mine workers, and can at least be expected to increase the applications from Ivigtut for permission to travel to Canada for a longer or a shorter period." Julianehaab was a region of perennial interest and had not been visited for two years. "It is fairly close to Bluie West 1, the United States southern air-base, and has some contact with it; it has a southern climate and is in the vanguard of new experiments in Greenland, notably sheep-rearing, cattle-farming and grain cultivation."

Dunbar concluded his report by saying that it was impossible to plan itineraries from the Ottawa end. “Mr. Porsild very possibly has ideas on the subject already, or circumstances in the spring may point to this or that course. It is hoped, in the meantime, that this memorandum has served to show that the very small cost of the upkeep of the Consulate in Greenland is well spent, and that Canada has good cause to maintain it for the duration of the war.” On February 22, Norman Robertson approved the recommendation by writing at the bottom of the report in flowing black ink: “I think this memorandum makes a pretty conclusive case.”¹⁷



CHAPTER THIRTY-FIVE

LAST CONSULAR YEAR

There was good news for Erling Porsild at the beginning of 1943 about his paper on the western arctic plants. Raup was happy to tell Anderson:

We are planning to publish it at the Arboretum, probably in a number of *Sargentia*, a periodical that has replaced our series of 'Contributions.' I have a paper on my Mackenzie Mountain collections of 1939, which I have somewhat enlarged to cover all that is known of the flora of southwestern Mackenzie (north to Norman and east to about the longitude of Rae). It has been proposed that this paper and Porsild's should occupy one number of *Sargentia*, provided mine does not become so large (it is not quite finished yet) that it would make too big a number. In any case I think we can do justice to Porsild's work.¹

With that important matter settled, Erling could finally relax and turn to his other botanical and writing projects, as well as his consular commitments in Godthaab. He was a good host, as has been seen from letters from friends he had entertained in his "igloo" in Ottawa, and it can be imagined that entertainments at the Consulate would be pleasant and appropriate even if perhaps not quite as lighthearted as they had been with the irrepressible young Acting Consul of the previous year. Unlike Dunbar and Kirkwood, who had each spent time commenting on what for them was a new and interesting situation, Erling did not find it necessary to enlarge on his social activities in Godthaab during the winter, and in fact he left his six-month report for Dunbar to write when he returned in July. Of the winter, all he would ask Dunbar to write was: "Full and constant contact has been maintained with the life of Godthaab and of

Greenland, opinions, personalities and trends. This is assured by considerable social activity, both formal and informal. The Consulate building has taken its second and rather more severe winter with as entire efficiency as it passed its first winter test." There had been a change of faces at the U.S. Consulate, with Mr. John Ocheltree appointed as Consul and Mr. Gray Bream as Vice-Consul.

Health conditions had been satisfactory overall in Greenland, the report continued, except for an incidence of mild influenza throughout South Greenland, and there had been no serious shortage of staple foods except for an acute lack of vegetables and fresh fruit when the winter's supply that arrived in January was spoiled by freezing. "Various import restrictions and the general scarcity of goods, together with the free spending in Greenland by United States soldiers and sailors and by Ivigtut miners on leave," had created a surplus of cash but it was not an enormous sum and was being taken care of in various ways. Coastal ice conditions had been light over the winter but the cryolite mine had had problems with frequent and violent gales and heavy ice-coating on equipment. The last 1942 cryolite shipment had gone out as expected in January and there were no shipments in the 1943 contract up to the end of June. It was another record-breaking year for the cod fishery as there appeared to be more fish than ever before in the fjord waters, and cod were caught at Godthaab all winter long.

Apart from a generally uneventful winter, there had been a lot of war-related activity along the East Greenland coast, where it seemed that the importance of weather reports to the Axis powers had not been exaggerated and earlier fears of German meteorological activities in Greenland not unfounded. On March 11, Erling sent a coded telegram to Keenleyside to inform him that a three-man sledge party from the Danish East Greenland Patrol Base at Eskimo Naes had observed two strangers escaping from an unoccupied hut on Sabine Island at about 74°30' North. Inside the hut, the patrol had discovered a number of articles that proved beyond doubt that it had been visited by members of the German armed forces which must have come from a base of their own not far away. In a further report on April 24, Governor Brun told Erling the history of the Patrol that had been operating between Scoresby Sound and Danmark Havn for almost two years from bases occupied previously by Danish and Norwegian hunters. "In Greenland the existence of such a system of patrols has been kept very secret," Erling said, "and while I have known about it and its modus operandi, personnel, and bases, such information has been imparted to me confidentially chiefly through Mr. Penfield, the former American Consul.

I have not reported to you the existence of such patrols because I have felt confident that more complete and authoritative reports would have reached [you] from more competent sources.”

The men for this patrol, in collaboration with the United States Greenland Defence authorities, had been equipped with radio transmitters and other necessary equipment and supplies, but they were not armed. Travelling chiefly in winter, by dog team, they had effectively patrolled the 500-mile-long, uninhabited and forbidding coast-line, keeping at all times in close contact by wireless, in a secret code, with the Governor at Godthaab. Thus it was a routine patrol that had encountered the two Germans at Sabine Island.

Having first investigated the abandoned hut, the patrol at once withdrew in order to reach their base and to give the alarm. In this they were successful, although it appears that in the escape the patrol lost one of their two dog teams to the pursuing Germans. Having given the alarm, two men from Eskimo Naes again started north by dog team, now travelling overland in order to by-pass Sabine Island. The purpose of the journey was to rescue one of their comrades who for some time had been occupying an out-post north of Sabine Island. The patrol reached the out-post safely but, on the return trip, between Sabine Island and Eskimo Naes, was ambushed by a party of Germans armed with machine guns. One of the Danes was shot and killed when trying to escape while the other two were taken prisoner and brought to Sabine Island.

One of these men managed to escape and after great hardships reached Eskimo Naes, having travelled the distance of 100 kilometers on foot without food or proper travelling gear. He reported that the German party numbered ten men under the command of a Lieutenant Richter. They had been landed on Sabine Island by air, and, at their main base at Germania Harbour in the northern part of that island, had set up a meteorological station and a wireless transmitter. They were well armed with small arms and machine guns.²

A few days later, the Germans raided Eskimo Naes. The Danes, however, had expected it, and from a nearby sub-base were able to report the raid by wireless and subsequently to escape to Ella Island to the south. From there they were able to supply detailed information about snow and landing conditions

for aircraft in that vicinity, which would enable sufficiently large forces from Angmagssalik or Iceland to arrive within striking distance of Sabine Island. Several large American aircraft were observed over Scoresby Sound, flying in a northerly direction, on or about March 27, but although a month had passed neither Governor Brun nor the American Consul at Godthaab had been informed of the outcome. Meanwhile, the Governor had changed the status of the East Greenland Patrol to National Defence and taken steps to supply the men with suitable arms in order to defend themselves.

By May 11, in further conversation with Brun, Erling could report new information about the Germans at Sabine Island. It now appeared likely that they had come by ship the previous autumn, rather than by air, and that they may have operated their meteorological station throughout the winter. When the Dane who had escaped was further questioned at Ella Island, it appeared that he understood some German and had been able to pick up odd bits of information from conversation among his captors, also he had noticed that they seemed to have an abundant supply of coal and were using a heavy type of coal-burning stove, not likely to have been carried by an air-borne landing party, and they had pelts of white foxes that seemed to have been taken early in the season.

Brun had still heard nothing from the Americans on May 11 but on May 14 he learned from Scoresby Sound sources that the Germans had left their base camp in force a month earlier, travelling with dogs for the purpose of capturing and destroying the Danish patrol headquarters at Ella Island. As Erling reported in his telegram May 15, the Danish prisoner had been forced to act as guide, but when they reached another patrol outpost at Mygge Bugt, the German commander despatched the entire force while he remained behind to guard the prisoner. After the raiding party had left, leaving one dog team behind, the prisoner managed to disarm Lieutenant Richter and take off for Ella Island to warn the patrol personnel. However, the Germans had taken a shortcut and when he arrived he found that the Danes had already withdrawn to Scoresby, so he returned to Mygge Bugt, captured the commander and single-handedly brought him 360 miles to Scoresby where he was turned over to the American guard.³

They were still piecing the story together in Godthaab in July. On July 24, Erling could tell Keenleyside that the Governor had told him yesterday that the German commander had been transferred to Iceland by air.

While at Scoresby Sound Lieutenant Richter at first refused to give any information about his operations in Greenland, but recently he had become more communicative and had been able to explain certain details hitherto not fully understood.... It appears that the Germans had landed at Hansa Harbour on Sabine Island in August 1942. The ship used, he stated, had been a German steel trawler which, throughout most of 1941/42 had been stationed in Denmark Strait as a permanent German weather station. The trawler was still at Sabine Island where it had wintered. By the removal of its masts, and by measures of camouflage it had been rendered so inconspicuous that it had apparently not been seen by an American scouting 'plane which had flown directly over Sabine Island.⁴

As far as Brun knew, no action had yet been taken by the American forces in East Greenland against the remaining Germans at Sabine Island, but the Danish patrol had returned to their headquarters at Ella Island and found that, except for having destroyed the radio equipment, the Germans had done little damage. The Danish East Greenland Patrol had now been augmented by several experienced men from the west coast who had been supplied with dog teams for winter travel. It was planned to reoccupy the abandoned Danish outposts and to set up a new station at Mygge Bugt.

It was left to Trevor Lloyd, Acting Canadian Consul to Greenland 1944–45, to consolidate the full story of German activity and weather stations on the northeast coast of Greenland in 1943 and 1944. In his December 18, 1944, report to Keenleyside, he noted that the United States had bombed the Sabine Island weather station in May 1943, and it was later destroyed by a landing party. At Christmas time, the Patrol had found a new German station further north, on Shannon Island at Cape Sussi. The Patrol had attacked the German post in April 1944 and returned to their base after killing one and wounding two of the enemy, of whom there was thought to be six. That station had been destroyed by American forces in July. Yet another radio station was discovered and destroyed on Great Koldeway Island on October 3, with the capture of three officers and nine men. The U.S. cutter *Northland* sank a German trawler off Great Koldeway Island and captured another off Cape Bergen on October 4, taking the second trawler to Boston with twenty prisoners.⁵

German U-boat activity that relied to some extent on these weather reports had been at its highest in the winter of 1943, with twenty-seven merchant

vessels sunk by the “wolf packs” in March alone in the Battle of the Atlantic. The tide was turning, however, as the Allied forces were improving their methods of avoiding and attacking the enemy, and by May 1943 the submarine hunters were being turned into the hunted in Atlantic waters. All the same, when Dunbar returned to Godthaab on May 22, having travelled by RCAF plane to the U.S. Army airbase at Goose Bay, Labrador, from there to Bluie West 1 at Ivigtut and by U.S. cutters *Northland* and *Escanaba* to Godthaab, the *Escanaba* had no sooner set him ashore and was on her way back to sea again when “she was blown to bits by a German torpedo that hit the ship’s magazine; only two of her crew survived.”⁶

It was Erling’s turn to travel that summer. An opportunity arose at the beginning of August for him to go north on the *Julius Thomsen* on Governor Brun’s annual inspection tour. The ship would not be calling at Godhavn, but according to a letter he wrote to Austin Clark at the Smithsonian on November 29, his father was very well and had “made a trip to Thule this summer and enjoyed it very much” so there may have been a chance to see him somewhere en route. In any case, he would have a chance to see and photograph the communities in that northern part of Greenland and have the unique opportunity to watch the Greenland Administration in action and see the Governor at work away from his office. He was to say later that his conversations with Eske Brun confirmed the high opinion he already held of the Governor’s administrative ability, his excellent understanding of and sympathetic attitude towards the native Greenlanders.⁷

The usual procedure on arrival at a port of call was for the Governor to have a conference with the District Manager (Kolonibestyrrer) and then make an inspection of administrative buildings and plants owned by the government and discuss plans for new construction or replacements. Next, the native council (Kommuneraad) would be summoned, and matters of local interest, complaints, etc., would be discussed. If there had been a criminal case beyond the jurisdiction of the local magistrate (Sysselmand), a jury would have been called, but in the past year there had not been any criminal cases requiring the attention of the Governor and most business that year was trivial, although of considerable importance to the small community.

There had never been police in Greenland yet somehow law and order had been maintained. One of the most effective methods of control was by wise Administrative use of the trade monopoly. A case came up for the Governor involving the disposition of articles that were classified as flotsam. According

to Greenland law, anything found in the sea or on the beach was the property of the crown and the finder was paid a certain percentage of its value. However, in ancient Eskimo law, anything found or lost that was not claimed by its rightful owner belonged to the finder. The Governor listened carefully to the witnesses and ruled that the Greenlanders had acted against the law but recognized that he had no way of enforcing it, so he ordered that no tobacco or coffee was to be sold to Greenlanders in the district until the articles in question had been delivered to the local authorities. The articles were handed over a few hours later, and thus the case of obvious disobedience to the law was peacefully settled without the use of force or loss of face to the Administration.

“Later, at Akunaak near Egedesminde,” Erling said,

... I had occasion to observe another example of administration of justice in Greenland, in the instance of two young male ‘convicts,’ each serving a sentence of ‘hard labour’ for petty theft and burglary. In each case the value of property involved had been less than \$20.00. Greenland has no jails or other penal institutions. Therefore the offenders, having been duly tried and sentenced, had been ‘deported’ from their home town to the outpost where suitable lodgings had been found for them with private families. While ‘serving’ their time they were employed as day labourers by the Administration at the usual rate of pay except that the balance of their wages was being withheld, after payment had been made for room and board. Except during working hours these men were quite free and could easily have made their escape had they wanted to do so. Both assured me that they considered their ‘punishment’ just and fair. They were well treated in the community and by the local manager, but suffered somewhat from homesickness and looked forward to the time when they could return home.⁸

It had been stormy but mild along the coast that winter, and many of the usual routes for winter dog travel had not been open due to lack of winter ice. Much of the increased temperatures in the waters of Davis Strait were due to changes in ocean currents over a number of years. At the same time, there had been a decided amelioration of mean air temperatures. Erling commented in his report that he felt that the present amelioration of the climate might not continue, for it was known from glaciological, geological and palaeontological evidence

that Greenland in postglacial time had had alternating periods of warmer and colder climate. In historic time, there had been two such periods, known in the previous century, when the Atlantic cod had been as abundant in Greenland waters as it was at present and later it disappeared again. Since most Greenlanders obtained their living from the sea, changes in marine life were of fundamental importance to the country and its economy. Throughout the district that year, the cod had been close to the shore. "The fish are caught chiefly on short set-lines and with hand-lines ('jigs'). Trawling for cod or the use of cod traps is as yet unknown in Greenland.... Even with the present primitive equipment the fishermen can produce more fish than the Government operated salting and curing plants ashore can handle.... Here, as elsewhere in Greenland, the storage facilities are inadequate for the long storage often necessary due to the war-time irregularity of shipping."⁹

The rapid development of the recent North Greenland cod fishery had fundamentally changed the native economy, since the fishermen were now better off than the seal hunters and were quickly becoming too dependent on imported foods and an unbalanced and less healthy diet. There had been no serious health epidemics since North Greenland was cut off from contact with the mother country, Erling reported, but there was an increased prevalence of what he could only describe as 'war psychosis,' particularly in the more isolated communities. Spells of despondency, irritability and melancholia were naturally most prevalent during the long and dark winter. A common complaint often heard was that North Greenland was receiving a step-motherly treatment as compared with the Southern province. At Umanak people complained that no 'real' ship had visited them for two years.

Egedesminde was their first port of call on August 6, and Erling noted that three spacious warehouses and other harbour improvements had been made since his visit in 1940. There was also a new U.S. Army meteorological and radio station manned by seven men. Two excursions were made from Egedesminde, one to the outpost of Akunaak, and one to a "hot spring" at Sarkardlet, an island to the south with a lake that was several miles long. "Its water is subject to a more or less regular rise and fall of several feet, a fact which has given rise to a number of Eskimo legends. The lake is said to have no visible outlet, but in all probability is drained through a natural, subterranean siphon, the orifice of which is the 'hot' spring. The water in the spring is not hot, but remains a few degrees above freezing throughout the year, a fact not likely to escape the notice

of the observant Greenlanders in a country where normally all streams freeze during winter.”¹⁰

At Kutdligssat, the *Julius Thomsen* loaded coal from the mine before leaving for Prøven near Upernavik on August 11.

While at Prøven Governor Brun arranged an excursion by motor boat to the head of Laksefjord which is famed for its trout stream and for having the most northerly ‘forest’ in Greenland. Actually its ‘trees’ are merely willow, just tall enough to conceal a man, but form a copse which covers several acres of land. The ground everywhere in the fjord abounds in wild flowers, in strange contrast to the barren outer coast. During an afternoon’s botanizing no less than 97 different kinds of flowering plants and ferns were detected, two of which heretofore had not been known to occur in Greenland north of Disko Bay. In a lake through which a trout stream flowed the water was recorded at 60° F. While I botanized, the fishermen in the party had landed about 40 fine trout weighing from three to six pounds each.¹¹

Upernavik, the most northerly settlement on the trip and reached on August 16, was situated on a small, barren, rocky island. Despite a magnificent mainland view of high ice-covered mountains, mighty glaciers and iceberg-filled fjords of unforgettable grandeur, Erling felt that the place itself was dismal and desolate. Due to the lack of level ground suitable for building, native houses were crowded at the back of the administration buildings and adjacent to the cemetery where all the graves were on top of the ground due to lack of soil, the coffins merely covered by heaps of rocks. “Throughout its history the people of Upernavik have been reputed improvident and shiftless,” he said, and even though the district during the winter produced more than half of the seals caught in Greenland annually, the population, in summer, appeared poverty-stricken. The poorest native houses and most unsanitary conditions along the entire west coast of Greenland were observed at Upernavik, he reported..

Two excursions by motor boat were made while the ship discharged some of her coal in Upernavik, one to a long-abandoned graphite “mine” that showed signs of trenching and removal of the black lead from two small open cuts, and the other to the spectacular bird cliffs for which the district was famous. “The principal birds nesting here are Brunnich’s guillemots, razor bill auks and kittiwakes,” said Erling. “Although for centuries incredible numbers of eggs and

birds were taken here annually, the number of birds nesting on these cliffs seem undiminished.” The birds nested on narrow shelves or horizontal crevices on sheer rock walls rising to one to two thousand feet facing the sea. “By their white fronts the guillemots and the auks are visible from afar, and most of all resemble little penguins or tiny men in tail coats and white shirt fronts. When one approaches the cliffs, the number of birds does not at first seem staggering because only a small number of the inhabitants are visible from below and only when frightened do the birds leave their nests. At the time of our visit many birds had already left their nests permanently; however, when a gun was fired, the sky, for a few minutes, was literally darkened by their wings.”¹²

In Greenland, guillemots and auks could be shot throughout the year except near the rookeries, but the collecting of eggs was still permitted there.

To anyone but a Greenlander these cliffs would appear quite inaccessible unless a man were lowered with a rope, which, in view of the great height of the cliffs would seem impractical. The Greenlanders, however, are fearless climbers and gladly risk their lives to secure a mess of birds’ eggs. Our native guide explained how, at this cliff, egg collectors landed from their kayaks on a narrow shelf, and reached the bird cliff by traversing what looked to me like a sheer rock wall at a height of several hundred feet above the sea. In response to my exclamation: “You people must be very daring to risk your lives in this way,” the guide modestly answered: “No, we are not very brave; on the contrary, we are timid people; but we are inordinately fond of birds’ eggs.” He then related how, some years before, he and four other men had gone to collect eggs on this cliff, leaving one old man in a row boat. While the men were on the cliff they saw the old man take ill and fall into the sea. While the egg collectors were helpless on the cliff, the boat drifted out to sea. The men spent five days confined to a narrow shelf on the cliff before they were rescued. Asked how they had been able to stand this terrifying ordeal, he answered that it had really not been so bad. Eggs had provided food and drink and they had been able to sleep for short spells held to the narrow shelf by their comrades. The worst had really been that they had become infested by thousands of hungry bird lice that gave them no peace.¹³

The August 21 visit of the *Julius Thomsen* to Umanak on the way south, the place where no “real” ship had called in over two years, had been looked forward to by the people of the community for weeks, and Erling said that when the ship was still several miles out to sea, the entire population could be seen on the look-out hill above the town. All the officials and their families were invited on board the ship for a gala dinner when they arrived. As he had done at all the other overnight stops, Erling offered to show “movies” ashore for the native population if a suitable place could be found. He had always been proud of his still photography but this year he was also carrying a camera for taking moving pictures. His “movies” were a selection of documentary films loaned by the National Film Board and his 16 mm pictures of Greenland that were the first colour film ever shown in Greenland. In places where electric power was not available, the pictures were shown on board the ship. Since there was no hall or room in Umanak that could hold even a fraction of the three hundred people who were interested, it was arranged that the pictures would be shown outdoors. “It was a beautiful calm night,” Erling said, “but not until 1 a.m. (double summer time) did it become dark enough. The crowd which had patiently waited for several hours vociferously vetoed my suggestion that it was perhaps now too late. This was the first time moving pictures had been shown at Umanak, and only when my supply of film had been exhausted, after four hours of continuous performance, did the crowd disperse.”¹⁴

Continuing south, the *Julius Thomsen* again stopped at Kutdligssat to take on coal for Sukkertoppen and Godthaab. A stop was made at Jakobshavn to take fifty sledge dogs on board, destined for a United States Army base on the east coast, and several hundred barrels of salted arctic halibut, recently introduced on the American market as “blue halibut.” More dogs were taken on board at Egedesminde but there was no sign of the naval ship off Søndre Strømfjord that had been arranged for their transport so, when no ship came, all the dogs were put ashore on a nearby island together with their caretakers and a quantity of food. When half the cargo of coal had been off-loaded and a quantity of general cargo for Godthaab put aboard at Sukkertoppen, the ship set sail for Godthaab where she docked on September 4.¹⁵

Erling now had less than three weeks to pack his bags, say his goodbyes, and get ready to leave Greenland, at the very least for the winter, although in fact his goodbyes this time would be final. Max Dunbar would stay until the next summer and be relieved by geographer Trevor Lloyd, who would be bringing his family with him over the next winter, and finally Dunbar would return

with his new wife Joan and be there for the closing of the Greenland Consulate in 1946. Meanwhile, Erling would make one last official trip to South Greenland, leaving Godthaab on the *Julius Thomsen* on September 23.

With brief stopovers at the U.S. emergency airbase of Marrak at Bluie West 7 and Ivigtut, the ship reached Julianehaab on September 26. "Julianehaab is the administrative centre of the most populous and in many ways most diversified and interesting district in Greenland," Erling wrote in his report on December 7. "The town is situated on the north side of Igaliko Fiord, near the entrance. It has a small, but quite good natural harbour. A stone pier has been built, along which small vessels can tie up.... With its streets, public square with a fountain, its quays and substantial stone buildings, Julianehaab is certainly more urban in appearance than other Greenland towns. The population is about eight hundred [and it] has a radio station, a hospital with X-ray equipment and beds for sixty-odd patients."¹⁶

From a map of Greenland, it can be seen that the district of Julianehaab extends down the southwest tip of the country around to the extreme southeast, including the area around Cape Farewell. Although the outer coastline facing the sea is only a hundred and sixty miles long, due to the numerous long fjords and indentations the total length of coastline is actually closer to two thousand miles. In 1943, Erling could say that the population of the district was almost as large as that of the Yukon Territory in Canada, and numbered about four thousand Greenlanders and about sixty Danes distributed around thirty trading posts and villages.

Much of the interest of the district lay in its history. In the Middle Ages, from the year 1000 to about 1300, a Norse colony had flourished in what was then Eystri Bygd (Eastern Settlement) with a farming population estimated at about six thousand. In 985, Eric the Red had taken land on Tunugdliarfik Fjord, across from the new American base of Bluie West 1. At its height, it was estimated that the settlement had a hundred and ninety farms or homesteads and twelve churches, all of which had been located in recent times. Disease in Greenland and in the home countries of Norway and Iceland where so many died of the Black Death between 1349 and 1402, isolation, and hostile Eskimo attacks from the north were some of the factors that led to the decline of the Norse, and it was believed that the last inhabitants of the Eastern Settlement probably died about 1490.

Erling spent three weeks in the Julianehaab district, making a full report on the cod fishery, seal hunting, and sheep farming, and taking excursions by

motorboat to Igaliko, where a large number of natives had been trained to keep sheep, Nanortalik, which he found was the most isolated and primitive of the entire west coast dependent mainly on seal hunting, and Tassermiut, which in Greenland was famous for its birch “forest.” Kingua Valley, hidden in a narrow valley among high, ice-capped mountains, was of outstanding scenic beauty, he reported. The forest was limited to the most sheltered part of the valley where the tallest trees were all birch from fifteen feet to twenty feet high; but the lower reaches of the hills were covered with a dense birch scrub ten feet high. Erling was particularly interested in the idea of growing Canadian tree species in generally treeless Greenland. He had sent seeds of some hardy species to Governor Brun as early as February 13, 1941, for experimental tree planting in Ivigtut, and could now say that “Botanical studies carried out in Greenland during the last three years ... conclusively prove that the absence in Greenland of coniferous trees is not a climatic one. Hardy conifers such as the Canada spruce (*Picea glauca*), larch (*Larix laricina*) and others could be successfully grown in the fiords of Greenland at least as far as Godthaab provided that the planting experiments were carried out in a scientific manner.”¹⁷

The Julianehaab district led the country in the production of salted cod.

The per capita production, however, is very low compared with other districts because of the more primitive fishing methods used. Thus, the majority of the producers of the district are *a priori* seal hunters, and fish for cod only when the spring seal hunt is over. Few of them own fishing dories and most of the fishing is done from kayaks with hand lines or ‘jigs.’ The kayak is a most seaworthy one-man craft, wonderfully suited to seal hunting, but is not very practical for commercial fishing. On its deck it will carry about two hundred pounds of fish, and the fisherman therefore when ‘loaded’ must bring his catch to the shore.¹⁸

A native trader at Sardlok had told him that a kayak fisherman when fish was plentiful could produce 350 pounds of cleaned cod per day while a dory fisherman on good days could produce 2,000 pounds. The fish were split, cleaned, and prepared for curing by the fishermen and their families, and this was usually done on the beach near the Government-operated fish-curing plant. He noted that the cleaning was more carefully done than by the fishermen of Newfoundland and Labrador. The cured fish were graded and packed in fifty kilo

burlap wrapped parcels for shipment. Greenland salted cod was considered the finest on the world market, Erling's report concluded.

He left Julianehaab on the *Julius Thomsen* on October 19 for Ivigtut where he looked at the U.S. Army and Naval camps before leaving for Narssak and Bluie West 1. The main runway at the airbase had been surfaced with concrete and a new hangar and workshop was being built to replace one destroyed by fire earlier that summer. Administration buildings and barracks were situated along a well-graded road about five miles long that followed the south side of the valley. At the end of the road, by a small clear lake, surrounded by birch-covered hills, a new hospital was nearing completion, and on a rocky ridge north of the lake, several hundred feet above the airport, a water reservoir had been constructed. Erling would not have been Erling if he had not explored the vegetation around the area to see the effect of all the construction on the native flora and whether introduced plants had begun to take any hold.¹⁹

On October 27, he was flown in a U.S. Army plane to Goose Bay, Labrador, where he landed at night and had to spend four days waiting for the weather to clear. "One day was spent making a botanical survey of a nearby peat bog and of the black spruce forest," he reported. Only a botanist or naturalist could wander around a cold, desolate airstrip in the middle of nowhere and write happily about what he was seeing.

Following two weeks of freezing weather the deciduous trees were all bare and all summer-green plants were frozen and wilted. The ground was frozen but fortunately not covered by snow. The bog, which appears to be typical of much of the Lake Melville lowlands, occupies an almost level, sandy plain about 50 feet above the level of the lake. The bog is a typical black spruce bog, with spruce 15–25 feet high, scattered balsam fir, white birch, larch, spotted alder, and willow. In general aspect, except for one or two plants, notably the baked-apple (*Rubus chamaemorus*), the bog was astonishingly like some such southern bog as the Mer Bleue of the Ottawa district. In wet places among the trees the ground was covered by sphagnum and hepatics (*Marchantia polymorpha*) with a dense undergrowth of *Chamaedaphne calyculata*, *Ledum groenlandicum*, *Alnus incana* and *Salix candida*, etc. In somewhat drier places the ground cover was chiefly the lichens *Cladonia rangiferina* and *C. sylvatica* with *Kalmia angustifolia* and *Vaccinium pensylvanicum* forming the undergrowth. On fallen trees

and on stumps were seen species of *Polyporus* and on a birch stump a single species of *Fomes* sp.²⁰

He counted ninety annual rings on the stumps of a balsam fir and measured other trees in an area of richer, alluvial soil near the lakeshore where trees were larger and better developed, and concluded that the balsam fir and black spruce had been capable of remarkably rapid growth for their first sixty years. There were few birds due to the lateness of the season, but he did see two small flocks of pine grosbeaks, a few redpolls, and one chickadee. "Signs indicated that rabbits and meadow mice were plentiful. A number of red squirrels were seen."²¹

On October 31, Erling left Goose Bay by RCAF Command, arriving the same day at Dorval, Montreal, which he left by train and arrived in Ottawa that night. There was wonderful news waiting for him in Ottawa. While he was finishing the last of his consular service in Greenland, two things had finally come to fruition that he had been wanting for so long. In the September that had just passed, a long article had appeared in the *Sargentia* September issue, an article entitled "Materials for a flora of the Continental Northwest Territories of Canada," by A. E. Porsild. Even more importantly, on September 22, a meeting of the Treasury Board of the Privy Council of Canada was held in Ottawa in which the Board recommended that "under the provisions of Section 59 of the Civil Service Act, the position of Botanist, National Museum of Canada ... be exempt from the operation of the said Act insofar as the principle of competition in appointment is concerned, to provide for the permanent appointment of Alfred E. Porsild, but that in all other respects this position be subject to the provisions of the said act, such exemption to apply to the present appointment only."²²

There is no knowing when Anderson's letter of October 2, enclosing a copy of the Order-in-Council with accompanying memorandum, would have reached Erling, but Anderson had been up to see Mr. Lynch about it and been given to understand that "while the Order-in-Council authorizes your eventual appointment to a permanent position, it is doubtful whether the Department will be able to put it into effect until you are finished with your employment by the Department of External Affairs."²³



CHAPTER THIRTY-SIX

ROAD TO THE YUKON

“Gosh, it is good to have you back from furrin’ parts!” Hugh Raup exclaimed as he wrote to tell Erling of the successful collecting trip that he and Lucy had made over the new highway to Alaska through northern British Columbia and the Yukon in the summer of 1943.

... In fact, it was incredible – one of those rare occasions when you make a lot of wonderful plans with the understanding that only a part of them can be expected to materialize, then they practically all turn out as you had originally made them. When we went North in the spring we could find out practically nothing about the road or the kind of transportation and supplies we would have. We simply had to take the Army’s word for it that they would be forthcoming. Naturally we had our fingers crossed. Then we had all the transportation and supplies we could desire, and the best of cooperation. The Army not only did it, but did it gracefully! In addition to the general success of the plans, we had an uncommon lot of sheer luck – meeting the right people at the right times, and being in the right places at lucky moments.¹

He had seventy-five reprints from Erling’s “Materials for a flora of the Continental Northwest Territories of Canada” paper in *Sargentia*, which he would send when he heard from him, but in the meantime he was mailing a few copies. “I think the paper turned out very nicely,” he said. Erling had received the first reprints when he wrote to thank him a week later:

I did not know that my paper was out, in fact I did not expect it to be out for quite some time. I have just thumbed through it. It looks first rate, in fact much better than any publication that the Museum might have given me, and I am truly grateful to you and to Dr. Merrill for making its publication possible. I have not been able to locate the second copy of the manuscript, which should be here, but I can see that, in spite of what you say, you must have spent considerable time on it. Thanks a lot! By the way, how was its publication financed? I am going to write a note to Dr. Merrill shortly and also one to Dr. Croizat.

He was glad to hear that the trip over the Alcan Highway had been so eminently successful. Austin Rand, Taverner's ornithological successor at the Museum, had been up there and met the Raups that summer, and he was now talking about getting out a manual of the birds and mammals of the highway. "I see in the Arboretum Journal that yours is a two year project. I suppose then that you plan to continue where you left off this year. If I am not going back to Greenland I should like very much to look over the country opened up by the Norman-Whitehorse road."²

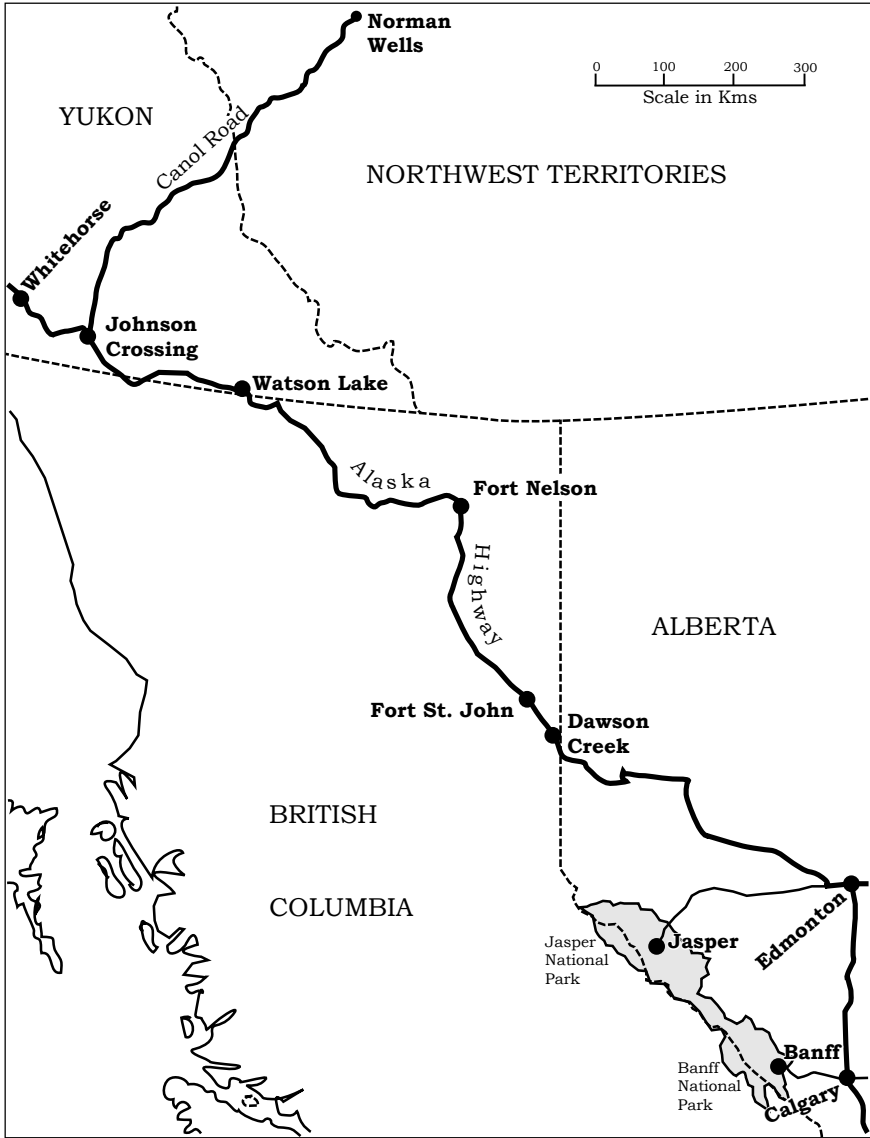
Raup mailed the rest of the reprints on December 6. "Both copies of the manuscript are here," he said, "and if you want them I'll send them along. When we decided to print it, I thought it best to have both copies, on the chance that you might have made notes in the Ottawa copy that did not appear in ours. You will eventually note, if you haven't done so already, that I made sundry minor changes in the manuscript. I hope I didn't go outside your meaning. With regard to financing - forget it! I told Dr. Merrill the other day that you wanted to know where the money came from, and he said to tell you not to ask." Raup wasn't sure if the money could be found for his party to go back north in the coming summer, but when he was in New York a few weeks earlier he had had a couple of talks with Dr. Camsell from the Department of Mines and Resources, and he thought the Canadian geological parties would be working on the Canol pipe line in the year ahead. "Should this be the case, there might be an opportunity for somebody there. If you are not going back to your post, why don't you see if they won't take you north?"³

Why indeed. It had been understood when Erling came back from Greenland that Rand might be going up again if the Department of Mines and Resources wanted him to do it and would pay his expenses. "But our own people did not seem to think that we ourselves ought to have a biological party," Erling

told Raup at the end of April. "I then saw Dr. Camsell and suggested that the Museum ought to do something, and that I thought a botanical-zoological party ought to spend this summer on the Canol road while the road 'was still there.' The idea interested Dr. Camsell and later we were able to get the Museum direction to push the matter." The opportunity was really too good to miss. Both the new Alcan Highway (later called the Alaska Highway) and the Canol pipeline road had suddenly opened a great many previously inaccessible areas for firsthand study. An Alaska that once could only be reached by sea or air was now within driving distance, even if it was over a thousand miles from the nearest railhead, and all the miles from central British Columbia to the Yukon-Alaska border were shouting to be explored botanically. Raup had happily "picked flowers by the roadside" along the new highway that summer and it looked as if the Canol Road would be even better.⁴

Only the war could have made possible this incredible access to the North, and, just as the Nazi threat to Greenland had brought instant and amazing military response from the United States to that part of the world, so the Japanese threat to the isolated and vulnerable northwest of the continent had resulted in a massive U.S. military operation to carve a highway and pipeline out of endless northwest mountain, forest, and muskeg, with the 1,500-mile Alaskan Highway from Dawson Creek, British Columbia, to Fairbanks, Alaska, and the 525-mile road and oil supply pipeline from Norman Wells in the Northwest Territories to a new refinery in Whitehorse in the heart of the Yukon.

The threat of attack from the other side of the Pacific Ocean was not an idle one. Already, in the summer of 1940, Alaskans had realized their vulnerability when they learned of a large Russian military air base to be placed on Big Diomed Island in the mere fifty-six mile stretch of the Bering Strait that separated North America from Asia. Significant spying had been carried out for a long time by Japanese military men posing as fishermen along the necklace of the Aleutian Islands strung neatly across the North Pacific from Japan to Alaska. After the attack on Pearl Harbor, there seemed nothing to stop Alaska from being next for invasion because that would give the Japanese forces a comfortable base from which to attack shipping lanes and cities along the west coast of Canada and the United States and beyond. U.S. Defence troops poured into Alaska, and the U.S. Army did some secret work of their own in the Aleutians. When the Japanese attack on the U.S. Naval Base at Dutch Harbour finally happened on the morning of June 3, 1942, the invaders were suddenly counter-attacked by American planes emerging from secret airfields hidden on



Rocky Mountain Parks, Alaska Highway, and Canol Road, 1944 (Cartography: Faith Carlson)

the islands at “The Blair Packing Company” and “Saxton and Company,” two innocent-looking apparent salmon-packing operations. The Japanese were successfully chased back, but if the Allied offensive was to continue, the plan was to invade Japan by the same route, for which they would need all the back-up the roads and pipeline could give them, as well as the string of airfields across to Alaska that were being constructed by Canada.

Work on the Highway had already begun that winter after several changes of route. Vilhjalmur Stefansson, as consultant to the U.S. government agencies, had recommended building a highway to Alaska via the Mackenzie River Valley and laying the oil supply pipeline along a northerly low-altitude route from Normal Wells to Mayo, Dawson, and Fairbanks, but to his dismay, when the United States Army began to build the Highway with the agreement of Canada in March 1942, it would be a route far to the west of his proposal. Equally, the Army chose a more southerly mountainous route for the pipeline project. Stefansson always felt that the Alaska Highway had been built over “the worst possible route” and the accompanying Canol (short for Canadian Oil) Project that covered miles of remote and difficult terrain was “not the project that anyone but the Army would have chosen, but it did produce and deliver oil, although at enormous cost.”⁵

Early in January, Erling had written to Richard Finnie, son of his old friend in the reindeer years, for information about the Canol Road. The pipeline project had been kept very secret and the road that ran beside the above-ground pipes was not open to anyone without a special permit. “Dick Finnie,” as he was known to his friends, had been liaison officer and historian with the Canol Project since May 1942, assisted by his wife Alyce, and he wrote back February 1 to tell Erling that they had spent the first year attached to Bechtel-Price-Callahan, the constructors, then were taken over by the U.S. Army Engineers and had since been on the staff of General Worsham, Division Engineer, in charge of all construction on the Alaska Highway as well as the Canol Project. As the latter was nearing completion, they hoped to get their tasks finished within the next month or so.

“The Canol Road starts from Johnson’s Crossing, where it branches off from the Alaska Highway, 80 miles east of Whitehorse,” he said.

It skirts Quiet Lake, follows the Rose River to Lapie Pass, then goes down the Lapie River to the Pelly, which it crosses at Ross Post at the mouth of the Ross. Then it ascends the Ross River to Sheldon Lake,

passes Mount Sheldon and ascends to Macmillan Pass (altitude about 5,200 feet). It then follows and crosses the northerly headwaters of the Keele River. It finally reaches the Mackenzie Valley by a tributary of the Carcajou River, crossing this river at a point 23 miles from Canol Camp, continuing to the Mackenzie over the valley. Canol Camp is exactly opposite Normal Wells. The length of the Canol Road is about 525 miles from Johnson's Crossing to Canol. Johnson's Crossing, by the way, is at the lower end of Teslin Lake.

I have just returned from Canol and Norman Wells. I reached there last week after having spent three weeks between Whitehorse and Canol, driving alone in an Army truck. I had previously been over most of the road from both ends, and had repeatedly flown back and forth over the Mackenzie-Yukon divide, but this was the first time I had driven right across (the road was 'holed through' on December 31), and it was a memorable experience. I am sure you could do a wonderful job of botanizing across the divide. You should start on your trip before April unless you want to wait until summer, because much of the road will be impassable over breakup. A jeep or four-wheel-drive truck is what you will need. General Foster, the Special Commissioner for Northern Defense Projects, is the man through whom your arrangements can be made.⁶

Erling had returned from a short holiday when he wrote to thank both Dick and Alyce Finnie for the "fine lot of information" they had sent him:

I am more than pleased to have all this most useful information, and to find that you are so optimistic about both the Alcan and the Canol routes. As you no doubt know it is exceedingly difficult to find out what the actual conditions are, at least in Ottawa it is. People who have been on the road either give you a glowing account or tell you that it is almost impassable, depending upon what conditions prevailed when they happened to be there – perhaps months and months ago. Your information is, of course, the very latest and most authoritative, and I feel it is possible now to know just what to expect. I notice that you advise a start before April because the Canol road will not be passable during the break-up. There will of course be very little doing in botany before the middle of June, so I may have to take a chance on finding

the road still there after the break-up. So far the plans are still in the making, and it seems very difficult to get any definite authority to go ahead with the plans.⁷

While he waited for official permission to go ahead with the plans for the summer, Erling was busy in other areas. Back in November, he had been asked by Brigadier Chisholm of the Department of National Defence to join a committee formed in his absence to prepare a manual on emergency foods in Northern Canada. (It is interesting to speculate as to whether this was the military man who had been his neighbour in Rockcliffe where, the story goes, Erling was playing with a Copper Indian bow and arrow in his garage when the arrow shot out of the open door towards the rear of a man leaning over to dig a dandelion out of his lawn. Fortunately, the arrow landed in the grass behind him, point down, and Erling strolled over very quietly to pick it up, put it behind his back, and said “Good morning, Brigadier!”)⁸

The letter from the Brigadier stated that the committee would greatly appreciate his advice, especially if he would also prepare the section on Animal Foods. Since Erling had already published a paper on “Edible Roots and Berries of Northern Canada,” it was not long before he was working on a manuscript for use by the Royal Canadian Air Force on “Emergency Food in Arctic Canada” to be published a year later. One of his edible plant booklets was sent to an old northern friend, Fenley Hunter. Hunter sent it on to John Logan of Trans-World Airlines in New York City and asked him to return it to Erling with thanks as he did not intend to take it on his next trip to the Arctic, preferring the four-legged kind of food. Erling knew John Logan had made a name for himself on a daring motorcycle trip in May 1939 with Slim Williams of Alaska, travelling over brutal terrain from Fairbanks to Hazelton, BC, to demonstrate the possibilities of an early plan for the Alaska Highway, this time paralleling the coast. Logan also passed on a copy of Hunter’s letter with a reminder of that event:

Erling’s interesting and most scientific article reminded me immediately of the tummy-aches you and Slim Williams contracted shortly before you came to Bob Porsild’s cabin on your motorcycles while enroute from Fairbanks to the World’s Fair right here in Flushing Meadows. I have looked in vain in Erling’s list of specimens for the water lilies or lily pads you two hungry fellows took to eating in some

moose pond – but have no doubt that you will be able to recognize your old botanical friend somewhere among the few poisonous plants to be found in the Arctic or sub-Arctic. Your tummy-acher must be there because the Great Botanist at Ottawa has very sharp eyes and misses nothing.⁹

If Erling's plans for the Canol Road worked out in the summer ahead, the Porsild brothers would be reunited for the first time since Bob and Elly had left Reindeer Station. Bob had worked at towing logs in the Vancouver area until 1935 when he and two friends had decided to go north looking for gold in the Yukon, even though Elly was nine months pregnant at the time. Their son Aksel was born in Whitehorse while the men were building a riverboat, and one week later they started for Dawson where Bob hunted and trapped and worked for Consolidated Gold Corporation and then on the construction of Snag Airport near Beaver Creek. The family had been back in Whitehorse since the end of 1943. By now they had four children, including their daughter Betty who had been born in Aklavik in 1931, son Aksel who had been born in Whitehorse in 1935, and two younger girls born in Dawson, Ellen in 1937 and Johanne Julie in 1940. Bob was hauling wood for the newly enlarged airport that was part of the chain of new and updated Canadian airports en route to Alaska, and there would certainly be time for a family reunion if Erling got up there in June.¹⁰

Erling had some statutory holidays to take before the end of the Museum's financial year in March so he went back to Sunshine Lodge at Banff for ten days of skiing, after which he called at the Park Headquarters to discuss the possibility of future work. "During the conversation I obtained much information that will enable me to plan a future botanical survey of the park," he told James Smart, Controller of the National Parks Bureau in the Department of Mines and Resources.

Accompanied by [Chief Warden Bruce Mitchell] I visited the elk, sheep and moose winter range at Hillsdale and elsewhere in the vicinity of Banff. Also I was shown a small lot which had recently been fenced for the purpose of range recovery studies. On March 9th Mr. Holman came up from Calgary. Together we drove to Lake Louise and back to Banff. In the evening we continued to Kananaskis Forest Experimental Station, where I spent the next day. While at Banff I spent two entire evenings examining Mr. Sanson's extensive collection of plants

from the vicinity of Banff. In the course of this examination I named about 500 specimens that were unknown to Mr. Sanson.¹¹

It had been interesting for him to compare the changes at Sunshine Lodge from the time when he had been there five years earlier. His stay had been “most pleasant.” On his earlier visit, everything had been more primitive and skiers had had to ski up carrying their own baggage.

The bus service to the door of the lodge has made a change in the type of skiers that visit the place. The food is excellent and abundant and the menus are more varied.... The price is \$3.00 per day for meals which is not unreasonable. Since my first visit, electric light and a central heating plant has been installed. All bedrooms have been ‘done over,’ and the beds are much better. Otherwise the accommodation is pretty much the same but with the increased number of visitors there is a tendency to crowd the bedrooms. At \$2.50 per occupant per night, two occupants should be enough for each room. However, when making my reservations, I was informed by the management that 3 to 5 persons occupied one bedroom. All visitors knew beforehand what to expect and accepted conditions cheerfully. During my visit I did not hear complaints.... In conclusion I might say that I thought the place was well managed. I might add that I have skied in Switzerland, Austria, Norway and Sweden but I do not recall any place where the skiing conditions are better than at ‘Sunshine.’¹²

With ideas for the next year’s fieldwork at Banff already taking shape, Erling returned to Ottawa in time for a very important meeting on March 31 with a group of men with northern interests, including Diamond Jenness from the National Museum and Trevor Lloyd from the Department of Geography at Dartmouth College in Hanover who was soon to be appointed Acting Consul in Godthaab to relieve Max Dunbar for the winter. The meeting had been suggested by Dr. Lincoln Washburn, now of the Arctic, Desert, Tropic Information Center (ADTIC) of the U.S. Army Air Forces in New York, who thought that a group of Canadians interested in the polar regions should meet with a group of like-minded Americans in New York to discuss setting up a permanent organization. Stateside, Vilhjalmur Stefansson had expressed a wish privately to give his Arctic Library to some organization or institution that would maintain

it as a centre for polar research, and the ADTIC in New York had also built up a valuable store of maps, memoranda, and other data on the polar regions in the past two years. The U.S. Government had trained many men in Arctic techniques and several of them wanted to retain an interest in the north. It was now proposed that the Canadian group should discuss whether an international organization was desirable, where its headquarters should be located, and the nature of the work it should undertake.

It was very quickly agreed at the Ottawa meeting that there was a need for an international organization in North America to interest itself in the polar regions from a scientific point of view, and it was felt that it should be based in Canada nearer to the scene of northern operations, although for other considerations it might have to be in the United States. Montreal, with its two English and French language universities and its accessibility to the eastern United States, was suggested as the logical location. There was also room for a distinct Canadian organization, possibly affiliated with the above, that concerned itself with peculiarly Canadian problems of the north with particular emphasis on their social and administrative aspects. Its duties would include research, coordinating information, maintaining a library, organizing expeditions and other scientific work, encouraging northern research and training in Canadian universities, supplying expert advice to government agencies, and promoting public awareness in regard to Canada's responsibilities and opportunities in the North. Names that were suggested for a further meeting in New York concerning the formation of an international Arctic Institute included those present and Wynne-Edwards from McGill University in Montreal and Hugh Keenleyside from the Department of External Affairs in Ottawa.¹³

By the end of March, Erling's plans for the Canol Road had been approved and he had written to Tisdale, Saskatchewan, to ask August Breitung if he would like to come with him as his field assistant that summer. He had been in correspondence with this unusual young man since January 1939, and over the years the shy farmhand with a consuming passion for botany had sent him hundreds of carefully collected and pressed plant specimens of excellent quality. In return, Erling had sent books and articles on botany and every encouragement he could give this dedicated, untrained enthusiast.

There was no doubt of Breitung's keenness about plant collecting. One letter to "My Dear Friend Mr. Porsild" on 2 January 1941 told him of the success of his 1940 season:

Well, I had a good collecting season, though others think its hard work, I just love it. I made an interesting trip to Hudson Bay Junction, about 75 miles to the east of here or more, and while absent 4 days I collected over 100 numbers, of 3 to several specimens of each number, many species were new to my herbarium and a few new to Sask. I travelled by bicycle, as that is the way I do most of my collecting, most of the way until I would get tired and took the train for a short distance, after pushing the bicycle all day in the heat over the railway ties, as there is no road for much of the way toward [toward] Hudson Bay Junction from Tisdale. I spent one whole day south of Hudson Bay Junction, at the Red Deer River, collecting, and when I had collected everything that I thought was new and interesting it was around 6 o'clock and I had forgotten about time altogether. Well I sure was loaded with plants, all I could handle across my back and on the handle bars of my bicycle, all in newspaper. Some people asked me if I were selling newspaper, etc. The trip cost me a lot of sweat but I believe it was successful.¹⁴

“I enjoyed your account of your collecting trip,” Erling wrote back, “it shows that you have the true make-up of a Naturalist. As I have told you before you have done remarkably well so far and I am sure that if you can manage to continue in the way you have started you will make some very worth while contributions in botanical exploration of your province. Tonight we have a meeting of a small group of Naturalists, the Macoun group, a section of the Ottawa Field-Naturalist’s Club, and I shall read part of your letter and tell them about the work you are doing.”¹⁵

A Christmas card he had received in Greenland from Breitung in 1942 showed a young man standing straight and stiff and solemn in a square-cut jacket and cuffed trousers with straight, well-pressed creases, white shirt and tie, high colour in the cheek bones, in front of a snow-covered house and garden. Enclosed with the card was a medical file for the Army which included questions about his occupation: “Were you brought up on a farm?” “Yes.” “What other work can you do well?” “Botany. 7 years on my own.” “Can you handle horses?” “Yes.” “Drive a tractor?” “No.” “Can you milk?” “Yes.” “Is there any particular occupation in which you would like to be specially trained?” “Botany.” By 30 October 1943, Breitung could tell his “Dear Friend” that after a great deal of effort and sacrifice of sleep and time he had managed to get out

and put up a parcel of pressed plants for the National Herbarium of Canada. He hadn't counted them, he should have been in bed hours ago as he was doing hard physical labour working on farms wherever he was needed as farm help was so scarce, "more so than the army authorities realize."

In response to a hint from Erling on 14 February 1944 that he might be able to offer him employment in the field that summer depending on his status with the military, Breitung's letter of February 19 spoke of his lack of time for botany since he was out working.

I wish I could spend 100% of my time to botany! I am working at mounting plants or writing labels or putting parcels of plants every evening till late at night or early in the morning. I don't think I am really carved out to farm work, though I can do more botany work than I could if in the army. I have postponement from military training till next fall, and likely can get another postponement if I stay on the farm (if in the meantime the war don't end). I don't know what would happen if I left the farm? In other words I am drafted for farm work as you thought. I guess that's what it amounts to. I have been working on the farm steady for two years, without a break, summer & winter. Perhaps I could get away for a few months in the summer as a vacation. I think I earnt [earned] one anyway. I don't think I could leave Saskatchewan and take up employment in an industry, factory without the Selective Service. I know a boy who left the farm and went to B.C. on his own to look for a job in a factory there. They could not hire him as he had no permission to leave Sask, so they put a uniform on him! I guess we can't do just as we please anymore. The only way I know that I can see I can leave for a few months in the summer is as a vacation. I guess no one could refuse me that. During that time what could I do for you? What is your offer? I am 30 and should be doing more to help mankind for generations to come!¹⁶

Erling wrote to him from Banff and an excited letter came back from Breitung on February 24, saying he would be exceedingly glad to go with him to the Yukon as his assistant. There was talk of their meeting in Regina ("I have never been to a larger city than Saskatoon") but he could not get away from the farm. Letters went back and forth about his getting permission to leave the farm until April 22 when he wrote jubilantly that he had received a letter from the selective

service in Regina granting him permission for the Yukon expedition. "So now you can let me know about what day to meet you in Edmonton as I think that will be where we likely leave for the more or less wilderness."¹⁷

Everyone, it seemed, was going north that summer. The Raups had managed to find money for their continuing expedition along the Alaska Highway and had written to Anderson to ask if their old arrangements for the loan of field equipment could be made again. Raup told Erling that all their arrangements seemed to be going through all right and he would be in Ottawa on the afternoon of June 1 to pick up their gear before leaving on the night train. "We expect to go to Whitehorse by way of the coast, and then work through southwestern Yukon into Alaska," he said:

... We shall probably spend two or three weeks in the Kluane Lake region west of Whitehorse in the early summer, and hope to do some collecting there in the latter part of the summer when the grasses will be in good shape. Our plans for the Alaskan end of the trip are not complete, but we expect to spend some time in the Tanana valley and hope to arrange matters so that we can work on both sides of the glacial boundary. Although a part of the trip will be outside Canadian territory, I am hoping that our arrangement for the loan of G.S.C. equipment can be made. The second set of all our collections will, of course, be deposited in the herbarium at Ottawa.¹⁸

Erling was checking out the equipment for his own and the Raup party at the end of April. He was very pleased that they were able to go back to the Yukon that summer and continue along the highway to Fairbanks, and his trip was practically a *fait accompli* although there were still a few important details such as from which Government pocket the money was to be provided. "I have, however, been told to go ahead and get my outfit together and to hire field assistants," he told Raup on April 25:

... The plan is now that Rand and I are going together on a joint party, each with an assistant and a cook. We are getting an army truck and hope to be able to 'steal' a jeep somewhere. We plan to go over the Alcan road, get our outfit together at Whitehorse and to spend about two months on the Canol. We hope to be able to leave Ottawa toward the end of May. I do not expect I can count on collecting on the Canol

much later than first week of August, when we may return to Whitehorse, and from there make a 'look-see' trip to Dawson and perhaps the Ogilvie Mountains. We should be back in Ottawa in September.

