



Some Common Edible Mushrooms of Newfoundland and Labrador



Black Morel *Morella* sp. nov.



Meadow Mushroom *Agaricus campestris*



Greening Orange Milk-Cap *Lactarius deterrimus*



Orange Milk-Cap *Lactarius thyinos*



Shaggy Mane *Coprinus comatus*



King Bolete *Boletus edulis*



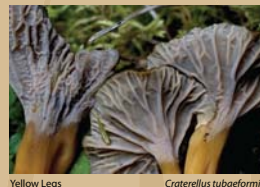
Common Puffball *Lycoperdon perlatum*



Pear-shaped Puffball *Lycoperdon pyriforme*



Slippery Jack *Suillus luteus*



Yellow Legs *Craterellus tubaeformis*



Sweet Tooth *Hydnum umbilicatum*



Peck's Russula *Russula peckii*



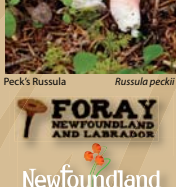
Newfoundland Chanterelle *Cantharellus roseocanus*



Lobster Mushroom *Hypomyces lactifluorum*



Hedgehog *Hydnum repandum*



Pine Mushroom *Tricholoma magnivelare*



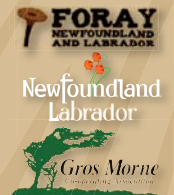
Honey Mushroom *Armillaria ostoyae*



Birch Bolete *Leccinum scabrum*



The Big Cat *Catathelasma ventricosum*



www.nlmushrooms.ca

More than 1,500 species of fungi have been identified and catalogued by Foray Newfoundland and Labrador. Some are delicious mushrooms, some are inedible, and some are deadly poisonous—and it is not always easy to tell them apart. Never eat a wild mushroom unless you are absolutely sure of its identity.



FORAY NEWFOUNDLAND AND LABRADOR

is an amateur, volunteer-run, community, not-for-profit organization with a mission to organize enjoyable and informative amateur mushroom forays in Newfoundland and Labrador and disseminate the knowledge gained.

Webpage: www.nlmushrooms.ca

ADDRESS

Foray Newfoundland & Labrador
21 Pond Rd.
Rocky Harbour NL
A0K 4N0
CANADA
E-mail: [info AT nlmushrooms DOT ca](mailto:info@nlmushrooms.ca)

BOARD OF DIRECTORS CONSULTANTS

Michael Burzynski

PRESIDENT

Geoff Thurlow

TREASURER

Faye Murrin

SECRETARY

Andrus Voitk

Past PRESIDENT

Jim Cornish

Jamie Graham

Tina Leonard

Anne Marceau

Michele

Piercey-Normore

Maria Voitk

Marian Wissink

MYCOLOGICAL

Dave Malloch

NB MUSEUM

AUDITOR

Gordon Janes

BONNELL COLE JANES

LEGAL COUNSEL

Andrew May

BROTHERS & BURDEN

OMPHALINA, newsletter of Foray Newfoundland & Labrador, has no fixed schedule of publication, and no promise to appear again. Its primary purpose is to serve as a conduit of information to registrants of the upcoming foray and secondarily as a communications tool with members.

Issues of **OMPHALINA** are archived in:

Library and Archives Canada's Electronic Collection <<http://epe.lac-bac.gc.ca/100/201/300/omphalina/index.html>>, and

Centre for Newfoundland Studies, Queen Elizabeth II Library (printed copy also archived) <<http://collections.mun.ca/cdm4/description.php?phpReturn=typeListing.php&id=162>>.

The content is neither discussed nor approved by the Board of Directors. Therefore, opinions expressed do not represent the views of the Board, the Corporation, the partners, the sponsors, or the members. Opinions are solely those of the authors and uncredited opinions solely those of the Editor.

Please address comments, complaints, contributions to the self-appointed Editor, Andrus Voitk:

seened AT gmail DOT com,

*... who eagerly invites contributions to **OMPHALINA**, dealing with any aspect even remotely related to mushrooms. Authors are guaranteed instant fame—fortune to follow. Authors retain copyright to all published material, and submission indicates permission to publish, subject to the usual editorial decisions. Issues are freely available to the public on the FNL website. Because content is protected by authors' copyright, editors of other publications wishing to use any material, should ask first. No picture, no paper. Material should be original and should deal with the mycota of Newfoundland and Labrador. Cumulative index and detailed Information for Authors available on our website.*

COVER

FNL poster, Some common edible mushrooms of Newfoundland and Labrador. Finally out! Much time and work has gone into it. A handsome poster, a justified source of pride for everybody who helped contribute to it.

For the record, all of the illustrated species have been eaten at the editor's table with no ill effects. And one mushroom has been shown by DNA to have a different name than what appears on the poster: our *Tricholoma magnivelare*, as we learned in **OMPHALINA** 5(6), has been shown to be genetically the same as *T. matsutake*. At least for now.

CONTENT

Editorial	2
Wetlands of Gros Morne	
<i>Michael Burzynski</i>	4
Edible mushroom poster	
<i>Michael Burzynski</i>	6
Mushrooms in the news	
<i>Andrus Voitk</i>	8
Book review: Poroid fungi of Europe	
<i>Henry Mann</i>	10
Stewardship poster	
<i>April Muirhead</i>	12
Dr Kare's thesis	
<i>Andrus Voitk</i>	13
<i>Cortinarius sanguineus</i>	
<i>Andrus Voitk</i>	14
Bishop's sketch book	16
<i>Alpova cinnamomea</i>	
<i>Hayward, Horton, Lebeuf, Voitk</i>	17
Wild mushroom soup	
<i>Robin McGrath</i>	21
Partridge & chanterelles	
<i>Robin McGrath</i>	22
Moroccan chicken with mushrooms	
<i>Robin McGrath</i>	23
Poster advertisement	24
Partners	inside back cover
Notice of Foray 2014	back cover



Message from the Editor

Our poster issue documents some of the ways in which our activities have influenced the awareness of mushrooms in our province, and beyond. A poster may seem like a very small thing of little significance, possibly even risible as an “achievement” from the vantage point of workers with greater accomplishments on a global scale. But from FNL’s perspective it is a major accomplishment, a big reason for its existence.

The mission of FNL is to organize enjoyable forays and to publish information gleaned therefrom. Scientific reports are but one part of making information public. From the point of view of our funders, largely the citizens of Newfoundland and Labrador (via the public service), surely the greater goal is to raise awareness of natural history among our fellow citizens? The person aware of nature and its role is more liable to be its good custodian, loyal interpreter and constant defender. There is today an awareness of mushrooms in this province that could not be imagined a mere decade ago. Good on you, each and every one, who contributed to this change!

The above may lead you to the conclusion that ours is a foray for the common woman or man. It is. Remember, service to common humanity is the road to nobility. Take the case of Sir Leif Ryvar den, member of our faculty in 2011, and frequent contributor of articles to *OMPHALINA*. No sooner had he returned home from Newfoundland and Labrador, but he was knighted by the King of Norway.

Congratulations and heartiest best wishes, Sir Leif!

The obvious causal relationship between attending our foray and knighthood has not been lost on observant mycologists—the list of Norwegian mycologists now wanting to come to our foray has grown to outlandish proportions.

Sir Leif has since published a new book on polypores, the group he has studied all his professional life. Henry Mann, unaware that he was

reviewing the book of a noble, reviews the book from the viewpoint of an interested amateur.

Our good friend, Kare Liimatainen, successfully defended his doctoral thesis, as noted on page 13. Veteran foragers will remember Kare and wife Tuula as the students of *Cortinarius*, who during several forays contributed much to our knowledge of this large genus. And their daughter Aava. Well, now that he is a Doctor (the other kind), Kare, ever humble and modest, tells us that we need not call him Doctor Liimatainen. Dr. Kare will do just fine.

Kare states that coming here altered the course of his studies. That may be so, but even without coming here physically, our collections contribute to the face of Mycology in small ways. Often hard to document, mostly because it is not our work, but we have provided small contributions, or occasionally even some stimulus. One example is the *Alpova diplophloeus* complex. When we asked around for help to identify our truffles, Tom Horton offered to help. The task went to doctoral student Jeremy Hayward, who found that the genus was somewhat confused in North America, and in the process of identifying our single species, completely revised the genus on this continent (Hayward J, Tourtellot S, Horton TR: A revision of the *Alpova diplophloeus* complex in North America. *Mycologia* June 2, 2014; doi: 10.3852/13-360); from that study comes the final word on our *Alpova* on page 17.

Not one, but three mushroom recipes from Goose Bay wrap up our self-congratulatory issue. A decade ago, who’d a thunk it? As our partnership support dwindles in front of our eyes, it is good to take stock to satisfy ourselves as well as our partners that we have used the support prudently, with palpable results throughout our province, as well as on a wider scale.

See you at the Foray!
andrus

Less than two weeks to Foray time!
Registrations closed.

**FULLY
SUBSCRIBED!**

Last information before the Foray—read carefully.

FORAY MATTERS...

1. INFORMATION

REGISTRATION FORM

HOW TO GET THERE

etc.

Please see *OMPHALINA* V, No 4 (April issue), as well as other material stored on our website nlmushrooms.ca.

