MushRumors

The Newsletter of the Northwest Mushroomers Association

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Mushroom Season for the Ages Yields Huge Dividend for the 2010 Northwest Mushroomers Association Fall Show

With an unusually wet whether pattern establishing itself in the early part of June, long before the fall mushroom season would commence, there was a feeling of anticipation in the air, that a bountiful crop of mushrooms just might be in the offing. We could not, however, have anticipated the extent of it. The duration of the

photo by Jack Waytz



Capturing the look of the temperate rainforest

season.

As usual, there were a few surprises in this season of such a wealth of edibles. While there was a seemingly endless procession of *Boletus mirabilis* available on virtually every submerged hemlock snag in Whatcom County, *Boletus edulis* was sparse at best in our area, despite what for all appearances, were absolutely perfect conditions for a boisterous fruiting. Adding to this myco-mystery was the fact that, inexplicably, from I-90 south, the fruiting that we were expecting was happening from Mid-September through the end of the first week of October. I received word from Joy Chen that on the way to the Snoqualamie Pass, there were so many king boletes that the trails were almost unnavigable. Even more amazingly, there was an equal number of the tasty *Leccinum aurantiacum*, and also countless scads of matsutake mushrooms, all in the same habitat! Just another perplexing question for the mushroomer to ponder: why there and not here, with apparently identical conditions?

fruiting, as well as the quantity of most of the desired edibles was astounding. Chanterelles were found in great numbers until Thanksgiving, and normally hard to find, and highly prized cauliflower mushrooms were wide spread over an almost unbelieveable period of the fall season. If one has the good fortune to find one, they normally appear at the zenith of the fall season, in the early part of October. when the good rains have thoroughly permeated the thirsty substrates of the land. This year, I found the first of an incredible four, on the 19th of August, and the last, and best, in the middle of November, while on

my last chanterelle hunt of the

In this issue:

Mushroom of the Month
Inocybe praecox
By Dick Morrison Pg. 4

2010 Fall Show Report *By Buck McAdoo*

Silver Lake Foray Report By Christine Roberts Pg. 8

Pg. 6

Two Weekends at the South Pass By Jack Waytz Pg. 9

Event Species List Annex Pg. 10

2011 NMA Highlights Pg. 15

As was evidenced by the vast variety of species assembled for tour show, not only the edibles had banner showings this year. There were a remarkable number of rarities uncovered, including some first time finding in Washington, first time findings in North America, and some species that have never before been described by science. These are still being studied, as Buck's work seems never to end. There was even two fruitings of the dreaded death cap, *Amanita*



Gomphus kaufmanii: Stash and Carol Broniszs' gnarly annual contribution, which no one else ever finds!

phalloides, found for the first time in Bellingham on the Western Washington University campus by NMA president Pete Trenham.

Thankfully, the weather this year was substantially better for collecting than last year. Those brave

souls that withstood driving rains in the fall of 2009 were greeted with sunny, pleasant conditions. The mushrooms seemed just to be waiting to be found, so that they could be proudly displayed on our tables. Many thanks go out to all of those who provided collections; you made the show a success.

Since Doug's mother and father couldn't make it out for the show this year, we had a new crew manning the centerpiece, and what a phenomenal job they did. They were able to give it a true deep in the old growth, temperate rain forest look. Very impessive, indeed. Thanks very much to Jill Emerson, Chuck Nafsiger, Dick Tobias, and others who worked on it for their superb efforts. The same can be said of the artists who arranged the tray displays. They have never looked better. Under the careful direction of Margaret Dilly, an awesome effort was delivered by all; too many to name here. The

infusion of new blood into the process was noticeably beneficial.

The process of labeling the mushrooms after the identifiers work their magic with them, has been under refinement for the past two seasons, and has reached its fruition with the effort this year. Combined with

photo by Jack Waytz



From the South Pass, the rare and tasty *Cortinarius armillatus*; sadly, slightly blurry-

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The Northwest Mushroomers Association meets on the second Thursday of the months April, May, and June and September, October, and November. Meeting Location is NEW: CEAEE - Center for Expressive Arts and Experiential Education, 1317 Commercial Street, Suite 201, Bellingham, WA 98225. 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 forward 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!)

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some new people lending their help with the identification process, the operation has never been so efficient.

Speaking of the identifiers, special thanks to Fred Rhoades, Buck McAdoo, Larry Baxter, Christine Roberts, Erin Moore, Margaret Dilly, Tim Johnson, and newcomer Daniel Vining for providing the invaluable asset of expertise. Our club is more than fortunate to have such qualified people to perform this task. Make use of their expertise whenever you have the opportunity. Many clubs are not so fortunate, they actually have to search for competent identifiers to help them put on their fall exhibits. The NMA's mushroom identifiers are truly an invaluable asset.

Year after year, one of the most important and beloved, albeit stressful, parts of our extravaganza is the mushroom cookery presentation for the adoring throngs that come to visit our show. Marianne Phelps headed up this year's crew



Jill and Dick hard at it on this year's fantastic centerpiece.

of kitchen all stars, which included Marian Tobias, Alyne Anzalone, Lisa Hervieux, Keith Phelps, and Norine Morrison. It is no small task, preparing the mushrooms for cooking, then keep up with the demands of over 700 visitors. Great work indeed! Speaking of the mushrooms for the kitchen, the cooking isn't possible at all unless

photo by Jack Waytz



Amanita mushrooms galore! Can you pick out the edible species here?

we receive donations of chanterelles, kindly made. Thanks to Bob Clemmons and Stash and Carol Bronisz and all others who gave of their own booty so generously.

