

MushRumors

The Newsletter of the Northwest Mushroomers Association

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November - December 2007

2007 Fall Wild Mushroom Show Yields Record Turnout!

*Crowds came away sated with tasty soup and chanterelle saute,
and fascinated by the wealth of fantastic fungi...*

The Northwest Mushroomers Association 2007 Fall Show was the culmination of a most fascinating year for mushroom enthusiasts of the Pacific Northwest. The year was marked much more by the inexplicable, than the ordinary. It all really started with unusually heavy rains in the high country from July 21st through July 24th. These rains were taken as a signal by certain mycelium for a dramatic and wide spread fruiting of *Boletus edulis* everywhere where there was an elevation of between 3800 and 5800 feet above sea level all

photo by Vince Biciunas



Calm before the storm at Booksales...

over western Washington and south into Oregon. Those who waited until the third week of August, such as myself, were actually late to the party! It is rare to see a fruiting of "The King" of this magnitude any time before Labor Day.

Tradition seemed not to matter to the mushrooms this year, as along with this very early fruiting of boletes, there were also massive fruitings of many different *Russulas*, a huge fruiting of lobster mush-

rooms, and even matsutakes made an August appearance!

photo by Jack Waytz



Buck and Margaret pour over identifications

In stark contrast, by the time September rolled around, as these early frenzied fruitings seemed to burn themselves out, in normally wet conditions, what was absent began to be notable. There was a complete absence of oyster mushrooms, (not even *one* appeared at the show), although all conditions seemed to be ideal for them, and very few angel wings as well. The *Pleurotus* genus seemed to have been curiously left out of the fray this season. Additionally, while some mushrooms were early, others made their appearances quite late, and stayed for vastly extended fruitings. *Boletus mirabilis*, *Boletus zelleri*, and *Boletus fibrillosis* have lingered into November, and I observed perhaps the largest and most widely found fruiting of *Lepiota rachodes* ever seen!

It remains to be seen whether subsequent fruitings of the usual suspects would have reappeared in the high places such as Schreibers Meadow, early snows

at this elevation throughout our area have, sadly, made the possibility one of fantastic pondering only.

The collections assembled for the show itself were very representative of what I had observed in our forests. There was a wide variety of *Corinarius* mushrooms, some of which are, even as I publish this newsletter, not yet identified by our top expert in this genus, Buck McAdoo. There were many *Lepiotas* and *Pholiotas* alike, but scarcely a *Pleurotus*, and no *Phaeolepiotas* at all! We would also have had no *Boletus edulis* if one of our patrons had not brought in two beautiful buttons about halfway through the show. A young couple had brought in a decent sized bag full of them and of course I asked where they had been found. The woman replied, "I got them at the mall." I thought, naturally, that she was being facetious, and laughed and said, "which store would they be in if I wanted to get some?" She looked at me strangely and simply stated, "No really, they were outside at the mall." I was left speechless. This was, to me, the most remarkable item of the show.

In line with the traditionally mysterious nature of our fungal friends, while several species that we expected to see were absent, a few turned up that we did not expect, including some so rare they have only been seen a hand full of times in the past century, and some even rarer than that, may turn out to be new species. Research is still ongoing at this time. (See Buck's show report later in this issue.)

The actual organization of the show was a bit different this year than in recent years. For starters, for the first time in recent memory, Fien was not available to be our master chef in the kitchen. Due to an unfortunate injury to her foot, she was forced into some lighter duty at the show, helping with book sales and membership. This

photo by Vince Biciunas



Nadine was great at the door for the duration.

photo by Vince Biciunas



A great assemblage of mushroomers, 2007

was actually a bit of a relief and Fien was grateful to get a chance to talk with our guests. Deb and Don Glover took over the kitchen and did so with grace and aplomb. They were on top of things from start to finish and the

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The Northwest Mushroomers Association meets at the Bellingham Public Library, 210 Central Ave., Bellingham, in the Lecture Room, at 7:00 pm on the second Thursday of the months April, May, and June and September, October, and November. *Note:* Each year one or two of these meetings may be moved to the NW Room of the Fairhaven Public Library. We will inform you in advance of these changes. Membership dues are \$15 for individuals and families and the special price of \$10 for students. Please make checks payable to NMA and forward to:

Cris Colburn, membership, at the mailing address above.

