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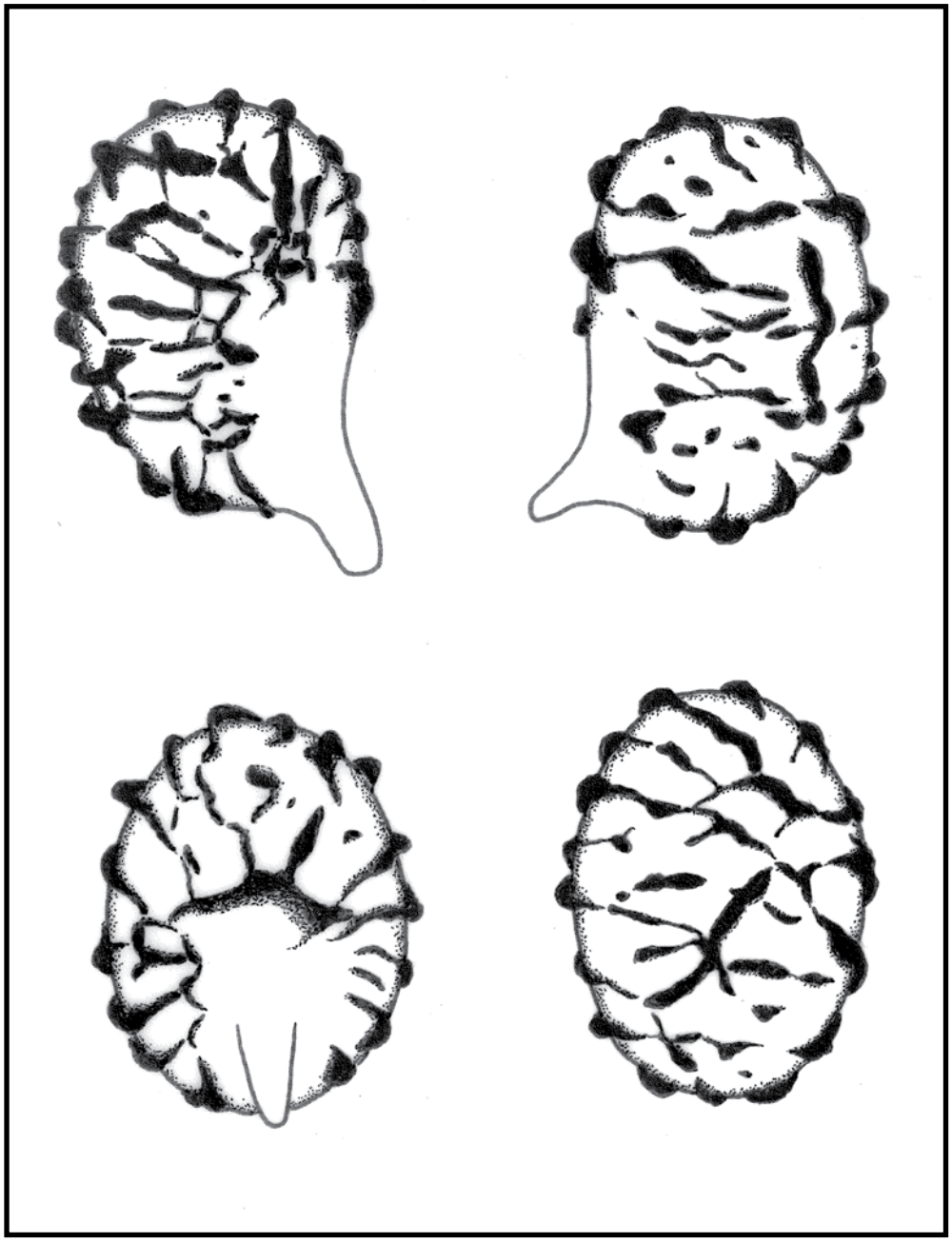

Newsletter of FORAY NEWFOUNDLAND AND LABRADOR Vol. VIII, No 5
Aug. 3, 2017

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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COVER

Lactarius splendens spores, drawing by Mieke Verbeken. We do not expect most of our readers to be microscopists, but we thought even non-microscopists might find microscopic findings interesting on occasion, and the drawing possesses a beauty beyond its accurate depiction of spore morphology, something which should appeal to the aesthetic sensibility of microscopist and non-microscopist, alike.

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CONTENT

Message from the Editor

Summer is here with conviction and sincerity. Three weeks to foray time. As I write this, there are still a few places available, so if you have not registered and plan to attend this year, better do it to-day.

Do not forget the mycoblitz for registrants at Barachois Pond Provincial Park on Friday at noon, before the Foray. See next page for details, as well as maps for registration, page after.

This is the last issue before the Foray. For those not participating this year, your membership lapses with this issue. If you should like to continue getting Omphalina issues as they appear, please download and fill out a Membership Form from our website, and send in with the fee. Should you decide this is the time to part ways, thank you for the joint journey, and good luck on your leg forward. Future issues will, of course, become available for free download from our webiste.

We are pleased to open (after the Foray notices) with another discovery, formally reported to the scientific world, that had its beginnings in research into our own collection. And we close with a snippet from work in progress, showing the contribution of partners to this effort. The scientific contributions of the Foray go well beyond an enjoyable week-end.

See you at the Foray!

