MushRumors

Newsletter of the Northwest Mushroomers Association

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Armchair foraging Linda Magee

I love to travel, see new sights, meet new people, laugh as I struggle with a foreign language, and try new foods. My travel bug has now been in hibernation for the last six months.

So, when our Science Advisor Dr. Fred Rhoades circulated a video on the NMA Google Groups, I took an armchair trip. You are immediately transported to a far different place. A young woman in a rural area of Yunnan Province in China spends her day foraging with her dog and returns home to share her bounty with her family. I saw beautiful vistas, quaint dwellings, exotic flora and fungi, and mouthwatering mushroom dishes. Just like a tourist, I could drop in, see the sights, gather some memories, and move on.

I watched the video again, then a third time, and had an epiphany. Well, that's an exaggeration. I realized a different time requires a different perspective.

The young woman in the video may have traveled no further than the province's largest city, but her trip to the mountains was full of adventure and discovery. Walking instead of flying, discovering the beauty and riches for herself instead of reading labels in a museum, the freedom to reap the bounty of her



A scene from the short online film on mushroom foraging and cooking in Yunnan. Here's the link, in case you missed it the first time: https://www.youtube.com/watch?v=3emTwlygonk

discoveries and share it with others . . . all priceless.

The season for this kind of travel is upon us. Stories of lobsters and chanterelles are circulating. It's time to plan that big trip, right here. And, if we're lucky, our trip will give us the makings of a delicious feast. Happy foraging this fall, everyone!



Hello to NMA members from Instagram Mariella Kerr

Have you heard the latest? NMA is now on Instagram! Follow @ northwestmushroomers, or if you don't have an Instagram account, you can go to www.instagram.com/northwestmushroomers to view some of the pictures we've been posting. We would love to share any photos that members would like us to post! If you want your mushroom photo(s) featured on NMA's instagram, email Mariella at 360nmamembership@gmail.com and you can include a description if you would like. You can also tag us in your pictures or on posts you find interesting, we would love to see!

We are currently 268 members strong, how awesome is that!? In case you all didn't know, all memberships are extended until next year due to covid. We are very happy to continue seeing new members join throughout the year—thank you for joining us!

See our guide to beautiful fall funga, starting next page!

Fall season in the Pacific Northwest offers the mushroom hunter an incredible abundance of wild mushrooms and fleshy fungi in a wide variety of habitats. Some fungal enthusiasts are focused on foraging for edibles, some enjoy the challenge of identifying their finds, while for others the thrill is in seeking out, identifying and documenting new and/or unusual species. No matter one's interest, there is plenty in our region to engage a mycophile.

Those who forage for wild mushrooms as food assume responsibility for knowing the guidelines for safe wild mushrooming and the identification of the edible mushrooms

they seek, as well as toxic look-alikes. Helpful resources include mushroom identification books, internet sites, and knowledgeable, experienced mushroomers. **Verify each specimen you intend to eat**, and be aware that reactions to an edible mushroom species may be different for different people. Remember: When in Doubt, Throw It Out!

Finally, responsible mushroom hunters should take care to minimize damage to the collecting area and leave as little trace of their presence as possible.

Below are a few of the favorite fall edible species in the Pacific Northwest, including some toxic and non-toxic look-alikes. Enjoyable mushrooming!



The Prince—Agaricus augustus

It's named The Prince for a reason, as this stately species has an almond aroma, firm flesh, and incredible intense flavor when cooked. The slugs and maggots love it too, so it can be a race as to who gets to a patch of them first. Look for The Prince in disturbed areas in mixed woods and along roads and paths where it often fruits during warm, drying weather.

Two common Prince look-alikes that can give you a tummy ache, or worse, are *A. deardorffensis* and *A. hondensis*. In both, the crushed flesh of the lower stem has a sweet but unpleasant chemical odor like phenol. The stem base of *A. deardorffensis* typically stains bright yellow when cut and the cap is covered with small dark scales. *A. hondensis* is a stout woodland species with a thick felty ring, a somewhat weaker yellow staining reaction in the stem base and fibrillose fawn colored cap scales.