I am trying to get Breitung released from a farm job and to take him along as assistant. He is 'crazy' to go and I feel he will be a pretty 'safe gamble.' He is probably a little bit queer in some ways, but he certainly can collect. The other assistant [W. H. Bryenton] is a chap I had with me on the Kazan River in 1930. He is a trapper and prospector by profession and a first rate field man. We even have the cook picked out so you see we are practically 'all set to go.' The trip will be no joy ride with our $\frac{3}{4}$ ton 4-wheel drive army truck to transport five men and 'tons and tons' of supplies and equipment. We plan to assemble at Dawson Creek, and if things look too tough to use our 'thumbs' to get some of the stuff hauled to Whitehorse where we plan to outfit.¹⁹

"Between us we should have materials for a voluminous addition to Hultén's Flora of Alaska and Yukon," he continued. He had just received copies of Part 2 and 3 of the Flora through the "diplomatic bag" and was glad to have them as they would be a great help in the field that summer. "At the same time I cannot help being somewhat irritated by the omniscient manner in which he has decided everything. It may be too that he is quite justified in the harsh treatment he is giving me, but it seems to me that he is not quite fair in some places – and certainly not very gracious about it. Some fault can be found with most larger papers; even Hultén's present one is not without mistakes."²⁰

The meeting to discuss the formation of a joint Canada/United States Arctic association had been set for May 13 in New York, and Erling hoped to see the Raups in Boston on the way back to Ottawa. With approval for both, he left for New York on May 12, where, the following day, he would attend what would be the beginning of a long and rewarding association of people with a special interest in that area of the world bounded by the Arctic Circle, the birth of the Arctic Institute of North America. The eleven Canadian delegates at that first meeting included those Canadians suggested and present at the March meeting, also Dr. Camsell and Major Baird, among others. The nine American delegates naturally included Stefansson. It was decided that the proposed institute should be formed to represent the United States, Canada, and Newfoundland, with other arctic institutes in Denmark, United Kingdom, and USSR invited to join at a later date. The term 'Arctic' would be applied in a broad sense. The

institute should be located in a large eastern city, preferably in Canada, where it would be a research and information centre and would work to sponsor and finance arctic research. September was mentioned as a suitable time for a meeting in Montreal to draft a constitution and to suggest a director and a Board of Trustees. With these important preliminaries concluded, Erling left New York for a few days in Boston with the Raups, and when he got back to Ottawa he wrote: "I enjoyed my visit very much and hope I did not take too much of your time. Best regards – see you all in Whitehorse!"²¹

Before he left, Erling received a memorandum from Anderson outlining his work in the field, which would have the object, as far as was practical, of obtaining material and information that was most likely to be useful to the National Museum. This included general collections of vascular plants, of which six duplicate sets should be obtained for exchange purposes, a mile-by-mile transect or survey of forest types, general ecological studies of vegetation types with particular emphases on ecotypes and local and general distribution of plant species for the purpose of determining the age of the flora, post-glacial history and immigration, general notes on forest cover that included timber resources, and general observations on forage cover for grazing animals, and on agricultural and horticultural possibilities along the road.²²

Erling had been working on a manuscript on the "Mammals of the Mackenzie Delta" over the winter and sent Anderson his second copy from the Macdonald Hotel in Edmonton on May 26. While the party proceeded northwards, on June 7 Anderson put in a request for it to be published by the Museum. It is a great pity that he did not write to Erling the same day to tell him of what he had done, for he usually commented on the news of the day, and the newspapers in Ottawa that morning would have been full of the D-Day landings along the beaches of Normandy the day before. For the first time in the war, the entire Canadian army was on the battlefield, and while the stories of the relief of France were encouraging and exciting they were intertwined with the sad news of heavy infantry casualties. August Breitung would have daily reason to be grateful that he was not "over there" with the army as he joined the party heading north.²³

As Erling had predicted, there was not enough room for men and gear on the truck they picked up at the start of the Alcan Highway, so field assistants Breitung and Bryenton were sent to Whitehorse on an army bus while Rand and Erling and the cook followed. By July 7, when Erling wrote to Anderson from their camp at Lapie River, he could report that they had had good luck

with everything and had had some wonderful collecting to date. "This is a most interesting flora due to the complex geology of this region and because of the mountains," he said:

The Canol Road is open only a short distance past Sheldon and it may not be passable until September, so I do not expect that we shall be able to do much collecting once we cross the divide. We are still in hopes of being able to reach Norman.... So far everything in the expedition has worked out well. Rand's and my assistant are both doing nobly, in fact better than I had hoped. We have all been working pretty hard, in fact I think we shall have to slow down a bit. So far we [have] been at it all of us from seven a.m. to twelve p.m. including Sundays.²⁴

He had sent two shipments totalling nine packages of dried plants to date. Only the wrapping paper needed to be removed and the inside bundles placed intact in a storage case.

Anderson had received both shipments by July 25. He was glad that they were doing so well and noted that "anything from that area is good, as anything collected will add something to our distributional records." Miss Harkness had been in hospital and then taken a holiday after her sick leave to visit her old home, so she would not be back until August 15, and Miss Hurlbert was holding the fort in her absence. "Parliament is still in session, but have begun to have sessions on Saturday mornings, and that usually means it may be near to closing. I read in the paper not long ago that Mrs. George Black was going back to Yukon to stay. The Blacks have always been good friends of the N.M.C. and I hope that you see them when you go to Dawson."²⁵

Erling had been down to Whitehorse to ship another "truckload" of specimens from Rand and himself when he wrote to Anderson from their Sheldon Lake camp on August 2. The serial numbers in their plant collection now numbered over 2,200,

... probably a record for a season's collecting. Quite some time ago, I counted 110 species in our collection not heretofore collected in the Yukon. The published parts of Hultén's *Flora of Alaska-Yukon* now includes the willows. We have 41 species not recorded by H. from the Yukon and a large number of plants not included in his *Flora* at all. At that rate we should add about 1/10 to the recorded number of species

in the Y.T. [Yukon Territory]. That is, of course, not surprising because so little has been done by professional collectors. In addition I am getting some very interesting distributional data that do not fit in too well with Hultén's theory of distribution given in his 'Arctic Biota.' So far the flora has been almost 100% Cordilleran and practically all the 'new' stuff belongs there. It is still too early to see what amount of endemics we have since all our 'new species' are in critical groups such as *Antennaria*, *Senecio*, *Taraxacum*, and *Salix*. Rand likewise continues to get 'new' stuff and is very pleased with his findings. In fact, I am sure that we both feel that the expedition has been successful beyond all expectations.²⁶

Anderson was delighted to get the ongoing results of the expedition from both Rand and Porsild, and sent his congratulations on August 16: "My opinion for years has been that southeastern Yukon Territory is one of the most promising large areas in North America which has been almost entirely neglected by biological explorers and collectors, and I am glad that the National Museum of Canada is getting in on the ground floor in the research work. You are fortunate in being able to investigate a comparatively unexplored field, and the National Museum is lucky to have two men on the staff with the knowledge and energy necessary to bring back as great a harvest of specimens and other data as is humanly possible."²⁷

He hoped that their party would at least get a little time on the eastern slope of the Mackenzie Mountains before the freeze-up as that barrier should make a great difference in distribution of species, and they had very little details west of the middle Mackenzie River, between the Liard (Wahanni) and the Mackenzie delta. As for news at the Museum, Miss Harkness was back in the Herbarium looking well, and they were having the hottest August weather ever known in the district, with offices everywhere closing early in the afternoon due to the heat, although the Herbarium was relatively cool. "Parliament adjourned a few days ago and things are more quiet in Ottawa. The war seems to be going well, with the Allied forces having Normandy and Brittany pretty well liberated, and moving rapidly 'nach Paris.' Yesterday the announcement was made that the Allies had made a landing in force in southern France and made a bridgehead for several miles inland without encountering very heavy resistance. The Russians are steadily moving ahead and are on the edge of East Prussia. How fast

things will move later is a matter of conjecture, depending upon a great many factors which are still uncertain.”²⁸

Erling’s last letter from the field was written on August 19 at Sheldon Lake:

In a week or two we should be able to get through the Mackenzie Mts. to Norman. We are moving up the line 30 miles tomorrow and from there we are but a few miles of bad mudholes from the high mountain country. It has rained a lot lately and the rain has slowed down the road work and our work too. Still, our Sheldon camp has been most productive and has added several interesting species some of which undoubtedly are new. We plan to be back in Whitehorse on Sept. 15. Due to the delay on the road we have had to give up the trip to Dawson since wages are ‘eating up’ the money tentatively set aside for this purpose.²⁹

Nowhere in Erling’s field reports to Anderson does he mention taking Breitung to Bob and Elly Porsild’s house in Whitehorse, although Elly complained that she “hated that little man August” because he put all his plants to dry all round her wood stove, leaving her no room to cook or hang her wet laundry. By the time the Museum party officially got back to Whitehorse in September, Bob Porsild was working on the Canol Road as a carpenter. He had been building riverboats all summer when, as the story went, late in August 1944 some Americans ‘dropped by’ to watch him at work. At the time he thought nothing of it but later one man returned and introduced himself as the superintendent for Standard Oil on the Canol Road. He needed a special carpentry job done because the crude oil from Norman Wells was highly explosive due to its entrapped gases, and Bob was asked if he could build airtight partitions for the pumps to minimize the danger of explosions. There were ten pumping stations, each about eighty miles apart, and Bob worked his way along the road until the order came in 1945 to “drop everything no matter what – the war was over.” A little while after the war ended, he and Elly built and operated a lodge and garage at Johnson’s Crossing, where the soon-abandoned Canol Road met the soon-to-be burgeoning Alaska Highway.³⁰

Erling also had not noted in his field reports that he had visited the Raups at the beginning of their expedition, but on October 22 he heard from Raup that “in some ways the most interesting part of our trip began very shortly after you visited us at Kluane Lake. We found some very good alpine collecting on a

mountain at the east end of the lake, and some that was fairly good back of Burwash Landing.... John Sticht made a series of trips up Slim's River and found some good data on glacial and post-glacial geologic history. And it was only a few days after we saw you that Fred Johnson began to find artefacts. From that time on he hit one jackpot after another.²³¹

Back in Ottawa on September 29, Erling had already told Raup his news of the end of his Canol trip.

Since I saw you we covered the Yukon part of the Canol Road pretty thoroughly. We had fine weather throughout June, July, but in August and September a lot of rain fell. This rain delayed the work on the road and not until September 5th could we start on the trip across to the oil wells. On September 3rd the temperature had dropped to 12 degrees F, so very little collecting could be done. As was to be expected there is a complete break in the flora when crossing the divide into the Paleozoic. One night we camped on the bald summit of a mountain at close to 7,000'. I here noted 61 species more than half of which had not been seen on the Yukon side – including *Melanidion boreale*. We started back on September 8th reaching Dawson Creek on the 20th. Owing to the prolonged spells of rain the Peace River road was closed, and we had to store the truck and proceed by train. We crossed your trail a couple of times, last when we visited Mr. Christensen's camp and found that you had been camped there a few days before.

Altogether I am more than pleased with the results of the summer's work, and my chief worry now is how to get 'through' all that hay and get my report finished before the end of the fiscal year. The summer's work comprised a total of about 3,000 numbers with 10,000 specimens and a lot of ecological notes. We have about 150 species that are 'new' to the Yukon including a fair number that may prove undescribed. The flora is decidedly cordilleran in its affinity and it is very old. There is a good deal of endemism and some very curious distributional problems. To what extent this will affect Hultén's maps I cannot estimate at the present. Needless to say August has been invaluable, and after our initial difficulties were overcome has been a wonderful help. I wish I could have him here this winter. Naturally I am dying to know how you fared and where you went from Kluane Lake. What are your plans and when are you coming up here?²²



Bob and Elly Porsild's lodge, Johnson's Crossing, Yukon (Photo: P. W. Dathan taken in 1984)

It is noteworthy that in his letter to Raup, for the first time in his correspondence Erling used the word “hay” to describe his huge plant collections of that summer, little knowing that one day he and others like him, who had gone out to gather plants in challenging remote areas, braving bears, wolves, biting insects, brutal weather, difficult transportation and plant drying conditions, sickness, pain, injury, and a host of other problems and dangers, could be dismissed as “mere hay-gatherers.” Although most of the material needed for present-day tabulation and research is now safely sorted and stored in elegant herbarium cases, perhaps this is the time to pay tribute to all those “hay-gatherers,” including not only the early and late pioneer plant explorers and collectors but those of today who still go to further fields to bring back a wealth of plant material, for their important contributions to the advancement of botanical knowledge and what we now know of the flora of North America.



CHAPTER THIRTY-SEVEN

THE YEAR THE WAR ENDED

When Erling Porsild returned to Ottawa from his 1944 summer in the Yukon, the Government of Canada was on the verge of collapse. Colonel Ralston had come back from the front saying that more troops were needed and the shortage could only be met by taking reinforcements from the home-defence conscripts who had been in training since 1941. In Europe, the Canadian Army was holding the sea flank of the Allied front in France and the Low Countries and had been involved in very severe fighting in the Scheldt estuary. Casualties were heavy, with the loss of 6,367 men between October 1 and November 8 alone. Mackenzie King's biographer, J. L. Granatstein, noted that these casualties and the thousands that preceded and followed them precipitated the greatest political crisis of the war in Canada, while the conscription crisis of 1944 very nearly destroyed the government of Mackenzie King and could conceivably have produced something akin to civil war in Canada. The problem was that the Prime Minister had promised Quebec that he would never order conscription. When all attempts failed to persuade the National Resources Mobilization Army (NRMA) to volunteer for the front, he had no choice, so on 27 November 1944, Mackenzie King gave the speech of his life in the House of Commons, turning his back on the Opposition and directly addressing the French Canadian members of his party who gave him their reluctant support and thus averted the fall of the Government.¹

Anderson had referred to this situation on November 30 when he wrote to Erling in Boston, where he and his daughter were staying with the Raups while he worked at the Gray Herbarium for a couple of weeks. "There has been a good deal of excitement in the country as well as in Ottawa for the past week," Anderson said, "and although there have been many extreme statements made,

they only go to show that in our form of government elected officials are responsive to the demands of the people, and do not have to wait four years to make a change if necessary.”²

As December and then the New Year of 1945 arrived with hopes for the approaching end of the war, change was on the horizon at the National Museum in Ottawa. On January 9, Erling wrote to Fenley Hunter at Flushing Meadows, Long Island:

So the new year has started, and may it end with less chaos in this unhappy world of ours that we have been having now for so long! I am glad that I am a pessimist, for then things always turn out a little better than one suspects. Just now I cannot see that the prospect is overly bright ahead. You will be interested to know that Dr. Camsell was retired today. Personally I am not sorry to see him go for in his 25 or more years of office he has done very little for the Museum. So little, in fact, that whoever takes over could not very well do less. Dr. Anderson too is officially on retirement leave but comes in every day just the same. I think myself that he will be a ‘gonner’ the day he cannot come to his office and potter around with the beloved ‘mice’ and bear skulls. There have been very heavy casualties on the Museum staff during the last 10 years and today there is barely a staff left. In a year or two I will be the ‘old man’ in the Museum. Just now something seems to be in the air and things may actually begin to happen. I have even been promised four new appointments in my department. For years there has been talk of the Geologists moving out of the building and it may happen yet.³

Although they were enjoying a real, old-fashioned winter with greater piles of snow than he had ever seen before and the skiing was superb, Erling told Raup that he was hard at work on his report on the east slope of the Mackenzie Mountains, which he had allowed to grow into something bigger than first planned because there was a fair chance it would be published as a Museum Bulletin that spring. “It will depend somewhat on the political outlook. Just now ‘we’ seem to be quite anxious to make a ‘show.’ Also we are busy in the Museum making up great plans for post-war work. The fact that we have practically been told that ‘the sky is the limit’ makes me suspicious that these fine plans are not intended for anything but the ‘files.’”⁴

He had been asked to prepare a memorandum for Mr. Lynch of what was needed in the Herbarium, and he sat down to write a document that was memorable on several counts. It was a long memo when it was finished, and it was very carefully thought out and expressed, but what is immediately obvious is the different tone between this and the many others that had preceded it. For the first time in his dealings with the Museum administrators, this is not an overt or hidden plea to the department coming from a man who is uncertain about his position, for this memo comes from a confident man who is now secure in his post and able to ask forthrightly for what he and the Herbarium really need and dare to imagine will get in the near future.

“The thought that first comes to my mind,” he wrote 8 January, “and one that cannot very well escape anyone who has had occasion to look into the workings of the National Herbarium, is that today the Herbarium is carrying on with exactly the same staff as when it was founded eighty-three years ago, namely one trained botanist and one non-botanical assistant. And this notwithstanding the fact that the National Herbarium in the past eighty-three years has grown from a small reference collection, housed all in one cabinet, to a major Herbarium – measured even by American standards – with a total of 250,000 mounted and inserted plants.”⁵

After carefully discussing the importance of the “largest Herbarium in Canada and most complete collection of Canadian plants anywhere,” he then outlined the complex services it was necessary for it to be able to undertake, although, because the National Herbarium for many years had been inadequately staffed, it had “never been able to furnish as complete a service as an institution of its kind should be in a position to provide.” He outlined the history of the considerable field collections that had not been worked up due to lack of personnel. “Thus, my predecessor, Dr. Malte, during his twelve years of curatorship, made voluminous collections of plants, but never found the time to study or report on the collections he has made. In 1936, when I came to the National Herbarium, not a single plant collected by Dr. Malte had been inserted in the Herbarium and a very small portion of them had even been named or classified. Three small and comparatively unimportant publications, totalling less than a hundred pages, constituted the total published results of his labours during twelve years as Curator of the National Herbarium.”⁶

By comparison, he pointed out that between 1936 and 1939, with the very able assistance of Miss Harkness, some 60,578 plants had been received as the result of field work sponsored by the Museum or as donations, 52,340 had been

labelled, 32,340 had been named, 19,768 had been mounted and inserted in the Herbarium, 15,006 duplicate specimens had been distributed to Canadian and foreign botanical institutions as exchange and 4,389 as donations, while Erling had published a major paper on the Flora of Alaska in *Rhodora* and fourteen smaller papers in various publications. Since then, another important paper had been published by *Sargentia* in 1943.⁷

It should be quite evident from the above that during these years the small staff of the National Herbarium worked quite hard; I myself put in an average of sixty hours of voluntary and non-paid overtime each month. It was discouraging, therefore, to find that, in spite of it all the work kept accumulating, with no prospect of assistance forthcoming. Today, after several year's absence in Greenland on special war work as Canadian Consul to Greenland, I am getting farther and farther behind in my own work as well as in the endless task of keeping the nomenclature in the Herbarium up-to-date. At the same time our storage cases are 'bulging' with perhaps 75,000 plants awaiting study and naming, not to mention my collections of 12,000 Yukon plants made last summer, and numerous smaller collections submitted for naming and revision. The present situation in the National Herbarium is, in part, the cumulative effect of the natural development and growth of the collection, but is due primarily to the lack of adequate help now and in the past.⁸

Since "the sky was now the limit," he was not afraid to ask for it. "To carry on properly the work which is even now in sight would require three additional trained taxonomists, one of whom should work as a full-time cryptogamic botanist; further there is urgent need for a full-time preparator for mounting plants, and for another girl who could be trained to do library research and filing of botanical data." He already had two trained taxonomists in mind. "My particular reason for bringing this whole question under discussion at this time is that perhaps for the first time in the history of Canadian botany, there are just now two fully trained young Canadian botanists, who will soon be available and who are prepared and anxious to make the taxonomy of Canadian plants their life-work."⁹

One of these men was Dr. Bernard Boivin of Montreal who had been trained at l'Université de Montréal and had obtained his PhD from Harvard.

He had joined the army a year earlier and was at present serving in the Pacific, but before going overseas he had called on Erling to discuss his future plans. He had been offered a position in the United States, but wanted to work on the flora of Canada if a suitable position became available. The other candidate was Dr. James Soper of Hamilton, Ontario, who was a graduate of McMaster University and had also done post-graduate work at Harvard before obtaining his PhD in 1942, after which he had joined the RCAF. Dr. Soper had recently spent several days in Ottawa when he also called on Erling to discuss his future. He had been offered a position with the Department of Agriculture, Ottawa, but would much prefer a position at the National Herbarium, because it would permit him to carry on researches in taxonomic botany. Both of these men, whom Erling knew very well, would soon be available, Dr. Soper probably in spring and Dr. Boivin after the war. "Both men are of exceptional calibre and have received the best training possible. As members of the Armed Forces they will be eligible for Government positions. There is not the slightest doubt that these men will receive attractive offers from the United States, and that, if they are not provided for here, Canada will lose two young men of great promise."¹⁰

Lynch passed on Erling's memo to the Director of Mines and Geology Branch with the comment:

I think Mr. Porsild makes a very good case for the urgency of enlarging the establishment of the National Herbarium. In my opinion it is physically impossible for Mr. Porsild to keep up unaided even the current work of the Herbarium. Apart from his efforts there is no way of giving to the public any benefits from the National Herbarium. The potential benefits of the Herbarium extend throughout the fields of forestry, agriculture and related resources... If it is the policy of the Department to foster the development of the various resources based on one or other of the many branches of botany, I think serious consideration should be given to Mr. Porsild's memorandum with the view of establishing the National Herbarium, in the matter of manpower, in a position to serve the public and the country generally, in an efficient and progressive manner.¹¹

With such encouragement going up the line, Erling was asked to prepare a memorandum on post-war botanical field work in Canada, which could be profitably carried out over a five-year period if sufficient trained botanists and

adequate financial support was available. "There is in Canada to-day urgent need for field work in nearly all branches of botany," Erling wrote on January 18, "and for floristic work in nearly all parts of the country." The need was particularly great in the Northwest, he stated, because the relationship between the floras of North America and Asia could not be fully understood until more was known of the plants growing in Alaska, Yukon, the Northwest Territories and British Columbia. His field work in that area to date had shown that there were very important and unexpected discoveries yet to be made in these unexplored areas. A more complete understanding of the present day floras would throw much light on the past history of the floras, he said, and thereby help to understand other problems such as the post-Pleistocene history of the country and the pre-historic migration of animals and man, etc.

He pointed out that the military air posts constructed in various places across the Canadian Arctic had made many parts of the far North readily accessible. No professional botanist had ever visited the Canadian Arctic Archipelago west of Ellesmere and Baffin Islands and since these islands were believed to have remained unglaciated during the Pleistocene their botanical exploration might be expected to furnish very important data. Almost no botanical work had ever been undertaken in the northern parts of the provinces where practically all land a few miles from railroads or waterways remained totally unexplored. The same was true of the interior of Ungava. Botanical exploration of National Parks, with a view to publish suitable manuals on their floras had long been needed. Such manuals would be in great demand by professional botanists as well as by tourists visiting the parks, particularly Jasper, Banff and Waterton Lake Park and would serve as permanent advertisers of these parks.¹²

He proposed ten areas of exploration in the Yukon, Northwest Territories, Northern British Columbia and the Queen Charlotte Islands, and Ungava, estimated at a cost of \$75,000–\$100,000 over five years if accompanied by a professional botanist on staff and planned on the usual summer season basis that was adequate for nearly all types of floristic field work. He concluded with the startling suggestion, although he acknowledged that it was "perhaps outside the scope of present plans," that he could also see the need for establishing Arctic Research Stations. "For plant physiological work and for detailed ecological studies, year-long residence and laboratory facilities are required for which more or less permanent research stations should be established at well chosen points."¹³

Perhaps he went too far, for the administration was struggling with practical and reasonably obtainable objectives. Word came back asking him to prepare a memorandum on the economic value to the country of the botanical work of the National Herbarium. Knowing that it was always easier to justify spending money on tangible needs than for pure research, it took Erling some time to reply. He had been through the same arguments six years earlier when the Department of Agriculture wanted to take over the National Herbarium. Enclosing a copy of his arguments on that occasion, he added on February 15:

Research in plant taxonomy and plant geography is basic or fundamental botany, the value of which cannot be directly translated into dollars and cents. All branches of applied or economic botany such as the various branches of agriculture, forestry, wild life management etc. etc., all use the information gathered by the taxonomic botanist and the plant geographer.

In Canada the classic example demonstrating the relation of plant geography and taxonomy to economic, applied botany is the work done by Professor John Macoun, the creator and first curator of the National Herbarium. By his botanical surveys and classification of the aboriginal flora of the west, Professor Macoun correctly predicted the agricultural potentialities of the West. When [he] first claimed that wheat would grow in the Peace River district, this was considered visionary or even absurd. In fact, Macoun's work accurately showed that some soils in the Prairie Provinces were capable of growing wheat while others should be left as grass lands. Had his advice been followed millions of dollars could have been saved in the Province of Saskatchewan alone during the drought years.

Recent examples of the relation of fundamental botanical research to applied botany could be seen from botanical surveys carried out in northern British Columbia and the Yukon in the last few years, he said. "These will clearly show what parts of the new lands made accessible by the Alaska Highway and the Canol Road are suitable to agriculture."¹⁴

A different kind of incident showing the importance of the National Herbarium had occurred quite recently, outlined in a number of internal memos. On January 28, a ten-pound bag of what looked like ordinary white sand was delivered to the Museum by the Department of National Defence, and with it

came the urgent request that the contents be examined to determine the place of origin. By careful sifting, the sand was found to contain tiny particles of organic material which were sent to the Herbarium for Erling to identify. He was able to detect fragmentary parts of a red pine that he could not bring down to species, and grains of rice that he was sure came from Japan, but in order to be certain of species identification he flew down to Boston on January 29, where he was able to ascertain that the plant material could only have come from the Japanese island of Honshu or from south Korea. Erling reported that the condition of preservation of the fragments showed that they could not have been transported by water, and therefore could not have been carried to this continent by the ocean currents. The geologists at the Museum, Dr. R.T.D. Wickenden and Dr. Eugene Poitevin, confirmed the diagnosis of the place of origin.¹⁵

At the time, the reason for this investigation was kept under tight army security wrapping, but when the war ended it could be told in a postwar story in the *Ottawa Journal* that a number of Japanese paper incendiary balloons had drifted across the Pacific in the winter of 1944–45, soared over the Rockies and touched off grass fires as far east as the Saskatchewan prairies. “Today everybody knows the balloons were launched from a beach on the main Japanese Island of Honshu, and drifted at 60 miles an hour with the prevailing winds to the North American continent. But two years ago when the balloons first started descending on this side of the Rockies, their source was unknown, and with summer only a few months away, it was grimly necessary that it be located and destroyed before the air-borne incendiaries could touch off what might have been tremendous forest fires in the rich stands of West Coast timber.” Once the scientists in Ottawa had ascertained the place of origin of the balloons, the launching site near Tokyo was subsequently bombed and destroyed.¹⁶

Meanwhile, Erling was hard at work in the Herbarium on his summer collections. He told Breitung that he was having a hard time with the antennarias as he thought they were in a terrible mess, “and I may have to revise all our western members of the genus before I can do anything to our Yukon collection.... I have been very busy this winter and although I seem to work quite hard the work seems to pile up ahead just the same. In a week or so I shall have finished the report on the east slope of the Mackenzie Mountains.... At the same time I have been putting in a good deal of work on the Canol report which will be quite a book – at least 250 pages. So far I have written up a lot of ecological notes and the catalogue as far as the grasses.” He did not know what

he would be doing next summer but expected to be in the field somewhere in the west, possibly Banff.

By March 10, he was writing to the Selective Service again to see if Breitung could be released to join him at Banff that summer. "I have been working on our antennarias lately and have all but finished. Some job I can assure you. I have not counted the species but there must be about 25. I had to describe no less than eight new ones. I have named one for you. You probably do not remember it, but you took it on the mountain at mile 116." August was overjoyed. "I am very glad of our success in collecting about 25 species of *Antennaria* and at least eight new ones," he wrote in April, "and am also exceedingly excited over the one you named for me or after me. At mile 116 I remember I made one or two collections of *Antennaria*, but don't remember just what they look like, but I remember that day I collected *Apocynum androsaemifolium*, *Amelanchier alnifolia*, *Potentilla* sp., *Melandrium*, etc."¹⁷

Erling told Raup on March 14 that he had just finished the antennarias,

... and a pretty tough job it was. It has taken me about three weeks and many headaches. I do not think that what I have done will be the last word, but I have at least some semblance of order.... The highlands of the Yukon apparently has been another centre where a great many species of *Antennaria* have evolved or survived much the same as Gaspé and Newfoundland in the East or Chilliwack Valley in B.C. where a lot of Greene's new species came from.... In all, I have 25 species including seven new species and a new variety described. I have, consequently, been spouting Latin lately and have even gotten to the stage where I dream in Latin – or perhaps I should not call it Latin! I have even had the temerity to construct a key for the 30 species of *Antennaria* in Yukon and Mackenzie. It seems to work for me. I wonder if it will for anyone else?¹⁸

He had been to Montreal in February to speak to the Province of Quebec Bird Society about the "Wild Flowers of Yukon and the Canol Road" but March brought him back in contact with the disturbing developments at Reindeer Station. He wrote to Mrs. V. Hatting on March 16: "I was very sorry to learn of the tragic disaster last fall," he said. "I thought very highly of Charlie and his family and it was too bad that a thing like this should happen. Stanley, too, I knew very well although he did not work for me while I was at the station." The disaster he

was referring to was the wreck of the schooner *Cally* in a storm off the Arctic coast in the fall of 1944, which resulted in the loss of the two native reindeer herd owners with eight members of their families and the white supervisor Stanley Mason, and was not only a personal tragedy but was a serious setback for the whole Reindeer Project.¹⁹

The first native reindeer herd had been established in 1938 by separating about 950 reindeer from the main herd and transferring them to an area in the vicinity of Anderson River. The 1942 report on the station noted that the new herd was placed in charge of an Eskimo, Charlie Rufus, and his father Rufus Kalealuk. The younger Rufus had received several years' training as an apprentice herder on the reserve. His father was the owner of a schooner used in transferring the native families and supplies. A second native herd had been established in December 1940 with about 825 reindeer taken to a location near Horton River, several miles east of Anderson River. The natives entrusted with this herd were Peter Kaglik, trained as an apprentice reindeer herder on the reserve, and Amos Tama, another native of the district who provided a schooner. Herd No. 2 had also been under the supervision of a departmental officer who kept in touch with Reindeer Station.²⁰

Following the terrible accident that had taken the lives of both reindeer herd owners and the supervisor, Deputy Commissioner R. A. Gibson of the Department of Mines and Resources had contacted Erling to discuss the problems of finding and re-locating the scattered deer. Erling felt that, in view of the very difficult situation confronting the men in the field, the best solution would be to join the two eastern herds at least for the time being. "If a corralling was not possible, due to lack of help," he said, "the best estimate possible should be made of the number of deer in Charlie's herd. It would be too bad if it becomes necessary to bring these two herds back to the main herd because it would swell its numbers beyond the capacity of the range."²¹

He was anxious that the native owners' families should be treated fairly. "In view of the fact that Charlie, three years ago, was ready to return the original nucleus of 900 deer, there would seem to be no question that, according to the contract, he or his heirs (his father, Rufus Kalealuk and his sister Bessie) can claim ownership to the balance of his herd. Likewise, Peter Kaglik's widow would have a claim to whatever number of deer there might be in Peter's herd above the original nucleus. If the department is forced by circumstances to take over these herds some equitable compensation should be made to these people."²²

Erling had received a letter from Mathis Hatta, one of the Laplanders whom he had hired in Norway and had returned home, which he translated for Gibson on March 19. The letter was undated, but was postmarked Jan. 27th, 1945, and mailed from a small town in northern Sweden. "Dear Mr. Erling Porsild," it read in translation,

I am now in Sweden having travelled here with reindeer teams and I want to tell you that the Germans have burnt down all of Kautokeino [his home town in Norwegian Lapland] and also my house. And I do not know what to do unless I can go to Canada. So will you please let me know if I can get a job with the reindeer work for things are bad here and our houses are gone. Please do write me. I have come to Sweden with my brother Isaac to get food. At home we live in a small cabin in the mountains. I would like to tell you more but I am in a hurry to get back. We have no mail service in Kautokeino so send the letter to Knuttainen, Sweden. Best greetings to you from all of us. I have three girls, one boy and a wife too. We are all well. Isaac Hatta too is well. I am giving this letter to a Norwegian Army Major who is going to Stockholm.²³

Gibson replied that of course it would be impossible to bring Hatta and his family back to Canada at the present time. "The situation at the Reindeer Station is a bit difficult these days owing to the loss of the two native reindeer herders and Supervisor Stanley Mason. We had hoped to get funds this year for increased scientific activities and for that matter for strengthening our administrative organization in the Mackenzie Delta but unfortunately we have been unable to do so."²⁴

As Erling had predicted in his letter to Raup at the start of the year, optimism about unlimited funds for the Herbarium as soon as the war ended was beginning to fade as spring advanced. The original request for his summer field work in the Rockies was for a four-man party with the use of packhorses, but in the end he was forced to cut his expenses in half and plan on having only one assistant and the use of an Army truck. He was still hoping to have Breitung as his assistant again and a number of letters were exchanged in April about his release from farm work for the summer. Meanwhile, on April 9, Erling was asked to give a radio address to the people of Denmark and Greenland on the fourth anniversary of the German occupation, and on April 20 to speak to the Ottawa

Field-Naturalist's Club on "Greenland, its Nature and People." Although the war on Germany was going well, the country was shocked and saddened on April 12 when the news came from the United States that President Roosevelt, who had done so much for the Allied cause even before his country officially entered the war, had died from a brain haemorrhage. The war in Europe ended less than a month later. On May 9, while debris from the wildly excited V-E Day Parade in Ottawa the day before was being cleaned off the streets, Erling was still trying to get clearance for his field assistant that had not yet arrived in the mail. He told Breitung that he was getting letters from all sorts of people about the summer trip. "They all tell me that you have told them that we are going. Some want to go along. In as much as the trip has not been finally ok'd and since the Selective Service have not yet released you it would be better not to tell anyone that we are going."²⁵

Finally, on June 1, Erling wrote to Raup saying that it was difficult to believe that in ten days or so he would be on his way west to spend the summer picking flowers in Banff, Jasper and Waterton Lakes Parks.

You may wonder why I do not go somewhere else where the flora has not been studied by a host of people but, as I may have mentioned, I am going, first to get some much needed personal experience with the Cordilleran flora and second to obtain local distributional and ecological data on the species we already have in our herbarium from these Parks.... If you can think of any problem that I should look into this summer I would be glad if you would mention it and I would see what I can do. I am, of course, planning to do a fair amount of collecting but not on the grand scale of last summer, provided that I can control August, for he is going with me again. I know it will be difficult. Perhaps I can think up some kind of rationing system by which August is to collect vascular plants on Mondays and Fridays only, mosses on Tuesdays, and so forth ad lib....

I have been working on the willows lately and, probably because "ignorance is bliss" they are not giving me very much trouble, except in the Arcticeae group, thanks to Schneider. I wish I had his papers with me in the field and that I had noted the stomata on live material. I find it difficult to see the stomata on dried leaves and so far I have not taken the trouble to soak any material. By the way, is the wetting test for stomata any good for fresh willow leaves? I am probably not

qualified to speak on the subject but I find Hultén's treatment rather unsatisfactory. He certainly has left a lot of loose ends. I suppose you have Part 5 of his flora which came some time ago.²⁶

Erling could not have imagined when he wrote that letter how quickly and dramatically his summer plans would be changed and how soon he would be seeing Hultén in person. Only four days later, on June 5, an urgent telegram went out to Breitung from Ottawa.

DUE TO UNFORESEEN DEVELOPMENTS I AM LEAVING FOR EUROPE JUNE 8 AND MAY NOT RETURN UNTIL END OF JULY /STOP/ IF YOU ARE AGREEABLE I PROPOSE THAT YOU SHOULD GO TO BANFF AND COLLECT PLANTS IN THE BANFF PARK ACCORDING TO INSTRUCTIONS THAT I SHALL PREPARE FOR YOU /STOP/ ARRANGEMENTS WOULD BE MADE FOR YOUR LODGINGS AND TRANSPORTATION WHILE AT BANFF /STOP/ I EXPECT TO JOIN YOU IN BANFF TOWARDS END OF JULY AND TO CARRY ON FROM THERE AS ORIGINALLY PROPOSED /STOP/ PLEASE WIRE YOUR ACCEPTANCE AND POSSIBLE SUGGESTIONS COLLECT AND I SHALL FORWARD INSTRUCTIONS TICKET AND SPENDING MONEY BY MAIL.

On June 6, he sent Breitung the money and instructions of what he needed to do and wished him luck before leaving the next day.²⁷

It was to be nearly the end of August, writing to the Raups from Banff, before Erling was able to explain what the change was all about, and how, with practically no warning, on the eve of his departure for the Park, he was asked to go to Moscow as one of three Canadian delegates to the U.S.S.R. Academy of Sciences Congress from June 15 to June 30 to celebrate the 220th anniversary of the founding of the prestigious academy. Canada was represented by Erling Porsild, ex-Acting Consul for Canada in Greenland and Botanist at the National Herbarium, as well as Professor Harold A. Innis, author of several books on economic aspects in Canada and head of the Department of Political Geography at the University of Toronto, and Dr. Hans Selye, histologist at McGill University and delegate of the Royal Society of Canada.

Needless to say I was glad to accept even if I am still wondering why I was chosen. Left Ottawa by special plane on June 7 and landed the next day at Fairbanks where the RCAF turned us over to the Russians

who had a big transport plane waiting. This, incidentally was the same plane that Molotov flew to San Francisco in and was nicely fixed up with silk curtains, deep club chairs and Persian rugs. We were told that the plane "was ours" and to tell the pilot if we wanted to stop anywhere in Siberia and that he would travel by day or by night according to our honoured wishes. We chose day travelling and suggested stopping at Markova on the Anadyr, Jakutsk, Omsk and Sverdlovsk. The trip took 6 days of leisurely travel through Siberia with 36-hour stops in some places. The weather was good and we saw quite a lot of the country because the Russians like to travel at 18,000 ft. or better. I had been permitted to take all the pictures I wanted and should have some fair Kodachromes.

You have probably seen or heard full accounts of the meeting so I won't go into details. It was a grand show and well staged. It was also an all-Russian cast and no place whatsoever was left for talks or lectures by the foreign delegates of which there were some 127 from U.S.A., Canada, France, England, Sweden, Poland, Hungary, Roumania, Turkey, Iran, India, Australia and China. In addition to the Academicians there were close to one thousand Russian scientists and we listened to a lot of 45 minute speeches in Russian. The more important were translated and we had a fairly good interpreter service at our disposal day and night. The programme was a very full one and we rarely got to bed before two a.m.

In addition to the spiritual food we were wined and dined overwhelmingly. We had, or could have had, vodka and caviar for breakfast every blessed morning. We had three grand banquets, including a farewell dinner given for us by Joe [Stalin] at the Kremlin. Also there [were] receptions galore, by the U.S. Embassy, the British d[itt]o, and many others. Besides we saw four ballets, four operas, three plays and, of course a lot of museums. A tour of the Kremlin, and all-day excursion on the Moscow-Volga canal, a four day trip to Leningrad and much more besides. Throughout the visit [we] were the guests of the Russian Government and my total expenses in Russia came to \$1.14 for a laundry bill and a dollar for a box of matches that I could have got for nothing at the hotel. Even our bar expenses were paid for by Joe.

There were very few botanists; besides Hultén and myself there were a Pole and a chap from Iran. Naturally I saw a lot of Russian botanists and I am much impressed with what they have done, even during the war. The Moscow herbarium and Botanical garden does not amount to much; but the Leningrad one is something. The herbarium contains close to 5,000,000 sheets ... and duplicates ready for distribution – 400,000. And they say they are very anxious to exchange plants just as soon as possible. They showed us lots of books, in and out of print. Of the former we could have any one we wanted. I came away with 75 lbs. while Hultén who was greedier brought five meters. I got a personal copy of the Flora of the U.S.S.R. when I told them that we already had the set at the Herbarium.

Following the congress my two fellow Canadians returned by Siberia while I had been asked to do a job for the Govt. in Sweden where I spent about two weeks. My travels took me through much of Sweden where I met a lot of Swedish foresters and forest botanists. I was flown by the Russians, first to Finland and from there to Stockholm. (Did you know that Hultén now is director of the National Herbarium at Stockholm where he succeeded Samuelsson?) From Stockholm I flew to Copenhagen and from there to London where I spent a week and visited Kew and British Museum. The damage to the herbarium at South Kensington is negligible and Kew was not touched at all. At Bloomsbury they lost a quarter of a million books, but not botanical ones.²⁸

Erling did not say that he had also visited Polunin at Oxford and found, he told Wynne-Edwards, that he liked him better than he had in earlier days, but in answer to a query from a Major Per Scholander, he said they had discussed the second part of Polunin's "Botany of the Canadian Eastern Arctic" that was ready for the press when the war put a stop to publication of all matters not directly concerned with the war.

Polunin was deeply concerned by this because he felt that some of his collaborators might wish to withdraw their contributions for publication elsewhere. At one time he thought that he could arrange to have the volume published in Britain and asked permission to do so. The permission was readily granted and the first copy of the manuscript

was sent to Polunin who, however, found it impossible to arrange the publication. This was the state of affairs when I visited Polunin recently at Oxford. I had expected to find him somewhat impatient over the delay: actually he was not too sorry because he had come to realize that much more information was needed, at least in some of the fields covered. He now hoped to be able to make a trip to the Eastern Arctic next summer, when he expects to add very considerably to the collection made during his earlier trips.²⁹

After leaving Oxford, Erling told Raup:

On July 26 I flew from Prestwick to Ottawa in 14½ hours thus completing my little trip around the world. On August 1st I left for Banff to salvage what could be salvaged of the summer's field work. Happily August Breitung had been working there for six weeks and there was practically nothing left for me to collect when I joined him. We now have 2,600 numbers and still a month to go.... I hope to be permitted to bring August to Ottawa in the fall and to keep him there for a few months putting the collection into systematic order and sort in the Malte and Watson stuff. After that I hope to get him a job where he can get himself some training in landscape gardening unless, of course, I can see a way to keep him at the herbarium. I would hate to see him go back [to] the farm work which he hates. He is still a problem child and will always remain a rough diamond, if a very likeable one.

Edith came out to Banff with me and spent almost three weeks climbing mountains and riding horseback. She has now returned to Ottawa and will soon be on her way to New York where she is to take a 3-months course as introduction to her new job with the Department of Health at Ottawa. She is quite excited about it and also a bit awed. She doesn't quite know what her work will be except that she is to do lab work and is to specialize on some new technique that was developed during the war.³⁰

The war with Japan ended during those happy weeks at Banff. Back in the Herbarium in Ottawa, Erling told Raup on October 4: "This summer's harvest I am even afraid to open.... We had a good time in the West this summer and, chiefly due to August's colossal energy, we brought back about 2,900 numbers. Most of

the time was spent in Banff Park, but before returning we made hurried trips to Jasper, Kootenay and Waterton Lakes.” Before coming East, he had made a trip out to Vancouver and Victoria where he had a nice visit with botanists J. W. Eastham, Professors Davidson, Hutchison, and McTaggart-Cowan, Dr. Brink, Clifford Carl, and others. In Edmonton, he had given an informal showing of his slides taken on his trip through Russia. It was reported in the *Edmonton Journal* of September 24 that “permission to take the pictures was extended to the party by the Russian government and Dr. Porsild said he understood he was one of the few foreigners ever to be given the opportunity.” By March 1946, he would be telling Raup that he was having a grand time spouting about Russia and “Soon I will be ‘an expert’ on Russia, or else locked up with the spy-suspects,” a reference to the Soviet spy ring which had been exposed by Igor Gouzenko, a cipher clerk in the Russian embassy in Ottawa, in the fall of 1945. The “spy-suspects” included the private secretary to the British High Commissioner in Ottawa and a cipher clerk in the Department of External Affairs.³¹

By October 1945, Erling had managed to arrange for lodging and work in Ottawa for Breitung, although not in the National Herbarium. However, he was able to help him edit his “Catalogue of the vascular plants of central eastern Saskatchewan” which was accepted for publication in *The Canadian Field-Naturalist* on 27 February 1946. August’s Christmas greeting to “My Dear Friends, Dr. A. E. Porsild and Edith Porsild” came in the form of a calendar

... in appreciation for everything you have done for me, to make me happy among the mountain wilderness, scaling the highest peaks and looking down into deep valleys or over [precipices] many hundreds of feet down, walking over snow banks or glaciers in midsummer, or inhaling the aroma of fields of fragrant wild flowers on alpine meadows, and looking over range after range of mountains like the waves on the ocean, stretching as far as the eye can see, and the fun of collecting plants. All this has greatly stimulated my interest in Botany... And hoping we can be companions on many more expeditions in the future, with fragrant flowers, mountains, streams, forests, pure & fresh air, sunshine, clouds & stars as additional companions.³²



CHAPTER THIRTY-EIGHT

POSTWAR SETTLEMENT

The war had ended, but Erling Porsild was still keeping in touch with the postal authorities to find out when he could exchange parcels with Sweden. “We have a lot of plants for you,” he told Eric Hultén, now Director of the Naturhistoriska Riksmuseet in Stockholm, “and I should like to get rid of them as soon as possible because we need the space.” It was not until November 1945 that he was able to mail four packages, including the third set of duplicate material from his Alaska plants and the J. P. Anderson collection that had been sent to him in 1941 with the understanding that he was to ship them on to Hultén as soon as possible after the war.

Their meetings at the Congress and in Stockholm had been amicable and Erling told Hultén on 21 February 1946 that he would send him a copy of his account of the trip to Russia when it was published in the *Canadian Geographical Journal*. After discussion of future exchanges, Erling felt that the time was right to bring up the unpleasant subject of what he considered to be Hultén’s unfair treatment of him. In acknowledging receipt of part 5 of the Alaska Flora, which he was finding very useful in working up his Yukon collection, he said:

I must confess that it sometimes irks me slightly to see the way in which you often, and deliberately, disparage my efforts in my Contribution to the Flora of Alaska. Typical examples are in your History of botanical exploration of Alaska, where, in the map, the symbols giving the relative importance of the collections made, my collecting stations are generally assigned the lowest rank, comparable to those of mere chance collectors. When the truth is that up to 1926 my collections probably were amongst the largest ever made in any part of Alaska.

A typical example in the Flora is in part 4, under *Silene Menziesii*. Anyone reading your treatment would certainly get the impression that I ‘missed the boat’ entirely, whereas the truth is that I actually emphasized the importance of the seed character, not, as you say, the differences in the calyx. We make mistakes, even the best of us, but why point out mistakes where there are none?¹

Hultén responded by sending him 1,545 sheets of Scandinavian plants, but it was not until April 2, on holiday in Lapland and in the middle of a blizzard that made it impossible to ski in the mountains, that he resolved to answer Erling’s letter of February 21. First, he said, in his long handwritten missive, he would be sending duplicates of his own Alaska collection as soon as it could be labelled and sorted into sets, in exchange for any plants he could send him in the future. He would be sending back earlier loan material when he had finished *Epilobium* in the Alaska flora. He wondered if Erling could be interested in doing the genus *Antennaria* in the Alaska flora as he had too little for comparison and the antennarias of North America appeared to split into apomictic types in much the same way as the European *Taraxacum*. To answer Erling’s complaints, struggling with difficulty to express himself clearly in a second language, he said:

I am sorry to see that you do not think that I tried to be objective when handling your contributions to the Alaskan flora. I myself think that I have been very careful in this respect and only rarely made remarks concerning your treatment although I thought that they should have been made. On the whole I believe more in a building up method in science than in criticising, but in a work that aimed at a sort of monographical treatment it is often impossible to avoid criticism.

I think that your position concerning the Alaskan flora was extremely unfavourable and I was very astonished that you was choosing the way you did. You knew that I had for years tried to penetrate all literature and to see practically all material collected in the country and still you tried to make a hasty review in advance of my treatment. Such a policy is bound to lead to trouble whoever makes it because there is not enough time to penetrate the problems to the bottom. By this time I know this. When I started with Kamtchatka, Komarov said he would never write a Kamtchatka flora (although he

had a large part ready), but when I had published two parts his flora appeared. I never wrote about it but it is pretty full of mistakes, part of which are corrected in Fl. U.S.S.R. but part of which are blessed [considered correct?] there. He is the chief [editor] of this work. When I started with the Aleutian Islands Tatewaki and Kobayashi made the same thing with still less good results and when I was ready to start with what will certainly be my last large flora Alaska-Yukon you considered – as I understand – that your collections were too large to be left in other hands and made the same [mistake].

In my opinion we both have had much advantage to do in another way. I had handled the Alaskan material and you had made a flora of the district between Mackenzie and Hudson Bay of somewhat the same type as my Alaskan flora. Then we should have specialized on the critical genera and sent our material of them to one another. In this way the world had got a good review of all known between Bering Sound and Hudson Bay and the work could have been made more quickly and adequately than now and we could have help of one another. When you were in Lund I proposed this as you remember, but without result.

It has been very troublesome for me during the work not to have had your collection available, in fact it is the only important collection that I have not had an opportunity to examine. When you say that your collection probably were amongst the largest ever made in any part of Alaska this may be true concerning the mass of material, which I have not seen, but in surprisingly many cases the same plants were collected in the same places by earlier collectors. Your contribution is very easy to see in my maps as they are marked with rings in all cases when I have not seen other specimens of the same species collected from the same place.

I have been more than astonished that you really dared so often to say 'new to the flora of Alaska' when you knew that a work trying to summarize all previous records were under the way. Only when it was too much I have mentioned anything about mistakes in this field as I think it gives very little but I must confess that they have been trying. Sometimes they must have been made merely as a habit as there are cases of at least ten earlier reports. I have noted most of these cases in my copy of your work but usually mentioned nothing in the flora.

Concerning the map of collections it is based on a mass of statistical material and I worked more than a month on summarizing everything and draw out the percentage as correctly as I could. I therefore think that I am absolutely right there. You had another job and could not devote all time to the botany and you had very little station work. Travelling it is not possible to get the entire flora, the spring-flora is, for instance, usually missed. To this needs station work.

Concerning the new species you must admit that you handicapped me badly by not sending even a fragment of them. As I am not apt to accept new species merely on authority this naturally can lead to that species that possibly are good were not accepted. I never understood why you did not send me at least fragments of the new species already published. You could only win by doing so. As it is now they are nearly the only species described from the area of which I have not seen authentic material. This seems very strange to me.

In the example of *Silene Menziesii* mentioned in your letter you say that I did not point out that it is the seed character that is most important but [I used instead] the calyx. The thing is that very few specimens have ripe seeds and that this character thus is very difficult to use, while all have a developed calyx. I took up your *Melandrium macrospermum* which differs in practically only a seed-character and I tried to contribute to the understanding by picturing the seed, but I must say that I would hardly have made that species myself after having examined numerous seed-bearing specimens of different Caryophyllaceous plants. The state of ripeness is a very important and much overlooked factor and bad mistakes can be made. I hope that this is not the case with *M. macrospermum* but it is hard to feel sure.

Everyone, also the best, can make mistakes, as you write, and this is only natural as no one can have an experience covering all cases. The only thing to do is to try to do ones best. I earnestly feel that I never hunted for your scalp although I must confess that I have had more difficulties with bringing your collection in harmony with the other material than any others which seems unnecessary. I think that we both could come along much better with full cooperation.²

When Erling had voiced his “little grievance,” he had expected to be rebuked for holding back his Alaska collection and for going ahead with his own publication

to prevent the material being “stolen” from him (regardless of the fact that he had in fact “stolen” the title to the collection from his brother in view of their joint collaboration), but Hultén’s long and masterful argument may have given him pause to consider that he could have done things differently if he had not been ruled by his frustrated ambition under uncertain circumstances. Perhaps he could now see that in the long run he might have profited from giving up his own dreams, and that something important had been lost to the larger world of science because of the lack of cooperation, but it was still necessary for him to thank Hultén for his “very full and frank discussion” and explain his own position.

“It is very helpful towards understanding many things that have been puzzling me,” he replied:

I am sorry that things have worked out the way they have and that you were not able to consult my Alaska collection. This, however, is not entirely my fault. You must not forget that even in 1933 I had done considerable work on the Alaska flora, and it is only natural that I then wanted to publish it myself rather than turn the entire collection over to you, as you asked me to do. I never could see why this seemed so unacceptable to you, because what I planned to do could in no way be considered competitive to your flora. Naturally, I could not then foresee that a World War, lasting almost six years, would prevent me from sending even fragments of my types to you. Had this not intervened I would, of course, have been more than willing to send you my material after it was published in my annotated catalogue.

As regard my frequent remarks ‘New to the Flora of Alaska,’ I willingly admit that in some cases these remarks were premature and erroneous. Actually, in nearly all cases I was correct, however, for my paper was never intended to cover southeast Alaska, which phytogeographically belongs in the Pacific coast region. The original title of my manuscript made this clear, but it made such a long and cumbersome title. When this was changed by the editor, I failed to realize the full implication as regards some of my remarks about distribution. Even so, in some instances, where you draw attention to my ‘error,’ you have not even yourself seen Alaska material, but base your remark on unsubstantiated records in literature (e.g. many of Kurtz’s and Turner’s records). In other instances the only existing

record was based on obscure U.S. Geological Survey papers on Alaska or on manuals such as Rydberg's *Rocky Mountain Flora* or Britton & Brown, where no locality or authority is given.