We need a field trip coordinator. Could it be you? If so, contact Doug. It's fun, and besides, someone feeds you!

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!)

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soup got better as the day went on. Thanks to all who donated their chanterelles to the kitchen, and special thanks to Alex Winstead of Cascadia Mushroom Works who came up with about six pounds of his own inventory to put us over the break even point. Check them out at the Bellingham Saturday market. After the smoke cleared and the kitchen crew had fed over 630 visitors, there was just enough of everything to leave no soul unfed. A great plan came together!

The actual numbers in terms of patrons, book sales, and new memberships were staggering. The club got 59 new members, sold twice the amount of books of previous years and received more than 100 visitors more than our previous high total in 2004. All told, this was a wildly successful show for the club financially. Our treasurer, Cris Colburn will offer a more detailed account at our meeting on November 8th.

Thanks to all who extended a herculean effort towards the success of this show. Our identifiers: Dr. Fred Rhoades, Buck McAdoo, and Erin Moore, all those who set up the display trays, too many to name here. The finished product was breathtaking. Thanks to Nadine Lihach who stayed glued to the door for the entire show and who, in great part, was instrumental in getting so many new people into the club, Cris Colburn for the tremendous book sales, and Vince Biciunas for signing up all the new members. Thanks to all of the wonderful member volunteers who worked hard and used their mushroom enthusiasm throughout the show. Special thanks to Vince for putting all of this together, and to Doug Hooks, for the great job of overseeing the whole process and insuring we had the assets to cover the entire organization. I would also like to thank Catherine and Kei of the Bellingham Herald for the terrific publicity this year, and the Cascadia Weekly as well. The good press and wet weather, which kept people seeing mushrooms everywhere, together insured the best public showing ever.

photo by Vince Biciunas



The start of great doings in the kitchen

photo by Vince Biciunas



Fred Rhoades and Tim Johnson continue identifying mushrooms as the throngs start to enter.

photo by Jack Waytz



Setting up the show's first impression

Thursday, November 8th, 2007, NMA monthly meeting at the Bellingham Public Library from 7 to 9 pm. This meeting will wrap up the club's 2007 season and will feature our very own **Dr. Fred Rhoades** offering us a multi-media presentation on the nematode trapping capabilities of fungi that are mainly the wood dwellers such as oyster mushrooms.

Saturday, November 10th, 2007, is the traditional end of season foray at Bowman Bay, conducted enthusiastically, as always, by **Margaret and Claude Dilly**. We will meet at the building to the rear of the main parking area at 9:00 am. for some refreshments and then off to capture what mushrooms the late season offers; usually a great variety indeed! Come join us there!

Mushroom of the Month:

Arrhenia chlorocyanea (Patouillard) Redhead,
Vilgalys, Moncalvo, & Lutzoni By Buck McAdoo

It isn't often that I'll drive 25 miles out of town to check out a mushroom described to me over the phone. But when I got the call from long-time member Evan Sanford in the drizzly morning of April 14th, 2007, it caught my attention. There was a blue mushroom on his lawn he hadn't seen before. As he began to describe the weird, thickish gills, I immediately thought he had *Polyozellus multiplex*, a large dark purple-blue Cantharelloid species. The largest of these, however, had a cap the size of his thumb nail.

Evan and wife Pam collect mushroom guides as a hobby. I realized that they would recognize an uncommon species when they saw one. I was at the site just beyond Kendall in half an hour.

I was greeted by Evan at his door. He pointed at a spot in his lawn. This seemed to be a signal for his dog, Nutmeg. This rambunctious female pug began running routes over lawn and driveway, and had to be captured by Evan to save the specimens. Fortunately, he had already taken a photo, the one you see here, so whether my shot came out or not was no longer significant.