andrus

FORAY MATTERS…

Barachois blitz

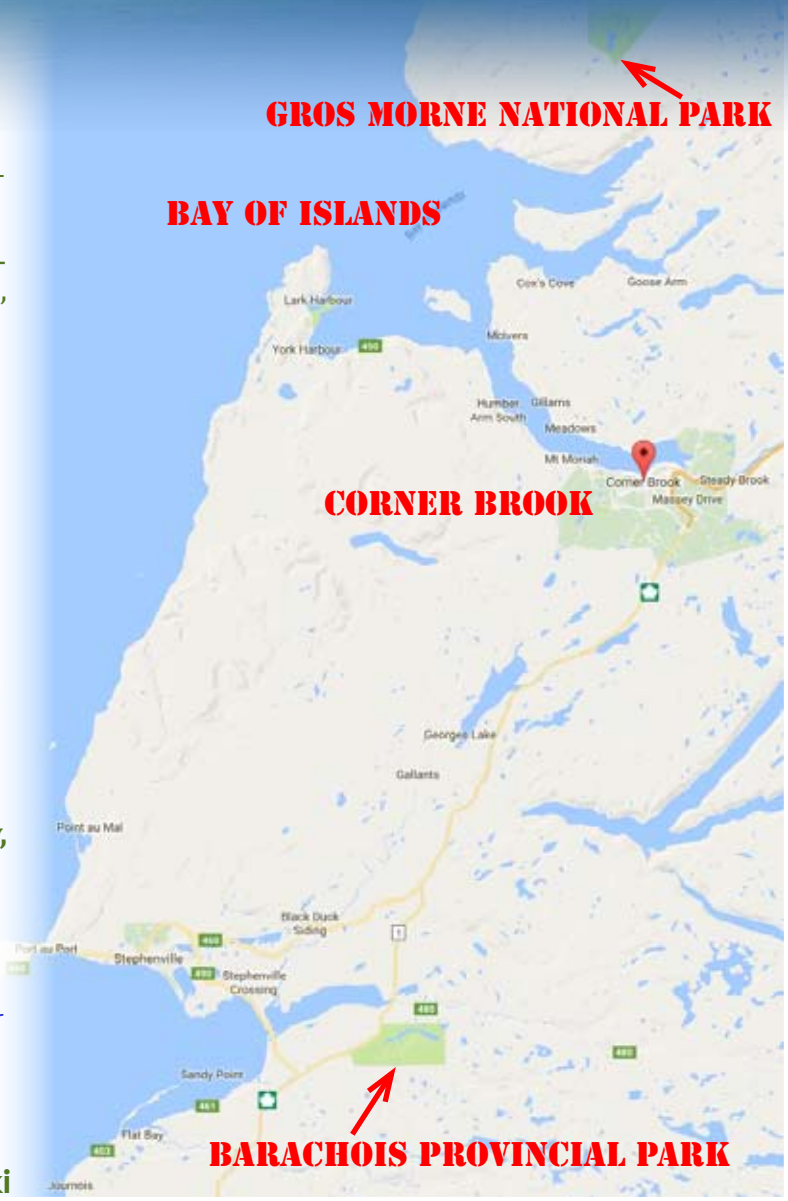
Do not forget to come to the Barachois Blitz—details in the last issue, map for directions on the Right. **Meet by the Park Administration Building about 11:45 AM**. At 12 noon, sharp, we shall divide into teams to explore the Park for a mycologic all-taxa census. To allow time for sorting, identification, databasing, photography, etc., and still have time for the reception and presentations, we need to leave the Park before 3:00 PM. Please bring your own water and lunch to eat on the trail. Driving time, Park to Campus is about 1 hr.

Registration

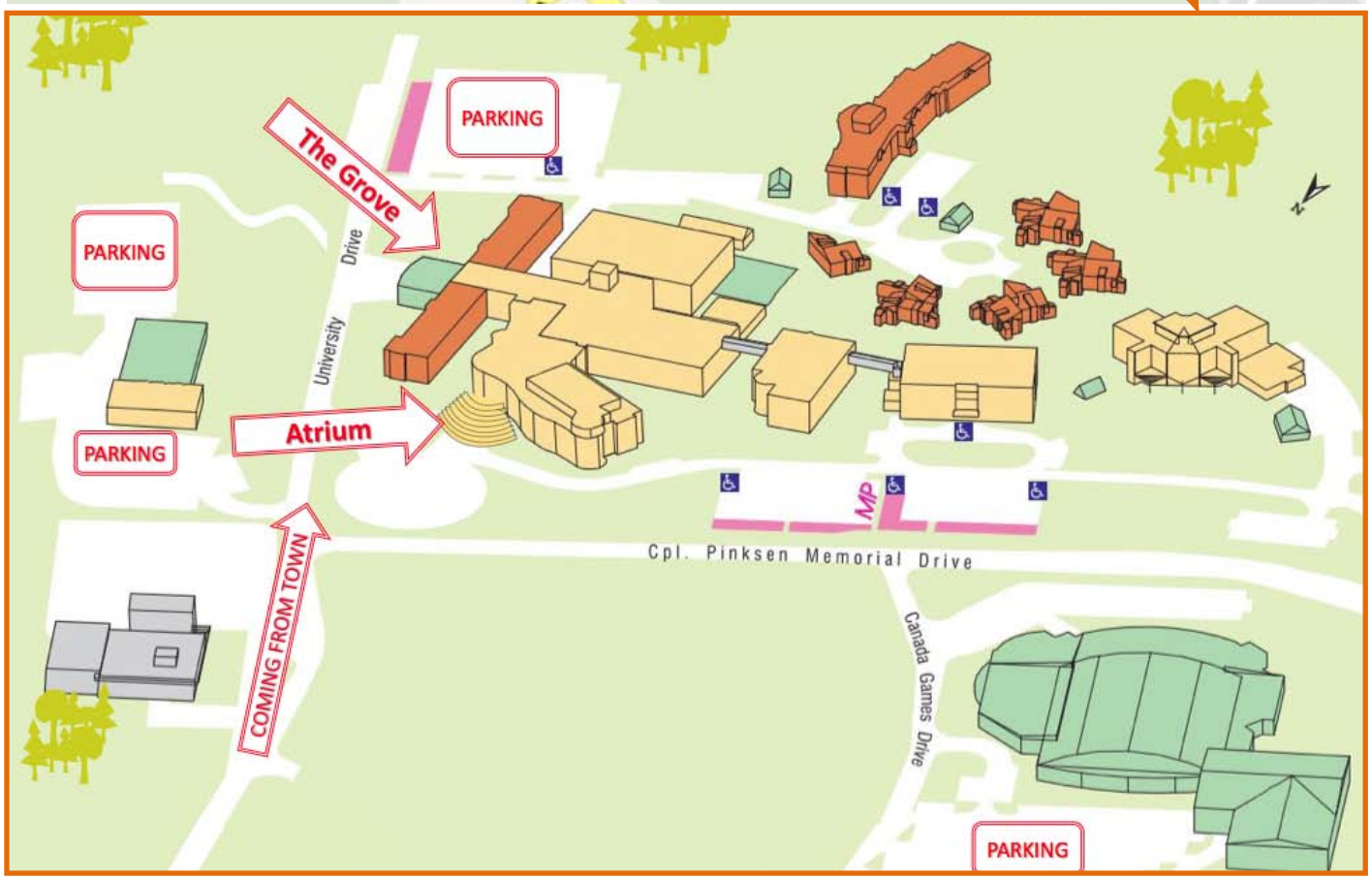
On-site Foray registration will take place at the **Atrium on Sir Wilfred Grenfell Campus** in Corner Brook, **4:00pm–6:00pm on Friday, August 25**. For directions, please see maps, next page.

Our website <nlmushrooms.ca> has a downloadable **Registration Form**, and other important **information**. Further notices or information about the Foray will appear there, or will be sent to registrants by e-mail.