Also, you must not forget that when I examined the Alaska material in the U.S. National Herbarium, the bulk of the material was inaccessible to me. Naturally, the genesis of an error does not actually matter as long as the error is there, and I am sorry if I erred in important matters. Nevertheless, I refuse to believe that my contribution is altogether without merit as anyone using your flora could very easily be led to believe.³

Hultén was not anxious to continue the argument but rather to close it. On September 19, he told Erling that he was glad that they were able to discuss their affairs frankly and openly in their last two letters and thought that they had come to understand their respective points of view a little better. Except for the antennarias, most of the long disagreements, misunderstandings, and battles over the flora of Alaska were over, even if they would always continue to disagree over some Arctic plant taxonomy problems. In Erling's 400-page *Botany of Southeastern Yukon Adjacent to the Canol Road*, which would not appear until 1951, he commented: "Hultén's monumental Flora, as shown by the frequent references throughout this work, has been a constant source of stimulation and of invaluable help even though I have frequently found myself in disagreement with the opinions expressed. Through Dr. Hultén's kindness, and despite the difficulties of war-time mailing, the first three parts of his Flora had reached me in 1944 in time to be taken to the field." He included his key to the genus *Antennaria* in the Yukon and paid tribute to August Breitung "who accompanied the writer in the field for several seasons and contributed large series of splendid material of many rare and several new species of *Antennaria*. *A. Breitungii* differs from all other pink-flowered species of our area by its short, somewhat crowded basal leaves that in age become perfectly glabrous above."⁴

For his part, Hultén acknowledged his debt to the National Herbarium in Ottawa for examining specimens and mentions Erling under authors and publications in his ultimately colossal work on the *Flora of Alaska and Neighbouring Territories* in 1968, but there is no *Antennaria Breitungii* listed among his antennarias and it is noted that the seeds of *Silene Menziesii* are described as black and shining in the text but are not given as a major factor in identification.

Melandrium macrospermum Porsild, however, is still to be found intact in the Caryophyllaceae section.⁵

During the Hultén/Porsild correspondence over the winter and spring of 1946, the decision had been made for the first time in the history of the National Herbarium since John Macoun retired in 1912 that there would be more than one botanist on staff. James Macoun had complained up to the time of his death in 1920 that he “was all alone in the Herbarium” after his father left for the West. As his replacement, Oscar Malte had earnestly begged for assistance up to his death in 1933, and Erling had managed on his own with only the indefatigable technician Miss Harkness through all the years of the war, but on April 25 he could tell Hultén that “at long last I am getting some assistance, including two young and very promising taxonomists.”

In fact, he would only get one for a year as Dr. Bernard Boivin started work on 9 May 1946 only to resign on 8 May 1947 to work on a personal research project with a grant from the Guggenheim Foundation. Meanwhile, he accompanied Erling on the four-man party organized for that year in the Rockies, with Breitung and young Karl Raup from Boston also helping with the field work. Between them, they collected 6,000 plant specimens. By all accounts, Erling had a busy year. The Annual Report for the National Herbarium noted that on May 10 and 11 he attended meetings of the Arctic Institute of North America in Montreal, and on May 20–22 he went to the annual meetings of the Royal Society of Canada where he was made a Fellow. On July 1, in recognition of special services during the war, which included the identification of the plant material in the Japanese war balloons, he was awarded the M.B.E.⁶

“The news has reached us by some round-about means that you have been included in the list of those getting the M.B.E.,” Trevor Lloyd wrote from Dartmouth College in Hanover, New Hampshire, on August 28:

Both Joan and I are very glad that some of the authorities have at last discovered the importance of your Arctic work. For myself I can think of at least a half dozen reasons why you should have got far more than that, and included in that is your pioneer voyage on the Great Lakes Freighter across Davis Strait. However, the main thing is, so we hear, that you are at last getting sufficient help in your work room to be able to handle research work properly. A note from Max indicates that the Department of External Affairs maintained to the end its long reputation for botching the ordinary everyday problems of shelter

and transportation connected with the consulate. He apparently only spent three weeks sitting at BW-1 [Bleue West One]. Maybe he was lucky to be brought back at all.⁷

Lloyd and his wife had enjoyed their consular tasks in Godthaab in 1944–45, although they found the consulate small for entertaining, and somewhere in the consular papers it is recorded that every time they entertained Greenland visitors their guests insisted on being shown the indoor toilet installed by “the mighty Porsild.” However, it was left to Max Dunbar to close the Canadian Consulate in a manner that would impress the Danes of Canada’s position. “My last year in Greenland, 1945–46, I shared with my new wife, Joan Jackson of Hamilton, Ontario,” Dunbar said:

We arrived in Greenland after the war in Europe was over, and life in Greenland had changed, with new faces appearing from Denmark.... The standard of living seemed to mount in peacetime, and the ‘stemning’ [morale] was high. There was an enormous Christmas party in the Seminarium. But for those of us who had been there since 1941, something was missing. So many of the people I had learnt to know so well had gone home to Denmark; a community structure had been broken. But Greenland itself remained, and will always remain. So Joan and I enjoyed that to the most until we closed the Consulate permanently in the summer of 1946.

Erling was happy to hear that Dunbar had got the position in the Department of Zoology at McGill University to replace Vero Wynne-Edwards who had left for the University of Aberdeen in Scotland.⁸

Erling’s letter to Raup on October 5 told of being at a rather unusual loose end. “I have only lately [been] doing any serious work,” he said:

It always takes me the best part of a month to get going when I have been away on an extended holiday; and to make matters worse carpenters are hammering away in and outside my office from morning to late, so that all conversation and even thinking let alone serious work is out of the question. Besides we have been having such wonderful weather up here that it seemed a shame to spend it at the office; accordingly I have been away up at Blue Sea Lake in the Gatineau a-visiting

with the Taverners. They have a lovely place up there and needed a strong man around in case anything went wrong with Percy. He, by the way has been doing much better this summer than he has for some years.⁹

Erling had dreamed of building a new house in Ottawa when he got back from Greenland but his builder,

... who seems an honest man, says that it just isn't any use. He cannot get the materials he needs and besides, since last spring the price of such materials as you can get has gone up [by] 25%. I have now moved in with the Taverners where I am about as comfortable as one can be in someone else's house.... Father has gone to Denmark where he plans to spend a couple of months; then he plans to come to Canada for a visit and to go all the way to Whitehorse. I wish now that I had a house so I could induce him to stay in Ottawa where he would be much happier than in Denmark.¹⁰

The Museum carpenters continued to be busy all through the winter, but by February 1947, when Erling was informed that from now on he had to report to Dr. F. J. Alcock as the new Acting Curator of the National Museum, a different part of the building was being fixed up for yet another National Herbarium re-location. The move came in March, and on April 12 Erling told Raup that their new quarters were a vast improvement over anything they had had before and when they got everything squared away they would be very comfortable. Boivin was leaving in May and a new man was taking his place. He hoped to fill the stenography vacancy soon.

This has been a busy winter in the Herbarium and in spite of school classes and increased transit traffic, and finally a long drawn-out process of moving to new quarters on the fourth floor, I have managed to complete the catalogue part of my Yukon Flora which now totals about 700 pages. I probably won't find time to do more to it this spring because I have to complete a revision of *Dryas* for the Trans. of the Roy. Soc. of Can. And also, in a misguided moment, have promised to write up the antennarias for Hultén's Alaska Flora. He has sent me all

his material which, however, will add very little to what I already had for my treatment of the genus in the S. W. Yukon.¹¹

He was still struggling with *Dryas* in his April letters to Raup, saying that matters were much more complicated than he had first thought and the thing to do was a revision of the genus in North America. He asked for a loan and returned the material with the comment “You will, no doubt, be dismayed to note, on the enclosed list, what a mess I have made of what heretofore was a perfectly simple and ‘well-understood’ genus.... The paper is coming along and will have to be submitted soon.” He thought Raup would have heard of Percy Taverner’s passing on May 9. “He had a pretty bad time of it although the doctor claims that his mind was pretty well gone the last week. Strangely enough the only thing that stood up was his heart that had bothered him all his life. I came to know him very well during the last year and shall miss him very much. Mrs. Taverner has been wonderful through it all. She has looked after Percy for so long that now she feels sort of lost.”¹²

The Herbarium was well settled in the new quarters in the West Wing of the Museum by the coming of summer. Behind a rather forbidding array of “gray-green cabinets arranged in long rows like city blocks” could be found “the botanical offices occupied by the Chief Botanist, A. E. Porsild, and his small staff of botanists and technicians, consisting of H. J. Scoggan and W.K.W. Baldwin, Miss Hilda Harkness, Miss Barbara Schwartz and Miss Norma Roberts.” Bill Baldwin, formerly instructor at the University of Toronto, had been appointed on May 15, and Homer Scoggan, Assistant Professor of Botany at Macdonald College of McGill University, on June 3. Erling thought that Dr. Scoggan was “a young and very promising chap from McGill,” but he was a little doubtful about his other new man. “Baldwin has been teaching at Halifax and at Toronto since he got out of the Army,” he told Raup. “Unfortunately he is not a taxonomist and is a dark horse all around as far as I am concerned. All I can do is to hope for the best. Who k-n-o-w-s!”

Nicholas Polunin was now teaching in the Botany Department at McGill University and showed up to do research in the Herbarium several times that summer. Word came from Morten Porsild that he had booked passage on a freighter and would arrive sometime towards the end of June. “Great was my consternation, therefore,” Erling told Raup June 2, “when, at Quebec, I received a cable saying that he was on his way by air and would arrive in Montreal the next day. He is here now and none the worse for his first flying experience. He



W.K.W. Baldwin, H. J. Scoggan and A. E. Porsild examine botanical specimens at the National Herbarium, Ottawa, ca. 1947 (CMNA)

is heading for the Yukon but I am trying to talk him into going with me down the Mackenzie first. He seems quite chipper in spite of his 74 years, but a 14 day canoe and camping trip may be too strenuous for him.” Dr. Porsild spent a week in the Herbarium before going up to Whitehorse for the summer to “pick flowers” along the Canol Road with Bob Porsild, returning to spend another three weeks in Ottawa in September.¹³

Erling, meanwhile, was heading north for the Mackenzie River and beyond. For years, Gibson had wanted him to look at the lichen-grazing situation at Reindeer Station, and now, with the setback to the project due to the schooner tragedy, it seemed more urgent than ever that he should see for himself what was happening there. "I had hoped to be able to stay 'in' this summer," he had told Raup April 12,

... but find that I shall, at last, have to give in to Mr. Gibson who wants me to go down to the Reindeer Station where, by giving the 'boys' a pep-talk, he expects me to invoke a minor miracle which is to solve all their problems. I had hoped to be able to tie this in with a 'grazing survey' of the territory I covered in 1927-28 but find that the Airforce will not supply the transportation needed. The result is a compromise which gives me air transportation to and from Aklavik and the use of a chartered plane to cover the Reindeer Reserve east to Anderson River, but not the country between the Arctic Coast and Bear Lake.... Some time during the summer I am to go along on one of the trans-Arctic flights from Fairbanks to Peary Land and back. The flight will be non-stop. It will be an interesting experience but probably not much else.¹⁴

Leaving Scoggan to settle into the Herbarium and work on his flora of the Gaspé Peninsula, and Baldwin to leave Ottawa on June 23 as head of a National Museum botanical survey of James and Hudson Bay "with a young man from the Montreal Botanical Gardens [J. C. Kucyniak], two Finnish botanists [Dr. Ilmari Hustich and Dr. Risto Tuomikoski] and a Swiss geologist [Dr. E. H. Kranck]," Erling left Ottawa by train on June 25, heading for Reindeer Station. His later report to Gibson would carefully recount all details of his activities and findings. On July 1, he and his old trapper friend Ralph Bryenton of Herb Lake, Manitoba, left Edmonton to fly to Hay River, N.W.T., where a 22-foot canoe and equipment for the trip down the Mackenzie was waiting for them. Due to poor visibility, the plane was unable to land and they were forced to spend two days in Yellowknife, but on July 4, travelling from Hay River by canoe, frequent stops were made along the Mackenzie River for botanical collecting and for studying biotic problems connected with the natural afforestation following destruction of the original forest due to fire. A collection of plants was made along the Mackenzie totalling 350 numbers including several rare and little known species heretofore known only from single collections made by early travellers in the Mackenzie District.

They reached Reindeer Station on July 21, and, accompanied by Bryenton and H. J. Hargrave, Superintendent of the Dominion Range Experiment Station at Manyberries, Alberta, Erling made a survey of the reindeer-grazing reserve by plane, with fourteen landings to make detailed examinations on the ground. He was particularly anxious to see how the winter range of the main herd had stood up to twelve years of grazing. "During four winters the herd had been wintered within a radius of four to eight miles of the main station," he said in his September report,

... in addition this range has been grazed each year for periods of from a week to ten days during the spring and fall migration between summer and winter grounds. A 15-mile hike over this ground showed that the lichen cover of this particular range, which originally had formed approximately ten per cent of the total vegetation, had now been materially reduced and that as a result of grazing, grasses, sedges, and forbs had increased. Willow and other dwarf shrubs had neither gained nor suffered. Although the reindeer had not wintered on this particular range since 1937-38, practically no sign of recovery or new growth of lichen was noted. Nevertheless, the forage on this range is by no means completely destroyed, and similar country in Lapland would still be considered good winter pasture.

Other wintering places were visited on Noel Lake and Peter Lake, where the herd has spent only one winter.... In both places the effect of one year's grazing was scarcely noticeable.... From these observations it would appear that one winter's grazing does practically no damage to good browse-lichen range, provided it is not used until the ground is frozen and snow covers the carpet. The reason for this is that in the frozen 'reindeer moss' carpet, the grazing reindeer merely nibble the tips of the lichen plants. The tips of the branches are the only parts of the lichen plant that are capable of growth, and when lightly grazed, are able to regenerate in a few years. Where 'holes' have been plucked into the lichen carpet by grazing, these 'holes' quickly fill in by lateral growth and also no doubt by expansion of the lichen mass. Thus, in a lichen carpet six inches deep, only the upper two inches show active growth; the lower third is dead and undergoing a slow process of decay. Therefore, when the entire upper layer of the lichen carpet is destroyed by grazing or trampling, regeneration ceases or, at best, is

greatly retarded. Also, other plants, such as dwarf shrubs, sedges and grasses, or the true mosses, with all of which the lichen plant competes for space, occupy the place formerly taken by the lichens. For this reason, winter range should be allowed from three to four years of rest between grazing. When this rule is observed, winter range such as is found in the Reindeer Reserve will last indefinitely.¹⁵

The summer range for the main herd during the past twelve years had been on the low and rather wet coastal tundra, with one year near Kittigazuit and the rest on the north end of Richards Island. Some concern had been expressed from time to time regarding the ability of this pasture to withstand continued year-after-year pasturing of a herd of 5,000 animals but a detailed examination of several local areas that had seen some of the heaviest grazing showed that the range had stood up remarkably well. Far from being depleted, grasses and sedges had actually increased, due to the “tilling” effect of trampling reindeer. In his report, Erling said that he considered that the summer pasture on the north end of Richards Island would be adequate indefinitely for a herd of 5,000 reindeer.

At Reindeer Station itself, all the buildings appeared to be in good repair, but he was critical of the newer mechanical equipment that suggested “an extraordinary lack of planning.” The power plant that had replaced the original system was expensive and inadequate. The old “Ram” tugboat had stood up well over the years of rough usage by untrained operators but was now in somewhat run-down condition and needed a complete overhaul by competent mechanics to keep it going for another fifteen to twenty years. The fishing boat used at Anderson River was in good running order and seemed well-suited for requirements but, with the worries of the recent *Cally* losses still freshly in mind, Erling did not hesitate to say that he thought that the present boat used by the chief herder was “as poorly built a boat as I have seen; in my opinion it should never have been accepted as it is not only poorly designed, but of poor workmanship, unseaworthy, and safe only for use in rivers and estuaries.”¹⁶

On July 29–30, the party attended the annual round-up of the main herd at the Kigdluait corral that had been constructed according to Erling’s plan in 1935. A few years earlier, two work pens were substituted for the single chute originally installed; and in 1946 the lead-in fence was extended along the shore of Kigdluait Bay for about one mile to form a large holding pasture. In addition to the regular reindeer crew, a number of local men had come to work during

the round-up. Most of them had attended the round-up for several years and thus all had experience in handling deer. He did not think the pens worked as well as the chute because it held things up and involved much chasing and needless excitement for the animals, and the shape of one of the pens appeared to be responsible for some broken legs and horns. "It must be admitted, however, that with the crew on hand the work progresses faster than I have ever seen it done before."

His general impression of the main herd was that it was healthy and that the females and fawns looked strong, but there was a marked deficiency in the size of males. One reason for the decrease in size could be due to killing immature steers in order to supply the increasing demand for meat, but another could be laid at the door of one of his original Lapp herders. "During the mating season bulls become aggressive and a large powerful bull can be quite dangerous," he said:

Some reindeer men, and notably one of the Lapp herders I brought from Norway in 1931 – Aslak Tornensis, who resigned and returned to Lapland in 1939 – outspokenly maintained that all large bulls should be castrated; when not closely checked he vigorously practised this rule. This man was the oldest and probably the most experienced of all the Lapps and while in the service taught many of our Eskimo apprentices herding and handling of deer. It would thus seem quite likely that over the years there has been a deliberate tendency to eliminate the largest breeding animals. Even today among farmers and livestock men the principles of modern selective breeding is not always followed, and it can scarcely be assumed that Lapp or Eskimo reindeer men fully understand the genetic principles involved in the breeding of animals.¹⁷

He had discussed the matter with Hogan, the Superintendent of the station, who admitted that he knew this unfortunate practice had existed in the past but believed that it had been discontinued for some years. The present chief herder, Mikkel Pulk, claimed that he fully understood the importance of selective breeding, and Erling observed that during the corralling he seemed very anxious to select strong and large fawns for breeding stock.

A visit was made to the Anderson herd on August 24–25. Travelling by plane, Erling flew over Nicholson Island where he saw the herd near the corral.

They landed at the station in Wood Bay, which on the map is called Stanton. A new frame house had been erected a year earlier but there were no other buildings. The assistant foreman, Malcolm McNab, in charge, was there with his boat "Stanton," getting ready to cross the bay to Nicholson Island where corraling was to start the following day. At the station, he met Chief Herder Edwin Allen, a native of Alaska who was an experienced reindeer man and veteran of the long drive from Kotzebue Sound, and Peter Rufus, the only surviving son of Charlie Rufus, who was now part owner of the herd. "A promising young lad of about 19 who even now is a good reindeer man and told me that he wanted to remain in the reindeer business. He is as yet unmarried and too young to manage a herd of his own, but as soon as possible he should be given every encouragement to establish himself in the reindeer business. There is some question as to what part of the herd legally belongs to Peter; the broadest possible view should be taken in settling this question."¹⁸

At the 1946 round-up after the *Cally* accident, only 276 adult female deer and 121 adult steers bore Charlie Rufus's mark. No deer had been marked to Charlie's estate since 1,659 animals were actually counted in the 1944 round-up, which did not include 579 reindeer that were estimated as "missing" at that time due to sickness, accidents, separation from the herd, fawn exposure, and being killed by wolves. "The Rufus estate is still in the hands of the Public Administrator and as far as I know no settlement has been reached," Erling said.

I understand that from a legalistic point of view some doubt exists as to what number of deer Charlie's sole heir, Peter, owns. The matter is complicated by the fact that the 950 deer which were originally loaned to Charlie were never returned to the Government. This, however, was not Charlie's fault because on several occasions he had been anxious to return the original stock but each time was told that the Government was not yet ready to receive them. Further complications arose when, in the winter of 1942-43, 305 steers from Charlie's herd were marketed. Of the total sale price of \$7,475.50, a portion was allotted to Peter Kaglik, the owner of Native Herd No. 2. This was to be a first instalment paid to the Government for deer received by Charlie. Peter in turn was to hand over a certain number of live deer to the Government.

I understand that Charlie Rufus had felt that this had been unfair to him and that he had been entitled to the full proceeds of the sale

from his herd, because Peter Kaglik had not participated in the drive and because Charlie's contract called for payment in reindeer. In as much as Charlie had repeatedly tried to return the 950 deer to the Government and as failure to do so was due to the unwillingness of the Department to receive them, I feel that Charlie had a just cause for complaint. I also think that when the estate is finally settled the Department ought to take this into consideration so that as generous a settlement as possible may be made with young Peter.¹⁹

When Charlie Rufus had first established his herd at the mouth of the Anderson River, there were a number of native and white trappers in the district, but these people had all departed in recent years and the Anderson River herd was now without a local market. The Department had intended that this herd would be used as a nucleus for future herds to be established further to the east and south, but with the loss of the owners of both native herds and their families, the eastern development received a very serious setback, from which it might never recover. Erling commented that it seemed very doubtful that new herds would be established in the Anderson River district or to the south of there. He recommended that the herd should be divided into two to four smaller herds which should be re-located somewhere on the shore of the Eskimo Lakes where a market for surplus meat could be found at Tuktoyaktuk or at the main Reindeer Station on the East Branch.

Morale was low at the main Station. Superintendent Hogan was near retirement age and in failing health, and he wished to be replaced. Erling recommended a game warden in Aklavik who was interested and could be trained to take over when Hogan retired. The chief labourer was also getting on in years and could no longer cope with the work in hand, and Erling felt that he should be replaced by first open water by a carpenter-mechanic who should be a young married man preferably without children. The chief herder and one remaining Laplander was Mikkil Pulk, who had grown with the added responsibility, and under the guidance of a younger superintendent might do even better. Pulk had told Erling that he hoped to retire in the next few years and have his Eskimo son-in-law take over a reindeer herd. "Although Pulk is a Laplander his social status is that of a native. I should like to see him as part owner in a reindeer herd when he would do well."²⁰

The Eskimo reindeer herders were largely recruited from Mission schools, and "some have not lived the life of their parents since early childhood and if

compelled to do so now would probably experience difficulty of adjustment to the life of a hunter or trapper.” Although on the whole Erling thought that they were “willing and capable and altogether potentially a fine group of boys” and at least half a dozen of them had sufficient experience to become owners, none at present wanted to assume the responsibility and preferred to work for wages. They all appeared to him to be normal, intelligent boys but with one or two exceptions showed little initiative or ambition and were content to live a day-to-day existence, spending their leisure hours loafing or gambling. “Half of the boys are unmarried which, to a native boy over 20 is an abnormal and unnatural state of affairs; they all wish to marry but with the unfavourable ratio in the Mackenzie Delta of unmarried males to females, they are unable to do so.” Another factor was that “the younger generation of Eskimo, particularly the women, have become accustomed to the amenities of ‘civilized’ life and are no longer willing to endure the hardships of life in isolated areas far from stores, movies, medical services, schools etc.”²¹

In his report, Erling knew better than to compare these young people with those he had found in Greenland, where he had been impressed with how positively they had adapted to a changing world. The secret was that it had happened slowly for the Greenlanders, and they had been able to do it in their own way. Already, in one short generation, these young Mackenzie Delta herders were not the people for whom the Reindeer Project had originally been envisaged. They had been educated only up to a point and then left somewhere between the hard Arctic-wise world of their grandparents and the easier but inappropriate white man’s takeover of the north for which they had not been adequately prepared.

Erling knew from experience how readily they responded to leadership and he recommended that the Station install a carefully planned educational program in which he believed they would eagerly participate. “A teacher should be appointed to the Reindeer Station who should run a day school and from time to time visit the herd camps where he/she should direct evening classes and correspondence courses. Much progress could be made by supplying suitable reading material to the herders. This should be partly instructional and partly entertaining,” he said. He recommended specially prepared and well-illustrated pamphlets covering such subjects as reindeer handling, breeding, range management, mechanics, hygiene, etc. “Some school texts would be suitable for distribution to the boys. I do not know of any Canadian school books that I would recommend; but I have seen excellent school books published in

the U.S.A. [A] book of this type is: Carl Sauer: *Man in Nature – America before the days of the white man.*”²²

Something needed to be done about a banking and purchasing system at Reindeer Station. Most of the herders were continuously in debt to the traders and mail-order credit. The system of herders rations that Erling had proposed in 1931 was no longer workable under present circumstances and had led to waste and abuse of one kind or another. He suggested that the Department promote the establishment of a regular store at Reindeer Station, operated by a private trader under contract, and that the herders and staff in future should be given a cash allowance in order to buy their own rations, equipment, and fuel. The trader could maintain a stock of necessary dry goods and suitable clothing, and he could also run a post office and handle reindeer products and surplus meat. Again, Erling had a capable man in mind from the Hudson’s Bay Company post in Tuktoyaktuk.

“It is most unfortunate that Family Allowance has been extended to natives living in the Northwest Territories,” Erling said. “I have talked about Family Allowance to many Eskimos as well as to a number of white residents who know natives and know conditions in the Arctic. They all condemn it. One native said to me ‘If the Government has money to give away, why must I pay Fur Export Tax or Income Tax. I make enough money to feed my children properly; but Government officials have told me that I must take Family Allowances although I do not need it; if I must take it why can I not use the money to educate my children?’”

“The time has come,” Erling said,

... when it must be decided if the ‘progress’ made in the reindeer industry in Canada is good enough; when it must be decided whether to admit failure, or do something really constructive. When it was decided to introduce domesticated reindeer into the Canadian Arctic, the purpose was to train Eskimo to become reindeer owners and to give them reindeer... But there are today no native-owned reindeer herds and none of the many boys trained in reindeer work are today showing a desire to acquire herds of their own, because the Department has failed to convince them that reindeer raising is as profitable and sound economically as trapping for fur. On the contrary, they feel today that the life of a reindeer herder is more insecure and involves more hard work, isolation and hardship than that of a hunter or trapper. Unless

it is decided to write off the experiment as an economic and social failure, something really constructive should be done towards making reindeer work a better and more economically and socially attractive occupation.²³

Erling felt that the early years of the Canadian reindeer experiment had been slow and faltering when everything was new and untried and a number of courses had been taken with little success, but that stage had now passed and a definite policy should be outlined and plans laid for the next five-year period.

The future success of the reindeer venture depends very largely upon the department's ability and willingness to place a man in charge who is capable of leadership. This man must have vision, energy, tact and ability to inspire the natives; he must be young enough and of strong enough physique to be able to travel and to live outdoors for prolonged periods; he must be resourceful and of sound judgment and at the same time willing to learn. Given those qualifications he will quickly learn what is needed about the reindeer business, for there is today a sufficient number of trained herders; the necessary technical equipment is there; the reindeer herd is in good shape and we know that the climate and the country is suitable for the raising of reindeer.²⁴

When he left Reindeer Station for the last time that summer, no one could say that Erling Porsild had not tried. He, like so many people in the project, had done their best, but there had been too many problems beyond their limited scope from the start, and now there were too many factors already lined up to inhibit the venture in future. A lot of Erling's recommended changes for Reindeer Station would be made successfully – at its height, there were four native reindeer herds as well as the Government herd, and the mosquito-ridden station that became almost a town (called 'Qun'nglaat' by the Inuvialuit) boasted a Hudson's Bay Company store, a school for twenty pupils, a post office, a church, and a population of 90 people – but the times were changing too much and too fast in the North. The distant early warning (DEW) line radar posts to protect North America from hostile activity around the Arctic would be coming, and the building of Inuvik as an administrative centre for the Mackenzie district, the discovery and development of Beaufort Sea oil, and the settlement

of indigenous land rights among a host of other things would all detract the people of the Delta from the difficulties of raising reindeer.

Looking down the years into the future, all the native herds reverted back to the Government, and Reindeer Station was abandoned in 1969. The one large remaining herd was sold in 1974 to “Canadian Reindeer Ltd.,” an outfit owned by one white man and two Inuvialuit brothers from Tuktoyaktuk. It prospered and then declined and was ultimately sold to “Kunnek Resource Development Corporation” at the end of the twentieth century, and today there rests only one consolation connected with the herd of almost the same number of animals as those that came all the way from Alaska. The last of the herd that roams the land from Richards Island eastwards is owned by Lloyd Binder, grandson of Mikkel Pulk, but even he was quoted in 2008 as saying on CBC News, when the animals had been temporarily scattered by wolves, that the previous owner had said that reindeer herding was all about heartbreak, “and I could say that it’s all about that and disappointment.”²⁵

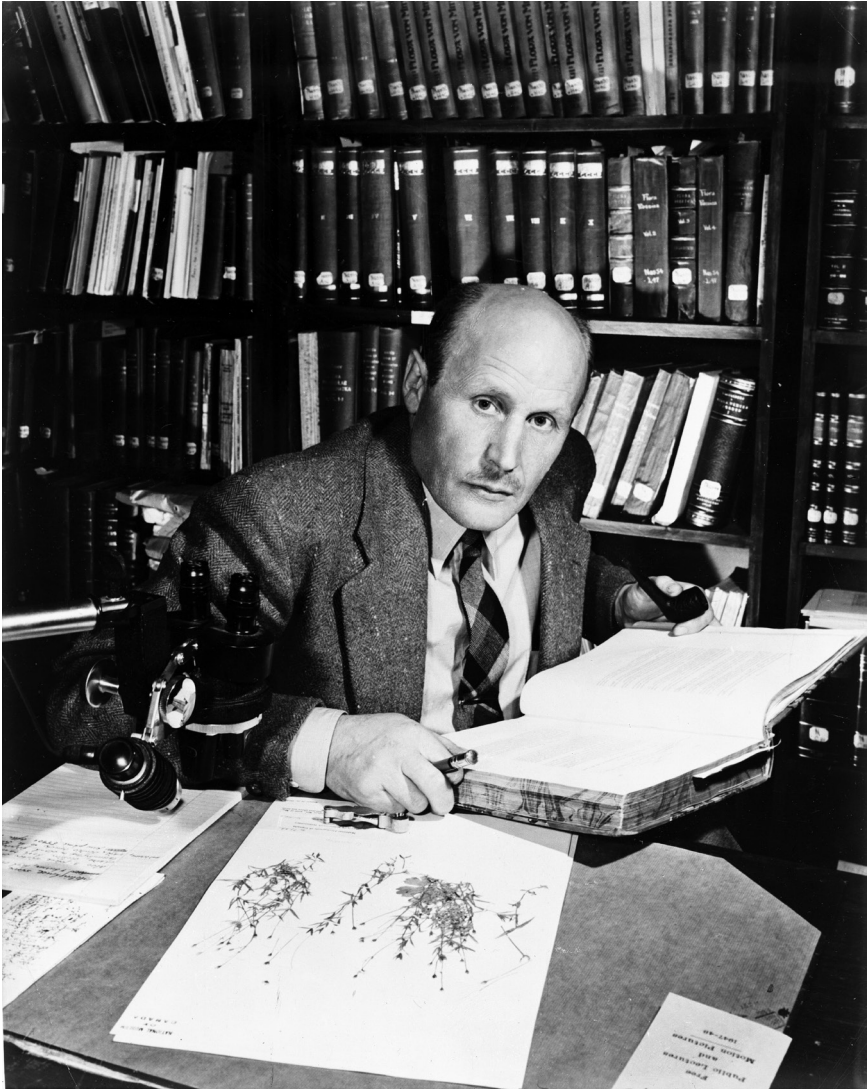


CHAPTER THIRTY-NINE

THE “OLD MAN” OF THE HERBARIUM

By the fall of 1947, Erling Porsild could look back on more than twenty years in the history of the Canadian Reindeer Project and the National Herbarium. He was the last remaining veteran of “the old days” at the National Museum, for all the associates and friends who had been there when he arrived in Canada as a young man were now gone – Malte, Jenness, Taverner, Anderson – even Rand had gone to the Field Museum in Chicago – and now he was surrounded on all sides by the “new boys” who sported doctorates from Canadian and American universities, whereas he was still “Mr. Porsild of the Herbarium” even if he was an increasing force to be reckoned with, especially in Northern affairs. At age 46, he was seen by fellow staff members of the Museum as a big, soft-spoken man with a smile that would break into a broad grin when his wry sense of humour was stimulated, a man who had his own ideas about how things should be done but was more interested in getting on with the job than in making issues.¹

It would be almost another decade before he would cross the last scholastic barrier to earn his PhD on his work on the botany of the Canadian Arctic Archipelago. He had looked at the western Arctic islands from the air when he accompanied a U.S. Air Force *Polaris* non-stop military surveillance trip from Fairbanks to Northwestern Ellesmere Island after he left Reindeer Station in August 1947, but was still working on the Rocky Mountain field collections and his Yukon flora that winter. At the same time, he was part of the establishment of a congenial new group in Ottawa called “The Arctic Circle” that started when Tom and Jackie Manning remarked to their friends and fellow arctic travellers Graham and Diana Rowley that their dining room table could no longer accommodate the growing number of people who gathered there regularly to talk about the North. On November 24, Erling wrote to tell George Douglas, with



A. E. Porsild in his office at the National Herbarium, Ottawa, ca. 1947 (CMNA)

whom he had kept up a friendship since they first met to share their experiences of exploration around Great Bear Lake: “You will be interested to know that we are hoping very soon to have an Arctic Club in Ottawa which is to provide an informal meeting place for people interested in the Arctic. We plan to have short talks followed by informal discussions, and even beer. We also plan to send out a bulletin where we intend to keep track of arctic people and what they are doing. I have had your name on the mailing list, thinking that you would be interested.”²

The first official meeting was held on December 8, and no one there that night could have imagined how successful “The Arctic Circle” would become at hosting presentations by experts in every aspect of northern fields and producing an impressive list of important publications about the North. But it was not only the new circle of Arctic friends that was making life pleasant for Erling in the winter of 1947–48. He had been living a bachelor life for far too long, without a home of his own and no one to share it with even if he had had one, since Edith was by now working and living independently. However, sometime during or between his many friendly or official meetings, or, as has been rumoured, in the government map department where a certain young woman was reputed to have been working, Erling met a nice Englishwoman named Elizabeth Williams, with an eight-year-old daughter, named Antoinette, from a previous marriage. By the time he was planning an official two-month trip in the summer of 1948, travelling to California to visit important botanical institutions and western botanists and become acquainted with the southwestern flora in the desert subalpine regions, it was clear that he would not be going alone. In a letter to Bassett Maguire at the New York Botanical Gardens on April 15, Erling thanked him for his helpful information regarding the best means of travel in the United States and said: “Naturally we shall plan to visit as many of the herbaria as we can along the route. It is probably not the best time to visit botanists in the west but I hope to find some of them home. I am particularly anxious to see Rollins, Mason, Clausen and Hitchcock and have written them about the trip. With kindest regards and thanks again in which my fiancée joins me.” To the delight of the Raups, who met Elizabeth in Ottawa in spring, they were married just before leaving for the south. “Mr. Porsild got away on Saturday,” Miss Harkness wrote Raup on April 26. “The last few days were a terrific rush!”³

Travelling by car, they left Ottawa in time to reach Ann Arbor, Michigan, by April 28, when Erling was scheduled to give a talk on “Problems in Plant

Distribution in the North American Arctic.” From there, they drove to Chicago, hoping to see the Rands but they were not at home. There was still snow in the mountains as they continued west so there was not much botanizing to be done at Mesa Verde Park in Colorado, but there and in Arizona they visited pueblos and canyons and park museums en route to Stanford University in Palo Alto, California, where Dr. Reed Rollins was about to leave for Cambridge, Massachusetts, to take over the directorship of the Gray Herbarium. Having met several botanists and staff at the Dudley Herbarium, the newlyweds had a week’s honeymoon at Monterrey before heading north for San Francisco and the California Academy of Science, where Erling was delighted to see 91-year old Alice Eastwood was well and in great shape to give them a luncheon with several scientists, a tour of the Golden Gate Park with its exotic trees and shrubs, and show them the superb African dioramas at the Academy.

From San Francisco, they crossed the Oakland Bay Bridge to Berkeley where they called on Dr. Herbert Mason, Director of the Botany Museum at the University of California. Although the campus was cramped by the encroaching town, Erling was impressed by the size of the Herbarium, its large number of species and equally large annual budget, as well as an almost room-sized vault heated by steam radiators that was used for drying specimens. The Masons invited Erling and Elizabeth to stay with them in their beautiful house set into a hillside overlooking San Francisco Bay, and late at night they sat and talked about the set-up in Californian Botany, including the Dudley Herbarium at Stanford and the California Academy in San Francisco. “He confirmed what I had already noted,” Erling said, “that the district had in these institutions an unusually diversified and most active group of botanists and biologists covering practically all fields. Therefore, their meetings are never dull. Mason who himself seemed quite well grounded in genetics commented on the fact that with such an assortment of geneticists it was always possible to get up a general discussion which invariably brought out the fact that no two geneticists ever agreed, so that a plant taxonomist here need never let himself become ‘brow-beaten’ as was sometimes the case in other places where geneticists undisputed could maintain that ‘they alone knew all the answers.’”⁴

Leaving Berkeley behind, Erling and Elizabeth drove north through the redwood forests to picturesque Oregon, looking at sea birds and seals, and large sand dunes covered with brown and yellow lupines or bright yellow broom shrubs. At Seattle, Erling spent several hours in the University Herbarium with Leo Hitchcock who was busy preparing for his summer collecting expedition.

“He has quite a system by which he takes a large number of students of both sexes in the field for the summer. His regime is quite a strenuous one. Up at five to cook breakfast served at six. From seven to eight, morning classes. Collecting all day. Supper at six; seven to eight, classes and study of collections. One summer he took 46 students in the field.”⁵

The end of the trip took them to Vancouver for the Royal Society of Canada meetings June 12–16, at which Erling read a paper by Scoggan entitled “The Flora of Gaspé and Bic,” and they had lunch with George Douglas and his brother Lionel. Erling had not met “Lion” before and found him to be quite unlike his brother, very English and urbane after years of commanding large passenger ships. Leaving Vancouver on June 17, they had two more weeks for Erling to collect additional alpine species at Banff before heading back to Ottawa on July 9.⁶

During the rest of the year and over the winter, Erling worked on his report on the flora of southeastern Yukon adjacent to the Canol Road, which he submitted for publication in March 1949. He wrote several book reviews and a number of articles for the *Arctic Circular* and prepared a report for publication on a collection of plants from Nueltin Lake, N.W.T., made by Francis Harper in 1948, aided by a grant from the Arctic Institute of North America, for which he also edited and rewrote a report by Finnish botanist Hustich on his forest botanical field work in Ungava. During this time, he was in contact with Dr. A. L. Washburn, Executive Director of the Arctic Institute of North America, who was doing geological research on Victoria Island. The result was a plan for field work in July and August 1949, combining air and land exploration on Banks and Victoria Islands in the Canadian Arctic Archipelago.⁷

Accompanied by Peter Jenness of the Geographical Bureau, son of Diamond Jenness, Erling left Ottawa July 5 and reached Yellowknife July 7. “Spring was exceptionally late north of Slave Lake,” he told Raup in September.

We had hoped to be able to land on a lake at Holman Island by mid-July but were unable to do so until two weeks later. This delay gave me an opportunity to revisit Scented Grass Hill Peninsula on Bear Lake. A very hurried visit in 1928 produced some rather startling discoveries above the 1,500-foot level which made me think that the peninsula might have escaped glaciation. My second visit definitely dispelled any such notion and added very little floristic information; the most startling being *Ranunculus Eschscholtzii*. Even though the peninsula

was glaciated at one time, it certainly was not submerged and may, somehow, have been connected with the Cordilleran system when the Mackenzie basin drained through the Dease Valley.

At Port Radium, near the main pitchblende deposit, I found a colony of *Salix Scouleriana* in which, besides normal staminate and pistillate plants, occurred plants with hermaphrodite catkins and even perfect flowers. I do not know what the significance is, nor if radiation conceivably could have been the cause of this strange aberration. Have you ever heard or seen such a case? As I remember it your monoecious *Salix glauca* from Kluane Lake had normal pistillate and staminate catkins. Have you reported on this? My hermaphrodite *S. Scouleriana* might merit a note of some sort but I am not sure that I can do it full justice. However, even a photograph with descriptive data, in *Rhodora*, might suffice.⁸

On July 30, Erling and Jenness reached the Holman Island Post in a Norseman plane piloted by Ernie Boffa, and joined “Link” Washburn and his wife, the Hudson’s Bay Company post manager Bill Calder, and Father Buliard of the Roman Catholic Mission. Most of the Inuit of the district were at their sealing camps at Minto Inlet and elsewhere, and even Father Buliard was at the time living at his sealing camp ten miles up the coast, where he had 200 large seals temporarily buried in beach sand to preserve them. From the air and the land, Erling could look around the Hudson’s Bay Post more completely than Malte had once done at similar posts in the Eastern Arctic. “Although the sea was still icebound,” he said in his report that was later published by the Arctic Circle, “as far as we could see from the air, summer appeared to be at its height in the Holman Island area, and the landscape, which from the air had appeared rocky and barren, on closer inspection was ablaze with colour. In full bloom on the hillsides back of the Post were masses of creamy-white mountain avens, purple loco weeds, and magnificent yellow cinquefoils. On south-facing slopes we could even find miniature ‘rock gardens,’ all gay with purple gentians, daisies, and Lapland rhododendron, yellow arnicas, and in rock crevices even three kinds of rock ferns.”⁹

Owing to the difficulty of access by sea, Banks and Victoria Islands had until recently been among the least known islands in the Canadian Arctic Archipelago. Erling said: “No professional botanist had previously visited these islands, and for floristic information we had largely depended upon the

collections of plants made by officers of the early British expeditions under McClure and Collinson. It was not surprising, therefore, that in the first two hours of botanizing on Banks Island I doubled the known number of species of vascular plants.”

The first two weeks of settled weather made it possible to do a good deal of useful flying and plant-collecting on Banks Island, but with the late season break-up of the sea, a period of unsettled weather made things more difficult. On August 22, they landed at the foot of Mercy Bay.

The lateness of the day and the threatening fog, which was slowly creeping from the Polar ice pack, made it inadvisable to remain here long enough to explore the foot of the bay for remains of McClure’s winter quarters of 1851–2 and 1852–3 where his ship, the *Investigator*, was abandoned later to be broken up by Eskimo. On the beach I picked up bits of flotsam that undoubtedly were from the *Investigator*. The surface of the wood was bleached white, but scraping revealed one piece to be English oak and another to be mahogany; both were perfectly fresh and sound after nearly a hundred years. Climbing the hill to the east we could not but wonder how many times McClure and his men, during the 3 years they were frozen in here, had climbed this identical hill to look toward the Polar Sea that never opened enough to release their ship. In the steep cliffs facing the bay we found beautifully preserved fossil corals in beds of Devonian rocks.¹⁰

“Altogether we put in about 60 flying hours in the islands with a total of about 20 different places visited,” Erling told Raup.

On a number of those we were able to spend only a few hours but then the flora is so comparatively simple that even such a brief visit gave me sufficient time for obtaining what I believe are fairly complete local lists.... According to a preliminary count Victoria has about 190 species of vascular plants and Banks about 160. Contrary to expectations the flora of these islands have fewer species in common with ‘Berin-gia’ than with the Cordillera. Although probably all of Victoria and perhaps all but the northwest end of Banks Island were glaciated and later submerged at least to the 600–700-foot level, there appears to be a fairly high incidence of endemism.

Washburn confined himself almost entirely to Victoria Isl. and primarily to landform problems, particularly those related to frost action, solifluction etc. He is very pleased with the results of the summer and should have some pretty good stuff. I am, myself, almost completely baffled by the multiplicity and complexity of the frost action problems seen in Banks Island; the existing nomenclature certainly is entirely inadequate for the galaxy of polygon-forms seen there. In fact I am seriously considering renaming the island; Polygonia!¹¹

Back in the Herbarium over the winter of 1949–50, there were administrative changes to adjust to when another new year arrived, and Erling had a new letterhead on his office stationery when he wrote to Raup on 31 January 1950. “The old Dept. of Mines and Resources has been split into three new departments,” he said.

We are the largest, known as Resources & Development which, besides, embraces forestry, lands and development, N.W.T., the Film Board, etc. The Geological Survey is under the new Mines and Technical Surveys Dept., together with Topographical, Geodetic and Hydrographic Surveys, Dom. Observatory etc. and, finally, Immigration [and] Indian Affairs etc. are in a separate department. Thus far things seem rather confused and we do not know yet if the change will help or hinder the Museum. One immediate and far reaching result is that it will speed the departure of the Geologists and the Art Gallery so that the time when we have the use of the entire building is in sight. One bright spot is that Dr. Keenleyside remains Deputy Minister of our department. As long as he stays there the Museum will probably be in clover (relatively speaking). On the other hand, Mr. Gibson, in the shuffle, became our Branch Director. He is due for retirement next year and we do not know who will replace him.¹²

He was hoping that the Raups would be going to Stockholm to attend the Seventh International Botanical Congress that summer. “I want to put in some time looking at arctic plants in London and arctic Eurasian ones in Stockholm,” Erling said. “Elizabeth and Nette are going along and will visit in England with Elizabeth’s parents, except for a short visit to Sweden and Denmark.” The Porsild family left Ottawa on 4 May and returned on August 20. From

July 6–20, he attended the Botanical Congress at Stockholm to which he had been elected a Vice-President, and from July 21–30, he took part in a botanical excursion to Swedish Lapland organized by the Congress. Before and after the meetings, he spent considerable time in the herbaria of the Royal Botanical Gardens at Kew and the British Natural History Museum in London, the herbarium of the University of Copenhagen, and the herbarium of the National Museum of Sweden in Stockholm, for the purpose of examining historical collections of plants made in the Canadian Arctic by early British expeditions in search of the Northwest Passage. He also studied methods of preservation and exhibition of plant material, and in England he consulted the curators with regard to their war experiences in emergency evacuation and preservation of irreplaceable plant material. “The experience of the staff of the British Natural History Museum, which was bombed and partially burned during the war, was particularly valuable,” he reported.

To Raup on September 15, he said he was sorry that they had not been able to come. He was pleased that Elizabeth had left Nette with her grandparents and joined him in Denmark and Sweden. It was her first visit and Erling said she had enjoyed it very much before returning to England before the congress opened.

It was a very good meeting, I thought. You probably have had full and better accounts of it from Merrill, Rollins, or Wetmore so I shall save my story until we meet again.... Before and after the meeting I spent some time in London, Copenhagen and Stockholm browsing through the arctic collections. In London I particularly wanted to look up McClure and Collinson collections for Banks and Victoria Islands. It was a very slow job, especially at Kew where, sometimes it would take me an hour or more to locate some particular specimen. One really would have to spend at least six months to really see what is there! The Stockholm herbarium is in very good shape and is a wonderful place to work. For years they have had a flock of D.P.'s [displaced persons due to the war] available for any jobs they cared to give them (at no cost to the herbarium). Hultén said that at one time during the war, he had forty of them working! I saw the proofs of the last part of the Alaska Flora which should be out some time in 1951. You have, I suppose, seen Hultén's *Atlas of Distribution of Vascular Plants in N.W. Europe*. It is a fine piece of work.

He hoped to see Raup at the Alaskan Science Conference in Washington, D.C., November 9–11. Meanwhile, after three months absence from Ottawa, he was bogged down with office work. “I have been writing a lengthy report on the congress which may be useful if, in 1957, we again extend an invitation to the Congress to come to Canada. Next on my list is a pile of 167 galley proofs of the Yukon flora. I have been afraid to look at them, but must get busy.”¹³

At last, he had a new botanist on staff to work on the long-neglected lichen herbarium. Ivan Mackenzie Lamb had joined the National Herbarium on 26 April 1950 and at once began the reorganization of the Cryptogamic section. Scoggan was working on his proposed flora of Manitoba, while Baldwin spent considerable time that year in sorting and cataloguing the ‘Lawson Herbarium’ which had been presented to the National Herbarium by Mount Allison University. Baldwin was also increasingly involved in numerous museum outreach activities that included organizing the program for the Macoun Field Club for enthusiastic young naturalists “which involved 57 meetings and excursions and two special exhibits and two meetings with parents, friends and sponsors” in that year alone.¹⁴

Sometime in the winter, Hugh Raup sent Erling his paper on the “Vegetation of the Central and Southern Mackenzie River Basin” and Erling returned it with the comment that as always his presentation was very clear and stimulating and he had found it most helpful. On his part, he complained that he seemed to have undertaken to write a total of 20,000 words for Stefansson in three papers entitled (1) Economic Botany of the Arctic (2) Edible Plants of the Arctic and (3) Flora and Vegetation of Arctic Alaska and Northwest Canada.

I really didn’t think I would get it done but when, for a couple of weeks, I was more or less laid up after having my varicose veins excised, I finally got busy, throwing in 7,000 words for good measure. Naturally I have been wondering if any of this material will ever be published, and when recently I was down in Washington for the Arctic Institute Board of Governors meeting, I had a chance to talk to John C. Reed, who seemed very doubtful that the Navy would even wish to see the work completed let alone have it published. Later I spent the best part of a day in New York with Stef, who admitted that the Navy had cut down his appropriation, and that there was a distinct possibility that there would be insufficient funds for the completion of the remaining fourteen volumes. The first six I believe are ready for the printer. Stef

said the printing was assured on a commercial basis as soon as the Navy would agree to having the balance of the work completed.

For some time we in Canada have been having grave misgivings about the recent trend of development in the Arctic Institute. We are not happy about Link's somewhat autocratic and unilateral decisions, and we think that the recent move to Washington will make it imperative that the Canadian cooperation should be quite independent, since otherwise we shall be quite unable to obtain financial support in Canada.¹⁵

There were other grave misgivings that winter about what was happening on the other side of the Pacific, with reports of the build-up of the Soviet-backed North Korean army near the boundary line with U.S.-supported South Korea. "The Museum, and various other Government agencies, have had their field appropriations cut severely as part of the new war-scared economy move," Erling said. "Still we hope to have Scoggan and Baldwin back in Manitoba; and Mackenzie Lamb and I may be able to spend a month or two in Banff and Jasper Park, where I have a few things to do before I can really get busy on the Rocky Mountain Flora. What are your plans for the summer?"¹⁶

The Raups had just come back from five weeks in Honduras when they received Erling's letter on March 12. They were not going far that summer as they had a new scheme of student instruction, provided the Army did not pick up too many eligible people. It looked as if their older son, Karl, who had assisted Erling in the field one summer, might be drafted into the forces, but they wondered if Erling would like to take on their second son, David, who was doing his first year at Colby College in Maine and planned to major in geology. "Do you want to take on Dave if you go to Banff and Jasper? Please speak with complete frankness. We probably can scare up the cost. It would be the best thing in the world for him."

Erling said he would love to have Dave come along, although he could not afford to pay him and could only offer transportation as he was going to drive to Banff with Mackenzie Lamb, but by mid-April "most of the 'shopping' has been done and there, somehow, seems to be enough money left in the Museum kitty for some field work and, if all goes well, I plan to leave Ottawa for Banff some time early in June.... Following the division between Museum and Geol. Survey the Museum was left with very little field equipment and almost with no motor vehicles. So, rather than depend on the Parks people for transportation,

which would be most unsatisfactory, I am being ‘permitted’ to drive my own car west and to use it in the field (collecting 3 cents a mile).” He did not think the trip would be a very expensive one and thought the summer would be quite interesting if Dave did not mind the long ride in the car. “I plan to go by Sault St. Marie and then to cross into the States and to come back north into the Cypress Hills where we may spend a week or so. The return trip, too, will be through the States, possibly by another route. I have tentatively planned to be back early in September. Actually the field season is pretty well over by the end of August.”¹⁷

On June 25, the North Korean army crossed the 38th parallel boundary line into South Korea, and Canada was soon once again at war, as part of the twenty-one United Nations countries that joined the United States in the defence of South Korea. By the end of the summer, young Karl Raup had finished his boot camp and was waiting to be called up for the front. Meanwhile, it was a good collecting summer in the mountains. Mackenzie Lamb left in early August and David Raup was home by August 22.

Erling flew north on August 20 from Edmonton to Whitehorse where Bob Porsild joined him for the first botanical collecting trip the brothers had done together since Great Bear Lake in 1928. He told Raup that it was “a most enjoyable and profitable excursion into the Carcross area. I have always wished to examine the sand dune area and to have a first hand look at its most interesting flora. Unfortunately the summer had been extremely dry and everything was pretty badly dried up, but I did, nevertheless, get a pretty good idea, and a collection of specimens including some of the rather puzzling things found there. In my Yukon Flora I questioned whether some of the strange lupines of that area were really indigenous, but after seeing them in the field, I am fully convinced that they are.”¹⁸

While he was visiting Bob and Elly and family at Johnson’s Crossing, Erling said the fishing was excellent and there was a run of king salmon “the like of which I have never seen, and my brother told me that one day a tourist hooked a 60 lb. one which dragged him off the bridge into the water.” From there, he continued to Fairbanks and McKinley Park for the Second Alaska Science Conference from September 4–8. “The meeting there was very pleasant and it was nice to see and talk to many old friends; but I must admit that after the Washington meeting, the one at McKinley Park seemed somewhat anti-climactic.”¹⁹



R. T. Porsild (CMNA)

Meetings on Northern affairs were taking up more and more of Erling's time. In October, he took Elizabeth with him to New York when he had to drive down for a Board Meeting of the Arctic Institute of North America, which had been an important one. "The morning session was stormy," he told Raup October 27,

... and just before the recession for lunch it looked as if we had reached a deadlock. When the Canadians made a move to appoint an executive director, the Americans countered with an 'amendment' to appoint two executive directors, one for Washington and one for Montreal. We thought the amendment nullified the motion, but to our surprise the chair maintained that it didn't. For a while it looked as if the Institute was going to break up with board members resigning right and left. Then someone moved adjournment for lunch. A lot of martinis were passed around and they acted as oil on the troubled waters. During the meal there was a lot of visiting around the table when most of the difficulties were ironed out. At any rate, when the meeting was resumed, the amendment was duly voted on and defeated whereupon the motion for one director with executive powers was carried unanimously. So, in the end, all ended harmoniously and it now remains to be seen if the new executive director-elect will accept the job.²⁰

Erling and Elizabeth stayed with Hugh and Lucy Raup at Petersham during the meeting and then spent three nights in the family's apartment in Cambridge while Elizabeth went shopping and Erling visited the Gray Herbarium. He would have liked to have had more time but managed to have a good talk with Rollins and hoped to get down again sometime in the winter after working on the Banff collection. "It will be strange to be working there again and to come into the library without finding Fernald at work on the long table," he said. Driving back through the Adirondacks, Erling said he could not recall a more enjoyable trip through such pleasant and colourful country.

His next report of family happenings was not nearly so happy, however. Writing to Raup on January 21, he said that Elizabeth had had the misfortune of picking up measles at a New Year's party. Fortunately there did not seem to be any complications but she was quite miserable, and of course had to be isolated and in bed for over a week. "She is up and around again, but feels rather weak," Erling said. "She should be back to normal, however, by the end of the

week.” Despite his optimistic forecast, Elizabeth Porsild would not be well even when she was over the measles as she had been waiting for months for an operation to repair problems from a previous operation and could return only to some semblance of normality while waiting to hear from the hospital.²¹

Meanwhile, Erling was on the Publications Committee for *Arctic*, and Diana Rowley had left him a handful of manuscripts to consider. Among them was one written by Nicholas Polunin that he considered was “Nick at his worst” and was curious to see what Raup thought of it. “Diana Rowley tells me that he must have a decision soon because *Scientific Monthly* is anxious to print it. He is rather scornful of the S.M. but if *Arctic* cannot use his msc, he will let them go ahead and print it. Now, I ask you, how can anyone bring himself to make such a statement on paper? The *Scientific Monthly* would no more print Nick’s present ms. than fly – and if they do I shall think less of them.”²²

Raup returned the paper on January 23 with the comment that it was not to be highly recommended.

It falls far short of doing what it sets out to do. To begin with, it is much too wordy. Everything of consequence in it could be said in a fraction of the space. It is full of divergencies and gratuitous remarks that don’t add anything. Furthermore, there seems to me a lack of a ‘critical attitude.’ I don’t know how to say what I mean. It has to do with a great deal of Nick’s work. Everything seems to be about equally interesting to him, and he seems not to be able to sort out what is genuinely significant. I suspect that this is some sort of hold-over from his early and more or less romantic approach to arctic problems. He decries the early lack of direction in arctic botany and then proceeds, in expressing his own views, to seek to perpetuate the same thing. It seems to me that critical evaluation of the course of events in arctic research is one of the most essential things just now.

