OMPHALINA

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Newsletter of FORAY NEWFOUNDLAND AND LABRADOR

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Oct. 20, 2015

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.

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seened AT *gmail* DOT *com*,

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COVER

Cladonia borealis, Mt Ignoble, October 4, 2015. One of the Christmas lichens of 2011, a sign of Christmas come early to the decision makers in the Executive chambers of OMPHALINA.

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CONTENT

Message from the Editor

The foray is over. It was a lot of fun, as always. A full report will come out in the next issue, which will come out in due course. Meanwhile, here are two reports that are a bit overdue: the Microscopy Workshop at Grenfell College and a trip to Mt Washington to seek a topotype.

Because of uncertainty whether the next few issues will have room—or even be appropriate vehicles for holiday greetings—we decided to use this opportunity for very premature holiday wishes and appropriately themed articles. Thus, the contents are sandwiched between the red and green lichen on the cover and the reindeer from the firewood—the woodpile a natural focus of attention this time of year—at the end. Also, the last page contains advertisements for Christmas gifts. Better early than never, we always say.

Ads in Omphalina? Well, if you find it crass, keep the cards and letters coming (preferably along with small flagons of very fine and expensive Cognac), or the letters page will be used for advertising! Commercialism abhors an unused space. The future is now in your hands.

Meanwhile, mushroom season continues, and with it, the problem of misidentification and its sequelae. Because new members join all the time, a warning every few years is not too much. This issue contains one such warning about *Amanita bisporigera*.

Finally, check out the back cover: Mavis Penney's photo of Muskrat Falls, not too far from Goose Bay, the site of our 2016 Foray. Keep the dates open. At our house we're pondering the idea of a road trip to the Foray along the Labrador Highway…

Happy mushrooming!

andrus

PS

By the way, should the idea of future microscopy workshops interest you, please let us know. The good folks at Grenfell College are willing to repeat it, but need an indication of interest among the public. That's us, among others.

Cladonia borealis

Michele Piercey-Normore

Cladonia borealis is a small red-fruited pixie cup lichen that is widely distributed around the world in arctic, boreal, Antarctic and alpine areas. The wide distribution of the lichen recorded in the literature may be the result of it being easily confused with another red-fruited species, *C. coccifera*. The confusion between *C. borealis* and *C. coccifera* is based on an almost identical physical appearance. *Cladonia borealis* was named by Soili Stenroos where she described its morphology to be very similar to that of *C. coccifera*.[1] *Cladonia borealis* has smaller cups (up to 0.5 cm wide) and the surface of the cup contains tiny granules but *C. coccifera* has larger cups (up to 1.5 cm wide) and the surface has scaly plates. The only other difference between them is their natural products; *C. borealis* produces usnic and barbatic acid while *C. coccifera* produces usnic acid and zeorin.

The natural products produced by *C. borealis* are synthesized by the fungal hyphae that make up the squamules (leafy thallus growing on the soil) and the pixie cup, which have a yellowish green color from usnic acid. Usnic acid absorbs ultraviolet light (UV) and protects the lichenized algae from the damaging UV rays of the sun. Usnic acid also has antimicrobial properties that help to protect the lichen from bacterial and sometimes fungal infections. The other two compounds (barbatic acid and zeorin) are produced in the internal tissues and their functions have not been studied as well as that of usnic acid. They may help to keep the internal tissues dry to allow for better photosynthesis by the algae or they may have antioxidant properties. The cup may contain tiny red spheres around the rim, which are the fruit bodies and produce ascospores. The developing ascospores may be protected from UV damage of sunlight by the deep red pigment of the fruit bodies, rhodocladonic acid. In these photos, taken on Mt Ignoble this year, the red fruit are still young, but often they grow to become much larger spheres.

Cladonia borealis is one of many red-fruited species in section *Cocciferae* (sensu Ahti) of the large and diverse genus *Cladonia*.[2] There are about a dozen red-fruited species found in Newfoundland and Labrador[3] but some of these look very different from *C. borealis*. For example, *C. pleurota* and *C. deformis* both form

cups but they have a powdery layer that covers the entire cup and can be rubbed off by your fingers, whereas *C. borealis* and *C. coccifera* do not have a powdery surface. *Cladonia bacilliformis* is a cup-less stalk covered in tiny squamules and *C. macilenta* is another cup-less stalk covered in a powdery layer. However, they all have red fruit and are pale yellow because of usnic acid.

