

MushRumors

The Newsletter of the Northwest Mushroomers Association

Volume 22, Issue 2

May - August 2011

Spring and Early Summer Was Eventful for the Northwest Mushroomers

Morel Madness 2011, at Tall Timbers

Margaret Dilly

Mother's Day came early this year and the cool weather spring continued. In spite of all that we had a great gathering of wonderful people at Tall Timbers Ranch. Not much in the way of edible species of mushrooms were out but I think we all had a good time.

photo by Vince Biciunas



Far more snow than usual adorns the peaks around Tall Timbers

Verpa bohemica, called the early morel were found, indicating it was early. Although we do not recommend them, some were carefully prepared and offered for sampling. Noone had immediate effects but it is not a good idea to add them to your edible list.

Most foragers were back by late afternoon and joined in to enjoy the various before dinner snacks and set up for dinner. By this time we had 39 occupants in this small dining area. With a bit of ingenuity tables we were able to seat everyone. A feast it was, with many hot dishes, salads and luscious desserts. As the clean up crew labored with the dishes people gathered to get better acquainted and play games and the diehard mycologist attempted to solve the fungal identification problem.

Sunday morning found us all assembled to savor Fien's superb crepes filled with the delectable creamy morels (thanks to Vince and Migo). After cleaning up the facilities and gathering up our things we all headed out, hoping to have better luck in the years to come.

A special thanks to all who signed up to help (apologies, as I lost the list of names): you know who you

We arrived Friday afternoon to find snow still along the roadsides on the White River Road to camp. Some folks had already arrived but soon the facilities began to fill and by dinner time we combined our food and had a mini potluck spear-headed by Fien's delicious mushroom soup.

Friday morn the weather looked fair and we ventured in groups out to find the elusive morel. The day remained fair except for one rain squall. We found lots of other species but Vince and Migo's group were the only ones to find any amount of morels. Back to camp we went for identification of the rest. Under Fred's expert eye, 38 species were identified. Many

photo by Vince Biciunas



A doggedly determined group face down the late spring, in search of the elusive morel.

are! You did a super job, which was appreciated by all.

Looking forward to Morel Madness next year. We will be limiting the attendance to 30, limit set by Tall Timbers, so remember to get your bid in early in 2012.

photo by Vince Biciunas



Celebrating the rare few true morels for the table

Fall Events for the Northwest Mushrooms Association

September 15th meeting: Steve Trudell will give a talk on common fall mushrooms of the Pacific Northwest and their ecology, with a follow on foray on Friday, September 16th hosted by Fred Rhoades at a location still to be determined.

October 13th meeting: Duane Sept, a professional nature photographer and author of *Common Mushrooms of the Northwest*, will give a presentation on his mushroom photography and video work. We will sell his book, and he will be available to autograph member copies.

November 10th meeting: Dimitar Bojantchjev will be our guest speaker. Dimitar is a *Cortinarius* expert and well versed in the use of molecular methods in mushroom taxonomy. He will give a layman's overview on application of molecular/DNA techniques for understanding phylogeny in mushrooms as well as discuss his research work with the genus *Cortinarius*.

Northwest Mushroomers Association Fall Wild Mushroom Show

Bring Us Your Mushrooms!! Go to your favorite forest or alpine hiking area and spend a day or two (an excellent excuse to take a Friday off of work) collecting all of the fine fungus that you can find, and bring them in for our displays. The show is not as exciting without mushrooms!

Sorting and preliminary identification at Bloedel Donovan Park Community Building Saturday, October 15th at 5:00 pm, mushroom identification and show set up Sunday, October 16th at 8:00 am, show time 12:00 - 5:00 pm.

Northwest Mushroomers Association Officers and Contact Information

President: Peter Trenham (360) 306-8566 ptrenham@yahoo.com

Vice President: Richard Tobias
(360) 733-1069 rmtobi@aol.com

Treasurer: Cris Colburn 360-738-3067 or crisc@ridewta.com

Secretary: Margaret Sullivan 360-724-3158 or Maggie@fidalgo.net

Book Sales and Membership: Vince Biciunas 360-671-1559 or vbiciunas@comcast.net

Science Advisor: Dr. Fred Rhoades
fmrhoades@comcast.net

Mailing Address:

NMA

P.O. Box 28581

Bellingham, WA 98228-0581

The Northwest Mushroomers Association meets on the second Thursday of the months April, May, and June and September, October, and November, from 7 - 9 pm.

Meeting Location is back to the Bellingham Public Library. We will inform you in advance of any changes of venue. Membership dues are \$15 for individuals and families and the special price of \$10 for students. Please make checks payable to NMA and send to: Cris Colburn, membership, at the mailing address above.

Fien is our field trip coordinator. Field trips are scheduled for the Saturday after each meeting.

MushRumors is published every other month (roughly). Deadlines for submissions are the 15th of odd-numbered months. (Of course, exceptions will be made in the event of fungal finds of unusual import!)