2. MYCOBLITZ

Be at Sir Richard Squires Memorial Provincial Park by **11:00 AM**, Fri. Sep. 12, 2014. Bring own lunch. **NOTE for people driving from St John's: The Hwy 420-422 connection from the TCH is not passable. Drive to Deer Lake, take Hwy 430 north and turn R on Hwy 422 (toward Cormack). Go until Park sign. Rough road.**

3. GROS MORNE PASS

We need to buy a Gros Morne Pass for all participants. Those with a valid Gros Morne Pass, please let Anne Marceau know [marceauanne AT gmail DOT com](mailto:marceauanne@gmail.com) to prevent double payment (i.e. allow us to save on costs).

4. ARTS & CRAFTS TABLE

Just a reminder that those of you doing some artsy or crafty things with mushrooms or along mushroomy themes should bring them along to share with others. You need not sell, if you do not wish—you may either Show or Sell.

Please register with Glynn Bishop [fozmos AT gmail DOT com](mailto:fozmos@gmail.com), who will set up the tables. He'll need to know the amount of space you require, etc. Glynn will set it up, but each artisan will be responsible for her own items and for any transactions. FNL provides the venue, but takes no responsibility for the wares—and charges no commission!

5. WORKSHOPS

Two spots left in either dyeing or water colour workshops. If you have any interest, let Maria know [medemari AT gmail DOT com](mailto:medemari@gmail.com), as they are filled in order.

6. FISCALLY DIRECTED CHANGES

FNL's means changed drastically the last two years. Here are some changes your Board has made to keep within our means:

- Smaller faculty, shorter Faculty Foray;
- Decreased number of participants;
- Decrease in funded database team positions;
- Less expensive venue;
- FUNGI subscription not included in membership/registration fee;
- Elimination of early payment rebates.
- The Reception and Cookout were to be changed to BYOB events, but an unexpected last minute increase in support enabled us to serve wine and beer for these events, as in past years.

Concerned members have written to ask whether FNL is in danger of folding.

Not on your life!

As long as the Board handles the budget with prudence, there is no reason we cannot have an enjoyable, informative and affordable foray, even with NO support. We may have to do things differently, but we should be able to have a good time in the woods, learn a few things, enjoy each others' company, until things improve again. Unfortunately the scientific arm will suffer: our policy is that participants pay their costs, but not the scientific part, which runs on Partnership support.

THE WETLANDS OF GROS MORNE

Michael Burzynski



Caribou on lowlands with escarpment in background

Wetlands are found on both lowlands and highlands in Gros Morne, and cover about 10% of the park area. Wetlands occur where water accumulates in hollows or saturates hillsides with runoff. Peaty wetlands (bogs and fens) are characterized by the accumulation of dead organic matter beneath a thin veneer of living plants. Insect-eating plants (pitcherplants, sundews, butterworts, and bladderworts) are particularly common in bogs and fens. Marshes tend to have no peat, with the plants rooted in rich mud beside lakes, rivers, or the ocean. Often the dominant species are grasses, sedges, and rushes.

Bogs are peaty wetlands dominated by mosses. Typically, sphagnum moss is the most important species, wicking up water as it grows, and producing acid that “pickles” the dead plant matter below. The “soil” in bogs is almost pure organic matter, and has very little nutrient value because decomposition is so slow. The water table tends to be high—a bog acts like a sponge on the landscape—and since the water contains

little oxygen, plant roots cannot survive below the surface of the water table. Tree growth is stunted, only adapted plants can grow well. Bogs tend to grow slowly upward and outward year by year, drowning the surrounding forest. Watch for species of colourful *Hygrocybe*, tiny *Lichenomphalia*, *Mycena*, and *Galerina*, and note how most lichens live on the dryer hummock tops.

Fens are dominated by grass-like sedges. Tussocks of deergrass are the most common vegetation. On dryer hummocks there are often dense growths of *Cladonia* and *Cetraria* lichens—crucial winter foods for woodland caribou. Fens tend to have shallower peat than bogs, and drainage channels wind through them. Some fens have developed on limestone bedrock, and their less acidic peat makes them important to a wide range of orchids, including the showy lady’s-slipper.



Freshwater marsh, St. Paul’s Inlet

Marshes develop where moving water deposits rich mud during floods or high tides. Freshwater marshes are found in a few places in Gros Morne, such as the upper parts of the Lomond River and Deer Brook estuaries, and around river mouths in St Paul’s Inlet. Saltmarshes are less common. The most accessible are on Tickle Point near St Pauls, and at Glenburnie at the southeast end of South Arm of Bonne Bay. Most of the plants in marshes are grasses, sedges, and rushes, and many of the fungi are microscopic, growing on the seeds and leaves of those plants.



Deergrass (Trichophorum cespitosum), an important fen plant



Ribbon bog near Bakers Brook

Some Common Edible Mushrooms of Newfoundland and Labrador



Black Morel *Morella* sp. nov.



Meadow Mushroom *Agaricus campestris*



Greening Orange Milk-Cap *Lactarius deterrimus*



Orange Milk-Cap *Lactarius thyinos*



Shaggy Mane *Coprinus comatus*



King Bolete *Boletus edulis*



Common Puffball *Lycoperdon perlatum*



Pear-shaped Puffball *Lycoperdon pyriforme*



Slippery Jack *Suillus luteus*



Yellow Legs *Craterellus tubaeformis*



Sweet Tooth *Hydnum umbilicatum*



Peck's Russula *Russula peckii*



Newfoundland Chanterelle *Cantharellus roseocanus*



Lobster Mushroom *Hypomyces lactifluorum*



Hedgehog *Hydnum repandum*



Newfoundland
Labrador



Pine Mushroom *Tricholoma magnivelare*



Honey Mushroom *Armillaria ostoyae*



Birch Bolete *Lecinum scabrum*



The Big Cat *Catathelasma ventricosa*

www.nlmushrooms.ca

More than 1,500 species of fungi have been identified and catalogued by Foray Newfoundland and Labrador. Some are delicious mushrooms, some are inedible, and some are deadly poisonous—and it is not always easy to tell them apart.

Never eat a wild mushroom unless you are absolutely sure of its identity.



Edible Mushroom Poster

Michael Burzynski

Long ago, and far away (actually, in 2009, leading up to the second Lion Max Simms Camp foray), we decided to hold a contest to find photographs for an edible mushroom poster. Luckily, five years later, what we have actually ended up with is not an edible poster, but a poster illustrating edible mushrooms.

Getting to printed poster has been a long and difficult process. Laura Park volunteered to coordinate the project. She sent out the requests for photographs, organized the contest, and with the help of judges Faye Murrin (mycology), Ralph Jarvis (artistic) and Gene Herzberg (photography) chose winners from the entries. Next year Gene was asked to send in some entries, and Joe Brazil stepped in as photography judge. Lavish prizes were handed out to the winners during the sunny 2009 Foray in Central Newfoundland and the soggy 2010 Foray on the Great Northern Peninsula. Faye then had the tough job of deciding which species would be illustrated on the poster. Most, but not all of the species we had hoped to capture were represented. As the project evolved, not all of the winning photographs could be used on the poster and some extra photographs had to be sought. Tina Leonard then took the package and worked with the designer.

Erika Pittman, an employee of the provincial Department of Environment and Conservation, designed the poster, suffering through several rounds of changes as the scientific names of certain species became moving targets. The final contributor was the Gros Morne Co-operating Association, which paid for the printing of the poster.

As president of Foray Newfoundland and Labrador, I would like to thank the photographers who submitted their photos and everyone else involved in the production of this bold and colourful poster. I hope that it will inspire many more Newfoundlanders and Labradoreans to become interested in fungi.

Some Common Edible Mushrooms of Newfoundland and Labrador will be available during the coming September foray for \$10 (including tax). It will also be available from the Gros Morne Co-operating Association gift shops at the Visitor Centre (near Rocky Harbour) and the Discovery Centre (near Woody Point). All money earned from poster sales will be used to fund future forays and projects.

Now for the poisonous mushroom poster—or perhaps for safety's sake right from the beginning we should call it the poster of poisonous mushrooms...

In addition to this poster, Michael is also working with Forestry on two other posters, explaining the activity of our Foray. These will be used by Forestry at various public displays to show some of the activities going on in our woods. Again, an example of how our activity is beginning to shape the way our forests are viewed...

Editor

MUSHROOMS IN THE NEWS

Andrus Voitek



'A TIME FOR HEALING'
PAGE 6



DEPRESSION IN WOMEN
PAGE 8



SATURDAY SUN RUN
PAGE 13

The Western Star

Navigating our communities

Monday, June 9, 2014 • Corner Brook, Newfoundland and Labrador • Vol. 64, No. 134

www.thewesternstar.com

YOU SAID IT

"Right now we're focusing our efforts on mining the lower footwall zone in our Ming Mine. If we're successful in creating a viable operation there, then that will greatly increase the life of the mine."

Peter Mercer, Rambler Metals
Page 7

IN MY OPINION

The team has been through this all before, and we can only think it must be a tough decision for the Royals' ownership when the risk is leaving the impression that the team is abandoning a loyal fan base — no matter which home ice they decide to defend.