Michael Burzynski

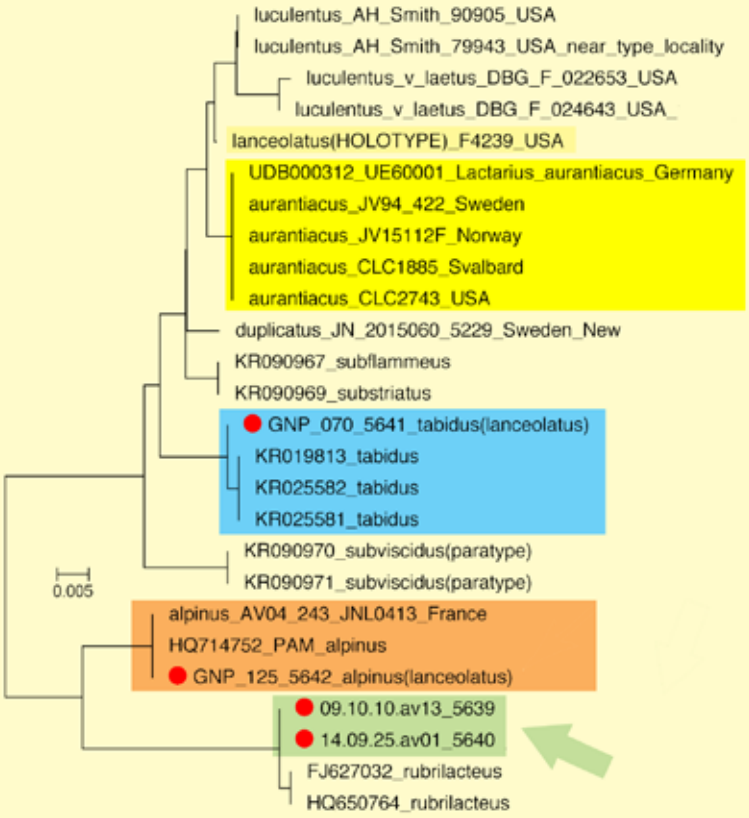


NOTE: Maps oriented in “driving view”, uphill at top, NOT North.



Lactarius splendens

Jorinde Nuytinck,
Annemieke Verbeken,
Irja Saar, Henry Lambert,
Jean Bérubé, Andrus Voitk



Those of you, who memorize every immortal word and picture in Omphalina, no doubt immediately remember the phylogenetic tree in our title banner from the April, 2016 issue, which featured the graceful *Lactarius alpina*.[1] At that time, the focus was on the tan box, showing the place of that species among its relatives, including many similar species. The green box, immediately below it, was at that time thought to be an unknown species that the authors intended to pursue. That pursuit is now over, and it is the species in the green box that has the arrow this time: *Lactarius splendens* Hesler, A. H. Sm. We have just published an account of this species as the second known species with white latex in section *Deliciosi* of *Lactarius*.[2] Section *Deliciosi* is named after the European *Lactarius deliciosus*, and is characterized by species with orange-to-reddish latex. Hitherto, only one species with white latex was known to belong to this section, the European *L. porninsis*.

You probably think that science is made by carefully planned study, and that we discovered this in the course of a formal investigation of all NL *Lactarius* species belonging to section *Deliciosi*. Not so. There actually is such a study going on, with the collaboration of Andy Methven, Andy Miller, Irja Saar and Jorinde Nuytinck, but because this species does not have orange latex, nobody knew to include it in that review. No, the story of how this discovery was made is a classic illustration of how science is really done.

Since her tour of service as part of our faculty at the 2007 foray, Jorinde has kept in touch. Thus, January, 2016, she asked AV for certain *Lactarius* specimens for a project of one of her students. At the time, AV was looking again at a small group of orange *Lactarius* species that he had been unable to identify, even with good help. They were too pretty to discard. Ever the opportunist, he answered Jorinde that the specimens she requested had a fee: sequence and identify these 4–5 orange collections as well! Shocked at such blatant extortion, JN had no choice but to give in for the good of her student. The rest is history.

Out of this little arrangement we discovered that *Lactarius alpinus* grew in our province. And we found this "unidentified species". JN consulted with her former doctoral supervisor, Mieke Verbeken, who remembered seeing one such mushroom on a foray in Québec, which she had tentatively identified as *Lactarius splendens*. The description of that species fit ours well, and when we sequenced its type specimen, we were pleased to learn that, indeed, ours was the same species.

The story does not end there, because, although stirring, a report that some people in NL have identified two mushrooms they did not know before, is not deemed sufficiently significant to grace the pages of one of the finest scientific publications devoted to mushrooms and other things like that.

No, once we had the DNA of our mushroom, we placed it in a tree of *Lactarius* species, and, to our surprise, this beautiful little mushroom species, which we knew to have white milk, fell into section *Deliciosi*, the group with orange milk. As mentioned, only one white-milked species of *Lactarius* is known to

Figure 1. Lactarius splendens. *A. Collection near L'Anse l'Amour, Labrador. B Collection near Baker's Brook Falls trail, Gros Morne National Park, Newfoundland. C. Collection near Rimousky-Neigette, QC. Note* Sphagnum *and larch needles on photos A–C. E–H: microscopic appearance of spores, basidia, cystidia and pileipellis. Source: Ref. 2.*

belong to that group, one producing larger and somewhat different fruiting bodies. The interesting thing is that both these white-milked species of section *Deliciosi* grow with larch. Larch is an unusual partner for *Lactarius*, so there must be something more than mere coincidence, but what, we do not know. Anyway, it was the discovery of a second white-milked species in *Deliciosi* that merited reporting as a new discovery. If you want a copy of our report, please ask, and we shall be glad to send you one. Otherwise, enjoy the descriptive (Figure 1) and comparative (Figure 2) photos of the species on these pages.

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Figure 2. *From above down:* Lactarius alpinus, L. tabidus, L. splendens. *Superficially all look like similar orange-yellow small* Lactarii, *and one might be forgiven to think them one species. Careful comparison reveals several differences: stem height / cap diameter ratio ≥ 2 for* L. alpinus, *≤ 2 for the other two.* L. alpinus *grows in wet soil under mountain alder (*Alnus alnobetula *ssp.* crispa*); the other two grow in* Sphagnum, L. tabidus *with birch (small leaves of* Betula michauxii *can be seen in upper part of photo), ad* L. *splendens with larch in* Sphagnum. *The cap of* L. alpinus *is dry, rough and minutely scaly, that of* L. tabidus *is smooth, viscid to mucinous, and that of* L. *sp is smooth and somewhat gelatinized, most noticeable over the disc.*

Source: Ref. 1.

Orange rust of dewberry: Arthur or Gym?