Editor: Jack Waytz

Phone: 360-752-1270 or

gandalf5926@comcast.net

MushRumors c/o Jack Waytz

P.O. Box 28581

Bellingham, WA 98228-0581

www.northwestmushroomers.org

Mushroom of the Month

Panaeolus semiovatus (Sowerby ex Fries) Lundell & Nannfeld

By Buck McAdoo

It was May 2nd, 2011, and despite heavy rains in April, no reports of new mushroom sightings were coming into my office. Therefore I was a bit taken off guard when Rich Kohr, one of the maintenance chiefs at the Herald Building, motioned me aside in the sixth floor corridor.

“By the way,” he said, “Forgot to bring one in. My brother has a farm out on the Van Wyck Rd. There, next to a barn right next to the road is a pile of horse manure. There are large, white mushrooms growing on that pile. Think they could be edible?”

“Large, white?” I repeated.

I was there. Small, white would have implied *Coprinus niveus*. Rich’s description implied a fungus I hadn’t seen before.

It was drizzling when I arrived at the pile. Right away I could see they weren’t in *Coprinus* because the gills weren’t deliquescing. Older gills were pure black. Some of the caps were 8 cm wide and looked like bell-shaped World War I helmets rising out of the dung. The odd thing was the presence of velar remnants on most of the stems.

Back at the office, it didn’t take long to key them out. It turned out that almost everyone else has seen this mushroom but me. It is cosmopolitan, found around the world from Hawaii to Europe to the Yukon wherever there is horse dung, or even sheep, cow, or donkey dung, according to Breitenbach & Kranzlin. An iconic photo of a single specimen of *Panaeolus semiovatus* on a pyramid-shaped pile of horse dung can be found in *The Wild Mushroom* by George McCarthy. The shot transforms the mushroom into a monument.

There is no dearth of field descriptions. Caps can be 3-9 cm wide and are at first egg shaped, then hemispherical, and finely broadly bell-shaped in age. Cap colors range from ivory to tan to grayish-tan or pale brownish, all on the same pile. They are tacky when moist, shiny when dry, and usually finely wrinkled or rugulose. When dried in the sun, the caps become cracked or areolate. The cap margins can project beyond the gills. They are straight or incurved and occasionally flecked with veil remnants. According to A.H. Smith, the cap colors are affected by sunlight. They tend to be darker in the shade. The cap context is whitish, but yellowish just beneath the cuticle and at the base of the stem. It should also be mentioned that the fruiting bodies are fragile, which is a typical trait of species with cellular cap structures. The gills are sharply adnexed at first, then become adnate as the caps expand, and finally end up almost free. They are gray to pale brown when young, but soon become mottled gray and black as the spores mature. This salt and pepper look is due to the spores maturing at different times, a hallmark of *Panaeolus*. Gill edges soon become white fimbriate (fringed) as can be seen in the top photo. When the gills are finally all black, the caps have begun to sag. Stems can be 6-20 cm long and 3-15 mm thick. Kibby mentions that the great variability in sizes is due to the relative nutrients in the dung. An especially rich piece of horse dung can produce a 25-centimeter stem. The stems are stiff, brittle, hollow, cartilaginous, and terete (perfectly rounded) until expanding slightly at the base. The upper part is powdery and striated where the gills once adhered to it. The stems are white above the ring and pale tan below. Bases are sometimes found with appressed white mycelium. The partial veil tears away from the cap margin as the cap expands and settles unevenly on the stem. This thin, membranous ring is usually torn and soon vanishes, leaving a ring zone marked by the black spores that had originally landed on the ring. Rings are usually fluted or striated with crenate margins. The bottom photo shows the ring being torn as it transitions from cap margin to stem. The spores are black in deposit, the taste is mild, and the odor reported as mild, like straw, or slightly fungoid.

Microscopically, there is plenty to look at. Spores are huge, dark brown in KOH, and thick-walled. Moreno, Manjon, and Zugaza report spore measurements of 16-22 x 9-14 microns. There is a clear and present hyaline

photo by Buck McAdoo



germ pore either centrally located at the apex or obliquely off-center. It was once thought that specimens with obliquely lateral germ pores might represent a different species, but Breitenbach & Kranzlin found both kinds of germ pore locations in the same spore deposit. The spores are ellipsoid in profile and slightly pip shaped or obscurely angled in face view. The basidia are 4-spored and measure 23-30 x 10-12 microns. Clamps are present at the bases. The gill trama is of subparallel hyphae verging on interwoven. The hyphae in the center of the gill measure 11.5-18 microns wide. The pleurocystidia are saccate, clavate, or mucronate, and measure 32-34 x 12-14 microns. The refracted pale yellow contents allow them to be termed 'chrysocystidia'. The cheilocystidia are highly variable in shape, including all the shapes of the pleurocystidia plus fusoid-ventricose with flexuous walls. According to Orson Miller, these clavate-rostrate cheilocystidia are a distinctive feature of *Panaeolus semiovatus* and separate it from younger fruiting bodies of *Panaeolus solidipes*. (There is no mention of what goes on with the older fruiting bodies of *P. solidipes*). The cap cuticle is a hymeniform palisade of clavate to pyriform cells several layers deep, and interspersed frequently with filiform, clavate, subcapitate, or lageniform pileocystidia. Beneath the cellular layers of the pileipellis, the context soon becomes gelatinous and outlines of the hyphae become hard to discern. A.H. Smith described the context as 'floccose'.

