



FORAY

NEWFOUNDLAND AND LABRADOR

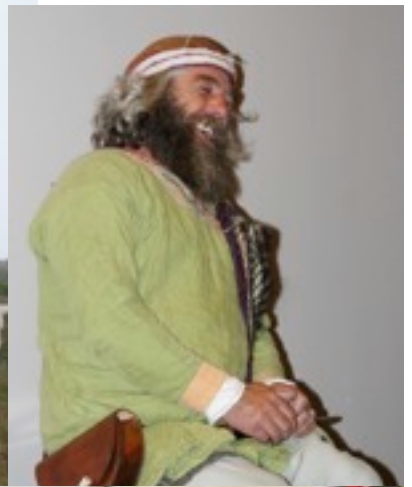


THE GREAT NORTHERN PENINSULA

SEPTEMBER 2010

REPORT

FORAY NEWFOUNDLAND AND LABRADOR



Editor: Marian Wissink

Contributors: Jamie Graham, Anne Marceau, Model Forest, Umberto Pascali, Andrus Voitk

Photos: Lindsay Collingwood, TA Loeffler, Roger Smith



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Partners

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
 Department of Innovation, Trade & Rural Development
 College of the North Atlantic
 St Anthony Campus
 Parks Canada
 L'Anse aux Meadows National Historic Site
 Gros Morne National Park
 Great Northern Peninsula Forest Network
 Model Forest of Newfoundland and Labrador
 RED Ochre Development Board
 Viking Trail Tourism Association
 Sir Wilfred Grenfell College
 Tuckamore Lodge
 Gros Morne Cooperating Association
 Memorial University
 Grenfell Historical Properties
 Aurora Nordic Cross Country Ski Club
 FUNGI magazine
 Quidi Vidi Brewing Company
 Auk Island Winery



Faculty

Guest faculty:

David Boyle
Britt Bunyard
Renée Lebeuf
Ed Lickey
Kare Liimatainen
Tuula Niskanen
Esteri Ohenoja
André Paul
Roger Smith
Greg Thorn

Local Faculty:

Michael Burzynski
Faye Murrin
Andrus Voitk



Participants

Greg Thorn	London ON
Nina Zitani	London ON
Carlo Thorn	London ON
Jackson Thorn	London ON
Esteri Ohenoja	Oulu, Finland
David Boyle	Truro NS
Ed Lickey	Bridgewater VA
Renée Lebeuf	Pierrefonds QC
André Paul	Pierrefonds QC
Roger Smith	Fredericton, NB
Michael Burzynski	Rocky Harbour NL
Anne Marceau	Rocky Harbour NL
Faye Murrin	Torbay NL
Andrus Voitk	Humber Village NL
Maria Voitk	Humber Village NL
Tuula Niskanen	Helsinki Finland
Kare Liimatainen	Helsinki Finland
Aava Niskanen	Helsinki Finland
Elke Molgaard	St John's NL
John Molgaard	St John's NL
Judy May	Humber Village NL
Elaine Humber	Corner Brook NL
Jamie Graham	Corner Brook NL
Ulrich Hochwald	Long Cove, NL
Françoise Tupinier	Montréal QC
Tina Newbury	Corner Brook NL
Tarik Rodrigues	Corner Brook NL
Kaden Rodrigues	Corner Brook NL
Bruce Rodrigues	Corner Brook NL
Claudia Hanel	Frenchman's Cove NL
Marianna Wright	Toronto ON
Tony Wright	Toronto ON



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Gwendolyn Knudsen	Griquet NL
Stephen Knudsen	Griquet NL
Laura Park	Harbour Main NL
Mac Pitcher	Harbour Main NL
George Park	Charlottetown PEI
Linda Pascali	Toronto ON
Umberto Pascali	Toronto ON
Marian Wissink	St John's NL
TA Loeffler	St John's NL
Phyllis Mann	Pasadena NL
Henry Mann	Pasadena NL
Yvonne Thurlow	Corner Brook NL
Geoff Thurlow	Corner Brook NL
Jeri Graham	Corner Brook NL
Sarah Graham	Corner Brook NL
Graham Zilkowski	Corner Brook NL
André Myers	Flowers Cove NL
Diane Holsinger	Timberville Va
Tom Holsinger	Timberville Va
Olivier van Lier	Corner Brook NL
Lindsay Collingwood	Corner Brook NL
Nathan Wareham	Massey Drive NL
Tammy Higgins	Pasadena NL
Gordon Hancock	Deer Lake NL
Janice Pilgrim	Roddickton NL
Rosie Myers	Corner Brook NL
Elizabeth Smith	Raleigh NL
Jackie Bessey	Raleigh NL
Randy Batten	St John's NL
Mark Lamswood	Parsons Pond NL
Diane Pelley	St John's NL
Stephanie Coombes	Corner Brook NL
Kate Edwards	Corner Brook NL
Jeff Siddall	Corner Brook NL





Morgan Barber	London ON
Leah Soper	Corner Brook NL
Tommy Landry	St. Narcisse- Beauregard QC
Britt Bunyard	Germantown WI
Christian Wright	Corner Brook NL
Trudy O'Keefe	St Anthony NL



PROGRAM 2010

FRI SEP 10

11:00 AM

Registration *L'Anse aux Meadows*

12:00 noon

Mycoblitz *L'Anse aux Meadows*

6:30 PM

Reception, Supper, Sagas *L'Anse aux Meadows*

8:00 PM

Photo Contest results *Laura Park*

8:15 PM

Ethnomycology *Britt Bunyard*

8:15 PM

Mushroom identification *Faye Murrin*

SAT SEP 11

8:00 AM

Breakfast *The Legion*

9:00 AM

Forays (see TRAILS)

