Report of International Biodiversity Year

Nature Walk & mushroom winter foray

Sunday, March 14, 2010

Sponsors / organizers:

HUMBER NATURAL HISTORY SOCIETY

FORAY NEWFOUNDLAND AND LABRADOR

Interpreters:

Henry Mann
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Report can be downloaded from <nlmushrooms.ca>

Nature Walk

Henry Mann

Participants meandered through a variety of woods, clearings and fields observing tracks, birds, trees, shrubs, insect galls, wood decay fungi, lichens, mosses, and a variety of other natural features and ecological interactions. A thin layer of powder over the crusty snow allowed the identification of snowshoe hare, squirrel, mink, moose, and small mouse-like mammal footprints. Squirrels were particularly active at this time of year and could frequently be seen as well as heard, and their cone middens were conspicuous everywhere. A vole carcass was noted impaled on a sharp branch, probably a sign of shrike presence. Many small birds could be heard in treetops throughout the walk, but only raven, crow, blue jay, grey jay, white-winged crossbill, and chickadee were actually identified by participants. A number of insect/plant interactions were noted including pine cone willow galls, willow stem galls, goldenrod stem galls, raspberry galls and overwintering pupae in hollow cow parsnip stems. Participants were amazed at the diversity of wood decay fungi fruiting bodies present at this time of year. As always, the identification of our native deciduous trees and shrubs in winter was an interest and challenge. The beautiful weather, leisurely pace, and nature's abundance made for an enjoyable two hour outing for all of the 35 participants.

Aphid gall on pin cherry

Pine cone willow gall on—you guessed it—*Salix*

Pupae & frozen frass in cow parsnip stem

Liverwort on maple trunk

ALNUS RUGOSA, SPECKLED ALDER

ALNUS CRISPA, MOUNTAIN ALDER

female cones	old smaller, without stalks; new visible; susceptible to *Taphrina robinsoniana*	old larger, with stalks; new covered by bud; not susceptible to alder tongue gall (*T. robinsoniana*)
male catkins	dependent from outset, more advanced (bloom earlier, before leaves expand)	initially erect, more closed (bloom later, as leaves expand)
nutlet	narrow wings	wide wings
buds	blunt tips, 2 scales	pointed tips, 3-4 scales
branches	lenticles more evident	lenticles less evident
size	larger	smaller
habitat	lowlands	higher
frequency	commoner on west coast NL; none on Avalon or GNP, limited in Labrador	less common on west coast; found throughout the province

Pinus sylvestris, Scots pine (introduced)
2-needles, short, cones angled backwards

Taxus canadensis, Canadian yew
needles flat, stalked, sharp pointed

Abies balsamea, balsam fir
cones pointed upwards

Acer rubrum, red maple
twigs red, smooth; always blue sky

Acer spicatum, mountain maple
bushy, tall, new twig bark red and finely hairy

Cornus stolonifera, red-osier dogwood
low thickets of bright red branches

Betula papyrifera, white birch
yellow birch is never smooth like this

Betula papyrifera, white birch
smooth, white bark, even when shredded

Betula lutea, yellow birch
rough, dirty bark, always severely shredded

Corylus cornuta, beaked hazelnut
Catkins along twig, not only at ends, like alder