The widespread distribution of *C. borealis* from the Arctic to the Antarctic regions has been explained by long-distance dispersal of its ascospores.[4] Long-distance travel of spores and other propagules has been shown to occur in some lichen species such as *Porpidia flavicunda*, a crustose lichen found on rocks,[5] and a species of the old man's beard, *Usnea perpusilla*.[6] For *Cladonia borealis*, it was suggested that birds like Arctic terns are responsible for carrying the spores long distances because they have one of the longest annual migration paths known for birds that extends from the Arctic to the Antarctic. Presumably spores or other propagules of lichens can hitchhike on and within the feathers of birds and be carried between the Antarctic and the arctic.

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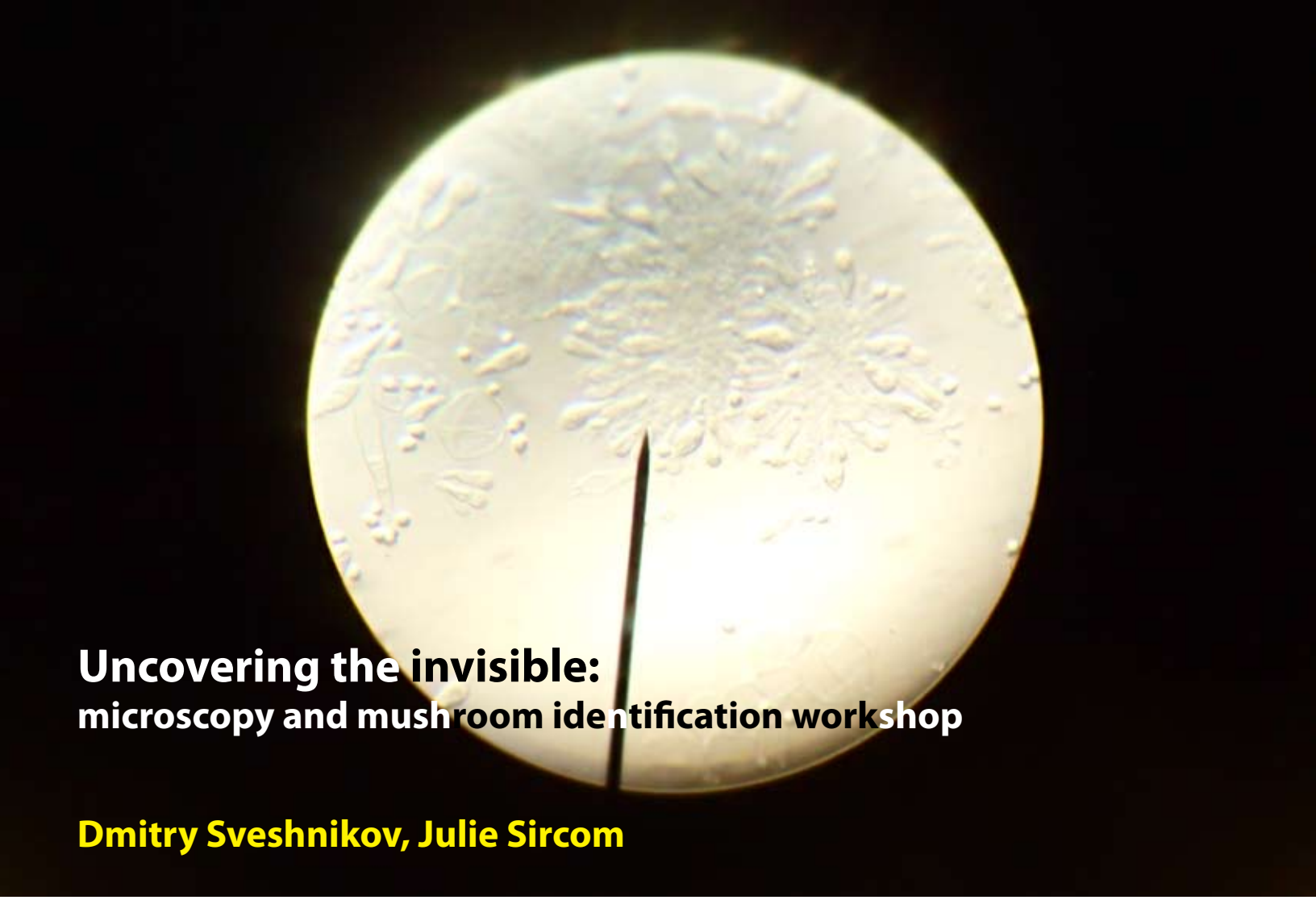
Photo: Maria Voitk



Uncovering the invisible:
microscopy and mushroom identification workshop

Dmitry Sveshnikov, Julie Sircom

This September the Grenfell Campus of Memorial University purchased a new state of the art compound microscope for its Herbarium (SWGC), to complement the existing dissecting microscope of similar quality. At the same time the Bonne Bay Marine Station acquired a full complement of new working microscopes. To celebrate this extension of microscopic capability in the region, these organizations teamed up with Foray Newfoundland & Labrador to conduct a microscopy workshop for the public as part of the university's public outreach program.