Panaeolus semiovatus, also known as the Sticky Mottlegill or the Dung Mottlegill depending on which author you follow, has been moved around nomenclaturally. Jakob Lange stuck it in *Stropharia* in 1923 due to the ring on its stem. It does look like a larger version of *Stropharia semiglobata* which ironically doesn't have a ring. In various guides, it can be found under its numerous synonyms, including *Panaeolus separatus*, *Anellaria separata*, *Anellaria smiovata*, or even *Anellaria fimiputris* in older British guides. 'Fimiputris' means 'rotten dung'. Ewald Gerhardt notes that *Panaeolus fimiputris* is now considered a nomen dubium, and indeed, the Index Fungorum does not list it as a synonym. Some authors continue to list it as a synonym regardless. In the older days, *Anellaria fimiputris* was said to differ from our present concept of *Panaeolus semiovatus* by its more lead colored, viscid caps with white appendiculate margins, and rings that are not membranous, but rather just resemble zones on the stems. Masee noted that stems were often rather wavy, spores measured 9-10 x 6 microns, and caps were generally beaded with the veil. No wonder this is not considered a synonym.

However, *Panaeolus solidipes*, considered by some to be a good edible, is almost indistinguishable from *Panaeolus semiovatus* except for its lack of a ring. As implied by the name, the stem is solid in *P. solidipes*, but hollow in *P. semiovatus*. Dr. Orson Miller found the caps scaly or more markedly wrinkled, and the stems more twisted-striated in *Panaeolus solidipes* which he now believed to be a synonym of *Panaeolus antillarum*, a species he had run into in summers in Alaska and the Yukon.

Another look-alike could be *Panaeolus phalaenarum*, which according to Pacioni & Lincoff, has whitish caps tinged reddish, no ring, and an odor of burnt sugar. According to Gerhardt, it has a dentate cap margin and a longitudinally striate stem. *Panaeolus semiovatus form exannulatus* is a synonym.

During its brief sojourn in *Stropharia*, Jakob Lange introduced a *Stropharia separata form vernalis* for a 'darker, shorter form found in pastures or wooded areas, but always on dung'.

So much for the nomenclature and look-alikes. We now turn our attention to the edibility factor. To resume the narrative of my only encounter with *Panaeolus semiovatus*, I returned to my office with the specimens, and found Rich again in the corridor. He still wondered if they were edible. I showed him a photo of the species in *Mushrooms of Colorado* by Vera Evenson. This established the identification. Then, underneath the description, we read 'inedible'.

"But that's a woman," I said, "We better get a man's opinion."

He nodded appreciatively.

I then opened up McIlvaine. Here, under the former name of *Anellaria separata*, we read 'it is substantial in flesh, excellent in substance and flavor. Cook soon and not over fifteen minutes.'

"There's no time to lose," I said, "It's a diamond in the rough."

He politely declined the invitation to dine on the boat. He may have suspected a bullet because opinions on the edibility varied tremendously. Here are a few examples:

Lorentz Pearson – '*Panaeolus separatus* is definitely poisonous, causing hallucinations.'

The McKnights – 'Not recommended. Some *Panaeolus* are poisonous.'

Bruno Cetto – 'Senza interesse.'

J. Walton Groves – ‘Species of *Panaeolus* should not be eaten and can cause a form of intoxication.’
 Pegler & Spooner – ‘Inedible, possibly poisonous.’
 Neuner – ‘Although not poisonous by any means, the environment it has chosen appears somewhat unappetizing and uninviting. Its value as an edible fungus has therefore not yet been established.’
 Soothill & Fairhurst – ‘Said to be poisonous.’
 David Arora – ‘Edible, according to most sources. There is one dubious report of *psilocybin* containing specimens from Colorado.’
 A.H. Smith – ‘Edible and good, but not recommended. The genus contains a number of species that cause *psilocybin* type poisonings. Smaller specimens could be confused with these.’
 Schalkwijk-Barendsen – ‘Sometimes it is hallucinogenic.’
 Dickinson & Lucas – ‘The fungus consumes a certain amount of the dung, and in so doing, some of the material consumed becomes a part of the fungus itself.’

What more inspiration does one need? After sautéing four caps in salted butter on my fancy yacht, I have to agree with Smith and McIlvaine. The flavor is very, very good. The caps absorb the salted butter and bring out a rich, salty taste on a par with the Gypsy Mushroom. Jack Waytz also took the culinary plunge. He pronounced them to be good and thought they had a slight smoky flavor. No tinge of horse or dung, and neither of us got a hallucinogenic experience. The spirit of our co-founder, Dave Jansen, lives on.

All considered, *Panaeolus semiovatus* is just one more reason to check out the Kentucky Derby. In fact, they ought to name a horse after it..... ‘and in the far lane, The Dung Mottlegill is moving up..’