1:00 PM

Lunch *on the trail*

5:00 PM

Quidi Vidi QuuQup & Supper *Grenfell Interpretation Centre*

7:00 PM

Ascomycetes *René Lebeuf*

8:00 PM

Growing mushrooms *David Boyle*

8:00 PM

NL *Sphagnum omphalinas* *Ed Lickey*

8:30 PM

NL chanterelles *Greg Thorn*

SUN SEP 12

8:00 AM

Breakfast *The Legion*

8:40 AM

Group Photo

OUTSIDE

9:00 - 11:00 AM

Pick for the Pot *Judy May*

Mushroom photography: point & shoot *Michael Burzynski*

Mushroom eating insects *Britt Bunyard*

11:00 - 1:00 PM

Pick for the Pot *Maria Voitk*

Mushroom photography: SLR *Roger Smith*

Growing mushrooms *David Boyle*

INSIDE—CONA

9:00 - 10:00 AM

Tables *Ed Lickey*

Microscopy *Greg Thorn*

Mushroom Cooking 101 *Maria Voitk*

10:00 - 11:00 AM

Tables *Faye Murrin*

Microscopy *Ed Lickey*

How to use a key *Andrus Voitk*

11:00 - 12:00 PM

Tables *Esteri Ohenoja*

Mushroom Cooking 102 *Ulrich Hochwald*

How to use a key *Andrus Voitk*

12:00 - 1:00 PM

Tables *Greg Thorn*

Mushroom Cooking 102 *Ulrich Hochwald*

Mushroom Cooking 101 *Judy May*

1:00 PM

Lunch *The Legion*

2:00 PM

AGM, elections, thanks

2:30 PM

Community Fungi Fair
CONA

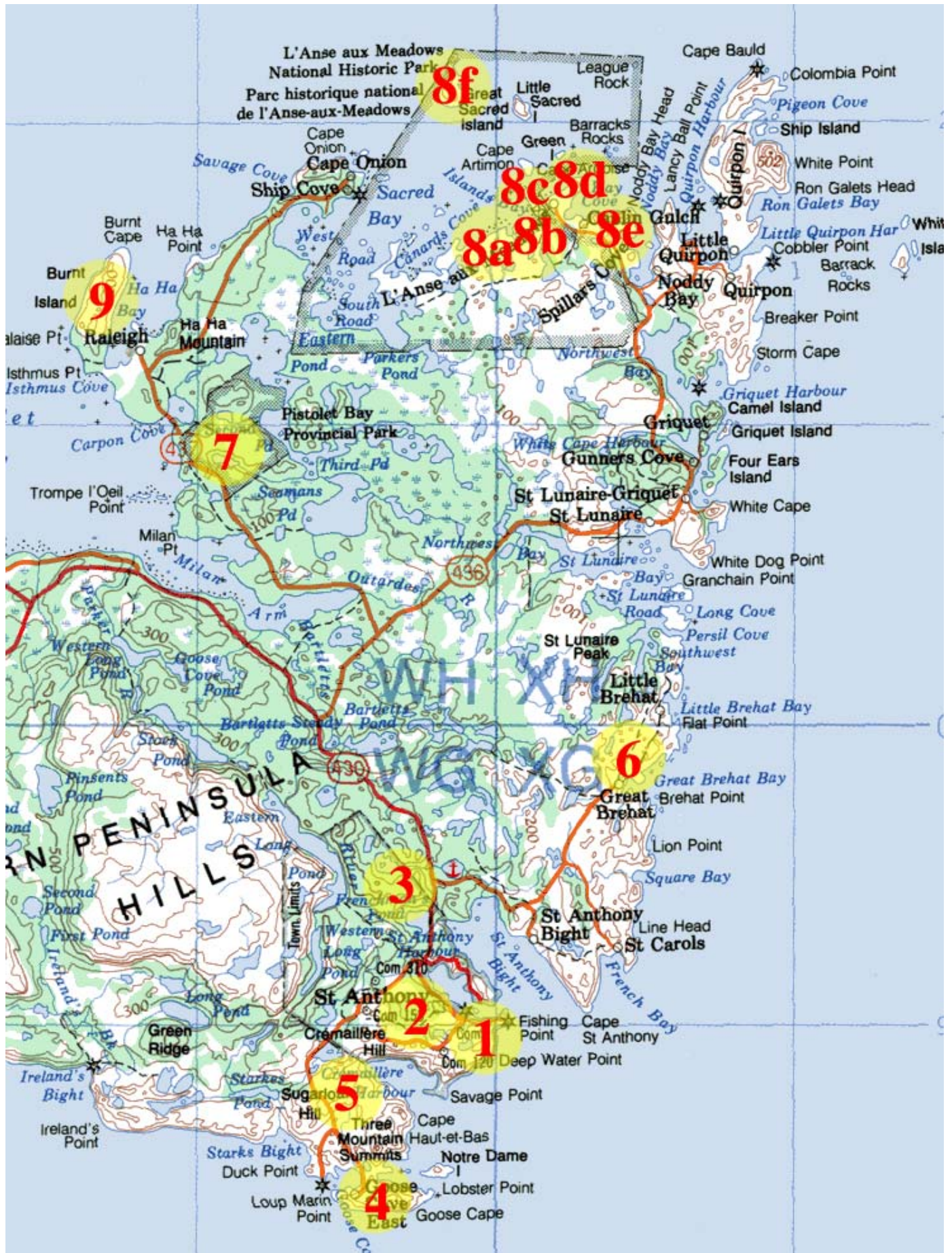
Lectures			
	Friday		Saturday
6:30	Reception/Supper at sod huts, flowing into:		Renée Lebeuf – The beauty of Ascomycetes
7:00	Sagas and Shadows		
8:00	Laura Park – Photo contest results		Ed Lickey Our logo mushroom and other NL sphagnicolous omphalinas
8:15	Faye Murrin Introduction to mushroom identification	Britt Bunyard Did the Vikings eat mushrooms? The ethnomycology of 1,000 AD North America and beyond	David Boyle Growing mushrooms
8:30			

Sunday Workshops						
	OUTSIDE			INSIDE		
9-10	Pick for the pot Judy (12 max)	Photography Point & shoot Michael (8 max)	Mycophagy: Insects that eat mushrooms Britt (10 max)	Tables Ed	Microscopy Greg (4 max)	Cooking 101 Preservation Maria
10-11				Tables Faye	Microscopy Ed (4 max)	How to use a key Andrus
11-12	Pick for the pot Maria (12 max)	Photography SLR Roger (8 max)	Growing mushrooms David (10 max) \$40	Tables Esteri	Cooking 102 Mushrooms on toast Ulrich	How to use a key Andrus
12-1				Tables Greg	Cooking 102 Mushrooms on toast Ulrich	Cooking 101 Preservation Judy

TRAIL DESCRIPTIONS

YELLOW = barrens, **GREEN** = forest, **BLUE** = faculty foray only

Trail		GPS start		Diff	Dist	Description	Terrain	Habitat	Yield
Nr	Name	N 51°	W 55°	1-4	km				
1	St Anthony - Fishing Pt & Santana trail	21.355 21.399	33.336 33.615	1 2-3	2-5	Around Point; path east of cemetery, strenuous climb 476 wooden steps to excellent lookout return same way or gravel road to Balsam St	grassy meadow, heaths, few bushes, alders	coastal barrens	med
2	St Anthony - Grenfell House	21.633	35.153	1-2	1-4	gravel path up behind Grenfell House, then down by pond	coniferous woods, rocky heath, few birch	boreal forest	high
3	Aurora Nordic Ski Club	23.943	35.477	4	10	ski trails (following light poles) then uphill	grass, wet bogs, conifers, birches	boreal forest	high
4	Goose Cove	18.674	37.632	2	1-3	cinder trail then open	grass, rock, heath	crowberry barrens	low
5	Cremaillere Cove road	20.041	38.697	3	1-4	go on ridge of rock and open heath, back by gravel road	rock, small bogs, alders	crowberry barrens	low
6	Great Breat	25.672	29.565	2	4+	gravel paths by seashore; path to Little Breat starts as gravel, gets rougher	grass, rock, heath	bog, crowberry barrens	low
7	Pistolet Bay Provincial Park	31.469	41.807	2	3	campsites & trail around pond	grass, nearby heath; coniferous woods,	boreal forest	high
8A	L'Anse aux Meadows coastal trail			2	1-4+	mostly flat seaside trail	along flat coast	coastal meadow & heath	lo-med
8B	L'Anse aux Meadows Birchy Nud-dick loop & grounds	35.618	31.259	1-3	1-2	short loop through heath and grassy meadow along settlement	bog, tuckamore forest, crowberry heath, coastal meadow	meadow, coastal barrens, tuckamore forest	med
8C	L'Anse aux Meadows Beak Point			2	2	essentially flat coastal walk to small settled community (respect private property)	coastal heath to community	coastal heath, grass, sand dunes	med
8D	L'Anse aux Meadows Lacy's trail			3	3	easy walk along coast, steep climb in heath, down through heath-meadow	coastal heath to headland	meadow and crowberry heath	lo-med
8E	Cape Raven Trails	35.349 approx	29.523 approx	4	3-4	steep climb to crowberry heath headland, great view, not long, but has variety, a bit strenuous	forest, wet seepage slopes, meadows, barrens, dense tuckamore	boreal forest, meadows, coastal barrens	lo-med
8F	Great Sacred Island			1-3	2	go by boat, barren island, 1947 ship wreck	crowberry heath, few scrubby trees	coastal barrens	low
9	Burnt Cape Ecological Reserve	34.81	44.825	2	1-6	gravel road and rocky barrens	limestone barrens, dwarf willow	limestone barrens	very low



Andrus' highlights

There were many beautiful mushrooms and many new species, many exciting finds. Even before seeing them all or knowing the final results, three mushrooms stand out for me, shown at right, top to bottom: *Gyroflexus brevibasidiata*, *Craterellus lutescens* and *Helvella corium*.