Corylus cornuta, beaked hazelnut
nut

Rubus idaeus, red raspberry
gall, probably caused by midge *Lasioptera rubi*

mushroom winter foray

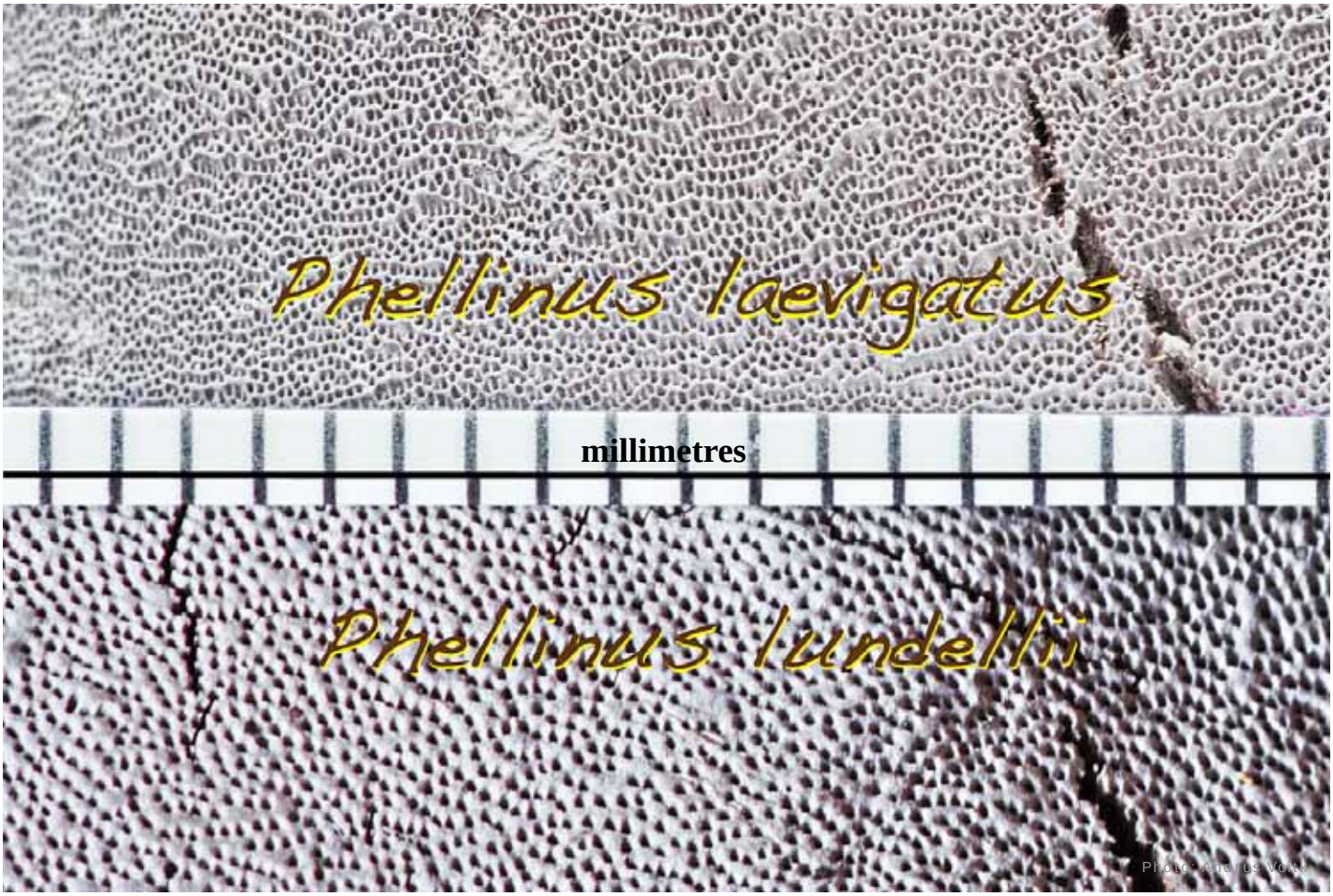
Andrus Voitk

Mycorrhizal mushrooms fruit when photosynthesis is active (trees are in leaf), so winter is the time for saprophytes, the decomposers of organic material. Hardier (and harder) species can withstand drought and freezing, growing as the weather warms. For more ephemeral mushrooms, dependent on water to fruit, beautiful warm and sunny weather with a gentle breeze comes at a price. To fruit, they need thaw with rain to soak the wood, or gentle soft snow on the branches, that melts with the midday sun. Thus, the beautiful *Panellus violaceofulvus*, so plentiful in February, was entirely absent. As were *P. ringens* and similar *Tectella* species. Only a few dried specimens of *P. stypticus* and *Plicaturopsis crispa*, two plentiful broadleaved wood rotters in our area, were found. The only jelly fungus found was dry *Exidia glandulosa*. The illustrations to the right show the effect of moisture: the upper plump fruiting body of moist February, and lower thin flakes found in sunny but sere March.

An unexpected pleasure was finding dead standing alders studded with myriads of *Cyphellopsis anomala*, each fruiting body about 1 mm in its greatest axis. As expected, they were shrivelled, but revived with new moisture. The illustrations below show the collected dry specimens on the left, and on the right their appearance after spending overnight under a wet towel, one end of the stick in water.

Many perennial conks were found, as well as dry remnants of annual bracket fungi. Among the former were several *Phellinus* species, including *P. laevigata*, seen for the first time. It can resemble *P. lundellii*, but they can be distinguished by distinctly different pore size (illustration next page). In addition several confusing corticate fungi (fungi smeared on like layers of thin skin) were collected.

Skyler May got to keep his *Fomes fomitopsis*, the tinder polypore (cover), thus bridging the 5,000-year gap with the Iceman of Ötzi, who also collected this polypore in the winter, to carry his fire.



Species list

with number of collections (an imperfect indicator of commonness)

Cyphellopsis anomala	5	*Hypoxylon fuscum*	1
Plicaturopsis crispa	3	*Laeticorticium roseum*	1
Cerrena unicolor	2	*Phellinus laevigatus*	1
Dibotryon morbosum	2	*Phellinus prunicola*	1
Exidia glandulosa	2	*Phellinus punctatus*	1
Fomes fomentarius	2	*Plicatura nivea*	1
Panellus stypticus	2	*Polyporus arcularius*	1
Peniophora erikssonii	2	*Polyporus brumalis*	1
Stereum hirsutum	2	*Spongipellis unicolor*	1
Amylostereum chailettii	1	*Trichaptum abietinum*	1
Dacrymyces chrysospermus	1	*Trichaptum biforme*	1
Fomitopsis pinicola	1		
Gloeophyllum sepiarium	1	*Chlorociboria* sp.	1
Hymeochaete tabacina	1	Pyrenomycetes	many, many, many

PINK PENIOPHORA

Although not rare, because of its attractive colour, it is collected more often than its prevalence might suggest. It breaks through the wood as multiple small rose-pink granular donuts. These elaborate a matte rose-pink film, which covers the donuts, making them resemble small mouths under a circular blanket with a light pink to whitish fringed edge. Edges spread radially and coalesce to form large mats, studded with small raised craters.

As so often, there are several very similar pink species, growing on dead standing or fallen wood, usually with the bark on. Despite their similarity, distinguishing between them is easy, really easy, provided, of course, you note the host tree species with exactitude. *Peniophora aurantiaca* grows on dead standing or fallen *Alnus crispa* (mountain alder). *Peniophora erikssonii* grows on dead standing or fallen *Alnus rugosa* (speckled alder). *Peniophora incarnata* grows on various broadleaved trees, even conifers on occasion.

The colours of the illustrations differ because of differences in cameras and light conditions, not because they represent different organisms; this amount of colour difference is not helpful to distinguish these species, but spore size can separate them. The host was not specified for our collections (not always easy to do for a dead branch!). I have chosen to count them *pro tempore* as *Peniophora erikssonii*, because *Alnus rugosa* was more common in the foray area.

The shadows are getting longer, night is beginning to fall.
The Iceman of Ötzi leads his band out of the forest to safety,
his tindermushroom secure in his pocket, to carry fire and warmth
to the next bivouac.

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