Henry Mann

Naturalists spend much time outdoors wandering nature's pathways and noticing its vagaries. Some are familiar and these we take pleasure in revisiting as the seasons progress. Others are first time or even repeated observations, but are matters of which we have little knowledge and understanding. These may often be conveniently dismissed, knowing full well that nature has innumerable complexities and secrets, just too many for one individual to contemplate, let alone to investigate. Yet for some of these there are experts and specialists who have delved deeply into their structure, physiology, molecular biology, taxonomy, ecology and others aspects and we may expand our understanding by consulting them.

When something catches my eye and I am in an inquisitive frame of mind, I sometimes look into these observations more closely, especially attempting to determine the organisms involved and how they fit into the ecology of their surroundings. This is one such attempt. The following brief account is mainly for other naturalists who may or have made similar observations. If for no other purpose, this note may add a tiny bit to the knowledge of the commonness and distribution of our local flora and "funga".

Dewberry (*Rubus pubescens*), also known as dwarf raspberry and plumboy, is found throughout our Newfoundland forests and sometimes in open moist fields and headlands. Only about 25 cm tall, it appears to be an herbaceous plant dying back each fall, but really is a small sub-shrub with woody bases close to the ground. Flowering stems are upright as are the compound leaves each of 3 to 5 leaflets arising from runner-like stems (Figure 1). In some open woody sites plants may form complete carpets of leaves. In early to mid-June when plants are blooming along the Pasadena trails, smaller misshapen leaves can be noted in some patches (Figure 1). On the undersides of the leaflets brilliant orange patches can be seen (title banner). Examining some of the orange material with a compound microscope at 400x reveals the spherical to broadly ellipsoid orange spores of this rust fungus (Figure 2).

Orange rust is a disease of black raspberries and blackberries, but some other *Rubus* species like dewberry can also become infected, but apparently not the red raspberry (*Rubus idaeus*). Once plants are infected they remain infected for life. The rust does not kill the plants outright, but they become deformed and flowering and fruiting is severely reduced. According to a number of sources, orange rust of *Rubus* is caused by two or three different rust fungi or variants of the same rust fungus depending on how one wishes to pigeonhole the evidence. Rusts are in the same general group as the cap-and-stem mushrooms (Basidiomycetes), but produce no mushroom-like structures, are parasites of plants, and have complex life cycles with up to five different kinds of spores. Some, like the white pine blister rust, have life cycles which require infections of two different hosts (e.g. white pine and currants). Others, like the orange rusts, can complete their life cycle on a single host.

Figure 1. *Healthy Dewberry plant in bloom, early to mid-June, above, and infected plant, below: normal leaf on left, deformed leaves and orange rust and on right. Rust pustules seen in title banner.*

So, what is the scientific name of our Pasadena plumboy orange rust fungus? Here is where things get interesting or confusing depending on one's familiarity with rusts. The story seems to be as follows. Orange rust has two official scientific names, originally considered a single species, but now treated as two separate closely related species (forms), which cannot easily be distinguished by their looks alone. Superficially, their infections look identical. As is especially common in botany and mycology, independent individual researchers gave them different names, which, as the rusts became better understood, became synonyms of the one official name of each.* One form has a short infection cycle and predominately is a parasite of blackberries and dewberries. It produces orange spores (aeciospores) in spring, which are splashed by raindrops to nearby plants to produce an early infection. This form is named *Gymnoconia nitens*. The other form predominantly infects black raspberries and its spring orange aeciospores do not infect directly, but develop into other spores (teliospores) which infect plants later in the season. Its infection cycle is more lengthy and complex, so it is referred to as the long cycle form. Its name is *Gymnoconia peckiana*. To add confusion,

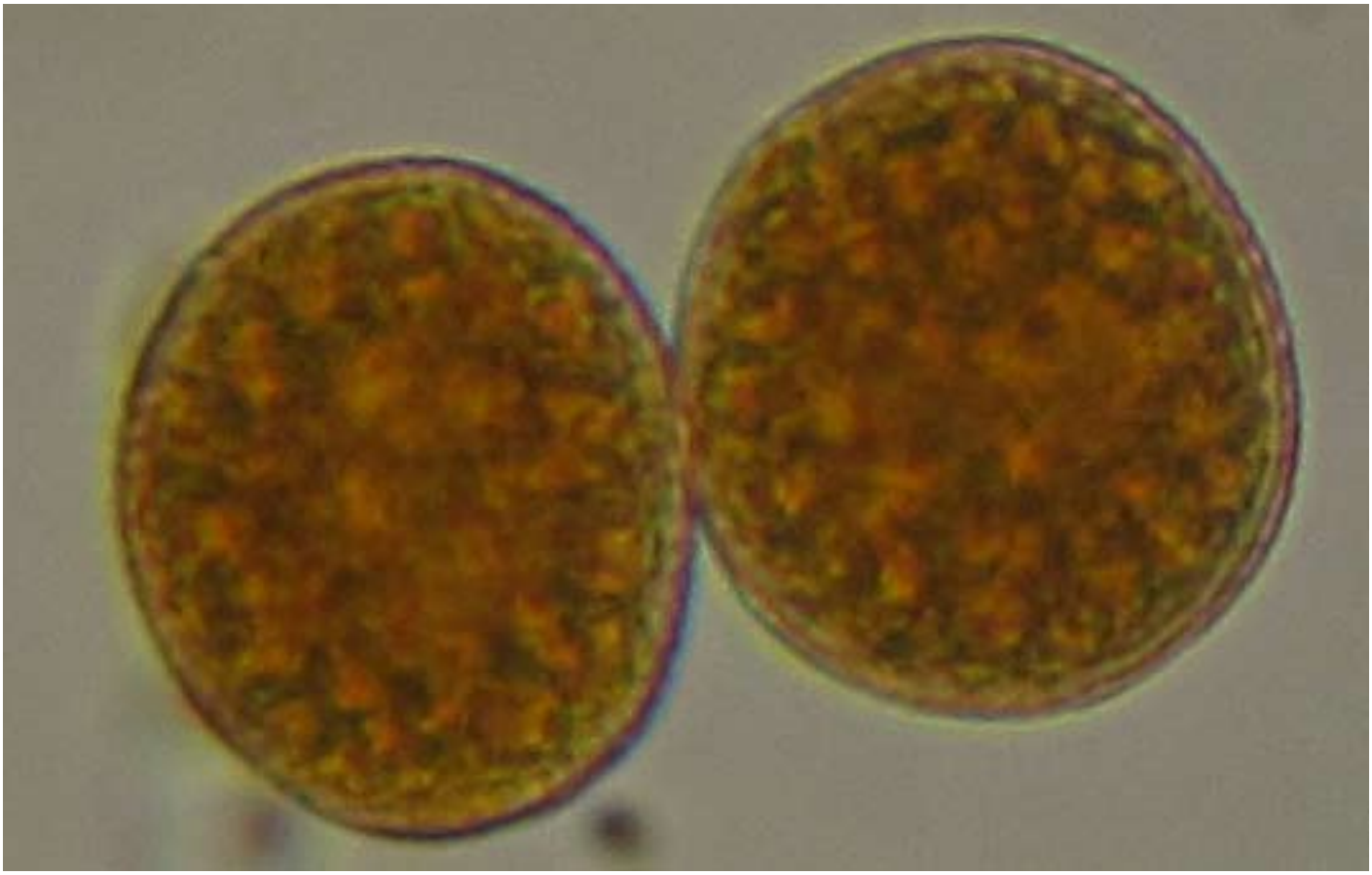

Figure 2. *Two orange aeciospores of the orange rust fungus, original magnification 400 ×.*