The first, a rare mushroom elsewhere, could be considered the signature mushroom for the Great Northern Peninsula, at least that part of it not covered by limestone. We have found it in Labrador in the past. Several collections were brought in from *Sphagnum* bogs along many of the trails. We have not found it below the GNP. It was also not recovered from the bog on Burnt Cape. This suggests that it is a non-calciphilic northern species, common on the GNP, which probably forms the southernmost extreme of its range. A beauty, not normally accessible to the mycophile.

C. lutescens, a known calciphile in northern localities, was found by Esteri on Burnt Cape. It resembles *Craterellus tubaeformis*, except that the stem is more intensely orange-yellow and the gill surface is flat or wavy, not ridged or gilled, like its cousin. A beautiful and uncommon find.

H. corium, also from Burnt Cape, had already dried up by the time of our foray. However, Jackie Bessey and Elizabeth Smith, the two interpreters for the Cape, said that a few weeks before the foray, they were very plentiful among the limestone. This mushroom likes disturbed soils, such as the frost-disturbed Cape. Four separate groups were found and every time some *Plantago maritima* was seen nearby (left lower corner), without other vegetation. *H. corium* is a known mycorrhizal mushroom, and the lack of other potential partners suggests that the *Plantago*



Photo: Andrus Voitk



Photo: Andrus Voitk



Photo: Andrus Voitk

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must be its mycorrhizal partner. Indeed, *P. maritima* is also known to form mycorrhizal relationships, but the association of these two organisms has not been documented before. When I notified a student of helvellas of this, he made plans to come and study these mushrooms next year, with the intent of reporting this relationship—another opportunity for our foray to contribute to mycological knowledge.

Mycological highlights were totally eclipsed by the non-mycological highlights. Among these is the historic flavour of this foray, with the Reception at the 1,000-year old L'Anse aux Meadows Viking settlement and our Quidi Vidi QuuQup at the Grenfell Museum, affording participants a view into the 100-year old Grenfell legacy, still very palpable in the area.

It was impossible not to notice the vast increase of partners from previous years. Just read the namecard or the names in your program! We realized that this foray was going to be much more expensive than our usual events and set out early to invite new partners. The response was beyond our wildest expectations: old partners worked to find additional support, while new

partners came on board in spades. As a result, instead of the expected major shortfall, we now expect a surplus. It is very gratifying to find such support for our activities; the surplus will hasten our microscope acquisition program, to eliminate a major recurrent problem at every foray.

The supreme highlight of this foray for me was undeniably provided by the people. I repeat again: mushrooms don't make a foray, people do. There will always be mushrooms, but it is the company of enthusiastic people that makes it memorable. I had the pleasure of leading two groups on two separate days, through what surely must be the worst weather of any foray in the world. High for the day was 7°C, with 90 km/h winds and horizontal rain, augmented by frequent violent gusts. Exposed, we forayed along the barren coastline, the first uprights to be buffeted by winds after travelling across miles of unobstructed ocean to gather their fury. Everybody agreed that the weather was bad, but this did not deter them! All were enthusiastic, poking, exploring, scampering from find to find. Enthusiasm bound us all, young and old alike, in a fellowship of excitement and discovery.



Photo: Roger Smith

The Model Forest Group's Foray Experience

Contributors: Lindsay Collingwood (MFNL), Gordon Hancock, Tammy Higgins (MFNL), Mark Lamswood (RED OCHRE), Andre Myers (NORDIC), Janice Pilgrim (NORDIC), Nathan Wareham (HEDB), Gordon Hancock (HEDB)

We went to the foray, not knowing what to expect, but hoping to learn whether mushrooms could be a reasonable non-timber forest product in communities, who have traditionally looked to the forest for part of their income. We are grateful to Faye Murrin to take time before the foray to discuss these issues with us. Faye has looked into this matter in the past and has publications about the commercial potential of harvesting wild mushrooms in Newfoundland and Labrador. The mushroom foray was held on the Great Northern Peninsula.

The foray was not business oriented. Its main focus was for people to pursue a shared interest in mushrooms in an enjoyable social setting. People had fun, while contributing to scientific knowledge of the mushrooms in our province. However, it was an outstanding introduction to mushrooms for the beginner or novice enthusiast, and an excellent venue to form partnerships that will be of value in the development of any future mushroom initiative. The foray provided a great introduction to the area, the community and its history. It also gave us an opportunity to experience many facets of mushrooms personally, to “learn the language” of mushrooms, see how they grow, get hands-on experience with collecting and harvesting, cooking, eating (Yum!), and even growing them.

Of the many contacts made at the foray, we should highlight David Boyle, Michael Burnizski,

Anne Marceau, Faye Murrin and Andrus Voitk. These contacts, added to others we have sought outside the foray, should become some of the core resources to help us pursue a mushroom initiative into the future. This is a general summary only. A full Trip Report with suggestions for future activity is being prepared and will be published after completion.





Foray in the Land of the Vikings

by **Umberto Pascali**

This September, my wife, Linda, and I travelled along with fellow MST members Tony and Marianna Wright to the Great Northern Peninsula of Newfoundland to attend the annual fall foray of “Foray Newfoundland and Labrador”.

We landed at Deer Lake. While Tony and Marianna drove directly to St Anthony at the top of the Northern Peninsula, Linda and I took a side trip to Gros Morne National Park. While hiking a short trail, we observed the magnificent carving of landscape by glaciers of the last ice age.

On Friday Sept. 10, we joined the 72 foray participants at L’Anse aux Meadows where we were given a short tour of the site where Vikings set camp in 1000 A.D.

In the persistent rain, we set out for our first foray. Our challenge was finding mushrooms in this new environment with the ground crowded by a variety of mosses, lichens, roots and branches of trees that remained close to the ground. When a beautiful *Russula* would show up, it was quite a task to pull it all in one piece from such intricacy. In treed areas, the growth was stunted but so thick that if a mushroom was spotted, you had to crawl in a kind of cave formed by the low-hanging branches.

In the evening, we were treated to a very good supper followed by a Viking saga and a presentation on Boreal Ethnomycology by Dr. Britt Bunyard, past Editor-in-Chief for NAMA and now editor of the magazine FUNGI.

The following day, our foray took us to Goose Cove. The panorama and view of the ocean was spectacular but so was the blowing wind. At one point, the wind blew away all that was in Linda’s basket. While the rest of the group left to properly identify the mushrooms collected, the two of us stayed behind to pick partridge berries on a ground filled by a tapestry of color.