Editorial
Page 4

SYNOPSIS

House fire keeps Cormack fire department busy
Cormack's fire Chief Chris Foster said it's not unusual for firefighters to get called back to a structure fire. That was the case over the weekend with a fire that destroyed a home on Veterans Drive.
Page 3

Local players drafted by Q teams
Brady Griffin-Herford and Luke Housie are among the Newfoundlanders to hear their names called at the 2014 Quebec Major Hockey League entry draft held recently in Sherbrooke, Que.
Page 13

ODDITY

Teachers aide tricked students into eating pet treats: school
BOYERTOWN, Pa. (AP) — A Pennsylvania school district says an aide has been suspended after she tricked students into eating pet snacks by telling them they were cookies.
About 75 fourth-graders at New Hanover-Upper Frederick Elementary School received the pet treats during recess Thursday. No injuries were reported.

Student Gabriel Moore said the aide first joked they were dog treats, then told students they were actually cookies, Gabriel ate three.
Officials notified parents Friday. They didn't disclose the type of pet treat but said the ingredients would only be harmful to people with certain food allergies.

QUICK WEATHER

Today	Tuesday	Wednesday
High: 15	High: 18	High: 13
Low: 9	Low: 8	Low: 5
POP: 40%	POP: 40%	POP: 70%

See detailed weather on page 2.
For up-to-the-minute weather, visit www.thewesternstar.com



INDEX
Opinion 13
Canada 7
The World 19
Obituaries 20
4 Sports
6 Lifestyles
6 Classified
8 Comics

A haven for rare mushroom species

By GARY KEAN
STAR STAFF WRITER

CORNER BROOK April Muirhead admits she's not an expert mycologist, but her interest in mushrooms is certainly growing.

After attending mushroom forays the last two Septembers, the Corner Brook woman now finds herself in the midst of studying some varieties of morel mushrooms in western Newfoundland that have never been seen in Canada before until recently.

In fact, one of those morels is "hitherto unknown to science," according to Foray Newfoundland and Labrador, an amateur organization that studies mushrooms in the province.

According to the group, there are three species of morels in the



Anne Marceau of Rocky Harbour holds a bowl of the edible Mel-36 morel mushrooms, freshly picked in the Gros Morne area.
— Photos courtesy of Michael Buzyniak



This species of morel mushroom, known only as Mel-36, was first found in western Newfoundland several years ago.

province. Two have not been officially described before, although the DNA of one had been identified earlier from Scandinavia, China and the state of Washington. All three are found in western Newfoundland. The interesting one also found

in other locations has been found in Corner Brook, the Port au Port Peninsula and on an island on the Naskapi River in Labrador. The one that's even lesser known to science has been found in the Corner Brook, Hamber Village.

Steady Brook and Gros Morne areas. Specimens have also recently since been found in New Brunswick, so the mushroom is not unique to the island of Newfoundland.
See **COMPARATIVE** and related story on page 2

Comparative study

— Continued from page 1

Muirhead has an environmental science degree from Grenfell Campus, Memorial University and followed that up with a diploma in geographic information systems from the College of the North Atlantic in Corner Brook. For her major GIS assignment, she asked people to describe the habitats where they were finding mushrooms and produced a project predicting where different kinds of mushrooms might be found in western Newfoundland.

Muirhead worked with the foray's database team and many of the other people there were among those who had helped provide her information for the GIS project.

Recently, Andrus Voitek, Labrador's past-president and editor of the groups Omphalina newsletter, asked Muirhead and Darin Brooks, the GIS program instructor at College of the North Atlantic, to do a comparative study of the two most interesting morels in the only place where they're both known to exist.

It's pretty cool that there is not much known about them and they are right here.

April Muirhead, researcher



April Muirhead is studying some varieties of morel mushrooms grown in western Newfoundland.
— Star photo by Gary Kean

"It's pretty cool that there is not much known about them and they are right here," said Muirhead as she checked out the slowly decomposing remains of the morels known so far only as Mel-36. The Mel-36 morel is the one found only in western Newfoundland and New Brunswick so far. "In a couple of weeks, there should be Mel-19 mushrooms here," said Muirhead of the anticipated

arrival of the other rare species. The comparative study being done by Muirhead and Brooks will likely be a topic of discussion at the next provincial mushroom foray to be held in Gros Morne in September.

gkean@thewesternstar.com
Twitter: WS_GaryKean

try in the province was 100 per cent — the lowest rate of food insecurity

Waterloo.
See **LESS THAN** on page 3

American portion of his mission to follow the global latitude on which

starting from Corner Brook today.
See **7 MET** on page 3

ONLINE Star Poll: The Los Angeles Kings have taken a two-game lead over the New York Rangers in their best-of-seven Stanley Cup final series. Do you believe the Rangers will make a comeback with the next two games being held in New York City? www.thewesternstar.com

TOMORROW
Destinations: Health and Weather Nicol take us on another outdoor adventure. \$1.37

CITY CHRYSLER

CHECK OUT OUR REMODELLED PRE-OWNED DEPARTMENT

GREAT PRICES Newer Models '13s & '14s

25 Pieces to Move
Low kms • Low oil, 5,900 kms

2013 Chrysler 300S RWD
Fully Loaded

2013 Chrysler 200 Limited
Fully Loaded

2013 Grand Caravan Crew
Fully Loaded

NOW OPEN SATURDAY



In early June, readers of the *Western Star*, published in Corner Brook, NL, were in for a genuine treat: two separate articles by Gary Kean about new mushrooms found in the region in one edition. In addition to interviews, both articles relied heavily on a most reputable source: [OMPHALINA](#).

The front page headliner of the June 9, 2014, edition was devoted to the morels of Newfoundland (see the articles by Kerry O'Donnell and others in [OMPHALINA](#), 5[2]). The article with pictures covered most of the front page claimed nearly the same column space on p 2. In the illustration on the previous page, the excerpt from page 2 (blue frame) is superimposed on a photo of the front page. The story can be read on the web at

<http://www.thewesternstar.com/News/Local/2014-06-09/article-3755663/Western-Newfoundland-is-a-haven-for-rare-mushroom-species/1>.

If you compare the photo of the morel on the front page with that on our poster, you can be excused for suspecting that they are one and the same picture. They are.

A separate story appears on page 2, describing the finding of *Gymnopus eneficola*, a new species, hitherto unknown to science, in western Newfoundland (see the articles by Ron Petersen, Karen Hughes and others in [OMPHALINA](#)

5[5]). Of particular interest is that the holotype (the original specimen used as the reference for the species by scientists the world over) was collected at Pasadena Ski and Nature Park. The Pasadena folk should be proud that they had the foresight to dedicate their ski trails to the study of nature as well as to skiing. The derivation of the name “eneficola” is explained in the article to mean someone who lives in Newfoundland (en-ef = NF= Newfoundland + icola = dweller).

Confession: the photo of *G. eneficola* was added for this illustration and not part of the original article, due to space considerations.

G. eneficola has been collected in Gros Morne in the past, so we should have a good chance of finding this new species at this year's foray. Morels are spring mushrooms, so them we shall not expect to see at the foray. But we will have an evening review of the species in this province.

It is rewarding to see that some of the contributions made by Foray Newfoundland & Labrador to the mycological part of our natural heritage are getting recognition and prominent display to the general public. Increasing public awareness of natural history is a worthwhile achievement.

Book review

Henry Mann

L. Ryvarden, I. Melo, T. Niemelä

Poroid fungi of Europe

455 pp.
Fungiflora
Oslo
2014

£94.99

Depending on exchange rate of the day, translates to about \$175 CAD, plus postage, handling and taxes, if any.

The poroid fungi are a diverse group mostly of wood decay species, but a few are mycorrhizal or parasitic. Their spore producing surface consists of a variety of pores and the group is often known as “polypores” although it may include some related non-porous or gilled forms. Many form shelving fruiting bodies on the trunks of trees and have been known as “bracket fungi” or “conks” locally. Some only form a thin surface covering on wood. Any observant naturalist wandering woodland trails will encounter a number of species in this group on almost every outing.

Traditionally book reviews of professional and academic works are usually prepared by other experts. However, the purpose of this review needs to be clearly understood, as I am not a mycologist, but an amateur and a naturalist with a modest interest in wood decay fungi.

Two questions immediately come to mind, “Why would a North American be interested in a European book”, and “Why would an amateur even consider reviewing a highly specialized work such as this”? To the first question, it has long been

understood that there is a considerable relationship between North American, European and Asian floras and

mycotas. Many species and more so, many genera are the same or variants of the same. So the keys and descriptions for the families, genera, many species and the species descriptions for these are just as useful in North America as they are in Europe. For example, we can identify all our known Newfoundland *Trametes*, *Daedaleopsis*, *Datronia*, *Antrodia*, etc., and most species in the genera *Fomitopsis*, *Trichaptum*, *Inonotus*, *Polyporus*, *Phellinus* and others with the keys of this European work.