About half way through the big event, club member Rosa Tai came in bearing a big white box which was to be a donation to the kitchen as well. It was filled with probably 15 pounds of matsutake mushrooms! Some were cooked for samples for the public, and it was to the delight of all that I distributed most of this geat gift to those left at the end for the traditional potluck dinner. It speaks volumes to the magnitude of the mushroom season when one can give away 15 pounds of a mushroom that is, in normal years, are not only quite coveted, but sold at the specialty markets in Seattle for \$65.00 per pound. The 2010 Fall Show was in many respects the most

successful show in our club's history. I look forward to taking this event to an even higher level in the coming seasons. Thanks again to all who participated!

photo by Jack Waytz



The striking purple *Cortinarius violaceus* on one of the *Cortinarius* trays: collected by Erin Moore

photo by Jack Waytz



Christine Roberts attemps to identify a strange species of *Ramaria* growing from her head...

Inocybe praecox, the Early Inocybe, a Newly Described Species from Washington State

By Dick Morrison

Inocybe mushrooms most often fruit in the late summer and fall, so it was a bit surprising to come across an attractive, medium sized, brownish-yellow capped Inocybe in late March 2010 in Sudden Valley, near Bellingham. Several keys were used in an attempt to identify the specimens, and a possible match was found in a 2008 key to Inocybe spp. in the Pacific Northwest by Dr. Brandon Matheny. The best match was a species provisionally named I. "praecox" (provisional because it had not as yet been described in



a peer reviewed scientific journal). I contacted Dr. Matheny (who was a student of Dr. Ammirati at the Univ. of Washington) and he was kind enough to send me a very recent publication in the journal Mycologia (Dec. 2009) by Kropp, Matheny and Nanagyulyan, where *I. praecox* was officially described and discussed. This publication included a key to the *Inocybe splendens* complex of which *I. praecox* is a member. From photos of the Sudden Valley specimens Dr. Matheny felt *I. praecox* was a likely candidate. After studying morphological and microscopic characteristics it was concluded that the Sudden Valley collection was, indeed, this newly described species of *Inocybe*.

The following descriptions of *I. praecox* are based on and the paper by Kropp, et al in Mycologia and the samples from Sudden Valley.

Important field characters (the most distinctive in **bold**): 1) **fruiting in spring** under red cedar, western hemlock and/or alder and madrone; 2) mushroom of medium size, somewhat robust (tricholomatoid); 3) **cap brownish-yellow, convex to plane, sometimes with a broad umbo, surface matted fibrillose** but not scaly; 4) **gills attached, pallid, becoming light brownish in age**; 5) **odor lacking**; 6) **stem pruinose (powdery or dandruffy) to at least half way down the stem,** equal, pallid to light tan; 7) **stem with a marginate (rimmed) bulbous base.**

The following is a more complete description of *I. praecox*.

Cap 2.0-6.0 cm diameter, margin incurved when young, convex to plane at maturity, often with a broad umbo. Surface slightly greasy, with appressed fibers or squamulose areas in age, not rimose. Color medium yellow-brown to dark yellowish brown, sometimes darkening to brown in age. Odor none. Gills close, narrowly attached, 2.5-6 mm deep, whitish at first, becoming light grayish-brown in age, edges pallid and indistinctly fimbriate. Stem 2.0-7.0 cm x 5-13 mm, solid, equal, terminating in a distinctly marginate basal bulb; color pallid to light tan, pruinose down to the basal bulb when young, less evident near the base and may only be visible part way down the stem in older specimens. Veil absent. Spore Print mid-brown. Spores (7.5-)8.6(-13) x (4.5-)4.9(-6.0) um, smooth, almond shaped to elliptical, apices subconical to obtuse, color yellowish-brown, without a germ pore. Pleurocystidia 44-70 x 12-18 um, numerous, thick walled (1-1.5 um), clavate to fusiform-ventricose, apices obtuse and often coated with crystals. Cheilocystidia 32-65 x 12-17 um, numerous, thick walled (0.5-2.0 um) clavate to fusiform-ventricose, rarely ovate, apices obtuse and often coated with crystals. Caulocystidia present on stem, clavate to subfusoid, typically thin walled, some with crystals at the apex. Clamp connections present. Habitat: Occuring singly or in small groups on the ground in forested or park locales under conifers, e.g., Douglas fir, western hemlock, and western red cedar, but also red alder and

madrone, at lower elevations in Washington State.

<u>Comments:</u> The species name *praecox* means "early", which is an apt name for this spring fruiting *Inocybe*. There is no information on whether *I. praecox* is poisonous, but as with other species of *Inocybe*, it most likely is, and should not be eaten. To date, *I. praecox* has only been reported to occur at lower elevations in western Washington State. However, it may be found to have a wider range now that it has been described and mush-roomers become aware of it.

Most, if not all *Inocybe* species are mycorrhizal with various conifer and broadleaf trees. *I. praecox* is probably no exception as it is found associated with trees such as Douglas fir, western hemlock, red alder, and madrone. The Sudden Valley fruiting was under Douglas fir and western hemlock. *I. praecox* has no distinctive odor, in contrast to many other *Inocybe* sp. which have strong or distinctive odors e.g., spermatic, fishy, like green corn and even fragrant. It is also rather robust for an *Inocybe*.

The genus *Inocybe* contains a large group of small to medium size terrestrial, brown spored, often dull colored mushrooms, many of which fall into the "LBM" category. Although members of the genus are fairly easy to recognize, species are another story as there are many "look-alikes" as well as those that are poorly characterized or even undescribed. So, identifying species can be a chore and currently available keys are often inadequate. Based on recent work with DNA analysis and microscopic traits some researchers have suggested splitting *Inocybe* into several new genera, and this work will be going forward as new information is revealed by the professional *Inocybe*-ologists.