Later, he added: “Incidentally, Nick Polunin is in something of a dither, for he has no job for next year. It is pretty hard for me to keep from saying things I ought not to when he talks to me about it.”²³

March brought discussions of the new Grants-in-aid Committee of the Arctic Institute on which Raup had agreed to serve. Erling hoped that he could make some improvements as to how the grant applications were handled. He had often wondered, he said, if the committee had really taken time to consider

each application on its merits, or if, perhaps, those applicants known to committee members had not been arbitrarily favoured. He had been acting as a botany scrutineer and giving his opinions on the respective merits of each application to the best of his ability. "By and large my recommendations have been followed – at least to the extent that rarely has a grant been given against my recommendations. Naturally the committee should be free to accept or reject a recommendation of the scrutineers but I do not think that the committee ought to award grants to applications that had bypassed the scrutineers, as has happened on some occasions. This year, for example, more than half of the very small amount awarded to botanical projects was given toward a project that neither you nor I had seen or heard about which was submitted by a man that I, at least, had not even heard of." He was hoping that the new research committee might concentrate on worthwhile arctic research projects, "for I feel that a number of projects which were submitted in the past have not been too carefully planned and not always well chosen, while other and more worthwhile projects have been completely overlooked." Raup agreed, and thought that a great deal of the difficulty stemmed from a consistently uncertain and occasionally poor policy in selecting grantees for its research funds. "I think that any program for getting together and publishing statements of research needs is wasted effort until this basic problem is dealt with."²⁴

The Raups were hoping to get up to Ottawa for a spring visit, and Erling wrote on April 22 to say that he and Elizabeth certainly hoped and expected to see them "before you get too bogged down with visitors." He was planning to spend a week or ten days at the Gray Herbarium, probably the end of May. "I had hoped to get down earlier but various reasons have caused me to put it off, including the uncertainty of when Elizabeth could get into hospital. She has been on the hospital waiting list since July last and only a few days ago was told that she could come in on May 6th. She will be in hospital no more than a week, we hope. While she would be sorry to miss you, there is no reason why you could not come, even if she is not here, if you would be willing to risk Nette's and my cooking."²⁵

Another reason for Erling's postponement of his trip was that his daughter Edith (who now preferred to be called Karin) was getting married sometime in May. The Raups decided to put off their visit until later, and it proved to be a wise decision because Elizabeth had to be rushed into hospital on May 5, when "her condition, which had long been quiescent, suddenly became acute. All is well now," Erling wrote on June 2, "and we hope that her troubles, that all date

back to adhesions following an earlier operation, are permanently cleared up.” Karin Porsild and Harry Lumsden were happily married on May 23 before going to live in Tweed, Ontario. With Elizabeth improving at last, it seemed that life had a chance of returning to normal in the Porsild household after the long months of being kept on hold.²⁶

Things would not, however, be normal for quite some time in one area of Erling’s life, although ostensibly his work in the Herbarium continued as before. A quick look at the April–June quarterly report for the herbarium shows that Mr. Porsild completed the first draft of a 139-page manuscript on the Flora of the Islands of the Western Arctic Archipelago and began writing a Manual on the Botany of the Canadian Arctic Archipelago. He determined and checked numerous plant specimens, wrote reports and briefs, and attended several meetings. On May 19–20, he attended all-day meetings of the Interdepartmental Committee on Eskimo Affairs; on May 30, the meeting of the Advisory Board of Wildlife Protection, on June 13–14 all day meetings of the Annual Provincial-Federal Wildlife Conference; and, on June 16, a meeting on the Administration of Arctic Affairs. On June 19, he left for Boston and New York to spend two weeks working on critical plants and plant illustrations in the Gray Herbarium of Harvard University and the New York Botanical Gardens.²⁷

All this and more was normal routine work for Erling and was duly reported in the proper channels, but nowhere in the official reports is there mentioned a word about a damning review that Erling wrote for *The Beaver*, the magazine of the Hudson’s Bay Company, that would raise a storm of letters and editorials across the country for the next several months, a storm out of all proportion to his usual sphere of northern and botanical activities.²⁸



CHAPTER FORTY

STORM OVER THE ARCTIC

In the fall of 1949, a young man named Farley Mowat began a book about a group of northern people, based on two summers in Keewatin that had shaped his concern for their welfare. “I would like to keep myself out of it as much as possible,” he told Dudley Cloud, editor-in-chief of *Atlantic Monthly Press*. “I want to let the Eskimos tell most of their own stories. I think this can be done with authenticity since one of my labours was the compilation of an Ihalmiut vocabulary, the doing of which made me at least somewhat familiar with their language.... The book must have a heart and, equally vital, a purpose. The fate of the Ihalmiut is at the heart of the story, and the purpose is to draw attention to their plight and to that of all the native peoples of the north. And elsewhere, for that matter. So you can expect me to beat the drum about that quite a lot.”¹

The book came out in the early months of 1952, and in the calm before the resultant storm of controversy began, a letter came to Ottawa from George Douglas in Lakefield on April 1, saying that he thought Erling was the person to write a review for *The Beaver* of an “irritating” book by Farley Mowat called *People of the Deer*. This was followed by a telegram from Clifford Wilson, Editor, at Hudson’s Bay House in Winnipeg: “AGREE WITH DOUGLAS YOU ARE BEST MAN TO REVIEW MOWATS BOOK FOR BEAVER /STOP/ TRUST YOU WILL DO THIS PLEASE PLEASE REPLY COLLECT.” Without any idea what he would be letting himself in for, Erling agreed to write it. On April 8, Wilson wrote to say that he was glad that Erling would do the review and was sending him a copy of the book, in which he had made several annotations with the help of some of the Company men who knew the area in the Barrenlands of which Mowat had written. In case it would be of some additional help, he was also sending the remarks made by P. G. Downes for the *New York Times* on February 24 on “some

of Mowat's more outlandish statements," because it was the only unfavourable criticism he had seen, and because it was "the only one written by a person who knows the country." Could Erling let him have his review, that might be a thousand words long if he so wished, in about a month's time?²

Although "in a month's time" would be during the same period when his life at home was in complete turmoil, Erling buckled down to read the book that by now had received glowing reviews from many quarters, including no less a person than Hugh MacLennan at McGill University, who was quoted as saying that it was "the finest book of its kind ever to come out of Canada." Stefansson, who had once taken a beating for his claims of finding the unknown "Blond Eskimos" of the Arctic coast, had given his blessing to this new book about an unknown and threatened Eskimo tribe named Ihalmiut that was starving to death in the Canadian Barrenlands. "A book of rare force, beauty, and vigor which most readers will find difficult to put aside and impossible to forget," announced a reviewer in the *Boston Sunday Herald*. "A continuously interesting account of one of the least known regions of the North American continent and a collection of entertaining stories. Some of these are about Mr. Mowat's own adventures. Some are his recreations of Ihalmiut legends, folk lore and oral history," said the one in the *New York Times* that was not written by P. G. Downes.³

Taking account of the adverse comments that came with *People of the Deer* from the Hudson's Bay Company sources but bringing to it his own depth of arctic experience and his long training in scholarly exactitude, Erling later told the editor of *Natural History* that in reviewing the book he was shocked by its numerous misstatements and half-truths. "Perhaps I should take a more charitable view of authors and their statements," he said,

... but in this case I do find it rather difficult, knowing the background of the book. Or perhaps it is merely that, as a scientist, I object when writers deliberately contort the truth or fabricate evidence to 'prove' their point.... On general principles I do not think writers should be allowed such license when writing to inform or instruct; for if they do, how is the uninformed public ever to know what to believe? ... It is, of course, an undeniable fact that the Caribou Eskimo, as well as other primitive tribes of Canadian Eskimo are dying out. This, if you will, is the only truth contained in the book; but the sensational slant which Mowat gives their tragic story in order to sell his stuff has little or no relation to actual facts.⁴

In view of all the trouble that would later ensue, it is a great pity that he did not phrase his review in *The Beaver* in much the same general vein. Instead, carefully avoiding any reference to his own extensive background in the north, he went through the book and tore it apart down to the smallest details. Mowat was writing about the inland Eskimos who were allegedly being exterminated by neglect in the Barrenlands around Nueltin Lake, a place a little to the south of where Erling and Bryenton had travelled in 1930 and where they had given some of their own supplies to needy people whom they met along the way. Mowat was recommending that the government should bring in reindeer to relieve the starving people, yet Erling knew the land was unsuitable because he had seen it for himself. Far from no one in government caring about these people, the whole Canadian Reindeer Project had been based on trying to help them. Yet Erling did not mention any of this, no doubt because he did not wish to draw the government into his arguments, and when he submitted his review on May 21 he asked Wilson to bear in mind that it was written as a private individual rather than as a spokesman for the Department of Resources and Development.⁵

Apart from what Mowat would later claim were minor discrepancies, what for Porsild was the most damning thing about Mowat's book were the population figures he was claiming for the "Ihalmiut" that had been all but wiped out due to government neglect. Who were these thousands of mythical "people of the deer" that everyone else seemed to have overlooked? Erling had read all the literature giving more realistic figures that Mowat discounted, he did not believe there was such a separate group of people, and he could not believe that the writer had learned the difficult Eskimo language in the short period he claimed, which made the stories of their history as told to the author without an interpreter seem even more unreliable.

As far as people with experience in the North could see, a major problem with *People of the Deer* had to do with Farley Mowat's apparent claim that it was all true, when, in fact, to strengthen his narrative as he later freely admitted, he had skillfully altered details and woven fiction into the circumstances of his expedition, circumstances that could easily be proved to be other than those depicted. His first creative change was the description of how he had gone to the Nueltin Lake area entirely on his own in the summer of 1947 but Erling had been working on the plants collected by Francis Harper at Nueltin Lake that summer and knew that Mowat had not been alone. When Harper's grant from the Arctic Institute of North America had been approved in April 1947, he had

written to tell Erling that he was hoping “for the participation of Farley Mowat, of Richmond Hill, Ontario. He seems to have exactly the right qualifications, and it is merely a question of financial support, on which I am trying to get help for him.”⁶

A relayed report, dated 9 April 1952, to Clifford Wilson from Doug Clarke, Supervisor of Wildlife Management in Toronto, confirmed that Farley Mowat had joined Harper’s expedition in Toronto in the spring of 1947. “They flew from Churchill into the Schweder establishment and set up headquarters there,” Clarke said. “Mowat parted company with Harper some time during the summer and made a trip into the Barrens. I presume that he was with Charles Schweder and that he made some brief contacts with Eskimos. He got a flight out to the coast with someone and came back to Toronto. Harper stayed at the Schweder cabin until Christmas.”⁷

Erling now contacted Francis Harper at Mount Holly for the correct information and received a reply that left no doubt as to Harper’s opinion that the “certain person” in question was so odious to him that he wished there was never an occasion to be reminded of him. “When I dismissed him for intolerable conduct in early July, 1947, I insisted that he should never mention my name in print, and I said I would do likewise by him. I hope nobody else will refer even to our temporary association.” No one could say that Farley Mowat had not stuck to his side of the bargain when he avoided mentioning Harper in his story, for his feelings about his superior were equally critical, but it certainly added fuel to the flames that his account was not to be trusted.⁸

“I am beginning to think that my acceptance of the assignment was ill considered,” Erling wrote to Douglas on April 16, “for of the many bad books about Eskimo in the arctic which have been published in recent years, I am sure this is easily the worst. I have not yet completed the reading but the more I see of it the less I like it. However, the book has already been given too much publicity and serious consideration, and I suppose a review in *Beaver* may do some good.” On May 28, he said the review of *People of the Deer* was done and he had already seen the proofs. Making light of all the work it had involved, he said: “It was fun doing it, and I am wondering now what Mowat will think of it. Somehow I don’t think he will like it.”⁹

The review by “A. E. Porsild” came out in the June issue of *The Beaver* and began with a summary of what was known of the people of the northern interior.

The Caribou Eskimo are a small tribe of Canadian Eskimo who live in the interior of Keewatin and, until a few years ago had few contacts with the outside world, depending almost entirely on caribou for food and clothing. Although they lived within a few days' travel of the west coast of Hudson Bay, J. B. Tyrrell, in 1894, was probably the first white man to visit them, and not until after 1921–22, when members of the Danish Thule Expedition visited them, was much known of their life and primitive culture.

During the summers of 1947 and 1948, Farley Mowat made brief excursions into the land of the Caribou Eskimo, and in *People of the Deer* presents what is claimed to be a factual account of the past and present of one small band of Eskimos living on the upper Kazan River, near Ennadai Lake. By evidence that is far from convincing, and very often totally erroneous, Mowat attempts to show that this small band a generation ago numbered into the thousands, but is now rapidly approaching extinction, largely because of Governmental neglect and indifference. *People of the Deer* is a book of pungent charges and accusations, not only against those Government officials in Ottawa who are charged with the welfare of Canadian Eskimo and Indians, but also against those who have assumed the responsibility for their spiritual care and, last but not least, against the traders and trading companies whose exploitation, according to Mowat, most of all is responsible for the present plight of the Caribou Eskimo. Some of these charges are very grave, and they will, unfortunately, be read by many who lack first-hand knowledge about the Arctic.¹⁰

It was in the latter part of his review that Erling pointed out some of the more “serious errors and half-truths” that he had found in the book, and his “few samples” to illustrate them are best summarized in an unpublished internal memo accompanied by a letter from Clifford Wilson, July 14.

Mr. Porsild charges that Mowat claims falsely to have spent two years in the Arctic; that he conceals the fact that in 1947 he was a junior on an expedition led by Dr. Francis Harper; and that he was junior to Andrew Lawrie on a government expedition in 1948. He implies that Mowat lies when he describes thousands of caribou crossing Windy Bay, by quoting Harper as saying the largest herd seen by him

numbered 75; and that his estimate of thousands of deaths caused by tuberculosis boils down, on analysis, to 73. Porsild also charges that it is impossible to learn [to speak Eskimo fluently] in a month, that Mowat traded without a licence and as shabbily as the traders he attacks, and that his estimate of earlier population in the north is wildly exaggerated.¹¹

Reviews of the “A. E. Porsild” review were soon hot off the press in places like the *Montreal Star*, which printed an article favouring Erling’s points on June 21. The very specificity of Erling’s attacks invited corrections, and Farley Mowat, enraged by the charges against his work and personal veracity, was not long in demanding that *The Beaver* should print his counter-attack. Wilson refused, on the grounds that he did not want the argument to go on forever, nor did he wish to continue to promote the book by this means. “I wonder if you have received, like we have, the six page mimeographed rebuttal by Farley Mowat to your review?” he asked Erling July 14:

It’s a weird sort of thing – on the surface almost as plausible as his book – though in one place he says that you accuse him of spending a full two years on the Barrens when he says that he never made that statement anywhere in the book. On page 89, however, he does say that after two years in the Barrens he still calls them by that name, and nothing could be much plainer than that... One interesting point he brings out is that he wilfully mixed up the chronology ... in the interests of ‘literary craftsmanship,’ though why, it is hard to make out. Possibly he took liberties with the chronology of other parts of the book going back into the 19th century.¹²

The question of whether *The Beaver* should or should not publish Mowat’s defence was further debated in the press. Eventually, a copy of the rebuttal was sent to the *Montreal Star* by the publisher and an extract was printed in the “Letters to the Editor” on July 15. In his rebuttal, Farley Mowat said that Mr. A. E. Porsild clearly intended to prove that he was “a congenital liar on the basis of a few minor errors.” In return, he pointed out that Porsild had deliberately misrepresented his claim that the book dealt with only one small band of Eskimos when he had stated clearly that it included most of the former inhabitants of over 100,000 square miles with an original aboriginal population of

2,000 individuals. Mr. Porsild had also talked of his vagueness as to routes and dates of his own travels. "I frankly admit to this vagueness," he said, "and fail to see that I have sinned. My book was an attempt at a work of literary worth and to preserve its unity I transposed occasional events to suit the needs of good craftsmanship. At no time did I attempt to write a personal diary or a journal but, instead, I wrote a book about THE PEOPLE OF THE DEER."¹³

He flatly denied that he was an assistant to Dr. Harper "in his one-man expedition" to collect birds, small mammals, and plants in the Nueltin area. "In fact Harper and I were together for only a few weeks in all. I should add that in an article published in *Natural History* some time before my book appeared, Dr. Harper in writing of his Nueltin experiences signally failed to make any mention whatsoever of myself. This neglect draws no raised eye-brows from Mr. Porsild – but when I do the same thing in my book I am accused of deliberately altering and distorting facts." Similarly, when he and Andrew Lawrie had planned their trip to the North in 1948, "it was made quite clear to us that unless we worked for the Government, we would be unable to go north at all. Perforce we agreed. I was enrolled as a student-biologist and was paid accordingly. Neither Mr. Lawrie nor I was subordinate to the other, in any sense except a purely administrative one in Ottawa. I find it hard to see why I should be blamed for neglecting to recount all this in my book."¹⁴

He also denied having claimed to have spent a full two years in the north; in fact, he said, he made it abundantly clear in his book that he entered the Barrens in the spring and left in the fall of 1947 and did the same in 1948. Regarding Mr. Porsild's implication that he had not seen anything like the numbers of deer he described, he quoted Banfield and Lawrie who reliably reported seeing thousands of animals in one day in the same general area and at the same time of year. Harper might have been correct in saying he had only seen seventy-five at once but "he did not witness the occasion described in my book when the deer trekked north in the spring of 1947." He acknowledged that he was only at fault in saying that the deer he saw at that time "were largely without antlers."

Mowat said that Mr. Porsild claimed that he falsified figures but counter-charged that he was equally capable of juggling them himself when it came to numbers of deaths from tuberculosis. Mowat quoted his source from the Canadian Tuberculosis Association to back up his statements. As for the statement that it was impossible for him to have learned Eskimo in such a short time,

Mowat agreed that many white men in the Arctic never learned it because they refused to speak the language of what they considered to be an inferior race.

Nevertheless a glance at many arctic works by men of authority will show that it is possible to acquire a good knowledge of Eskimo in a very short time. For example, let me refer Mr. Porsild to the work of Dr. Douglas Leechman, Dominion Archaeologist; and to the book, *Hudson[’s] Bay Trader*, by Lord Tweedsmuir. Old ‘arctic hands’ to the contrary, the ability to understand, and to be understood by Eskimos can be acquired – with hard work – in three or four months. Mr. Lawrie learned the language during the same period that I was studying it, and we were both able to carry on long and fairly involved conversations with our Eskimo friends, without much trouble.¹⁵

Erling wrote to Clifford Wilson on July 22 saying: “I do not think that Mowat’s effort requires any further statements beyond what you have already made. I have checked it point by point, and I can find no case where his comments have, in any way, disproved or invalidated what I said. I have checked with the records of the Arctic Institute which show that Francis Harper, not Mowat, was given a grant in support of the Nueltin Lake expedition.”¹⁶

If Mowat had dealt with all the Keewatin Eskimo across a hundred thousand miles, as he said in his rebuttal, Erling questioned, how did he explain his statement in the book that members of the Fifth Thule Expedition did not meet the “Ihalmiut” or even learn about them? Since when was it “good craftsmanship” deliberately to falsify facts and events, or to transpose events, or claim to have travelled by canoe on a trip that was actually made by plane? As to his examples of other men who had learned to speak Eskimo in a short time, Erling said: “Many and better books have been written about the Eskimo without their authors having found it necessary to claim that they had learned to speak Eskimo – let alone in one month. Neither Douglas Leechman nor Tweedsmuir or Michae [Miche] claim to speak Eskimo. They have all managed to get their information from real Eskimo – perhaps less glamorously, but probably more accurately – by the use of interpreters.”¹⁷

There was no evidence whatsoever to support Mowat’s claim that there were ever 2,000 Eskimo in Central Keewatin. Hearne found no trace of Eskimo there in 1770, Birket-Smith on the Fifth Thule Expedition stated that the total Eskimo population of Keewatin district was 432 of which only about 200 lived

in the interior in 1921, and according to the 1951 census, the Eskimo population of Keewatin District was 1,286.¹⁸

Erling sent a copy of Mowat's reply to George Douglas on July 29, commenting that he thought it was a very poor effort. "I don't know how long this controversy shall be going on," he said. "The time I have spent on this book is all out of proportion to its value, and what worries me most is that it is probably all grist to his mill. I do, however, derive a certain amount of amusement from it and, I suppose, it has killed its chances of being included in the list of required reading for Ontario High Schools. This alone would be worth some effort." He added that he was staying home that summer in order to complete a couple of books on arctic flora, and after almost six weeks of hot and sticky weather he was taking the family for a week's camping and canoeing somewhere on the Georgian Bay north of Perry Sound. By August, he could tell Douglas that it had been a very hectic summer in Ottawa. "I decided not to do any field work in order to catch up with two latish reports on the Arctic Flora that I just had to get off my hands. Actually it has not worked out very well for with most of the Museum staff away and with Dr. Alcock away on frequent trips, I find that I have had very little time free to carry on my own work."¹⁹

While Erling still hoped that it would all die a natural death, the Porsild-Mowat controversy continued to simmer into the fall. "A literary battle without modern parallel in Canada," Scott Young of the Canadian Authors Association described it when he threw in his unqualified support on the side of the author in an article entitled "Storm out of the Arctic" in the October 18 issue of *Saturday Night*. "The fight is over the book called *People of the Deer*, by Farley Mowat, a young ex-infantry officer who spent most of 1947 and 1948 in Eskimo country," he said.

The antagonists are the author and a magazine called *The Beaver*, which is published by the Hudson's Bay Company. In its June issue, *The Beaver*, among whose functions is that of professional debunker of all views of the North which do not conform to the Hudson's Bay Company's long and not entirely distinguished experience in that area, blasted Mowat's book in a review ... written by A. E. Porsild, an Arctic expert employed by the Government, which Mowat criticizes more strongly even than northern traders in his book. Therefore, you might say that the two agencies criticized most bitterly in the book teamed up to answer it.

“Some people counselled Mowat to sue,” Young said:

Mowat wisely refrained, just as the Hudson’s Bay Company had wisely refrained from suing Mowat for criticisms of northern trading policy in the book.... One factor which gives this controversy an importance (even above the moral one that an author called a liar has been refused the right to defend himself) is that the book has been such a success here and abroad. In the United States, where it was published by Little, Brown & Co. after parts of it had been serialized in *The Atlantic Monthly*, the book was chosen for distribution by the Literary Guild. In England, it was a Book Society choice for September. It is being translated into French and Swedish.... It has been praised by Danish Government officials who in Greenland have met with vigor, intelligence and much success, many of the problems of northern natives which have been bungled by the Canadian Government through a combination of half-measures and no measures at all. And a French anthropologist who is also an Eskimo linguist has called the book “certainly one of the best books ever written about the Eskimo,” and he also verified in general material Mowat gained (in the Keewatin district of the Northwest Territories) by conversations with Eskimos of the dwindling tribe of caribou-eaters called the ‘Thalmiut’ with which the book is mainly concerned. This French anthropologist thus supported Mowat on a point which was the object of some of *The Beaver’s* strongest ridicule – the very possibility that Mowat could learn the Eskimo tongue well enough to understand it. If one is to believe *The Beaver*, most career Arctic specialists find no time to learn the language.

People of the Deer is, to me and to many other readers, a magnificent book, an unforgettable portrayal of the present and past of a victimized people. Its enthusiastic public acceptance here and abroad attests its basic appeal, which is that of any vital, well told story. The attempts by these old Arctic hands of the Hudson’s Bay Company and the Government to discredit it seem to reflect the narrowness of their approach to the Eskimo problem. Any real humanist among them must admit that the major contentions of the book are true – that before we came the Eskimos were happy aborigines, able to combat their natural enemies, but that the weapons and diseases of white men

have corrupted them to the extent that they no longer can cope with the forces that are destroying them.²⁰

Prior to the publication of Scott Young's article in October, the Editor of *Saturday Night*, R. A. Farquharson, sent the manuscript to *The Beaver* for comment. Clifford Wilson promptly passed it on to Erling, who wrote to Farquharson on September 15, hoping to dissuade him from publishing it. "Because of certain imputations made by Mr. Young," he said,

I should like to point out that my review of *People of the Deer* was written solely from the point of view of a scientist whose work has brought him in close contact with the Arctic and with Arctic problems, but not with the actual responsibility for the administration of the North. To show why I consider myself in a position to write at least with some authority on the Arctic, I might mention further that I spent my boyhood in Greenland among Eskimo and have spent a considerable part of my adult life in arctic work. I know the North American Arctic from Alaska to Greenland from personal observation, and I have travelled extensively in arctic Europe and Asia as well. I have travelled and lived among nearly all Eskimo tribes, including those that Mr. Mowat is concerned with. I speak the language of the Eskimo, I know a good deal about their customs and problems, and I am deeply concerned with their future welfare, for I have found among them some of the finest people I have ever known.

Unfortunately the problem of what to do with and for the Eskimo is a very difficult one for which there is no entirely satisfactory solution because conditions vary so greatly from tribe to tribe over the many thousand miles of arctic coastline along which our few thousand Eskimo live. It is pointless to make direct comparison between our Eskimo and those of Greenland where, for two hundred years, the native population has been kept completely isolated by a paternalistic Danish Government mindful of the needs for a deliberately slow but gradual education of the Eskimo. I might point out here that the system which has worked so well in Greenland is, in many respects, similar to that adopted by the Hudson's Bay Company in the early days when that Company held what amounted to a trade monopoly in the Canadian Arctic.

It is well known that for a number of years there has been a decline and a worsening of conditions among the more primitive Eskimo tribes in Canada. Owing to improved means of transportation, even the most remote tribes have at last come into contact with civilization; and the impact upon them has almost invariably been disastrous because they were unprepared for it, and unable quickly to adapt themselves to the white man's food, his tools and his diseases. But the question whether the Government could or should have prevented this contact, is at best academic; and it may safely be assumed that if it had, there would have been no lack of critics who would have found such a policy high-handed and unrealistic.

In my review of *People of the Deer* I am defending neither the policy of the Canadian Government in dealing with our native peoples, nor the past or present policy of our northern trading companies. That of the Hudson's Bay Company, at least, can well speak for itself. My only concern was to show that Mowat's book, notwithstanding the favourable views expressed by numerous reviewers, is misleading and utterly worthless as a crusade against alleged maladministration, because the premises upon which its conclusions are built are wrong or even fictitious. To prove this, it was necessary to cite some of the more glaring examples of errors and falsehoods. Some of these errors Mr. Young pronounces unimportant and trivial. They might be in a work of fiction, but not in a book that claims to be factual; for, if the author of such a book, whether through ignorance or design, is consistently wrong about his 'facts,' how can his conclusions be other than worthless?

In his treatment of figures and facts Mowat is completely unscrupulous. In posing as an authority on Eskimo and arctic problems, he leads his readers to believe that he has lived in the Arctic for considerable time, or, to be exact, two years. Thus, on p. 89, when speaking about the Barrenlands, he says: "... after two years in the land ...," and in a letter printed in the *Globe and Mail* on March 31, 1952, he categorically states: "I myself spent two years in the so-called barrenlands." An examination of official reports and Government files actually shows that Mowat was in the Barrenlands no more than 47 days altogether and that, during 1947 and 1948, he spent no more than six months all told in the Northwest Territories. Such 'inaccuracies'

may seem trivial to Mr. Young but they make me wonder about Mr. Mowat's veracity, especially when later, in his reply to my review, he flatly denies having ever made such a statement.

Because Mowat lacks first-hand information about Eskimo, he manufactures it. Hence the 'Ihalmiut' tribe which Mowat has created solely as a vehicle for his attack on Government administration and on the 'wicked' traders. There never was such a tribe, nor is there even a thread of evidence in support of his claim that there ever was a tribe of Eskimo, several thousand strong, living on the upper Kazan River. In 1770 Samuel Hearne saw no Eskimo there, nor any indication that they had ever been in what was then Indian country. When the discrepancies between Mowat's story and the 730-page scientific report of the Danish Fifth Thule Expedition becomes too evident, Mowat (p. 256) merely dismisses Rasmussen and Birket-Smith's contacts with the Caribou Eskimo as having been brief and clouded.

In his reply to my review Mowat claims that I deliberately misrepresented him by stating that his book "deals only with one small band of Eskimo ... for I state clearly that the Ihalmiut – of whom I write – include most of the former inhabitants of central and southern Keewatin Territory – an area of over 100,000 square miles..." This, of course, is absurd, for an area of 100,000 square miles would comprise all that part of Keewatin lying between the 60th parallel and Wager Inlet or, in other words, all the inhabited parts. Furthermore, on p. 256, Mowat specifically states that "Rasmussen never met the Ihalmiut, and never even suspected their existence." Rasmussen for obvious reasons did not mention the 'Ihalmiut' because there never was such a tribe, but he and Birket-Smith did write a large volume about all the Eskimo of Keewatin District. If Mowat had taken time to read this volume more carefully, he might have avoided a number of mistakes, for Rasmussen, being part Eskimo himself and a great scholar, was undoubtedly the greatest authority on Eskimo.

Most telling is Mowat's claim that he obtained his evidence and background information, including such matters as folklore, history and religion, direct from Eskimo who knew no English at all, and without the aid of an interpreter. To get around this difficulty he claims to have learned to speak the Eskimo language, and to have accomplished this astounding fact in just one month. Says Mowat

(p. 121) “In a month’s time I was able to make myself understood and I could understand most of what was said to me.” And on p. 123, “I found I was able to speak about quite abstract subjects, and incidentally give the lie to those who say that these ‘natives’ are unable to think, or express themselves, in abstract terms.” To have learned French or German in a month’s time would have been a considerable accomplishment; since philologists agree that the Eskimoic is one of the most difficult and complicated languages known, this claim shows how utterly worthless his evidence is.

If Mowat had been content to write a book about his travels and personal impressions, or if he had chosen the novel as his medium, no great harm would have resulted; but in a book which claims to be factual there is, in my opinion, no place for ‘poetic licence.’ To judge from the present article by Scott Young, and from the numerous favourable reviews of *People of the Deer*, Mowat’s style must, somehow, be convincing to writers who know little or nothing about the Arctic and who do not care to check statements. But it seems to me that such reviewers should be content to discuss only the literary merits or demerits of the book.

In conclusion may I suggest that rather than printing Mr. Young’s article you obtain an independent opinion on *People of the Deer* from Dr. R. C. Wallace, Director of the Arctic Institute of North America, or from Col. Graham Rowley, Arctic Advisor to the National Defence Board.²¹

Erling sent a copy of his letter to Farquharson to Clifford Wilson, who replied immediately on September 17:

I thoroughly enjoyed your letter to Farquharson of *Saturday Night*, and if anything will dissuade him from publishing Scott Young’s article, I am sure this will; in fact, the more I read of your writings the more I wish you would do something for *The Beaver* along any lines you choose. I am afraid you let yourself in for something when you reviewed that book of Mowat’s, and I can only hope that you got some enjoyment out of it. I hope that Farquharson does obtain an independent opinion from Dr. Wallace, or Graham Rowley. I had a letter this morning from Dudley Copland, in which he pointed out that Gerald

Waring is doing an article for the *Montreal Star* on the Eskimo from the angle of the 'impact of civilization' on those recently primitive people. Dudley says he was able to correct some of his impressions, so perhaps it won't be so bad after all. Copland wanted to know if we had any repercussions on your review of *People of the Deer*. He doesn't know the half of it.

In the September issue of *The Beaver*, it was briefly noted that Mr. Mowat's defence and Mr. Porsild's reply had been received, but both letters had been too long for space limitations in a quarterly magazine and the review still stood as originally published.²²

Erling certainly hoped that this would be the end of it, so it came as a complete shock when he received the *Saturday Night* response on October 3. "Dear Mr. Porsild," the letter from Farquharson read. "I am enclosing a proof of your letter answering Scott Young. We are running the Young piece in the October 18 issue with a footnote saying that a letter by you will appear in the issue of October 25th. The formes, as far as your letter is concerned, close a week from today and the last part of the letter has already gone on the color formes – one of the difficulties of getting out a magazine. I would appreciate your sending as quickly as possible a picture of yourself. I very much appreciate your writing the letter."²³

Erling was immediately on the phone to Farquharson to try and stop the publication of his letter but he was too late. On October 7, he wrote:

As I told you over the 'phone yesterday, my letter of September 15th was not meant for publication in *Saturday Night*, but written in the hope that it might dissuade you from printing what I consider just another 'plug' for a thoroughly worthless book. Far too much has already been written about *People of the Deer*. However, since you are printing Young's article, I suppose some sort of reply is needed, but I would have preferred to write a straight answer. Since this is not now possible, you may print my letter, provided certain changes are made in the text. I am particularly unhappy about the last paragraph which has no place in the reply to Mr. Young. Since, unfortunately, that part has already been set up in print, the best solution seems the restoration of the article to the original letter form. I have made this and a few

other necessary changes in the galleys which I am returning to you herewith, together with a photograph which you requested.²⁴

Wilson must have heard from Farquharson about Erling's reply to Young going into print, as he phoned him on October 15. When they talked, they could see that the book affair was escalating beyond anything they could have imagined, and it seemed prudent for Erling to inform the Deputy Minister of the Department of Resources and Development, now no longer Hugh Keenleyside but Major General H. A. Young, before Erling's "letter" came out in *Saturday Night*. Erling wrote to the Deputy Minister on October 16, telling him that he thought it quite obvious that it was written, not for publication, but in order to dissuade Mr. Farquharson from printing an article in defence of what he considered a thoroughly worthless book. He had been surprised and dismayed when he received the proofs of what was then to appear as an article over his signature. He had tried to stop its publication, but since the last part had already been set up, he had agreed to have it published as a Letter to the Editor when certain changes had been made to the first part. Enclosing a copy of the original, which differed little from the changes he had made, he said: "I trust that there is nothing in my letter to which you will object; in fact I think I made it quite clear that my review in *The Beaver* was written entirely from the point of view of a private individual."²⁵

The *Saturday Night* Letter to the Editor from "A. E. Porsild, Arctic expert," was printed on October 25 under the heading of "Arctic Storm in Reverse." It contained few changes, although Erling had been careful to re-phrase the comment that "Because Mowat lacks first-hand information about Eskimo, he manufactures it." He also added new volleys to the Arctic fight as he made his correction.

My argument that Mowat could not possibly have attained even an elementary knowledge of the Eskimo language, does not impress Scott Young as much as Mowat's claim that an unnamed French anthropologist and linguist verbally pronounced his book 'one of the best ever written on Eskimo.' One wonders if this is what Mr. Young means by 'a balanced and unbiased view'?

Or take the now famous case of the dried deer tongues. Mowat, on p. 78 of his book, reported that "one outpost of a world-famous trading concern actually encouraged the sale of tremendous quantities

of ammunition to the Northern Indians by offering to buy all the deer tongues that were brought in! Many thousands of dried deer tongues passed through that post, while many thousands of carcasses, stripped only of their tongues, remained to rot in the spring thaws.” Fortunately, as pointed out in the March, 1952, issue of *Beaver*, ‘deer tongue,’ in northern trade parlance, means the leaf of a certain plant, used in the flavoring of tobacco! Thus far, Mowat has not admitted that he slipped up on the deer tongues but, on the other hand, has not questioned the correction printed in *The Beaver*. Nor has he explained that mysterious tribe – the Ihalmiut – that, as far as I can see, was created solely as a vehicle for his attack on Government administration and on the wicked traders. There never was such a tribe. Nor is there even a shred of evidence in support of his claim that there ever was a tribe of Eskimo, several thousand strong, living on the upper Kazan River. In fact, the very idea that there might ever have been enough game to support such numbers of people, is utterly ridiculous.²⁶

The response by Scott Young, as the author of “Storm out of the Arctic” and in his capacity as Vice-Chairman of the Canadian Authors Association, was printed in the Letters to the Editor in *Saturday Night* on November 1, saying that Mr. Porsild’s reply to his article repeated many of the statements made in the original review and so needed no further comment.

However, one inference I would like to correct. Mr. Porsild says that people who know little or nothing about the Arctic “should be content to discuss only the literary merits or demerits of this book.” I agree, to this extent – that nobody but an Arctic expert should step between Mr. Mowat and Mr. Porsild as they slug it out on points of fact. Mr. Porsild’s record certainly qualifies him to criticize work on the Arctic. However, in Mowat’s unpublished reply to Porsild’s review he is also able to show errors of fact in Porsild’s review. These errors of Porsild’s are as trivial as some of Mowat’s errors, caused in both cases by misunderstanding or carelessness, and I’m not qualified as a referee in that kind of infighting. My intervention is based entirely on what I feel to be the unfairness of *The Beaver*’s attitude in not publishing Mowat’s reply to their many serious charges against him. Mowat is

quite capable of fighting for himself, if allowed to do so. If *The Beaver* had published Mowat's reply, I would still be a bystander.²⁷

Of all that was written about the whole business of who said what, who was right or wrong, and what really mattered about Mowat's *People of the Deer*, the best comments were written by Arctic photographer Richard Harrington. They appeared in *Saturday Night* under the heading of "Arctic snowball fight" on the same day as Young's last letter. Harrington wrote:

Mr. Scott Young made a gallant but ineffective attempt to restore Farley Mowat's reputation as a northern observer in this snowballing (October 18) issue. Young, too, has been spellbound by what I would term 'imaginative non-fiction.' But like the majority of readers, he has no firsthand knowledge of the Arctic and Subarctic. Both complain loudly that all adverse criticism comes from 'traders' and 'Government officials,' that the book is being picked on by biased reviewers. Well, this one is free of that, as I am "the free-lance photographer and newspaper reporter who wandered into the northern Barrens" (p. 324) and brought out the news of famine.

Mowat really has two books here. The colourful prose of his travel observations, including places he has not seen, and enriched by a fertile imagination. Plus a treatise of Government, missionary and trader mismanagement, mixed with endless inaccuracies. It is true in part. Our aggressive and greedy white man's civilization should be blamed. Every one of us is guilty of destroying the stark realistic culture of the Eskimo – including Mowat, who did not feel ashamed to hand out two plugs of tobacco for a suit of caribou skin clothing which usually brings \$40–60 to a native at a trading centre. With Mowat's miraculous linguistic ability, he could easily have given the Eskimo a note to the nearest trading post, less than 100 miles away, and established a credit there. In fact, I feel like complaining, "Look, here is a flagrant incident of the white man taking advantage of the Eskimo!"

Contrary to Mr. Young's statement, numerous cautious and adverse reviews have been levelled at this book, by reviewers who should be free of the taint of bias. To my mind, the best one came from Ottawa's anthropologist, Dr. Douglas Leechman. Says he, a bit sadly, "It's a dangerous book, because it is well-written, and it is also

an inaccurate and prejudiced book.” *The Beaver* magazine has made it a point to strive for accuracy and authenticity in its pages. It is the accepted authority on the Canadian North in its fields. Behind it are men with lifetime knowledge and study of Arctic affairs. As Young says, Mowat’s book is not the only one to be panned in its pages. What if every wounded author demanded space for retaliation?

Personally, I would happily travel by dog-team along Mowat’s miles, that shrink from his 300 to 100 – but I would be disappointed to arrive at his Deer Lake post, and find it named Duck Lake. Since the book is meant to be factual, I have read an article by Mowat in *Argosy*, covering the same area and period, but including new characters. Which is correct? There is much that is good and strong in this book. But by its wordy violence, by its ranting, by its errors, the strong and authentic arguments are thrown away, wasted.

Of his comparisons with Greenland Eskimos, I would suspect that he has been reading Government reports. I know only opposite views from other Danes with Eskimo ancestry. But Eskimos in Alaska that I have seen were a sorry-looking, Government-supported lot. ‘What ought to be done about the natives’ I have found to be a favorite topic of conversation in the tropics as well as in the Arctic, amongst the white people. In Canada, Ottawa officials spend their days worrying about it; in the north, the long Arctic nights are spent worrying the subject. Only a few are puzzled as to what ought to be done with the white man. Before Mowat’s book gets a banned-in-Boston sort of popularity, we should remember that a dash of fact in fiction may be good; but the opposite gives every expert and scientist the right to let fly with demolishing snowballs.²⁸

This last snowball should have been the end of the whole regrettable fight as far as Erling Porsild was concerned, except that he reckoned without the irrepressible one-up-manship of one Farley Mowat. As found in the office files in the National Herbarium, in December 1952, he received a personal Christmas card. It was a child’s card, showing a cute small animal saying “I’ve got something for You!” while holding a big wrapped parcel. Inside was another box that said “You’re getting HOT!” and inside that another one “You’re BURNING UP!” and finally “You FOUND it! Warmest Christmas wishes!” and it was signed “Cheers chum – Farley Mowat.”

“A. E. Porsild, Arctic Expert,” with all the weight of his position and influence in Arctic circles behind him, should probably have simply thrown the cheeky card into his wastebasket, but Erling Porsild, Botanist, with his dry sense of humour, could not resist retaliating with his own Christmas greeting. It was a drawing by L. Crosby showing the North Pole on which there was a sign dividing the top of the world between F.M. and A.E.P. On one side of the Pole, it showed Farley Mowat in hooded Inuit attire outside an igloo marked “FM Co.” In one hand he was holding out a dove of peace with a leaf in its mouth, but the other hand was behind his back where he had a stack of snowballs. On the other side of the Pole, Erling Porsild was sitting at his desk with his typewriter and microscope. He was smiling in greeting, but one hand was behind his desk where he too had a stack of snowballs.

The last word in this private battle behind the public war must definitely be left with Farley Mowat, who responded with a New Year’s greeting that he had composed, entitled “Reflections over an Empty Glass.”

My eyes are dim, I cannot see,
Conitron overwhelmeth me.
The hot tears scald my swollen eyes,
My heart is anguished with surprise
That I had ever wished to smite
So stout, so humorous a wight.
Oh pity me —
A. E.

Deluded by your vivid prose,
I wished to punch you on the nose!
Incensed by your too lurid words,
I wished to feed you to the birds!
Imagination helped me build
A most unpleasant E. Porsild.
I thought he was a carle, a loon,
A gaberlunzie, a buffoon,
A caitiff, Vandal, and gossoon.
A cavaliere servante, yet.
A courtier, a teacher’s pet.

These thoughts, poor Mowat so beset
O'mi(z)ho hiakpagpa
(His anger, to descend, he let.)

So I believed Porsild, A. E.,
Was the true soul of pedantry.
A solemn owl of ponderous mien,
A Don who wrote in bitter vein,
And yet whose sallies – far from mattering –
Ugpis(h)o'p ookalrosia
Were (Owl, the big's, loud gnattering.)

So pity me, who must, alack,
Now take it back.
Who finds the man he would have shot,
Is not.
Who can no longer hold his wrath,
Against one who knows how to laugh.

For now I cannot be consoled.
My dreams are shattered, I am old.
My sun has set, my sky grows cold.
(And the last copy of my book is sold.)
Dispirited, denied the battle,
I turn me now toward the bottle.
Oh Gods, Oh Fates! How can this be?
This bottle that stands in front of me,
The label that my poor eyes see –
Says, Best Procurable – H.B.C.!

It was signed by Mowat, who scribbled in the margin: "I shall be in Ottawa – with bodyguard – Jan. 10 or thereabouts and I'd be delighted to autograph your copy of P.O.D. over a dram in the local wineshop."²⁹

Whether or not the two antagonists ever met over a friendly dram, the poetic signal of truce should have been the last of the affair, but there were postscripts to come. In July 1953, Erling received a letter from Andrew Lawrie at the University of Toronto, who had been trying to bring together his notes on the birds of southern Keewatin ready for publication.

With the appearance of Dr. Harper's recent paper it seems to me that it is now possible to write something a little more definitive than an annotated list and with this in mind I have been for some time engaged in carefully summarizing the literature. In so doing I have twice seen references (in Clarke and Manning) to certain unpublished notes of yours from Yathkyed Lake and the Lower Kazan River. This letter is to enquire whether you would permit me to use these same notes. I should, in all fairness, add that I am also using Mowat's notes and collection from Nueltin and Brochet and his name will appear with mine as a co-author.

Erling agreed to lend his Keewatin bird notes with the understanding that the purpose of his trip was a botanical reconnaissance, and collection of plants and botanical and geographical information had been his first concern. "You may use any of the data given in the list provided it is understood that I do not claim to have assembled a complete list of the birds of the area traversed," he said. His list was returned by Mowat "in Lawrie's absence," thanking him for letting them see them. "We shall not, however, be making use of them."³⁰

Later in 1953, Farley Mowat received an Anisfield-Wolf Award of \$2,000 for *People of the Deer*, an annual recognition given, it was announced, for sound and significant books published in the United States or around on the subject of racial relations in the contemporary world, which, by their presentation of these problems may help in their solution. Committee member Ralph Linton of Yale said that Mowat's book was "a full-scale, well rounded picture of an inspiring people, as well as a plea for the understanding help without which these people will vanish from the earth forever." Erling promptly picked up his pen to write to Professor Linton on November 24. "I am sure Farley Mowat is pleased with the award," he said, "and perhaps a little amused too – for he has a keen sense of humour – that his 'plea for the understanding help without which these people will vanish from the earth forever' has been heard. What worries me is that the Ihalmiut people never did exist, except in Mowat's imagination, see 'Beaver,' June, 1952, p. 47."³¹

The problem of Mowat's alleged starving Ihalmiut people came up in the House of Commons on January 14, 1954, reminiscent of the long-ago concern about the "starving Eskimo" in the early days of the Canadian Reindeer Project. There was much argument about the truth or falsehood of Mowat's

allegations of government neglect of these people in the book. It was suggested and then withdrawn that both Porsild's review and Mowat's defence should be mimeographed for the benefit of the members. The most passionate advocate for the book admitted to ignorance about the subject while the greatest admirer of Porsild, who had read the book but not the review, made the extraordinary claim that "he [Porsild] was the man who brought the Eskimo from Alaska to the Northwest Territories." An argument regarding possible censorship of the book, based on rumours from the Hudson's Bay Company, was an exercise in political obstruction tactics and got nowhere. It was stated that if the allegations in the book were true, it was a terrible indictment on the part of the government that was responsible, and the question remained as to what had been done to ascertain the truth and send relief to these people. The Hon. Jean Lesage, Minister of Northern Affairs and National Resources, was convinced that Porsild was right and the book was false because it was based on partial information and with some outrage on the part of the supporting member the House agreed with the Minister's verdict and moved on to other matters.³²

Farley Mowat continued to fight. In an article in *Saturday Night* under the heading "The Case of the Disappearing Eskimos" on October 30, 1954, he said that he had been "haunted for some time by the Eskimos Who Never Were." His book had been "an attempt to draw attention to a great and continuing evil being perpetuated upon the native peoples of the north." In writing it, he was critical of what he believed to be "the callous indifference and sublime stupidity of those men appointed as administrators over the Eskimos and southern Indians," and he was also critical of trading concerns. A few weeks earlier, and several months after the Hon. Jean Lesage had slanderously labelled him as a liar in public debate in the House of Commons, "the Department of Northern Affairs announced that it was sending several plane loads of emergency food to 'a band of about 40 Eskimos living at the north end of Ennadai Lake, 230 miles from Hudson Bay, and about 50 miles north of the Manitoba border.' The location of the Eskimos who never were could not have been more closely pinpointed had it been taken from my book, *People of the Deer*."

Porsild's earlier review of his book "read more like a deliberate attempt at character assassination than anything else," he said. "At the time Dr. Porsild wrote his review, he could not have been unaware that most of his charges were false; the proof lay in the files of the Government Department to which he belonged." An attempt to stop the book from being put on the supplementary reading list for Ontario schools due to that review had not succeeded. As

to Dr. Porsild's brief communication to the Anisfield-Wolf Award committee in his official capacity as an employee of the Government, "It stated clearly that the Award Committee had been duped – *that the Eskimos about whom I wrote never existed*. Certainly someone is lying." As far as he was concerned, there was conclusive proof in Government files under the signature of Tyrell that in 1897 the "mythical Eskimos" of whom he wrote numbered more than 600 individuals, and official Government censuses referred to populations of up to 200 of these "non-existent Eskimos" as late as 1931. He had a formidable list of "real authorities" including Linton, Stefansson, and Lord Tweedsmuir, who had all publicly supported his book and attested to its accuracy, and no anthropologist or other scientist had publicly supported Dr. Porsild's opinion of his book. "He is the sole 'expert' accuser," he said.³³

Behind the scenes, Erling was certainly not the "sole expert accuser." One of Mowat's listed authorities was Edmund Carpenter from the University of Toronto, who wrote to Erling on November 2: "I have not seen Mowat's latest *Saturday Night* attack, but I understand my name appears in it. I do not know in what context he could have used it, since my only comment on his book was in a letter to his publisher – who sent me a free copy and asked for an opinion – which he got: 'Mowat suffers from an inability to tell the truth.'³⁴

It began to seem as though the tedious and nasty exchanges of charges, counter-charges, and insults would go on forever, with both sides equally convinced that they were right and the other more or less stretching the truth for their own purposes, but a blessed silence fell on the subject in the National Herbarium until November 29, 1957, when an extraordinary letter arrived for Erling, extraordinary because of its politeness of tone and language, and its unbelievable request after all that had gone before.

"Dear Dr. Porsild," wrote Farley Mowat,

As you may know, I am preparing a two part work on the Interior Barrens of Keewatin and Mackenzie, with the co-operation of the Dept. of Northern Affairs and National Resources. One of the aspects of the work upon which I hope to write at length, concerns the movements and centres of population of the Barrenland Eskimos. I am therefore most anxious to collect and examine all information which is relevant to this subject. In your botanical expedition up the Kazan River to Yathkyed Lake, you no doubt encountered Eskimo families. So far as I know you have not published your observations, made on this journey,

and I am therefore at a loss to know where they may be seen. I assume that copies of your MSS notes are on file, but I thought that you might be able to elaborate upon them as far as the Eskimos were concerned. If you feel able to co-operate with me in this matter, I should be delighted.

True to form, there was a postscript that Mowat could not resist. "P.S. You snatched that copy of Hanbury's book right out from under my nose at Dora Hood's. But I forgive you."³⁵

The reason for this amazing request would become apparent two years later when a new book by Farley Mowat appeared on the scene. In his foreword for his continuing story of his Ihalmiut tribe in *The Desperate People*, Mowat was careful to explain his extensive background research for this book and his indebtedness to all sorts of sometimes unexpected people, including the Hudson's Bay Company, the Royal Canadian Corps of Signals, the Territorial Court of the Northwest Territories, and

... a number of scientists and scientific organizations and a great number of individuals with experience in the Arctic who provided me with invaluable material, including personal journals and diaries. In some cases the transmission of this material involved a considerable degree of potential risk – a fact which I am not free to dwell upon but which I feel bound to acknowledge publicly. Finally I wish to acknowledge my debt to the several members of the Department of Northern Affairs of the federal government who gave me the most unstinted co-operation even when it was clear that the results would not redound to the credit of the Department.

All the major events in this book, and most of the minor ones, have been documented from official sources. Other sources which were used included published works, signed statements and private correspondence, together with many hours of tape-recorded conversations with survivors of the Ihalmiut, other Eskimos, and white men who were involved in the recorded events. To obviate the possibility of error, all Eskimo conversations were independently translated by at least two Eskimo linguists.

At the time *People of the Deer* was written it was impossible to obtain documentary corroboration of much of the material. Consequently I

was obliged to use pseudonyms for some of the Eskimos and many of the whites as well as to deliberately misidentify some individuals. I was also obliged to refrain from identification of certain events in terms of time and place. In the present book these problems no longer exist and all names given are the correct ones, while all the events are presented in their actual spatial and temporal contexts. Where apparent discrepancies occur between this book and my earlier one, the version given here is the factually correct one.³⁶

This time there would be no review, critical or otherwise, by A. E. Porsild. Back in the quiet Herbarium of December 3, 1957, Miss Harkness sent a note to Farley Mowat to say that Mr. Porsild was in Europe, and the letter of November 29 had been forwarded on to him by airmail. An inter-departmental memo on January 6, complete with marginal notes by Erling, suggested that the report dealing with reindeer grazing and the suitability of the parts of Keewatin and Coats Island, visited by him in 1930, had been sent to Mr. O. S. Finnie, then Director of the N.W.T. branch of the old Interior Department, where it should still be on file.³⁷



CHAPTER FORTY-ONE

STUDY YEAR IN EUROPE

“I am beginning to think again about getting to Ottawa to see a lot of stuff in your herbarium,” Hugh Raup wrote 19 January 1953. “I had about given it up for this winter and spring, because we thought we would be off to Honduras – but plans for this have exploded, and we are left with some leeway. Could you, would it be convenient, to have us for a week or so sometime in February?”¹

Erling responded that it was very good news, and he and Elizabeth were looking forward to the visit. He was still struggling with the “Manual of the Botany of the Canadian Arctic Archipelago” because he was trying to do too many things at once. “You will be interested to know that I shall be able to illustrate all species with line drawings thanks to Mrs. Johannes Lid of Oslo who has very kindly offered to do them for me. You may have seen her drawings in *Norsk Flora*’ by Johannes Lid, and elsewhere. I think she is tops.” His paper on the “Flora of the Mackenzie Basin” was what was really ‘gumming up the works’ the most. “It started out merely as additions to your list but I gradually talked myself into expanding it to include Bear Lake and the Delta, thereby paving the way, as it were, for a future manual of continental N.W.T.”²

The Raups arrived February 14 and from the later exchange of letters, it would seem that the ten-day working visit was a huge success as these old friends accomplished what was needed by day and relaxed together in the evenings, but it was also significant in view of the far-reaching results. Lucy was so impressed with the work that Mackenzie Lamb had done with the lichens that it was not long before he was going down to see her at the Farlow Herbarium, and by the end of July he wrote to Erling from his field station in Newfoundland that he would be returning to Ottawa only to pick up his family as he had accepted the position that they had offered him. Meanwhile, both the Raups

were encouraging Erling to work on his manual of the Continental Northwest Territories and to apply for a grant in order to do a year's work in the European herbaria. Further encouragement came when they got back to Boston. "I saw Prof. Harlow Shapley in the Faculty Club the other day," Raup wrote from Harvard on March 23, "and told him that you were about to apply for funds from the Philosophical Society. I told him that I was going to support you in it with all stops pulled out. He said that the applications, for consideration at the June meeting, should be in by the last of April."³

It was April 3 before Erling had a chance to get back to him. They were leaving to visit Karin and Harry and going on to Toronto, he said, but when he got back he would get busy with his application.

It has been a somewhat hectic time since you were here and I am way behind, not only with letters but also with my writing schedule. First Miss Harness goaded me into starting the distribution of my N.W.T. duplicates, mostly collected between 1927–28, but also the 1947, and several other smaller collections, including those of Keewatin and James Bay. These duplicates have been on my mind for a long time and I realized that it would take some time to make them into sets.... It took the two of us 14 days. They are sorted into 8 sets and all wrapped up but not yet mailed.

After that, he took his unused leave and spent ten days doing odd jobs that needed to be done around the house, including varnishing all the upstairs floors and putting a new roof on his garage. "I haven't done any manual work for so long and my back and muscles are so sore that I can barely move."⁴

Erling sent a draft of the grant application to Raup on April 11, hoping he could tell him what changes he thought he should make. "You have had much experience – and success – in obtaining grants, so I shall be very glad to listen to anything you care to suggest; and I won't blame you if the grant should not materialize. There is always the possibility that those who vote the money will not be too impressed by my project." He was in doubt about how much to ask for.