Agaricus deardorffensis



Agaricus hondensis



Pacific Golden Chanterelle—Cantharellus formosus

There are a few fall mushrooms a foraging novice might confuse with an edible chanterelle such as the Poison Pax, Scaly Chanterelle, False Chanterelle, and Woolly Pine Spike.

The Poison Pax is quite toxic, containing hemolytic toxins which can lead to severe illness, even death. Notice in the photo that the gills are easily rubbed off from the cap.



White Chanterelle—Cantharellus subalbidus

The Scaly Chanterelle and False Chanterelle are eaten by some, but can also cause very unpleasant gastric symptoms, and are not recommended as edibles. The Woolly Pine Spike is regarded as edible, but is said to cook into a black, goopy tasteless blob.



Poison Pax—Paxillus involutus



Scaly Chanterelle—Turbinellus floccosus



False Chanterelle—Hygrophoropsis aurantiaca



Woolly Pine Spike—Chroogomphus tomentosus



Key field marks of this highly prized mushroom include a club shaped netted stem, brownish-tan cap and non-staining light colored pore layer in young caps. The Fibrillose Cap Bolete, *Boletus fibrillosus*, is an edible lookalike with a darker brown velvety cap. Both can be found in mixed woods with conifers and hardwoods. The King Bolete can sometimes even crop up in urban settings. There are no **known** toxic look-alikes to the King Bolete or close relatives.

King Bolete—Boletus edulis



A stout form of the King Bolete



A young Fibrillose Cap Bolete—Boletus fibrillosus

The PNW form of Matsutake mushroom was recently recognized by science as a distinct western North American species and given the name *Tricholoma murrillianum*. In Asia, the firm young buttons are very popular and expensive, resulting in the commercial harvesting of the Western Matsutake. The aroma is distinctive, and described by David Arora as a blend of Red Hots (candies) and dirty socks. The unusual flavor of the Matsutake does not appeal to every palate, which includes mine, so even though I like to find these lovely mushrooms I am happy to gift them to those who appreciate their unusual culinary appeal. Hunt for them with conifers, where they often fruit in groups under Salal and other erinaceous plants. **Important:** Learn to distinguish the Matsutake from potentially deadly white Amanitas (see side information).



Western Matsutake—Tricholoma murrillianum



Western Matsutake—Tricholoma murrillianum

Woodland Amanita— Amanita silvicola → If you hunt for the Matsutake, **BEWARE: Don't confuse it** with the other, deadly, *Amanita smithiana*, or another white *Amanita* like *A. silvicola*! *A. smithiana* is responsible for serious poisonings and several deaths in the Pacific Northwest of those who have mistaken it for the Matsutake. It contains heat-stable toxins that can lead to kidney failure. This species *does not* smell like Red Hots and dirty socks; it is soft fleshed, the cap is often hung with pendulous white veil remnants, and it has an enlarged turnip-shaped basal bulb. *A. silvicola* is pure white;the odor of young caps may be slightly fruity but it turns foul in age; and the stem is short with a somewhat enlarged, tapered basal bulb. The toxicity is not known at present, but it is not a species to experiment with.



Smith's Amanita — Amanita smithiana



Smith's Amanita — Amanita smithiana



The cosmopolitan Blewit is characterized by its blue-purple color, classic compact form, inrolled margin of young caps and pinkish-buff spore print. The cap may fade to brownish as it ages, as in this photo. It decomposes and fruits in all types of organic matter like wood chips, sawdust, leaf debris, etc. The cooked taste is a bit tangy. No other blue-purple mushroom has the combination of characters of the Blewit. But, Blewit seekers should become familiar with other blue-purple hued mushrooms such as species of Cortinarius, and the poisonous Lilac Inocybe, both which have brown spore prints.