Many *Inocybe* species are known to be poisonous, containing muscarine and possibly other toxins. David Arora estimates that *Inocybe* contains a higher percentage of poisonous species than any other major mushroom group, including *Amanita*. Every mushroom enthusiast who collects mushrooms for food should learn to recognize *Inocybe* species and take Arora's recommendation to avoid eating them.

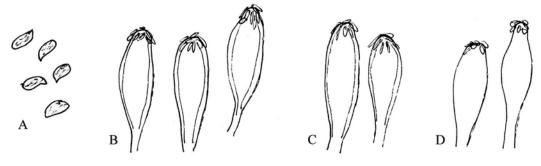


Fig. 3. *Inocybe praecox*. A) Basidiospores. B) Cheilocystidia. C) Pleurocystidia. D) Caulocystidia.

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Matheny, P. B. 2008. *Preface to artificial key to common and noteworthy species of Inocybe from the Pacific Northwest.* Photocopied separate, revised Feb. 2008. Clark University.

The next riveting issue of MushRumors will be out soon. Look for:

- -Another thrilling Mushroom of the Month article by Dick Morrison
- -Bowman Bay Foray report By Margaret Dilly
- -Recipes from my November cooking class
- -An exciting preview of the mushroom activities of 2011
- -2010 wrap-up and retrospect

Leading up to the show, the weather pattern seemed more conducive to the fruiting of wild mushrooms than any year in recent memory. Although too early to spot the massive hordes of <u>Suillus caerulescens</u> on the sides of roads, a visit to almost any woodland area would reveal an abundance of fungi. Unlike last year, there was no killer frost in early September. The weather remained warm between the rains and the fog, and the fungi responded accordingly. As a result we shattered the 2008 club record of 249 species at the show. Margaret Dilly reported 286 species! And there were at least 300 if you included the *Inocybes* and species of *Cortinarius* that eluded identification.

It was the Year of the *Cortinarius*. Jack and I and Jairul saw them everywhere we forayed in the days leading up to the show. In the early days of Northwest Mushroomers, Veronica Wisniewski used to handle the *Cortinarius* species. This was great because it freed the rest of us up to handle everything else. Veronica left the club some years ago, and ever since I had kept my fingers crossed that we wouldn't be inundated with *Cortinarii*. Year after year we got the usual suspects, but this year would make up for all of them combined.

Therefore, on Saturday night, I was not shocked to see the *Cortinarius* boxes advance over the floor in much the same manor as the *Russulas* did the year before. (I got so bogged down in *Russula* last year that Margaret and Fred had to drive me out of that area.) On Sunday, I was greeted by Fred.

"Look," he said, "I think it's very important that we identify the things we know first. If time allows, we can work out the difficult species later."

This meant to me that I could avoid *Cortinarius* entirely and pray that Fred would head for the *Inocybe* box as he did last year. I headed for Collybioid species with a sense of relief. I found myself alone in the War Room, the place where we identifiers usually convene. This year was different. There were just so many fungi that there really wasn't time for folks to walk in and out of that room. Almost everyone took species from boxes to tables and back again for more. I got through *Collybia* and *Clitocybe* in about the same time that Christine got through *Russula*. She headed over to Ramaria, another major challenge, which left me hesitating between *Agaricus* and ... *Cortinarius*. This is the largest genus of gilled fungi in the world. Many of us love *Cortinarius*. It has many beautiful species, most with wispy cortinas which hang from cap margins to stipe like spider webs. They are also quite difficult to figure out. Many of ours look like European species, but differ in subtle ways that either prevent us from naming them or entice us to cheat and name them anyway. Since there are hundreds of *Cortinarii*, keying one out could take up an hour's time or more. And if you arrive at a name through the use of a European key, it's probably not the one you have in front of you anyway. DNA sequencing is proving many of ours to be different.

And then there are regional differences caused by soil composition, tree association, weather patterns, and how hygrophanous (dried out) the specimens are when you find them. Some change dramatically from dark brown to tan as they age. Another field characteristic is the color of the veil. Much of the time this can only be observed in buttons before the rusty spores mature and turn everything rusty. On top of all this is the human factor. One person's idea of 'tawny' might be another's vision of 'cinnamon' color. And so on and so on.

But this time I came prepared. I lugged over every major pictorial *Cortinarius* guide that I had. Armed with this material, I would impress my peers with more Corts identified than ever before. *Cortinarius violaceus*, *Cortinarius traganus*, *Cortinarius semisanguineus* the easier ones leaped from the boxes to the tables. This was made possible by the labels, which fortunately were in alphabetical order and bound together by elastic bands. One cannot overemphasize the importance of this system. Otherwise it would have taken ten minutes to find one name tag. The rare *Cortinarius paragaudis*, specimens of which had been found by Jack, made it out to the tables in one of the earlier batches, only to get lost in the mayhem until Jack relocated them on a *Cortinarius* tray misplaced next to *Pholiota* minutes before the show was to start. This was a pretty big deal. No one wants to see something special they found disappear in thin air. But it happens. Mushrooms can be just as mysterious in the building as they are outside of it.