With regard to the second question, I am always on the lookout for sources that will allow the average naturalist to identify the wood decay fungi,

mainly by features visible with

the naked eye or hand lens. This work is clearly intended for the professional practicing mycologist who has the equipment and experience to observe and interpret microscopical features of hyphal structure, spore size and ornamentation which are frequently required in the keys. The average



naturalist does not often have access to a microscope or the ability to interpret what he/she sees through the lenses. This work therefore, along with the substantial cost, is not likely to become part of most naturalists' reference libraries, but it is anticipated that it will be joyously and eagerly received by mycologists. I look forward to the mycological reviews by the practicing experts. Yet, there is a small group of serious amateurs who will also eagerly want a copy of this book. Because the macro and micro features of the poroid fungi are so clearly explained and illustrated, this work can help bridge the gap between the amateur and professional for those amateurs willing to delve more deeply into this fascinating fungal group. The superb photographs are also a distinct reason to own a copy as are the descriptions and keys for those species we have in common.

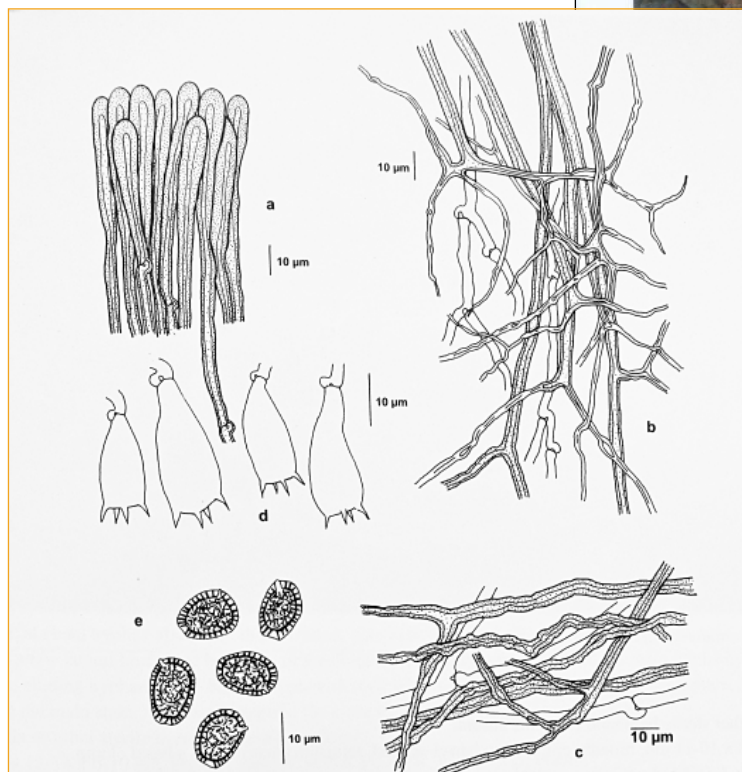
"Poroid Fungi of Europe" is a large format book (29 cm x 20.5 cm) of 455 pages. It is intended primarily as an identification manual, providing a concise, but detailed and well-illustrated discussion of the



Fig. 314. *Trametes betulina*, T. Niemelä 7685.



Trametes cervina, (Slovenia) L. Brivio.



macro and micro features important for species determination in the group. Keys to families, genera and species are provided with the bulk of the book devoted to detailed species descriptions. Of the 394 species dealt with in the book, 210 are illustrated with colour photographs. Photographs are large close-ups, clearly showing important morphological features, some of the best photos I have seen for the poroid fungi (see upper example this page). In addition, detailed microscopical drawings are provided for many species (see lower example this page). Hopefully a treatment of similar scope and quality will appear for North America as well!

Stewardship Association of Municipalities Inc.

The Stewardship Association of Municipalities Inc. decided to develop a Training Manual for member municipalities on “How to develop and deliver an interpretive walking tour in your region.” It was to contain materials related to wildlife and wildlife habitat education and stewardship, intended for various audiences. As one might expect, the document was to contain a simple guide section showing some of the common bird, plant and

mammal species found in the province.

But who would have thought—even a few years ago—that it would have been felt desirable that such a document in this province also include a section dealing with mushrooms?

Ed comment:

FNL can probably look with satisfaction on this as its contribution to public awareness about mushrooms and their place in our natural heritage. Another source of satisfaction is that it was our own Database Team member, April Muirhead, who won the contract to

fashion the page shown here. In ten years we have not only spread the faith, but have also produced preachers with sufficient expertise to continue the mission.

Not all bad.

Common Fungi in Newfoundland and Labrador

Mushrooms

<p>Amanita muscaria Fly agaric Cap varies from light yellow to deep orange with white patches. Stalk has a “ring” of tissue. Toxic to humans.</p>  <p>Photo: Andrus Votik</p>	<p>Lactarius thynos Orange cap and stem. Gills contain an orange fluid called latex or milk. Other orange-milked <i>Lactarius</i> species often turn green when bruised, but this one does not.</p>  <p>Photo: Jim Cornish</p>
<p>Cortinarius spp. Brown Cortinarius species Mycorrhizal mushroom with rust-brown spore print and a web-like veil attached to stalk and brown cap.</p>  <p>Photo: Jim Cornish</p>	<p>Russula spp. Red-capped Russula species Mycorrhizal mushroom with brittle flesh, which breaks with snap like chalk. Cap is reddish.</p>  <p>Photo: Jim Cornish</p>
<p>Hydnum repandum - Hedge Hog These two edible species often grow together in coniferous or deciduous forests. <i>H. repandum</i> (repandum = upturned) is larger and, lighter in colour while, <i>H. umbilicatum</i> is smaller with a dimple.</p>  <p>Left photo: Andrus Votik</p>	<p>Hydnum umbilicatum - Sweet tooth Right photo: Jim Cornish</p> 
<p>Leccinum holopus White Birch Bolete Mycorrhizal association with birch species. White, often with green stains at the base of the stem. Pores bruise brown after being handled and stem turns pink when cut.</p>  <p>Photo: Jim Cornish</p>	<p>Leccinum scabrum Birch bolete Very common bolete in the province. Associates with birch. Young firm ones are good to eat, but older ones tend to be soggy.</p>  <p>Photo: Andrus Votik</p>
<p>Trichaptum abietinum Softwood rotter that produces multiple annual small shelf-like fans, with irregular pores. Upper surface is hairy, the outer margins are pale purple.</p>  <p>Photo: Andrus Votik</p>	<p>Piptoporus betulinus Birch polypore White to brown cap with inrolled margins, whitish pores and soft white flesh. Grows on dead Birch (<i>Betula</i> spp.) trees.</p>  <p>Photo: Andrus Votik</p>
<p>Fomes fomentarius Hoof fungus or tinder Dark grayish-brown, hoof-shaped conks, found on living birch, white to gray. It can be used as tinder to start a fire.</p>  <p>Photo: Jim Cornish</p>	<p>Fomitopsis pinicola Red-belted polypore Grows on softwoods and sometimes birch trees. Gray cap with a red laccate band. Each year a new ring is formed with the outer light band of the current year.</p>  <p>Photo: Jim Cornish</p>

GILLED

TOOTHED

SPONGY

SHELF, BRACKET & CONK

AND THAT AIN'T ALL...

In the making is a book about the natural history of Newfoundland and Labrador, with an elusive date of release, last estimated to be spring, 2015. In it there is a significant section devoted to mushrooms, again something that may not have been as normal a decade back, as it is now.

Just before this issue was to go to print, a nice surprise waited for us in the mailbox: a handsome inscribed book containing the PhD thesis of Kare Liimatainen. A generous section is devoted to Acknowledgments, where the FNL experience gets lots of mention.

Michael

Burzynsky is thanked for helping find a house in Gros Morne while collecting—twice. We get thanked for inviting Kare and family to the Foray, which “really opened up a new world ... and changed our work.”

The Foray is described as “a really great foray with a small, passionate team.”

So, thanks to our invitation, this talented team studying *Cortinarius*, changed its direction from a Nordic focus to one comparing European and North American species. Their success is not ours to claim, even if we take joy in it. They made their