Blewit—Lepista nuda



Lilac Conifer Cortinarius—Cortinarius traganus



Western Lilac Inocybe—Inocybe pallidicremea

Four (almost) foolproof fall edibles Richard Morrison

Considering the human imagination, nothing is completely foolproof, but these four fall PNW species come close



Shaggy Mane—Coprinus comatus

Nothing looks like the Shaggy Mane with its tall bullet shaped cap and large shaggy scales. It is one of the black spored Inky Caps in which the gills and caps autodigest into a gooey black liquid. It is the young, firm caps that make a meal. Yummy when coated in egg batter and cracker crumbs or corn meal and fried to a golden brown. It is found in grassy locations and along paths and roads. As the Shaggy Mane can accumulate toxic heavy metals from contaminated soil don't collect in such locations. Also, be confident pesticides haven't been applied to lawns or grassy areas: fungi are excellent bioaccumulators of heavy metals and more.

The bright orange-red Lobster Mushroom is the unexpected, yet delicious result of mycoparasitism in which an ascomycete microfungus (*Hypomyces lactifluorum*) infects a basidiomycete mushroom, frequently a *Russula*, which in the PNW seems to be mostly the boring and bland tasting white *R. brevipes*, the Short Stemmed Russula. Thank you Mother Nature!



Lobster Mushroom—Hypomyces lactifluorum infection of a Russula species



Cauliflower Mushroom—Sparassis radicata

Looking more like Italian pasta than cauliflower, this strange conglomeration has an exceptional flavor when cooked. Cleaning it can be a chore, but well worth it. A weak parasite on the roots of conifers in older growth forests, it is known to fruit at the same location for a number of years.

Fruiting on dead conifer logs, preferentially true fir, this lovely mushroom imitates the flavors of shrimp or shellfish when cooked. Nothing more needs to be said.



Conifer Coral Hericium—Hericium abietis

Mushroom of the Month

Cortinarius thiersii (Ammirati & A.H. Smith)

Buck McAdoo

It was a fine spring day on May 24, 2020, when club member Jeremy Ferrara and I drove over the Snoqualmie Pass to meander on the east side. Jeremy had found some morels at his dad's place in Cle Elum the week before. It had rained hard since. We thought we might do better this time through.

But even more to the point, Jeremy has the Cortinariu fourth longest tenure of all members of the Northwest Mushroomer's Association but has never had a "mushroom of the month" attributed to him. If we failed in finding morels, we had this to fall back on. Wouldn't it be appropriate, I thought, to find a Cortinarius. At our fall shows, Jeremy seems to naturally drift towards Cortinarius, often

Jeremy just likes Corts.

We were also looking forward to visiting Cle Elum, Jeremy's home town. There was a special Italian pastry shop there that couldn't be missed if we made it that far. We never made it that far.

helping me with the identifications. Fred has noticed this also.

On the way down from Snoqualmie Pass, we noticed a sign off the westbound side of the freeway declaring Merritt Lake Road. Neither of us had been there. We made the necessary U-turn and headed in. Less than a hundred yards in, the road forked. We pulled over and Jeremy found a morel immediately. This is what happened to Jeremy his last trip over this side, and history repeated itself. We were to find no more morels that day. Jeremy then found a pair of Lyophyllums and a break of *Kuehneromyces lignicola*. I found some Psathyrellas. Jeremy countered with large cespitose clusters of a stout *Cortinarius* that Dr. Ammirati later identified as *Cortinarius brunneovernus*. This might do for a mushroom of the month, but dull brown wasn't his favorite color: I know this about Jeremy.