In the evening, we met at the Grenfell Interpretation Centre for a mushroom cook-up and dinner. We were

treated to delicious tortilla stuffed with huitlacoche or corn smut, caribou hamburger topped with a mixture of trumpets, chanterelles and morels. Afterwards, a number of very knowledgeable mycologists made presentations.

On Sunday, the last day of the foray, there were several indoor and outdoor activities. We decided to take a good look at all the variety of mushrooms on display at the St. Anthony Campus of the College of the North Atlantic. Here we found *Lactarius* and *Cortinarius* were most prevalent.

Then we hit the road back to Deer Lake. We were counting on a daylight drive but, just out of St. Anthony, we stopped at a large open field, the site of a fire some 30 years ago. The field was now covered with partridge berries. We picked until close to 5pm then reluctantly we had to go. We arrived at our B&B luckily without encountering a moose.

The next morning, we drove to Corner Brook, this time trying our luck picking blueberries. After struggling to locate the spot, we found out that they had been damaged by the frost so that ended our enthusiasm of blueberry picking. We did enjoy the panorama of the Corner Brook setting and the beautiful Humber river valley. Arriving at Deer Lake Airport, we were invited to partake at the inauguration ceremony of works of art by famous artists Diana Dabinett and Urve Manuel.

In all, it was a glorious adventure. I had my first encounter with *Lactarius glycosmus* with its distinct coconut smell. We did see moose on the roadside, beautiful ocean views and enjoyed the hospitality of Newfoundland’s Bed & Breakfasts with amazing hosts that really make you feel at home. Add to that the friendliness of the local people to make it all a worthwhile experience.

This article first appeared in *Mycelium*, the newsletter of the Mycological Society of Toronto, and is reproduced here with permission from the author.

Foray Fotos



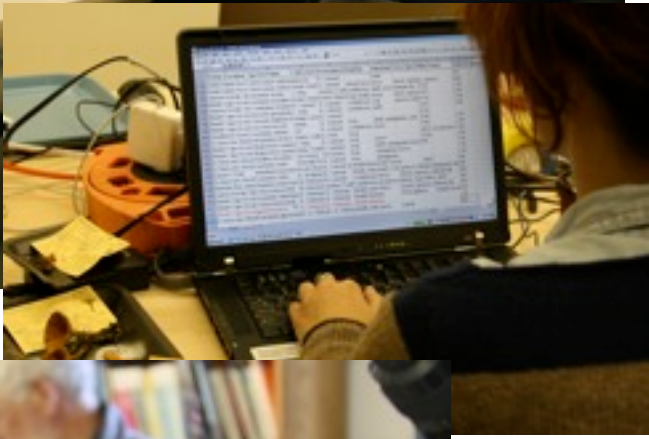
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For more pictures of this year's foray



<http://www.facebook.com/profile.php?id=100001744686549>

Thanks Nathan!

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SPECIES DISTRIBUTION BY FORAY TRAIL

1= Santana, 2 = Grenfell, 3 = Ski Club, 4 = Goose Cove, 5 = Cremaillere, 6 = Great Breat, 7 = Pistolet Bay, 8 = L'Anse aux Meadows, 9 = Burnt Cape, **misc** = elsewhere or unknown, **TOT** = total records for the species. "Common" species TOT count highlit (10 or more). **Bold brown print** = edible common species. **Green background** = new to cumulative list. **Species** column lists all species identified during the foray. **TOT** column lists the number of collections of a species. Remaining columns—same information for each trail. NB: number of collections approximate indicator of abundance. Comparison of trails not valid, because all not sampled equally.

Species	TOT	1	2	3	4	5	6	7	8	9	misc
<i>Aleurodiscus amorphus</i>	2								2		
<i>Amanita fulva</i>	1			1							
<i>Amanita groenlandica</i>	1			1							
<i>Amanita sinicoflava</i>	3	1		2							
<i>Ampulloclitocybe clavipes</i>	3	1	1					1			
<i>Armillaria sinapina</i>	1			1							
<i>Arrhenia sphagnicola</i>	1								1		
<i>Bankera violascens</i>	2			1				1			
<i>Bisporella citrina</i>	6	1		2				1	1		1
<i>Bovista plumbea</i>	2								2		
<i>Cheilymenia stercorea</i>	2							1		1	
<i>Chondrostereum purpureum</i>	1								1		
<i>Chrysomyxa ledi</i>	4			1				1	1	1	
<i>Clavaria argillacea</i>	1								1		
<i>Clavariadelphus ligula</i>	3								2	1	
<i>Clavariadelphus sacchalinensis</i>	1								1		
<i>Clavulina cinerea</i>	1			1							
<i>Clavulina coralloides</i>	4			3				1			
<i>Collybia cirrhata</i>	6			2		2	1		1		
<i>Collybia tuberosa</i>	13	1	3	4					4	1	
<i>Coprinopsis atramentaria</i>	2		1	1							
<i>Coprinus comatus</i>	4			1				1			2
<i>Cortinarius acutus</i>	4			1				3			
<i>Cortinarius anomalus</i>	6		1	2		2			1		
<i>Cortinarius armeniacus</i>	2			1					1		
<i>Cortinarius armillatus</i>	1		1								
<i>Cortinarius aureofulvus</i>	1							1			
<i>Cortinarius bataillei</i>	2		1					1			
<i>Cortinarius brunneus</i>	5			2				1	1		
<i>Cortinarius camphoratus</i>	9			4		1		4			
<i>Cortinarius caperatus</i>	4		2			1		1			
<i>Cortinarius cinnamomeus</i>	1								1		
<i>Cortinarius disjungendus</i>	3			1		2					
<i>Cortinarius evernius</i>	5		1	2					2		
<i>Cortinarius flexipes</i>	11	1		6	1	1		2			
<i>Cortinarius fulvo-ochrascens</i>	1					1					
<i>Cortinarius gentilis</i>	1			1							

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Species	TOT	1	2	3	4	5	6	7	8	9	misc
<i>Cortinarius glandicolor</i>	1	1									
<i>Cortinarius hemitrichus</i>	1			1							
<i>Cortinarius huronensis</i>	1					1					
<i>Cortinarius illuminus</i>	1			1							
<i>Cortinarius imbutus</i>	1							1			
<i>Cortinarius impennis</i>	1			1							
<i>Cortinarius incognitus</i>	7			2	1	1			3		
<i>Cortinarius infractus</i>	1			1							
<i>Cortinarius laniger</i>	1							1			
<i>Cortinarius limonius</i>	2			2							
<i>Cortinarius malicorius</i>	5			3			1	1			
<i>Cortinarius mucifluus</i>	10			3		2	4	1			
<i>Cortinarius obtusus</i>	19	1		9		3	1	2	3		
<i>Cortinarius percomis</i>	1							1			
<i>Cortinarius praestigiosus</i>	1			1							
<i>Cortinarius rubellus</i>	1			1							
<i>Cortinarius rusticus</i>	1							1			
<i>Cortinarius sanguineus</i>	2							2			
<i>Cortinarius scaurus var. sphagnophilus</i>	1								1		
<i>Cortinarius semisanguineus</i>	1								1		
<i>Cortinarius solis-occasus</i>	1							1			
<i>Cortinarius sommerfeltii</i>	1		1								
<i>Cortinarius stillatitius</i>	9			3		1		5			
<i>Cortinarius subtortus</i>	1			1							
<i>Cortinarius tortuosus</i>	3							1	2		
<i>Cortinarius traganus</i>	2		1					1			
<i>Cortinarius uliginosus</i>	1						1				
<i>Cortinarius umbrinolens</i>	1	1									
<i>Cortinarius valgus</i>	1			1							
<i>Cortinarius venustus</i>	3		1						2		
<i>Cortinarius vibratilis</i>	1							1			
<i>Craterellus lutescens</i>	1									1	
<i>Craterellus tubaeformis</i>	16			3		1		7	4	1	
<i>Crinipellis setipes</i>	1								1		
<i>Crocicreas coronatum</i>	1									1	
<i>Cudonia circinans</i>	4			1		1		2			
<i>Cystoderma amianthinum</i>	1			2			1				
<i>Dacrymyces chrysospermus</i>	1							1			
<i>Ditiola peziziformis</i>	1	1									
<i>Entoloma elodes</i>	3	1							2		
<i>Entoloma sericellum</i>	1								1		
<i>Entoloma strictius</i>	4						1	1	2		
<i>Exobasidium cassandrae</i>	2			1		1				2	