Funding for the event was secured from the MUN Quick Start Fund for Public Engagement and the Grenfell Campus Research Office. In kind support was lent by the Grenfell Campus Herbarium (SWGC), Marketing and Communication, Computing and Communications, and from the Bonne Bay Marine Station.

Organizers:

MUN HERBARIUM SWGC GRENFELL CAMPUS

Bonne Bay marine station

FORAY NEWFOUNDLAND AND LABRADOR

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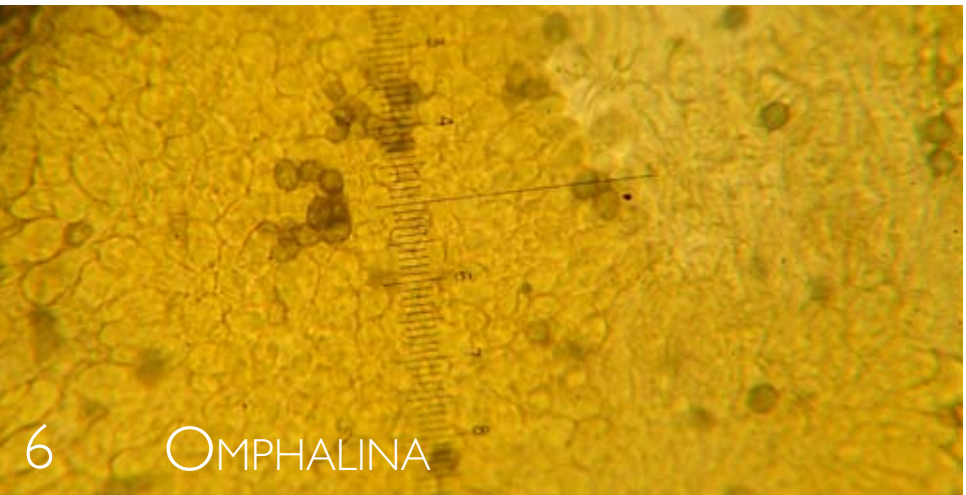
An exciting moment in the history of high-tech teaching of microscopy: the set-up is judged to be perfect! Workshop leader Greg Thorn looks on as his co-leader, Nils Hallenberg, sets the stage, and Dmitry Sveshnikov adjusts the projector. Using this equipment, the audience saw projected on the screen how Nils performed a procedure in real time while Greg described the steps of the very same procedure.

A powerful educational tool: Nils Hallenberg describes what he sees through the microscope, while the audience is able to see the same image projected onto the classroom screen. Below: photomicrograph of a Russula, *showing sphaerocytes and ornamented spores dyed with iodine.*



No, the title banner does not depict the Moon before the recent lunar eclipse. The photo shows a microscopic image of fungal cells, with the pointer showing a detail of interest. This is what scientists see when studying microorganisms for teaching, research, or simply to identify accurately the mushroom we have collected—possibly not totally irrelevant if you want to know whether it is edible or not. If you wish to show such an image to other people, or even publish it, one simple way, as done here, is to take your cell phone camera to the eyepiece—this is what students often do during classes, mainly to skip the seemingly old-fashioned practice of drawing what they see. It must be said that drawing is great for studies, but there are certainly benefits to using modern technology. Unfortunately, a cell phone camera does not do justice to the beautiful world of the minuscule.

To take good images requires a microscope equipped with a specially designed image capturing device. A not insignificant added bonus of such setup is that the images can be shown real-time on screen for a larger audience, making it excellent for teaching microscopy classes in botany, zoology, microbiology or mycology. The Division of Science at Grenfell Campus (MUN) in Corner Brook recently acquired such equipment: a suite of high-end dissecting and compound microscopes was installed at the Grenfell Campus Herbarium (which proudly features the acronym SWGC, as it was initiated and built at the times when the school was known as "Sir Wilfred Grenfell College"), and complementary imaging devices were installed for biology classrooms on Campus, and also at the Bonne Bay Marine Station (Norris Point, Gros Morne National Park) for use in summer courses.