Bibliography

- David Arora, *Mushrooms Demystified*, 1986.
 Breitenbach & Kranzlin, *Fungi of Switzerland, Vol.4*, 1995.
 Bruno Cetto, *I Funghi dal Vero, Vol.2*, 1980.
 Dickinson & Lucas, *The Encyclopedia of Mushrooms*, 1979.
 Vera Evenson, *Mushrooms of Colorado, 1997*.
 Ewald Gerhardt, *Panaeolus in Funga Nordica*, 2008.
 J. Walton Groves, *Edible and Poisonous Mushrooms of Canada*, 1979.
 Geoffrey Kibby, *Mushrooms and Toadstools*, 1979.
 Geoffrey Kibby, *Colour Encyclopedia of Mushrooms and Toadstools*, 1979.
 Kuo & Methven, *100 Cool Mushrooms*, 2010.
 George Masee, *British Fungi and Lichens*, 1900.
 George McCarthy, *The Wild Mushroom*, 1996.
 McIlvaine & Macadam, *One Thousand American Fungi*, 1902.
 Vera & Kent McKnight, *Peterson Field Guides – Mushrooms*, 1987.
 Orson Miller, *Interesting Fungi of the St. Elias Mountains, Yukon Territory, and Adjacent Canada in Mycologia 60, (1190-1203)*, 1968.
 Orson & Hope Miller, *North American Mushrooms*, 2006.
 Moreno, Manjon, & Zugaza, *La Guia de Incafo de los Hongos de la Peninsula Iberica, Tomo 2*, 1986.
 Andreas Neuner, *Chatto Nature Guides' Mushrooms and Fungi*, 1978.
 Pacioni & Lincoff, *Simon & Schuster's Guide to Mushrooms*, 1981.
 Lorentz Pearson, *The Mushroom Manual*, 1987.
 Pegler & Spooner, *The Mushroom Identifier*, 1992.
 John Ramsbottom, *Larger British Fungi*, 1965.
 Carleton Rea, *British Basidiomycetaceae*, 1922.
 Helene Schalkwijk-Barendsen, *Mushrooms of Western Canada*, 1991.
 A.H. Smith, *Studies in the Dark-Spored Agarics in Mycologia 40, (669-707)*, 1948.
 A.H. Smith, *Mushrooms in Their Natural Habitats*, 1949.
 Smith & Weber, *The Mushroom Hunter's Field Guide*, 1980.
 Soothill & Fairhurst, *The New Field Guide to Fungi*, 1978.
 Stuntz & Isaacs, *Pacific Northwestern Fungi in Mycologia 54, (272-298)*, 1962.
 Wakefield & Dennis, *Common British Fungi*, 1981.
 Watling & Gregory, *Strophariaceae and Coprinaceae in British Fungus Flora 5*, 1987.

Have you seen Me? Mystery *Gymnopilus*

By Buck McAdoo

Gymnopilus sp. – (pg. 380 #6)

Cap – 12 cm. wide, shallowly convex to almost plane. Shiny, lubricous, reddish-tawny with sparse yellow-ochre discolorations. Cap cuticle peelable. Context watery-buff and 1 ½ cm. thick at disc.

Gills – Adnate to abruptly notched, separable from cap. Broad, subventricose, edges entire, lacerate in age. Color strong ochre-orange. Four tiers of lamellulae.

Stipe – 6 ½ cm. long and 2 cm. thick. Tough, fibrous, buff with vinaceous to vinaceous-brown fibrils. Base clavate. Apex with broad orange band and velar shard. Context yellow.

Odor – Mildly pleasant.

Taste – Bitter.

Spores – Rusty, dextrinoid.

Habitat – Found on wood chips in Whatcom County, Wash. on October 21, 2007. Brought to the Fall Show by a stranger.

photo by Buck McAdoo



photo by Buck McAdoo



Microscopic Notes

Spores – Ovoid to ellipsoid, slightly inequilateral in profile. Finely verrucose. 4.1- 4.6 x 6.9-7.2 microns. (Only 7 measured.)

Basidia – 4-spored. Clavate to fusoid ventricose. 6.6-7.2 x 17.2-30 microns.

Gill trama – Of parallel hyphae with grayish, rounded, incrustated ends in KOH.

Clamps – Present.

Cheilocystidia – Clavate to fusoid ventricose. A few subcapitate or with elongated necks. 7.9-8.8 x 24.3-29.3 microns.

Pleurocystidia – None seen.

Caulocystidia – Represented by clusters of clavate hyphae with clamped bases.

Pileipellis – A cutis of repent hyphae 2-5 microns wide, randomly encrusted. Soluble pigment is chestnut in KOH. (Possibly thinly gelatinized). Subpellis of more inflated hyphae. Gelatinous zones in the context.

Lactifers – Tawny in KOH. Also clamped.

Comment – Keys out closest to *Gymnopilus echinulispora*, which has wider spores, fulvous gills, and no velar material. Up until this specimen arrived at the identification table, I had never heard of a *Gymnopilus* with a lubricous cap surface before. I had to email around to find out who was working on *Gymnopilus* in North America. The answer was no one in the year 2008.