We proceeded to drive to the parking lot at the trailhead. Here we found the ubiquitous *Gyromitra esculenta*, which I mention can be eaten if parboiled first. Dreadful gastrointestinal issues await you if you don't. Jeremy elected to pass them by entirely. Then about half an hour further up the trail we came to a slope with a south face beneath some ponderosa pines. And scattered among the needles was the *Cortinarius* you see here. We both knew we had found a member of the Section Dermocybe, known for its colorful yet diminutive Cort species especially prized for dying. I picked one up and took a sniff. Strong musty odor. The gills were already rusty from the spores but seemed to have a brighter scarlet gill edge. This was intriguing. We had our



Cortinarius thiersii. Photo by Buck McAdoo.

mushroom of the month, if we could name it.

So back in my all-purpose office in Bellingham, I worked up the following description:

Caps: 1½-3 cm wide, obtusely convex with broad to papillate umbo. Margins draped or slightly incurved. Innately brick-brown fibrillose over a shiny dark rusty-ochre ground. One specimen areolate in age. Not hygrophanous. Context pale lemon yellow. KOH on the cap yields a dark red color.

Gills: Adnate, thickish, subdistant. Rusty with scarlet emarginate edges. Crinkly in age. Three tiers of lamellulae.

Stipe: 3–4½ cm long and 2–3 mm thick. Equal until enlarged clavate bases. Often curved. Shiny yellow-olive with brick-brown fibrillose streaks. Apices brighter yellow. Context pale lemon yellow.

Odor: Musty.

Spores: Bright rusty.

Habitat: Scattered below ponderosa pine and Doug fir up the Lake Merritt Trail on May 24, 2020.

This description along with the photo was subsequently sent to Dr. Joe Ammirati. He wanted to see micro shots of the spores. Thanks to earlier supervision from Dr. Fred Rhoades, we could now provide this service. We heard back that the spores were larger than average for the section. This plus the red reaction from KOH led him to *Cortinarius thiersi*i with an exclamation mark. It was a springtime mushroom known from the Sierra Nevadas and the eastern Cascades. Joe himself had coauthored it. We soon received an email with the original description.

Upon perusing it, I was immediately incredulous. Gills were described as pale yellow to ochre buff with edges same color as the faces. The cortina was yellow and left yellow patches on the stem. Caps were yellow-brown to olive-brown becoming ochre-tawny in age. The odor and taste were raphanoid (of radish). Eventually it dawned upon me that we had collected older specimens. The genus *Cortinarius* is tricky. Degree of humidity and age can alter colors in a heartbeat. The odor of radish could morph into "musty"



Cortinarius thiersii. Photo by Richard Morrison.

in age. Or just as probable, my sense of smell had equally aged.

Looking over the literature, Joe had made a few more observations. In his pamphlet, *Dermocybe Clade in the Pacific Northwest: Diagnostic Features*, he notes that the extra cellular pigment can be "granular yellow to purplish-red depending on the age of the dried specimen." And in his original publication he noted that the basidia were 4-spored, and the pileipellis, a

cutis of cylindrical to broadly cylindrical hyphae 5-25 microns wide. These were smooth to slightly encrusted. There were no cystidia. And the spores measured $7.7-10 \times 4.7-5.8$ microns.

And finally, in *California Mushrooms* there is a full page photo on page 280 of this species. Everything seems more yellow. It does mention that caps are more cinnamon brown in age. The closest look-alike is *Cortinarius aureifolius var. hesperius* which fruits in the same places at the same times, but has longer and narrower spores at 9.5–13 x 3.5–4.5 microns.

On behalf of the club we'd like to thank Dr. Ammirati for identifying it and Jeremy for finding it. Nobody eats these small Dermocybes, and in hindsight we should have still made it to that pastry shop in Cle Elum.

Bibliography

Joseph Ammirati and A.H. Smith, "Studies in the Genus Cortinarius III. Section Dermocybe: New North American Species" in *Mycotaxon* 5, (381–97), 1977.

Joseph Ammirati, *Dermocybe Clade in the Pacific Northwest:* Diagnostic Features.

Dennis Desjardin, Fred Stevens, and Michael Wood, *California Mushrooms*, 2015. Timber Press, Portland, Oregon.