I do not want to be greedy, so I consulted External Affairs and the enclosed draft budget is in part based upon their advice about cost of living and travel abroad. You will notice that the total estimated cost for

a year abroad with the family is \$9,000.00. This seems a lot of money. I have thought of asking for \$6,000.00 and hope that I can supply the balance out of salary. If Dr. Alcock is right I can get leave of absence without much trouble and he thinks that there is a very good chance that I may be granted leave on part salary. I hope he is right. It would do no good to apply until I definitely knew that I was going.

There was the question of who, besides Raup, would be able to sponsor him. "I am afraid my academic accomplishments will not impress. I really ought to do something about this – or at least 'qualify' for an LLD! I don't suppose my F.R.S.C. [Fellow of the Royal Society of Canada] and M.B.E. would impress them?"⁵

Raup had gone over Erling's application on April 14 and had only a few suggestions to make:

At the outset, I shall go back to some things I probably said when I was in Ottawa. I think you should aim this thing at a 'flora of boreal America,' rather than at a 'flora of Keewatin and Mackenzie.' Actually in your 'argument' you have set forth the larger purpose on the first and most of the second page. Then when you come to the specific problem, without saying you were doing so, you 'come down' to Keewatin and Mackenzie. The whole project, as outlined on those first two pages, has force, and I think it is really what you are shooting at. If this is the case, I think the title of your request should be 'Studies in connection with the preparation of a descriptive manual of the flora of boreal America.' If you can bring yourself to change the main title as I have suggested, then maybe you will have to set some kind of southern limit. Latitude 56°? Then, if you want to concentrate the work for which you want the money on Keewatin and Mackenzie, where it is most needed, you can say so and go on from there. If you do this, you should make it clear what you are doing, and indicate why the need is greater there than in either the eastern arctic or in Alaska and Yukon.

I would like to see you do this. You are the logical person! You have more material at hand with which to work on it than anybody else in the world, and you have more personal knowledge of the whole problem than anybody else in the world. You have had experience in the preparation of such things, and you are sufficiently well known in

all the places where you need to get help. Neither Hultén nor anybody else abroad or in America is fitted for it. You know yourself what Hultén can do to prevailing American groups. All the objections I have ever heard you make to doing it are stuff and nonsense!

You need to do a little more personal horn-tooting. Put in a little life history – your field training in Greenland before you came to America – your ten years' experience on the reindeer problem. By all means mention your F.R.S.C., and your membership in the Order of the British Empire. Also you could mention that you are an honorary foreign member of the American Academy.

The budget looked all right to him. "Can you properly say that it would actually be cheaper to take Elizabeth and Nette with you to Europe than to leave them in Ottawa? If so, this would be a good point. I should think it might be true, particularly if you could rent your house in Ottawa while you were away." He thought Dr. Merrill at the Arnold Arboretum and Herbert Mason at the University of California would be good references, but it might be a good idea if another one was Canadian and suggested Diamond Jenness, even though he was retired, for a Museum perspective.⁶

Erling duly filled out the form as suggested on April 15. He wrote to Merrill, Mason, and Jenness, who all agreed to support him. The answer was not long in coming from the Philosophical Society. Erling told Alcock on June 24 that he was informed on June 10 that he had been awarded a \$2,000 grant for the purpose of study and photographing of historically important botanical collections from arctic and boreal America, chiefly in the herbaria of London, Paris, Copenhagen, and Oslo. "The grant was given on the understanding that I would be able to finance ordinary living expenses for myself and my family from other sources," he said.

In order to carry out the herbarium researches for which this grant was awarded, I now request that I be given a year's leave of absence on full salary, commencing about April 1, 1954, and that I be authorized to attend the Paris Congress [the Eighth International Botanical Congress in Paris from July 2–14, 1954] at the expense of this Department. In 1950, my total expenses in connection with my attendance of the Stockholm Congress, including the six weeks spent in Stockholm and London, amounted to about \$1,300. Cost of living and travelling

in Europe has increased sharply since 1950, but I believe that the cost of attending the Paris Congress and some of the excursions would not exceed \$1,800. For the rest, I am prepared to use my salary, so that the entire cost to the Department will be limited to the above amount which, in any event, would be required to send me to Paris to attend the Congress. During my absence, Dr. Scoggan should take charge of the herbarium, and with the rest of the herbarium staff would, I am sure, be able to handle routine maintenance and other ordinary business of the herbarium.⁷

On July 25 he was writing to thank Raup for offering further help and advice in regard to supplementary grants:

I do not yet know what the score will be in regard to Governmental support etc. Our Deputy Minister has been away from Ottawa for six weeks and has only recently returned. I expect, however, that the reply will be favourable.... Meanwhile I am off on a 2-week trip to Axel Heiberg Island. I know I have no business going but the temptation was too great. I am going as the guest of the Tower Co. of Montreal who for a number of years have been doing construction work in the Canadian Arctic and who are sending a small party north to carry out some measurements. We shall be leaving Ottawa on the 27th travelling in the company's Catalina plane. Axel Heiberg is, of course, almost completely unknown botanically, and I hope to get some worthwhile information.

Unusually, no letter describing this trip was found in the correspondence, but it was recorded in the Herbarium Annual Report that "a total of 151 specimens of vascular plants, besides much other botanical and biological information, was obtained from this island, which had not been visited before by a professional botanist."⁸

Both Scoggan and Baldwin were also out in the field that summer, Scoggan completing his survey of Manitoba and Baldwin looking at the botany of the Clay Belt in Ontario and Quebec. It was now important to replace Mackenzie Lamb, who officially resigned from the Herbarium in September. Erling received a letter from John Thomson, Associate Professor of Botany at the University of Wisconsin, recommending Dr. Mason E. Hale as an exceedingly promising student of North American lichens, and Erling was glad to hear from him

“because his name has been mentioned to us by other people who think equally well of him and think that we should offer him Dr. Lamb’s position. Among his principal sponsors is Dr. Lamb himself who is very favourably impressed with the work Dr. Hale has done on arctic lichens.” The position would have to be advertised and an application form would be sent out to him at that time.⁹

By September, Erling’s plans for his sabbatical leave were finally coming together. He would have to go without his family, which was disappointing, as he had originally hoped that he and Elizabeth could rent their Ottawa house and take thirteen-year-old Nette with them to England for at least part of the time. Now it seemed, they would have to stay and mind the fort at home while he went overseas alone, but at least a new reward had been added to the trip. “I have been given a grant by the Philosophical Society of America,” he wrote to Vero Wynne-Edwards in Aberdeen on September 29,

... which, together with a year’s leave of absence granted me by the Department, will make it possible for me to attend the 1954 Botanical Congress in Paris and to carry out protracted herbarium studies in London, Paris, Copenhagen, Oslo and Stockholm. I hope to be ready to leave early next summer. Meanwhile the University of Copenhagen has offered to accept any paper I care to submit as a thesis for a Ph.D. I am not sure what I shall do about this. As it happens, my paper on the Botany of the Western Arctic Archipelago, based largely on the 1949 expedition, will soon be ready for the printer. It may fill the bill. What do you think of this suggestion?¹⁰

A letter from the university records office in Copenhagen confirms that the circumstances of Erling Porsild’s acceptance were “a little unusual” because the University of Copenhagen had accepted the title of “Chief Botanist” as ranking with an academic title. They noted his work in the Botanical Museum of Copenhagen since 1945, studying the arctic collections, but the final granting of a PhD would be determined by the scientific value of his forthcoming paper that would be judged like all other theses submitted for that purpose.¹¹

Erling set aside his other writing over the winter in order to have the manuscript of “The vascular plants of the western Canadian Archipelago” ready for the printer before he left in June. Simultaneously, he was working on marking distribution maps with plant “spots” in preparation for work on “Atlas of Canada” which he had begun the year before. Meetings continued to consume

a major portion of his time. A look at the Annual Report for 1953–54 shows that in that year alone, he attended Board and Executive meetings in Ottawa, Montreal, New York, and Washington as Vice-President of the Arctic Institute of North America, besides meetings of the Royal Society of Canada, the Provincial-Federal Wildlife Committee, the Canadian Conservation Association, the Advisory Board of Wildlife Protection, a joint meeting of the Departments of Agriculture and Resources and Development on a proposed National Botanical Garden, and a meeting of the Advisory Committee called by the N.R.C. in connection with the proposed moving of the site of Aklavik, N.W.T., not to mention his informal meetings with the “Arctic Circle” and various speaking engagements.¹²

In January, Erling received a letter from Professor Mogens Westergaard at the Universitetets Genetiske Institute in Copenhagen. “I have now been elected one of the directors of your father’s old station at Disko,” Westergaard said. “It is with great pleasure that we hear that you have decided to submit a thesis for the Ph.D. at the Copenhagen University. We are looking forward with great anticipation to your visit here, and there are a great number of problems which we want to discuss with you, especially concerning the collaboration between the Disco Station and the other arctic institutions.”

For some time, Erling had been hearing reports that his father, now retired and living in Denmark, was failing and suffering from bouts of amnesia. “I suspect that such difficulties and lapses are to be expected in an old gentleman of eighty-one,” he had written to Max Dunbar in May 1953. “The unfortunate thing is that he has arranged his life in such a way that no one can help him when he needs it. One reason for his hermit existence may be that he is self-conscious about his occasional absent-mindedness and unwilling to admit that the time has come when he is no longer as efficient as he used to be.” It was a great relief to all when “the marvellous old boy,” as Joan Dunbar described him, went to live with his youngest son, Sten Porsild, in the spring of 1954.¹³

By March 1954, Erling told Raup: “It looks as if I will be sailing for Europe from New York on June 11. I still do not see how I am going to get through in time but having booked my passage I guess I shall have to.” By then, the official advertisement for a cryptogamic botanist for the National Herbarium had gone out, and among the returning applications was one from Howard A. Crum at the University of Louisville, Kentucky. He was a bryologist, trained at the University of Michigan under Dr. Steere, with a background in the moss-flora of Mexico, and “considerable experience” with the mosses of temperate and

arctic North America as well. "My background in lichenology is sketchy but adequate, I think, for curatorial duties," he said.

The long-awaited decision on the post had not been made on May 8 when Mason Hale wrote to Erling: "I am extremely hopeful that the final decision, whenever it may come, will be in my favor. There are few individuals in North America who have spent an entire academic career aimed at becoming a professional cryptogamic botanist in the face of the painfully obvious fact that there are virtually no job openings for them and who have worked with energetic interest on the Canadian flora." The final decision was in favour of Howard Crum, and Hale wrote to Dr. Alcock on June 28 of his keen disappointment, especially in view of his experience in mosses as well as in lichens.

I believe that I had all the qualifications listed on the Civil Service bulletin. Had you desired a bryologist all along, it would have saved me no inconsiderable expectation and wasted plans to know so nine months ago. I do not speak out for my own personal loss but for the irreparable damage that has been done to lichenology in North America. There are approximately 10 professional bryologists for every lichenologist in North America, and while a number of them are in positions of research, only one lichenologist, Dr. Lamb, is professionally employed. In this respect the Committee's decision was notably shortsighted. Lichenology may not improve its present medieval plight for another generation.¹⁴

Leaving Elizabeth and Nette in Ottawa, Erling sailed for Europe on June 9. Writing to Dr. Alcock on August 15, he said:

I arrived in Paris on June 16 and spent the next two days in the Botanical Museum where Michaux's herbarium is kept. I was delighted to find this exactly as left by M. and it was thus a simple matter to locate the 50-odd Michaux types of Canadian plants. Although the Paris herbarium is a very large one, it contains very little of interest to us.

I had arranged to join one of the pre-Congress excursions, and on June 19 met a group of 16 botanists who, under the leadership of Dr. and Mrs. Paul Jovet, were to spend 10 days in the Landes et Pays Basque occidental. I had selected this excursion because it was composed entirely of professional botanists and because its itinerary

included the western part of the Pyrenees.... The first days of the excursion were spent in the low country along the Atlantic coast where problems of land reclamation and dune control were studied. Several large dune areas got out of control during the war when the Germans established extensive road systems through the dune areas to service their fortifications along the coast.¹⁵

Although collecting was difficult due to the tight schedule, he had enjoyed the experience of seeing unfamiliar plants and vegetation types and succeeded in collecting some 160 numbers of which there was very little or no representation in the National Herbarium. "The Pyrenees offered some excellent opportunities for observing the results of century-long bad land use in alpine pastures where more than 50% of the available pasture now produces nothing but bracken."

The Botanical Congress opened with a plenary meeting at the Grand Amphitheatre at the Sorbonne. Between the speeches, the Garde Republicaine entertained the delegates with selections from Mozart, Bach, and Handel. Following this, an invitation to hold the next Botanical Congress in Canada was extended by Jacques Rousseau. There was much confusion about the afternoon sessions in the twenty-odd lecture rooms, with many delegates ending up in the wrong sections, and with much delay and confusion caused by having different offices for registration, mail, information, exchange, etc., which all became bottlenecks owing to insufficient staffing and lack of competent interpreters. The last individual sessions were held on July 12 and the final plenary meeting on July 13 for resolutions, addresses, and votes of thanks. There the Congress officially accepted the invitation to hold the next congress in Canada in 1959.

Between the sessions there had been the usual official functions, receptions, and excursions. Erling had attended a reception on July 3 in the Zoological Gardens at Vincennes, spent a day at Versailles on July 6, an evening session at the Sorbonne to celebrate the Centenary of the French Botanical Society, an all-day excursion to Fontainebleau on July 9, and an evening reception in the Louvre given by the Ministry of Education on July 12. When it was over, he joined a post-Congress excursion to the French Alps

... led by the eminent French ecologist Braun-Blanquet, doyen of European ecologists and father of the Swiss school of ecology who was ably assisted by Prof. L. Emberger of Montpellier. About 66 botanists took part in this excursion; travelling by chartered bus we visited a variety

of places between Chambéry and Nice where the excursion ended on July 21. This section of the French Alps has a very rich flora with representation of alpine and Mediterranean species. Of particular interest was the region around Mont Cenis with a large number of endemic species. In the pass, above timberline at 2,400 m. botanists have listed over 2,000 species of plants, including bryophytes and lichens.

The last stop was in Nice, where the Congress officially ended on July 26 after meetings and all-day excursions related to Mediterranean and tropical botany.¹⁶

Erling had been sorry that Dr. Merrill, his long-time supporter at the Arnold Arboretum, had not been able to get to the Congress, and he wrote to tell him that his experience and sound views were missed:

I am sure you have already heard a good many reports on the Paris Congress to which I should have little to add. My own impression was that many things were less efficiently done than at Stockholm and that the time has come when some rather drastic changes will have to be made if such large meetings are to be manageable. Personally I very much question the wisdom or useful purpose of such masses of individual papers that take up time that could be better employed in general symposia given by carefully selected speakers. I have never been happy about having the 9th Congress in Canada and what I saw in Paris has made me even more doubtful of our ability to do a creditable job; in fact I am at a loss to understand how some of our botanists, knowing how few truly qualified people we have who can take charge of the more important jobs, can hope that we may even do as well as the French. True, the language difficulty will not be so great as at Paris where scarcely anyone in the secretariat spoke any language other than French; but the lack of people of large enough calibre and experience will be serious enough.

He said that he had enjoyed and learned a lot from both his excursions in France, although the second was too large, with too many "tourists," but what impressed him the most on both trips was how greatly the European landscape and its vegetation had suffered at the hands of man and his animals. "I was constantly puzzled by the seeming futility of statistical ecology applied to unstable plant communities so greatly modified by centuries of grazing and

tree cutting,” he said. After the second excursion had ended in Nice, he went to Copenhagen with a short stop-over in Hamburg where he had hoped to find Lehmann’s herbarium. “In this I was disappointed for it appears that it was stored during the war in what is now the Russian zone and that the herbarium was carried off to Leningrad.”¹⁷

In Copenhagen, Erling settled down to work at the Botanical Museum, checking arctic Canadian specimens collected chiefly by Amundsen’s expedition in the *Gjoa* and by members of the Danish 5th Thule expedition under Knud Rasmussen. “I am hoping soon to have completed the introductory chapters of my report on the flora of the western islands of the Arctic Archipelago,” he told Alcock in August.

The Botanical Museum is almost closed up for the summer. Most Danes seem to go away for the summer holidays but fortunately the director had left instructions for the janitor to let me in. My work has been somewhat hampered, however, by the lack of books and references and it was only when the librarian returned from holidays that I was able to obtain some of the books I needed for my writing. Meanwhile of course, the plants in the herbarium were accessible and I was able to put in my time to good advantage. I had hoped to be able to see Professor Jessen about my doctorate when I arrived in Copenhagen but he, too, was away and is only expected back this week. A meeting with him and other members of the faculty has been arranged.¹⁸

Before leaving Ottawa, Erling had been asked to represent Canada’s Wildlife Service at the 4th session of the International Union for the Protection of Nature held in Copenhagen from August 25 to September 3. In a three-day committee session on Arctic Fauna, he felt that a brief statement might be useful on the administration of Wildlife Resources in Arctic and subarctic Canada, and later he answered questions on the present status and protection of black, brown, and grizzly bears in Canada.

Erling continued to work at the Botanical Museum until November when he visited Oslo and Trondheim “where I found much of interest,” he told Merrill. The Norwegian herbaria were rich in recent collections from East Greenland, Spitsbergen, and Novaya Zemlya, while of special interest to North America were the collections made by H. G. Simmons in Ellesmere Island during the 2nd Norwegian Expedition in the *Fram* (1898–1902) and those made by

members of the *Gjoa* expedition (1904–6) along the route of the Northwest Passage. In Trondheim he gave a lecture on the flora of the Canadian Cordillera at a meeting of members and guests of the Royal Society. “In Oslo Mrs. Lid, the wife of the curator, had completed the pen-and-ink drawings which are to illustrate my manual of the flora of the N. Am. Arctic, the manuscript of which I completed last winter. Mrs. Lid’s drawings are excellent and I hope I managed to [convince her to do?] the flora of the southern Canadian Rockies which I hope to have ready before too long. There seems to be some hope that I may be able to interest one of our large oil companies in this project, and that they may consider paying for colour illustrations.”

He reached London at the beginning of December and was soon working in the herbarium of the Royal Botanic Gardens at Kew, Richmond, on the collections cited by W. J. Hooker in his “*Flora Boreali-Americana*” (1833–42). “It is going to be a very slow job, but I think a rewarding one,” he told Merrill in January 1955.

I am finding a great many Hooker types that have not heretofore been recognized as such and I have, I think, solved several problems that have long been puzzling me.... I am not sure how long it will take me to finish at Kew – or perhaps, I should say to finish what I have to do. And I haven’t even been to the British Museum yet. I am sure I could easily spend an entire year here quite profitably which, unfortunately neither time or funds will permit. Still, it is a very wonderful experience being here if only for a few months and I shall certainly make the best use of my time.¹⁹

Kew and the British Museum (Natural History) were rich in botanical collections brought back by the early British expeditions in search of a Northwest Passage. Of primary importance for Erling’s present study were not only those cited by Hooker but also Douglas, Richardson, and Drummond collections made prior to, during, or resulting from the 1st and 2nd Franklin Overland Expeditions to the Polar Sea, a substantial part of Pursh’s herbarium on which was based his *Flora Americae Septentrionalis* (1814), and the important collections made in the Canadian Arctic Archipelago by members of Parry’s 1st and subsequent expeditions (1819–20).

In his official report to the Philosophical Society, Erling said:

Several thousands of specimens from these collections were examined in some detail and nearly 300 photographs were made of critical specimens, 'types' or of original letters or notes dealing with historical materials. Because a large part of the material examined is critical, it was often necessary to annotate, or in various ways verify or check literature references for each specimen. During the period spent in Britain, visits were made to Aberdeen, Edinburgh and Oxford for the purpose of examining historically important collections in the herbaria of those cities and certain critical material in the herbarium of the University of Cambridge was borrowed for study at Kew. In the British herbaria special attention was paid to the genus *Dryas* and upwards of one thousand specimens from the British Isles and Central Asia were examined. This resulted in some important information supplementing the results of an earlier study.²⁰

He had told Dr. Alcock that there had been a very sharp increase in the cost of living in Europe since 1950, particularly in France where the U.S. State Department allowed \$18.00 per diem living allowance against \$12.00 for most other European countries, and heard from him December 10 that the Treasury Office would like to have his accounts of expenses incurred at the Botanical Congress. The chances of his thesis report being printed in time for his defence were not looking good, Dr. Alcock told him, but if the proof-reading could be done in Ottawa, it might be finished by April.

I note that you have to assure the University in advance of this so that the date of your public defence could be set by the University. We could let you know, say by February, what the chances of this would be. I wonder whether this being such a special case the University would make an exception for you. I would be very glad to write assuring the authorities that your report is in process of being published and that the report is like the manuscript which they have seen and that the necessary copies would be sent to them just as soon as they leave the printers' hands. It does seem too bad that the granting of your degree may be held up and that you may have to make a return trip to Copenhagen.²¹

On January 17, when Erling heard from Miss Harkness that there was now a fair chance that 300 copies of his paper would be ready to be delivered to the University of Copenhagen by mid-March, he wrote to Dorothy Burke in the Editorial Division of the Department of Mines and Resources:

I understand that if the printers are to have the report ready in March I shall have to forego seeing the proofs. Naturally, I am sorry about that but I expect the few and rather minor additions that I have can be mailed to you or to Miss Harkness. I expect Miss Harkness will keep me informed about the progress of the printing and about deadline for possible additions and corrections to the galleys. I know that much can happen between now and March, and I shall certainly keep my fingers crossed. If it isn't ready, however, I shall only blame myself for taking so long in finishing the introduction; if, by some miracle, it is, I know that it will only be because someone has pushed pretty hard at your end to make it possible and I want you to know that I am very grateful to you for what you have done.

I expect to be in Copenhagen again early in February when I shall know the report of the University committee on my thesis and when I shall also know the latest date for the public defence. According to the rules of the University a certain interval is required between the distribution of the printed report and the public defence in order to allow the official opponents appointed by the University (and anyone else who might wish to criticize the thesis) *ex auditorio* time to study the thesis. It is quite a business, and very different from the procedure at Canadian or American universities! It is quite a solemn affair although a lighter touch is sometimes introduced by the opponents in poking fun at the poor doctorand. Everyone attending wears full evening dress – no caps and gowns – and the function is usually well covered by the press because doctorates are not as common in Denmark where, last year, only 35 degrees were given by the four Danish universities.

I have now spent a bit over one month at Kew. It is a fine place to work and very rich in historical collections of plants, manuscripts, letters and rare botanical works. I am sure I should have no difficulty in passing a whole year profitably, provided, of course that I did not perish from cold. As an arctic 'veteran' I am amazed at the hardiness of the British; at times I even think they enjoy being utterly uncomfortable.

Still, in my own case, the work I am doing is most rewarding and I am daily 'finding' things and facts. Thus far I have only been up to London a few times but I really must take time off to see a few plays and hear some of the wonderful music that is so abundantly available in London.²²

Before he left Kew, he gave a lecture at the Royal Botanic Gardens before the combined staff of the institution, and in February, at the invitation of Wynne-Edwards, he travelled up to Scotland to give a talk on the boreal flora of N.W. Canada to a botanical audience at the University of Aberdeen. Back in Copenhagen on February 15, he wrote to Max Dunbar to tell him that when his father went to live with his younger brother the previous spring he had asked Erling to see that his library and herbarium were taken care of. "The books were moved to the Arctic Institute in Charlottenlund, and the herbarium to Botanisk Museum," he said:

I have gone through his various manuscripts and have had several meetings with Professor Jessen, Bøcher, Sørensen, et al., and the upshot is that a committee has been formed to see what can be done with Dad's 'Flora of Greenland' and I think that there is a good chance that it will be published. But first there is a good deal of work to be done on the manuscript. I am afraid that it will not be possible to keep the library intact. I am to have some of the botanical books that I do not already own; the University would like to buy general works of reference for the Disko Station and for the Arctic Institute. As you know, Dad has a good deal of zoological literature, and when rearranging the books after the move it occurred to me that you might know of someone who might be interested in acquiring the lot.... If I remember correctly, you have spent some time at the Disko Station and probably are familiar with what is there and you probably have a much better idea than I as to the approximate value.

He told Dunbar that he had expected to stay in Europe until the end of May "but it looks now as if I had to return sooner than expected. I had asked for, and was granted a year's leave, commencing April 1st. When owing to pressure of work last spring I was unable to get away until June, I should have asked to have the period changed, but omitted to do so."²³

In his final grant report to the Philosophical Society, Erling wrote: “Returned to Canada on May 1, 1955, having spent approximately 6 weeks in France, 3 weeks in Spain, 4 months in Denmark and Norway, and the balance of the time in England.”

There is nothing in any of the official reports to explain the three weeks in Spain, but in a letter to Joseph Ewan on July 11, in whose house he had been staying while working at Kew, Erling said that his trip to France and Spain “was a delightful one and, except for the sad ending, it certainly was the most enjoyable holiday I have ever had.” An unconfirmed report says that his wife joined him there for a needed holiday for both of them. According to that source, Elizabeth became very ill during their stay and had to be flown back to Ottawa, with Erling booked to follow her on the first available sailing. Whether the story is true or not, by only reaching Canada on May 1, Erling did not make it home in time. After a serious illness, Elizabeth Porsild died, just short of her thirty-seventh birthday, in the Ottawa Civic Hospital on April 19, of “unresolved pneumonia.”²⁴

It was a shocking homecoming after all the months away. Although some people felt he should not have left his ailing wife alone for so long, Ottawa friends, family, and colleagues rallied around. Messages of sympathy from botanical friends across North America and Europe all echoed the feeling of shock and sorrow, including the one from Joseph Ewan to say that he and the ladies in the house where Erling had been staying in Richmond were all deeply stirred and saddened by the news of his wife’s death. “We can only send our very real sympathy and hope that by now things have eased a bit and some semblance of peace of mind returned to you,” he said.

Two months after Elizabeth’s death, Erling finally was able to write to Dr. Merrill at the Arnold Arboretum. “Owing to the illness and tragic and sudden death of my wife, I had to cut my year short,” he said, “leaving a number of things undone.” Even though he had not been able to do all he had hoped, he still felt that he had been able to accomplish most of what he had intended to do in his ‘year’ in Europe and he was sure that the experience he had gained would be of some value in years to come, not only to himself but to others in the field of Arctic and subarctic research.

It was coming to the end of the year when Erling heard from Professor Norman Radforth at Hamilton College, Hamilton, Ontario, that he had only recently heard the sad news of his bereavement, and sent his deepest sympathy for his great loss. “I hope for your own sake that the adjustments you will be

facing will soon become less trying for you,” he said. In thanking him for his kind expression of sympathy, Erling said: “Adjustments such as this must be made because we have to carry on, but as we grow older, they are less easily made.”²⁵

He would have another deep loss to face almost exactly a year later when he wrote to tell Trevor Lloyd that his “dear old Dad, teacher and travelling companion of many trips,” had died on 30 April 1956. Lloyd replied: “I am sorry to hear of the death of your father, for whom all of us had immense respect.... The remarkable thing about Magistar Porsild was, of course, that he was not only an outstanding scientist and the pioneer of all the other Arctic Stations, but he also took an active and constructive part in governing Greenland and planning its reform. I have a thesis that the real reformers of Greenland have seldom been the government officials but so often were men like your father who knew Greenland well but saw the problems from the outside.”²⁶

Due to his wife’s death, Erling was unable to attend the public defence of his thesis, but under the circumstances the University of Copenhagen allowed it to lapse and granted him his PhD degree based on “The vascular plants of the western Canadian Arctic Archipelago,” published by the National Museum in 1955.²⁷



CHAPTER FORTY-TWO

ROCKY MOUNTAINS AND HUDSON BAY LOWLANDS

The soon-to-be Dr. Erling Porsild returned to work in the National Herbarium 11 May 1955, relieving Scoggan who had taken charge during his absence. Baldwin had completed his botanical survey of the Clay Belt region of northern Ontario and Quebec during the past summer, and the newly appointed bryologist, Howard Crum, had joined the staff on September 20 and spent the fall collecting mosses in the Gatineau Hills north of Ottawa. Scoggan's *Flora of Manitoba* was at the printers and he had begun work on a proposed flora of maritime eastern Canada.

It was a particularly hot summer in Ottawa in 1955, with high humidity and temperatures reaching 94° F for prolonged periods, which made for trying working conditions in the Herbarium. Crum went out to the Canadian Rockies for two and a half months and Scoggan left for New Brunswick in July and August, leaving Erling and Baldwin to make plans in the hot office for their next year field trip to the Hudson Bay lowlands. Over the summer, Erling read and reviewed a number of papers submitted for publication in *Arctic*, wrote his report for the American Philosophical Society, prepared an abstract for a symposium on arctic-alpine floras to be held at Michigan State College, East Lansing, on September 5–9, and resumed work on his manual on the flora of the Arctic Archipelago and looking at the illustrations from Mrs. Dagny Lid.¹

He had sent his stepdaughter to his brother's family at Johnson's Crossing for the summer. When she came back from "waitressing" at the end of August, she said that it had been "just super" and she had made "a lot of dough to boot." Nette was growing up, and like Edith/Karin before her, she wanted a new name, so her shortened form of Antoinette was now to be Toni. Erling told

Raup September 2 that he had enrolled her at a girls' school in Whitby for the coming year and was glad that "her summer in the wilds of the Yukon" had turned out so well.

As for himself, "The vascular plants of the western Canadian Arctic Archipelago" was finally out.

When I get up my nerve to look at it, I shall think of a lot of things that I could have said, but didn't. Thus far only a few advance copies have been run off for the University of Copenhagen (they require 289!). When I get more, I shall send a copy along. Meanwhile, the manuscript of the "Manual of the Arctic Archipelago" is almost ready for the printer.... I should like to show it to you before it is submitted, and if I can get away for a few days, I should like nothing better than a visit with you and Lucy. Perhaps some time after the Lansing meeting, towards the end of the month, if you are not tied up then.²

Raup was working on the "Flora of the Alaska Highway" at last and there was nothing he wanted more than for the two of them to compare manuscripts, but he and Lucy were very busy until the end of October. They managed a get-together during an Arctic Institute meeting in Montreal on November 17 when Erling was appointed Secretary and he could tell Raup that he had submitted his *Flora of the Canadian Arctic Archipelago* to the printers the day before. In response to an invitation to go down to Boston for Christmas, Erling said it was most kind of them

... but Karin tells me that Jennifer and Deborah insist that they want to see their grandpa for Xmas and since travelling to Ottawa in mid-winter by car will be a bit too risky, Toni and I shall have to go to Toronto. However, if you are not tied up otherwise between Xmas and New Years, I would very much like to spend a day or two with you talking about the maps we have to produce for the new Atlas of Canada.

It seems that we are expected (whether we can or not) to prepare one map in 1:20,000,000 (or larger) showing 'Native Vegetation' and to fill that balance of two map sheets with anything else we can think of in plant distribution other than trees and agricultural plants. I have thought of using the space to map ranges of species illustrating some of the major phytogeographical groups; not quite the way Hultén

and you have done, but along the lines I have followed in Bull. 135, and to use colour instead of dots. I can have space for 34 small maps measuring about 4 × 6 inches, or half as many as that at twice the size. I can use up to three colours if I wish. The editorial board is averse to the introduction of circumpolar maps and would prefer not to let me show ranges extending beyond Canada. So far I have not pressed for the circumpolar maps, but I believe I could insist on showing ranges extending into Alaska and Greenland. I have been 'playing' with these distribution maps off and on now for a couple of years without, however, reaching beyond the 'cooking' stage. But I shall have to 'produce' fairly soon and would like very much to have your reaction to the method and my choice of species.³

Raup replied on December 14 that the map problem sounded as if it could be troublesome. He would be glad to see what Erling was doing with it, and also take advantage of the opportunity to talk some more about the Alaska Highway when they met on December 28. Meanwhile, as well as doing the maps, Erling started work on the manual on the Flora of Rocky Mountain National Parks, based on field work during 1945, 1946 and 1951. Two days before Christmas, it was recorded that he attended a meeting in Toronto with officials of the Ontario Department of Lands and Forests dealing with a proposed biological reconnaissance in the Hudson Bay lowlands in 1956, and from December 27–30 he consulted faculty members at Harvard University, in connection with Atlas of Canada and problems related to the 1959 Botanical Congress.⁴

The first meeting of the General Programme Committee for the 9th International Botanical Congress was set up in Montreal on 14 January 1956. Those present included R. D. Gibbs, Paul R. Gorham, J. W. Groves, Pierre Dansereau, A. E. Porsild, H. B. Sifton, and chairman Jacques Rousseau. With his experience with several congresses, Erling had prepared a list of his thoughts of what they had better try to do with this first one in Canada, since it was obvious that they had to be realistic in their thinking.

To begin with, no two Congresses have followed the same plan. We are free to set our own pattern, at least about many things. There are several possibilities. We can outdo the French and make things even more elaborate. Or we can try and have a simple Congress. But first we must take stock. We are rich in natural resources, we are told. That

holds for our scenery and native, unspoiled Nature, too. But we are very poor in botanists. This is not something we have to be ashamed of. But we must realize it and cut our cloth according to our purse, because if we do not, [there will be] people from elsewhere who do not understand our peculiar circumstances – that we are young, and that much of Canada is still a frontier country – at least as far as scientific exploration is concerned. Our botanists so far have been preoccupied with local problems. Not many are familiar with problems and conditions elsewhere or have many contacts with botanists in other lands. Such knowledge and experience is necessary to organize and run an International Congress and therefore we but few [will have] to do the work.

To emphasize the problem, Carl Skottsberg, president of the 7th Congress, had told Erling that they had two hundred botanists in Sweden of sufficiently broad training and experience from which to choose the fifty-odd needed for key positions. He made a plea to keep the Congress simple.

Large Congresses are no longer a novelty, especially not in North America. Since we are not bound closely by patterns of earlier Congresses, let us make ours simple. Cambridge was simple. Eight sections. Only invitation papers. Abstracts presented in advance in book form. Papers and subjects in form of round table conference and symposia. We hope to make the 9th Congress the first truly International Congress on this side the Atlantic.... Many European botanists will be coming for the first time to North America. They will want to see our country, our flora and our herbaria and institutions. They will also want to meet our botanists but they will not come to hear papers they can read later at home.⁵

It was a good beginning as the ground plan for the Congress was laid out, and back in Ottawa Erling had little to add to the results. Meanwhile, he was deep in the organization of a complicated summer of field work, where essentially he would have to be in two places at once. He expected to spend most of the summer in the Rocky Mountain parks, but he would have to come east for a two-week break with another project. “Some years ago,” he said in his summer field trip report,

... I planned a botanical survey of large bog and fen areas in the low country west of James Bay hoping to persuade the Swedish bog specialist Hugo Sjörs to join a National Museum field party. I was delighted when Sjörs expressed interest, promising to join us during the summer of 1957, and to bring his wife who specialized in hydrology and who has been his field assistant on all his recent bog and fen projects in Scandinavia. During several visits to Toronto, I had succeeded to interest officials of the Ontario Department of Lands and Forests in such a project and had come away with firm promises of air support to be provided in 1956 for a two-week air and ground reconnaissance when two of their field biologists would accompany a National Museum of Canada sponsored field party consisting, besides myself, of W.K.W. Baldwin and Dr. I. Hustich of the University of Helsingfors. During this survey several areas were to be selected for the 1957 survey. In preparation for this survey, Mr. Baldwin and I were to assemble aerial photos of the selected sites and to have enlarged detail maps prepared from the photos. As far as possible landings were to be made in one or more of these areas.⁶

Turning towards his plans for the summer work in the west, Erling had been in contact with Johannes and Dagny Lid at the Botanisk Museum in Oslo about their combined work in the Rocky Mountains. Johannes Lid was due to retire as Curator in 1956 and the plan was that both the Lids would join him for the summer. "While it may yet be premature to say that we can do it," he said,

... the first and most important obstacle has been overcome when authority was obtained, in principle, for the publication of a book on 'Canadian alpine flowers' to be illustrated by 135 plates of water colours. It is to be approximately 6 × 8 inches in format and to have 165 pages of text. This means that as soon as the National Museum can produce the manuscript and illustrations the 'Queens Printer' will proceed with the work. Whether the work will be done here or elsewhere is to be decided. The next step is to obtain a grant to make it possible for Mrs. Lid to come here to make the illustrations. That may entail some difficulties because our estimates ... for 1956 have already been passed and additional appropriations of this kind are difficult to get through Parliament. However, our Minister has shown

considerable interest in the plan and I expect that his Department has some funds somewhere for 'unforeseen expenditures'... Provided that I get the money, my plan would be to have you come here in early June and to commence work near Banff (elev. 1,100 m) where springs come early. As the season advances, we should move up and spend most of July and August in the alpine zone. In Banff we would try and rent a cabin outside the town. Not far from Banff is a very fine alpine plateau where, at 2,400 m, most of the alpine species may be found. There is a hotel for skiers that some years remains open in summer. At any rate I think it may be possible to rent a cabin with kitchen facilities. Naturally, we shall plan to have a girl to look after the cooking and housekeeping.⁷

By January 1956, the plans for the Rocky Mountain parks were pretty much approved. Ralph Bryenton would join them as Erling's field assistant. However, in April, Dr. Alcock informed him that the Assistant Deputy Minister of the Department had decided that "it would be unwise for the Government to proceed with this work which, he had been informed, would compete with existing works privately published" and therefore he could not permit the National Museum to enter into a contract with the Lids to make the illustrations. Despite Erling's objections that the work would in no way compete with other works and there was an urgent need for such a book, the decision was final. Since the Lids had already accepted his offer, he offered to proceed with the book at his own expense and was finally given permission as long as the work in no way interfered with his field work, and "I was to make no use of technical information obtained by me in the field or in the office in my capacity of a Government botanist." It was a ridiculous restriction in view of all his past work on the project but Erling at once wrote to the Lids and offered to personally finance their travelling and living expenses, proposing that they should jointly complete the work and try and have the book published by a commercial publisher.⁸

Somehow, it all came together in the end. On September 23, Erling wrote to the Raups, who had spent the summer in East Greenland with Link Washburn ("I have always thought it curious that your first physical contact with the Arctic was to be Franz Joseph Fjord in N.E. Greenland!") and was looking forward to hearing about it.

"I returned to Ottawa at the end of August after a hectic but otherwise very enjoyable summer," he said.

The Lids proved very good travelling companions. Despite his 70 years, Johannes is as active and enthusiastic as a youngster just out of school. He climbs mountains like a mountain goat and I had the greatest difficulty in keeping up with him. Everything I proposed met with great enthusiasm and never once did his interest flag. Even the long trip by car from Ottawa never tired him or her and when I asked them if they would not prefer to return by train or by air they said they would, but only if that would make it easier for me; but they really had been looking forward to going back with me in the car. Although Dagny is actually much younger, she acts more like his age. She was happiest when she could be quietly at work with her drawings and she did not mind being left in camp when Johannes and I went off climbing mountains. And she did a wonderful job completing 187 drawings that are all superb. She hopes to do 40 more from notes and sketches, a good many of them monocots and ferns that do not change much by pressing. The problem now is to find a publisher. Thus far only the Oxford University Press has shown real interest and I am to see their editors in Toronto some time this fall.

This winter I shall be working again on the Rocky Mountain manual; but I shall have to abandon my original plan of dealing with only Banff, Jasper and Waterton Lakes parks and expand the area to take in the Rocky Mountain Forest Reserves opened up by a new road which extends from Crows' Nest Pass north behind the first ranges almost to the Edmonton-Jasper Highway. This summer I was only able to work the southern part, from Canmore to Coleman. It adds a number of foothill species but its flora is essentially similar to that of my original area.

I had hoped to do the northern part this summer, but had to go east to take part in a reconnaissance trip to the James Bay lowlands where we plan to have a party working the next two or three summers in close collaboration with Ontario Dept. of Lands and Forests. In four days of flying under ideal conditions we saw a lot of very interesting country. Unfortunately we could not land in some of the most interesting spots but I obtained some quite good colour photos. I should like to show them to you some time and tell you of some of our problems there. The whole area is a huge swamp which appears to be drying out. Over

thousands of square miles larch is the dominant tree which has not been recognized before. There are many kinds of 'patterned' surface, but none due to frost action and as far as we have been able to discover this summer there is no permafrost anywhere, unless deeply buried. In one place I dug down 7 feet in a black spruce muskeg forest without finding frost although the top layer was two to three feet of peat.

Baldwin worked out of two camps this summer, from places selected during the reconnoissanced flights and was able in one or two places to penetrate by canoe into near-inaccessible swamps or bogs. But to really get anywhere we shall have to use helicopters and I hope we can get the ear of the military to do this. Our first landing was the Mattawatawa River in the southwest portion of the lowlands, and to me it was quite a surprise to walk through river forests of elm and ash, some of them with trunks 24 inches in diameter.⁹

He had had to make an unexpected flight back to Ottawa before returning to the Rockies.

I cannot remember if I told you that the Museum is to attain Branch status when Alcock retires in November. I am sorry to see him go into retirement and I know that he would have liked to carry on. Jacques Rousseau, who has been fired from the Montreal Botanical Garden, is applying for the job, and I am afraid that it is all being tailored to fit him. As a matter of fact, it looks as if it had been the intention of the Department to 'rig' the appointment, so that no one else would have a chance to apply. It seems that a lot of office politics are involved and also some nepotism – it appears that Jacques went to school with someone in a high place etc. At any rate, Alcock managed to get his foot in the door in time, and a proper board was appointed. Unfortunately, there wasn't enough time to advertise the job properly and I know that two of the most likely candidates for the job did not have time to consider it before the competition closed. At Alcock's insistence I applied, but only as a 'protest.' I knew I could not do a good job as an administrator and that I would hate it. I was hauled back to Ottawa to appear before the board which, incidentally, appeared to be a very fair one. As yet no decision has been announced. It would be

disastrous for the good of the Museum if R. was given the job. If he is I may seriously consider resigning.¹⁰

There were problems too with the Arctic Institute, which Erling said was “having a difficult time” one way or another.

I have long felt that we are overexpanding and in danger of becoming a mere ‘holding company’ and that we are getting into too many things, and mostly so that we can collect overhead. We should never have become involved with the Northwest Project. Some very curious things have happened there, as it seems unknown to and contrary to the agreement reached by the Board of Governors. I suppose you have seen the letter Graham [Rowley] wrote to Gustafsson of Resources of the Future, in order to find out who submitted the prospectus that was quite at variance with the one the Board had considered and approved. Tom [Manning] is resigning in November and for which I am sorry. He has done a good job and has the interest of the Institute at heart. He feels very frustrated over the way things have been going. We do not seem to have anyone in Canada who can take his place.

It seemed that Erling’s friends in the Arctic Circle had certainly been doing their bit for the Institute, but another friend would soon be solving some of the problems when Dr. H. M. Raup, Director of Harvard Forest, became the new chairman of the Arctic Institute of North America.¹¹

On November 5, Erling told Raup that they still did not know who would be the new Director of the Museum. “The place is rife with rumours; some said to come from the ‘horse’s mouth’ are that the National Museum is to be divided into Natural History and Historical Museums, each with its own director, and that both are to be placed directly under a minister of the Crown. The last would be a good move but I see no advantage to the former. The same source ‘claims’ to know that J. R. is to be our new director. Phooey to that one!” In fact, the “horse’s mouth” claimant had been right about the division of the Museum administration into two branches. Loris S. Russell was appointed to the Directorship of the Natural History Branch, and Jacques Rousseau was appointed as Director of the Human History Branch, but two years later, “following internal friction in the Human History Branch, Dr. Rousseau severed his connection with the Museum” and Dr. Russell took over that Branch as well.¹²

In June of 1957, Erling was elected a Guggenheim Fellow, which provided him with a grant to carry out studies of boreal eastern Asiatic plants in European herbaria that were outside the boundaries of his earlier studies. "This, at any rate, was what I wanted to do," he explained,

... although the document sent me by Mr. Moe, Director of the Simon Guggenheim Memorial Foundation specifically stated that the fellowship was designed to assist me in carrying out studies "when, where and how I wished." For the summer of 1957, field work had been planned in the Rocky Mountains and in the Hudson Bay Lowlands and for the latter, Dr. and Mrs. Hugo Sjörs of Växtbiologiska Institutionen, Uppsala University, Uppsala, had accepted an invitation to join a National Museum field party under my direction. Accordingly, I applied for Special Leave of Absence from the end of October until June 1, 1958. This was readily granted by the Department with the understanding that I would be back to Canada in time to make all necessary preparations for the botanical excursion to the Rocky Mountains and to the Canadian Arctic under my leadership planned for the 9th International Botanical Congress to be held in Montreal in 1959.¹³

For the past year, Erling had been playing an active part in the Field Trips Committee for the Congress. As far back as their second meeting in Ottawa on 14 April 1956, chaired by H. A. Senn, it was felt that these trips would be a very important part of the Congress, with so many scientists coming to North America for the first time. Short and inexpensive trips could be planned comparatively easily while longer trips would have to be either more expensive or limited to small numbers. Under discussion were something in the order of twenty field trips, including one to the Canadian Arctic, one or more to Western Canada to cover the Prairies, the Rockies and Vancouver and beyond, two to Gaspé and the Maritimes, one to southern Ontario and another to northern Ontario for the Clay Belt and Boreal Forest, several around Montreal, Ottawa and Lake St. John which would include mycology and phycology and other specialized trips, and others to bring the United States into the picture, which would include the Great Lakes, Appalachians, and Southwestern Deserts. It was decided that Erling would be responsible for the Rocky Mountain trip around Banff and the trip to the Arctic. He had been making enquiries about the possibility of RCAF support for the latter but it was too early to obtain promises for assistance in

1959. There would not be much chance of a “Grand Tour” except on commercial rates, and accommodation would depend on the co-operation of one of the services, so that “it might be that only a very small group would be invited to take part and such a trip could be organized quite quickly at the last minute.”¹⁴

By April 1957, Erling’s plans for the Museum field trips for that summer were well advanced. He told Raup that he had been working furiously on the Atlas of Canada maps as they had to be handed in that week and he was coming down to Washington for an Arctic Institute meeting when he hoped to go over the last problems with him. It was a short trip but he took Toni with him for a visit with the Raups. After that, it was time to get ready for the bogs and fens of the Hudson Bay lowlands. “I am fascinated by some of the problems facing us in Hudson Bay,” he told Lucy Raup, “but I do not like the flat, swampy country we will be in. We shall all have webbed feet when we return!”¹⁵

The Banting Committee of the Arctic Institute had awarded a travel grant to Hugo Sjörs, the Swedish bog ecologist who was considered the leading authority on northern bogs in Europe. Erling told Dr. Russell that it would cost the Museum nothing for his participation unless a contribution could be made to publishing an independent or joint report of the field work. Sjörs would be joined by his wife who was his usual assistant. Erling later told the Lids that he had found Hugo and Gunnel Sjörs very good and stimulating company and the very best travelling companions and he felt that it was largely due to them that they were able to accomplish so much in such a short time.

The plan called for Erling, Baldwin, and the Sjörs to meet with officials from the Ontario Department of Lands and Forests at Timmins on June 20 ready for departure by plane and later transfer to canoe. The lowlands area that they would be looking at was so wet that it could almost be described as a swamp sea, with wet bogs, pools, surrounding raised ‘islands’ of black spruce. A central camping spot was chosen on the only horizontal and not too soft and muddy area on a clay bank at the junction of the Attawapiskat-Muketei rivers west of James Bay. To Raup he said: “We have solved some of our problems, but as so often happens, for every one problem solved, two new ones develop. It is a truly amazing country, and a tough and forbidding one too and I am afraid that we shall never come to grips with some of the most important problems until we have a helicopter. Also we must find out more about what happens up there during spring breakup, freeze-up and what the country looks like in winter. We should actually set up a small observation post which could be visited at different seasons and be used as a field laboratory in summer.”¹⁶

Leaving Bill Baldwin to continue work alone in the field, Erling and the Sjörs returned to Ottawa at the end of July. After a few days together, the Sjörs boarded their plane for Sweden and Erling headed once again for the Rockies where he planned to study the flora of the eastern ranges that had recently been made accessible by road improvements. From Calgary, where he picked up a Museum-organized jeep, his destination was Cadomin and Rocky Mountain Park, “both now ghost towns in a formerly coal mining district now abandoned owing to decreasing markets for coal.” From there, he and Ralph Bryenton, his old travelling companion from so many northern trips, could make excursions into the nearby hills along former, barely passable mine roads.

The flora of this area was rather different from that of Banff Park, he noted. “Unfortunately, the season was already far advanced; 6 inches of snow fell on August 25, putting a stop to further collecting. Our return was by a different route north from Cadomin to Hinton on the Jasper highway. The first part of this road was very rough. From Jasper, an excursion was made 30 miles up the Indian Snake R. and others to Maligne Lake and to Saskatchewan Glacier on the Jasper-Banff Highway.” Although too late for a number of species, he felt that the overall results of the trip were most satisfactory. Their collection included some important new discoveries and significant range extensions, many of them being arctic species not heretofore known so far south in the Rocky Mountains, which confirmed Erling’s impression that the eastern ranges must have been an important refugium to arctic plants during late Pleistocene time.¹⁷

“For our trip we had a powerful truck equipped with 4-wheel drive and a power winch which made it possible to travel over roads and trails quite impassable to ordinary cars,” he told the Lids in October. “We were even able to drive to the very top of a number of mountains. I rather suspect that you would have frowned on climbing mountains in this manner, but I must say that I found it very convenient and not nearly as strenuous.” He told the Sjörs that it had been very fine mountain country and it had “felt very good again to be on terra firma” after the wet swamps of the Lowlands.

On the train to Ottawa I picked up some kind of bug which has made me feel rather low for a couple of weeks, and from which I am only now recovering. In consequence I am only now slowly ‘digging’ into the accumulation on my desk.... It was my intention to continue checking through your plants, hoping to be able to finish them in a few days and to return them to you together with the cryptogamic plants and

books you left. However, coming to the collections from the Attawapiskat camp I came to realize that Bill's and my collections are, perhaps, more complete than yours and that by concentrating on them I shall avoid duplicating the work and that a list of our collections will provide you with all the information you need to check your own... I shall try to have the complete list ready before I sail for Europe on November 7 and to have your phanerogams shipped before that date.

He looked forward to seeing them again and comparing notes and results of what had been a good and profitable summer.¹⁸

The trip to Europe was coming almost faster than he could plan it. He wrote to Wynne-Edwards in September to tell him that the Department had granted him six months leave from November 1 to continue studies in European herbaria and libraries. "I am not so sure that I have any business going off again at this time," he said, "or that the Guggenheim people used good judgment in making me the Fellowship. But the temptation to accept was very great, and I yielded. My plans are still somewhat uncertain and flexible but I intend to devote more time to visiting institutions, and to talk to [more] people than I did last time, and to see what I can learn about arctic and boreal Eurasian plants and their relation to species in the floras of arctic and sub-arctic parts of N. America."¹⁹

At the end of October, Erling told Hugo Sjörs that he would be coming to see him at their convenience. "I am leaving Ottawa on Nov. 2 and expect to arrive in Copenhagen on Nov. 20. Then I shall go to Stuttgart to pick up my new car and perhaps proceed to Switzerland and Austria." Erling's choice of buying a new Mercedes Benz in Germany might seem extravagant, but it was actually quite reasonable at that time to sail to Europe from North America, buy a car on the other side and drive it around on holiday, and then have it shipped while travelling back by sea.²⁰

Although he was now confident that he could make the trip, he was still under the weather when he wrote to Raup on November 1. "For six weeks after my return from the field I was 'laid low' by the flu and its after effect. I am recovering rapidly now although I still have a cough and am almost deaf on my one ear from some infection. This has put me so far behind in my work and for a time I did not think I would be able to get away. I only finished working up the collection we made last summer and some of the other most urgent matters a few days ago." Karin had been to see him while he was recovering. "I have had

a very nice visit from Karin who had her first holiday away from children and puppies. It was grand to have her all to myself for four days and the comparative rest did her good.”

The trip across the Atlantic was coming up rapidly, and ahead lay Europe, with an unforeseen encounter waiting for him that would change his personal life for the rest of his years. Unaware of what the kindly fates had in store, Erling was confident that he would see everyone and everything he had in mind.

I am sailing on a small Danish freighter which will take me direct to Copenhagen, in 13 days they say. I am looking forward to the trip, because I am sure it will give me a chance to rest and, I hope, also to do some writing. Despite the ‘flu’ I have been working quite hard between spells in bed and I have completed the working up of the collections from the ‘Lowlands’ which contain a great many interesting things, including some quite unexpected range extensions. In all we have about 50 species not recorded from the lowlands in [Abbé Ernest] Lepage’s catalogue. I am taking with me a lot of field notes, plant lists, maps and field data etc. hoping that Sjörs and I can find the time to work on them this winter. For this reason I have kept my European itinerary flexible; also I shall have to talk to a number of people in order to find out where I should go to look at Eurasian arctic-alpine plants and who I should see and talk to. I have been granted a visa to visit USSR and plan at least to visit Leningrad, probably in February or March; I also want to see what they have in Vienna, Geneva and Helsingfors.²¹

The Quarterly Report for the National Herbarium October–December 1957 ended with the brief note: “Left for Europe on November 2nd.”



CHAPTER FORTY-THREE

NINTH INTERNATIONAL BOTANICAL CONGRESS

Crossing the cold and foggy North Atlantic in mid-November 1957, Erling Porsild was grateful for the twelve days of sea-going rest on the freighter to Copenhagen, although he spent three hours each morning and afternoon with his books, papers, and typewriter in order to write up the summer's work and to outline the details needed for the excursions with the Ninth International Botanical Congress in 1959, as well as sorting out slides and going over notes for several lectures he expected to give in Europe.

On arrival in Denmark, he spent a good deal of time in the Copenhagen library and herbarium before picking up his new car in Stuttgart and going via Heidelberg and Basel to Geneva, where he was disappointed to find comparatively little material from the Far East in the DeCandolle Herbarium. He found it was "unheated and poorly provided with lights so that, at this time of year, it was difficult to work there except for a few hours during the middle of the day. A few days after my arrival I was taken ill with some sort of intestinal 'flu' and for the next ten days was laid up at my hotel with a fairly high temperature which left me very weak. In the end I thus accomplished very little in Geneva beyond looking up a number of things in the very excellent botanical library."

He visited Zurich, Salzburg, and Munich before returning to Copenhagen to spend Christmas with his brother Sten and family. Over the holidays, the brothers went ski-ing together in Austria. It seems obvious from Erling's journal entries that, unlike the gruelling pace he had set himself on his last study visit, he intended to make the most of this trip to Europe by taking excursions, going to concerts, operas, and plays, and spending more time with family and botanical friends as well as working in selected herbaria. On January 9, he

wrote to Joseph Ewan, who was back teaching at Tulane University after his research at Kew had ended and had written a letter of support for his Guggenheim fellowship: "I am in Europe, thoroughly enjoying myself, accomplishing very little in the way of useful work, and, as usual, frequently suffering pangs of remorse and guilt for being lazy." He gave as his excuse the fact that he had lost three weeks over the A-influenza attack with complications, but had now completely recovered.¹

He gave a talk on the Hudson Bay Lowlands to a capacity audience in the Botanical Institute in Copenhagen on January 23 before leaving on the overnight boat to Oslo to see Johannes and Dagny Lid and talk about their book on the Rocky Mountain alpine flowers. "In the Oslo Herbarium I came across a collection of Labrador plants made by Moravian missionaries in the early part of the 19th Century," he said. "The collection must be one of the earliest from Labrador and is of considerable historical interest. It had been given to the herbarium many years ago by Professor Axel Blytt but no one in the Museum knew how and when it had come into his possession. It was of little or no interest in the Oslo museum and I was delighted to accept it by way of exchange for the National Herbarium in Ottawa."