Meanwhile, I was hitting the *Cortinarius* wall. The normal things we always get out were out and labeled. It was my time to shine. I would hold a promising specimen in my hand and flip through photos of Scandinavian

Phlegmaceas, expecting any minute to solve the identity. When this failed, I would grab the ancient Key Council Key created by Dr. Stuntz and proceed after ten minutes to a place where neither key choice made any sense. There might not be anything wrong with the key. There just aren't enough species in it. From here I might reach for Moser's Farbatlas. This gets quickly discouraging because the photos are not in alphabetical order. They are in Fungi of Switzerland, Vol.5, but you have to know what section your Cortinarius is in to make it work for you. The clock is ticking. You need coffee. Every other identifier out there is getting more specimens labeled than you are. It's time for Arora's Mushrooms Demystified. Most of the Usual Suspects are in there. The rest are hidden in one-liners that don't supply enough information. Arora would have needed a 2,000- page book to address them all. In the end a dozen or more Cortinarii are left in the boxes. These are the brownish ones that would need microscopic work to get identified correctly. There are also some gorgeous species we haven't seen before. The best we can do with these is to round them up after the show, photograph them at Cornwall Park, describe them, dry them, and hope that some day a Northwest key for Cortinarius will materialize that will include them.

This was just the *Cortinarius* story. Every other identifier had their own adventure with other genera. In the end, I feel it was our best effort to date. Even the *Inocybes* got done before the public came in. The addition of three or four identifiers we didn't have last year made the difference. But not all of it. I believe we have all learned the names of some fungi we didn't know several years ago, and the summation is what you saw at the show.

Mushroom Sampler Provides Spectacular Taste Treat By Jack Waytz

In the aftermath of the 2010 Fall Mushroom Show, with season still going full force, I got an unexpected call from David Arora, who was on his way up to stay at his brother's condo in Vancouver, BC. He asked how the mushrooming was here and I informed him of just how great the year had been. He decided to stop by and possibly do a hunt before heading north in the morning. Naturally, this seemed like a good idea to me. I had a good compliment of several different edibles in the refrigerator, so I told him, "At the very least, we could have



David Arora and Buck McAdoo

a great dinner." I phoned Buck, who, of course, agreed to join us for dinner. The weather was quite rainy by midday, so we decided to bag the hunt, since David is working mainly on taking photographs for the anxiously awaited next revision of *Mushrooms Demystified*, and a driving rain was less than conducive to that activity, not to mention David's propensity for fair weather mushroom hunting.

Little did I know, David was bringing by some edibles of his own, as he had been collecting on his way up the coast. As it turned out, David, Buck, and my wife and I would dine on nine different varieties of edible mushrooms, five of which I had never before tasted! The lineup included some classic favorites: chanterelles, *Boletus mirabilis*, and *Sparassis crispa*, and the less consumed but also very flavorful *Cantherellus*

tubaeiformis. In addition, we tried *Tricholoma flavovirens* and David brought the boisterous *Cortinarius ponderosum*, which proved to be my wife Anita's favorite of the bunch, as well as *Catalathesma ventricosa*, which David referred to as the "mock matsutake," a very large, white, gilled mushroom associated with coastal spruce, which I just loved the taste of, *Russula olivacea*, and for desert, the surprising and sweet *Clavariadelphis truncatus*. What an unbelievable flavor. When tasting mushrooms like this, it becomes exquisitely evident how unique the flavor of every fungus really is. It was a superb format, a mushroom tasting, to eat what I love best, mushrooms.

The rain let up for a warm and sometimes sunny few hours foraying at the Silver Lake campgrounds. Quite a crowd turned up, including many of the new members and their families who had joined at the mushroom show. Pete Trenham introduced new members to the ethics, safety, and protocol of our forays, and pointed out

folks most likely to be able to identify finds. Business over with, we all trooped off into the forest in small groups.

Our little group soon found a nice crop of lobster mushrooms, and a bit further on some oysters. This is always encouraging for new folks, you can sense the enthusiasm being sparked. As we went along the cameras came out and cries of "Oohh look at this, it is beautiful," were heard frequently.

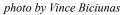
At lunch time we all spread our finds out on the picnic tables, filling about two thirds of them, leaving scarce room for the potluck



A game assembleage of hunters at the October Silver Lake Foray

food. Buck McAdoo, myself and folks who had taken Fred's identification class got labels on as many as we could, and interesting finds were discussed. Buck got all excited about a collection of little brown *Cortinarius* "Possibly a new species," and rushed off to photograph them on the forest floor. We managed to name 92 taxa, some of which we worked on at home later.

Finds that were greatly admired somewhat jealously included *Sparassis crispa* and *Boletus fibrillosus*, both excellent edibles. Notable for their brilliant colours were a tiny but vivid red *Hygrocybe miniata*, *Laccaria amethysteo-occidentalis* with its strikingly purple gills and basal tomentum, *Gymnopilus luteofolius*, dingy brown until you turn it over to see the bright yellow gills, and the salmon-orange *Pholiota astragalina*. *Thele-phora palmata* was also found, this little brown, wizened looking mushroom is notable for its powerful stink of rotting cabbage and garlic! All in all we found an amazing variety of mushrooms, learned more about the Silver Lake habitat, and had fun socializing and eating the yummy food.





A good time was had by all, and in the end, a formidable yield of fungi

photo by Vince Biciunas



Christine at the identification table, with avid onlookers eager to learn

With weather conditions creating an optimal environment for so many mushrooms in the fall 0f 2010, one of the biggest benefactors of these conditions were the mushrooms in the *Cortinarius* genus, as Buck so eloquently alluded to in his Fall Show Report. With so many *Cortinarius* mushrooms turning up for the show, Buck and

photo by Buck McAdoo



Cortinarius fulvoochrascens

I decided it would be well worth a trek into the wilds of northern Whatcom County to an area which has become known to us over the years as a virtual hotbed of *Cortinarius* activity even in average mushroom seasons and this was no average season. It doesn't hurt that while engaged at the study of the genus *Cortinarius*, there is always a good quantity of chanterelles for the food basket while on the hunt, not to mention the moist delectable, largest, white chanterelles that I have ever seen.