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Species	TOT	1	2	3	4	5	6	7	8	9	misc
<i>Exobasidium karstenii</i>	2									2	
<i>Exobasidium savilei</i>	4			2				2			
<i>Exobasidium vaccinii-uliginosi</i>	2									2	
<i>Fomes fomentarius</i>	1							1			
<i>Galerina mniophila</i>	1		1								
<i>Gloeophyllum sepiarium</i>	4			1				3			
<i>Gomphidius glutinosus</i>	2							2			
<i>Gymnopilus junonius</i>	5			2				3			
<i>Gymnopilus penetrans</i>	2							2			
<i>Gymnopilus sapineus</i>	1			1							
<i>Gymnopus acervatus</i>	2							2			
<i>Gymnopus dryophilus</i>	4	1		1					2		
<i>Gyroflexus brevibasidiatus</i>	5					2			3		
<i>Hebeloma mesophaeum</i>	2									1	1
<i>Hebeloma polare</i>	1										1
<i>Hebeloma velutipes</i>	1										1
<i>Helvella corium</i>	1									1	
<i>Helvella lacunosa</i>	5		2						1	1	1
<i>Hemimycena lactea</i>	3	1							2		
<i>Heyderia abietis</i>	1								1		
<i>Hydnum repandum</i>	7			1				4	2		
<i>Hydnum umbilicatum</i>	12		1	4				4	3		
<i>Hygrocybe chlorophana</i>	1								1		
<i>Hygrocybe coccinea</i>	1			1							
<i>Hygrocybe conica</i>	6			3		2		2		1	
<i>Hygrocybe laeta</i>	1									1	
<i>Hygrocybe lilacina</i>	1				1						
<i>Hygrocybe miniata</i>	2			1					1		
<i>Hygrocybe mycenoides</i>	1								1		
<i>Hygrocybe punicea</i>	1								1		
<i>Hygrocybe squamulosa</i>	5				1	1		3			
<i>Hygrocybe substrangulata</i> var. <i>rhodophylla</i>	1								1		
<i>Hygrocybe virginea</i>	1								1		
<i>Hygrophorus camarophyllus</i>	1							1			
<i>Hygrophorus chrysodon</i>	3			3							
<i>Hygrophorus piceae</i>	3			2				1			
<i>Hygrophorus pudorinus</i>	3			3							
<i>Hypholoma capnoides</i>	3		1	1				1			
<i>Hypholoma elongatum</i>	4					1		3			
<i>Hypholoma radicosum</i>	2	1	1								
<i>Hypholoma udum</i>	1							1			
<i>Infundibulocybe gibba</i>	2								2		
<i>Infundibulocybe gigas</i>	1										1

FORAY NEWFOUNDLAND AND LABRADOR

Species	TOT	1	2	3	4	5	6	7	8	9	misc
<i>Infundibulocybe squamulosa</i>	1								1		
<i>Inocybe asterospora</i>	1										
<i>Inocybe geophylla</i>	13	1		4		1		4	2	1	
<i>Inocybe geophylla</i> var. <i>lilacina</i>	4			1				2	1		
<i>Inocybe subcarpta</i>	1								1		
<i>Jahnoporus hirtus</i>	1							1			
<i>Laccaria bicolor</i>	13			3		1		5	3	1	
<i>Laccaria laccata</i>	6			3		1	1	1			
<i>Laccaria longipes</i>	2					1		1			
<i>Laccaria nobilis</i>	2			1			1				
<i>Laccaria striatula</i>	6		2	2				1	1		
<i>Lachnellula agassizii</i>	4			2				2			
<i>Lactarius affinis</i>	8			2		1		4	1		
<i>Lactarius badiusanguineus</i>	1							1			
<i>Lactarius deceptivus</i>	6		1	2				3			
<i>Lactarius deterrimus</i>	19			2		1		5	2	9	
<i>Lactarius glyciosmus</i>	13		1	2			1	4	4	1	
<i>Lactarius hibbardae</i>	3		1	1				1			
<i>Lactarius leonis</i>	1			1							
<i>Lactarius lignyotus</i> var. <i>canadensis</i>	9		1	3				4		1	
<i>Lactarius mucidus</i>	2			1				1			
<i>Lactarius nitidus</i>	2							1			1
<i>Lactarius pseudoflexuosus</i>	2	2									
<i>Lactarius pubescens</i>	2									2	
<i>Lactarius repraesentaneus</i>	1			1							
<i>Lactarius rufus</i>	14	1		2				2	8	1	
<i>Lactarius salicis-reticulatae</i>	1			1							
<i>Lactarius sordidus</i>	1		1								
<i>Lactarius tabidus</i>	8		1						7		
<i>Lactarius thynos</i>	6		1	2				2			1
<i>Lactarius torminosus</i>	1										1
<i>Lactarius trivialis</i>	1								1		
<i>Lactarius tuomikoskii</i>	2					1				1	
<i>Lactarius turpis</i>	3							1	2		
<i>Lactarius uvidus</i>	4			2				1	1		
<i>Lactarius vietus</i>	5		1	3				1			
<i>Leccinum holopus</i>	14		1	6	1	1		2	3		
<i>Leccinum scabrum</i>	5			1			1	1	1	1	
<i>Leccinum schistophilum</i>	1					1					
<i>Lentinellus micheneri</i>	1			1							
<i>Leotia lubrica</i>	7	1	1	4				1			
<i>Lepiota cortinarius</i>	1			1							
<i>Lepista pseudectypa</i>	1										1