Grenfell Campus has a long-term connection with public naturalist

Ample working material had been gathered to examine. On the table are prepared spore prints as well as fresh mushrooms, lichens and other fungi collected for the workshop. In addition, there were bags of Sphagnum *and other mosses, liverworts and tardigrades—all to get an overview of the sorts of organisms where microscopic study can be helpful, interesting and informative.*

groups on the west coast of Newfoundland. Because Foray Newfoundland and Labrador (FNL) excursions are regularly attended and assisted by Grenfell faculty, staff and students, we decided to hold a launch celebration and test-drive of the new set-up in the form of a microscopy overview and mushroom identification workshop—a number of faculty members, students and FNL members were interested to learn such techniques. Luckily, we were able to engage two world-class microscopists and mycologists as workshop leaders: Greg Thorn of the University of Western Ontario and Nils Hallenberg from the University of Göteborg, currently living in Denmark. The Public Engagement Office and the Research Office of Grenfell offered financial support, which settled the matter—the workshop was a go! And for free.

Before the event, the equipment was moved to the brightest teaching laboratory on campus, the Computing team helped connect the visuals, the Marketing group provided photographic assistance, and the new on-campus caterer, The Grove, prepared to take care of coffee breaks and lunch.

The workshop started early in the morning, and continued into late afternoon with four sessions: two on general microscopy, and two on mushroom identification. The participants, in addition to the renowned leaders, included members of faculty and staff of Grenfell,

Throughout the workshop session the instructors moved through the stations. Greg Thorn, above, and Nils Hallenberg, below helping and interacting with student participants.

This page: additional shots of participants at work or interacting with leaders in an effort to master the fine art of microscopy to aid identifying mushrooms.

guests from Forestry and Wildlife departments, students of all levels (undergraduate, graduate, alumni), and members of FNL. Excluding the leaders from Denmark and Ontario, the furthest participant drove in from as far as Gander. Scientists brought samples of their own research interests to the room, and participants were introduced to a variety of microscopic creatures and structures.

The event was a clear success with many favourable comments from participants; the experts fully tested and approved the quality of the equipment and the feasibility of the audio-visual setup, while the participants learned many tricks of the trade, held many discussions and even took a forest walk during breaks. After it was over, the microscopes were returned to their permanent stations, and there has not been a single day since that they were not used, largely by the very same students who had attended the workshop. Grenfell faculty is looking forward to a long and productive use of the equipment, and hope to repeat the workshop again next year for themselves and the community, to gain more insights into the invisible world.

The elusive faerie

Andrus & Maria Voitk

The July, 2015, issue of Omphalina was devoted to the description of a small omphalinoid mushroom found atop Mt Ignoble, near our home. Since then we have learned that instead of a single species, the burn bald of Mt Ignoble is home to at least three species of small brown mushrooms, an *Arrhenia*, a *Lichenomphalia*, and a *Mycena*. In trying to unravel the identity of these species, we discovered that *Omphalina oreades* (named after the Oreads, mountain nymphs of Greek mythology), published by Rolf Singer in 1948, may be the first description of our *Lichenomphalia*. An effort to test our suspicion with DNA analysis could not be done, because the mushroom is too small—Singer's type collection does not permit the sort of destructive sampling required by present-day sequencing. The next-best solution would be to compare the DNA of our mushrooms to that of a topotype (similar mushroom from the type location). Singer made his collections near the summit of Mt Washington, and the species was collected again in the same location by Bigelow in 1966, who gave the locations as the trails to Lake of the Clouds and Alpine Gardens, both from the summit and both still in use to-day, bearing the same names.

What could be simpler, then, than to drive to Mt Washington and collect some fairies? Use of "drive" is intentional, because there is an auto road right to the summit. Besides, just over 1,900 m asl, Mt Washington is reputed to have the second-highest number of hiker fatalities in North America; the much safer auto road has had three fatal accidents since its inception. If the objective is hiking, a day-long climb might sound reasonable, but if the object is to collect a specific and very small organism, then it seems most prudent to reserve time for the search, not the adventure. This has nothing to do with being closer to 80 than 70, of course—although a quick perusal of recent hiking deaths there shows a disproportionate number of the over-65 crowd.

With these thoughts in our minds, we wrote to Susan Goldhor,

The changeable weather atop Mt Washington on our first day. Even when in the clouds (most of the day), on the trails one could always see at least the next cairn. As the day wore on, more and more episodes of blue sky made an appearance, and by the time we were ready to leave, the sun was out. Naturally.