The species was indeed diminutive. The caps measured 6-10 mm. wide and were plane to shallowly depressed at first, then deeply funnel shaped in age. The cap color also changed from an inky, shiny blue-black at first to a slate blue-gray when mature. As the caps expanded they became deeply pleated with wrinkled margins. The gills were long decurrent, thick and ridge-like, intervenose, and pale gray-blue. The stems were smooth, measured up to 1 3/4 cm. long, and were equal or tapered slightly towards the base. They were dark gray-blue. The taste was mild, the odor somewhat musty. The spores were white and inamyloid.

Examination by microscope revealed ellipsoid spores with a pointy end, almost lacrymoid in shape. They measured 4.6-7.2 x 7.2-10 microns. The gill trama was interwoven. There were no cystidia. The pileipellis was a cutis of repent hyphae with a few ends exerted. The hyphal walls were incrustated with pigmentation. Clamps were found in the pileipellis by both Dr. Fred Rhoades and Dr. Scott Redhead.

Just for fun, I decided to google the name "*Arrhenia chlorocyanea*". A site came up that stated the species was to be found in the northern hemisphere in minimal lawns near bodies of water. Well, Evan's lawn isn't the best, and the bodies of water were represented by deep puddles in the driveway, so the habitat wasn't too far out of line. Other European sources claim that *A. chlorocyanea* can be found along paths in heaths, on lichens and mosses, and in the mountains. And finally a site informed me that the species was known as the Verdigris Navel by a select group of British aficionados. In England it is considered so rare that it made the Red List for Threatened British Fungi. Nice find, Evan!

Arrhenia chlorocyanea also appears to be rare in North America. Under a former name, *Clitocybe smaragdina*, Bigelow and A.H. Smith report that it had been recorded only four times between 1939 and 1962. Smith recorded three finds from Kalaloch, Washington, in a ten-day period in late April, 1939. The other find was made by M.C. Melburn in Uplands Park, Victoria, B.C. on February 6, 1959.

The species has an interesting nomenclatural history. The only picture of it that I can find in any popular guide is a water color rendition in *Handbuch fur Pilzfreunde*, Vol.3 by Michael, Hennig, & Kreisel. It was originally



described as *Omphalia chlorocyanea* by the French mycologist, Patouillard. Clamp connections were not mentioned in the description of the type. Because of this omission, Dr. Howard Bigelow created a new species called *Clitocybe atroviridis* in 1982 that did have clamp connections. Then, in volume II of his *Clitocybe* monograph, Bigelow stated that Dr. Gulden and Dr. Redhead found Norwegian collections of the original *Omphalia chlorocyanea*, and clamps were found in both. Unfortunately, the holotype representing the species concept in the Patouillard Herbarium lodged at Harvard has been lost. Perhaps for this reason, Dr. Redhead wanted to see Evan's specimens. He wanted to check for the presence of clamps one more time. Satisfied that the issue over the clamps had been resolved, Dr. Redhead and associates created the new combination *Arrhenia chlorocyanea* in 2002. *Clitocybe atroviridis* was listed as a synonym, and along with it would belong *Clitocybe smaragdina* in the sense of Bigelow and Smith. But why *Arrhenia*? Until quite recently this was such a rare genus that Moser attached only one species to it in his *Agarics and Boleti*, published in 1978. He described the genus as "fruiting body young almost spherically closed and stiped, developing ridge-like and veined in the hollow inside; the hymenium, at first turned upwards, then opening and declining downwards, spatula or spoon shaped, more or less gray." One would assume the description would now be amended to include blue and green colors.

However, the dark green *Clitocybe atroviridis* and the gray-blue *Arrhenia chlorocyanea* appear to differ in spore shape. Dr. Bigelow described the spores of *Clitocybe atroviridis* as 'broadly ellipsoid, sometimes ovoid to obovoid'. In Evan's collection of *Arrhenia chlorocyanea*, the spores were almost lacrymoid, pointy at one end. If spore shape is in any way diagnostic, this might deserve another look.

Way back in 1966, mycologists Morten Lange and Ola Skifte conducted a fungal survey in northern Norway. Among their finds was a single specimen of *Omphalina chlorocyanea* in peaty soil near Tromsø. They noted the presence of clamp connections and the "slight narrowing of the spore towards the apiculus". There is no doubt that this is the same rare species found on Evan's lawn.