I was directed to Bettye Rees in Sydney, Australia. She had just finished working on the genus *Gymnopilus* in Australia and was now beginning work on *Hebeloma*. She proceeded to direct me to Dr. Laura Guzman Davilos in Guadalajara. She said she would be glad to see the material. We emailed back and forth for a while, but in the end she had to postpone the DNA work because she had to return to teaching. A subsequent email to her in early 2010 went unanswered, so the postponement may possibly be permanent. She retains half of the specimen, and I have the other half.

I can't blame her totally for losing interest. Even if it did turn out to be a new species, it is probably not publishable because we don't know the exact location where it was found, nor the kind of woodchips it was on. Hopefully someone will find another one. And we can go from there.

Fall 2011 Mushroom Identification Course

This class is an introduction to various mushroom identification topics through short talks and demonstrations. Most of class time will be devoted to your working on identifications of mushrooms you and others bring in. It's a great hands-on way to learn mushrooms!

Tuesdays, Sep 13, 20, 27, Oct 6, 11, 18, 6:30-9:00 PM at the ReStore main meeting room in their Sustainable Living Center, 2309 Meridian St. on the corner of Boulevard and Meridian in Bellingham (ReSources website with directions).

The class is taught by Fred Rhoades, Margaret Dilly, Christine Roberts, Erin Moore and others. Open to NW Mushroomers members only. Cost for all 6 classes: \$20 (the cost covers room rental and copying expenses).

Class size is restricted to 25. Potential takers, please email Fred Rhoades – fmrhoades@comcast.net. He will return your email with an okay that there are still places available. Then you secure a position in the class by mailing class payment to club treasurer Cris Colburn (address will be provided with the return email). Once 25 paid class members are on the list, we will keep a waiting list to replace potential drops. Members who have not taken this class before will have priority. If you have previously taken the class and want to take it again, email Fred Rhoades and you will be placed on the waiting list: if there is room, you will be contacted.

Introduction to Our Fall Mushrooms

Dr. Fred Rhoades, our club's science advisor, is also teaching a mushroom class on Monday afternoons for the Academy for Lifelong Learning. Perhaps there will be club members who would be interested who either can't get into the club class or can't come on the Tuesday time for that class.

Mondays 4:30-6:30 on October 3, 10, 24, 31, and November 7 and 14 from 4:30 - 6:30 PM at the St. Luke's Education Center (Squalicum Parkway).

This class is for anyone who is interested in learning more about local wild mushrooms. Students will be required to collect and identify different kinds during the week between classes and to bring collections to class for further study. Classes will combine 15-30 minute talks by the instructor with hands-on practice in identifying the mushrooms all students bring in. Characteristics of the best edible species and the worst poisonous species will be covered. Includes a single, optional field trip.

The cost is yet unknown. If you might be interested in attending the class, please email the instructor (fmrhoades@comcast.net), specifically mentioning the Academy of Lifelong Learning class. He'll contact you when additional details are known. There is also a preview of the classes offered by the Academy of Lifelong Learning on Sept. 8 from 1-3 p.m. at St. Luke's Education Center.

The Carl Otto Heritage Preserve Foray proved that there can be mushrooms in our area in the spring. Long time club member Nancy Burnette has urged us to come over and check out the heritage site for mushrooms for several years, and we finally got around to it. Nancy was still in California, but her list of fungi found at the site was there to greet us when we walked in. Megan Crouse gave us a rousing welcome and then a run-down on the preserve. We were to pick from the trails as much as possible. If we saw an interesting fungus off the trail, we could go fetch it, but this would be an exception to the general rule of not disturbing the habitat. Seven of us showed up from Northwest Mushroomers. About 30 folks showed up from Lummi Island, maybe more. I was impressed that so many local folks wanted to learn about their mushrooms.

Our president, Pete Trenham, then gave an excellent report on our club, its purpose, the forays, the Morel Madness, and so on. He invited the audience to join up, and I hope some did. Dr. Fred Rhoades then presented an overview about what we might expect to find at the site. The preserve consisted of a large loop trail with a smaller loop trail in the Baumgart Woods extending off of the larger one. Fien Hulscher tried to pretend she was just another islander, but we spotted her anyway. 'Twas a long trip for her to make all the way from Anacortes with no promise of good edibles at the end.

The species list compiled by Fred and Lisa McAvoy is as follows:

The Slime Molds

Fuligo cinerea

Lycogala epidendrum (Wolf's Milk)

Lycoperdon sp.

Mycena Adonis

Mycena haematopus, the bleeding Mycena

Mycena oregonensis

Mycena stipata

Nolanea sp.

Phaeolus schweinitzii

The Fungi

Amanita pantherina

Bovista plumbea

Cerrena unicolor

Chromosera cyanophylla

Clavulina cristata with its Helminthosporium parasite

Coccomyces dentatus

Conocybe sp.

Coprinellus micaceus

Cortinarius sp.