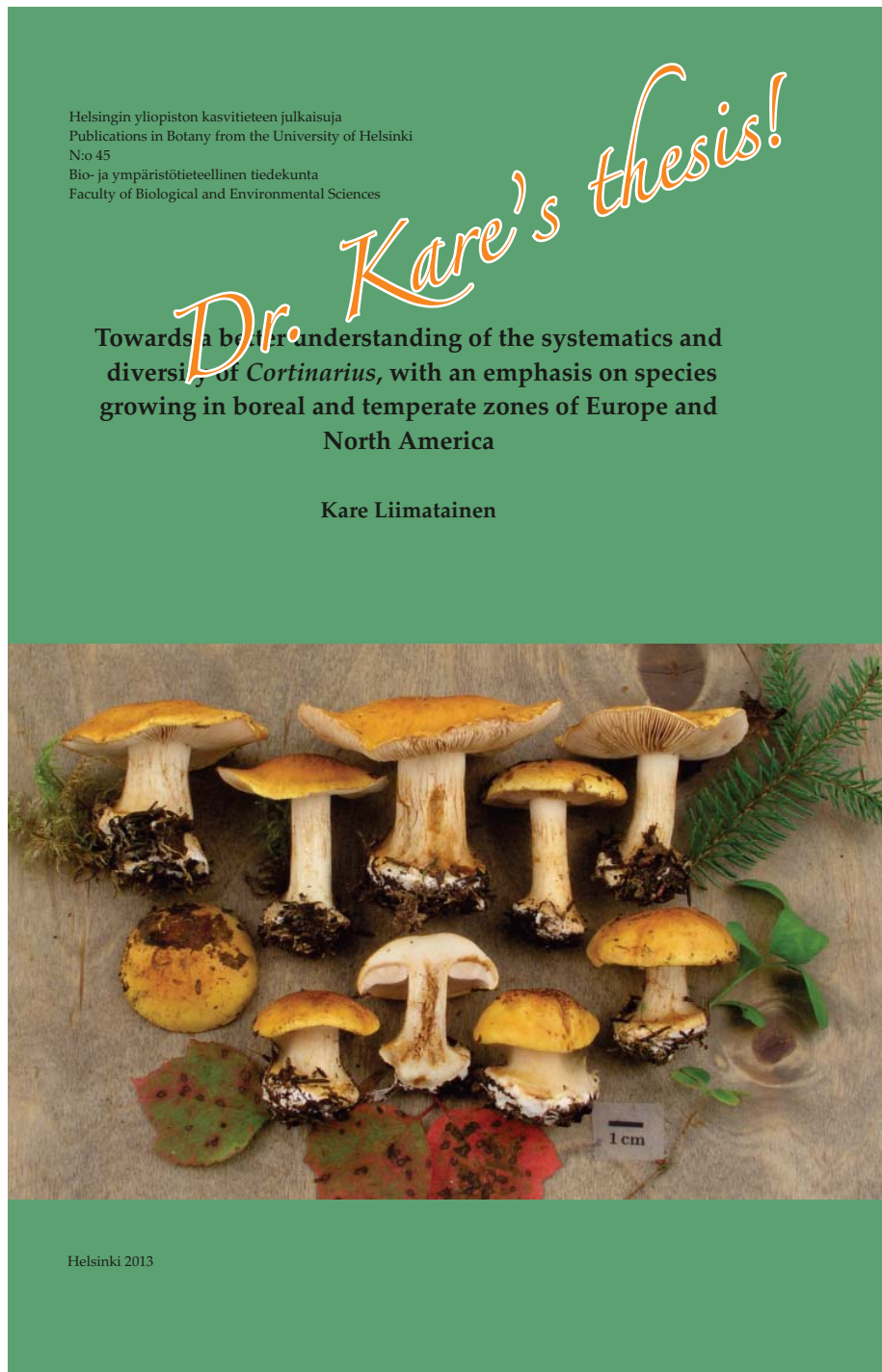
own way, did their own work, established their own contacts, including an important tie with Joe Ammirati. However, we can take credit for providing the impetus for this change of focus, resulting in possibly one of the most ambitious efforts to compare a major genus

across both continents.

Their work has already named several new species from Newfoundland and Labrador, including *Cortinarius grosmorneensis*. The thesis makes several

contributions to North American *Cortinarius*, and contains what may be the most significant study of the genus, with erection of 180 new DNA-based species, an incredible task that should help stabilize much of the *Cortinarius* work for years.

One of the results of the work in this thesis is that now we know exactly how many small red *Cortinarii* (section *Sanguinei*) there are in North America, and how many of these are found in our province: four and one. Perhaps not a big deal on a global scale, certainly not of the scope of the 180 new DNA-based species in the world, but for us it adds useful knowledge



of our natural history.

In a way of congratulating Kare and his team, we shall feature this small piece, culled from work in the thesis, on the following pages.

Andrus Voitk

Illustrations

Title banner from von Wulfen.²

Next page, all photos by Roger Smith:

Top: Sep. 6, 2011, Main River, deep section, near rivermouth,

Middle: Sep. 7, 2010, Pistolet Bay Provincial Park,

Lower: Sep. 29, 2007, Brother Brennan Centre, Avalon Peninsula.



The
Cortinarius sanguineus
of Newfoundland and Labrador is
Cortinarius sanguineus

One of our commonest species of *Cortinarius* is *C. semisanguineus*: a drab brown mushroom that surprises the collector with its vivid red gills, if turned over.¹ If you guess that the name *semisanguineus* suggests the existence of *C. sanguineus*, you are right. The latter, however, is much less common. Over 10 years of collecting, we have five collections of it, four from our forays and one in my private fungarium. All come from only three sites in the province: two collections from the Brother Brennan Centre on the Avalon, two from Pistolet Bay Provincial Park on the Great Northern Peninsula, and one from the steep (lower) section of the Main River.

This is a relatively small *Cortinarius*, with a cap diameter rarely exceeding 5 cm. As the name suggests, it is red in colour. While *C. semisanguineus* is red only under the cap, this one is red all over: cap, gills, stem and flesh. Only the basal mycelium is a light ochre. It is also a little more floccular or scurfy than the

smoother *C. semisanguineus*.

Agaricus sanguineus was first described by Freiherr Franz Xaver von Wulfen in 1781.² Since then, related species in Europe and North America have been considered as section *Sanguinei* of the *Cortinarius* subgenus *Dermocybe*. The recently published study by Tuula, Kare and their North American collaborators was the first to study the complex genetically, defining it as five species on two continents.³

Which of those five do we have in our province? The DNA of collections from two of our sites matches that of *Cortinarius sanguineus*, with only minor geographic variation. Because members of the species complex are so uncommon in our province, we cannot claim an all-inclusive survey, but the evidence suggests that *Cortinarius sanguineus* is the only member of the complex in Newfoundland and Labrador. Hence the repetitive title, giving the reader pause to ponder whether it is elliptic or redundant,

whether there is an echo, or whether the author stutters.

Why should this small red mushroom be so much more uncommon than its half-red relative? A look at its collection sites might offer a clue. The Brother Brennan Centre, where two of our collections come from, is an example of the Avalon Forest, a rather unique ecologic region in our province. It is our prime "boreal rain forest", or perhumid boreal forest.⁴ These regions are characterized by high atmospheric humidity from much rain and fog; there is more water coming in than flowing out. Trees are old because fire is uncommon in the wet environment. Branches of the primarily coniferous trees are bedecked with lichens. The ground is wet, covered with lush moss and *Sphagnum* patches are common. The illustrations show the association with lush moss or *Sphagnum* quite well.

Although the Great Northern Peninsula is much drier, the trail around the pond in Pistolet



Bay Provincial Park goes through a small econiche of similar moist forest, with humid air and wet, mossy ground. Similarly, the valley around the mouth of the Main River is a uniquely wet region, with humid air, wet ground, a forest covered in lichens and ground covered with lush moss. Probably some of our oldest conifers in the province grow there. The similarity of all three collecting sites suggests that in our province *C. sanguineus* is generally uncommon because it has very specific humidity requirements, and perhaps favours old growth conifers. This also suggests that were one interested in collecting this beautiful small mushroom, one need but identify similar habitat, where it should thrive quite well.



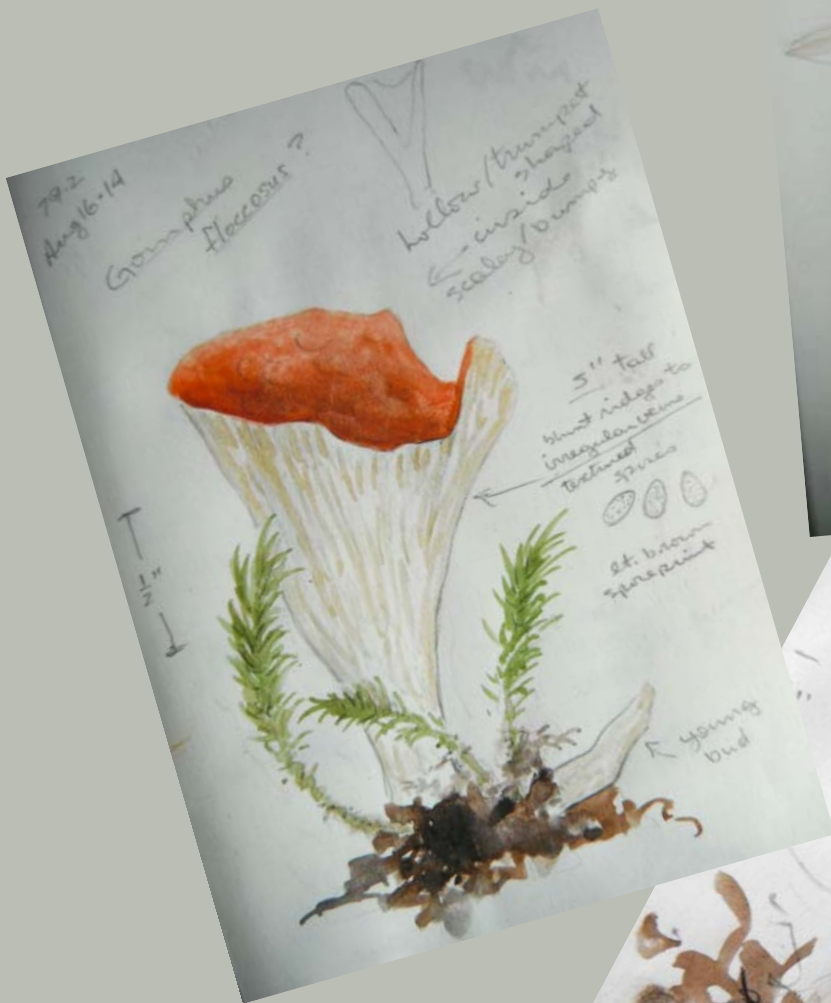
References

1. Cornish J: *Cortinarius semisanguineus*. *OMPHALINA* 3(8):13-14. 2012.
2. von Wulfen FX: *Plantae rariores carinthinae*, in Jacquin NJ: *Miscellanea austriaca ad botanicam, chemiam et historiam naturalem spectantia*, vol II, pp 107-108. 1781.
3. Niskanen T, Liimatainen K, Ammirati J, Hughes K: *Cortinarius*, section *Sanguinei*, in North America. *Mycologia*, 12-086.2012.
4. Clayden SR, Cameron RP, McCarthy JW: *Perhumid boreal and hemiboreal forests of eastern Canada*, in Dellasala DA, ed.: *Temperate and boreal rainforests of the world*, Island Press, Washington. 2010.