We got in touch with University of Washington professor Dr. Joseph Ammirati, one of the foremost experts on *Cortinarius* mushrooms in the world, and Steve Trudel, author of the most recent and comprehensive field guide to mushrooms of our area, *Mushrooms of the Pacific Northwest*.

Dr. Ammirati had already come up here for an early, and very successful look at the snow bank mushrooms up the Canyon Creek Ridge in June. We raved about our South Pass Site with such fervor, that Dr. Ammirati couldn't say no.

So it was that on the morning of October 24th, 2010, that Buck McAdoo, Dick Morrison, Joe Ammirati, and I headed out to the South Pass to endeavor to uncover what *Cortinarius* mysteries our diminutive forest would reveal. While Buck and I wondered if the season had peaked in the previous week, (we collected there for the Fall Show), we were quickly reassured otherwise when a huge variety of mushrooms presented themselves to us, including, much to the delight of Dr. Ammirati, collections of *Cortinarius* mushrooms aplenty. These included some of the usual suspects, such as *C. brunneus*, *C. traganus*, and *C. alboviolaceus*, as well as *C.*

vibratilis and C. purpurascens. Our findings were, however, far from confined to the ordinary, as we turned up some real rarities in the genus, including several that could not be identified, and others which have been collected only a handful of times on the North American continent. Amidst this bevy of Cortinarius collections, each of us had time to collect an impressive array of edibles; beautiful, fresh chanterelles, scattered everywhere, including the generally far harder to find C. subalbidus, the white chanterelle, and I also found a beautiful collection of Tricholoma flavovirens. Buck had secured another edible, the delicious Tricholoma portentosum, which he declared to be "one of the best wild mushrooms I have ever eaten," while collecting for the show,



Cortinarius malacorius

but sadly, I did not run across it this time. Too bad, any fungus that could garner this kind of praise from Buck must be outrageously good. My disappointment would be short lived, however, as on the way out of the forest, I spied a perfect 4 lb. *Sparrasis crispa*, right at the side of our trail back to the cars. In the end, we had spent most of the day out there, and Joe deduced that there were still plenty of *Cortinarii* hidden in the brush left to find, so we laid plans to come out the following weekend, and collectively hoped that both the weather, and the fruitings, would hold.

As we prepared to delve back into the unique forest habitat that we discovered in the South Pass area of Whatcom County, our already formidable group of mycologists was about to be joined in the hunt by none other than David Arora, who spent the night at my house after coming back into the country from Vancouver, BC.

When we first went into the woodline, it looked as though we had perhaps had the window of opportunity close on us. It looked surprisingly different from the week before, which had us meeting various fungi as soon as we opened the car doors. There were virtually no mushrooms to be seen at the outset, and the mood was a bit apprehensive in the group. Our spirits would soon be lifted, however, as closer inspection revealed immediately several different *Cortinarius* mushrooms than we had see on our previous hunt. As we got deeper into the

photo by Buck McAdoo



Cortinarius armillatus; tasty, but how to tell?

woods, we dicovered more and more *Cortinarius* gems hidden in this innocuous little forest, much to the surprise of David Arora, who exclaimed in disbelief, "I probably wouldn't even have stopped here, looking at it from the road." A good lesson, that no forest ought to be disregarded by the audacious fungophile. The collections included to different species of dark brown *Cortinarius* mushrooms, identified as *C. cacaocholor*. Joe had long suspected that there were as many as three diffent species that had ben assigned this moniker, but this was the first time in three decades of searching that he had found all three at once. Needless to say, this was grounds for celebration.

The plot thickened further when we entered a part of

the forest photo by Buck McAdoo

where, in addition to the Douglas Fir and hemlock that were the main arboreal features of this wood, there were some black birch scattered about. This raised Joe's level of excitment as he explained to us that the birch trees changed everything in terms of what mycorhizal partners might be present. And sure enough, they did. It was here that we turned up the species *Cortinarius armillatus* (above), the banded Cortinarius, a species known from the Eastern United States, and not found in Washington, until now. This species is also a very tasty edible. Dr. Ammirati got the part of the collection that was still in an edible condition for his field specimen, so we will have to wait until next year to try this one on the table. We also turned up the rare *Cortinarius pholideus*, *C*.



Cortinarius gentilis: lethal if ingested!

photo by Buck McAdoo



Last but not least, this *Cortinarius* mushroom befuddled even this team of experts; still unidentified.

aurantiobasis, and C. muciflus in this small area.

At the time that this newsletter is going to publication, Dr. Ammirati is still studying the various collections found here in the South Pass, so an exact species list is not available. By Joe's reckoning, we discovered as many as 50 species of *Cortinarii* in this forest, a staggering figure.

In the two decades that mushroom hunting has been my passion, these two weekend expeditions in the end of October at the South Pass felt like the crowning experience of the best year I have ever had mushrooming. It was truly a pleasure to find myself in such great company at just the right time and place, in such a great year for fungi. I will spend the rest of this winter researching the genus *Cortinarius*.

Species List for Silver Lake Foray, October 23rd, 2010 Compiled by Christine Roberts

Gilled mushrooms:

Agaricus augustus Fr.

Agaricus sp.

Small Agaricus sp. could be A. smithii Amanita constricta Thiers & Ammirati

Amanita gemmata (Fr.) Bertill. Amanita pachycolea D.E. Stuntz

Ampulloclitocybe clavipes (Pers.) Redhead, Lutzoni, Moncalvo &

Vilgalys (= Clitocybe clavipes)

Armillaria solidipes Peck (= A. ostoyae)

Cantharellus formosus Corner Clitocybe dilatata Pers. ex P. Karst.

Clitocybe sp.