Crepidotus applanatus

Crepidotus mollis

Entoloma sp.

Fomitopsis pinicola

Ganoderma applanatum, the Artist's conk

Gymnopus dryophilus

Gymnopus peronatus

Heterobasidion annosum

Hypholoma fasciculare

Hypoxylon multiforme

Hymenoscyphus vernus

Inocybe assimilata

Inocybe calamistrata

Inocybe flocculosa (group)

Inocybe geophila

Inocybe praecox

Inocybe stellatospora

Kretschmaria deusta

Lichenomphalia umbellifera

Plectania nannfeldtii

Pleurotus pulmonarius

Pluteus cervinus, the Deer Mushroom

Polyporus badius

Pseudoplectania nigrella

Rhodocybe nitellina

Rhytisma punctatum (left over from fall, but now releasing its spores)

Scutellinia scutellata, the Eyelash fungus

Stereum gausapatum (most common mushroom there)

Stereum hirsutum

Trametes versicolor

Xylaria hypoxylon (candle snuff mushroom)

The Lichens

Cladonia chlorophaea

Cladonia furcata

Cladonia transcendens

Hypogymnia enteromorpha

Hypogymnia physodes

Parmotrema arnoldii

Peltigera canina

Peltigera neopolydactyla

Ramalina farinacea

The edibles within the entire group are *Coprinellus micaceus*, *Bovista plumbea*, *Gymnopus dryophilus* for some people, not all, *Lycoperdon sp.* when firm and white inside, *Pleurotus pulmonarius*, and *Pluteus cervinus*, an acquired taste. None were found in enough quantity to make a meal.

Pleurotus pulmonarius is our local western Oyster Mushroom. Only one or two were found. When found in a fresh state in quantity, usually on alder or maple, they make a fine meal.

Pluteus cervinus, the Deer Mushroom, always grows on wood. It has gills that don't touch the stem, and are white but turn pink in age. It has an unusual parsnip-radish odor and a good flavor if fried up hard in butter. Some people don't like the taste. Before you try it, ascertain that the gills don't reach the stem. Otherwise you have a poisonous Entolomoid species.

Coprinellus micaceus is one of those Ink Cap mushrooms that auto-digest in age. If you find them young, usually in clusters at the base of stumps, they make a fine soup. If you find a large brown one, you have *Coprinopsis atramentarius*, which will give you a bout of diarrhea if consumed with alcohol.

Gymnopus dryophilus is edible for many, but there have been reports of gastrointestinal inconveniences for folks who have a reaction to it. It's a small orange-brown mushroom with white gills and an orange-brown stem that turns lighter at the apex. The spore deposit is white. *Rhodocybe nitellina* looks a lot like it, but has a farinaceous odor (like flour) and a pale pink spore print. This was also found at the site. No one seems to be dining in *Rhodocybe* these days, so unless you really know the former *Collybia dryophila*, I'd leave it alone.

Bovista plumbea and the *Lycoperdons* are puffballs. They can be eaten if they are firm and white inside. There is one puffball that is bitter. All the rest are edible and quite good sliced up and sautéed in palm oil. If they are black and firm inside, they are poisonous *Sclerodermas*.

Nancy Burnette has long wanted to augment her species list, and Fred really answered the call. He may have nearly doubled the list on this one foray. He meticulously worked out all the *Inocybe* species, minus the obvious *I. geophila*, with his compound microscope. These are little brown fibrillose fungi that most of us ignore since they are both poisonous and boring to stare at, but are fascinating under the microscope. Only a few in the world have star shaped spores, and Fred identified one of them here! Many of them have cystidia called metuloids. They look like blown glass bowling pins that are thick-walled and often have crystals at the apices. Very beautiful to look at, and Fred must have seen plenty.

Basically, Fred also doubles as the *Mycena* guy in our club, and the rare, tiny, scarlet *Mycena oregonensis* was one of them. Another former *Mycena*, *Chromosera cyanophylla*, had a yellowish cap and pale lilac gills. It is the only species in the genus *Chromosera* in the world.

There were quite a few hard conks and Polypores, many of them black from over-wintering. *Kretzschmaria deusta* may have been the rarest of these. Ronald Rayner describes it as 'one of the group with charcoal-like flesh that forms a thick, flattish crust and is commonly found on stumps or the roots radiating from the stumps. It is grayish-white when young and produces conidia, but turns black and brittle in age.' I hadn't seen it in 27 years.

Fred is also a lichenologist and so was able to identify nine different lichens on this foray with perhaps even more hiding in parts of the preserve off limits to us. One interesting find, although common in general, was *Lichenomphalia umbellifera*, an organism that is part lichen and part fungus. It is small, cream colored to pale ochre with decurrent gills, and always fruits on wood.

There were several Entolomoid species that I took home, photographed, and dried out, but I have to wait for the return of my microscope before I can work them out. There was another species with bright yellow gills that was equally interesting, but again I'll need that microscope to proceed.