The Bishop's Sketchbook



The “Labrador” *Alpova* updated: *Alpova cinnamomeus*

Jeremy Hayward, Tom Horton,
Renée Lebeuf, Andrus Voitk



An earlier summary of Newfoundland and Labrador truffles described a “possible new truffle”.¹ Because the first specimens were found in Labrador, it was referred to as “the Labrador *Alpova*”. Checking reported DNA sequences showed that soil analysis had uncovered similar markers from Alaska. Subsequent finds from both Labrador and the Island all proved to be the same organism, and to date we have no evidence for other species in the province. Further searches led to *Rhizopogon parvisporus*, described by Bowerman.² DNA analysis of the type specimen, collected outside St. Anthony, showed it to be a match for our collections, and DNA analysis showed that it differed from *Alpova diplophloeus*, with which it had been synonymized. Conjecture, premature, as it now turns out, that our find validated restoration of the historic species *R. parvisporus* and its recombination as *Alpova parvisporus* was presented to the Annual Foray by Andrus Voitk in 2012.³

These discoveries prompted a study of the Genus *Alpova* in North America. The review is now complete and a full report made.⁴ Morphologic and genetic analysis of type specimens reveal three species of *Alpova* in North America. *Alpova diplophloeus*, the most commonly identified species, actually seems to be a rather uncommon species, seemingly limited to the region around its type locality (San Juan Islands off Washington state). The *Alpova* species most commonly identified as *A. diplophloeus*, is, in fact, a previously undescribed species, described as *A. concolor* in the above report.⁴ The species most commonly found throughout the boreal forest of northern North America was first described by Dodge as *Alpova cinnamomeus*, when he proposed the genus *Alpova* to accommodate it.⁵ Genetic analysis (Figure 1) shows *A. cinnamomeus* to be conspecific with the

Rhizopogon parvisporus of Bowerman, as well as the material collected from Newfoundland and Labrador. It had been synonymized with *A. diplophloeus*, but these results show that *A. cinnamomeus* should be reinstated.

Thus, “the Labrador *Alpova*” is neither a new species, as first suspected, nor the *Rhizopogon parvisporus* of Bowerman, as subsequently suspected. Further research of the genus in North America has shown that the correct identity for the *Alpova* in Newfoundland and Labrador is *Alpova cinnamomeus*.

An *Alpova* is easy to identify in the field, at least in our province: cut it across and the content is solid, made up of darkening gelatinous material laid down on an ivory coloured stroma, giving the context a marbled appearance. A formal description of the species, as observed in Newfoundland and Labrador, follows.

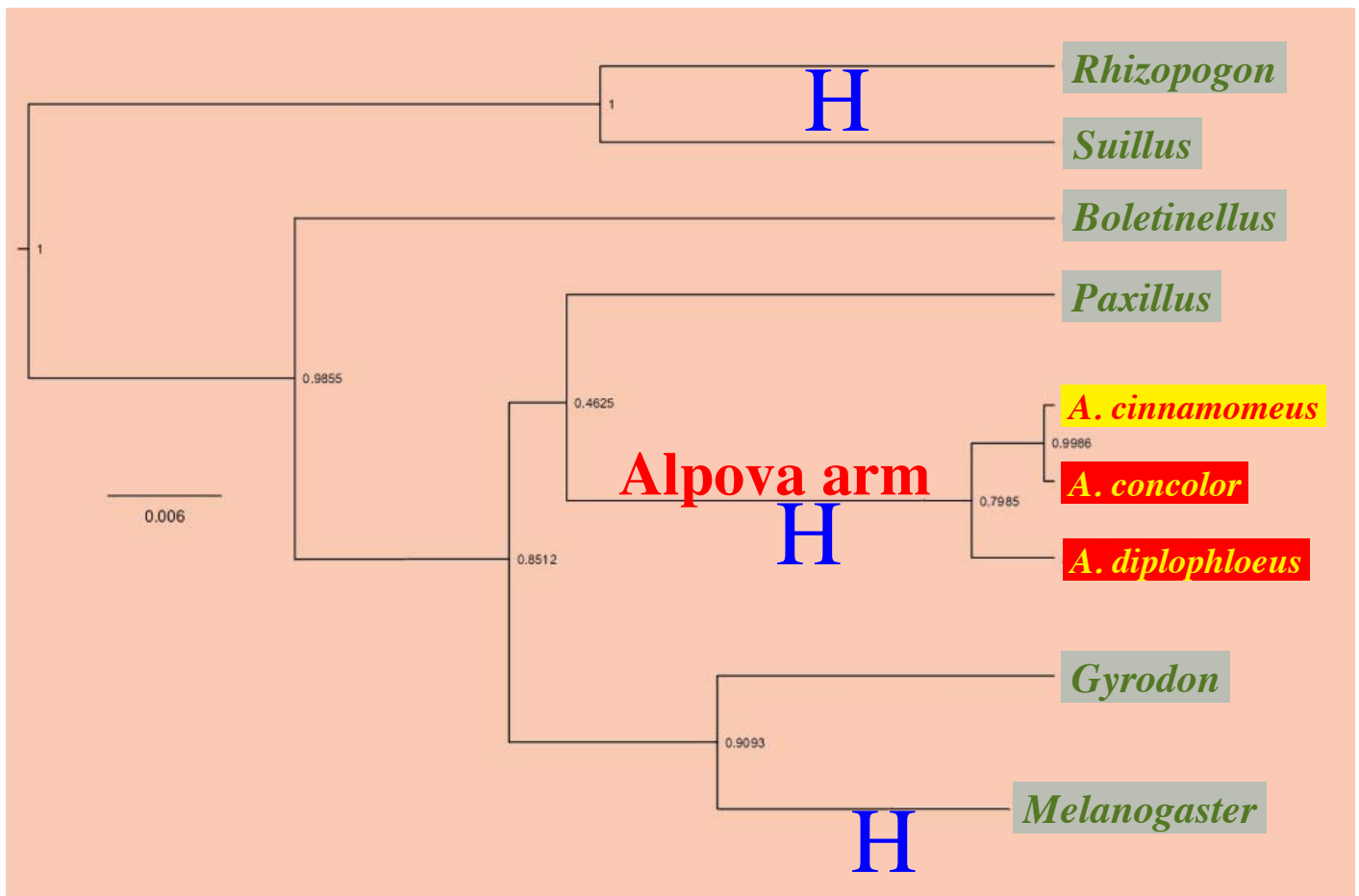


Figure 1. The phylogeny of *Alpvova* shown among a few related genera in the boletales clade. The three named *Alpvova* species of North America are shown, with *A. cinnamomeus*, found in Newfoundland and Labrador, on top. Bootstrap support indicated to the right of the node. Not every blue H indicates a hospital; in this case, those hanging from some branches stand for hypogeous (beneath the earth's surface), to illustrate how many of the boletales have chosen to go underground like a truffle.

Macroscopic: Basidiocarps subhypogeous, irregularly globose, 5-35 x 8-40 mm at maturity (Title banner & Figure 2). Peridium 2-layered, smooth, often with shallow sharply demarcated round depressions; at maturity light reddish tan, with irregular darker reddish brown areas, darkening somewhat when bruised, the depressions paler; the epicutis cracking when dried to expose subcutical tissue. Peridial layers brown in cross section. KOH on peridial surface of dried specimen quickly red-brown, darkening to deep brown or black. Rhizomorphae dark brown to black, arising from a single point at the basidioma base, occasionally sparsely appressed and scattered on its sides. Gleba solid, rubbery to gelatinous, sticky feel, chambers irregular, 0.2–0.75 mm wide, filled with gelatinous material, yellow in young specimens, becoming light olive, then dark at full maturity, supported on meandering off-white

stroma, producing a marbled appearance. Glebal stroma composed of interwoven hyphae, to 100µm. On exposure, cut glebal surface turns dark red within minutes, then increasingly browner and darker (title banner).



Figure 2. *Alpvova cinnamomeus*, intact and cut, collected in Terra Nova, September 30, 2012. Microscopic pictures taken from this specimen.



Figure 3. Photomicrographs of spores (S) and basidia (B) of the *Alpova cinnamomeus* shown in Figure 2. Basidia are mostly 8-spored, with capitate heads (H) and round knob-like sterigmata (St). These are not often described, because they tend to disintegrate at maturity.

Drying dark brown, hard and waxy when sectioned. Liquefies as dark olive paste past maturity. No odour to solid context, but at and after liquefaction odour becoming increasingly offensive and foul.