Coprinellus micaceus (Bull.: Fr.) Vilgalys, Hopple & Jacq. Johnson

Cortinarius anomalus (Fries ex Fries) Fries

Cortinarius mutabilis A.H. Sm. Cortinarius scaurus (Fr.) Fr. Cortinarius traganus Fr. Cortinarius sp. (2 or 3 of them) Crepidotus mollis (Fr.) Staude

Entoloma sinuatum (Bull. ex Fr.) P. Kumm. Gomphidius glutinosus (Schaeff. ex Fr.) Fr.

Gomphidius oregonensis Peck Gymnopilus bellulus (Peck) Murrill Gymnopilus luteofolius (Peck) Singer Hygrocybe flavescens (Kauffman) Singer Hygrocybe miniata (Fr.) P. Kumm

Hygrophorus bakerensis A.H. Sm. & Hesler

Hygrophorus eburneus (Fr.) Fr. Hypholoma capnoides (Fr.) P. Kumm.

Hypholoma fasciculare (Huds. ex Fr.) P. Kumm.

Hypomyces lactifluorum on Russula brevipes (lobster mushroom)

Inocybe geophylla (Fr.) P. Kumm. Inocybe mixtilis (Britzelm.) Sacc. Inocybe sp. (at least 3 of them)

Laccaria amethysteo-occidentalis G.M. Muell.

Laccaria laccata (Scop.) Fr. Lactarius fallax A.H. Sm. & Hesler

Lactarius hepaticus Plowr.

Lactarius kauffmanii Hesler & A.H. Sm.

Lactarius luculentus Burl. var. laetus Hesler & A.H. Sm.

Stropharia aeruginosa (Curtis) Quel. Stropharia ambigua (Peck) Zeller Tapinella atrotomentosa (Batsch) Sutara

Tricholoma atrosquamosum (Chevall.) Sacc. (best guess)

Tricholomopsis decora (Fr.) Singer

Lactarius luculentus Burl. var. luculentus

Lactarius scrobiculatus (Fr.) Fr. Melanoleuca melaleuca (Fr.) Murrill

fer

Melanoleuca strictipes (Karsten) Murrill

Russula fragilis (Pers. ex Fr.) Fr. Russula isabelliniceps nom. prov.

Russula raoultii Quel. Russula silvicola Shaffer Russula xerampelina (Secr.) Fr.

Strobilurus trullisatus (Murrill) Lennox

Non-gilled basidiomycetes

Boletus calopus Fr.

Boletus chrysenteron (Bull.) Fr.

Boletus fibrillosus Thiers

Boletus mirabilis (Murrill) Murrill

Boletus subtomentosus (Linnaeus ex Fries) Suillus caerulescens A.H. Sm. and Thiers Suillus lakei (Murrill) A.H. Sm. and Thiers

Lycoperdon pyriforme

Schaeff.Nidula niveotomentosa (Henn.) Lloyd Pseudohydnum gelatinosum (Scop.: Fr.) P. Karst. Ramaria leptoformosa Marr & D.E. Stuntz (best guess)

Ramaria sp.

Sparassis crispa (Wulfen) Fr. Clavulina cinerea (Fr.) J. Schroet. Clavulina cristata (Fr.) J. Schroet. Fomes fomentarius (L.: Fr.) J.J. Kickx Fomitopsis pinicola (Sw.: Fr.) P. Karst. Ganoderma applanatum (Pers.) Pat

Oligoporus caesius (Schrad.: Fr.) Gilb. & Ryvarden

Phaeolus schweinitzii (Fr.) Pat. Phlebia tremellosa (Schrad.: Fr.)

Nakasone & Burds. (= Merulius tremellosus Schrad.)

Trametes versicolor (L.: Fr.) Pilat Coltricia cinnamomea (Pers.) Murrill Thelephora palmata Scop. ex Fr.

Ascomycetes

Bisporella citrina (Batsch ex Fr.) Korf & S.E. Carp.

Gyromitra esculenta (Pers.: Fr.) Fr. Gyromitra infula (Schaeff.: Fr.) Quel.

Helvella elastica Bull.: Fr. Helvella lacunosa Afzel.: Fr. Helvella maculata N.S Weber Xylaria hypoxylon (L.) Grev.

Species List for 2010 NMA Fall Show

GILLED MUSHROOMS

AMANITA

Amanita franchetii (A. aspera)

Amanita gemmata Amanita muscaria Amanita phalloides Amanita porphyria Amanita silvicola

Amanita smithiana (A. solitaria)

LIMACELLA (WITH AMANITA)

LEPIOTA

Chlorophyllum (Lepiota) brunneum Chlorophyllum (Lepiota) rachodes Lepiota rubrotinctoides (L. rubrotincta)

Lepiota clypeolarioides

Leucoagaricus (Lepiota) americanus

Leucoagaricus leucothites (Lepiota naucinus)

HYGROPHORUS

Hygrocybe conica Hygrocybe laeta

Hygrocybe miniata var. miniata

Hygrocybe psittacina Hygrophorus bakerensis Hygrophorus eburneus Hygrophorus piceae

LACTARIUS

Lactarius alnicola

Lactarius deliciosus group

Lactarius fallax Lactarius kauffmanii Lactarius pallescens

Lactarius pseudomucidus (L. mucidus) Lactarius rubrilacteus (L. sanguifluus)

Lactarius scrobiculatus Lactarius uvidus

RUSSULA

Russula abietina Russula adusta Russula bicolor

Russula brevipes var. brevipes

Russula cerolens Russula cessans Russula cremoricolor

Russula dissimulans (R. nigricans)

Russula ectomycorrhizae

Russula emetica Russula farinipes Russula fragilis Russula gracilis Russula isebelliriceps Russula murrillii Russula nigricans