He had been invited to go to Trondheim by his old friend Olav Gjaerevoll, Mayor of the town and Director and Curator of that branch of the Norwegian Academy of Sciences, where he was asked to give a talk to members of the Botanical and Zoological Societies. From there he took the train to Stockholm to spend a delightful couple of weeks with Hugo and Gunnel Sjörs, discussing their past and future work concerning the Hudson Bay Lowlands. While there, he was asked to speak to staff and botanists from a number of botanical institutions on the Alpine Flora of the Canadian Rocky Mountains. "Following the lecture, I was invited to a very grand dinner to which came most of my audience of some 60 people. I was told that it is customary thus to entertain out-of-town lecturers who in this case are given an opportunity to meet and talk to the people who come to their lectures. At the dinner, the speaker is the guest of the society while the other guests pay for their own dinners and drinks. This seems an excellent and most civilized custom which we could well adopt in Canada."

Although he had been told at the Russian Embassy in Ottawa that there would be no problem with obtaining his diplomatic passport to Russia while in Europe, he had endless difficulties in Copenhagen and Stockholm until he was finally given the necessary papers in order to proceed to Leningrad via Finland. Hustich met him in Helsingfors and entertained him royally. Erling



A. E. Porsild in front of the Riksmuseet, Stockholm, 1958 (Photo: William A. Weber)

met a number of botanists and gave both his talks on different evenings, but at the one he gave on the Lowlands, he was amused to note that “everyone became so interested in the slides I showed and discussed them so loudly among themselves that I almost gave up giving any commentary at all which, after all, wasn’t needed.”

He was the only passenger on the plane to Russia on February 19 and the hour and a half journey was spent chatting with the stewardess in English. He was met with courtesy at the airport in Leningrad, and, despite a certain amount of confusion over various official rules at the outset, his month’s stay turned out to be a heartwarming as well as a rewarding experience. A certain quantity of vodka may have added to the warmth but he really felt that he had never been surrounded by so much kindness and generosity on all sides. His hotel was reasonably comfortable, he had no trouble with ordering or talking to anyone at meals, his working conditions at the Botanical Institute were more than ample, the staff were helpful in finding a great amount of *Dryas* and other interesting material, his colleagues were extremely warm and friendly, the In-tourist girl who showed him around the city and the Hermitage could not have

been more pleasant and charming, and there seemed to be an endless number of excellent concerts and operas held in the evenings. The equipment supplied for his talks did not exactly give justice to his photographs but they still seemed to be enjoyed, and when he was at work at the Institute during the day, there was a constant stream of visitors at his desk. Before he left, they all came bearing presents for him to take back.

He returned to Copenhagen on March 18, took his car out of storage, and went back to work at the Museum until the end of the month. On April 1, he and Sten set off for another skiing holiday in Austria. It was not until April 15 that he settled in to try and work in the herbarium of the Botanical Museum in Vienna, which he found was another very difficult place in which to work.

The collection is housed in 5 large rooms or halls, each with 30 ft. ceilings. Herbarium cases are wooden and placed in 3 tiers, so that tall ladders are needed to reach the cases. The arrangement of cases is poor and wasteful of space and working conditions in the herbarium are bad. Not only is there no heat but the only light is provided by a few low-watt bulbs suspended from the ceiling. Everywhere tables are piled high with unwrapped collections showing that the staff is quite unable to cope with the work on hand. The library is old and possesses many rare old books and is fairly well up to date. Library space too is scarce and books are scattered through many rooms, in bookcases reaching to the ceiling, often two rows to each shelf. As a result books are hard to find and use. One girl looks after the library and also helps in the herbarium. She told me that at the beginning of the war the entire herbarium and library was removed to storage in various Austrian castles. The plants were tied in bundles and carried downstairs – 176 steps – no elevator, and packed into crates in the yard and there loaded on trucks. As it happened, no damage was done to buildings whereas the Art Museum across the path suffered a bomb hit that did little damage however. One castle in which collections were stored was destroyed during the war and the collections with it, so that several families of monocots (incl. Cyperaceae) were lost.²

It was perhaps fortunate, under the circumstances, that the herbarium was not as rich in East and North Asiatic material as Erling had hoped. He worked on *Dryas* and *Saxifraga* but found little of interest. His entire entry for April 17

read: "Cold. Worked in herbarium. At night to State opera to see *Tosca*." On April 19, the day after his brother Sten left him to go back to Copenhagen, Erling worked only in the morning, went for a drive in the afternoon, and returned at night to see "a very fine performance of O'Neill's *Strange Interlude* – in German." It is notable that there is now a distinct lack of information in his daily reporting. His last entry of any real length is of an excursion to Rax, a hundred kilometres southwest of Vienna, on April 20, which concludes, without naming any companions: "On the way back to Vienna stopped near Petershof in one of the famous wine districts and found a small farm house where we spent the evening. Some other places had been too crowded and noisy. This was smaller and less noisy and very enjoyable. The wine was good (and reasonable), and an old chap with a concertina entertained with typical Viennese songs in which most joined." For four more days, he simply wrote: "To Museum," and then mentioned brief outings. By the end of April, he was touring in Italy, with no mention of anything but place and date, and by May 17 he was back in Copenhagen ready to sail back to North America on the same freighter on which he had travelled six months earlier. Officially, he arrived in Boston May 31 and was back at work in the Herbarium on June 4.³

However, when he arrived in Ottawa he was once again not alone or soon would not be. Miss Harkness said primly: "Mr. Porsild went to Europe with no wife and no car, and he came back to Canada with a new Mercedes Benz and a new wife!" There had actually been no time for a ceremony in Europe but Vienna-born Margrit Guelfenburg Stoeffel, aged 37, divorced school-teacher, and Alf Erling Porsild, aged 57, of Ottawa, Ontario, were quietly married in Edmonton, Alberta, during the field trip to the Rockies in the coming summer.⁴

Erling had been shocked to find that his house had been broken into while he was away. He wrote to Raup to tell him that since coming home "there have been many busy days for me both at the office, and also at home where everything was in a horrible mess after the burglary. I still do not know what the burglars were after, for nothing valuable (except my British order) was taken, nor was any serious damage done. The Police theory is that they were looking for secret documents and manuscripts!" The police theory may have had some basis in his apparent "Russian sympathies" and long stay in Leningrad during the winter, but it would, of course, be impossible to prove. Meanwhile, he was settling back to catch up with work at the office where he expected to spend a couple of months before going out west. All his staff was out of the office. "Bill is back at Winisk, Homer is in the Maritimes and Howard has just gone on

holidays before going in the field,” he told Hugo Sjörs. It is interesting to note the use of the first names, a sign of the changing times after the formality of all the previous years.

By September, he was telling Raup, who had just come back from another summer in East Greenland, that he had recently returned from

... a somewhat hurried trip to Alberta and B.C. mainly to prepare next year's botanical excursion under the I.B.C. to Rocky Mts. The trip was made by car and was a most pleasant one, not least because I was accompanied by 'that girl friend' of mine. She enjoyed the trip immensely and it was fun to observe her reactions to all that was new to her and to show her our Canadian west. By now you will have seen from the formal notice about the happy event.... I have promised Margrit to show her some of the eastern hardwood forest in autumn colours. I shall never forget my own reactions to it, many years ago, on a trip through Vermont and New Hampshire, in October. This and a shopping trip to Boston for curtains and blinds for the porch and for a new record player may give us an excuse for a trip south (as if one was needed). If we do make it we shall certainly want to stop in at Peter-sham on our way.⁵

He was “absent on sick leave” from the Herbarium for 13½ days late in the year when he had to go back into hospital for another operation on his old problem from the North. As he told Sjörs at the beginning of January 1959, “I have had some long-needed repairs done to my legs and to an old hernia and am still a bit ‘weak in the knees’ from much cutting and nearly a month on the sick list. However, things are mending fast and I am sure I shall be able to out-walk you next time we get to Attawapiskat.” He had told Gjaerevoll on November 17 that his recent marriage had been a wonderful change for him, and Margrit seemed very happy and contented in Canada. To Sjörs he added: “Many thanks for your letter of Dec. 12 with holiday greetings and good wishes to Margrit and me on the occasion of our marriage. We still think it was a very good idea! We have had a most enjoyable Xmas with visits from Karin, my married daughter and her family, and from the younger daughter Toni who hopes to graduate from high school next summer.”⁶

Plans for the 1959 International Botanical Congress, to be held in Montreal on August 19–29, were now in full swing. In Ottawa, the entire staff at

the Herbarium were actively involved in the planning as they were slated to be leaders in five major excursions – Homer Scoggan in the subarctic flora at Churchill, Manitoba, Bill Baldwin in the boreal forest of Ontario and Quebec, Howard Crum in the Bryology of Mont Tremblant, Quebec, and Erling Porsild in the alpine and subalpine flora of the Rocky Mountains and in the arctic flora and vegetation of the Canadian Arctic. The arctic excursion was presenting the most problems, so much so that Erling wrote to T. W. Bøcher at the Botanisk Laboratorium in Copenhagen on April 8:

There is still hope that we may be able to put on an excursion to the high arctic, although by now I almost wish that I had never suggested the trip. I want to have this trip as an 'invitation trip' to be extended only to botanists actively interested in arctic botany. It would, of course, have to be severely limited, owing to the quite small number that could be handled by the military aircraft available and by the limited sleeping accommodation at these high-arctic posts. The decision of 'which Department should pay for what and why' has held up the final decision for several months and may, in the end, make it too late to organize the trip.⁷

A letter had been written to Prime Minister John Diefenbaker by W. P. Thompson, President of the University of Saskatchewan, as early as 4 August 1958, outlining the importance of the Congress:

... where some 5,000–6,000 people will bring together scientists from over seventy countries interested in all aspects of plants. As part of the Congress a large number of field trips are being planned whereby botanists will have the opportunity of visiting every Canadian Province. Several departments of the Dominion Government as well as Provincial departments and private agencies are rendering material assistance in the planning and conducting of these trips. It is most desirable that a small group of specialists in Arctic botany should have an opportunity of visiting areas in northern Canada that are almost inaccessible by commercial transportation and in which there are no privately maintained facilities for accommodation. The visit of such a group of specialists would make a real contribution to the solution of problems in the distribution of plants in the Arctic areas of the

world and also to the knowledge of the botany of the Canadian Arctic. Canada occupies a unique position in holding sovereignty over such vast areas of the Arctic and it is especially desirable that foreign scientists should have an opportunity to visit the North at the time of the Congress.

It is impossible for the Congress Board of Directors to plan and conduct a trip in this area without the full cooperation of the Department of National Defence and possibly some assistance as well from the Departments of Transport and Northern Affairs and National Resources. Would it be possible for the Department of National Defence to provide transportation for the party in Service aircraft and food and accommodation at suitable stopover points? We fully realize that considerations of national security are paramount in planning such a trip. There is absolutely no desire to visit secret bases except as this might be necessary to provide suitable accommodation in areas of botanical interest. Since this is an international meeting of scientists we wish to invite botanists from a number of countries including the U.S.S.R.

If permission is granted for this trip the Congress Board would invite some 35–50 specialists to participate. The leader of the trip would be Dr. A. E. Porsild of the National Museum of Canada. The dates would be about August 1 to 11, 1959. A suggested route would be Edmonton – Coppermine – Cambridge Bay – Resolute – Frobisher – Chimo – Montreal. This of course can be modified to meet security regulations and available facilities.⁸

By 17 November 1958, there had been numerous discussions between all the relevant government departments. Alvin Hamilton of Northern Affairs and National Resources, in writing to George R. Pearkes, Minister of National Defence, said that as a result of these discussions it had been agreed that it would not be necessary to plan as ambitious a trip as that contemplated in Dr. Thompson's original letter:

It has also been agreed that the party could be kept to a maximum of thirty-five, and that if this size presented difficulties either in terms of transportation or accommodation the party could be split into two groups. Specifically, what is now proposed is a trip from Montreal to

Great Whale River to Frobisher Bay, flying over the [Chubb] Crater en route. From Frobisher Bay the party might return to Montreal via Fort Chimo and possibly Knob Lake. If it could possibly be arranged, it would be desirable to have a side-trip from Frobisher Bay to Resolute, but if this proves to be too formidable an undertaking the shorter trip or some suitable modification of it to suit the needs of accommodation and so on would be satisfactory to the botanists.

With respect to accommodation I might say that while these men are all scientists of world stature, they are accustomed to making field expeditions and would be quite prepared to sleep under canvas and generally to rough it a little. It is altogether likely that the group will include two or three scientists from the Soviet Union or other Iron Curtain countries. For this reason some thought would have to be given to security arrangements. Before the expedition was finally authorized it would, of course, be considered by the Interdepartmental Committee on the Exchange of Visits with the Soviet Union. I understand that the Committee is already aware of the proposal.⁹

By April 1959, it had finally been agreed that a North Star aircraft would be available to transport a group of thirty-five delegates on a ten-day field trip from Montreal to Great Whale River to Frobisher Bay, with a side trip to Resolute, and return from Frobisher Bay by way of Fort Chimo and Knob Lake. The cost of the trip would be in the neighbourhood of \$10,000, which would have to be borne by either the Congress or the participants. Without subsidy, the cost per delegate would be approximately \$300 for the trip. The Department of External Affairs had agreed to the inclusion of some delegates from Communist countries. On May 5, Erling could finally write to Bøcher:

As you will see from a circular from the I.B.C. Excursions Committee which is being airmailed to all those who have indicated interest in a trip to the High Arctic, we are now in a position to offer such a trip. Unfortunately it will not be the trip I had originally proposed, nor will it, unfortunately, be possible to make it an 'invitation trip' to a select group, at no cost to the participants. Still, it should be an interesting one. It is, of course possible, at this late date, that too few people will be able to change their plans, in which case the trip may have to be cancelled.¹⁰

Raup was in something of a quandary about the Arctic trip. "When we were in Ottawa in February, I told Bill Baldwin that I would go on his trip to the Clay Belt. I haven't written to him yet, but I have just about given this up." In fact, he had about given up going anywhere except to the Congress in Montreal because of the number of botanists he expected to pass through on their way to Canada so he felt he should see them there first. "All this doesn't lessen the attractiveness of the Arctic trip. Can you tell me anything more about the times? Have you got any personal opinions about whether the Arctic trip will actually come off?" Erling said that even though the number of people who had signed up was small, Senn had told him that the trip would go through even though the Congress might have to pay the deficit. "Some of the people I know are going: Hultén, Sørensen, Hedberg, J. W. Thomson, and L. Benson. Senn did not have the additional names when I spoke to him. I do hope you will be able to go. It will be a wonderful opportunity for a quick 'look-see.'"¹¹

Hultén was going to stay with another U.S. botanist, Bill Weber, at the University of Colorado Herbarium in Boulder, en route to the Rocky Mountain excursion. Weber wrote to Erling on June 29, hoping there would be some way that he could

go to the Arctic with that gang; I know Hedberg and most of the rest and think it should be a great trip.... I am expecting Hultén toward the end of this week. He is visiting his brother-in-law for a few days before coming on to Boulder, so he should reach here about July 4. I am planning to have him stay at Science lodge for a few days, to get acclimated to the altitude, and then I am going to take him on a five day excursion to Mount Evans, Hoosier Pass, Twin Lakes, and all of our very best alpine areas. He will fly from here to Jasper. As for us, I'm planning to drive to Jasper with the family and camp them in the park during the time we will be in the field. After the excursion they will go down to Seattle to visit family before returning to Boulder. If the Arctic trip doesn't pan out for me, I would plan to stay in the Park with them and collect until time to go to Montreal.

Erling immediately invited him to come to the Arctic and looked forward to seeing him at Jasper.

On June 9 he told Sjörs that "early in July, Margrit and I leave for the west to check preparations for the Rocky Mt. Excursion. After the excursion we dash back East. On Aug. 5th or 6th the Arctic trip starts from Montreal for a hurried



E. Hultén, Yellowstone Park, 1959 (Photo: William A. Weber)

visit to a few interesting points as far north as Cornwallis Island. Sorry you can't be along – still, there are no peat bogs!" In the end, Eric Hultén went by car with the Weber family to Jasper, which gave him a chance to visit 'Old Faithful' in Yellowstone Park, one of the only 'wonders of the world' he had never visited, and in Erling's official report for both the Rocky Mountain and Arctic excursions, he said he had been "most ably assisted" by Bill Weber who had acted as Assistant Leader, "and," he told Sjors, "made some very startling discoveries, among bryophytes as well as lichens."¹²

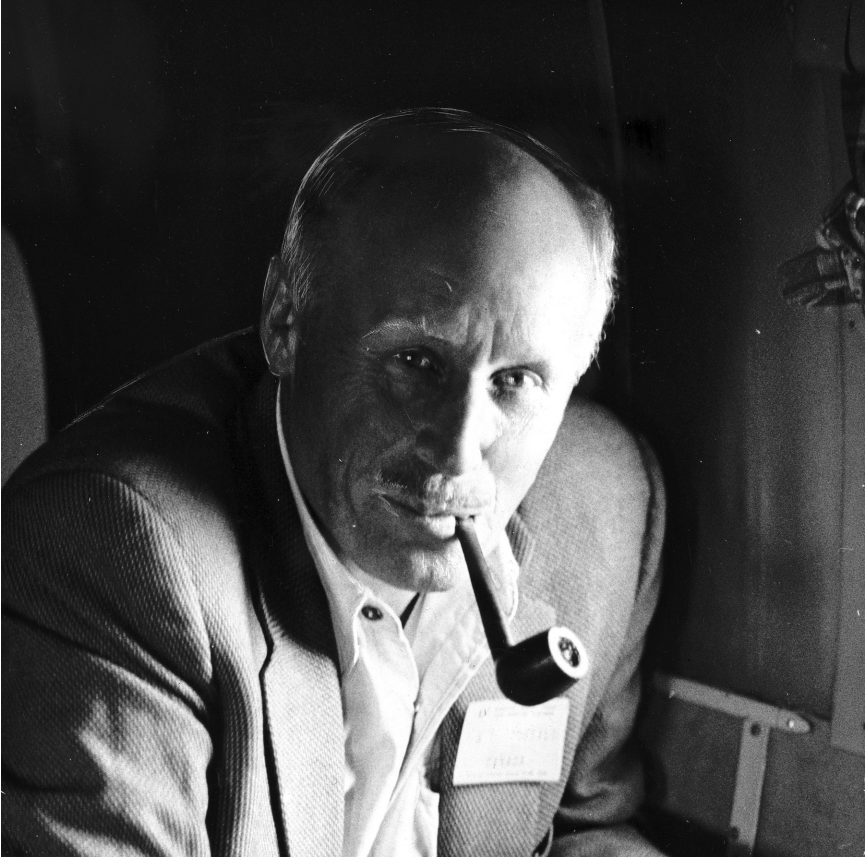
The forty delegates in the Rocky Mountain Excursion No. 2 group "met at Jasper on July 20 and during the following 2 days made excursions to Mt. Edith Cavell and Athabaska Valley," Erling reported. "On July 23 the group moved to Banff where, during the latter part of the month, excursions were made to the general vicinity of Banff, Lake Agnes, Consolation Lake, Snow Creek Pass and the high country along the Continental divide south of Healy Creek. Good weather favoured the excursion which furnished ample opportunities for study and collection of alpine and subalpine flora. An impressive list of new records and discoveries resulted from the tour."¹³

The Arctic trip began on August 8 at Dorval Airport in Montreal where thirty delegates assembled for transport to Great Whale River on Hudson Bay via RCAF North Star. They made their first field trip that afternoon before leaving the next day for Frobisher Bay on Baffin Island where they stayed for two days. On August 11, they were flown to Resolute for a two-day look at the high Arctic vegetation on Cornwallis Island. They left for Coral Harbour on Southampton Island on August 13, and Fort Chimo in Northeast Quebec on August 16, for a further two days of excursions at each location. On August 18 they made a brief stop at Knob Lake (Schefferville) en route south to Montreal. "Good weather and excellent working conditions again favoured the trip which afforded members of the group a unique opportunity for the study of arctic vegetation and flora as well as a most welcome opportunity for the discussion of numerous problems in arctic botany. The large collection of plants obtained included a number of interesting records and discoveries."¹⁴

Raup was delighted to have been able to make the trip to the Arctic. "The more I think back over it, the more amazing that trip becomes," he said. "I don't think I ever accomplished so much in so short a time – not just in the things that I did, but in the ideas I got from the things I saw and did and from the conversations I had with people. The trip certainly must have been one of the outstanding ones of the Congress, and you are to be congratulated for plugging away at the thing until it finally came to pass. As you know, when you talked about it with us last February, I didn't take it seriously at all, and didn't think it was possible."¹⁵

Back in Stockholm, Sjörs reported October 19 that Hultén was giving a lecture that week on the Congress "and on the marvellous Rocky Mts excursion (he will talk later on what he was shown of the Arctic). He is very enthusiastic about it all." Erling heard from F. J. Hermann, Senior Botanist for the U.S. Dept. of Agriculture at Beltsville, Maryland, on November 16:

From Bill Weber I've just had a glowing account of both the Rocky Mountain and your Arctic excursion. The latter, especially, must have been an experience of a lifetime for many of the participants judging not only from Weber's letter but from reports received from several others. Why in the world didn't the Botanical Congress list this trip among the others scheduled, I wonder, or at least get out some advance notice to the registrants? I heard nothing of it until it was over, otherwise I would certainly have made every effort to take part in it.



A. E. Porsild on plane during the International Botanical Excursion to the Arctic, August 1959
(Photo: Hugh Raup, CMNA)

After seeing your account of the Jasper-Banff excursion, too, with all its wealth of detail on significant species encountered, I would wish that I'd found a means of joining in.¹⁶

Scoggan, Baldwin, and Crum would also report successful completion of their Congress excursions. Scoggan was particularly enthusiastic about his Churchill tour which had begun in Winnipeg on August 7, assisted by Dr. J. M. Gillett of the Plant Research Institute in Ottawa, Dr. J. C. Ritchie from the University of Manitoba, and Mrs. Eva Beckett, a long-time resident of Churchill and



Participants of International Botanical Excursion to the Arctic, August 8 to 18, 1959, Ninth International Botanical Congress, Montreal, August 19 to 29, 1959. *L to R*, sitting: G. W. Scotter, W. A. Weber, W.R.M. Mason, T. Mosquin, J. A. Downes, T. S. Bayles; standing: J. W. Thomson, J. K. Morton, A. Stevenson, L. Benson, I.T.K. Kukkonen, E. Hultén, H. M. Dale, A. E. Porsild, W. E. Stevens, B. H. MacNeil, J.J.G. Leonard, B. A. Tikhomirov, D.B.O. Savile, R. Glen, K. O. Hedberg, J. A. Calder, A. A. Dutilly, M. G. Duman, E. Munroe, E. W. Scheer, H. M. Raup (Photo: unknown; William A. Weber Collection)

knowledgeable amateur botanist. They had had a fine display of northern lights one evening, to the delight of the group, and the abundant arctic and subarctic plants were in full flower, which amply justified the trip for all concerned.

The Ninth International Botanical Congress was a triumph for Canadian Botany in general. It was attended by over 3,000 delegates from around sixty countries, and the meetings in Montreal had all gone smoothly (“I think everybody was quite happy about everything,” Erling told Sjörö October 2. “At least I have heard no complaints.”) The excursions had all been well planned and executed across the country, and in five of them close to 150 delegates had been personally conducted into interesting floral areas of Canada by the staff of the National Herbarium of Canada. When it was all over, for the Annual Report of 1959–60, Erling could say that the preparations for the meetings and excursions took up a considerable portion of the working time and effort of the

Herbarium staff, but “in retrospect it is felt that the contacts made and the ideas exchanged during these excursions, as well as the information resulting from them in the form of information and specimens has been fully commensurate with the time and effort expended in the preparation and planning of these excursions.” In other words, it had been a huge success, of which the Herbarium staff could be very proud.¹⁷

It would not be possible, however, for the staff to settle slowly back to normal routines without new distractions. Erling told Raup October 5th that things were still disorganized, both at work and at home, and he was still trying to pick up the pieces after the summer’s activities. At home, painters had taken over the house and Toni was back home again taking her last year of high school in Ottawa. At work, his office had been removed out of the Herbarium on the fourth floor and set up on the floor below, while he was still naming plants collected during the two excursions, by himself and by people who left their collections with him for naming. “I hope eventually to send out a mimeographed list of plants seen and noted on the trip to the Arctic, because some interesting records may easily have escaped me.”¹⁸

The reason for the move was that, in September, the Art Gallery and the Geological Survey finally moved out of the Museum, the latter taking with them the entire photographic staff and equipment. Suddenly, the Herbarium on the fourth floor was provided with a huge amount of space on two floors. In contrast to the preceding years when the Museum botanists who did their office and research work in nooks and corners between the herbarium storage cases, each botanist was now provided with separate office space, and such furniture as he had previously used in the herbarium was transferred to the new offices on the third floor. The problem was that working conditions in the Herbarium itself had now become impossible.

In a memo to C. Allen, Chief Purchasing Division of the Department, September 26, Erling said:

The scientific research of a botanist can only be carried out in the herbarium, where all botanical specimens are stored and where must be available for him the botanical reference works, indices, microscopes and other essential equipment which are the tools of his trade. It is neither practical, nor desirable to carry research material from the herbarium to the offices on the third floor, and desks, chairs and other essential furniture are needed in the herbarium if the botanists are to be able to carry out what I consider their most important function.

In my own case more than half of my working time is spent in research in the herbarium where, for my work desk, for more than a year I have been using a folding table made in the Museum workshop for use in the field, and with it a folding metal chair. Botanists calling on me for professional consultation, I can at present offer a metal chair or the corner of my desk.

He was happy that there would now be adequate space for storing the national collection of plants that had almost tripled since he took office but the present filing cases and index cabinets had long been hopelessly inadequate.

I might add that, except when new positions have been created in the Herbarium, no new furniture has ever been provided for the Herbarium. In my own office, now on the third floor, my desk, I believe was originally provided for Professor Macoun when he came to the Geol. Survey, in 1883. All book cases, cabinets for card indices are hand-me-downs, discarded from other Government offices, the only new furniture being book shelves built in the Museum workshop. My telephone is on the window sill and my coat hangs on the back of my chair.¹⁹

There is no answering memo in Erling's files like those in 1936 when his first request for a workable desk was turned down due to the economic situation, but, two years later, he wrote to Raup on 25 August 1961 to say:

Nothing much has happened in the Museum during the last year. All the empty halls left us by the G.S. and the Art Gallery are still empty. The temporary partitions have been demolished, but it seems that whenever pressure is brought to bear on Dept. of Public Works someone questions the wisdom of spending money on a building that "is slowly sinking into the ground and will some day tumble down, and that, anyway, will have to be replaced in the next few years." A site for a new museum has actually been set aside on Elgin Street, in the downtown area, and if the present Government spending spree continues, we may soon have a new museum. But I doubt that I shall be in it. I think I told you that Dr. Anderson died in June and that Mrs. A. passed on a year ago. Jenness is well and busy writing up the history of the administration of Eskimo lands and their inhabitants, working on a Government grant that gives him completely free hands.²⁰



CHAPTER FORTY-FOUR

THE LAST YEARS

A new decade had begun in the National Herbarium in 1960 and Erling was already planning another trip out West. Writing to Raup in February, he said: "I expect to be in the Rocky Mts. again this summer, but first I plan to spend a month or so with Weber at Boulder, and to have six weeks or perhaps two months in Banff and Jasper, mainly in the easternmost ranges that probably were never glaciated, and where there seems to be a significant concentration of arctic species." He hoped to work with Bill Weber "on some problems of high alpine relic populations," he told Hugo Sjörs in April, and in October he said it had been a good visit and they had made some "very interesting and profitable excursions to the high country (12,000–14,000 ft.) in Colorado. It was a new and very exciting experience to visit these ancient table lands and to study their vegetation. We found at least three species new to the U.S. and at least a dozen new to Colorado or Wyoming."¹

"I had a wonderful summer last," he told Olav Gjaerevoll on December 22, "in some ways perhaps the most profitable and rewarding of all the seasons I have spent in the west. The trip took me all the way through the Rockies from S.E. Yukon to the high country in Wyoming and Colorado where you can get above 14,000 ft. Margrit came along, of course and we took turns driving – 15,000 miles in all."

His only complaint was to Sjörs that "while I was in the field this summer, Howard Crum decided he wanted to marry my secretary, who, in the last couple of years has developed so as to become almost indispensable. It will take several years to train a new girl and I expect that, as a result, I shall have to do most of my own typing. However, these are selfish considerations. I like Howard and I am sure he needs a wife and family life – only I wish he could have picked someone else's secretary."



Margrit and Erling Porsild in Colorado, 1960 (Photo: William A. Weber)

He apologized to Sjörs that, “owing to the Botanical Congress and subsequent digressions,” nothing had been done with the Hudson Bay Lowland material, however he would try and do the needed checking as soon as possible. The “digressions” had included his having to go to hospital to have his old hernia repaired again after having been on the hospital waiting list for fourteen months.

It was not a very serious matter and it looks as if the patching may hold together now. Just as I was ready to return to the office I developed a severe case of bursitis in my right shoulder, but, fortunately, it responded very well to cortisone, and I am now as good as new again. But it has delayed me over a month although I have been able to do a good deal of writing at home. As usual I am trying to do too many things at once. Last winter I completed about half of the ms. of a flora of the Mackenzie District, long overdue. I had planned to finish it this

winter but with the appearance of Moss' *Flora of Alberta* I think it is even more urgent that I should finish a lengthy list which I shall call 'Materials for a Flora of the southern Canadian Rocky Mountains east of the Continental Divide,' which is the results of seven summers' work in the west.

Finally, I am trying to complete a smaller paper resulting from a small job last summer, describing the vegetation of 'Liard Hotsprings' in northern B.C. It is an interesting area because the Liard Gap is one of important migration routes and because I suspected that the spring area would harbour interesting relic elements. I visited the area briefly in 1944 and have wanted to return there ever since, before the forests were burned or before someone built a spa there. I wish you could have been along, for I realize that I must have overlooked many features from lack of understanding. I did make a small collection of bryophytes that Crum has named; perhaps they will help to interpret the ecosystem. My own contribution will, of course be floristic and phytogeographic.

As 1960 came to a close, he told Gjaerevoll: "I really must get some work off my hands in the next few years and if I keep going in the field each summer I shall, instead, keep on piling up new material. The years are rolling along and it makes me shudder to think that in five years I shall have reached retiring age. The big job, of course, is the Rocky Mountain flora of which only the Monocots have been done. Then there is the flora of the Mackenzie District which is about one third done and a half a dozen smaller papers that I am committed to have ready some time this spring."²²

Raup was having a grand 'clean-up' of his collections at Harvard Forest in January 1961, including those from the Alaska Highway, since a young student named George Argus had finished his basic examinations and residence for his doctorate and was staying on for the current year to finish his thesis on willows.

He needed some funds to help out, and I had some research money that I could use for him, so we got together. He moved out to the Forest about the middle of December, and is doing a magnificent job of putting all my collections in order. The 1939 stuff from Brintnell Lake is done, and you should be receiving your set shortly. This is the stuff that had bugs in it, and it had to be completely resorted. I have been

much worried about it, as you know. But when George finally got into it, he discovered that the damage really was superficial, and restricted to only a few bundles. You may imagine my relief!

“I shall be looking forward to receiving a set of your Brintnell Lake and Highway plants,” Erling said, “I have often wished that I had had them.” As well as the major work on the Mackenzie District, he was working on a paper by “a young chap named Arnold from Michigan U.” who had collected very close to Brintnell Lake the previous summer. He was also working on a more lengthy paper on the vegetation of Liard Hotsprings where he had spent a week last summer, as well as a third paper on the lower Liard by “a young forester from Calgary,” and these three papers were all due to appear in an early number of the Museum’s “Contribution to Botany.” On a personal note, he said that he and Margrit were hoping to see the Raups sometime in spring as they were planning a trip to Florida to see her two elderly aunts. “We shall probably leave here about the middle of March and be gone for about one month. My brother and his wife have been visiting us for a couple of weeks and will return to Johnsons Crossing early next week. It has been grand to have them here.”³

Erling had been receiving parts of Hugo Sjörs’ Attawapiskat manuscript on the Hudson Bay Lowlands and was returning the final pages to him. He commented that the notes on potential resources were useful and interesting, although he did not expect either of them would see agricultural development in the Lowlands. Sjörs had raised questions regarding his nomenclature suggestions.

My reasons for showing preference for certain generic names, especially in a non-taxonomic paper, are not purely pedantic ones, but because those are the names that are familiar to the majority of the readers of the *Nat. Mus. Bull.*, and are the names still used in most American manuals. It would not matter much if your plants were arranged systematically, but to the reader not versed in systematics it might not be evident that *Trichophorum alpinum* (in an alphabetical arrangement) is what he knows as *Scirpus hudsonianus*. Few, if any, European readers would be in doubt about the meaning of these names, because they were in use in Europe not so long ago.

I know very well that we shall have to ‘modernize’ our nomenclature very soon. But it will have to come about through the

'Manuals.' Furthermore, if generic names not commonly understood are introduced in a primarily ecological paper, one must insert the commonly used names in brackets. This, in fact, is what I suggested doing, even though it is a little cumbersome. As regards the question of capitals, I must confess that I am old-fashioned and that I have never been able to see the advantage or time-saving in doing away with capitals. But I expect that I shall soon be alone in this and that I shall have to 'smarten up.' In America, most bryologists, I believe, do 'lower-case' and I realize the inconsistency in having *Sphagnum dusenii* on the same line with a *Draba Dusenii*.... I think the rule specifies that if capital letters are to be used for specific names they should be employed only for substantives and for adjectives derived from personal names. Therefore, *Warnstorffianum* should be capitalized, but *hudsonianum* (derived from the name of the bay) not.... But I do by no means insist that you should not write as you like. Other writers in the Mus. Bull. (even my own assistants) are 'permitted' to follow their own choice.

The Porsilds had a good end-of-winter holiday in Florida. "It was a wonderful experience," Erling said, "and, I am sure, did us both a lot of good. It was exciting, too, to see tropical (or at least semi-tropical) vegetation for the first time. Most striking was to see a pine forest with an understory of palmetto or to see and collect in the flesh *Taxodium distichum* of which my earliest and only previous experience was from the Cretaceous rocks of West Greenland, when junior assistant one summer many years ago to Professor A. C. Seward of Cambridge."⁴

It seemed that the years were turning into circles as they moved along. In August, Raup commented: "My heavens! What a lot of letters you and I have written to each other in the last 25 years – and this in addition to all the good talk!" Increasingly, time was showing itself to them both medically. Raup had been in hospital for an eye operation August 2–7. "The eye is getting along OK, but I have some sort of allergic reaction to the post-operative medication, so the thing is swelled up and I look frightful!" Erling hoped the operation had proved successful and he was not too long discomforted. "Perhaps it will be possible some time to replace defective or worn-out organs. I shall be in the market for a better pair of legs!" The Porsilds had spent the summer in Ottawa and had had a nice visit recently from Karin and her three children "who just now are in a very interesting age. They are all well. Toni has been working in Winnipeg this

summer and will be coming home for a short visit next week, before starting her second year in the University of Manitoba.”

Erling was working that summer on his Mackenzie District Flora and he told Raup:

I would have liked to make this a straight manual with keys and brief descriptions, but this would require an additional and preliminary paper in which taxonomical and phytogeographical problems could be taken care of. So now I shall try and compromise with something of a ‘hybrid’ nature in which I give short descriptions of families, and complete keys to genera and species; I hope also to be able to furnish distribution maps for all species not included in my arctic flora, but no descriptions of species beyond what the keys give. It would have been nice to illustrate all species not illustrated in the *Arctic Flora*, but that alone is a big job, even though we now have a full-time illustrator. [Mrs. Bartosch] came to us a couple of weeks ago and even now shows considerable promise, and is very fast. She has had some botanical training and is quite intelligent. After about one week’s briefing I put her to work on the willows, mainly because I was then working on that genus for the Flora. I should very much have liked to have your opinion of what she is doing.... I am now well into the dicots, and with some luck I might get fairly well ahead with the ms. this summer and following winter. With your revision it was great fun to ‘sail’ through the willows. Since I could not hope to improve on your keys, I hope you will not object when I have drawn freely on them.

“Use anything you can out of that willow effusion of mine,” Raup said:

George Argus has changed some of the ‘*glauca* group’ names in his thesis, and is probably right about most of them. He makes *glauca* a rather gigantic species, sinking *cordifolia* into it. But he also sinks *fallax* and *athabascensis* in it, which is dubious. He doesn’t recognize varieties or subspecies of *glauca*, merely geographic ‘phases.’ Then he recognizes one other species in the *glauca* group – *S. brachycarpa*, with three subspecies: ssp. *brachycarpa*, ssp. *niphoclada*, and ssp. *fullertonensis*. He might be right about this. I haven’t read all of his thesis yet, so I don’t know what all of his reasoning is.

Erling said he would certainly be interested to see what Argus was doing with *Salix glauca*, “but, for the present, I am quite happy to follow your latest treatment.”⁵

Sjörs’ paper on the Lowlands was ready for submission in January 1962 but Erling had some questions about the illustrations, text figures, and lettering before it was finally ready to go to the Museum printer. “I think I told you that I plan to spend a month in the London herbaria in March,” he said. “In April I shall join Margrit in Vienna. Before returning to Canada, we shall spend a couple of weeks in Denmark. It would be nice for us if we could include Stockholm in our itinerary; time certainly will be very short of that, but we shall have to think about that.” By September, he could say that they had stuck around Ottawa since their return from Europe in May. “I had hoped to get a lot of writing done, but it never happens. Too many interruptions.” The first proofs of the Attawapiskat paper had arrived from the printer and Miss Burke thought Sjörs, who had just received the good news of his appointment as professor at the university in Uppsala, should see it at that stage. Erling thought it read quite well and Miss Burke had said not to worry about the illustrations that looked pretty terrible in the first proof. The proofs were back to the printer by mid-October with corrections as asked. “We have just had a short visit from Bøcher who brought us up-to-date on botanical doings in Scandinavia,” Erling said, “and told me about the meeting this summer in Reykjavik. I never knew about that one until it was too late to go. I should have liked to be there.”⁶

The “five years” towards Erling’s retirement were beginning to pick up steam, and there were more medical problems to be faced. “I cannot remember if I have told you that I have been away from the office a good deal this summer,” he told Sjörs in November 1963, with only three years left of his herbarium appointment. “First Margrit and I went to Mexico on holidays for six weeks. It was a very fine trip and I should like very much to go back. Soon after our return I had to be rushed into hospital for an emergency operation following a ruptured colon which had caused a massive peritonitis. The first two days the outcome was uncertain but, as you can see, I won and am now almost as good as new.”

He was not quite “almost as good as new” for it had been a serious near-death experience and he was not quite over it. “The first ten days were pretty grim,” he told Raup,

... but since then I have gained strength rapidly and I am now back at the office again when I can work a bit and bring back references and

other material that I can work on at home. I still have a ‘peephole’ in my tummy that is to be sewn up at a second visit to hospital, Sept. 2. This temporary arrangement has been a nuisance and I must say that I much prefer the scheme intended by Nature. Margrit had a pretty bad time and during the first few days suffered more than I; but her recovery did not take quite so long. She has been a wonderful nurse since I came back from hospital and has spoiled and pampered me ‘something fierce.’ We have had a couple of visits from Karin and the children who spent three weeks with Mrs. Taverner at Blue Sea Lake.⁷

On November 1, Erling told Sjörs:

Margrit tells me that we are going to Europe next year and that I am to attend the Edinburgh Congress. There is not much point to me going, actually; in view of my approaching retirement someone else should go. You, no doubt, will be there. If we go, I think I should like to make the post-congress excursion, by boat to Ireland etc. It is good to know that all is well with you and the family. I should like very much to show Margrit a bit of Sweden and to have you meet her. We shall see. Meanwhile, please remember me to Gunnel and the ‘children’ that, no doubt, are all very grown-up. They do grow up; Toni is being married next week!

Erling was well enough for them to go down to see the Raups at the end of November and as usual very much enjoyed the visit and talks, but on the drive back, the oil pressure in the Mercedes suddenly dropped to zero. “Fortunately we were near an exit from the throughway, but before we got with walking distance of a telephone, we were in trouble. We had to leave the car in Albany and take the train back to Ottawa. We hope to have word tomorrow that the car is ready; if we do we shall go down in the VW and get it this coming weekend.”⁸

Erling, however, was far from being back to his old self. In March 1964, he told Raup that he had to go back to the hospital on April 27 “for some more, and, I hope, final repairs. Meanwhile Margrit has made tentative plans for us to go to Europe in early June, when the Lids have planned to take me on some pre-Congress excursions to the high country in W. Norway, famed for its large contingent of rare plants.” At work, he seemed to be making progress in completing some of his projects. His “Yukon paper” was completed long ago but “it

seems that our Editorial Division will be completely bogged down with other work for quite a while. My paper on the N. Eastern antennarias is completed at last and is now being typed.”

Just before going into hospital, he was having second thoughts about his paper on the S.W. Yukon. “I have just completed the examination of the fine set, 3149 numbers, of your Alaska Highway plants that we received some time ago by exchange from the Gray Herbarium,” he said:

I need hardly point out that the collection is a major contribution to our botanical knowledge of the flora of Yukon and northern B.C. In the list I have indicated some of the more important range extensions of which there are a great many. Having seen this material, I now cannot help wonder if in view of your stuff it was not a mistake for me to attempt to proceed with my list of ‘New or noteworthy plants in the flora of S.W. Yukon.’ This paper, as you may remember, was originally intended to deal only with the Schofield & Crum collection and with some stuff my brother and I collected in 1951 and 1961. Later, when the ms. was ready for typing, Spetzman [Lloyd Spetzman of the U.S. Geological Survey] heard of it and sent me his stuff, which contributed a large number of important additions. When your stuff came, my rewritten Catalogue was already completed. I knew you had been working on and off on your material and something you said some years back made me think that your “Highway Flora” was actually so far advanced that it might even be out before my list, and that this was the reason you had released your duplicate material. It is a pity if it won’t be out fairly soon. If I had known a couple of years ago, we might have been able to join forces and publish the highlights of our combined material before the ‘freshness’ had altogether vanished.

Raup’s response was to say that he didn’t know what was in his forthcoming paper on the S.W. Yukon but could see no reason why Erling should not go ahead with it.

Then this material can be used later in something more comprehensive. I have an idea for this ‘something.’ It is a mere suggestion for you to chew on. What do you say to you and I writing a flora of the Alaska Highway strip together? *Mit keys und* brief descriptions yet! As you

know, I have a first draft of this through the Monocots, and the willows could be extracted from my willow paper. The Gray Herbarium set of the collection is mounted but not inserted, and I have it here at the Forest where I can use it. When I can work at such a thing is another question. I'm over my head in the Greenland stuff at the moment, but that won't last forever. Fred and I have our Yukon paper going to the printer now. Anyway, think it over! I think it would be great fun!⁹

It was reported in the National Herbarium Quarterly Report from April 1–July 30, 1964, that Dr. Porsild left June 2 for a summer in Europe, visiting herbaria, attending the Tenth International Botanical Congress in Edinburgh, and collecting in Norway and Sweden, with Dr. Crum acting as Chief Botanist in his absence. He wrote to Sjörs on September 24:

We have been back home for nearly three weeks and are slowly returning to our accustomed way of living. We have had a very interesting, most enjoyable and profitable summer that we shall long remember. I am slowly catching up with the mail that accumulated in my absence and with a considerable pile of parcels containing plants that have been sent to me for determination, revision or report. When I need a rest, I do a little work on the plants I brought back from the excursions in Sweden and Norway, among which are several of which we have little or no material. Yesterday I completed my official report on my trip to Europe and what I did there.

Soon after our return Hultén recently returned from Alaska and Yukon, stopped over in Ottawa for a couple of weeks to look over our Alaska and Yukon plants for additional distributional data for his new Alaska Flora. We put him on a plane for Stockholm last night. He worked very hard while here – often from eight in the morning to late at night and he looked a little tired when he had finished. His energy and his extraordinary ability for sustained work seems undiminished.

Remembering their summer excursion, he said: “As I told you before I left you in Falköping, I very much enjoyed being with you two and with your group and I again thank you for inviting me and for all you did for me. I think I learned quite a lot, and I was much impressed with what I observed and with the broad knowledge of the members of your group, wishing, perhaps, that we had more

people of such high calibre in Canada, or that we somehow could attract some of them to this country.”

Once again there were rumours of changes floating around the National Museum, and there were encouraging signs that they would be forward-looking and exciting. “From what our new director told me a few days ago,” Erling said,

... the National Museum is perhaps due for some years of more liberal financial support, and it has even been hinted that we may soon be permitted to administer the funds voted us by Parliament, with fewer administrative restrictions, and that at least some of our requests for more staff, scientific as well as technical may be more favourably received than has been the case in the past. Our first requests are for a lichenologist and an ecologist – both categories are, as you know, scarce in Canada at present and I expect that we shall have to look for them elsewhere. The lichenologist will be Howard Crum’s responsibility. He might look to Finland where they appear to be in an abundant supply.

In the ecological field, I wonder if you would know anyone who might be interested to come to Canada. As a start we might be able to offer support of, say, a two-year project if such might appear more acceptable than a regular appointment. It might suit some young man working for his doctorate and not yet settled down for good.... When you have the time, I wish you would think about this suggestion and let me know what you think. My own thoughts are that our first attack should be aimed at problems in the boreal forest, or a continuation of the start already made on the Hudson’s Bay peatlands. It should not be difficult to find worth-while problems in either place that would appeal to a Scandinavian ecologist. I am sure such problems would receive very full support and encouragement from our foresters and wildlife management people.

By December 1964, Erling could tell Sjörs that the things he had mentioned in his letter in September as distinct possibilities had already come to pass, and that early in 1965 they would be able to advertise for a cryptogamic botanist for the National Herbarium, looking for a man of proven ability and some experience. “The staff requirements of the new and much enlarged Natural History Museum will, naturally, create favourable prospects for advancements, and for

further appointments to the staff. In fact, we are also advertising now for an assistant technician to help the cryptogamic botanists.”¹⁰

There would be changes both coming and going in 1965. It was officially reported that Dr. Howard Crum would be leaving the National Museum to take up a position at the University of Michigan in Ann Arbor, while Mike J. Shchepanek joined the permanent staff as technician in the Cryptogamic section on June 21, and lichenologist Dr. Irwin Brodo made his first field trip for the National Herbarium to the Gatineau Park on July 26. “As far as I am concerned,” Erling told Sjörs 25 May 1965, “I shall reach retiring age in January, 1966. I have been urged to apply for another year’s extension and have been told that this will likely be approved. Such extensions must be approved again each year and will of course depend on health conditions, etc. If my extension is approved, I shall mainly concentrate on the completion of my two major opera, dealing with the floras of the Rocky Mountains and the Mackenzie District.”

Meanwhile, the Herbarium staff had all been busy attending preliminary meetings and excursions in connection with the newly formed Canadian Botanical Association, which met for the first time at Carleton University in Ottawa on May 26–28. About 150 Canadian botanists were congregating in Ottawa for the event. “By the end of the week when these meetings are over,” he said, “I shall be leaving for Vancouver to attend the annual meeting of the Royal Society of Canada. On the way, I want to make a series of photographs to illustrate a contribution I am preparing for a new Atlas of Canada. To do this we shall go by car. Returning from B.C. we may drive through the American Rockies by way of Salt Lake City where I have to attend to some matters, returning to Ottawa in late June. A lot of driving in one month!”

In the end, the Porsilds decided to fly to Vancouver for the Royal Society meeting. “Before flying back to Ottawa I took some holidays,” Erling told Raup. “We rented a car and drove to Salt Lake City where we talked Mildred Wood into joining us on a tour of Bryce, Grand and Zion Canyons besides some of the lesser ones in the Wasach Range. The weather was grand and we had a fine trip together. The country we saw makes me wonder if more impressive scenery can be found anywhere in this world.”¹¹

Erling’s retirement was extended for a further year in 1966, during which it was officially reported (April 1–June 30) that he “completed his determination and critical study of his Rocky Mountain collection of vascular plants comprising well over 8,000 numbers, the result of nine field seasons spent mainly in Jasper, Banff and Waterton Lakes National Parks. This study ... will be the basis

of his forthcoming flora of the Canadian Rocky Mountains.” In July–September, it was reported that Erling, “in collaboration with W. J. Cody of the Plant Research Institute of the Central Experimental Farm, Ottawa, commenced the preparation of a checklist of the vascular flora of continental Northwest Territories for his forthcoming *Flora of Mackenzie and Keewatin District*.” In the same period, on August 1, Dr. Robert Lee joined the staff of the National Herbarium as Curator of marine algae, and, on September 6, Dr. Robert R. Ireland succeeded Dr. H. Crum as curator of bryophytes. On October 13–14, Erling attended a symposium on “Terrestrial Ecology” at St. Francis Xavier University in Antigonish, Nova Scotia, after which he visited the Cape Breton Highlands where he examined the flora of alpine bogs and made a collection of rare bog plants. He represented the National Museum of Canada at the centennial celebrations of the Peabody Museum of Natural History at Yale University, October 26–28. For the rest of his time up to December 31, 1966, he made a final and critical examination and report on collections of plants made in British Columbia and Alberta by Hugo Sjörs from the University of Uppsala and from the Ogilvie Mountains in the Yukon by Bob Porsild, both under contract with the National Museum, and continued to work with Bill Cody on the “Checklist of Vascular Flora of Northwest Territories.”¹²

Bob Porsild had retired in Whitehorse, and Erling had encouraged him to go back to collecting for the National Herbarium, especially in central Yukon as it was being opened up with the building of the Dempster Highway as far as the Ogilvie Mountains. “That’s pretty country up there,” Bob told reporter Lyn Harrington after he and Elly had loaded up their camper and headed north for a couple of summers, “quite changeable with wide valleys and sharp-edged white limestone mountains. It’s a dead-end road, with only a little hunting, fishing and mining, but hardly any traffic yet. And it’s good country for botanizing. The Ogilvies were not glaciated, you see. Plants grow there that won’t in the siltbanks of lower altitudes.... In two summers, my wife and I collected 464 different species, four to twenty specimens of each.”¹³

It was not recorded in the usual herbarium reports for 1966 that Erling had been called to Government House in Ottawa to be given the Massey Medal for distinguished service to the Canadian scientific community and his contributions to Arctic Botany. The ceremony was held on 3 May 1966, and according to the news bulletin later put out by the National Museum, His Excellency General The Right Honourable Georges P. Vanier said: “We may be thankful that such a thing as the Massey Medal exists by which we can honour such men for

the dedication and devotion in the service of their country. I know I speak for all Canadians when I say that this country owes Dr. Porsild more than it can repay.”¹⁴

The last official letter in Erling Porsild’s office file to Hugo Sjörs, written on 1 December 1966 over the title of “Chief Botanist,” ended: “All is well with us. The Herbarium is buzzing with activity and also badly crowded with people. In the last couple of years, the Museum staff has more than doubled, and in the Herbarium, we are now fourteen in addition to Gunnar Wassen [plant ecologist from Uppsala, Sweden] and Marian Kuc [bryologist] from Poland, who will spend the next year or two on an N.R.C. Postdoctorate fellowship.” His last unofficial letter to Sjörs in the same folder, sans title, was on 15 March 1967: “Margrit has planned a 5-week trip for us, to the Caribbean, by a Norwegian freighter leaving Montreal on April 4. I have been working quite hard since my retirement and I think it will be nice to bask in the sun for a few weeks.”¹⁵



EPILOGUE

CLOSING THE CIRCLE

Nine years before Erling Porsild retired in 1967, Bassett Maguire at the New York Botanical Gardens said that for thirty years A. E. Porsild, Chief Botanist of the National Herbarium of Canada, had been “the outstanding field investigator of boreal American vegetation” and had unquestionably “contributed more to the botany of boreal America than any other botanist now living.” In what was to be the last decade of his life, Erling could justifiably wear that mantle of botanical achievement. He had earned it.¹

James Soper was appointed as Chief Botanist of the National Herbarium in 1967, and George Argus joined the staff in 1972. Erling was awarded the status of Curator Emeritus and given two small offices, free run of the Herbarium and the National Museum Library as well as access to secretarial services. Soper, who readily recognized that Erling Porsild’s major contribution to the Herbarium had been in its growth and world-wide recognition as a valuable resource centre for the study of Arctic Botany, said: “He never interfered with my administration of the Botany Division, and I rarely, if ever, approached him for advice on such matters. Throughout his career he abhorred administrative duties and did only the minimum, considering this as an unwelcome, if necessary, distraction from the serious work of carrying out research.”²

Although his health and strength were noticeably failing in those last years at the herbarium, Erling continued to work on the Rocky Mountain, Yukon, and Northwest Territories manuscripts as well as other papers, of which another dozen, alone or in partnership with others, were published in his lifetime. His friendly relationship with William J. (Bill) Cody, Curator of the Vascular Plant Herbarium at the Department of Agriculture from 1946 to 1988, was remarkable for the rise of helpful understanding that had begun to exist between

that department and the National Herbarium after the bitter territorial feuds of the earlier years. Erling was particularly interested in Cody's extensive field work in the northwest, including his collection of plants around Reindeer Station in 1957 and again in 1963 to determine the effects of reindeer grazing. In 1966, they began to combine efforts to produce a 102-page "Checklist of the vascular plants of the Continental Northwest," published by the Plant Research Institute of Agriculture Canada in 1968. A lengthened version of the checklist, 667 pages, "Vascular plants of the Continental Northwest Territories," co-authored with Cody and published by the National Museum in 1980, was Erling's last major work. In the end, one hundred and twenty-eight publications in all would be credited to Erling Porsild, a sure sign of his towering presence in the field of Arctic and subarctic Botany and the natural sciences over all his years in Canada.

Honours began to pour in after his retirement. In 1971, the Ottawa Field-Naturalists gave him an honorary membership for his many contributions to the Club, the Botanical Society of America gave him the annual Merit Award, and the Canadian Botanical Association presented him with the Lawson Medal for notable contributions to the advancement of Canadian Botany. He received an honorary Doctor of Science degree from Acadia University in Nova Scotia in 1967 and another from the University of Waterloo in Ontario in 1973, in recognition of his remarkable achievements in the field of Canadian Science.³

His death came unexpectedly in 1977. He and Margrit were on holiday in Vienna when he died suddenly on November 13. According to one of his memorial tributes, a small private funeral service was held for him in Vienna, after which he was cremated and his ashes prepared for burial on Disko Island.