Online mushroom talks: Join us

Coming up! October 8, 7–9 p.m., Dr. Fred Rhoades, "Mushroom Identification, Up Close and Personal"

Past talk: Daniel Winkler of Mushroaming on "Cordyceps in Orient and Occident: A natural history"

On September 10, Daniel Winkler spoke to Northwest Mushroomers via Zoom on "Cordyceps in Orient and Occident: Natural History of a Perplexing Parasite and Purported Panacea."

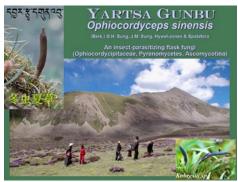
In a lively visual tour of a far-out group of fungi parasitic on insects and other arthropods, he explored the cultural and economic importance of *Ophiocordyceps sinensis*, the world's most precious fungi. Daniel concentrated too on presenting gorgeous species of Cordyceps from the neotropics of Columbia to the Pacific Northwest, combining hard-won field finds, stunning photos, and a captivating blend of stories and science

to explain the biology and diversity of "entomopathogenic fungi." The recorded talk is available to members for a limited time only on Vimeo. You must have a password (sent via email to NMA members) to view it.

Thank you, Daniel!

Daniel is author of field guides to edible mushrooms and coauthor of *Amazon Mushrooms* (2014). He grew up collecting and eating wild mushrooms in the Alps and has been foraging for 20 years in the PNW. He also organizes mushroom ecotours to Tibet and many other places: visit mushroaming.com.







Other virtual events for you

- October 13–15, State of the World's Plants and Fungi, www.kew.org/science/engage/get-involved/conferences/stateof-the-worlds-plants-and-fungi-symposium/
- October 16–30, Fungi Film Fest, from Portland, Oregon: the world's first short film festival dedicated to the beauty, weirdness, and human influences of mushrooms, lichens, and micro fungi. www.fungifilmfest.com/
- October 17–18, 2020 PSMS Wild Mushroom Show, October 17 and 18, www.psms.org/show.php/ \$5, with registration. Tickets go on sale at the beginning of October. *PSMS members get in online free*.

Coming soon! Board elections Linda Magee

It's been a strange year—forays, meetings, the ID class and NMA's Aannual Wild Mushroom Show . . . all canceled.

There is one activity in which we can all participate, the election of our Northest Mushroomers Board members for 2020–2021. We know that our membership are still actively engaged in mushroom pursuits, and that we all are hoping that next year will be better. With that in mind, we need a strong Board to steer us forward.

Here is a reminder of important October dates for our Board elections:

October 1 to October 15

The election is open from 5 pm on October 1 until 5 pm on October 15. You will receive a slate of candidates and a link to the online voting program. *Please note that voting can be done only through the on-line voting program.*

October 20

On October 20, our current President will send out an email to NMA members listing our newly elected Board members.

I am always eager to talk to members about running for the Board. If you are interested and haven't spoken to me yet, there's still time. Please email me at 360nmatreasurer@gmail.com.



Adobe stock image, by Kamila



P.O. Box 28581 Bellingham, WA 98228-0581 northwestmushroomers.org Northwest Mushroomers Association promotes the understanding and appreciation of mushrooms: furthering the study of fungi, their identification, natural history, ecology, and conservation. We serve mushroom enthusiasts in northwest Washington State, including Whatcom, Skagit, and Island Counties.

To comply with physical distancing during the Covid-19 outbreak, NMA has put its membership meetings and talks on hold for the time being. Our Board will reevaluate on a monthly basis when to resume meetings and forays. To stay apprised of forays, events, meetings, and more, join our googlegroups email list as a club member. Or visit northwestmushroomers.org/events or facebook.com/NorthwestMushroomersAssociation.

MushRumors is published online. We invite you to submit stories, photos, recipes, cartoons, and artwork. We appreciate your interest! Erin Moore, chanterellerin (a) gmail.com