Microscopic: Spores (Figures 3, 4) 4-5.5 (-6.5) $\mu\text{m} \times 2-3$ (-3.2) μm , mean 5.45 x 2.0, oblong to allantoid, thin walled, smooth, typically biguttulate when suspended in KOH but some spores with 3 oil droplets. In Melzer's reagent pale yellow to brown in mass. In trypan blue hyaline to orange-brown in mass. Basidia (Figure 3) most eight-spored, range 4-10; capitate, up to 50 μm wide, basal clamp; deliquesce quickly at maturity. Peridium: (Figure 4) 2-layered, 300-450 μm in total with pigmentation to a depth of 45-125 μm , composed of darkly pigmented fibrils consisting of close, tightly woven hyphae 5-7 μm in diameter, 14-25 μm in thickness; exoperidium lightly pigmented, 20-50 μm in thickness, composed of abundant inflated cells 25-30 μm across supported with uninflated hyphae 5-8 μm

in diameter; and endoperidium 80-110 μm thick, composed of unpigmented hyphae 5-9 μm in diameter with occasional inflated hyphae to 25 μm ; peridium as a whole easily separable from gleba when revived in KOH. Clamp connections abundant and conspicuous in peridium.

Distribution: The only *Alpova* known from Newfoundland and Labrador, found throughout the province, with confirmed collections from Terra Nova, West Coast, Great Northern Peninsula, Fogo Island, and coastal as well as central Labrador (Figure 5). Probably found with mountain alder throughout the province, and with the *Alnus viridis* complex in the boreal forest across northern North America.

Habitat: Poor, acidic, sandy soil: fixed sand dunes near both fresh and salt water, on sandy coastal heath barrens, and sandy soil in river basin. Small groups of 1-9 individuals associated with *Alnus viridis* ssp. *crispa*, within a 2 m radius from the host. If *Empetrum nigrum*

or other ericaceous plants in vicinity, often found under heath mat. Fruiting season July-October.

Notes

Because this is the only *Alpova* species in the province, description of and comparison with other North American species has been omitted; they are discussed in detail in the original review.⁴ The major difference between *A. cinnamomeus* and the other North American species is that the peridium of the other species is at least twice as thick. The description here is based primarily on NL material, but size ranges are given as seen across the continent, because the NL experience may not be sufficiently large to encompass the full range.

Our experience with this species illustrates the value of disseminating information. After a presentation of the species in 2012, it was immediately recovered the following day; it was also recovered on the foray the next year. Promoting collective awareness helps us document and appreciate the diversity of our natural heritage with greater accuracy.

Acknowledgments

We thank Esteri Ohenoja for finding the first collection in Labrador in 2008, Henry Mann for the Pasadena collection, and Henry and Phyllis Mann, as well as Michael Burzynski, Anne Marceau and Maria Voitk for their part in the excursion to the Labrador Straits to collect more specimens in October, 2011. The title banner hails from one of the collecting boxes on that trip.

References

1. Hayward J, Horton T, Voitk A: Preliminary report from the bolete underground: the false truffles of Newfoundland and Labrador. *Omphalina*, 2(8):7-8. 2011.
2. Bowerman CA, Groves JW: Notes on fungi from northern Canada. V. Gasteromycetes. *Canadian Journal of Botany*, 40:240-254. 1962.
3. Voitk A: Truffle adventures in Newfoundland and Labrador. Presentation, FNL Annual Foray. 2012.
4. Hayward J, Tourtellot S, Horton TR: A revision of the *Alpova diplophloeus* complex in North America. *Mycologia*, 13-360; Preliminary version published online: June 2, 2014, doi:10.3852/13-360.
5. Dodge CW: *Alpova*, a new genus of Rhizopogonaceae, with further notes on *Leucogaster* and *Archangeliella*. *Annals of the Missouri Botanical Garden*, 18:457-463. 1931.

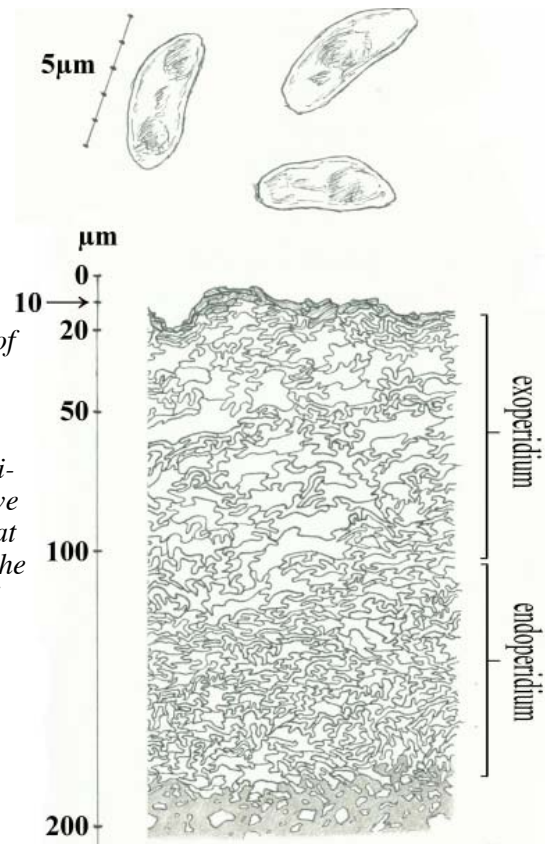


Figure 4. Drawing of peridium and spores of *Alpova cinnamomeus*. The other North American spp. have a peridium at least twice the thickness of this species.

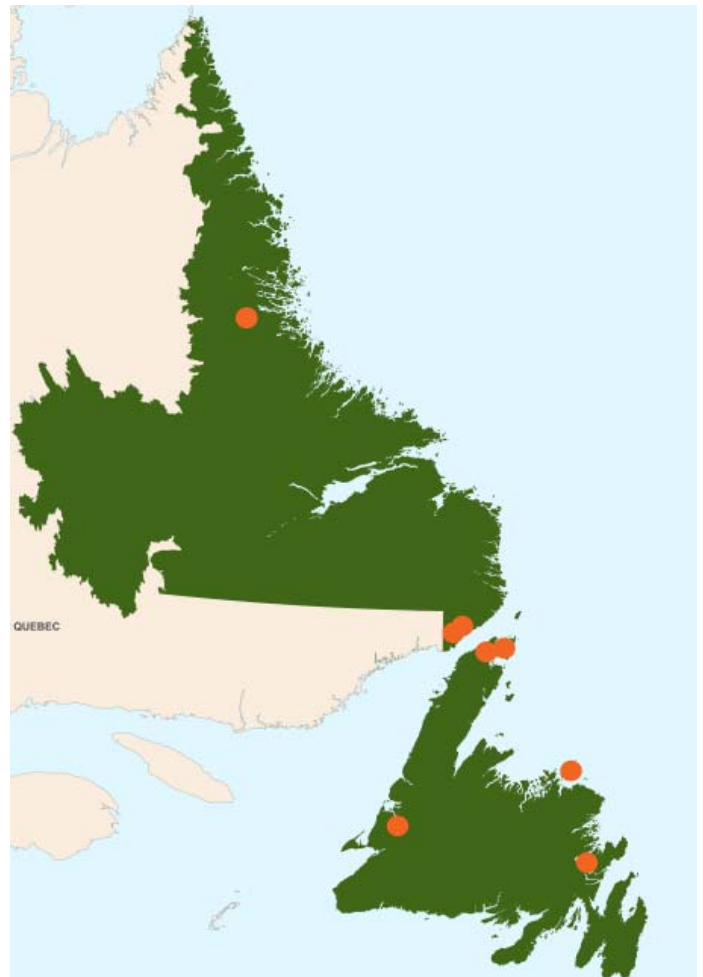


Figure 5. Collecting sites of *Alpova cinnamomeus*. It likely grows with mountain alder throughout the province



The empty skillet

WILD MUSHROOM SOUP

ROBIN MCGRATH

This recipe calls for a mix of cultivated and wild mushrooms, which can be shitake, cremini, morels, porcini, or as in this version, button mushrooms with Newfoundland chanterelles and dried boletes from Poland. The tomato base makes a nice change from cream. The result is a hearty but not heavy soup that made an excellent lunch on a day when the thermometer went to 28 below in Goose Bay. The pine-nut garnish is unusual but surprisingly successful. If substituting dried herbs for fresh, reduce the volume. The chicken stock can be replaced with vegetable stock or water for vegetarians.

INGREDIENTS

60 grams pine nuts	1 can Italian tomatoes
350 grams fresh or frozen Newfoundland chanterelles	750 ml. chicken or beef stock
227 grams button mushrooms, sliced	250 ml white wine
40 grams dried boletus edulis	3 cloves garlic
1 large onion, chopped fine	Fresh chopped parsley, thyme & rosemary, 1 tbs. each
100 ml olive oil	Salt and pepper

PROCEDURE

Toast the pine nuts on a cookie sheet in a 350 ° oven for about five minutes. Watch them carefully as they can go from golden to black in a very short time, and remember that they continue to cook as long as they are on a hot metal pan.