Thanks go out to Evan for reporting the species, to Dr. Fred Rhoades for verifying microscopic characters, and to Dr. Scott Redhead for verifying the identification.

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Note to all members:

This newsletter has been mailed to people based on a composite membership list compiled over the past three years. If your membership has lapsed, we would love for you to rejoin the Northwest Mushroomers. If you choose not to do so, this will be your last issue of the MushRumors newsletter. Hope to see you back!

Report on Mushrooms at the Fall Show

By Buck McAdoo

A few observers have commented that this might have been an even better fall season for fungi than 2004. There were so many mushrooms to sort out and name that we ran out of time for identifying the coral fungi. But no complaints. The variety was tremendous and the displays were breath taking. It was a terrific year for *Cortinarius*. This is a large and difficult genus of agarics that can tie up identifiers for hours. To make matters even more interesting, there were also a lot of *Inocybes*. Even though there were fewer of these, the fibrous brownish caps and slightly differing stem configurations also tied up identifiers for hours. While Fred Rhoades and I were hunkered down with these genera, Margaret Dilly was pretty much left with the rest at crunch

photo by Buck McAdoo



Cortinarius cinamomeus

photo by Buck McAdoo



Pleurotus dryinus var. *tephrotrichus*

tephrotrichus has a coarse gray covering of scales and fibrils on the cap surface. Spores were sent to Dr. Petersen in Knoxville, so we may be hearing more about it later.

I'd like to mention that the general public outdid itself this year, and brought in really interesting fungi to the identification table. One fellow found a giant clump of *Hohenbuhelia* on his wood chips. He also brought in a beautiful specimen of *Gymnopilus luteifolius*, and another *Gymnopilus* with a buttery smooth cap and salmon colored gills that I have yet to decipher. There was also a stunning variety of *Dermocybes*, those brighter gilled members of *Cortinarius*. An attractive woodland *Agaricus* with cinnamon colored scales was found by Jack

photo By Buck McAdoo



Hypholoma capnoides

Waytz and I at the Stimson Reserve. There is no staining reaction. The application of KOH on the cap surface turns it bright yellow instantly. The odor is medicinal and therefore it is not a good candidate for the table. So far we can't find a name for it. Finally, one of the most striking mushrooms at the show was *Cortinarius elegantior*. This is a large golden-yellow Cort with an emarginate stem base. I suspect that Stash brought it in, as he finds interesting species every year without fail.

time, so in a sense she was the star of the show from an identification point of view. In general, it seemed to be a banner year for *Clitocybe clavipes*, *Lepiota rachodes*, and *Paxillus involutus* with *Collybia peronata* coming in a distant fourth. There was a lot of *Clitocybe nebularis*, the Cloud Mushroom, at the show. While there were few varieties of *Amanita*, *Tricholoma*, and *Russula*, there were more *Pholiotas* than one would expect so early in the season.

Among the more interesting species brought in was *Pleurotus dryinus* variety *tephrotrichus* by Karen Kelly. She found it on deciduous wood on Camano Island. *Pleurotus dryinus* is a large, edible, stemmed *Pleurotus* whose gills turn yellow when dried. The variety

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All in all, the combination of heavy rains prior to the show, great publicity by the Bellingham Herald, and hard work by the core members of Northwest Mushroomers produced our best show in recent memory.

NMA Fall Mushroom Show Species List

Gilled Mushrooms:

Agaricus arvensis
Agaricus augustus
Agaricus campestris
Agaricus comptulus
Agaricus hondensis
Agaricus molleri
Agaricus nivescens
Agaricus sp.
Amanita gemmata
Amanita muscaria
Amanita muscaria v. formosa
Amanita porphyria
Armillaria ostoyae
Chroogomphus tomentosus
Clitocybe clavipes
Clitocybe deceptiva
Clitocybe dilitata
Clitocybe epichysium
Clitocybe fragrans
Clitocybe gigantea
Clitocybe ligula
Clitocybe nebularis
Clitocybe odora
Coprinus atramentarius
Coprinus comatus
Coprinus lagopus
Coriolus versicolor
Cortinarius brunneus
Cortinarius cacaocolor
Cortinarius camphorates
Cortinarius clandestinus
Cortinarius croceus
Cortinarius elegantior
Cortinarius griseoviolaceus
Cortinarius mutabilis
Cortinarius phoeniceus var. occidentalis
Crepidotus appianatus
Cystoderma amianthinum
Cystoderma fallax
Cystoderma granulatum
Flammulina velutipes
Galerina sp.
Galerina sp.
Gomphidius glutinosus
Gomphidius oregonensis
Gomphidius smithii
Gomphidius subroseus
Gymnopilus sp.
Gymnopilus sp.
Hebeloma mesophaeum
Hebeloma crustuliniforme
Hygrophorus bakerensis
Hypholoma capnoides
Hypholoma fasciculare

Inocybe geophylla
Inocybe geophylla v. liacina
Inocybe grammata
Inocybe pudica
Inocybe calamistrata
Inocybe rimosa
Laccaria amethysteo-occidentalis
Laccaria laccata
Lactarius deliciosus
Lactarius luculentus
Lactarius pallescens
Lactarius parvis
Lactarius rubrilacteus
Lactarius rufus
Lactarius tomentosus
Lepiota atrodisca
Lepiota clypeolata
Lepiota cristata
Lepiota rubrotincta
Lepista nuda
Leucopaxillus amarus
Lyophyllum decastes
Macrocyttidia cucumis
Macrolepiota rachodes
Macrolepiota rachodes v. rachodes
Marasmius oreades
Marasmius plicatulus
Marasmius sp.
Melanoleuca cognata
Melanoleuca sp.
Mycena amicta
Mycena aurantiodisca
Mycena aurantiomarginata
Mycena avenacea
Mycena delicatella
Mycena epipterygia
Mycena galericulata
Mycena metata
Mycena plumbea
Mycena pura
Mycena sanguinolenta
Nolanea sericea
Omphalina luteicolor
Paxillus involutus
Phaeolepiota aurea
Pholiota limonella
Pholiota melicola
Pholiota squarrosa
Pleurotus dryinus
Pluteus cervinus
Psathyrella longistriata
Psathyrella multipedata
Psilocybe azurescens
Psilocybe cyanescens
Rhodocollybia butyracea
Rhodocollybia imaculata
Rozites caperata
Russula acrior
Russula aeruginea

Russula bicolor
Russula brevipes
Russula olivacea
Russula rosacea
Russula xerampalina
Stropharia aeruginosa
Stropharia ambigua
Stropharia rugosa-annulata
Tricholoma myomyces
Xeromphalina campanella
Xeromphalina caudicinalis

Non-Gilled Mushrooms:

Aleuria aurantia
Boletus coniferarum
Boletus edulis
Boletus fibrillosus
Boletus mirabilis
Boletus ponderosus
Boletus zelleri
Cantharellus cibarius
Cantharellus formosa
Cantharellus infundibuliformis
Cantharellus subalbidus
Chlorociboria aeruginascens
Crucibulum laeve
Dacrymyces palmatus
Dentinum repandum
Fomitopsis pinicola
Ganoderma oregonense
Geastrum fimbriatum
Geastrum saccatum
Gyromitra infula
Helvella crispa
Helvella lacunosa
Hericium abietis
Hypomyces lactifluorum
Leccinum scabrum
Lycoperdon perlata
Lycoperdon pyiforme
Lycoperdon umbrinum
Otidia onotica
Phaeolus schweinitzii
Pseudohydnum gelatinosum
Sarcodon imbricatum
Scleroderma sp.
Suillus caeruleus
Suillus lakei
Suillus luteus
Tremella mesenterica
Vascellum pratense
Xylaria hypoxylon

Note: This is a *partial* list of the species shown, Buck is still keying out several *Cortinarius* mushrooms and the *Ramarias* were left unidentified.

photo by Jack Waytz



A tasty conflagration of *Coprinus comatus*, shaggy mane, perfect for the pan!!

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