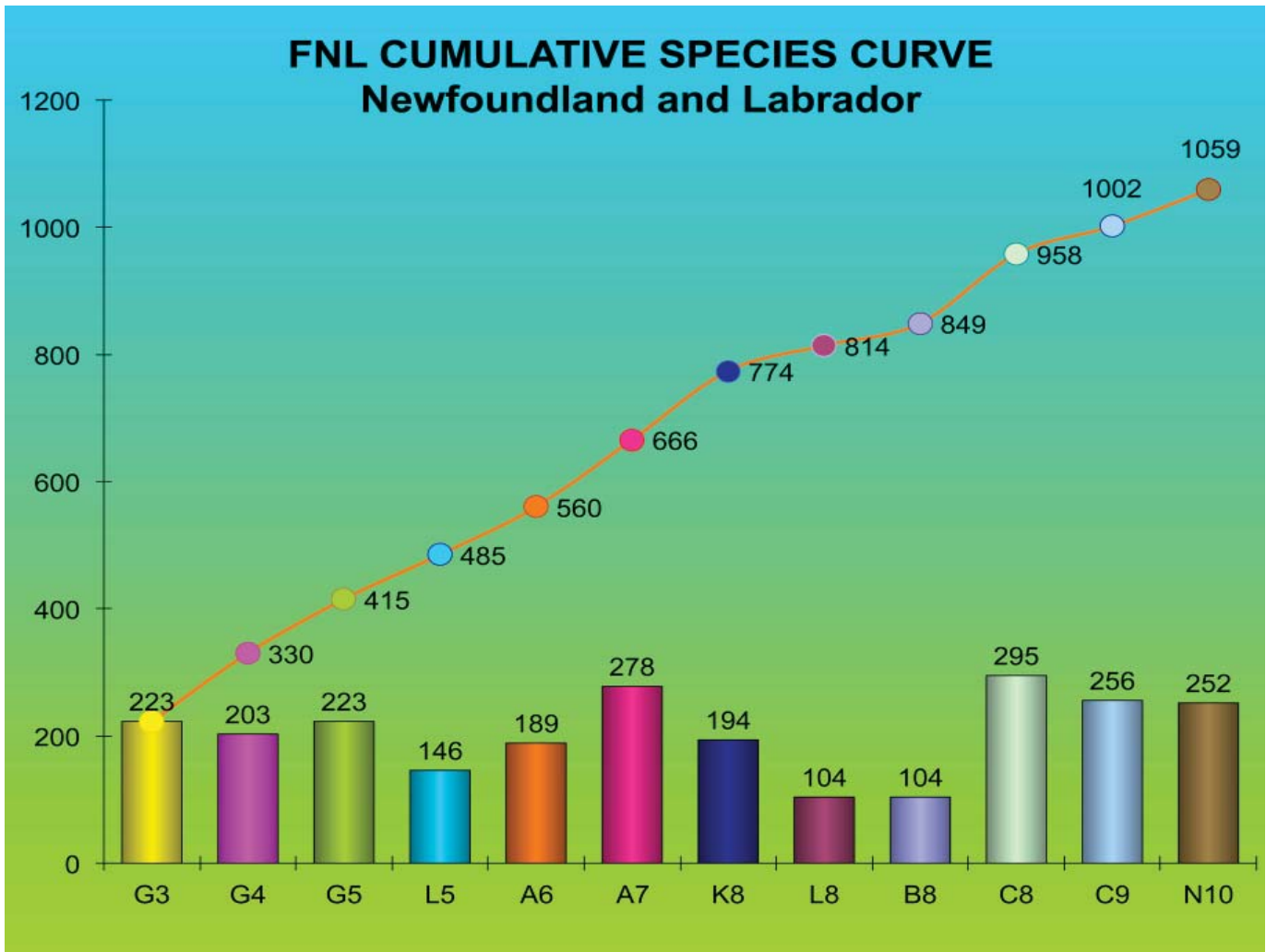
FORAY NEWFOUNDLAND AND LABRADOR

Species	TOT	1	2	3	4	5	6	7	8	9	misc
<i>Lichenomphalia umbellifera</i>	15	1					1	4	6	3	
<i>Lycogala epidendrum</i>	1			1							
<i>Lycoperdon foetidum</i>	1								1		
<i>Lyophyllum connatum</i>	7		1					2	2		2
<i>Marasmius androsaceus</i>	3					1			2		
<i>Marasmius epiphyllus</i>	2								2		
<i>Marasmius graminum</i>	1								1		
<i>Melampsora epitea</i>	1									1	
<i>Micromphale perforans</i>	3			1					2		
<i>Mollisia cinerea</i>	1							1			
<i>Mycena epipterygia</i>	2					1			1		
<i>Mycena filopes</i>	2	1						1			
<i>Mycena galericulata</i>	1			1							
<i>Mycena megaspora</i>	2	1			1						
<i>Mycena pura</i>	3	1		1		1					
<i>Mycoacia uda</i>	1							1			
<i>Parasola plicatilis</i>	1									1	
<i>Paxillus involutus</i>	9	1		3	1			4			
<i>Peniophora aurantiaca</i>	1								1		
<i>Peziza alcis</i>	1			1							
<i>Peziza badia</i>	1			1							
<i>Phanerochaete chrysorhiza</i>	1			1							
<i>Phellinus nigricans</i>	2			1				1			
<i>Pholiota alnicola</i>	2		1					1			
<i>Pholiota astragalina</i>	2			1				1			
<i>Pleurocybella porrigens</i>	5			3				2			
<i>Plicatura nivea</i>	2							1	1		
<i>Polyporus badius</i>	1			1							
<i>Polyporus leptcephalus</i>	1								1		
<i>Postia balsamea</i>	1							1			
<i>Postia tephroleuca</i>	1							1			
<i>Psathyrella lutensis</i>	2	2									
<i>Psathyrella velutina</i>	1										1
<i>Psilocybe coprophila</i>	1							1			
<i>Pucciniastrum goeppertianum</i>	1								1		
<i>Ramaria acrisiccescens</i>	1			1							
<i>Ramaria formosa</i>	1							1			
<i>Ramaria leptiformosa</i>	1			1							
<i>Ramaria myceliosa</i>	2						1			1	
<i>Rhodocollybia maculata</i>	2			2							
<i>Rhodocollybia maculata v. scorzonerea</i>	1		1								
<i>Rickenella fibula</i>	2			2							
<i>Ripartites tricholoma</i>	1			1							

FORAY NEWFOUNDLAND AND LABRADOR

Species	TOT	1	2	3	4	5	6	7	8	9	misc
<i>Russula abietina</i>	2								2		
<i>Russula aquosa</i>	8		2			2	1	3			
<i>Russula brunneola</i>	1								1		
<i>Russula citrinoclora</i>	3		1			1		1			
<i>Russula claroflava</i>	2			2							
<i>Russula clavipes</i>	1							1			
<i>Russula consobrina</i>	1							1			
<i>Russula cyanoxantha</i>	1							1			
<i>Russula decolorans</i>	1					1					
<i>Russula fragilis</i>	4			1				2	1		
<i>Russula gracillima</i>	2			1				1			
<i>Russula graminea</i>	2			1				1			
<i>Russula laurocerasi</i>	3							2	1		
<i>Russula paludosa</i>	13	1			1			4	6	1	
<i>Russula peckii</i>	9		1	6				1	1		
<i>Russula xerampelina</i>	3								3		
<i>Scutellinia cejpü</i>	1						1				
<i>Scutellinia scutellata</i>	2							1	1		
<i>Stropharia alcis</i>	4			2				1	1		
<i>Stropharia arctica</i>	1								1		
<i>Suillus cavipes</i>	4			2			2				
<i>Suillus clintonianus</i>	2			1				1			
<i>Suillus glandulosus</i>	5		1	1				3			
<i>Suillus grevillei</i>	1							1			
<i>Suillus paluster</i>	2			1		1					
<i>Suillus serotinus</i>	1									1	
<i>Suillus spectabilis</i>	2			1					1		
<i>Thelephora palmata</i>	1								1		
<i>Tremella encephala</i>	1								1		
<i>Tremella foliacea</i>	1			1							
<i>Tremella mesenterica</i>	5				1			2	2		
<i>Tremella mycetophila</i>	2								2		
<i>Tremiscus helvelleoides</i>	1			1							
<i>Tricholoma fumosoluteum</i>	5			1		2		1		1	
<i>Tricholoma intermedium</i>	1							1			
<i>Tricholoma pessundatum</i>	2							2			
<i>Tricholoma sejunctum</i>	1			1							
<i>Tricholoma transmutans</i>	3			2					1		
<i>Tricholoma virgatum</i>	1							1			
<i>Tricholomopsis decora</i>	5		1	4							
<i>Tubaria confragosa</i>	2			1				1			
<i>Xerocomus gracilis</i>	3			2					1		
<i>Xeromphalina campanella</i>	5			2				1			
TOTAL NUMBER SPECIES	252	24	35	119	10	37	17	110	86	30	13