Compiled by Margaret Dilly

Russula occidentalis Russula olivacea Russula placita Russula queletii Russula rosacea Russula silvicola Russula veternosa Russula xerampelina

ARMILLARIA

Armillaria sinapina (A. mellea)

Armillaria solidipes (A. ostoyae, A. mellea)

CYSTODERMA (WITH ARMILLARIA)

Cystoderma amianthinum Cystoderma fallax

SQUAMANITA (WITH ARMILLARIA)

CLITOCYBE

Cantharellula (Clitocybe) umbonata

Clitocybe avellanialba Clitocybe clavipes

Clitocybe connata (L. dilatata)

Clitocybe dealbata Clitocybe dilatata Clitocybe ditopa Clitocybe nebularis Clitocybe odora Clitocybe phyllophila Clitocybula atrialba

Hygrophoropsis (Clitocybe) aurantiaca

CATAHELASMA (WITH CLITOCYBE)

LYOPHYLLUM (WITH CLITOCYBE)

Lyophyllum decastes

ASTEROPHORA (WITH LYOPHYLLUM)*

COLLYBIA

Dendrocollybia rasemosa Gymnopus (Collybia) acervatus Gymnopus (Collybia) confluens Gymnopus (Collybia) dryophilus Gymnopus (Collybia) peronatus Strobilurus (Collybia) trullisatus

FLAMMULINA (WITH COLLYBIA)

Flammulina velutipes

MARASMIUS (WITH COLLYBIA)

Marasmius oreades

MYCENA

Hemimycena (Mycena) delicatella Mycena adonis (M. amabilissima)

Mycena amicta

Mycena epipterygia var. griseoviridis

Mycena galericulata

Mycena haematopus Mycena oregonensis

Mycena pura

Mycena purpureofusca Mycena robusta (M. plumbea)

Mycena rorida Mycena stipteca Mycena sp,

OMPHALINA (WITH MYCENA)

XEROMPHALINA (WITH MYCENA)

Xeromphalina cauticinalis

ARRHENIA (WITH MYCENA)

PLEUROTUS
Panellus serotinus

Pleurocybella (Pleurotus) porrigens

Pleurotus dryinus

Pleurotus populinus (P. ostreatus) Pleurotus pulmonarius (P. ostreatus)

LENTINUS (WITH PLEUROTUS)

TRICHOLOMA
Tricholoma flavovirens

Tricholoma focale (T. zelleri, Armillaria zelleri)

Tricholoma inamoenum

Tricholoma magnivelare (T. ponderosum, Armillaria ponderosa)

Tricholoma pardinum Tricholoma portentosum Tricholoma saponaceum Tricholoma sejunctum Tricholoma sulphureum Tricholoma vaccinum Tricholoma virgatum

TRICHOLOMOPSIS (WITH TRICHOLOMA)

Tricholomopsis decora Tricholomopsis rutilans

MEGACOLLYBIA (WITH TRICHOLOMA) CALOCYBE (WITH TRICHOLOMA)

LACCARIA (WITH TRICHOLOMA)

Laccaria amethysteo-occidentalis (L. amethystine)

Laccaria laccata

LEUCOPAXILLUS (WITH TRICHOLOMA)

Leucopaxillus albissimus

Leucopaxillus gentianeus (L. amarus)

MELANOLEUCA (WITH TRICHOLOMA)

Melanoleuca sp.

PINK SPORES (arranged by Family groups)

LEPISTA (ALLIDED WITH CLITOCYBE) Lepista irina var. irina (Clitocybe irina) ENTOLOMATACEAE Clitopilus prunulus

Entoloma rhodopolium group

Entoloma sericatum

PLUTEACEAE Pluteus cervinus

BROWN SPORES

AGROCYBE

BOLBITIUS (WITH AGROCYBE)

CONOCYBE (WITH AGROCYBE)

CORTINARIUS

Cortinarius acutus

Cortinarius alboviolaceus Cortinarius cacao-color Cortinarius camphoratus Cortinarius caninus

Cortinarius caperatus Cortinarius cinnamomeus Cortinarius collinitus Cortinarius crassus Cortinarius fasciatus

Cortinarius glaucopus Cortinarius malachius Cortinarius malicorius Cortinarius paragaudis Cortinarius phoeniceus

Cortinarius prasinus

Cortinarius rigidus Cortinarius semisanguineus Cortinarius subpurpureus Cortinarius traganus

Cortinarius vanduzerensis

Cortinarius violaceus PHAEOCOLLYBIA

GALERINA

GYMNOPILUS (WITH GALERNIA)

Gymnopilus bellulus Gymnopilus liquiritiae

Gymnopilus spectabilis group

CREPIDOTUS (WITH GALERINA)

PAXILLUS (WITH GALERINA)

Paxillus involutus

Tapinella (Paxillus) atrotomentosa PHYLLOPORUS (WITH GALERINA)

INOCYBE

Inocybe albodisca Inocybe calamistrata Inocybe geophylla Inocybe gramma

Inocybe hirsuta var. maxima

Inocybe lacera Inocybe lilacina Inocybe napipes Inocybe pudica Inocybe sororia

HEBELOMA (WITH INOCYBE)

Hebeloma crustuliniforme?

TUBARIA (WITH INOCYBE)

NAUCARIA (WITH INOCYBE)

PHOLIOTA

Pholiota agglutinata Pholiota aurivella

Pholiota (Kuehneromyces) mutabilis

Pholiota squarrosoides

Pholiota sp.