some recent authors use the name *Arthuriomyces peckianus* when referring to the long cycle form. The preferred usage is *Gymnoconia peckiana*, which clearly indicates the long form and the short form are closely related species in the same genus. In order to positively identify the long cycle form from the short cycle form, spores must be germinated to follow their development, or by DNA analysis.

But yet another twist. Apparently *Gymnoconia nitens* (the short cycle form) itself has two forms whose life cycles differ a bit, but as yet have no scientific names. So in anthropomorphic terms, *G. nitens* may really be two fraternal twins, so closely resembling one another that they appear as identical twins who cannot be distinguished without some difficulty.

Then, what is our Pasadena orange rust? I doubt many Omphalina readers have a great need to know. "Orange rust" is probably good enough for most, but my guess is one of the *G. nitens* twins, because this form is known to preferentially parasitize dewberries and blackberries. Having satisfied my curiosity to this level, it is enough for me and now is the time to move on to another one of the myriad of other observations awaiting in the Pasadena woods.

* Although probably not of particular importance or interest to naturalists, here are examples of the most common synonyms of each:

Gymnoconia peckiana (the long cycle form) – *Arthuriomyces peckianus, Gymnoconia interstitialis, Puccinia peckiana*.

Gymnoconia nitens (the short cycle form) – *Kunkelia nitens, Caeoma nitens, Aecidium nitens*

Acknowledgment

I thank Cathie Aime for her review and comments about the article.

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The empty skillet

BRAISED BEAVER WITH CHANTERELLES

Robin McGrath

The last of the 2016 chanterelles emerged from the bottom of the freezer towards the end of June, prompting this Empty Skillet cook to plan a suitably mushroomy feast for Canada Day. And what better way to celebrate our 150th birthday than to eat a beaver?

INGREDIENTS

2 lbs. beaver, disjointed
1 lb fresh or frozen chanterelles, sauted
2 medium onions, chopped
2 to 3 cloves garlic, chopped
A large glutch of red wine
Several tablespoons of flour
Several tablespoons of oil
1 cup hot water
Bay leaf and fresh rosemary
Salt and pepper to taste

PROCEDURE

Catch, skin and gut a beaver (careful not to pierce the musk sack). Sear and skin the tail and set aside for another day. If it is a large beaver, distribute some meat to friends and relatives, retaining several pounds for the home pot. (If a beaver is not available, lamb shanks make an agreeable substitute.) Dust the beaver with a little flour and sear in oil at a medium high heat. Remove the meat into a casserole dish and add the onions to the remaining oil. Sauté onions for a few minutes until translucent, then add the chanterelles, garlic, bay leaf and rosemary. Heat thoroughly, then add a cup of hot water and a generous dollop of red wine (or two tablespoons of cider vinegar). Pour the onion/mushroom mixture over the beaver and cook at 350 degrees for two hours or until the meat is tender to a fork. Salt and pepper to taste. Serve with rice or potatoes, a green vegetable or salad. An appropriate desert might be baked rhubarb with ginger and cinnamon, spooned over ice cream or yogurt.

Lichens from the Pruitt-Murray collection — 4

Yolanda Wiersma
Rachel Wigle
Tegan Padgett

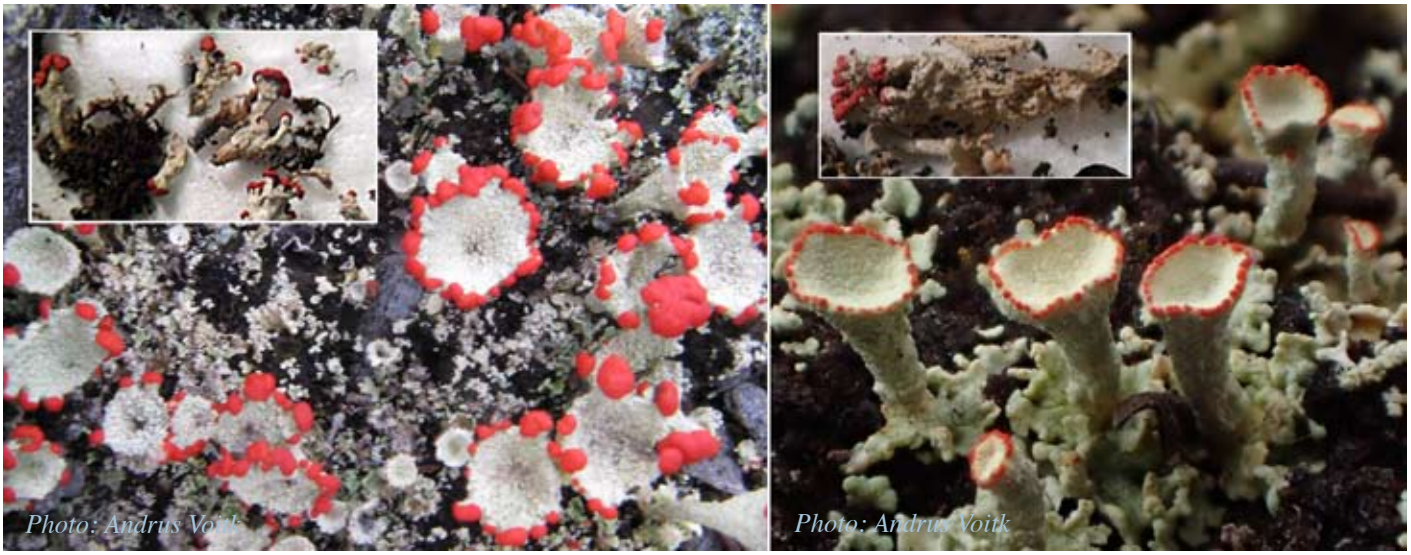
This issue's feature from the Murray-Pruitt collection highlights two pairs of *Cladonia* species, which look somewhat similar, and require a few specialized techniques to discern which is which. As readers of Omphalina know, Foray NL members recognize lichens as the fungi they are. Excellent introductions to a number of our province's more charismatic lichens have been provided in the Downhome magazine,[1] and Omphalina, although photo labels of some of these may not be 100% accurate. For example, Mac Pitcher[2] highlighted two sets of look-alikes, *Cladonia deformis* and *C. sulphurina*, along with *C. borealis* and *C. coccifera*. He noted that chemical tests are needed to discriminate and that "not all lichens shown have been tested to make sure of the identification." Here, we hope to help clear up some of the confusion between these. Interested readers in this genus can also refer to a key to the common *Cladonia* in our province that accompanies an article by Ahti and McCarthy.[3]