WHAT DO THESE DATA MEAN?



Surprises. It was an unexpected surprise to get this many species identified, given the very inefficient process, due to being spread out—much time that would normally have gone to identifying was lost (or turned to other pursuits!). This is a credit to our identifiers. Equally surprising was that we had collected this much material, given that the barrens were, well, barren and the weather encouraged early ends to outings. Well done! Current tally: 252 species were identified, 57 new to the cumulative list. We processed almost half as many specimens as in other years, yet got about as many species identified. Apparently there were more species than suspected, but mostly only one or two specimens of each.

Are we close to identifying all NL species? The cumulative species curve continues to rise in a straight line, suggesting that the 1,000 mark is

not close to the limit of species in our province. The broad pattern of this year's species differed from that of previous years, not surprising from a different ecosystem.

Visiting Specialist Effect. Regardless of what is collected, that which gets identified is what the identifiers work on, which is mostly what intrigues them. Therefore, all lists reflect the interests of the identifiers. Many mycologists are curious to know what species grow in a specific area, and therefore try to identify all that is brought in. Such lists probably reflect the species in the area at the time. It is often said that specialist identifiers, concentrating on single genera or small groups of mushrooms, skew the list to reflect disproportionately species of their interest. We have an opportunity to examine this tenet, because Tuula Niskanen and Kare Liimatainen, specializing in

Genus *Cortinarius*, have been with us for three of our eight annual forays.

The average per cent of *Cortinarius* species in the list is 18 for the three Tuula & Kare years (A7, C9, N10) and 10 for the other years. The

graph on this page shows the proportion of *Cortinarius* species in the list from all of our forays. The three highest tallies come from Tuula & Kare years. Contribution of *Cortinarius* species to our cumulative list is similar: *Cortinarii* averaged 24% of new species in Tuula & Kare years and 10% in other years. Clearly, Tuula & Kare have made a significant contribution to the *Cortinarii* on our list. Has this skewed our list to reflect a disproportionately high number of *Cortinarius* species? If “skewed” means that Tuula & Kare have made apparent more *Cortinarii* than we might have without them, then it is probably true. If, on the other hand, “skewed”

means that Tuula & Kare’s contribution created a list that is an inaccurate representation of the species in the region (as reflected by the collections brought in), then the contention is untrue.

Were Tuula & Kare our only identifiers, and had they limited themselves only to *Cortinarii*, then we should have produced only a *Cortinarius* list, clearly not reflective of all the species in the region. However, Tuula & Kare also identified mushrooms other than *Cortinarii*, and we had several other identifiers, who were more curious to learn all species growing in the area, so that identification of collected material did not suffer. In other words, if the identification process deals adequately with the species collected in the area, then a specialist who identifies more species in her interest group is not skewing the data, but augmenting them.

Of course, Tuula & Kare were not the only ones to contribute to our *Cortinarius* list. In addition to

our general identifiers, who also identified *Cortinarii*, Dave Malloch (A7) and André Paul (C9, N10) also took a special interest in this genus. A “specialist” is not a formal designation, but indicates a person who has gained an intimate

knowledge of a group of fungi through study of that group. For example, in 2005 Dave Malloch stated that he was going to pursue *Cortinarii* in greater detail. In 2006, 27 of the 30 *Cortinarius* species were identified by Dave. As the graph shows, the proportion of *Cortinarii* in the 2006 list (A6) was in the same range as the Tuula & Kare years, well outside the range of other non-Tuula & Kare years. A formidable display! As I understand it, at the moment Dave is pursuing Genus *Inocybe* with even greater zeal.

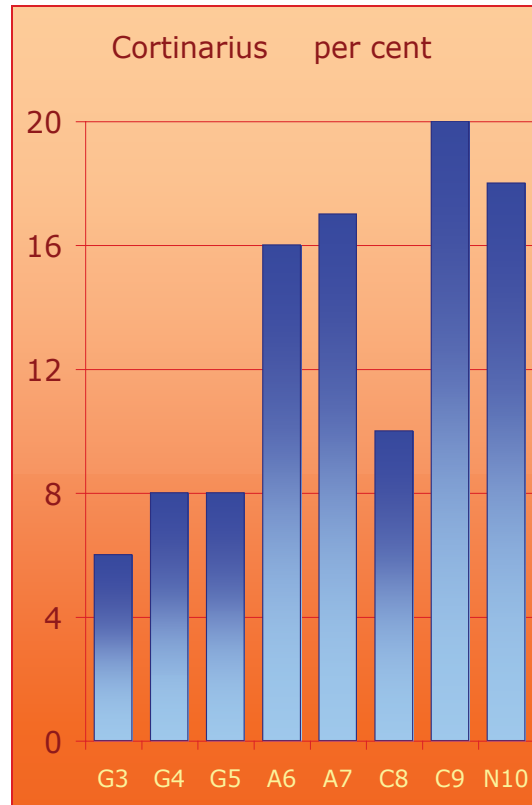
Abundance. Recording the number of collections of a species gives us some idea of its abundance. This is useful information in many

ways. It allows comparison of regions, because differences in common species can be useful indicators of regional difference. It also has a practical application in deciding whether to pursue the collection of any species. See the discussion of mushrooms as non-timber forest products, elsewhere in this Report, for an example of how this information can be used.

The idea of the foray is to learn something while having fun, and to gather some information of scientific value while doing it. Questions and discussion about these data are welcome. Our data contain much information and along with our herbarium material have contributed to several research projects, some of which have been or are on their way to be published in scientific mycological journals.

Thank you for this effort and hope to see you again in 2011.

Andrus Voitk



GNP MUSHROOMS AS NON-TIMBER FOREST PRODUCTS

Desirable qualities for harvestable wild mushrooms

1. abundant
2. accessible
3. easy to learn and to recognize
4. little chance of confusing with similar toxic species
5. resistant to parasites
6. robust
7. require minimal processing.

The foray provided first hand experience for people interested to learn whether mushrooms could be harvested on the GNP as non-timber forest products (NTFP). Participants surveyed local woods, documented presence and abundance of suitable species, saw how easy or difficult identification for these was, tasted several wild mushrooms, attended cooking classes using local mushrooms, and had a mushroom growing workshop to understand the basics of growing them.