PHAEOLEPIOTA (WITH PHOLIOTA)

Phaeolepiota (Pholiota) aurea

CHOCOLATE OR PURPLE BROWN SPORES

AGARICUS Agaricus arvensis Agaricus augustus

Agaricus hondensis

Agaricus moelleri (A. praeclarisquamosus)?

Agaricus silvicola

PANAEOLUS

PSATHYRELLA Psathyrella candolleana

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HYPHOLOMA

Hypholoma (Naematoloma) capnoides

Hypholoma (Naematoloma) dispersum? (not H. marginatum?)

Hypholoma (Naematoloma) fasciculare

STROPHARIA

Stropharia ambigua Stropharia hornemannii

BLACK OR GRAY SPORES

COPRINUS

Coprinellus (Coprinus) micaceus Coprinopsis (Coprinus) atramentaria Coprinopsis (Coprinus) lagopus Coprinopsis (Coprinus) sp.

coprinopsis (coprinus) sp

GOMPHIDIUS

Gomphidius glutinosus Gomphidius oregonensis Gomphidius subroseus

CHROOGOMPHUS (WITH GOMPHIDIUS)

Chroogomphus tomentosus

NON GILLED FUNGI

BOLETES

Boletus calopus Boletus chrysenteron Boletus coniferarum

Boletus edulis Boletus mirabilis Boletus smithii

Boletus sp.

Boletus (Xerocomus) zelleri

Chalciporus (Boletus) piperatus

Leccinum aurantiacum Leccinum scabrum

Suillus caerulescens

Suillus lakei

Suillus ponderosus

Suillus sp.

CHANTERELLES

Cantharellus formosus

Cantharellus subalbidus

Craterellus (Cantharellus) tubaeformis

Gomphus floccosus

Gomphus kaufmanii

CLUBS, CORALS, FANS & CAULIFLOWER

(includes Clavaria sensu lato, Ramaria sensu lato, Thelephora

sensu lato)

Clavaria vermicularis

Clavulina cinerea

Clavulina cristata

Clavulinopsis laeticolor

Ramaria araiospora var. araiospora Ramaria cystidiophora var. cystidiophora Ramaria flavobrunnescens var. aromatica

Ramaria leptoformosa

Ramaria rasilispora var. rasilispora

Ramaria stricta var. stricta Ramaria testaceoflava

Sparassis crispa (S. radicata)

TOOTHED (SPINED) FUNGI

Hericium abietis

Hydnellum scabrosum

Phellodon melaleucus

Sarcodon cyanellus

PUFFBALLS & ALLIES

PUFFBALLS

Geastrum saccatum

Lycoperdon perlatum

Lycoperdon (Morganella) pyriforme

Scleroderma cepa

BIRD'S NEST FUNGI (WITH PUFFBALLS)

Nidula candida

STINKHORNS (WITH PUFFBALLS)

JELLY FUNGI

Dacrymyces chrysospermus (D. palmatus)

Pseudohydnum gelatinosum

POLYPORES

(ALL TRADITIONAL POLYPORES)

Coltricia perennis

Fomes fomentarius

Fomitopsis (Fomes) cajanderi

Fomitopsis (Fomes) pinicola

Ganoderma applanatum

Gloeophyllum sepiarium

Heterobasidion (Fomes) annosum

Jahnoporus (Polyporus) hirtus

Phaeolus schweinitzii

Polyporus badius

Polyporus elegans

Porphyellus porphyrosporus (Tyopillus pseudoscaber)

Trametes (Coriolus) hirsuta

Trametes (Coriolus) versicolor

CRUST FUNGI

(NO DISTINCT FRUITING BODY, CRUSTS & SMEARS,

INCL CYPHELLACEAE)

Phlebia radiata (P. merismoides)

Phlebia tremellosa

Thelopore palmata

ASCOMYCOTA

CUP FUNGI (INCL MORELS, ELFIN SADDLES, ETC.)

Aleuria aurantia

Chlorociboria aeruginascens

Gyromitra infula

Helvella elastica

Helvella lacunosa

Helvella maculata

Peziza vesiculosa

OTHER ASCOS (FLASK FUNGI, EARTH TONGUES, CARBON FUNGI, ETC.)

Hypomyces lactifluorum

Xylaria hypoxylon

First Look at the Upcoming Year for the NMA

Saturday, March 5, 2011--Survivor's Banquet will be held at Bellingham Elks Lodge #194, 710 Samish Way, Bellingham, just a bit south off of I5's Exit 252, from 5 pm to 9 pm. We'll gather after 5 (or between 3 and 5 if you're coming to help decorate tables) for a cocktail hour, then have our pot luck dinner at 6 pm, followed by a raffle of donated mushroom-related items, or other nice raffle gifts (no white elephants please), and an informal slide show program. We request that all pot luck dishes come with a card stating mushroom ingredients, or recipe if you don't mind sharing that, and using only certain edible mushrooms. Fred will provide that list a bit closer to the date. Bring your pot luck dish and ingredients list, a beverage, (the Elks Club will have a bartender there to pour the drinks we bring in to share) some cash for raffle tickets, and cash or checks if you would like to purchase any new books. Maggie will bring a supply of some of the newer publications out recently. And bring your checkbook to reserve your room for Morel Madness. Oh, and your membership has to be up to date by March 5th.

Our meetings are moving back to the Bellingham Public Library, Downtown, Lecture Room, and the times will again be from 7 pm to 9 pm, usually on the second Thursday of the months in which we meet.

The exact dates are:

April 14

May 12

June 9

Sept 15 (a third Thurs)

Oct 13

Nov 10

Morel Madness is tentatively scheduled for the weekend of May 6, 7, and 8 at Tall Timbers near Lake Wenatchee. Margaret will have registration information at the March 5 banquet.

The Wild Mushroom Show will go on! Look for it in October.