Photo: Jim Cornish

The title banner depicts the joy of discovery. After the senior author's son, Xavier, first saw the positive reaction on shining UV light upon C. sulphurina, *he held the UV light aloft and shouted to all the heavens, "Hallelujah! I have seen the light!"*

It is a scientific fact that owners take on the countenance of their pets. So, too, do lichens take on the countenance of those who study them. Note the similar unbridled jubilation on the face of a young C. sulphurina *(L), on having his portrait taken, shouting—after the flash had fired—for all the forest to hear, "Hallelujah! I have seen the light!" Just as in the case of the upper photo, the joy in her offspring's face brought a tear to his mother's eye.*

Cladonia borealis S. Stenroos vs. *Cladonia coccifera* (L.) Willd.



Cladonia borealis, *(L), and* C. coccifera, *(R), with P-M collection specimens in inserts. The P-M collection specimens were identified by chemical testing, and are, therefore, assumed to be correct, whereas the in-situ specimens were identified morphologically, leaving generous room for argument, debate and doubt.*

On a first, very casual glance, as you step over it, *C. borealis* looks like one of the myriad red-capped pixie-cups found all over our province. *Cladonia borealis* stands about 10-40 mm tall, and is yellowish-green, with distinctive red apothecia which are on the margin of the cups and a bright red. The apothecia are narrow and tapering at both ends, giving them a spindle- or cigar-like shape . The podetia have rounded areoles or plates (patches of vegetative tissue containing algae and cortex), sometime on the outside of the cups and down the podetium. It is found across the boreal region and extends into montane and arctic regions. It is usually found on mossy boulders and rocks (it has even been known to occur on lava) or thin soil in open sunlight. It was first described by Stenroos in 1989[4] as distinct from *C. coccifera*.

Cladonia coccifera is nearly identical to *C. borealis*; the only difference being that *C. coccifera* contains zeorin and *C. boralis* contains barbatic acid. *Cladonia coccifera* is also more typical in arctic-alpine regions. Normally, one needs to run thin layer chromatography (TLC) to identify the presence or absence of these secondary chemicals. However, because our specimens are older, the zeorin has crystalized on the outside of the podetia, visible with a hand lens as small, clear, needle-like crystals.

Hinds and Hinds[5] state that *C. coccifera* is quite common in eastern North America, while *C. borealis* is rare in the east and common in the west. Brodo et al.[6], however, describe *C. coccifera* as "much rarer" relative to *C. borealis*. A search of the literature reveals records of *C. borealis* from such diverse localities as Poland, Slovakia, Turkey and Antarctica. It is indeed a well-travelled species; recent phylogenetic work[7] suggests that *C. borealis* colonized King George Island in Antarctica at multiple points in time following long-distance dispersal. Other work[8] suggests that *C. coccifera* is indeed, the rarer of the two. *C. coccifera* is not the only species of *Cladonia* containing zeorin; other species (including *C. deforimis*, described next page) have zeorin and are morphologically distinct. However, molecular work reveals some phylogenetic incongruence[9] – stay tuned while the taxonomists work this group out!

Both specimens were collected by Murray and Pruitt in the vicinity of Twin Falls Airport but neither was recorded on the Labrador Foray. The Consortium of North American Lichen Herbaria <http://lichenportal.org> lists a collection of *C. borealis* from just outside Goose Bay, as well as around Churchill Falls, in the Schefferville area and one near Hebron, as well as multiple collections of *C. coccifera* from various locations in Labrador.

Cladonia deformis (L.) Hoffm. vs. *Cladonia sulphurina* (Michaux) Fr.

Cladonia deformis, *top, and* C. sulphurina, *below, P-M collection specimens on (L), and in-situ photos on (R). The P-M collection specimens were identified by chemical testing, and are, therefore, assumed to be correct, whereas the in-situ specimens were identified morphologically, leaving some room for doubt.*

Cladonia deformis and *C. sulphurina* are two of our many, pretty "pixie cup" lichens (bright red apothecia around a cup on a stem), which you may have encountered in the classical lichenological literature.[1, 2] Both can grow up to 85 mm in height with rather narrow cups, smaller/sparser apothethia, and podetia covered with powdery soredia, and are usually found on rotting wood or in damp, acidic soil. *Cladonia sulphurina* has squamatic acid in the medulla which gives a UV+ reaction when the cortex is scraped away. The name "deformis" suggests something about the shape, though Brodo[3] notes that *C. sulphurina* has the more irregular shape of the two and frequently has split or misshapen stalks. Both species extend throughout the boreal and southward into Arizona and both were recorded during the 2016 Labrador Foray.

Acknowledgements

Thanks to Troy McMullin for assistance with identification and Jim Cornish and Andrus Voitk for in situ photos.