Even at its worst, it was a far cry from the next day, shown in the title banner. Under the rainproof layer, I had a thick fleecy and an undershirt, more than I wear in the winter at home. Not all dressed like that: the title banner photo was taken by a young mother in a T-shirt, shorts and flip-flops, with a baby on her back!

president of the Boston Mycological Club, to see if there might be a member of that club familiar with the mountain and its flora. We were in luck: she approached one such member, who replied, "I would be honored to take [you] around … in the month of August." And, since the summit is a protected area, he also offered to look after the permit to collect for scientific purposes.

August falls within the fruiting season of the species, so we agreed on a mutually suitable time. Larry Millman heard of our plan, and ever the adventurer, wrote that he would like to join us, not having explored Mt Washington before. He suggested a place to stay a bit closer than Susan's country house, which she had kindly offered for our use. The extra pair of eyes was very welcome.

We set off across the salt water to the mainland. Mt Washington is one of the Presidential Mountains, which are in the White Mountains, which, in turn, are part of the Appalachian Chain. Yes, the same Appalachian chain that continues through Newfoundland. This was like home to us, because the International Appalachian Trail, which begins in Georgia and goes over Mt Washington to our Island, passes very close to our house, along the side of our Mt Ignoble, in fact, which is a mere hiccough on the Appalachian Range. It seemed quite logical that the same alpine mushroom species should be as at home there as here.

On arrival we were met by Larry, already awaiting the adventure. We were disappointed to learn that our guide from the Boston Mycological Club had injured his knee and was unable to join us. One pair of eyes fewer, our seeing eye guide to the mountaintop, no less. However, he sent an assuring e-mail that the required permit to collect, a mere formality, should be in order; although not in hand physically yet, we should not hesitate to collect fruit bodies.

In the morning we drove up the Mt Washington Auto Road to the summit. The ascent was uneventful, if slow and steep, along several winding sections with precipitous drops from one side of the road. The day was not the best, with the top of the mountain in the clouds for most of the time, but these shifted constantly and on occasion blue sky could be seen. Rain, thunder and lightning, all forecast, were not in evidence. As soon as

A good omen: two mushrooms on Mt Washington that share the same habitat with our elusive fairy on Mt

Ignoble— a dry Arrhenia *cf*. obscurata *on the left and young* Clavaria argillacea *on the right*.

we were out of the car, we found a good omen: beside the parking lot were an *Arrhenia* and several groups of *Clavaria argillacea*, both species also found on Mt Ignoble in the same habitat where our *Lichenomphalia* grew. Unfortunately, no sign of the fairy to follow up the good omen. Next, we searched along the trail to Alpine Gardens, where our fairy mushrooms was reported by Bigelow. Again the fairy eluded us.

The return journey was not nearly as uneventful as the drive up. Because of the steep decline, drivers are advised to use the lowest gear. Unfortunately, our car lacked the conventional assortment of low gears, and only had one mildly retarding choice in addition to Drive. This was inadequate to keep the speed safe, causing excessive use of the brakes. Within five minutes the car filled with smoke of a foul odour from overheated brakes. There were several pull-offs for cooling brakes, and on the remaining way down we used most of them, to the consternation of Larry, who saw no need to waste precious time on braking so long as there was a perfectly functioning steering wheel. Nothing untoward happened, but the knowledge that one of the three fatalities on the auto road occurred after brake failure sat beside us as an unwanted travel companion all the way down. A queasy feeling I should not wish to relive.

The forecast called for similar weather the next day, confirmed by a telephone call in the morning. Larry left for other adventures. Because of the braking problems, we decided to take the cog railway this time. The ride was an experience in itself, well recommended, should you ever have that opportunity. Once at the summit, however, the weather

L to R: Larry Millman, Andrus Voitk, (Maria Voitk, photographer, missing) with their hosts, Aron Bernstein and Susan Goldhor, just before supper after the first day on the mountain.

The little train that could: the Mt Washington Cog Railway starting out from the base station. Note the contrast in weather from below, to that on top (title banner), The mountain in this photo is entirely obscured by cloud. A tribute to human ingenuity and vision and tenacity—bordering on hubris—this is a trip highly recommended and well worth experiencing.

was quite different, not only from the weather down below, but also from the previous day. The cloud cover was very dense. Walking away from the building, after the fifth pace it was no longer in sight! The wind was high and within a short while we were soaked and cold. Fortunately we had packed additional clothing, so that we could be both warm and waterproof for the search. However visibility remained a problem. While it changed from one minute to the next, there were long sections when there was no visibility beyond a few paces, and often it was not possible to see the next cairn on the trail.