Chanterelles, found in quantities further south, were not seen. In fact, we did not find any prized species in great quantities, like the pine mushroom (*Tricholoma magnivelare*) in BC, which accounts for millions of dollars of revenue, more than all other NTFPs combined. However, our findings suggest that a mushroom harvest on a smaller scale, possibly complementing berry harvests, is quite feasible.

The species list, found elsewhere in this Report, had 14 common species; seven of these are edible: *Craterellus tubaeformis*, *Hydnum umbilicatum*, *Laccaria bicolor*, *Lactarius deterrimus*, *Lactarius rufus*, *Lecanum holopus* and *Russula paludosa*. There is no reason that reliable identification of most, if not all, of these could not be learned, given instruction and guidance, with a built-in checking mechanism, over the course of a few seasons, starting with 2-4 and adding a few each year.

We review four examples and discuss growing another.

Craterellus tubaeformis

Yellow legs, winter chanterelle



Quite abundant in mossy forested areas. Easy to recognize with minimal instruction. Two somewhat similar species: *Leotia lubrica* is probably innocuous, but potential for serious error exists with small, possibly lethally toxic *Cortinarius* species, growing in the same habitat. With minimal instruction and care, such error should be totally preventable. Very resistant to insects and slugs. Excellent flavour, holds its own well with game and red meat.

Hydnum umbilicatum and *Hydnum repandum*

Sweet tooth, hedge hog mushroom



Almost as abundant as the previous, in the same habitat. Easy to learn with nothing similar to cause confusion. Very resistant to insects and slugs. Very good, somewhat milder flavour. Often liked even by people who do not like mushrooms.

Russula paludosa

The red mushroom, swamp russula



Occurs throughout the province, but achieves harvestable quantities only in the GNP and Labrador. Fruits somewhat earlier than the other two. Possibility for confusion with similar toxic reddish russulas exists, but a simple and entirely safe taste test in the field can immediately eliminate these. Of the four, this one suffers more from parasitic damage and requires a bit more care and quicker processing. However, the red mushroom has historic significance in the region.

Although eating mushrooms has not been a part of Newfoundland culture, this mushroom has been the exception. People from communities along the west coast of Newfoundland, from Port au Choix northwards, and along the Labrador coast remember eating “the red mushroom” with great fondness. Many remember their grandmother collecting and cooking it and all describe this as a real treat, something to look forward to each fall. Most adults telling this story say they no longer remember enough about the mushroom to feel safe picking it, but when shown *Russula paludosa*, will immediately recognize it. The link with past heritage would add romantic appeal to local use of this mushroom.

Lactarius rufus

Rufous milk cap, red hot milk cap



Quite abundant in mossy forested areas. Easy to recognize with minimal instruction. Somewhat similar species, which might cause confusion can be treated in a similar way. Fairly resistant to insects and slugs. Tastes inedibly hot if raw, or if consumed without preparation, and can cause gastrointestinal upset and distress. However, if parboiled before cooking, becomes a very desirable mushroom for salting and pickling. Used to great effect as a condiment, a garnish, in salads or in home made katsup.

Note: this species was not highlighted during the foray because normally we prefer to avoid species that require pre-processing. However, it was quite plentiful, is a favourite in many areas of the world, and does add to table appeal, making it a species at least worth considering.

oooOooo

We have resources to organize regional identification workshops at two levels, one for pickers and one for “verifiers”, trained to check picked mushrooms. Perhaps not practical at the outset, training verifiers aims for a future when more species are picked, and collectors might wish to have a basket of edibles examined to weed out inadvertent undesirables. Stations, with certified “verifiers” are maintained in many Scandinavian countries, available to the public free of charge and commercial agencies for a modest fee.

The first few years might test local use only. In ad-

dition to private use, for this to have any economic impact, regional restaurants would have to add local mushrooms to their menus. We have the resources to organize cooking workshops that teach basic cleaning, techniques of long-term storage and a variety of recipes. Serving local mushrooms in area restaurants can be expected to create an additional demand for product, raw and processed, for tourists to take home for later enjoyment.

Once local demand has been built up, export can be tackled, with its problems of quality control, storage and marketing. These are all highly desirable mushrooms in many areas of the world, so that the market is there for most of them, both in the province, the continent, and outside. Involving a local company with access to markets from the outset would be an asset.

The species described hitherto are wild mushrooms that cannot be grown and must be harvested where they grow, subject to the vagaries of all wild crops. Growing mushrooms for a commercial market has become commonplace, with competition leading to larger operations in search for economy of scale. Growing can be done virtually anywhere and theoretically there is no reason that a growing operation could not operate at a profit in Newfoundland and Labrador. However, our province may not have sufficient population to create a demand and shipping from here would add transport cost that might make competing in other markets difficult. A standard growing operation, aimed only at the local upscale market, would have the best chance for success near St. John's. However, there is an opportunity for some small scale growing unique to the GNP, which could complement locally picked wild mushrooms.

The most commonly grown species across the world is not the white button mushroom of the supermarket, but a jelly tree ear, *Auricularia polytricha*. This is the black mushroom found in almost all Chinese cooking. It is the favourite mushroom of the Chinese and because they are so populous, more of this mushroom is grown than any other in the world. We have a close relative of this mushroom in our woods, *Auricularia americana*, an edible mushroom found most commonly on stumps of balsam fir. It is not plentiful enough to make direct harvesting practical, but since this is a wood decayer, it should be easy to grow on softwood sawdust, using established techniques for other wood rotters. Reportedly our mushroom has more flavour than its Chinese relative, so in theory it should be



marketable. Although a commercial demand may not develop throughout the Occident, the concept is sufficiently intriguing that funding of a feasibility study seems justified. Regardless of outside demand, this mushroom should hold some interest for the tourist, who could complement his wild mushrooms with a grown local species, cousin to the famous Chinese tree ear. Whether this limited market would cover growing cost and whether additional markets can be opened for it, are worth exploring.

There may be other species, which may also be abundant, but were not encountered on a first foray, or others that fruit at a different time. Other uses, such as mushrooms for dyeing fabrics and wool, use of spalted wood for decorative effect, and collecting certain species for medicinal purposes, were not explored.

In summary, our foray showed that there are sufficient desirable edible wild mushrooms in the GNP to support small scale NTFP harvesting for the region's consumption, both personal and especially by its very significant tourist market. It is quite feasible to build on the coastal heritage of eating the red mushroom, to produce a tradition of eating local wild mushrooms, enriching the cuisine of the inhabitants. Adding local wild mushrooms to the menu of regional restaurants can significantly increase the value of the tourism experience. In addition to satisfying local needs, possibly this NTFP can supply more distant markets to some degree.

Beginning a new program is a great opportunity to plan and put in place a safe and enriching experience for both user and consumer.



FORAY NEW FOUNDLAND AND LABRADOR



The lot of them ... 2010

LICHENS added this year!



FORAY

NEWFOUNDLAND AND LABRADOR

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Terra Nova National Park

Headquarters: *Terra Nova Hospitality Home*

September 9-11, 2011

GUEST FACULTY*

Teuvo Ahfi
Stephen Clayden
Renée Lebeuf
Raymond McNeil
Faye Murrin
Todd Osmundson
André Paul
Roger Smith
Andy Taylor
Greg Thom
Zheng Wang

*tentative at time of publication

Please check our website in the Spring, 2011, for
Information & Registration Forms:

www.nlmushrooms.ca