Loris Russell paid his respects on behalf of the National Museum and the Royal Society of Canada. "Porsild was one of the last of those scientific explorers who laid the foundation of our knowledge of the Canadian Arctic and its plants, its animals, and its human inhabitants," he said, and under his direction "the National Herbarium collection had almost quadrupled in number of specimens, and had expanded notably into the field of non-vascular plants."⁴

T. J. Wood wrote that it was proper that the Arctic Circle pay tribute to the memory of one of its founders, who was also its first president and a long time member. "A. E. Porsild was my friend – a friendship spanning fifty years," he said. "We shared a common interest in things pertaining to the Canadian North, and had long discussions on its future, especially that of its people. There were times of grief and those of joy.... An often recurring picture is that

of him sitting writing at his desk turning out splendidly composed paragraphs on all manner of subjects; or, of him sitting at ease, smoking his pipe, and discoursing in gently-modulated tone of voice – with many a chuckle – on almost any subject imaginable, except religion. He is to me a memorable personality and now greatly missed.”⁵

Hugh Raup quietly recalled how Erling had enlarged the National Herbarium and made it into a superb research tool, as well as producing the stream of publications based on his studies of the boreal American flora. “He was well known and highly respected among biologists in both America and Europe. His research was meticulous, and rested solidly upon a clear understanding of the materials he worked with and of the theoretical concepts within which he operated. He made major contributions to knowledge not only in the taxonomy of boreal American plants but also in their geographic and circumpolar relationships.” As one of his oldest friends, Raup would remember Erling as “a quiet man, shy and unassuming,” yet he could also say:

He went through life with what amounted to a rollicking, though curiously muted, sense of humour. He was an inspired raconteur, and his tales were nearly always built around amusing incidents. He had a keen sense of the ridiculous in the human foibles he came across, including his own, and enough respect for the imagination of his listeners to describe a situation in the fewest possible words and then leave them to see the humour of it in their own way. His life was a saga of unique experiences and accomplishments – an inspiration to all those who have faith in the capacities of an individual human mind that guides its possessor’s energies with imagination, tolerance and taste.⁶

On 30 December 1977, six weeks after Erling’s death in Vienna, Bob Porsild died in his sleep at his home in Whitehorse. The funeral service was held in the Trinity Lutheran Church where he and Elly had been among the founding members. In an article repeated in both the *Whitehorse Star* and the *Yukon News*, reporter Flo Whyard said: “A giant of a man, in more ways than one, is how Bob Porsild appeared to many Yukoners, and his death at 79 last Friday in Whitehorse has removed from the daily scene one of those quiet pioneers who helped to build this country.” He left behind, in Yukon and Alberta, his widow Elly, three daughters (Betty Seaborn, Ellen Davignon, and Jo Brown), one son Aksel, eleven grandchildren, and one great-grandchild.⁷

Elly wrote to Richard Finnie to tell him that Bob “hadn’t been sick as such, but he was very tired and he never got over the death of his dear brother; they had so much in common in their love for nature and plants.” Margrit also wrote to him, saying that she knew how long his friendship went back with both Bob and Erling. “How strange that Bob died so soon after Erling... Maybe you could write something about the two brothers.” In Finnie’s later article about “The Polar Porsilds,” he remembered all the pleasant visits he had had with both brothers and their families over the years. “As generous, warm-hearted hosts serving good food and drink in their homes, the brothers would joke and tell stories in their Danish-accented English about colourful characters and incidents in the North and elsewhere.” Unlike Erling, Bob had never had any honours heaped on him except local ones, he said, but ironically, after his death, Elly received a Queen’s Jubilee Medal that had been awarded to him “as an expression of appreciation of worthy and devoted service rendered and of the esteem in which he was held by his associates.” Elly remarked: “Bob would have loved it – the only one he ever got.”⁸

It was left to Áskell Löve to write lyrically, as he closed the circle of the Porsilds’ lives: “When the nightless summer returned this spring to their beloved northlands, the ashes of the two great travelling brothers at last joined the arctic ecosystem of their youth in the family plot on Disko Island, where the sun shines all summer long and the northern lights pirouette during the arctic nights into vast eternity.” In his memorial tribute to the younger Porsild brother, Löve said that the importance of the works of great men was not easily appreciated by their contemporaries, but he felt that, in the future tribunal of scientific contributions, Erling Porsild would fare well. Meanwhile, they were

... allowed to admire his tremendous energy as exposed in his great plant collections; his profound learning and unusually sharp floristic eye as manifested in his essential works on the phytogeography of arctic-alpine regions in the Northern Hemisphere; his solid treatment of various entities of the arctic flora that he either was the first to describe or the last to rearrange on basis of new and brilliant observations; and especially his perseverance and literary skill that is mirrored in his many publications which place him among the most productive of Canadian and North American botanists and as one of the few all-time leaders in arctic botanical exploration.⁹

In spite of all the glowing tributes at the time of Erling Porsild's death, it is not a Canadian tradition, as Lester Pearson remarked of his friend Skelton in External Affairs, to create posthumous heroes of men of unsensational merit, especially influential men who were still relatively unknown in the popular domain because they had worked behind the scenes to follow their ideals and conscience with the utmost dedication to a larger cause. Despite Erling's brief bursts into fame with his wartime return from Greenland and his very public dispute with Farley Mowat, despite his solid reputation among his scientific peers, it would not be long before the world would tend to leave him behind to become largely a forgotten man like his father before him. At the time of his retirement, he was already considered old-fashioned by the up and coming young scientists. Even his herbarium, with its emphasis on big expeditions into the field and huge collections in storage, was becoming questionably passé in a North America where most of the vegetation was now known, so that other kinds of specialists were taking the place of the last botanical explorers of whom Erling was unquestionably one of the giants.

By the turn of the twenty-first century, in the reindeer field he would be remembered, if he was remembered at all, as part of the half-forgotten, half-misrecalled history of yet another failed northern scheme by the Canadian Government that had not properly involved the First Nations people, and so he would not likely be given credit where credit was due. In the field of Botany, for a younger generation, perhaps he would be most remembered as being the man who gathered "all that boreal hay" for the National Herbarium, although he would still be known and respected for his flora of the Arctic Archipelago and his impressive reference work with Bill Cody on the "Vascular plants of the Continental Northwest Territories," published in 1980 after his death. But perhaps the time is dawning for a new appreciation of what he accomplished in his lifetime to come up for our re-assessment. Appropriately, the Canadian Botanical Association has created the "Alf Erling Porsild Award" in his memory, "awarded in recognition of the best paper published in the field of systematics and phytogeography that year by a graduate student in a Canadian university or a Canadian student in a foreign university." With our new awareness of what is happening in the north with glacial warming, we might want to re-examine his detailed phytogeographical information with a new eye as to what has changed and is changing in his land of the midnight sun.

Looking back at the symbolic return to Greenland of Erling Porsild's ashes, it is not hard to see that it marked the end of a half-century journey that for him

had been difficult physically, emotionally, and professionally, but had at last brought him the rewards he so truly deserved. He had never stopped working to fulfil his own and his father's ambitions to make a name for himself in the botanical field. He had done his best to make the northern reindeer developmental experiment a success even if it had failed to achieve its potential due to factors largely beyond his control. He had believed in and worked hard for the cause of northern science while diligently seeking to understand the flora of that vast and challenging land above and below the Arctic Circle, from Greenland to Boreal Canada to Alaska, not only in order to identify and classify it taxonomically but to work out the larger questions of origin and migration patterns. He had consistently sought to raise the awareness and standards of Botany in Canada and promote Canada's achievements to the world. He had been a reliable consultant and participant in numerous scientific activities in the Canadian north, and he had won the approval of the British Empire for his important wartime contributions to his adopted country and his distinguished service thereafter.

Young Erling Porsild of Disko Island, who had gone to Canada all those years ago, had done very well indeed. He could, at last, rest in peace.



NOTES

CHAPTER ONE.

GREENLAND BEGINNINGS.

- 1 Family information in this chapter was acquired by sources quoted below, plus personal interview with Erling Porsild's daughter Karin Lumsden and telephone conversation with brother Sten Porsild in Denmark, while long-time friend and consular colleague Trevor Lloyd supplied the legendary boyhood stories.
- 2 E. Stefansson, 1945, *Within the Circle*, pp. 36–37.
- 3 T. J. Wood, 1978, *Porsild – An Appreciation*; see also Peter Freuchen, 1964, *Book of the Eskimos*, and AEP, 1948, *Greenland at the Crossroads*, concerning restrictions for entering Greenland.
- 4 F. De Laguna, 1977, *Voyage to Greenland*. The writer was incorrect in naming the Porsild son as Erling, who was in Ottawa at that time. The son she met was Robert Porsild, visiting his parents while on leave from the Canadian Reindeer Project.
- 5 Craig et al., 1927, *Canada's Arctic Islands*.
- 6 See MPP and AEP, 1920, *Flora of Disko Island*, for visiting scientists and research activities at the station; see also Tempelman-Kluit, 1977, *From Five Cents a Plant*, for story of boys' collections.
- 7 MPP to M. L. Fernald, 1 June 1922, NHF. First part of long letter to Professor Fernald at Harvard University regarding his son Erling's qualifications quoted at length throughout this chapter.
- 8 A. Löve, 1978, *Porsild in Memoriam*.
- 9 A. C. Seward, Undated. Letter of recommendation, PAC/NHC, RG 132:31:450.
- 10 MOM to MPP, 19 July 1922, PAC/NHC, RG 132:31:450.
- 11 C. H. Ostenfeld to MOM, 29 March 1926, PAC/NHC, RG 132:30:441.

CHAPTER TWO.

MALTE AND THE NATIONAL HERBARIUM.

- 1 R. M. Anderson to Francis Harper, 26 Feb 1920, PAC/NHC, RG 132:25.

- 2 For description of herbarium problems, see MOM to F. J. Lewis, 8 May 1924, NHF, and MOM to Chas. Camsell, Deputy Minister, Dept. of Mines, 20 Dec 1924, PAC/NHC, RG 132:20:332.
- 3 MOM, 5 Jan 1926, Memorandum on the Botanical Work of the Geological Survey and the Museum Branch of the Dominion Department of Mines, PAC/NHC, RG 132:30:435.
- 4 MOM to R. B. Thomson, 18 July 1926, PAC/NHC, RG 132:34:490; see also MOM, 29 April 1925, re: applicants for position of student-assistant to Chief Botanist, PAC/NHC, RG 132:30:435.
- 5 MOM to C. H. Ostenfeld, 2 Feb 1926, PAC/NHC, RG 132:30:441.
- 6 For warning re: introduction of reindeer herding, see S. T. Wood to OSF, 1 Dec 1922; for overview of situation, see D. Jenness, 1964, *Eskimo Administration*; see also Maxwell Graham, 11 Aug 1925, Statement regarding the Reindeer Industry and its possibilities in Northern Canada, with special reference to the Northwest Territories, PAC/CRP.
- 7 W. W. Cory to OSF, 28 Jan 1926, and OSF to R. A. Gibson, 17 Feb 1926, PAC/CRP.
- 8 Maxwell Graham, 4 March 1926, Memorandum for Fyle, Dept. of the Interior, NWT and Yukon Branch, PAC/CRP.
- 9 MOM to J. M. Coulter, 3 March 1926, PAC/NHC, RG 132:31:449, and W. T. MacClement to MOM, 8 March 1926, PAC/NHC, RG 132:25.
- 3 For official reaction to AEP's letter, see OSF to AEP, 3 April 1926, OSF to R. A. Gibson, 19 April 1926, and L. D. Baldwin to W. W. Cory, 22 April 1926, PAC/CRP.
- 4 For the role of Anderson and Stefansson in the Canadian Arctic Expedition 1913–18, see Wm. L. McKinley, 1976, *Karluk, the Great Untold Story of Arctic Exploration*; for letter of sympathy after death of her husband, see AEP to Mrs. Evelyn Stefansson, 27 Aug 1962, PAC/NHC, RG 132:34:483.
- 5 For RTP reaction, see Iris Warner collection, 1973–74, Yukon Archives, rough copy of article on CRP, undated and corrected by RTP; see also MOM to C. H. Ostenfeld, 7 May 1926, PAC/NHC, RG 132:30:441.
- 6 R. M. Anderson to MPP, 25 June 1926, NHF.
- 7 MOM to W. H. Collins, 20 April 1926, and W. H. Collins to W. W. Cory, 22 April 1926, PAC/NHC, RG 132:30:435.
- 8 MOM to AEP, 18 May 1926, PAC/NHC, RG 132:31:449.
- 9 MOM to C. H. Ostenfeld, 7 May 1926, PAC/NHC, RG 132:30:441.
- 10 OSF to AEP and RTP, 19 May 1926, PAC/CRP.
- 11 S. Hadwen to OSF, 26 June 1926, PAC/CRP.
- 12 E. W. Nelson to L. J. Palmer, 6 May 1926, PAC/CRP.

CHAPTER THREE.

CALL OF THE NORTHWEST.

- 1 MOM to AEP, 23 March 1926, PAC/NHC, RG 132:31:449.
- 2 AEP to MOM, 25 March 1926, private letter in Danish and official letter in English, PAC/NHC, RG 132:31:449.

CHAPTER FOUR.

IN SEARCH OF REINDEER.

- 1 Erling Porsild kept a field journal from 1926 to 1928. All quotes, descriptions, and activities in this and the remaining chapters in Part One can be assumed to come from this source, accessed by date, unless otherwise cited.
- 2 AEP, 1942, Reindeer/Caribou Grazing in Canada. Re: reindeer/caribou

- taxonomy, see A.W.F. Banfield, 1961, *Revision of Reindeer and Caribou*. See also Hadwen and Palmer, 1922, *Reindeer in Alaska*, pp. 5–6.
- 3 J. A. Luick, 1973, Cantwell Reindeer Industry; see also AEP, 1929, Reindeer Grazing in Northwest Canada, p. 9.
 - 4 AEP to OSF, “June” 1926, PAC/CRP.
 - 5 AEP to MOM, undated, PAC/NHC, RG 132:31:449.
 - 6 AEP to R. A. Gibson, 16 April 1946, re: memo on L. J. Palmer’s study of the Alaska tundra with reference to its reactions to reindeer and other grazing. PAC/NHC, RG 132:30:439.
 - 7 AEP, 1929, Reindeer Grazing in Northwest Canada, p. 10.
 - 8 For position of U.S. Biological Survey and readings on Alaskan herders’ protests, see Hadwen and Palmer, 1922, *Reindeer in Alaska*; Palmer, 1926, *Progress of Grazing Investigations*; Lantis, 1950, “The Reindeer Industry in Alaska,” Stern, 1980, *I Used to Have Reindeers*; Stern et al., 1980, *Eskimos, Reindeer and Land*. See also B. B. Mozee collection, M6 A4, Elmer E. Rasmuson Library Archives, University of Alaska, Fairbanks.
 - 9 AEP to OSF, 8 Aug 1926, PAC/CRP.
 - 10 AEP to R. M. Anderson, 14 Dec 1926, CMNAC/1996-077-Series A-Anderson.
 - 11 AEP to OSF, 8 Aug 1926, PAC/CRP.
 - 5 AEP to MOM, 18 Aug 1926, PAC/NHC, RG 132:31:449.
 - 6 AEP to OSF, 30 Sept 1926, PAC/CRP.
 - 7 AEP to MOM, “September” 1926, PAC/NHC, RG 132:31:449.
 - 8 AEP to MOM, 12 Dec 1926, PAC/NHC, RG 132:31:449.
 - 9 AEP to OSF, 2 Dec 1926, PAC/CRP.
 - 10 MOM to C. H. Ostenfeld, 16 March 1927, PAC/NHC, RG 132:30:441.
 - 11 Ernest de K. Leffingwell, 1919, *The Canning River Region*.
 - 12 AEP to OSF, 2 Dec 1926, PAC/CRP.
 - 13 For official approval of the first season of studying reindeer in Alaska, see OSF to W. W. Cory, 17 Feb 1927; Leonard D. Baldwin to W. W. Cory, 30 Oct 1926; and W. W. Cory to Leonard D. Baldwin, 2 Nov 1926, PAC/CRP.

CHAPTER SIX.

COASTAL ALASKA BY DOGSLED.

CHAPTER FIVE.

LITTLE DIOMEDE TO KOTZEBUE SOUND.

- 1 AEP to OSF, 8 Aug 1926, PAC/CRP.
- 2 See later edition, D. Jenness, 1959, *The People of the Twilight*. For AEP appraisal, see AEP to R. W. Wood and wife, 16 June 1958, re: gift of first edition.
- 3 AEP, 1938, Flora of Little Diomed Island.
- 4 D. Jenness, 1929, *Diomed Islands*.
- 5 AEP to MOM, 18 Aug 1926, PAC/NHC, RG 132:31:449.
- 6 AEP to OSF, 30 Sept 1926, PAC/CRP.
- 7 AEP to MOM, “September” 1926, PAC/NHC, RG 132:31:449.
- 8 AEP to MOM, 12 Dec 1926, PAC/NHC, RG 132:31:449.
- 9 AEP to OSF, 2 Dec 1926, PAC/CRP.
- 10 MOM to C. H. Ostenfeld, 16 March 1927, PAC/NHC, RG 132:30:441.
- 11 Ernest de K. Leffingwell, 1919, *The Canning River Region*.
- 12 AEP to OSF, 2 Dec 1926, PAC/CRP.
- 13 For official approval of the first season of studying reindeer in Alaska, see OSF to W. W. Cory, 17 Feb 1927; Leonard D. Baldwin to W. W. Cory, 30 Oct 1926; and W. W. Cory to Leonard D. Baldwin, 2 Nov 1926, PAC/CRP.
- 1 For commentary on Kleinschmidt’s “improvement” of Eskimo language, and connection with Leffingwell whose expedition Stefansson had been hired to join, and Archdeacon Stuck who escorted Stefansson to hospital at the end of the Canadian Arctic Expedition, see V. Stefansson, 1964, *Discovery: The Autobiography of Vilhjalmur Stefansson*.
- 2 Re: RTP quote, see Iris Warner collection, 1973–74, MS:B247, Yukon Archives.
- 3 Commonest large dextral shells in Arctic (up to 15 cm) are the whelks, family Buccinidae.
- 4 J. Taliaferro, 2006, In a Far Country: The Story of a Mission, a Marriage, a Murder, and the Remarkable Reindeer Rescue of 1898.
- 5 AEP, 1929, Reindeer Grazing in Northwest Canada, p. 14.

- 6 Ernest de K. Leffingwell, 1919, *The Canning River Region*.
- 7 AEP to OSF, 26 June 1927, PAC/CRP.

CHAPTER SEVEN.
TRAVELLING ALONE: AN ACCIDENT AND ITS CONSEQUENCES.

- 1 Ernest de K. Leffingwell, 1919, *The Canning River Region*.
- 2 See R. M. Anderson, Report on the Natural History Collections of the Expedition in V. Stefansson, 1913, *My Life with the Eskimo*, pp. 436–527.
- 3 See J. R. Mackay, 1963, *Mackenzie Delta Area*.
- 4 For estimated decimation of area game by hunters supplying whaling ships 1897–1910 and subsequent lack to mid-century, see Martel et al., 1984, *Wildlife of the Mackenzie Delta Region*.
- 5 AEP to OSF, 25 Jan 1927, PAC/CRP.

CHAPTER EIGHT.
MAIL TIME IN AKLAVIK.

- 1 OSF to AEP, 27 June 1927, and AEP to OSF, 29 June 1927, PAC/CRP.
- 2 AEP to R. M. Anderson, 11 July 1927, CMNAC/1996-077-Series A-Anderson.
- 3 AEP to OSF, 25 June 1927, PAC/CRP.
- 4 MOM to AEP, 7 April 1927 and 6 June 1927, PAC/NHC, RG 132:31:449.
- 5 AEP to MOM, 15 July 1927, PAC/NHC, RG 132:31:449.
- 6 MOM to W. R. Watson, 28 Oct 1927, PAC/NHC, RG 132:35:497.
- 7 MOM to C. H. Ostenfeld, 2 Dec 1927, PAC/NHC, RG 132:30:441.
- 8 C. H. Ostenfeld to MOM, 3 Jan 1928, PAC/NHC, RG 132:30:441.

CHAPTER NINE.
SCHOONER TRAVEL ON THE ARCTIC COAST.

- 1 According to McPhail and Lindsey, 1970, *Freshwater Fishes of Northwestern Canada and Alaska*, arctic char was fished extensively by Inuvialuit along Arctic coast using handlines, jigs, spears, gillnets, and traps.
- 2 AEP to OSF, 15 Nov 1927, Preliminary Report on Field Work of the Summer of 1927, PAC/CRP.SCH
- 3 Bishop Stringer's collection was recorded by J. M. Macoun and Holm, 1921, *Vascular Plants*.
- 4 For story of floating iceberg expedition, see V. Stefansson, 1964, *Discovery*.
- 5 For first published use of term 'pingo,' see AEP, 1929, *Reindeer Grazing in Northwest Canada*, p. 32. For formal introduction of term, see AEP, 1938, *Earth Mounds in unglaciated arctic northwestern America*. See also, R. M. Anderson, 1917, Preliminary list of specimens collected by the Canadian Arctic Expedition, 1914–16.

CHAPTER TEN.
RETURN TO AKLAVIK.

- 1 The journal gives no detail of the kind of evidence the Porsilds found that would indicate the site of an igloo 23–24 years after it had been used.
- 2 For difficulties of travelling along this shallow, stormy coast, and near-shipwreck of over-loaded *Bonnie Belle* one year later, see Metayer, 1966, *I, Nuligak*, pp. 165–66.
- 3 AEP to OSF, 13 Sept 1927, PAC/CRP.
- 4 Note the inordinate amount of time spent fishing in order to feed the dogs. For Arctic cisco, *Coregonius autumnalis*, the most important fish for dogfood at Aklavik, see McPhail and Lindsey, 1970, *Freshwater Fishes of Northwestern Canada and Alaska*.

CHAPTER ELEVEN.
COMPLETING THE 1927
RECONNAISSANCE.

- 1 AEP to OSF, 15 Nov 1927. See also Presnall, 1943, *Reindeer: Indian Service to War*, for caution re: short study of arctic lichen ranges in comparison to slow lichen growth cycle; quotes Palmer's new estimate 50–100 year recovery on badly over-grazed ranges and stresses need for ultra-conservative practices.
- 2 OSF to W. W. Cory, 14 Sept 1927; OSF to R. A. Gibson, 23 April 1928, PAC/CRP.
- 3 OSF to J. P. Richards, 30 Nov 1927; AEP to OSF, 1 Dec 1927, PAC/CRP.
- 4 See AEP, 1945, *Mammals of Mackenzie Delta*. Coyote killed on Arctic coast 1927 was new to the delta and unknown to Inuvialuit although common at Arctic Red River and Fort Norman. Skin/skull in Nat. Mus.
- 5 AEP, 1938, *Earth Mounds in Unglaciated Arctic Northwestern America*, pp. 54–55, mentions visit to this pingo as noted in 1927 in his journal. His 'Midway Island' was Hendrickson Island. Fresh water in pingos much used by Inuvialuit.

CHAPTER TWELVE.
LOOKING BACK AND FORWARD.

- 1 AEP to MOM, 16 Jan 1928, PAC/NHC, RG 132:31:449.
- 2 AEP to MOM, 3 Feb 1928, PAC/NHC, RG 132:31:449.
- 3 MOM to C. H. Ostenfeld, 25 Jan 1928; C. H. Ostenfeld to MOM, 3 Jan 1928, PAC/NHC, RG 132:30:441. See also Grøtved, 1936, *Vascular Plants: Fifth Thule Expedition*, re: collectors Knud Rasmussen, Peter Freuchen, Therkel Mathiassen, Kaj Birket-Smith, Helge Bangsted and Jacob Olsen as having few field notes, lacking information, difficulty with plant collection/

preservation on Arctic expeditions, and only 1,600 specimens.

- 4 See AEP to OSF, 18 April 1927, PAC/CRP, for response to query concerning Dominion Reindeer Company; see also OSF to W. H. Collins, 14 May 1928, PAC/NHC, RG 132:23:364, and W. H. Collins to MOM, 22 June 1928, PAC/NHC, RG 132:30:435, for Hudson Bay grazing potential questions.
- 5 See Machado, 1922, *Dr. Grenfell's Reindeer Experiment in Labrador*; Parker, 1922, Report on Grenfell herd at Lobster Bay; and official correspondence 1923–39 re: herd placed on Anticosti Island, PAC/NHC, RG 132:32:460.
- 6 See Hedlin, 1961, Reindeer for the North; Inglis, 1969, *And Then There Were None*.
- 7 For readings on the Baffin Island experiment, see Diubaldo, 1978, *Stefansson and the Canadian Arctic*; Stefansson, 1964, *Discovery*; Jenness, 1964, *Eskimo Administration*; Scotter, 1969, *Reindeer Husbandry as Land Use*; and Richard S. Finnie, 16 June 1947, semi-final draft of reindeer article sent to AEP for editing, Porsild collection, ROM.
- 8 Rutherford et al., 1922, Report of the Royal Commission to investigate the possibilities of the reindeer and musk-ox industries in the arctic and sub-arctic regions of Canada.
- 9 OSF to AEP, 1 Feb 1928; AEP to OSF, 4 Feb 1928; OSF to AEP, 14 Feb 1928, PAC/CRP.
- 10 Hansard, 6 June 1928, pp. 4007–8.

CHAPTER THIRTEEN.
WINTER TRAIL TO GREAT BEAR LAKE.

- 1 RTP to R. M. Anderson, 8 Feb 1928, CMNAC/1996-077-Series A-Anderson.
- 2 AEP to R. M. Anderson, 15 Jan 1928, CMNAC/1996-077-Series A-Anderson.

- 3 AEP to R. M. Anderson, 3 Feb 1928, CMNAC/1996-077-Series A-Anderson.
- 4 AEP, 1929, *Reindeer Grazing in Northwest Canada*, p. 21. See also Scott and Grossman, 1973, *Freshwater Fishes of Canada*, re: herring at Fort Franklin not marine herring (*Clupea harengus*) but Cisco Lake Herring, *Coregonus artedii* complex, 8–12" long and able to live for 13 years in Great Bear Lake.
- 5 AEP to OSF, 13 April 1928, PAC/CRP.

CHAPTER FOURTEEN.

DEASE ARM AND THE NORTHEAST BARRENS.

- 1 See Houston, 1984, *Arctic Ordeal*, p. 219, re: Richardson's mapping of 450 miles of north shoreline by canoe last three weeks of August 1825 and of south shoreline to Richardson Island by ice sled, 10–23 April 1826.
- 2 For history of Fort Confidence, see standard works on Hudson's Bay Company, plus Thomas Simpson, 1843, *Narrative of the discoveries on the north coast of America*; Houston, 1984, *Arctic Ordeal*; David Hanbury, 1904, *Sport and travel in the northland of Canada*; Stefansson, 1913, *My Life with the Eskimo*; and George Douglas, 1914, *Lands Forlorn*.
- 3 George Whalley, 1962, *Legend of John Hornby*.
- 4 AEP, 1929, *Reindeer Grazing in Northwest Canada*, p. 21.
- 5 Ibid.

CHAPTER FIFTEEN.

CHANGING TIDES AND SEASONS.

- 1 For the results of experiment, see AEP, 1932, *Notes on Seiches and Currents in Great Bear Lake*.
- 2 See G. Douglas, 1914, *Lands Forlorn*.
- 3 E. A. Preble, 1908, Biological Investigation of the Mackenzie-Athabaska Region.

- 4 Ernest de K. Leffingwell, 1919, *The Canning River Region*.
- 5 AEP, 1929, *Reindeer Grazing in Northwest Canada*, pp. 26–27.

CHAPTER SIXTEEN.

OF ICE AND "FLIES" AND MISERABLE DOGS.

- 1 J. M. Bell, 1902, Topography/Geology Great Bear Lake.
- 2 AEP, 1929, *Reindeer Grazing in Northwest Canada*.

CHAPTER SEVENTEEN.

MCTAVISH ARM AND CONJUROR BAY.

- 1 AEP to George Douglas, 27 Oct 1953, NHF.
- 2 See H. Robertson, 1984, *Gentleman Adventurer*, re: Bonnycastle going north on *Distributor* and meeting RTP Fort Norman 1 July 1928; also reported 35 dead Fort Simpson, 23 Fort McPherson, 13 Aklavik, 7 Shingle Point, 1 Whitefish Station; toll of more than 300 Indians reported by Bishop Fleming.
- 3 See Powell-Williams, 2002, *Cold Burial*, re: anxiety of Douglas and Stefansson, pp. 234–35, and OSF letter to Fort Reliance and report filed at Chesterfield Inlet, p. 236.
- 4 RTP quote in Iris Warner collection, 1973–74, MS:B247, Yukon Archives, Whitehorse.
- 5 J. M. Bell, 1902, Topography/Geology Great Bear Lake.
- 6 See F. Watt, 1980, *Great Bear Remembered*, for Labine/Dickens flight 1929, Eldorado strike/claims Echo Bay 1930 to Port Radium 1932. See also R. Finnie, 1942, *Canada Moves North*, for build-up activity/air exploration; and Miggs Wynne Morris, 2000, *Return to the Drum*, for effect of radiative exposure on the Sahtu'ine 1932–60.

- 7 See Johnson, 1975, *Great Bear Lake in History*, p. 239.
- 8 D. Jenness, 1932, *The Indians of Canada*.

CHAPTER EIGHTEEN.
END OF THE INVESTIGATION.

- 1 C. Osgood, 1931, *Ethnography of the Great Bear Lake Indians*.
- 2 See F. Watt, 1980, *Great Bear Lake Remembered*, and V. Stefansson, 1913, *My Life with the Eskimo*.
- 3 AEP to George Douglas, 27 Oct 1953, NHF.
- 4 See E. Taylor, 1985, *A Woman in the Mackenzie Delta, 1894–1895*.
- 5 A. L. Fleming, 1957, *Archibald the Arctic: Archibald Lang Fleming The First Bishop of the Arctic*.
- 6 The Raups and Erling Persild were to become close, life-long friends and colleagues. See correspondence AEP/Raup 1935–1977, NHF and PAC/NHC, RG 132:31:457.

CHAPTER NINETEEN.
RESULTS OF THE SURVEY.

- 1 RTP, Iris Warner Collection, 1973–74, MS:B247, Yukon Archives, Whitehorse. See also Davignon, 1988, *The Cinnamon Mine*, for story of courtship.
- 2 C. H. Ostenfeld to MOM, 1 Nov 1928, PAC/NHC, RG 132:30:441; MOM to Frère Marie-Victorin, 11 May 1929, PAC/NHC, RG 132, vol. 19.
- 3 MOM to W. H. Collins, 3 Nov 1928, PAC/NHC, RG 132:30:435.
- 4 AEP to OSF, 31 Oct 1928, PAC/CRP.
- 5 AEP to OSF, 7 Jan 1929, PAC/CRP.
- 6 Purchase agreement with Lomen Reindeer Corp. 8 May 1929, LFP:48:692.
- 7 AEP to OSF, 7 Jan 1929, PAC/CRP.
- 8 Ibid.

- 9 AEP to OSF, 31 Oct 1928, PAC/CRP.
- 10 For Lomen family's ongoing suspicion of AEP, see L. D. Baldwin to R. Lomen, 21 June 1929, and [R. Lomen] to C. J. Lomen, 31 Aug 1934, LFP:48:692.
- 11 L. J. Palmer to AEP, 5 Feb 1929, PAC/CRP.
- 12 OSF to W. W. Cory, 18 Dec 1928, PAC/CRP.
- 13 Purchase agreement, 8 May 1929, LFP:48:692.

CHAPTER TWENTY.
“THE BEST LAID PLANS.”

- 1 MOM to Watson, 13 May 1929, PAC/NHC, RG 132:35:497.
- 2 Wyatt Malcolm to MOM, 2 May 1929, PAC/NHC, RG 132:30:433.
- 3 MOM to C. H. Ostenfeld, 13 May 1929 and 19 May 1929, PAC/NHC, RG 132:30:441.
- 4 C. H. Ostenfeld to MOM, 3 June 1929, PAC/NHC, RG 132:30:441.
- 5 MOM to Watson, 11 Oct 1929, PAC/NHC, RG 132:35:497.
- 6 AEP to R. A. Gibson, PAC/NHC, RG 132:32:461.
- 7 AEP to MOM, 26 Oct 1929, PAC/NHC, RG 132:31:449.
- 8 See Davignon, 1988, *The Cinnamon Mine*, for family background of Asta Koefoed Hansen.
- 9 AEP to MOM, 26 Oct 1929, PAC/NHC, RG 132:31:449.
- 10 MOM to Selim Birger, 5 Feb 1929, PAC/NHC, RG 132:19.
- 11 See AEP, 1936, *The Reindeer Industry and the Canadian Eskimo*, p. 12, and AEP typed copy of journal, June–July 1931, Introduction to Trip to Sweden and Norway to engage Laps for Reindeer Station, NHF; re: AEP attitude to drive organization.

- 12 AEP to MOM, 26 Oct 1929, PAC/NHC, RG 132:31:449.
- 13 A. Bahr to D. E. Crowley, 16 Dec 1929, LFP:48:692; see also Bahr/Lomen Reindeer Corporation contract, 6 July 1929, LFP:48:692.
- 14 For early drive difficulties, see A. Bahr to A. J. Lomen, 15 Jan 1930; A. J. Lomen to A. Bahr, 30 Jan 1930; D. E. Crowley to Lomen Reindeer Corp., 16 Jan 1930; and W. B. Miller to L. J. Palmer, 26 Feb 1930, for memo re: Alaskan Reindeer for North Canadian Rangelands. LFP:48:692.
- 15 AEP, typed copy of journal, June–July 1931, Introduction to Trip to Sweden and Norway to engage Laps for Reindeer Station, ROM.
- 16 C. H. Ostenfeld to MOM, 10 Jan 1930, PAC/NHC, RG 132:30:441.
- 17 MOM to C. H. Ostenfeld, 1 Feb and 20 March 1930, PAC/NHC, RG 132:30:441.
- 18 C. H. Ostenfeld to MOM, 26 March 1930, PAC/NHC, RG 132:30:441.
- 19 A. Bahr to A. J. Lomen, 22 March 1930; Warren Ferguson to Lomen Bros., 29 June 1930, LFP:48:692.
- 20 See Robertson, 1984, *Gentleman Adventurer*, pp. 112–14, for Bonnycastle's account of downed plane episode.

CHAPTER TWENTY-ONE.
FIELD REPORTS, 1930.

- 1 National Herbarium Field Work 1930, PAC/NHC, RG 132:30:433.
- 2 MOM, Memo re: special leave, 15 Jan 1930, PAC/NHC, RG 132:30:436.
- 3 National Herbarium Field Work 1930, and MOM to Ralph Parsons, 26 June 1930, PAC/NHC, RG 132:30:443.
- 4 AEP, 1936, *Reindeer Industry and the Canadian Eskimo*; see also marginal notations, AEP, ROM, for Tyrell, 1894, Doobaunt, Kazan, Ferguson Rivers,

and Birket-Smith, Geogr. Notes on Barren Grounds.

- 5 AEP to W. Hobbs, 12 May 1945, PAC/NHC, RG 132:25:393.
- 6 AEP, 1936, *Reindeer Industry and the Canadian Eskimo*, pp. 7–11; see also National Photography Collection, PAC:PA 101016-7, Starving Eskimo woman and girl, and PAC:PA 101018, AEP giving out emergency rations, Kazan R., Keewatin District, NWT 1930.
- 7 E. Davignon, 1988, *The Cinnamon Mine*.
- 8 E. Porsild, 1981, "Excitement of First Year," *Yukon News*, 21 Oct.
- 9 RTP to R. M. Anderson, 20 Nov 1930, CMNAC/1996-077-Series A-Anderson.
- 10 E. Porsild, 1981, "Excitement of First Year," *Yukon News*, 21 Oct.

CHAPTER TWENTY-TWO.
SAD NEWS AND SUMMER IN
SCANDINAVIA.

- 1 SGD. Carl Christensen to MOM, 19 Jan 1931, PAC/NHC, RG 132:30:441.
- 2 MOM to Mrs. Ostenfeld, 24 Feb 1931, PAC/NHC, RG 132:30:441.
- 3 Mrs. Ostenfeld to W. H. Collins, 5 Dec 1931; W. H. Collins to Mrs. Ostenfeld, 7 March 1934, PAC/NHC, RG 132:30:441.
- 4 MOM to Mrs. Ostenfeld, 14 June 1933, PAC/NHC, RG 132:30:441.
- 5 MOM to OSF, 3 March 1931, PAC/NHC, RG 132:30:433.
- 6 See AEP, 1936, *Reindeer Industry and the Canadian Eskimo*.
- 7 D. E. Crowley, 9 April 1931, Report of Trip to Canadian Drive, and V. Stefansson to C. J. Lomen, 28 July 1930, LFP:48:692.
- 8 L. D. Baldwin to OSF, 7 May 1931; L. D. Baldwin to Lomen Reindeer Corp. 6 June 1931, LFP:48:692.

- 9 For entire account of AEP trip to Scandinavia in 1931, see type-written copy of his journal, Introduction: Trip to Sweden and Norway to engage Laps for Reindeer Station, June–July, 9 pp. and a second part to Sweden and Norwegian Lapland to engage Lap reindeer instructors for Reindeer Experiment, 15 pp., ROM.

CHAPTER TWENTY-THREE.
DESTINATION REINDEER STATION.

- 1 With one exception cited below, the information in this chapter has been taken from the second part of Erling Porsild's typed copy of his 1931 journal – *To Sweden and Norwegian Lapland to engage Lap reindeer instructors for Reindeer Experiment*, 15 pp. A. E. Porsild collection, ROM.
- 2 AEP to C. L. Porter, 2 May 1949, NHF, re 'Sennegrass' instructions.

CHAPTER TWENTY-FOUR.
THE DRIVE CONTINUES.

- 1 L. D. Baldwin to OSF, 15 Oct 1931, LFP:48:692.
- 2 OSF to L. D. Baldwin, 23 Oct 1931; see also H. E. Hume to L. D. Baldwin, 17 Dec 1931, re: retirement of OSF and work of NWT Branch transferred to Dominion Lands Administration. LFP:48:692.
- 3 OSF to L. D. Baldwin, 29 Nov/1 Dec 1931, LFP:48:692.
- 4 AEP to Commissioner, Dominion Lands Administration, 13 March 1932, PAC/CRP, RG 85:1135:270-1-1; personal communication with Elly Porsild in Whitehorse, 1985.
- 5 A. Bahr to A. J. Lomen, 17 July 1932, LFP:48:692.
- 6 [R. Lomen] to C. J. Lomen, 31 Aug 1934, re: possible purchase of native deer; Circulated warning unsigned, undated, possibly written by Geo.

A. Morelander, Supt. N.W. Dist. U.S. Bureau Educ; see also C. L. Andrews p.p. G. A. Morelander to A. Bahr, 30 July 1929, re: warning not to mix Canadian deer with native deer of Kotzebue Reindeer Co. LFP:48:692.

- 7 D. E. Crowley to R. Lomen, 23 Aug 1934, re: circular by Morelander warning people of the north coast against possible Lomen rustling tactics. LFP:48:692.
- 8 MPP to R. M. Anderson, 1 July 1932, CMNAC/1996-077-Series A-Anderson.
- 9 AEP, 1936, Reindeer Industry and the Canadian Eskimo.
- 10 AEP to R. M. Anderson, 1 July 1932, CMNAC/1996-077-Series A-Anderson.
- 11 RTP, Iris Warner collection, 1973–4, MS B247, Yukon Archives.
- 12 L. D. Baldwin to R. Lomen, 22 Oct 1932, LFP:48:692.
- 13 RTP, 1971, Seal for Government: Alaska Journal, vol. 1, no. 3.
- 14 AEP, 25 Nov 1932, letter for W. H. Collins sent to MOM. PAC/NHC, RG 132:31:449.
- 15 MOM to AEP, 4 Jan 1933, PAC/NHC, RG 132:31:449.
- 16 AEP to R. M. Anderson, 3 Feb 1933, CMNAC/1996-077-Series A-Anderson.
- 17 A. Bahr to R. Lomen, 7 March 1933; RTP and A. Bahr to R. Lomen, 29 March 1933, LFP:48:692.
- 18 AEP to MOM, 23 June 1933, copy in Anderson's file, CMNAC/1996-077-Series A-Anderson.
- 19 P. M. Hulbert to J. E. Howitt, 24 Aug 1933, PAC/NHC, RG 132:26:393.

CHAPTER TWENTY-FIVE.
THE END OF THE PROJECT.

- 1 MPP to R. M. Anderson, 11 Oct 1933, CMNAC/1996-077-Series A-Anderson.
- 2 R. M. Anderson to MPP, 13 Dec 1933, CMNAC/1996-077-Series A-Anderson.

- 3 H. H. Rowatt to R. Lomen, 28 June 1933, LFP:48:692.
- 4 For history leading to investigation of Lomen enterprises, see Olsen, 1969, *Alaska Reindeer Herdsmen*.
- 5 C. J. Lomen to R. Lomen, 8 July 1933, LFP:48:692.
- 6 D. E. Crowley to R. Lomen, 31 Aug–7 Nov 1933, LFP:48:692.
- 7 AEP, 1936, Reindeer Industry and the Canadian Eskimo.
- 8 A. Bahr to C. Lomen, 18 April 1934; D. E. Crowley to R. Lomen, 26/27 Feb 1934; R. Lomen to D. E. Crowley, 16 March 1934; LFP:48:692.
- 9 R. M. Anderson to MPP, 31 July 1934, CMNAC/1996-077-Series A-Anderson.
- 10 R. M. Anderson to H. M. Raup, 4 Nov 1935, CMNAC/1996-077-Series A-Anderson.
- 11 R. M. Anderson to H. M. Raup, 24 Feb 1934, CMNAC/1996-077-Series A-Anderson. See also M. O. Malte, 1934, Critical notes on plants of Arctic America, *Rhodora* 36:172-193.
- 12 AEP to R. M. Anderson, 9 Aug 1934, CMNAC/1996-077-Series A-Anderson.
- 13 R. M. Anderson to RTP, 12 Oct 1934, CMNAC/1996-077-Series A-Anderson.
- 14 AEP to R. M. Anderson, 20 March 1934, CMNAC/1996-077-Series A-Anderson.
- 15 AEP, 1935, Mackenzie Delta Breeding Ground for Waterfowl.
- 16 AEP to R. M. Anderson, 20 March 1934, CMNAC/1996-077-Series A-Anderson.
- 17 D. E. Crowley to C. J. Lomen, 25 Feb 1935, LFP:48:692.
- 18 AEP, Dom. Lands Admin. Official Receipt of Reindeer, 6 March 1935, PAC/CRP, RG 85:1135-270-1-1.
- 19 R. M. Anderson to AEP, 11 March 1935, CMNAC/1996-077-Series A-Anderson.
- 20 AEP, 1936, Reindeer Industry and the Canadian Eskimo.
- 21 AEP to H. M. Raup, 19 Oct 1935, PAC/NHC, RG 132:31:457.
- 22 H. M. Raup to AEP, 21 Oct 1935, PAC/NHC, RG 132:31:457.
- 23 R. M. Anderson to H. M. Raup, 7 Nov 1935, CMNAC/1996-077-Series A-Anderson.
- 24 H. M. Raup to R. M. Anderson, 12 Nov 1935, CMNAC/1996-077-Series A-Anderson.
- 25 R. M. Anderson to H. M. Raup, 6 May 1936, CMNAC/1996-077-Series A-Anderson.

CHAPTER TWENTY-SIX.
THE NATIONAL HERBARIUM.

- 1 W. H. Collins to AEP, 1 May 1936, PAC/NHC, RG 132:30:436.
- 2 R. M. Anderson to Professor M. L. Fernald, 14 April 1936, CMNAC/1996-077-Series A-Anderson.
- 3 J. Ramsbottom to MOM, 7 March 1933, PAC/NHC, RG 132:31:447.
- 4 MOM to J. Ramsbottom, 28 March 1933, PAC/NHC, RG 132:31:447.
- 5 R. M. Anderson to E. Hultén, 31 Aug 1933, PAC/NHC, RG 132:26:394.
- 6 AEP to V. Wynne-Edwards, 22 Nov 1945, NHF.
- 7 AEP to W. H. Collins, 12 May 1936, memo. PAC/NHC, RG 132:30:436.
- 8 AEP to R. M. Anderson, 5 Aug 1936, CMNAC/1996-077-Series A-Anderson.
- 9 AEP to H. M. Raup, 6 Dec 1936, PAC/NHC, RG 132:31:457, and AEP to C. Heimbürger, 4 Aug 1936, re: AEP health problem, PAC/NHC, RG 132:25. See also W. J. Hooker, 1829-40, *Flora Boreali-Americana*.
- 10 AEP to R. M. Anderson, 2 Feb 1937, CMNAC/1996-077-Series A-Anderson.

- 11 D. Jenness to AEP, 28 Jan 1937, PAC/NHC, RG 132:27:397. See also, AEP, 1938, *Flora of Little Diomed Island*, and AEP, 1937, *Edible Roots and Berries of Northern Canada*.
- 12 AEP to R. M. Anderson, 7 March 1937, CMNAC/1996-077-Series A-Anderson.
- 13 AEP to R. M. Anderson, 20 March 1937, CMNAC/1996-077-Series A-Anderson.
- 14 AEP to W. Maxon, 16 April 1937, PAC/NHC, RG 132:28:414.
- 15 W. Maxon to AEP, 19 and 24 April 1937, PAC/NHC, RG 132:28:414.
- 16 AEP to E. Hultén, 21 Sept 1936, PAC/NHC, RG 132:26:394. See also, Hultén, 1937, Outline of the History of Arctic and Boreal Biota during the Quaternary Period and Flora of the Aleutian Islands.
- 17 See AEP, 1938, Earth Mounds in unglaciated northwestern America.
- 18 W. Malcolm to AEP, 23 June 1937, PAC/NHC, RG 132:30:433; J. A. Urquhart to J. Lorne Turner, 15 Sept 1936, PAC, RG 109.77-8/155:1:7.
- 19 AEP to R. M. Anderson, 14 July 1937, CMNAC/1996-077-Series A-Anderson.
- 20 AEP to J. Seward, 29 Nov 1938, PAC/NHC, RG 132:33:476; and AEP to H. M. Raup, 12 Sept 1937, PAC/NHC, RG 132:31:457.
- 21 See newspaper article in the *Ottawa Journal*, Tuesday, 7 Sept 1937, under heading "Dr. A. E. Porsild Finds Rare Labrador Plants."
- 22 N. Polunin to AEP, 4 Nov 1937, PAC/BHC, RG 132:31:447.
- 23 AEP to H. M. Raup, 14 Dec 1937, PAC/NHC, RG 132:31:457. "Nun sieht man leicht" translated by Ludger Müller-Wille as "now one can see it easily."
- 24 AEP to H. M. Raup, 12 Sept 1937; H. M. Raup to AEP, 17 Sept 1937; PAC/NHC, RG 132:31:457. See also V. C. Wynne-Edwards, May 1937, *Isolated*

Arctic-Alpine Floras in Eastern North America.

- 25 AEP to H. M. Raup, 12 Sept 1937; H. M. Raup to AEP, 17 Dec 1937, PAC/NHC, RG 132:31:457.
- 26 AEP to H. M. Raup, 10 Jan 1938; H. M. Raup to AEP, 14 Jan 1938, PAC/NHC, RG 132:31:457.

CHAPTER TWENTY-SEVEN.
PUBLISH OR PERISH.

- 1 AEP to H. M. Raup, 10 Jan 1938, PAC/NHC, RG 132:31:457.
- 2 H. M. Raup to AEP, 14 Jan 1938, PAC/NHC, RG 132:31:457.
- 3 AEP to W. Malcolm, 19 Jan 1938; W. Malcolm to J. McLeish, 21 Jan 1938, PAC/NHC, RG 132:30:433.
- 4 AEP to H. M. Raup, 19 Jan 1938 and 28 Jan 1938; H. M. Raup to AEP, 25 Jan 1938, PAC/NHC, RG 132:31:457.
- 5 AEP to H. M. Raup, 28 Jan 1938, PAC/NHC, RG 132:31:457.
- 6 H. M. Raup to J. McLeish, 17 March 1938, PAC/NHC, RG 132:31:457.
- 7 AEP to H. M. Raup, 29 March 1938, PAC/NHC, RG 132:31:457.
- 8 H. M. Raup to AEP, 22 April 1938, PAC/NHC, RG 132:31:457.
- 9 AEP to H. M. Raup, 27 April 1938, PAC/NHC, RG 132:31:457.
- 10 E. Hultén to AEP, 18 Dec 1937, 14 Feb 1938, 10 May 1938, PAC/NHC, RG 132:26:394.
- 11 See AEP to H. M. Raup, 30 May 1938 and 13 June 1938, PAC/NHC, RG 132:31:457, re: Hultén's arrival and stay in Ottawa; E. Hultén to AEP for his thanks for hospitality, PAC/NHC, RG 132:26:394; and E. Hultén, 1941-48, *Flora of Alaska and Yukon*, p. 9, re: not seeing Porsild brothers' northwest collection.

- 12 AEP to H. M. Raup, 13 Aug 1938; H. M. Raup to AEP, 16 June 1938, PAC/NHC, RG 132:31:457.
- 13 See AEP/Raup correspondence file for exchange of letters 16 June–22 Aug 1938, PAC/NHC, RG 132:31:457.
- 14 AEP to W. Malcolm, 19 July 1938, PAC/NHC, RG 132:30:433.
- 15 AEP to H. M. Raup, 28 July 1938, PAC/NHC, RG 132:31:457.
- 16 AEP to H. M. Raup, 7 Aug 1938, PAC/NHC, RG 132:31:457.
- 17 AEP to W. E. Ekblaw, 14 Feb 1938, PAC/NHC, RG 132:22:354.
- 18 AEP to Sir Albert C. Seward, 29 Nov 1938, PAC/NHC, RG 132:33:476.
- 19 AEP to H. M. Raup, 16 Aug 1938, PAC/NHC, RG 132:31:457.
- 20 H. M. Raup to AEP, 19 Aug 1938, PAC/NHC, RG 132:31:457.
- 21 AEP to M. L. Fernald, 22 Aug 1938, PAC/NHC, RG 132:23:363.
- 22 AEP to H. M. Raup, 22 Aug 1938, PAC/NHC, RG 132:31:457.
- 23 M. L. Fernald to AEP, 29 Aug 1938, PAC/NHC, RG 132:23:363.
- 24 AEP to H. M. Raup, 2 Sept 1938, PAC/NHC, RG 132:31:457; W. Malcolm to J. McLeish, 3 Sept 1938, PAC/NHC, RG 132:30:433.
- 25 H. M. Raup to AEP, 20 Sept 1938, PAC/NHC, RG 132:31:457; AEP to E. Hultén, 13 Oct 1938, PAC/NHC, RG 132:26:394.
- 26 AEP to W. Malcolm, 24 Nov 1938, PAC/NHC, RG 132:30:433.
- 3 AEP to E. Hultén, 14 Dec 1938, PAC/NHC, RG 132:26:394; AEP to H. M. Raup, 12 Jan 1939, PAC/NHC, RG 132:31:457. See also AEP to H. M. Raup, 16 May 1939, PAC/NHC, RG 132:31:457, re: lack of funds for field trips that year.
- 4 AEP to H. M. Raup, 23 Jan 1939, PAC/NHC, RG 132:31:457.
- 5 AEP to H. M. Raup, 2 March/14 April/25 April 1939, PAC/NHC, RG 132:31:457.
- 6 AEP to H. M. Raup, 10 May/15 May 1939, PAC/NHC, RG 132:31:457.
- 7 H. M. Raup to AEP, 13 May 1939; AEP to H. M. Raup, 15 May 1939, PAC/NHC, RG 132:31:457.
- 8 AEP to W. Malcolm, and notes in file, 12 May 1939, PAC/NHC, RG 132:30:433.
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- 10 S. Hadwen, Reindeer Station report, July 1939, PAC/NHC, RG 132:32:460.
- 11 AEP to R. A. Gibson, 12 Dec 1938, re: letter from Aslak Tornensis. PAC/NHC, RG 132:30:439.
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- 13 W. E. Ekblaw to AEP, 24 March 1939, PAC/NHC, RG 132:22:354.
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- 15 W. Malcolm to AEP, 8 Sept 1939, PAC/NHC, RG 132:30:433; AEP to J. A. Munro, 6 Oct 1939, PAC/NHC, RG 132:30:430; AEP to H. M. Raup, 31 Oct 1939, PAC/NHC, RG 132:31:457.
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- 2 H. M. Raup to National Academy of Sciences, copy of proposal sent to AEP, 24 Jan 1939, PAC/NHC, RG 132:31:457.

- 18 H. T. Gussow to AEP, 19 Oct 1939, PAC/NHC, RG 132:25.
- 19 AEP to H. T. Gussow, 18 Nov 1939, PAC/NHC, RG 132:25.
- 20 H. T. Gussow to AEP, 21 Nov 1939, PAC/NHC, RG 132:25.
- 21 H. M. Raup to H. Snyder, 17 Nov 1939; AEP to H. M. Raup, 26 Nov 1939, PAC/NHC, RG 132:31:457.

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THE PROBLEM OF GREENLAND.

- 1 AEP to H. M. Raup, 1 Jan 1940, PAC/NHC, RG 132:31:457.
- 2 V. Wynne-Edwards to AEP, 4 Jan 1940; AEP to V. Wynne-Edwards, 4 Feb 1940, NHF.
- 3 AEP to D. Jenness, 6 March 1940, PAC/NHC, RG 132:27:397.
- 4 Lt. Col. C. H. Reason to Mackenzie King, 9 April 1940; F. W. Bruce to N. A. Robertson, 9 April 1940; NAC/RG25:2731:267-J-40. See also Duncan Campbell, 1985, *Global Mission*, vol. 1, pp. 329–30.
- 5 Sec. State/Ext. Affairs Ottawa to Sec. State/Dominion Affairs London, 9 April 1940, NAC/RG25:2731:267-J-40.
- 6 *Toronto Star*, 10 April 1940. For official consideration of problem, see unsigned memo, POSITION OF GREENLAND, 10 April 1940, NAC/RG25:2731:267-J-40.
- 7 L. Pearson to O. D. Skelton, 11 April 1940; NAC/RG25:2731:267-J-40.
- 8 Unsigned memo, POSITION OF GREENLAND, 10 April 1940; NAC/RG25:2731:267-J-40.
- 9 *New York Times*, 11 April 1940. For official discussion of effect of Monroe doctrine, see unsigned memo CANADA, GREENLAND AND THE MONROE DOCTRINE, 11 April 1940, NAC/RG25:2731:267-J-40.
- 10 F. W. Bruce to N. A. Robertson, 11 April 1940, NAC/RG25:2731:267-J-40.
- 11 H. L. Keenleyside, memo, INFORMATION REGARDING GREENLAND, 12 April 1940; NAC/RG25:2731:267-J-40.
- 12 O. D. Skelton, memo, GREENLAND, 12 April 1940, NAC/RG25:2731:267-J-40.
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- 20 Vincent Massey, secret cipher #527 to Ext. Affairs, 2 May 1940; O. D. Skelton to L. C. Christie, 4 May 1940, NAC/RG25:2731:267-J-40.
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- 22 H. Keenleyside, press release PROPOSALS FOR A CANADIAN POLICY RELATING TO GREENLAND, 4–6 May 1940, NAC/RG25:2731:267-J-40.
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- 24 Sec. State/Ext. Affairs Ottawa to High Com./Gt. Britain London, cipher #516, Re: telegram #527, 10 May 1940, NAC/RG25:2731:267-J-40.
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- 27 O. D. Skelton to Mackenzie King, 14 May 1940, NAC/RG25:2731:267-J-40.
- 28 Unsigned memo, LOOKING AT MEN FOR CONSIDERATION AS CONSUL, 15 May 1940, could have been written by Skelton or Keenleyside; NAC/RG25:2731:267-J-40. See also Robert Bothwell biography, 1978, *Pearson: His Life and World*, p. 20, and Lester Pearson, 1972, *Mike: The Memoirs of the Rt. Hon. Lester B. Pearson*, vol. 1, p. 64.
- 29 Sec. State/Ext. Affairs Ottawa, telegrams to North and South Greenland Governors, and unsigned memo to Mackenzie King re: AEP translation, 15 May 1940, NAC/RG25:2731:267-J-40.
- 30 Gov. A. Svane/Gov. E. Brun to Sec. State/Ext. Affairs Ottawa, 17 May 1940, NAC/RG25:2731:267-J-40.
- 31 Gov. A. Svane/Gov. E. Brun to Ext. Affairs Ottawa re: incoming staff/housing needs, 20 May 1940; K. P. Kirkwood to Ext. Affairs Ottawa re: supplies for Greenland, 23 May 1940, NAC/RG25:2731:267-J-40.
- 32 High Com./Canada, London, cipher #661, to Sec. State/Ext. Affairs Ottawa, 22 May 1940, NAC/RG25:2731:267-J-40.