This was no time for hiking along unfamiliar trails—the title, "No country for old men", came to mind. However, that was not as much of a problem as might be supposed. Judging by where it grew on Mt Ignoble, the habitat at the summit, beside the buildings and beside the road, seemed eminently suitable for our mushroom. Thus, we had access to much real estate as likely to yield the object of our quest, as any in the area. We stayed close to each other and close to buildings or visible roads. Again, several interesting finds, but no fairy, alas. When the last train went down we were on it, richer for the adventure, but quest unfulfilled.

The next morning the conditions were unchanged, with more of the same to be expected, and the possibility of lightning thrown in. After much contemplation of what is meant by "the better part of valour", we decided our most prudent course would be to set off homewards: two days arriving, two days on the mountain and two days leaving makes for almost the week we had planned.

In addition to an untold diversity of lichens, we noted the following mushroom species during the two days: species of *Cortinarius*, *Inocybe*, *Lactarius* and *Russula*, most of which we did not identify, an unidentified small *Galerina* in moss, *Arrhenia* cf. *obscurata*, *Clavaria argillacea*, *Deconica chionophila*, *Hygrocybe conica*, *Hygrocybe lilacina*, *Lichenomphalia umbellifera*, *Ramariopsis subarctica*, *Rickenella fibula*, *Xeromphalina cauticinalis*. The *Arrhenia* is under investigation because there is a small possibility that it may be a dried up version of our reclusive nymph. I doubt it, but…

Two other interesting finds deserve comment. One small coral mushroom reminded us of *Ramariopsis subarctica*, a species just reported from Newfoundland's Great Northern Peninsula as its first record in North America.[1] The

Rasmariopsis subarctica *on the left. To our knowledge, this is the second report of the species from North America.* Deconica chionophila *on the right. The mushroom is hygrophanous and this specimen is dry despite the high humidity in the clouds. The photo, not meant to demonstrate the appearance of the mushroom in its prime, shows the dead moss around it—a helpful identifying character.*

Mt Washington specimen was considerably smaller, and although its stem did have some hair, it was not nearly as hairy as described. Subsequent microscopic examination showed it to fit exactly with *Ramariopsis subarctica*, so that we guess that this may have been an immature specimen that had not formed the characteristically hairy stem yet. Typical, within a month of describing the first, comes the second continental record of the species.

The other interesting find, and quite common, was *Deconica chionophila*. This species was earlier known as a *Psilocybe*, but that genus was divided into two on the basis of phylogeny studies, with all non-psychoactive species ending up in the staid genus *Deconica*. In our northern wooded regions we find a very similar species, *Deconica montana*. They look similar, but mating studies have shown them to be distinct species. *D. chionophila* differs from *D. montana* by being of slightly smaller stature, by being found in un-wooded and more alpine environments, by being a weak moss parasite with dead moss around its growth site, and by having slightly bigger spores. All of these characters fit with the species we found on Mt Washington.

From the allusions to microscopic findings you can guess that these specimens were collected. In fact, we made four collections: *Arrhenia* cf. *obscurata*, *Deconica chionophila*, *Ramariopsis subarctica* and *Xeromphalina cauticinalis*. The unwelcome news on arriving home was that a permit to collect, despite contrary appearances, had not been processed. On request, a form was e-mailed to us retroactively, which we have filled out and returned, so that hope remains that all can still be set aright. However, should this be the last issue of Omphalina you receive, it may be because at least one of us is spending time in the hoosegow. A few years of government upkeep will allow us to recoup the cost of our fruitless fairy chase. Our medicines alone could bankrupt the system.

There is a lesson here, of course. Limit your interest in mushrooms to what you can eat. Should you get curious about them beyond that, you may end up in the jailhouse. Oh, opprobrium!

Acknowledgments

Our gratitude to Susan Golhor and Aron Bernstein for their hospitality and to Susan for her generosity, help, and, above all, capacity to worry. We thank Larry Millman and Rick van de Poll for their assistance and Larry for his companionship.

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Potential lethal poisoning by *Amanita bisporigera*

Corey Stein, Peter Wu, James Scott, Adina Weinerman

Although amatoxin poisoning is the commonest cause for serious problems or death from mushroom poisoning in North America,[1] it is still encountered rather uncommonly in Canada. Because of this, we published the results of a recent such encounter,[2] and offer a summary here in the belief it is also of interest to the mycophile community.