Heat the olive oil in a heavy saucepan and sauté the onions for app. 5 minutes while stirring. Raise the heat and add the fresh mushrooms and garlic, stirring until the mushrooms begin to release their juices. Add the tomatoes, the stock, the wine, the rest of the mushrooms and the herbs. When the mixture comes back to a near-boil, turn down the heat and simmer for half an hour. Serve garnished with pine nuts.





The empty skillet

WET ROAST PARTRIDGE & CHANTERELLES

ROBIN McGRATH

One of the best-kept secrets of rural Newfoundland and Labrador is its wild meat. Moose, trout, seal and rabbit frequently turn up on Newfoundland tables, and in Labrador you can add char, porcupine and even lynx to that list. Newfoundland chanterelles are a fine addition to all of these foods.

Spruce grouse, ruffed grouse, willow ptarmigan and rock ptarmigan, are all called partridges in Newfoundland and Labrador and are all hunted for food. Many people take only the breast fillet, but this is wasteful and disrespectful to the bird. If the plucking is done as soon as the partridge is killed, it is usually not a big chore.

Partridge has a tendency to be dry if not cooked properly, so it is often wrapped in bacon before being roasted. Wet roasting solves this problem. The rich mushroom gravy and the meat from the tiny leg and wing bones can always be turned into soup for a spectacular lunch the next day. Since the season for partridge is only open between October 1st and March 31st, either the mushrooms or the birds will have to wait for the other in the freezer.

INGREDIENTS

2 partridge (a.k.a. grouse or ptarmigan)	chopped
3 tablespoons butter	8 oz. chanterelle mushrooms
3 tablespoons olive oil	1 tablespoon flour
Large onion, chopped	1 cup red wine
3 cloves garlic, crushed and	1 cup water or stock
	Salt and pepper to taste

PROCEDURE

In oil and butter, sear two partridges, turning frequently, and place in a large casserole dish. Stir the onions into the remaining oil and butter for two or three minutes before adding the mushrooms and garlic. Sauté for several more minutes until all are soft. Stir the flour into the mixture, then add the wine and other liquid. Add salt and pepper and bring to a gentle simmer. Pour the mixture over the partridge, cover and bake at 350° for about 90 minutes or until the birds are tender. Serve with rice or mashed potatoes, and side vegetables.

Cook's tip: if you skin rather than pluck your partridge, dust them with the flour before searing them.



The empty skillet

MORCCAN CHICKEN WITH WILD MUSHROOMS AND OLIVES

ROBIN McGRATH



This recipe has been adapted to suit the palate of those who prefer their entrees savory rather than sweet, so that dried apricots and prunes have been replaced with mushrooms and olives. The version depicted here used half a pound of fresh Newfoundland chanterelles and two ounces of commercially purchased mixed wild mushrooms. If using dried mushrooms, make sure you reconstitute them in water that is warm, not boiling, to prevent them toughening up. Drain the water off to add to the stock, but leave the last few tablespoons in the bowl as it will probably contain some sand and grit. Serves six.

INGREDIENTS

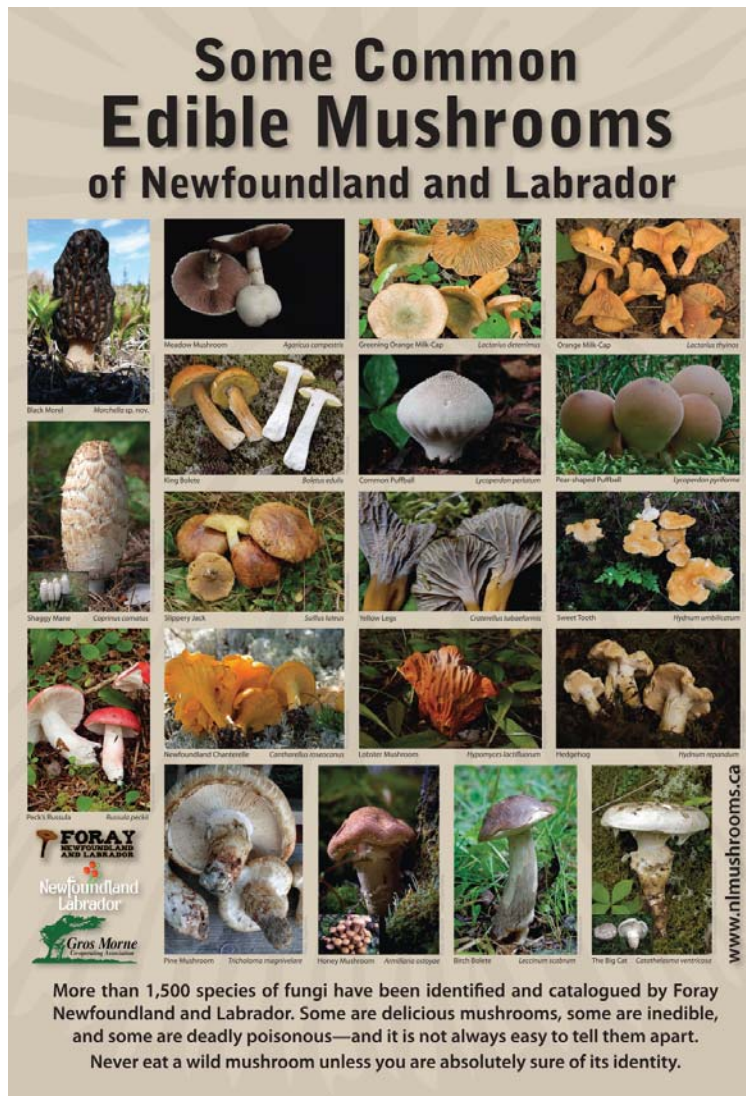
1 chicken, cut up, or 8 chicken legs	1½ cups chicken stock
Vegetable oil for frying	1 tbsp. cumin
1 large chopped onion	2 tsp. cinnamon
3 cloves slivered garlic	1 tsp. each turmeric & ginger
1 lb. fresh or 4 oz. dried wild mushrooms	¾ tsp. salt
1 small turnip, peeled & cut into large slices	½ tsp paprika
6 or 8 medium carrots, peeled & halved	2 cups chicken stock
½ cup calamata olives, pitted	½ tsp hot pepper sauce
	1 tbsp. cornstarch
	2 tbsp. lemon juice
	Chopped parsley

PROCEDURE

Heat oil in a heavy skillet or wok and fry the chicken for 10 minutes or until browned on all sides. Remove from the skillet and drain off all but about 1 tbsp. of the fat. Cook the onions and garlic for a few minutes until translucent, then add the mushrooms, sprinkle with the spices and stir fry for about five minutes. Add the hot pepper sauce, the chicken stock, and the fried chicken and when the mixture comes back to a boil, reduce the heat and simmer for 20 minutes or so, until the juices run clear when the chicken is pressed with a fork. Boil the turnip and carrots until vegetables are barely tender, then drain and place in a large casserole dish. When the chicken is cooked, use a slotted spoon to transfer the mixture to the casserole with the vegetables and place in a warm oven. Blend cornstarch with 2 tbsp. of cold water and stir into the pan juices until glossy and thickened, about two minutes. Add lemon juice and olives and pour over the chicken and mushrooms. Garnish with parsley. Serve with rice or couscous.



Foray Newfoundland & Labrador poster of edible mushrooms



\$10.00 including taxes

FORAY PARTICIPANTS

buy them at the Foray.

ALSO AVAILABLE from

Gros Morne Co-operating Association stores at the

- Visitor Reception Centre (Rocky Harbour) and
- Discovery Centre (Woody Point)

MAIL ORDER

Poster, including Shipping, Postage & Mailing tube

\$ 16.00, taxes included

E-mail: darlene@grosornetravel.com

Tel: 709-458-3605 (Darlene)

OUR PARTNER ORGANIZATIONS

PEOPLE OF NEWFOUNDLAND AND LABRADOR, THROUGH
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
PARKS AND NATURAL AREAS DIVISION
WILDLIFE DIVISION
DEPARTMENT OF NATURAL RESOURCES
CENTER FOR FOREST SCIENCE AND INNOVATION

PEOPLE OF CANADA, THROUGH
PARKS CANADA
TERRA NOVA NATIONAL PARK
GROS MORNE NATIONAL PARK
GROS MORNE CO-OPERATING ASSOCIATION

MODEL FOREST OF NEWFOUNDLAND AND LABRADOR
MEMORIAL UNIVERSITY OF NEWFOUNDLAND
ST. JOHN'S CAMPUS
GRENFELL CAMPUS

TUCKAMORE LODGE

QUIDI VIDI BREWING COMPANY

RODRIGUES WINERY

SHOREFAST FOUNDATION



FORAY NEWFOUNDLAND AND LABRADOR

2014 2014 2014
2014 2014
2014 2014 2014
2014 2014
2014 2014 2014
2014 2014 2014

The second decade

GROS MORNE NATIONAL PARK

A UNESCO WORLD HERITAGE SITE

Headquarters: *Killdevil Camp, Lomond, NL*

September 12-14, 2014



*Get to know our
MUSHROOMS
& LICHENS!*

**FULLY
SUBSCRIBED!**

GUEST FACULTY

Teuvo Ahti
Oluna Ceska
Christiane Corbeil
Renée Lebeuf
Michele Piercey-Normore
Roger Smith

*See our website for
Registration Forms
& Information:*

www.nlmushrooms.ca