All in all, a highly productive foray for this time of year. I have always contended that the islands harbored species we don't normally find on the mainland. This foray partially bore this out. I believe that a return in the fall could bring out some truly rare species plus a larger percentage of edibles for all to enjoy.

photo by Fred Rhoades



Lummi Island Slime Mold Mystery: Solved

Mystery slime mold that was quite commonly seen at the Lummi Island foray. I have tentatively identified it as *Fuligo cinerea* but it could also be a white form of *Fuligo septica*. The yellow-orange form of *Fuligo septica* is common in the woods of western Washington, especially in the late spring and summer. Another, large, pinkish form of this species is seen in Bellingham from time to time and appropriately is known as "Dog Barf Slime". The difference between the two species, *Fuligo cinerea* and *Fuligo septica*, is spore size. These pictures show the slime (plasmodium) stage, not the spore-producing stage. The spore-producing stage was in evidence, but we didn't collect it, unfortunately. The total width of the larger photograph is about 1½ feet and is at the base of a Douglas fir tree. Slime molds are not closely related to the true fungi but they are found where true fungi are common. They can be thought of as overgrown protozoa (related to the protozoan *Amoeba*) that literally feed on bacteria and other organic matter by injection (true fungi feed by absorption). Most of the time they are invisible in the soil, duff or rotten wood they inhabit. We see the slime stage when it emerges from the habitat to form spores. In this species the plasmodium forms a spore mass as a crusty cushion of purple spores: the early stage of which is happening in the lower, stereo photograph. -Fred Rhoades

photo by Fred Rhoades



Our Saturday foray was a lovely time as usual. We met at Lake Padden and we were lucky to have Leon Shernoff, editor of “*Mushrooms the Journal*,” join us in our outing. Coming all the way from Chicago, he seemed relieved and happy to be in our forests. Of the twenty or so folks that came to the foray, many were excited to see the abundance of oyster mushrooms (*Pleurotus pulmonarius*) lining the trail. I saw at least a couple folks with long stick knocking clusters down with exceptional technique, likely for later consumption. Along with many interesting species found, there was also delicious food and ducklings (not on the menu!) near our table. A few of us were also lucky enough to see a barred owl in a tree. With the weather holding out at a nice temperature, and the mushrooms fruiting, it was a wonderful time in the forest.

Lake Padden Foray – The Species List

The June 10, 2011, Lake Padden Foray yielded 36 species, quite a sum for this time of year. Six more species were actually brought in from eastern Washington by Leon Shernoff and Jack Waytz. These species from the Lake Wenatchee area were *Clitocybe* sp., *Cortinarius malicorius*, *Lyophyllum loricatum*, *Nidula niveotomentosa*, *Sarcosphaera crassa*, and *Tricholoma* sp. The *Lyophyllum loricatum* was the first true *L. loricatum* I’ve

photo by Buck McAdoo



Mitrula paludosa, falseley labeled *Vibrissea truncorum* at the June meeting; rare

seen. There seem to be many closely related ones that represent something else. The *Clitocybe* has an orange-brown cap, white gills, and an orange-brown stem. It is close to *Clitocybe sinopina* in Bigelow’s monograph, but not quite there. It needs to be re-assessed by one of us to get a better read on it. The *Tricholoma* had a brown cap. I have looked at it before. It has clamp connections, which puts it in the *Tricholoma saponaceum* group. It lacks the salmon tinted stem base of *T. saponaceum* and has no odor. Probably a sp. nov. waiting to be worked on by a *Tricholoma* expert.

Now for the Lake Padden List:

Bertia moriformis – a black raspberry-looking growth on hardwood.

Ceratiomyxa fruticulosa var. *flexuosa* – the snowflake slime mold.

Cerrena unicolor – a hairy gray-brown capped polypore that often turns green with algae. It has been identified as the fungal symbiont of a wood wasp in eastern Canada.

Coprinellus micaceus – A good edible, especially in soups.

Crepidotus mollis – a flabby, cream colored agaric with no stem that fruits in dimidiate (half circle) clusters off of logs. Caps have brownish fibrils. Spores are brown.

Ganoderma applanatum – The Artist’s conk. A huge one was found.

Gymnopus peronatus – This former *Collybia* is now the most common agaric in our county. Before

1990, it was only known from Europe.

Fomitopsis pinicola – Our most common polypore.

Helvella queletii – Considered rare, but common around here in the spring.

Hypholoma fasciculare – The Sulphur Tuft. Bitter, lurid yellow, and poisonous, in tufts, on wood.

Hypoxylon multifforme – Dark rusty to black cushion-like, forms on birch. The surface is dotted with perithecial ostioles. Spores are bean shaped.

Inocybe sp. – A brown capped *Inocybe* that could be a number of things.

photo by Buck McAdoo



Plectania melastoma, the only black cup fungus with rusty granules on outer surface.

Inocybe jacobii – A very small ochre capped *Inocybe*.

Kuehneromyces lignicola – Formerly *K. vernalis*. It looks like the deadly *Galerina autumnalis* (now *Galerina marginalis*) except it lacks the membranous ring on the stem.