A previously healthy 52-year-old immigrant woman presented to the emergency department at 7:00 am in early August with abdominal pain, nausea, vomiting and diarrhoea. Approximately 12 hours earlier, she had harvested wild mushrooms from a local park with her husband, who had previous foraging experience. She ate some, but nobody else ingested the mushrooms. She brought a sample of the mushrooms with her to the emergency department. She had no other significant medical history and was not taking any prescription medications, over-the-counter medications or alternative supplements.

The following morning, the mushrooms eaten by the patient were identified as *Amanita bisporigera*, a known hepatotoxic species. Local public health authorities were contacted to help identify the location of the mushrooms and prevent further public consumption. Meanwhile, the patient's liver function tests progressively worsened. Approximately 36 hours following ingestion, she was transferred to the intensive care unit and the liver transplant team was contacted. An expedited pre-transplant work-up was completed and she subsequently underwent an urgent deceased-donor liver transplantation. There were no complications associated with the procedure. Her post-operative course was unremarkable aside from pneumonia which was treated with a course of oral antibiotics. She was started on immunosuppressive therapy and discharged home 10 days following transplantation.

Over 20,000 mushroom species are currently recognized and estimates of up to one million undiscovered species have been proposed.[3] Despite this sizeable biodiversity, only a few hundred named species have been reported as poisonous to humans.[4] Amongst those most poisonous of mushrooms, several members of the genus *Amanita* are

responsible for the majority of deaths from mushroom toxicity: these include *A. phalloides* (accounting for greater than 90% of all fatalities), *A. verna* and *A. virosa*.[1] The culprit in this case report was *A. bisporigera* (cover photo and title banner). *A. bisporigera* has a mycorrhizal relationship with deciduous trees and fruits from late summer through to fall; it is commonly found in eastern North America.[1,4]

Due to the likely high number of underreported cases, the true incidence of mushroom poisoning is unclear. In the United States, approximately 6,000 toxic mushroom exposures occur annually, the vast majority associated with only mild symptoms.[5] In Western Europe, mushroom toxicity is more common with 50-100 fatal cases reported annually.[1] When serious toxicity does occur, as in this case, it is typically in the setting of foraging adults who misidentify a toxic mushroom with morphology similar to a known edible species.

The clinical presentation of amatoxin poisoning classically occurs in three phases.[6] The first phase is characterized by severe gastrointestinal symptoms including nausea, vomiting, abdominal pain and diarrhoea that occur 6-24 hours after ingestion.[6,7] The second phase lasts from 24 to 48 hours and is considered a false recovery period since symptoms typically improve.[6,7] It is during this phase, however, that mushroom toxins damage the liver.[7] Finally, the third phase, occurring after 48 hours, is characterized by liver dysfunction. It is during this phase, as well, that kidney failure may also develop.[7]

Unfortunately, currently there is no proven specific antidote for treatment of amatoxin poisoning. Deaths still occur, as do examples of survival with significant emergency intervention, carrying their own life-time morbidity. Distinguishing safe from harmful mushrooms is a challenge even for mycologists and people should be counselled that many mushrooms can be very similar in appearance. This is especially important for immigrants who might mistake local poisonous mushrooms for familiar edible species from their native land. Please be careful and forego a meal, if unsure. And please educate others to do the same.

Photos: Andrus Voitk

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***Side bar illustrations**: The many faces of* Amanita bisporigera *in NL. Young mushrooms may resemble an edible puffball. Cut it open to reveal the developing stem and cap, not spores. Both ring and volva may be eaten by slugs—they have no liver, so cannot poison it. Free gills, ring, volva and white sporeprint = STAY AWAY! In fact, if you are not sure, do not eat any fleshy white mushroom.*

The Bishop's Sketchbook

Daldinia loculata

Andrus Voitk

A past issue of Omphalina (vol 4, nr 1) presented a dozen pyrenomycetes that you might identify by sight. Since then I have met a few more that could join this list. This recent find might be added, although greater experience would increase the certainty.

Daldinia loculata is quite distinct in appearance. It has a very large pyrenocarp (pyrenomycete fruiting body), compared to most of our pyrenomycetes. The largest intact fruting body measured 26 mm in its longest diameter. Black, shiny globules of this size, growing out of lenticles of dead birch in your wood pile are unlikely to go unnoticed.

If you cut one open, as in the left lower corner of the banner photo, you will see concentric rings in the stroma. The perithecia (large, flask-shaped cavities containing the asci) are located in the outer ring.