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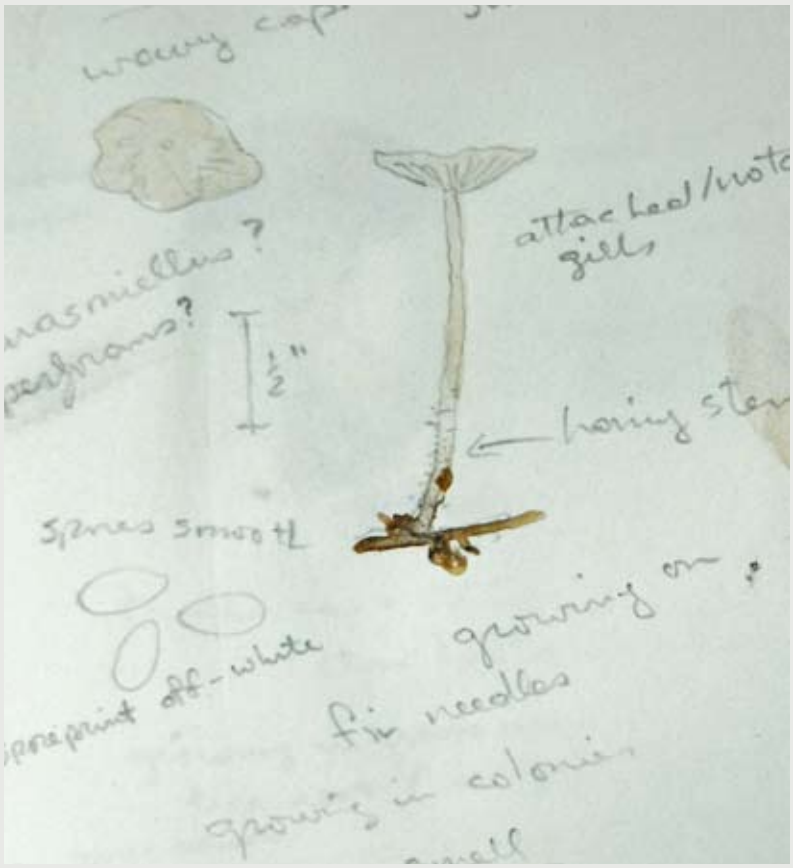
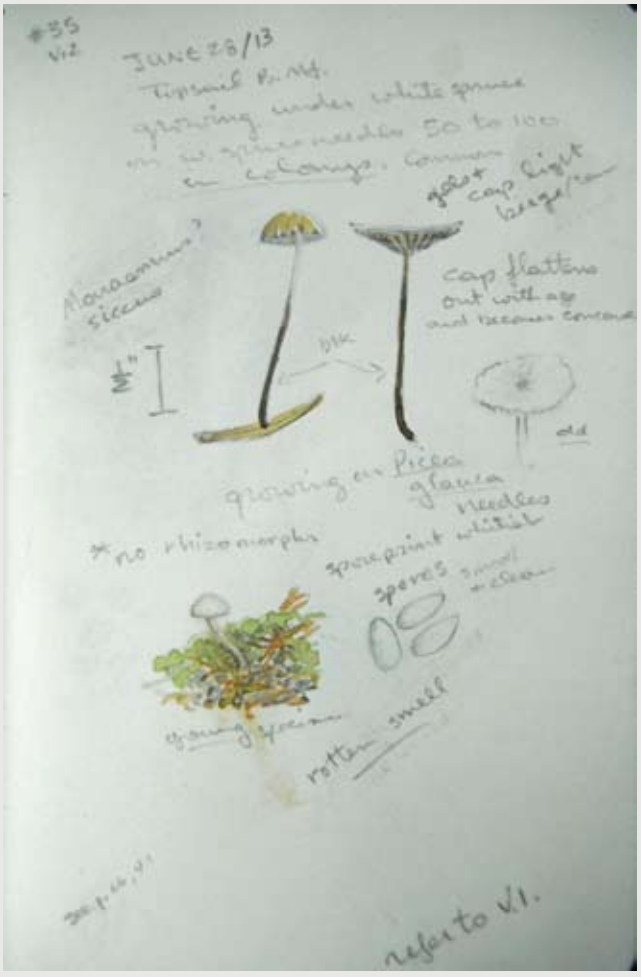
The Bishop's Sketchbook





The gills of a few mushrooms do not attach to the stem, but to a collar around the top of the stem. One of the favourite images of mushroom macrophotographers is the underside of *Marasmius rotula*, with its gills and collar. If you have leafed through any mushroom books at all, you cannot help getting to know this small mushroom before you ever encounter it. So it was with me. The first time I met the species in the woods, it was already a familiar friend from pictures. Although uncommon, it is not rare in NL; a reliable place to find *M. rotula* for us is among woody birch debris on one of Henry Mann's favourite trails in Pasadena (Figure 1).

Figure 1. Marasmius rotula *from Pasadena, NL. Note the collarium around the stem, where the gills meet.*

When I found what seemed to be the same mushroom in Estonia under a spruce, local mycologists told me it was called *M. wettsteinii*. Apparently it is similar to *M. rotula*, but grows on coniferous duff, not deciduous woody debris. There are very few reports of *M. wettsteinii* from North America, but it does grow here. Figure 2 shows one of two collections of the species made on the Squid Jigger's trail of Change Islands during our Fogo Foray. (Study the photo carefully, because it also presents a problem. Can you spot and solve it before reading the explanation in the caption?) I have also found *M. wettsteinii* on the trails of the Lobster Cove Head lighthouse in Gros Morne National Park (Figure 3).

Based on these three encounters, I can report that the *M. rotula* is the bigger species, whose caps may measure up to 15 mm in diameter, whereas it is unusual to find caps of *M. wettsteinii* with caps much over 5 mm. Thus, both substrate and size serve to differentiate these two species. The spores of *M. wettsteinii* are a bit bigger, but with so much overlap, that a microscopic differentiation by size alone is difficult.

Fine. Now we know a new species with a

Figure 2. Marasmius wettsteinii *from Change Islands, NL. Collariun well seen on middle specimen and lowest cap. But look carefully! Like on Sesame Street, one of these things is not like the others. The first specimen has a wider, flatter cap, and no obvious collarium. It also has a shorter, and noticeably fuzzy stem, as opposed to the smooth stems of the others. The first one is a misplaced specimen of* Crinipellis setipes, *from the same habitat!*

new name. But where did the name wettsteinii come from? A word of caution: pursuing such questions risks a step sideways from mycology/taxonomy to sociology/history. The disadvantage of such a step would be potential widening of your horizon, making you aware of how people have responded to different conditions in different places and different times. At its extreme it could invite a comparison with how people of your own time and place deal with similar matters, so caution is advised before reading further.

Figure 3. Marasmius wettsteinii *from the Lobster Cove Head ligthhouse trails in Gros Morne National Park. If you squint, you can make out the collarium, even though one is partly obscured by a spruce needle. Initially I thought the white, wavy structure on the left was an artefact, and was set to remove it from the photo, but Ron Petersen told me it was a rhizome, not often seen as nicely on in-situ photos.*

Figure 3. *Wettstein's two 50-Schilling compartiots, Sigmund Freud, above, and Ferdinand Raimund, below.*

A quick search of on-line information reveals that Richard Wettstein (1863–1931) was a renowned Austrian botanist, who proposed one of the fist classification systems based on evolutionary lineage, rather than morphologic or other similarity. Wettstein also described a small mushroom from coniferous duff in Austria as *Marasmius tenerrimus*, but because the same name had been used earlier by Berkeley & Curtis for a different species, its use here was invalid. Some years later the species was renamed *Marasmius wettsteinii* by Saccardo & Sydow, thus attaching for all time Wettstein's name validly to the species he first described.