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- 4 H. J. Hendra, Report on Ivigtut Cryolite Mine, 6 July 1940, NAC/RG25:2732:267-J-40c.
- 5 M. M. Mahoney to Ext. Affairs, Ottawa, 3 June 1940, NAC/RG25:2732:267-J-40.
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- 7 K. P. Kirkwood to Sec. State, 4 and 6 June 1940, NAC/RG25G2:2732:267-J-40; H. J. Hendra, Report on Ivigtut Cryolite Mine, 6 July 1940, NAC/RG25G2:2732-J-40c.
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 - 11 K. P. Kirkwood to H. L. Keenleyside, 6 July 1940; H. L. Keenleyside to K. P. Kirkwood, 7 July 1940, NAC/RG25:2732:267-J-40.
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 - 13 R. M. Anderson to AEP, 24 June 1940, CMNAC/1996-077-Series A-Anderson.
 - 14 AEP to R. M. Anderson, 25 July 1940, CMNAC/1996-077-Series A-Anderson.
 - 15 K. P. Kirkwood to H. Keenleyside, 17 July 1940, NAC/RG25:2732:267-J-40; K. P. Kirkwood Report to Ext. Affairs, 23 Nov 1940, NAC/RG25:2800:802-40.
 - 16 *Toronto Star*, 25 Jan 1941.
 - 17 K. P. Kirkwood to Sec. State despatches, 18 Sept and 27 Oct 1940, NAC/RG25:2411:102-HX-40c. Re: German spies in Greenland: The real name of Max Gruenwald would appear to be Max Grotewahl; see Cornelia Lüdecke, 1997, Zum 100. Geburtstag von Max Grotewahl (1894–1958), *Gründer des Archivs für Polarforschung, Polarforschung*, 65, 2, 93–105. With English summary. The film S.O.S. Eisberg/S.O.S. Iceberg was released in both languages in Germany and the United States in the fall of 1933.
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 - 20 AEP to R. M. Anderson, 16 Oct 1940, CMNAC/1996-077-Series A-Anderson.
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- CHAPTER THIRTY-ONE.
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 - 2 AEP to N. Polunin, 27 Jan 1941, PAC/NHC, RG 132:31:447.
 - 3 H. M. Raup to AEP, 18 July 1940, PAC/NAC, RG 132:31:457.
 - 4 H. M. Raup, 1941, Botanical Problems in Boreal America, vol. 7, *The Botanical Review*, March/April.
 - 5 H. M. Raup, 18 July 1940, PAC/NHC, RG 132:31:457.
 - 6 AEP to H. M. Raup, 16 Jan 1941, PAC/NHC, RG 132:31:457.
 - 7 H. M. Raup to AEP, 25 Jan 1941, PAC/NHC, RG 132:31:457.
 - 8 AEP to H. M. Raup, 3 Feb 1941, PAC/NHC, RG 132:31:457.
 - 9 AEP to H. M. Raup, 13 March 1941, PAC/NHC, RG 132:31:457.
 - 10 H. M. Raup to AEP, 17 March 1941, PAC/NHC, RG 132:31:457.
 - 11 AEP to H. M. Raup, 21 April 1941, PAC/NHC, RG 132:31:457.

- 12 H. T. Gussow to R. M. Anderson, 24 March 1941, CMNAC/1996-077-Series A-Anderson.
- 13 AEP to R. M. Anderson, confidential memo, 3 April 1941, CMNAC/1996-077-Series A-Anderson.
- 14 AEP, official memo Re: Preparation of work on Ottawa Flora, 3 April 1941, CMNAC/1996-077-Series A-Anderson.
- 15 AEP to M. L. Fernald, 10 May 1941, PAC/NHC, RG 132:23:363.
- 16 M. J. Dunbar to AEP, 27 April 1941, NAC/RG25:2799:793-E-40.
- 17 AEP to H. Keenleyside, 28 April 1941, NAC/RG25:2799:793-E-40.
- 18 W. B. Timm to C. Camsell, 15 May 1941, NAC/RG25:2799:793-E-40.
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- 20 H. Keenleyside to M. J. Dunbar, 27 June 1941, NAC/RG25:2799:793-E-40.
- 7 K. P. Kirkwood to H. Keenleyside, 27 March 1941; see also note in file 24 April 1941 re: Brit. Mil. Washington anxiety re: protection of mine; NAC/RG25:2732:267-J-40.
- 8 AEP to H. Keenleyside, 27 May 1941, re: Greenland Defence, NAC/RG25:2800:802-40.
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- 10 Sec. State to Can. Min. Washington, 9 June 1941, NAC/RG25:2732:267-J-40.
- 11 Can. Min. Washington to Ext. Affairs, 18 July 1941, NAC/RG25:2732:267-J-40.
- 12 H. Keenleyside to Chargé d'Affaires Washington, 8 Aug 1941; Can. Min. Washington to H. Keenleyside, 28 Aug 1941, NAC/RG25:2732:267-J-40. See also *New York Times*, 6 Aug 1941.

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- 2 For exchange of telegrams re: Canadian air base, radio/meteorological stations, 19 Aug 1940–Jan 1941, see NAC/RG25:2800:802-40.
- 3 H. Keenleyside to Can. Min. Washington, 4 Jan 1941, NAC/RG25:2800:802-40. For Alcan war production/sheet aluminum, see also Duncan C. Campbell, 1985, *Global Mission*, p. 352.
- 4 M. M. Mahoney to Ext. Affairs, 13/15 Feb 1941, NAC/RG25:2800:802-40.
- 5 Eske Brun, 1970, *Greenland and its Strategic Development during the Second World War*, p. 162.
- 6 R. M. MacDonnell to W. G. Hayter, Brit. Emb. Washington, 19 May 1941, re: Expedition to S. Greenland re: airfield; K. P. Kirkwood to Ext. Affairs, 26 July 1941, NAC/RG25:2732:267-J-40. See also Eske Brun, 1970, *Greenland and its Strategic Development during the Second World War*, pp. 161–63.
- 13 AEP to R. M. Anderson, 7 July 1941, CMNAC/1996-077-Series A-Anderson; Trevor Lloyd, 1985, personal interview.
- 14 K. P. Kirkwood to Ext. Affairs, 19 Aug 1941, re: Sarniadoc; AEP, shipping report to Ext. Affairs, 3 Nov 1941, NAC/RG25G2:2732:267-J-40.
- 15 K. P. Kirkwood to Sec. State, 20 July 1941, NAC/RG25:2732:267-J-40c.
- 16 B. A. Macdonald to Ext. Affairs, 12 Aug 1941, NAC/RG25:2732:267-J-40.
- 17 AEP to Ext. Affairs, 24 Nov 1941, NAC/RG25:2732:267-J-40.
- 18 AEP to R. M. Anderson, 7 July 1941, CMNAC/1996-077-Series A-Anderson; Max Dunbar, 1995, *Essays from a Life*, pp. 66–67; Trevor Lloyd, 1985, personal interview; K. P. Kirkwood to Ext. Affairs, 26 July 1941, NAC/RG25:2732:267-J-40c.

- 19 K. P. Kirkwood to Ext. Affairs, 26 July 1941, NAC/RG25:2732:267-J-40c.
- 20 K. P. Kirkwood to M. J. Dunbar, 2 Aug 1941, NAC/RG25:2800:802-40; Max Dunbar, 1995, *Essays from a Life*, p. 65, note 7.
- 21 H. Keenleyside to M. J. Dunbar, 19 Aug 1941, NAC/RG25:2800:802-40; H. Keenleyside to AEP, 26 Aug 1941, NAC/RG25:2732:267-J-40.
- 22 H. Keenleyside to R. E. Powell, 29 Aug 1941, NAC/RG25:2800:802-40. See also W. R. McConnell, Purchasing Agent for Alcan, to A. Fischer, 18 Aug 1941, re: problem with quality, and October exchange of letters re: problems with quantity, NAC/RG25:2732:267-J-40.
- 23 H. Keenleyside to AEP, 16 Oct 1941, NAC/RG25:2800:802-40.
- 24 AEP to H. Keenleyside, 20 Oct 1941, NAC/RG25:2732:267-J-40.
- 25 AEP to H. Keenleyside, 13 Nov 1941, NAC/RG25:2800:802-40.
- 26 M. J. Dunbar to H. Keenleyside, 1 Dec 1941, NAC/RG25:2800:802-40.

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- 2 AEP to E. Abbe, 2 Jan 1942, PAC/NHC, RG 132:18:284; H. M. Raup to AEP, 8 Jan 1942; AEP to H. M. Raup, 19 Jan 1942, PAC/NHC, RG 132:31:457.
- 3 R. M. Anderson to AEP, 1 Aug/6 Aug 1941, CMNAC/1996-077-Series A-Anderson.
- 4 AEP to H. M. Raup, 26 Feb 1942, PAC/NHC, RG 132:31:457.
- 5 E. Abbe to AEP, 13 June 1942, PAC/NHC, RG 132:18:284; E. Abbe to Director, Nat. Mus. Can., 21 June 1942, NHF.
- 6 AEP to F.C.C. Lynch, 27 Feb/ 4 March/ 7 March 1942, NHF. See also C. Camsell to AEP, 17 Jan 1942, thanking him for cryolite polar bear; PAC/NHC, RG 132:20:332.
- 7 AEP to H. Keenleyside, 7 April 1942; Ext. Affairs to AEP, 11 April 1942, NAC/RG25:2799:793-F-40.
- 8 Trans. N. Am. Wildlife Conference, vol. 7:231-391 (1942).
- 9 AEP to W. B. Timm, 25 April 1942, PAC/NHC, RG 132:20:332.
- 10 AEP to F.C.C. Lynch, two memos written on 23 April 1942, NHF.
- 11 AEP to H. M. Raup, 7 April 1942, PAC/NHC, RG 132:31:457.
- 12 M. L. Fernald to AEP, 11 April 1942; AEP to M. L. Fernald, 11 May 1942, PAC/NHC, RG 132:23:363.
- 13 L. Constance to AEP, 27 May 1942, PAC/NHC, RG 132:28:413; E. Abbe to AEP, 15 June 1942, PAC/NHC, RG 132:18:284.
- 14 AEP to H. M. Raup, 31 May 1942, PAC/NHC, RG 132:31:457.
- 15 H. M. Raup to AEP, 23 May 1942, PAC/NHC, RG 132:31:457.
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- 17 AEP to F.C.C. Lynch, 12 June 1942, NHF.
- 18 H. Keenleyside to N. A. Robertson, 13 June 1942; Asst. Under Sec. State to AEP, 24 June 1942; AEP to H. Keenleyside, 25 June 1942, NAC/RG25:2800:802:40.
- 19 R. M. Anderson to AEP, 24 July 1942: C. W. Jackson, Deputy Min. Mines and Resources, to W. B. Timm, 7 July 1942, internal memo re: Publication of Results of Botanical Studies of the Flora of Northern Canada by A. E. Porsild; PAC/NHC, RG 132:20:332.
- 20 AEP to C. Camsell, 3 Oct 1942, PAC/NHC, RG 132:30:332.

- 21 L. Croizat to H. Harkness, 12 Aug 1942, PAC/NHC, RG 132:27:396.

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PORSILD.

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- 2 M. J. Dunbar to Sec. State, 6 July 1942, NAC/RG25:2799:793-F-40; Dunbar, 1995, *Essays from a Life*, pp. 67-71.
- 3 AEP to N. Polunin, 3 Feb 1944, PAC/NHC, RG 132:31:447.
- 4 M. J. Dunbar to Sec. State, North Greenland Report, 20 Oct 1942, NAC/RG25:2799:793-F-40.
- 5 Trevor Lloyd, personal interview, 1985; Max Dunbar, 1995, *Essays from a Life*, p. 68.
- 6 M. J. Dunbar to Sec. State, North Greenland Report, 20 Oct 1942, NAC/RG25:2799:793-F-40.
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- 8 AEP to H. Keenleyside, 17 Sept 1942, NAC/RG25:2731:267-J-40.
- 9 C. H. Ostenfeld, 1926, *The Flora of Greenland and its Origin*; M. P. Porsild, 1932, *Alien Plants and Apophytes of Greenland*; AEP, 1945, *Survey of the Adventitious Flora of Ivigtut in Southwest Greenland*.
- 10 H. T. Gussow to C. Camsell, 18 May 1942; AEP to F.C.C. Lynch, 26 May 1942; NHF. See also H. Senn to AEP, 17 March 1943, PAC/NHC, RG 132:30:476. For historical perspective on wartime rubber shortage, see Richard A. Howard, 1994, "The Role of Botanists during World War II in the Pacific Theater," pp. 217-21.

- 11 AEP to R. M. Anderson, 12 Sept 1942, CMNAC/1996-077-Series A-Anderson.
- 12 R. M. Anderson to H. M. Raup, 3 Oct 1942, CMNAC/1996-077-Series A-Anderson.
- 13 K. P. Kirkwood to H. Keenleyside re: J. Pennfield letter, 31 March 1943, NAC/RG25:2799:793-F-40.
- 14 M. J. Dunbar to H. Keenleyside, 12 Jan 1943; see also F. W. Bruce to H. Keenleyside, 22 May 1943, re: Alcan's lack of cryolite need in 1943/request for stockpiling year's contract minimum at mine. NAC/RG25:2732:267-J-40.
- 15 M.J. Dunbar, Memorandum on the Canadian Consulate, Godthaab, Greenland, 17 Feb 1943, NAC/RG25:2799:793-F-40.
- 16 Ibid.
- 17 Ibid.

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- 2 AEP to Sec. State, secret dispatch 24 April 1943, NAC/RG25:2411:102-HX-40c.
- 3 AEP to Sec. State, secret dispatches 11 May and 15 May 1943, NAC/RG25:2411:102-HX-40c.
- 4 Ibid.
- 5 T. Lloyd to Sec. State, 18 Dec 1944, NAC/RG25:2411:102-HX-40c.
- 6 Dunbar, 1995, *Essays from a Life*, p. 72.
- 7 AEP to Austin H. Clark, 29 Nov 1943, PAC/NHC, RG132:21:339.
- 8 AEP to Sec. State, 17 Nov 1943, re journey to north Greenland with Gov. Eske Brun, NAC/RG25:2800:802-40.
- 9 Ibid.
- 10 Ibid.
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- 12 Ibid.
- 13 Ibid.
- 14 Ibid.
- 15 Ibid.
- 16 AEP to Sec. State, re: journey to report on conditions in southern portion of West Greenland from Godthaab to Bluie West 1, NAC/RG25:2800:802-40. (Note: Of the nine US stations established in Greenland, Bluie West 1 airbase was first, Bluie West 7 was primarily a naval facility with 25-bed hospital located in Ivigtut area.)
- 17 Ibid. See also AEP to Gov. Eske Brun, 13 Feb 1941, re: gift of hardy Canadian perennials/seeds of Canadian forest trees, PAC/NHC, RG 132:24:374.
- 18 AEP to Sec. State, re: journey to report on conditions in southern portion of West Greenland from Godthaab to Bluie West 1, NAC/RG25:2800:802-40.
- 19 Ibid.
- 20 AEP, 1944, "Notes from a Labrador Peat Bog," *Canadian Field-Naturalist* 58, Jan-Feb.
- 21 Ibid.
- 22 AEP, 1943, "Materials for a flora of the Continental Northwest Territories of Canada," *Sargentia* IV, September. See also copy of Minute of Meeting of Treasury Board, Privy Council Canada, 22 Sept 1943, PAC/NHC, RG 132:31:449.
- 23 R. M. Anderson to AEP, 21 Oct 1943, PAC/NHC, RG 132:31:449.
- 4 AEP to H. M. Raup, 25 April 1944, PAC/NHC, RG 132:31:454.
- 5 For background to construction of Alaska Highway/Canol Road, see Philip H. Godsell, 1944, *Romance of the Alaska Highway*, and Richard S. Finnie, 1971, *North American Arctic Petroleum Development*.
- 6 R.S. Finnie to AEP, 1 Feb 1944, PAC/NHC, RG 132:32:364.
- 7 AEP to R. S. Finnie, 11 Feb 1944, PAC/NHC, RG 132:32:364.
- 8 Brig. G. B. Chisholm to AEP, 16 Nov 1943, PAC/NHC, RG 132:22:356; Personal communication with Diana Rowley, March 2008, re: story of arrow.
- 9 AEP, 1937, *Edible Roots and Berries of Northern Canada*; AEP, 1945, *Emergency Food in Arctic Canada*. See also, F. Hunter to J. Logan, 20 May 1953, NHF.
- 10 See Ellen Davignon, 1988, *The Cinnamon Mine*.
- 11 AEP to J. Smart, 16 March 1944, PAC/NHC, RG 132:30:436.
- 12 AEP to J. Smart, 24 March 1944, PAC/NHC, RG 132:30:436.
- 13 Memo headed "Meeting held at Lisgar Building Ottawa," 31 March 1944, PAC/NHC, RG 132:18.
- 14 A. Breitung to AEP, 2 Jan 1939, PAC/NHC, RG 132:20:319.
- 15 AEP to A. Breitung, 7 Jan 1939, PAC/NHC, RG 132:20:319.
- 16 A. Breitung to AEP, 19 Feb 1944, PAC/NHC, RG 132:20:319. See also AEP/A. Breitung correspondence 2 Jan 1939 to 23 April 1944, PAC/NHC, RG 132:20:319.
- 17 A. Breitung to AEP, 24 Feb/22 April 1944, PAC/NHC, RG 132:20:319.
- 18 H. M. Raup to R. M. Anderson, 4 March 1944, CMNAC/1996-077-Series A-Anderson; H. M. Raup to AEP, 22 April 1944, PAC/NHC, RG 132:31:454.

CHAPTER THIRTY-SIX.
ROAD TO THE YUKON.

- 1 H.M. Raup to AEP, 8 Nov 1943, PAC/NHC, RG 132:31:454.
- 2 AEP to H.M. Raup, 15 Nov 1943, PAC/NHC, RG 132:31:454.
- 3 H.M. Raup to AEP, 6 Dec 1943, PAC/NHC, RG 132:31:454.

- 19 AEP to H.M. Raup, 25 April 1944, PAC/NHC, RG 132:31:454.
- 20 Ibid.
- 21 See AEP to F.C.C. Lynch, 1 March/20 May 1944 re: founding proposals/meetings Arctic Institute of North America, NHF; AEP to H. M. Raup, 20 May 1944, PAC/NHC, RG 132:31:454.
- 22 R. M. Anderson to AEP, 22 May 1944, PAC/NHC, RG 132:31:449.
- 23 AEP to R. M. Anderson, 26 May 1944, PAC/NHC, RG 132:31:449; R. M. Anderson memo Re: Publication of contribution on "Mammals of the Mackenzie Delta" by A. E. Porsild, 7 June 1944, CMNAC/1996-077-Series A-Anderson.
- 24 AEP to R.M. Anderson, 7 July 1944, CMNAC/1996-077-Series A-Anderson.
- 25 R.M. Anderson, 25 July 1944, CMNAC/1996-077-Series A-Anderson.
- 26 AEP to R.M. Anderson, 2 Aug 1944, CMNAC/1996-077-Series A-Anderson.
- 27 R.M. Anderson to AEP, 16 Aug 1944, CMNAC/1996-077-Series A-Anderson.
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- 30 Elly Porsild, personal interview, Whitehorse, 1985. See also article entitled "From Five Cents a Plant to Herding Reindeer," *Whitehorse Star*, 9 March 1977.
- 31 H.M. Raup to AEP, 22 Oct 1944, PAC/NHC, RG 132:31:454.
- 32 AEP to H. M. Raup, 29 Sept 1944, PAC/NHC, RG 132:31:454.
- 3 AEP to F. Hunter, 9 Jan 1945, PAC/NHC, RG 132:26.
- 4 AEP to H. M. Raup, 18 Jan 1945, PAC/NHC, RG 132:31:454.
- 5 AEP to F.C.C. Lynch, 8 Jan 1945, NHF.
- 6 Ibid.
- 7 Ibid.
- 8 Ibid.
- 9 Ibid.
- 10 Ibid.
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- 13 Ibid.
- 14 AEP to F.C.C. Lynch, 15 Feb 1945, NHF.
- 15 See AEP secret and confidential memo, 29 Jan 1945; AEP memo, War Record of Nat. Herbarium, 5 June 1946, NHF.
- 16 See R. Jackson, "Ottawa Scientists Cracked Case of Jap Incendiary Balloons," *Ottawa Journal*, December 1946.
- 17 AEP to A. Breitung, 20 Jan/10 March 1945; A. Breitung to AEP, 4 April 1945, PAC/NHC, RG 132:20:319.
- 18 AEP to H. M. Raup, 14 March 1945, PAC/NHC, RG 132:31:454.
- 19 AEP to Mrs. V. Hatting, 16 March 1945, PAC/NHC, RG 132:31:454. For ref: to 1944 disaster, see AEP, 1947, *Report on the Reindeer and the Mackenzie Delta Reindeer Grazing Reserve*, p. 17.
- 20 For establishment of native herds, see Reindeer Bulletin, Bureau NWT/ Yukon Affairs, Dept. Mines and Resources, 31 Oct 1942.
- 21 R.A. Gibson to AEP, 18 Oct 1945; AEP to R.A. Gibson, 18 Oct 1945, PAC/NHC, RG 132:31:454.
- 22 AEP to R. A. Gibson, 18 Oct 1945, PAC/NHC, RG 132:31:454.

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- 1 J.L. Granatstein, 1977, *Mackenzie King: His Life and World*, pp. 155–68.
- 2 R. M. Anderson to AEP, 30 Nov 1944, PAC/NHC, RG 132:31:448.

- 23 AEP to R.A. Gibson, 19 March 1945, PAC/NHC, RG 132:32:461.
- 24 R. A. Gibson to AEP, 22 March 1945, PAC/NHC, RG 132:32:461.
- 25 AEP to A. Breitung, 9 May 1945, PAC/NHC, RG 132:20:319.
- 26 AEP to H. M. Raup, 1 June 1945, PAC/NHC, RG 132:31:454.
- 27 AEP to A. Breitung, 5/6 June 1945, PAC/NHC, RG 132:20:319.
- 28 AEP to H. M. Raup, 25 Aug 1945, PAC/NHC, RG 132:31:454.
- 29 AEP to V. Wynne-Edwards, 2 Nov 1945, NHF; AEP to P. Scholander, 9 Oct 1945, PAC/NHC, RG 132:33:474.
- 30 AEP to H.M. Raup, 25 Aug 1945, PAC/NHC, RG 132:31:454.
- 31 AEP to H. M. Raup, 4 Oct 1945, 4 March 1946, PAC/NHC, RG 132:31:454. See also, *Edmonton Journal*, 24 Sept 1945.
- 32 A. Breitung to AEP and daughter, Dec 1945, PAC/NHC, RG 132:20:319.

CHAPTER THIRTY-EIGHT.
POSTWAR SETTLEMENT.

- 1 AEP to E. Hultén, 30 Oct/6 Nov 1945/ 21 Feb 1946, PAC/NHC, RG 132:26:394.
- 2 E. Hultén to AEP, 2 April 1946, PAC/NHC, RG 132:26:394.
- 3 AEP to E. Hultén, 7 June 1946, PAC/NHC, RG 132:26:394.
- 4 E. Hultén to AEP, 19 Sept 1946, PAC/NHC, RG 132:26:394. See also, AEP, 1955, *Botany of Southeastern Yukon Adjacent to the Canol Road*.
- 5 See E. Hultén, 1968, *Flora of Alaska and Neighbouring Territories*.
- 6 AEP to E. Hultén, 25 April 1946, PAC/NHC, RG 132:26:394; Annual Report for the National Herbarium in the National Museum of Canada, April 1946–March 1947.

- 7 T. Lloyd to AEP, 28 Aug 1946, NHF.
- 8 M.J. Dunbar, 1995, *Essays from a Life*.
- 9 AEP to H.M. Raup, 5 Oct 1946, NHF.
- 10 Ibid.
- 11 AEP to H.M. Raup, 12 April 1947, NHF.
- 12 AEP to H.M. Raup, 16 May 1947, NHF.
- 13 AEP to H.M. Raup, 2 June 1947, NHF.
- 14 AEP to H. M. Raup, 12 April 1947, NHF.
- 15 AEP, September 1947, Report on the Reindeer and the Mackenzie Delta Reindeer Grazing Reserve as observed during my visit in July–August 1947, NHF.
- 16 Ibid.
- 17 Ibid.
- 18 Ibid.
- 19 Ibid.
- 20 Ibid.
- 21 Ibid.
- 22 Ibid.
- 23 Ibid.
- 24 Ibid.
- 25 For update on Reindeer Station, see Inuvialuit Regional Corp, 2007; Lloyd Binder quote from CBC News, 8 Jan 2008.

CHAPTER THIRTY-NINE.
THE “OLD MAN” OF THE HERBARIUM.

- 1 For description of AEP, see Loris S. Russell, *Proc. Royal Soc. Can.*, 4th Series, vol.XVIII, 1980.
- 2 AEP to G. Douglas, 24 Nov 1947, PAC/NHC, RG 132:22:351.
- 3 AEP to B. Maguire, 15 April 1948; H. M. Raup to AEP, 19 April 1948; H. Harkness to H. M. Raup, 26 April 1948, NHF.

- 4 See AEP Daily Journal, 1948, Trip through the Southwestern States to California, typed, 24 pages. NHF.
- 5 Ibid.
- 6 Ibid.
- 7 See Annual Report of the National Museum, Bulletin No. 118, 1948–49. See also Ilmari Hustich, 1951, *Forest-botanical notes from Knob Lake in the interior of the Labrador Peninsula*.
- 8 AEP to H. M. Raup, 29 Sept 1949; See also P. Jenness to J. W. Watson, 8 July 1949, re: unauthorized change of plans to go to Great Bear Lake, and P. Jenness to AEP, 11 Dec 1949, re: Treasury questions of additional cost. NHF.
- 9 AEP, "A Botanical Exploration of Banks and Victoria Islands," *Arctic Circular*, Jan 1950.
- 10 Ibid.
- 11 AEP to H. M. Raup, 29 Sept 1949, NHF.
- 12 AEP to H.M. Raup, 31 Jan 1950, NHF.
- 13 AEP to H.M. Raup, 15 Sept 1950, NHF.
- 14 See Annual Report, National Museum of Canada, Bulletin No. 126, 1950–51.
- 15 AEP to H.M. Raup, 1 March 1951, NHF.
- 16 Ibid.
- 17 H.M. Raup to AEP, 12 March 1951; AEP to H.M. Raup, 21 March/17 April 1951, NHF.
- 18 D. Raup to AEP 19 Sept 1951; AEP to H.M. Raup, 25 Sept 1951, NHF.
- 19 AEP to H. M. Raup, 25 Sept 1951; AEP to D. Raup, 31 Oct 1951, NHF.
- 20 AEP to H. M. Raup, 27 Oct 1951, NHF.
- 21 AEP to H. M. Raup, 27 Oct 1951/21 Jan 1952, NHF.
- 22 AEP to H.M. Raup, 21 Jan 1952, NHF.
- 23 H. M. Raup to AEP, 23 Jan/31 March 1952, NHF.
- 24 AEP to H. M. Raup, 28 March 1952; H. M. Raup to AEP, 19 April 1952, NHF.
- 25 AEP to H.M. Raup, 22 April 1952.
- 26 AEP to H. M. Raup, 2 June 1952, NHF.
- 27 See Quarterly Report, National Herbarium, 1 April–30 June 1952.
- 28 See Chapter 40.

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STORM OVER THE ARCTIC.

- 1 All references in this chapter were taken directly from National Herbarium files, except for quotations from personal copies of Farley Mowat's *People of the Deer* and *The Desperate People*, and Mowat's perspective on the affair which is documented in his recent book, *Eastern Passage*, published by McClelland & Stewart in 2010.
- 2 F. Mowat to D. Cloud, Oct 1949, quoted in *Eastern Passage*, 2010.
G. Douglas to AEP, 1 April 1952; C. Wilson to AEP, 1 April/8 April, 1952.
- 3 MacLennan quote taken from McClelland & Stewart ad for book, *Ottawa Journal* 19 April 1952. For Stefansson blessing, see G. Douglas to AEP quoting P. G. Downes, 1 April 1952; for quotes from *Boston Sunday Herald* and *New York Times*, see list of tributes inside cover of *People of the Deer*, Pyramid edition, New York, 1968.
- 4 AEP to E. M. Weyer Jr., editor, *Natural History*, journal of the American Museum of Natural History, after the publication of a favourable review by Julius Bird.
- 5 AEP to C. Wilson, 21 May 1952.
- 6 F. Harper to AEP, 18 April 1947.
- 7 D. Clarke to C. Wilson, 9 April 1952.
- 8 F. Harper to AEP, 18 April 1952. See also: Mowat's criticisms of Harper in *Eastern Passage*, 2010.
- 9 AEP to G. Douglas, 16 April/28 May 1952.

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- 11 Re: AEP, "Review of People of the Deer," *The Beaver*, June 1952. See: Summary of the main charges made by AEP against Farley Mowat together with summary of Mr. Mowat's reply, attached to letter, C. Wilson to AEP, 14 July 1952. See also: reasons given for not publishing Mowat's lengthy defense of his book and AEP long response due to lack of space, *The Beaver*, Sept 1952.
- 12 See article by B. V. Ferguson, *Montreal Star*, 30 June 1952; C. Wilson to AEP, 14 July 1952.
- 13 See Letters to the Editor from publisher/Farley Mowat rebuttal, *Montreal Star*, 15 July 1952.
- 14 Ibid.
- 15 Ibid.
- 16 AEP to C. Wilson, 22 July 1952.
- 17 Ibid. See also C. Wilson to AEP, 14 July 1952, for Mowat's 6-page unpublished rebuttal to *Beaver* re: language interpretations subsequently confirmed by "J. Miche of Paris, a professional anthropologist and Eskimo linguist who visited the Ihalmiut in 1951."
- 18 AEP to C. Wilson, 22 July 1952.
- 19 AEP to G. Douglas, 29 July/13 Aug 1952.
- 20 Scott Young, "Storm Out of the Arctic," *Saturday Night*, 18 Oct 1952; subheading "Farley Mowat's 'People of the Deer' despite wide public acclaim has earned disapproval from critic of one northern magazine"; illustrated with artist's conception of Farley Mowat in setting of 'People of the Deer,' Atlantic cover painting by M. Korbach.
- 21 AEP to R. A. Farquharson, 15 Sept 1952.
- 22 C. Wilson to AEP, 17 Sept 1952.
- 23 R.A. Farquharson to AEP, 3 Oct 1952.
- 24 AEP to R. A. Farquharson, 7 Oct 1952.
- 25 AEP to C. Wilson, unposted, note re: phone call at top, 15 April 1952; AEP to Gen. H. A. Young, 16 Oct 1952.
- 26 AEP, "Arctic Storm in Reverse," Letter to the Editor, *Saturday Night*, 25 Oct 1952.
- 27 Scott Young, Letter to the Editor, *Saturday Night*, 1 Nov 1952.
- 28 Richard Harrington, "Arctic Snowball Fight," Letter to the Editor, *Saturday Night*, 1 Nov 1952.
- 29 See AEP/F. Mowat, Dec 1952, for exchange of greetings.
- 30 A. H. Lawrie to AEP, 13 July 1953; AEP to A. H. Lawrie, 17 July 1953; F. Mowat to AEP, 18 July 1953.
- 31 Anisfield-Wolf Award announcement, Can. Library Association Bulletin, vol. 10, no. 3, 1953, p. 92; AEP to R. Linton, 24 Nov 1953.
- 32 See Hansard, 19 Jan 1954.
- 33 Farley Mowat, "The Case of the Disappearing Eskimos," *Saturday Night*, 30 Oct 1954.
- 34 E. Carpenter to AEP, 2 Nov 1954.
- 35 F. Mowat to AEP, 29 Nov 1957.
- 36 Farley Mowat, 1959, *The Desperate People*, Foreword.
- 37 H. Harkness to F. Mowat, 3 Dec 1957; R.A.J. Phillips to AEP, 6 Jan 1958.

CHAPTER FORTY-ONE.
STUDY YEAR IN EUROPE.

- 1 H.M. Raup to AEP, 19 Jan 1953, NHF.
- 2 AEP to H.M. Raup, 21 Jan 1953, NHF.
- 3 H.M. Raup to AEP, 23 March 1953. See also exchange of letters 28 Feb to 23 March 1953, NHF.
- 4 AEP to H.M. Raup, 3 April 1953, NHF.
- 5 AEP to H.M. Raup, 11 April 1953, NHF.
- 6 H. M. Raup to AEP, , 14 April 1953, NHF.

- 7 AEP to E. D. Merrill/H. Mason, 15 April; AEP to D. Jenness, 19 April; AEP to F. J. Alcock, 24 June 1953. NHF.
- 8 AEP to H. M. Raup, 25 July 1953, NHF. See also Annual Report of the National Museum of Canada, Bulletin No.136, 1953–54.
- 9 J. Thomson to AEP, 2 Oct 1953; AEP to J. Thomson, 13 Oct 1953, NHF.
- 10 AEP to V. Wynne-Edwards, 29 Sept 1953, NHF.
- 11 Confirmation of unusual PhD circumstances received from records office, University of Copenhagen, 3 Jan 1986, personal communication.
- 12 Annual Report of the National Museum of Canada, Bulletin No. 136, 1953–54.
- 13 M. Westergard to AEP, 8 Jan 1984; AEP to M. Dunbar, 19 May 1953; AEP to M/J Dunbar, 25 May 1953, NHF.
- 14 AEP to H. M. Raup, 11 March 1954; H. Crum to National Herbarium, 25 Feb 1954; M. Hale to AEP, 8 May 1954; M. Hale to F. J. Alcock, 28 June 1954, NHF.
- 15 AEP to F.J. Alcock, 15 Aug 1954, NHF.
- 16 Ibid.
- 17 AEP to E. D. Merrill, 7 Jan 1955, NHF.
- 18 AEP to F. J. Alcock, 15 Aug 1954, NHF.
- 19 AEP to E. D. Merrill, 7 Jan 1955, NHF.
- 20 AEP Report to the American Philosophical Society, typed copy, undated. NHF.
- 21 AEP to F. J. Alcock, 15 Aug 1954; F. J. Alcock to AEP, 10 Dec 1954, NHF.
- 22 AEP to Miss Burke, 17 Jan 1955, NHF.
- 23 AEP to M. Dunbar, 15 Feb 1955, NHF.
- 24 AEP to J. Ewan, 11 July 1955, NHF. See also Death Certificate, Elizabeth Porsild, 19 April 1955, Personnel File, NAC/RG32:686.
- 25 J. Ewan to AEP, 30 June 1955; AEP to E. D. Merrill, 27 June 1955; N. Radforth to AEP, 23 Nov 1955; AEP to N. Radforth, 24 Nov 1955, NHF.
- 26 AEP to T. Lloyd, 25 May 1956; T. Lloyd to AEP, 30 May 1956; PAC/NHC, RG 132:26:402.
- 27 Circumstances re: granting PhD received from records office, University of Copenhagen, 3 Jan 1986, personal communication. See also, AEP, 1955, "The vascular plants of the Canadian Arctic Archipelago," National Museum of Canada Bulletin No. 135.

CHAPTER FORTY-TWO.
ROCKY MOUNTAINS AND HUDSON BAY
LOWLANDS.

- 1 See Annual Report of National Herbarium, National Museum of Canada Bulletin No. 147, 1955–56.
- 2 AEP to H. M. Raup, 21 Sept 1955, NHF.
- 3 AEP to H. M. Raup, 2 Sept 1955, NHF.
- 4 H. M. Raup to AEP, 14 Dec 1955, NHF. See also Annual Report of National Herbarium, National Museum of Canada Bulletin No. 147, 1955–56.
- 5 See minutes of meeting 14 Jan 1956, also AEP notes "Some thoughts on what we had better try to do," typed, undated. NHF.
- 6 See AEP Daily Journal 1956, "Reconnaissance by air of Hudson Bay Lowlands, Ontario," July 9–21. AEP Collection, ROM.
- 7 AEP to J. Lid, 30 Nov 1955, NHF.
- 8 See AEP Daily Journal 1956, Introduction, "Botanical Survey of Banff National Park," 11 June–8 July/23 July–30 Aug 1956, AEP Collection, ROM.
- 9 AEP to H.M.Raup, 23 Sept 1956, NHF.
- 10 Ibid.
- 11 Ibid.
- 12 AEP to H. M. Raup, 5 Nov 1956, NHF. See also Loris S. Russell, 1961, *The National Museum of Canada*, information booklet, p. 9.

- 13 See AEP, Daily Journal, Introduction to "Journey to Denmark, Switzerland, Germany, Norway, Sweden, Finland, Russia, and Austria to study E. Asiatic arctic plants in the herbaria, on Guggenheim Fellowship," 1957–58.
- 14 See minutes Field Trip Committee 9th International Botanical Congress, 14 April 1956, NHF.
- 15 AEP to H. M. Raup, 2/22 April 1957; AEP to L. Raup, 18 June 1957, NHF.
- 16 AEP to L. S. Russell, 3 April 1957; AEP to J/D Lid, 15 Oct 1957; AEP to H. M. Raup, 1 Nov 1957, NHF.
- 17 See AEP Daily Journal 1957, "Botanical Survey of Eastern Rocky Mountain Front Ranges, Alberta," August–September. AEP Collection, ROM.
- 18 AEP to "The Lids," 15 Oct 1957; AEP to the Sjörs, 1 Oct 1957, NHF.
- 19 AEP to V. Wynne-Edwards, 27 Sept 1957, NHF.
- 20 AEP to H. Sjörs, 30 Oct 1957, NHF.
- 21 AEP to H. M. Raup, 1 Nov 1957, NHF.
- 5 AEP to H. M. Raup, 26 June/23 Sept 1958; AEP to H. Sjörs, 17 June 1958, NHF.
- 6 AEP to H. Sjörs, 5 Jan 1959; AEP to O. Gjaerevoll, 17 Nov 1958, NHF.
- 7 AEP to T. Bøcher, 8 April 1959, NHF.
- 8 Draft of letter, W.P. Thompson to the Rt. Hon. John G. Diefenbaker, 4 Aug 1958, NHF.
- 9 A. Hamilton to Hon. George Pearkes 17 Nov 1958/28 Jan 1959; G. Carty, memo, 24 April 1959, NHF.
- 10 AEP to T. W. Bøcher, 5 May 1959, NHF.
- 11 H. M. Raup to AEP, 12 May 1959; AEP to H. M. Raup, 29 May 1959, NHF.
- 12 W. A. Weber to AEP, 29 June 1959; AEP to W. A. Weber, 3 July 1959; see also AEP official report (see next endnote); AEP to H. Sjörs, 9 June/2 Oct 1959 for Weber assistance/accomplishments on trips. NHF.

CHAPTER FORTY-THREE.

NINTH INTERNATIONAL BOTANICAL CONGRESS.

- 1 AEP to J. Ewan, 9 Jan 1958, NHF.
- 2 Note from Bill Weber, 2009: "Carl Rechinger told me that the monocots had been safe until the day when the Allied troops discovered it and made a big bonfire celebrating the war's end!"
- 3 For account of trip to Europe, see AEP Daily Journal, 1957–58, "Journey to Denmark, Switzerland, Germany, Norway, Sweden, Finland, Russia, and Austria to study E. Asiatic arctic plants in the herbaria, on Guggenheim Fellowship." Porsild Collection, ROM.
- 4 Interview with Hilda Harkness, 1984; Marriage certificate, 11 Aug 1958, Edmonton, Alberta; NAC/RG32:686.

CHAPTER FORTY-FOUR.

THE LAST YEARS.

- 1 AEP to H. M. Raup, 22 Feb 1960; AEP to H. Sjörs, 26 April 1960, NHF.
- 2 AEP to H. Sjörs, 20 Oct/11 Dec 1960; AEP to O. Gjaerevoll, 22 Dec 1960, NHF.
- 3 H. M. Raup to AEP, 19 Jan 1961; AEP to H. M. Raup, 4 Feb 1961, NHF.

- 4 AEP to H. Sjörs, 20 Feb/21 April 1961, NHF.
- 5 H. M. Raup to AEP, 10/14 Aug 1961; AEP to H. M. Raup, 5/25 Aug/16 Nov 1961, NHF.
- 6 AEP to H. Sjörs, 12 Jan/17 Sept/12 Oct 1962, NHF.
- 7 AEP to H. Sjörs, 1 Nov 1963; AEP to H. M. Raup, 19 Aug 1963, NHF.
- 8 AEP to H. Sjörs, 1 Nov 1963; AEP to H. M. Raup, 5 Dec 1963, NHF.
- 9 AEP to H. M. Raup, 26 March/23 April 1964; H. M. Raup to AEP, 28 April 1964, NHF.
- 10 AEP to H. Sjörs, 24 Sept/15 Dec 1964, NHF.
- 11 AEP to H. Sjörs, 25 May 1965; AEP to H. M. Raup, 20 Sept 1965.
- 12 See Quarterly Reports, National Herbarium of Canada, 1 April–31 Dec 1966; NHF.
- 13 Lyn Harrington, undated article, "Botany Bob Porsild," Yukon Archives, Acc. # 82/137.
- 14 See National Museum news bulletin, 16 Jan 1967.
- 15 AEP to H. Sjörs, 1 Dec 1966/15 March 1967, NHF.

EPILOGUE.

CLOSING THE CIRCLE.

- 1 Bassett Maguire, 1958, "Boreal America," in *Fifty Years of Botany*, by William Steere, p. 213.
- 2 J. H. Soper, personal communication, 9 Dec 1985.
- 3 See J. H. Soper and W. J. Cody, 1978, "Alf Erling Porsild, M.B.E, F.R.S.C. (1901–1977)," *Can. Field-Nat.*, vol. 92; see also, Bruce A. Bennett and Paul M. Catling, 2009, "William (Bill) J. Cody: A Legacy of Contributions to Northern Canadian Botany," *Botanical Electronic News*, no. 410, 17 June 2009.
- 4 See Loris S. Russell, 1980, "Alf Erling Porsild, 1901–1977," *Proc. Royal Soc. Can.*, series IV: vol. XVIII, p. 114.
- 5 T. J. Wood, 1978, "Dr. A. E. Porsild – An Appreciation," *Arctic Circular* 26(1): 19–23, p. 22.
- 6 Hugh M. Raup, 1978, "Alf Erling Porsild (1901–1977)," *Arctic* 31(1): 67–68.
- 7 See *Whitehorse Star*, 3 Jan 1978; *Yukon News*, 4 Jan 1978.
- 8 Richard S. Finnie, "The Polar Porsilds," *North*, Summer 1981.
- 9 Áskell Löve, "A. Erling Porsild 1901–1977 in Memoriam," *Arctic and Alpine Research* 10.



SOURCES AND ACKNOWLEDGMENTS

The single most important document at the beginning of the research was given to me by Mr. Aksel Porsild, son of Robert Porsild, to whom and for which I am grateful beyond words. It was a typed copy of Erling Porsild's daily record of his first work with the Department of the Interior, 1926–28: "Field Journal of an Expedition through Alaska, Yukon, and the Mackenzie District, being a botanical reconnaissance with special reference to the suitability of the country for domesticated reindeer. Also many notes on the physiography of the country, its inhabitants, wild life and general economic conditions. 146 pp." This unpublished diary was nowhere found on file in any future searches, and I am more than grateful to the staff of the Boreal Institute library in Edmonton for putting me in touch with Mr. Porsild as well as to him for his generous and timely gift.

Other important and unpublished daily journals, as referred to in the text and endnotes, covered official journeys taken during Erling Porsild's years at the National Herbarium. They were located in 1985 in the A. E. Porsild collection at the Royal Ontario Museum, Toronto, Ontario. This assortment of miscellaneous papers, published and unpublished documents, and literature (personally annotated by Porsild) was collected and/or presented to him during his tenure as Botanist and Chief Botanist at the herbarium before being donated to the ROM after his death. Thankfully, I was able to examine the whole prior to dispersal into various other libraries as was expected. I would like to express my appreciation of the help received from ROM staff, who graciously photocopied material for me to take away with me while trustingly allowing me to go through the large unsorted pile of material without removing anything of value to a sorely tempted biographer and lover of books and botany.

Voluminous correspondence, reports, and miscellaneous papers connected with the Canadian Reindeer Project (Northern Affairs) were available from the Public Archives of Canada (RG85:1135:270-1-1). A trip to Fairbanks

revealed that the Alaskan Reindeer papers were to be found in the B. B. Mozee collection (M6 A4) and the Lomen Family Papers 1850–1969 (Box 48, Folder 692) at the Elmer E. Rasmussen Library, University of Alaska. The study visit to the northwest in the summer of 1985 was only made possible through a northern training grant from the Centre for Northern Studies at McGill University for which I would like to express my deep gratitude. I am also grateful to Mrs. Erika Mothersill in whose car we drove the Alaska Highway, and to Dr. R. White and Dr. D. Klein at the University of Fairbanks who made several helpful contributions and took me to see the deserted reindeer station at Cantwell.

While passing through Whitehorse, I was able to interview Mrs. Elly Porsild, who was charming and helpful about family aspects that I had found puzzling, and find copies of correspondence and other items related to Robert and Elly Porsild in the Yukon Archives including the Iris Warner collection of 1973–74. The northern training grant allowed me to continue to Inuvik and fly home via Yellowknife. I would like to thank the staff at the Inuvik Scientific Resource Centre for allowing me to stay in their facility and helping me to get down the Mackenzie River Delta to Reindeer Station and to the Tuktoyaktuk Peninsula by boat and small plane to look for pingos and reindeer, and the Northwest Territories Archives at the Prince of Wales Northern Heritage Centre in Yellowknife for looking for information there, although I found little that was useful.

Back east, a primary source of inestimable value was that found in the official correspondence files located in the National Herbarium of Canada, and again I must thank McGill University for the Fonds pour la Formation de Chercheurs et l'Aide à la Recherche (Fonds FCAR Québec) scholarship that allowed me to finance the months of research in Ottawa. Thanks to the generous encouragement of Dr. Irwin (Ernie) Brodo, Chief Botanist at the National Herbarium, in 1985–86, I was given space to work in the herbarium and free access to the files kept by Porsild from 1936 to 1967, prior to their removal to outside archives where they would be less accessible. Again, everyone was wonderfully helpful in allowing me to photocopy everything I felt I needed, some of which would prove excessive as I learned more of my subject but I was not to know that at the time. I would like here to repeat my special thanks to Ernie for his ever-kind support and for his warm foreword which gives us such an immediate and intimate picture of Erling Porsild at home and in the Herbarium, and to his wife Fenja for her delightful company while we worked together on our separate projects in the basement of the National Herbarium.

Although I wish to thank the entire National Herbarium staff, and in particular Dr. James Soper for his thoughtful contributions and Kathy Pryer and Mike Shchepanek for their encouraging assistance, there is one member who deserves special mention. To Dr. George Argus, now retired but still working hard on his willows, who has found the time, even when he has little of it to spare, to go through my manuscript more than once in its developing phases and frequently offer wise advice about how to find something or someone and also correct some of my worst errors, and to his wife Mary Argus, I can only repeat my thanks over and over for their support over the years, for being there when I was ready to give up, and continually believing that I could and would do it.

An additional vast collection of herbarium correspondence, reports, and documents was available from the Public Archives of Canada under National Herbarium correspondence, 1863–1963 (RG132, vols. 18–36), and I spent months and years in that superb institution, suffering a great deal of embarrassment at the time due to a clacking typewriter surrounded on all sides by silent new computers, and with a fistful of copy money in order to obtain larger sections of material that was needed. Personnel documents (RG32:686:Int.7) were at first considered too confidential to be released but were given to me eventually to be used with discretion. For many years, the External Affairs records were not available at the Public Archives for one reason or another. Sometime in the winters between 2005 and 2008, I was able to track them down in what had by then become known as the National Archives of Canada, filed under RG25, which gave me the background and history of the Canadian Consulate in Greenland during and immediately after World War II. I have nothing but praise for the extent and efficiency of this national treasure chest of important Canadian records and for the people who faithfully keep it running.

Since the time when I first worked on the files in the National Herbarium, the Canadian Museum of Nature has established an archival department and I suspect that the 1936–67 Porsild papers will be found there in future if not now. It was in these new archives, thanks to an introduction by George Argus, that I more recently discovered the letters between A. E. Porsild and R. M. Anderson, a rich source for the personal details and private opinions exchanged between them. I am very grateful to Chantal Dussault and Andrée Bisson for taking so much time and trouble to find and photocopy material from the Anderson collection for me to use.

Beyond the unpublished material found in various files, there is a wealth of data in published articles, reports, and reference books, some written by Porsild himself. Most of the material of this nature, listed under Selected Bibliography, either came from the National Herbarium as a gift, or were bought by me, or obtained on loan from the McGill University library system, or more locally by ordering them through the always helpful Grand Manan Library staff. I have also to thank Ava Sturgeon, Archivist at the Grand Manan Archives, for spending hours in searching for important information for me, Binx Remnant of Winnipeg provided a helpful contact, and Therese Etherington supplied a critical piece of the puzzle from the Hudson's Bay Company Archives.

Some of the most important additions to the text have been the excellent digital maps produced by Faith Carlson of Unity, Maine, and Ragnar Müller-Wille of Montreal. They have worked hard to satisfy the requirements of the University of Calgary Press and the sometimes obscure and difficult requests of the author, but I am more than delighted with and grateful for all they have done.

Gathering the photographic illustrations proved to be a challenge that was not always satisfied, but I wish to thank the staff of the Library and Archives of Canada for all the photographs they were able to provide, including the large collection of Erling Porsild's own photographs and those of others for the Canadian Reindeer Project. I am grateful to the staff of the Canadian Museum of Nature archives for portraits of individual members of that institution, to George Argus and Kim Madge of the National Herbarium for their digital copies of Porsild's herbarium collection sheets, to the staff of the Canadian Museum of Civilization for those from Diamond Jenness, to Bill Edgar on Grand Manan for putting my 1984 slides of the Canol Road onto computer, and Bill Weber and the Müller-Wille family for providing personal photographs from the Rockies and Arctic excursions in Porsild's later years. I owe a special debt of thanks to the family of the late James Soper whose son Ian searched for and supplied personal photographs of the Raup family in time for publication. Sadly, Dr. Soper signed his name for the last time when he gave his permission for their use by the University of Calgary Press.

The records office at the University of Copenhagen kindly supplied the unusual conditions relating to Erling Porsild's doctoral degree in 1956, and I have received other information by personal correspondence. In fact, over the long years this study has taken me, I have received clippings, articles, advice, information, books, and encouragement from too many people for me ever to

identify by name. Porsild's colleagues, friends, and family have told me stories which I could never have found otherwise. As much as possible, they have been identified in the endnotes if not in the text, but to everyone who has helped me, whether named or unfortunately unnamed, I would like to express my fervent thanks. It is difficult for me to realize that many people whom I would like to acknowledge are no longer with us, people like Dr. Dorothy Swales and Dr. Wally Sackston, with whom I worked at Macdonald College in Ste. Anne de Bellevue, Quebec, also Dr. William Cody in Ottawa and Dr. Marika Ainley and Dr. Carl Heimburger in Victoria. I am forever grateful to botanists Dennis Woodland, John Bain, Kathy Pryer and Marcia Waterway who taught me so much in turn about our Canadian flora during the Macdonald years. In the course of doing the Porsild research, I have Mrs. Helen Risager of Greenland to thank for my introduction to the youngest Porsild son, Sten Porsild of Copenhagen, Denmark, who was extremely kind and helpful in an interview over the telephone. In Ottawa, it was a privilege to be able to interview Hilda Harkness about her Herbarium memories and Trevor Lloyd about the Greenland years, and most recently Diana Rowley gave me some contributions from the Arctic Circle years which I was delighted to receive.

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Weber Müller-Wille (who generously took on the long and difficult task of doing the index) and Bill Weber went through my penultimate manuscript with a fine eye for every mistake that could be found, of whatever size or significance, and returned it to me with such assurance that it was an important and necessary document that I cannot begin to list the extent of their encouragement and assistance or thank them all enough for what they have done.

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Abbreviations:

AEP	Alf Erling Porsild
AINA	Arctic Institute of North America
IBC	International Botanical Congress
NHC	National Herbarium of Canada
NMC	National Museum of Canada
RTP	Robert Thorbjørn Porsild
MPP	Morten Pedersen Porsild

Two-letter abbreviations are used for U.S. states and Canadian provinces, e.g., “NT” = “Northwest Territories.”

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“Every era and field has its heroes. Dr. A. E. Porsild is one of them for Canadian Arctic Botany. Porsild is one of the unforgettable Canadian pioneers of science whose exciting life story, now fully revealed, will serve as a great example for younger generations of dedicated enthusiasts of all fields.”

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One of Canada's most remarkable botanists, Alf Erling Porsild (1901–1977) grew up on the Arctic Station in West Greenland, where he later served as Vice/Acting Canadian Consul (1940–43). For nearly twenty years, he studied reindeer activities in Alaska and the Northwest Territories as part of a Canadian project designed to encourage grazing animal husbandry among aboriginal peoples. As Curator of Botany at the National Museum of Canada, he collected thousands of specimens, greatly enlarging the National Herbarium and making it a superb research centre. Porsild's meticulous work and observations have particular relevance today with the growing concern over global warming in the Arctic.

This long-awaited biography traces the challenging and adventurous career of an unusual, little-known scientist who battled rivalry, bureaucracy, personal disappointment, and private tragedy. In the end, he earned universal respect for his prodigious publications and intimate knowledge of the people, plants, and land around Canada's Arctic Circle. His story gives the first full account of the Canadian Reindeer Project and Canada's Consulate in wartime Greenland and describes the exploration and mapping of the Canadian flora and growth of the National Herbarium from about 1920 to Porsild's retirement in 1967.



WENDY DATHAN studied botany at McGill University and eventually worked as Assistant/Acting Curator at the McGill Herbarium and thereafter began her research on Porsild for her master's thesis on his Canadian Reindeer Project years. She is the author of two books on her travels and on her experiences living on Grand Manan, New Brunswick, where she is Curator of the Grand Manan Museum and an enthusiastic naturalist.



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