The reason identifying something this striking is uncertain, is that—as you no doubt suspect—the genus contains a complex of many similar species. Knowledge of distribution and host are an aid to identification: occurrence in the north, growth on birch logs, and spore size of this one make *Daldinia loculata* the most likely species. Said to be common, this is the only *Daldinia* I have seen (recognized) here in over 15 years, so my familiarity with the species is limited. You may see many similar pyrenocarps being lumped into *D. concentrica*, although currently that is thought to be a European species.

The lower photo shows both ends of the branch at the pyrenomycete's point of attachment, revealing the dark "spalting" of the border its mycelium had outlined in the wood as its territory.

Apparently the cervid pattern is not a recognized identifying character.

This message from the woodpile is not motivated by a wish to hurry on with the season, although I daresay for once I have gotten to a Christmassy message even before the carols begin in the supermarket. Rather, the premature intrusion of holiday wishes is the result of uncertainty about the next issue or two of Omphalina. Many things are in preparation and it is difficult to predict what will be ready when. We at the Editorial Suites and Offices need to be ready to go with the flow, roll with the punches, take it as it comes.

Ahead lies our Foray Report issue, with a real risk that it may not get ready to go out the door before December month. It is unlikely to have room for the customary holiday greetings. Another weighty monographic issue with no room for greetings is also looming on the horizon, so even if, etc., etc. Long story short: better some warm wishes now, than miss the wish for this year.

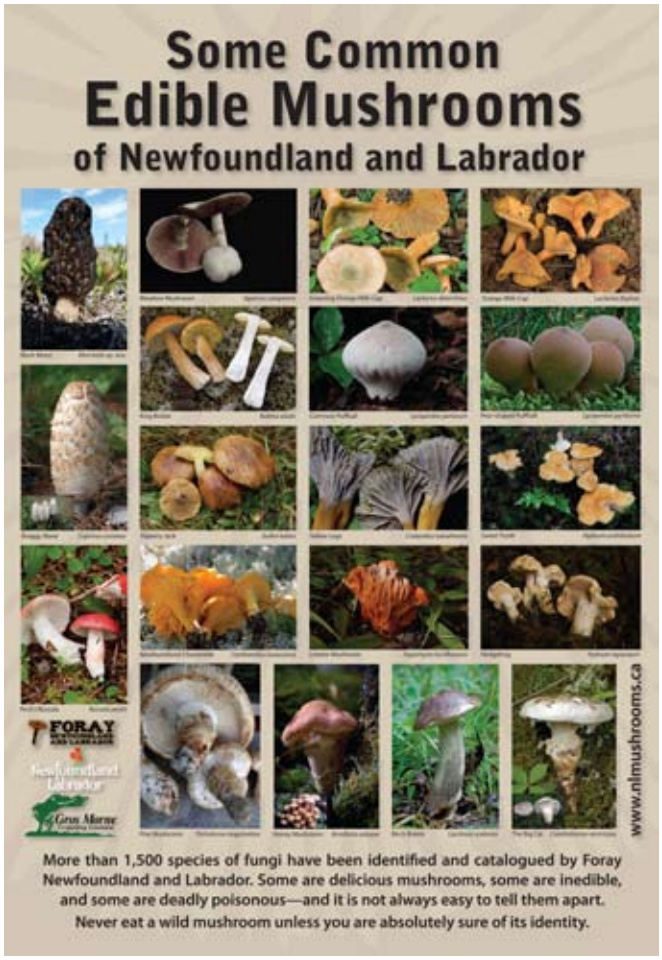
What if Christmas is not your thing? My suggestion is to be like the tireless but unsung workers milling about the Editorial Suites—roll with the punches. No matter what you celebrate or don't celebrate, at least in the Northern Hemisphere where we live, by the time the new year rolls in, you know that you have successfully, yet again, broken the back of the dark season, and every passing day will bring in more light, more warmth. For us in the latitudes of the Editorial Suites, the darkness that covers the Earth is very palpable, and breaking its grip worthy of a victory celebration. Let the trumpet sound, let the bubbly flow, let the fire crackle, and may your hearts be warm, your spirits joyful!

Happy Christmastide & a mycoprosperous 2016!

from the Editor-in-Chief, Associate Editors, and all the staff diligently toiling away in the luxurious Editorial Suites and Offices of Omphalina.

IDEAS FOR CHRISTMAS PRESENTS

Foray Newfoundland & Labrador poster of edible mushrooms



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FORAY NEWFOUNDLAND AND LABRADOR

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The second decade

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Photo: Muskrat Falls, Labrador, Mavis Penney