The Austrian government honoured Wettstein by putting his portrait on its 50-Schilling banknote, shown, with some additions, in the title banner. Honouring citizens who have contributed to cultural or scientific thought by placing their portraits on currency is a tradition in Austria and some other countries. After the Wettstein series, the Austrian 50-Schilling note bore the portrait of Sigmund Freud, and before Wettstein, it featured Ferdinand Raimund (Figure 3). While you recognize the name of Dr Freud, you may not know Raimund. He was an actor and playwright, particularly liked for his lighthearted farces.

Imagine that—a country honouring its scientists and artists by placing their portraits on its currency! Most Canadians probably recognize some of our physicians' names, like Banting, Best, Osler, Penfield. But can you name a Canadian playwright? If you are a Newfoundlander, you will probably come up with Gordon Pinsent, but after that? Now, how many Canadians can name a renowned Canadian mycologist? We have some of the world's foremost phylogenetic taxonomists, all unknown beyond the small circle of world mycologists. If you have attended our forays, you will likely know the names of a few Canadian mycologists, but what are the odds somebody not involved with mushrooms would know a single one? Can you imagine Canada honouring one of its mycologists by placing her portrait on our new, shiny, plastic banknotes? No, here, it is either the sovereign or some politician.

Now, that we have already rambled from the duff decomposers of our coniferous understory, let us stray a bit more. Of the other two people sharing a place on Austrian 50-schilling notes, what do we know of Ferdinand Raimund? Yes, he was an actor and playwright. But most dramatic was his tragic exit from this life. In 1836 he was bitten by a dog he believed to be rabid. Rather than suffer rabies, he shot himself.

We know that bats, foxes and other animals carry rabies virus, but know nothing of rabies. Times, when rabies was a real thing among the population, an ignominious, fatal disease, familiar to all, are unimaginable to us. But to the 46-year-old Raimund it was preferable to die of his own hand than to suffer such an end. Very real.

Pasteur and Roux developed a vaccine against rabies, which they used for the first time in 1886, fifty years after the death of Raimund. After several improvements, rabies vaccination has become routine for humans and their pets, the disease eradicated among most of mankind, unknown and largely unfeared.

Yes, France has used Pasteur's portrait on its currency: two different portraits on two series of 5-franc notes.

And, no, the dog that bit Raimund turned out not to be rabid after all.

Arrhenia subglobisemen

Andrus Voitk

In 2016 Gilles Corriol described a species closely related to *Arrhenia acerosa*, which differed from it by growing on wetland moss, forming many-headed fruiting bodies, and having nearly round spores, on the average 6.4 × 5.5 µm. in size.[1] Corriol reviewed the European taxonomy, where such a species had been referred to as *Agaricus tremulus, described by* Schäffer in 1774, but because that name is currently applied to a *Hoehenbuehelia* species, to prevent ambiguity Corriol proposed a new name, *Arrhenia subglobisemen*.

In June, 2017, the Atlantic Canada Conservation Data Centre (ACCDC) sent a three-man team to our Great Northern Peninsula to survey dwarf willow. In the course of its work the team encountered a similar multiheaded (Figure 1), gilled species with eccentric stem growing in wetland moss (Figure 2). The spores (title banner) matched those of Corriol's species.

Thanks to organisations like ACCDC, who fund natural history field work, and thanks to a team whose horizon extends beyond the narrow focus of their immediate study, we can extend the range of this taxon from the French Pyrenees to northern Newfoundland. For us this is very felicitous, because we are in the process of studying the *Arrhenia acerosa* complex. Knowledge of unusual taxa and their distribution will be very helpful, when we come to sort out the various members of this complex. When that is done, you will learn our findings here.

Acknowledgments

I thank Aare Voitk for the photographs, the ACCDC team (Alain Belliveau, David Mazzerolle, Aare Voitk) for the specimen and Gilles Corriol for reviewing these few words.

Reference

1. Corriol G: *Arrhenia subglobisemen*, un nouveau nom pour *Agaricus tremulus* sensu Persoon, Fries. Bulletin mycologique et botanique Daupiné-Savoie, 222:5–20. 2016.

Photo: Aare Voitk

Figure 1

Photo: Aare Voitk

Figure 2

THE MAIL BAG

OR WHY THE CARRIER PIGEONS ASSIGNED TO SERVE THE LAVISH CORPORATE AND EDITORIAL OFFICES OF OMPHALINA GET HERNIAS

Morels,

Morel turpitude—one of the best turns of phrase on these pages!

Geoff Thurlow

Ed: OK, gotta fess up. Michael Burzynski used it in a letter, and I took it without attributing the source. Thanks for the opportunity to make me honest.

Our first morel, ever! And right in my own driveway!

Estelle Michelin

Ed: Congratulations! So there are morels in Labrador, but the season is later. Letter dated July 6—ours are finished, even on the Great Northern Peninsula.

Thanks for sharing.

chanterelles,

The front page of the Western News, voice of the University of Western Ontario, reports the publication of our chanterelle species, covered in our last issue, opening with what surely must be a fawning reference to the authors: *Some discoveries come from the stars…* You can read the rest at: http://mediarelations.uwo.ca/2017/07/28/mistaken-identity-mushrooms-western-researchers-re-classify-common-chanterelle/

and slime moulds

The Project for the assessment of the status of the slime moulds species in Canada has been completed. The initial estimation by Environment Canada was to itemise approximately 200 species of myxomycetes for all the Provinces. The final inventory list contains 285 different species, a number that surpasses the expectations!

This common achievement will greatly contribute to the government's commitments under the National Framework for Species at Risk Conservation, the Accord for the Protection of Species at Risk, and the Species at Risk Act (SARA).

I thank you very much for the contribution you have provided. Without your participation, the realization of this Project would not have been possible.

I hope you will keep studying myxomycetes and transmit your knowledge to other generations. Interest in myxomycetes needs to be revived. It would be a shame to lose this expertise, because these fascinating organisms deserve to be recognized for the important role they play in the balance of nature and hence, for the richness they bring to our biodiversity.

Most sincerely,

Suzanne Béland
Environment Canada contractor
Status of the Myxomycetes

Ed note: I thought I'd share this recent e-mail with our readers, as an example of events to which our foray activity and records contribute on a regular basis.

To study any group of organisms, first you need an inventory. No scientist can survey the whole country, and the data of knowledgeable enthusiasts provides invaluable information.

We work directly with scientists on specific projects, and often describe new species or new discoveries. But FNL also contributes much data to many projects like the completed national **Myxomycete survey**. The main reason for our existence is not to gather data, but to enjoy each other's company as we learn more about our own natural heritage. However, there is no denying that the ability to make real contributions to a general knowledge of the organisms of our interest adds a sense of satisfaction to an already enjoyable process.

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  - Wildlife Division
- Department of Fisheries, Forestry and Agrifoods
  - Center for Forest Science and Innovation

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