Kuehneromyces mutabilis – It was nice to have the comparison with the above. It is a little larger with a paler stem that is lightly floccose below the ring. Although cultivated in Europe for the table, we don't eat it here due to the *Galerina marginalis* similarity.

Laccaria bicolor – A brick colored *Laccaria* that usually has a purple stem base, but sometimes doesn't.

Lycogala epidendrum – A slime mold that looks like pink blobs on wood. The blobs turn brown when aged. Known as Wolf's Milk. A pink 'toothpaste' come out when squeezed.

Marasmiellus nigripes – A small white marasmioid fungus with a black stem base.

Mucilago crustracea – A white to cream colored slime mold with a flaky cover of white calcareous crystals. Often looks like a white mat on the substrate.

Mycena amabilissima – A beautiful coral pink *Mycena*. It may have another name by now.

Mycena aurantiidisca – A fragile orange *Mycena* with a whitish margin. Common in our area.

Mycena deceptor – Fred pointed this out to me a day earlier at the Stimson Reserve. Caps are more convex than conical, and the brown caps fade to buff at the margins. No odor.

Mycena haematopus – A lilac-brown *Mycena* that bleeds blood-red when stem is broken.

Mycena sp. – A non-descript brown *Mycena* that needs a microscope to figure out.

Nolanea sp. – Small, brown with the stature of a *Mycena*. Could have been *N. bicoloripes*, a species that both Fred and Dick Morrison have worked out.

Nolanea sp. – Another like the above, but with a much paler stem.

Phylloporus rhodoxanthus – The Gilled Bolete has brilliant yellow gills and a plush brown cap
Leon is taking this one back to Chicago.

Plectania melastoma – My original prognosis was correct. This is the only *Plectania* with tiny rust colored granules on it. I hadn't seen it since 1983.

Pleurotus pulmonarius – This is the correct name for our western Oyster Mushroom. A few folks found enough to take home for a meal. There was a satiny white version with yellow stains on the cap margins that might have been something else. But the yellow staining ones are supposed to have cap scales. Bit of a puzzle here.

Polyporus badius – This whole group is poorly described by Gilbertson & Ryvardeen. Typical *Polyporus badius* has a shellacked tawny cap as did this one.

Polyporus varius – Also has a black foot at the stem base. Cap colors seem to vary, but caps do not have a glossy look.

Psathyrella longipes – Has veil shards on the stem, which separates it from most other *Psaths*.

Scutellinia scutellata – Tiny scarlet cup fungi with black 'eyelashes' on the rims.

Stereum ostrea – A wood scab fungus identified for us by Leon. Much more common back east. Probably the prettiest of the *Stereums*.

Trametes hirsutum – Like the Turkey Tail, but hairier.

Trametes versicolor – The Turkey Tail. It makes a fine medicinal tea. Some of the specimens had been invaded by parasites, rendering the tea idea less attractive.

photo by Buck McAdoo



Lyophyllum loricatum, a most interesting find from Leon and Jack's foray to the east side of the Cascades

A *Phylloporus* note from Leon: When I was in the PNW last month, I found a small *Phylloporus* with an olive-brown cap, and it also came in on a club walk in Bellingham. One of my hosts on the tour also had it as

his screen-saver.

Phylloporus is one of those very distinctive taxa that (like chicken mushrooms and some others that I discussed in my talk) has gone under one scientific name for many years, because the differences between the species has been overshadowed by the larger and more dramatic differences between the group and everything else.

When I got back home, I asked Roy Halling about the PNW *Phylloporus*, since I know that there are a few different species in North America, and he's a Boletaceae expert. I also had some experience with a different species of *Phylloporus* that we have in Chicago. Roy pointed me to a pretty authoritative key and article with *Phylloporus* descriptions here:

photo by Leon Shernoff



<http://sweetgum.nybg.org/boletineae/taxon.php?irn=1252>
-- where the relevant information is in the pdf about *Phylloporus* in the neotropics and North America.

Based on this, the appropriate name for what I saw up there is *Phylloporus arenicola*. I discussed this with Roy and he agreed -- and sent me a photo of a Mendocino collection of *P. arenicola* that looks basically exactly like mine. The size and cap color is right, as are the lack of a bluing reaction. (On the Kitsap specimen, I crushed some of the gills against each other and this made them look darker and I was able to convince myself that this was a weak bluing reaction, but this wasn't so). *P. rhodoxanthus* is much larger (the photos attached would be the extreme small end of its size range), its cap is very distinctly reddish, and the gills very definitely

bruise blue.

So... I just wanted to follow up on this identification issue, which came up a couple of times during my visit, and alert you to this species concept, since it's your very own endemic (central California through British Columbia) *Phylloporus* and it's always nice to have your own precise regional species concepts these rather than these broader general ones.

Note from the editor-

In addition to being the editor of *Mushroom: The Journal of Wild Mushrooming*, a fabulous magazine devoted to all things mycological, Leon is an accomplished musician. During his three-day visit regaled us with operatic classics while accompanying himself on the piano. It was a wonderful visit, and I hope that he will return.

- Jack

photo by Anita Waytz

