

Fungi Kingdom News

The newsletter of the Pioneer Valley Mycological Association



While we anxiously await the emergence of the larger, perhaps more charismatic fungi, don't overlook the smaller, but still beautiful, specimens that show themselves in early spring. You may have to look a little harder for them, but the effort is worth it. An example is this *Vibrissea truncorum*, or "stream beacon," a little Ascomycete that is saprophytic on dead twigs and found along the edges of streams. For a list of more spring mushrooms, consult Dianna Smith's checklist.

Eastern and

America

Central North

Book Sale!

The University of Texas Press is having an online sale of its books, including all mycology books. This is a perfect moment to get *Polypores and Similar Fungi of Northeastern and Central North America* by Alan Bessette, Dianna Smith, and Arleen Bessette at a 40% discount! We also recommend you pick up *Ascomycetes of North America* by Michael Beug and the Bessettes, This sale will not last long, so order copies today for yourself and your myco friends.

Polypores and Similar Fungi

\$39 vs. \$65, a 40% discount! (shipping additional) Discounts also apply to: Ascomycetes of North America, Mushrooms of the Gulf Coast States, and Edible Wild Mushrooms of North America.

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Jessica Benson Evans, *president* Mary Obrzut, *vice president* Michael Ostrowski, *treasurer and*

BOARD OF DIRECTORS

Michael Ostrowski, treasurer and membership secretary Stephanie Reitman, secretary Dianna Smith, chief mycologist

Other members: Philip Hadley Jonathan Kranz Sue Lancelle Paul Thomas

OUR MISSION STATEMENT

The Pioneer Valley Mycological Association is dedicated to enhancing the public's knowledge and appreciation of the fungal kingdom by providing ongoing educational programming in the form of guided mushroom walks, lectures, newsletters, information on multi-day regional and national forays, and citizen science projects. Because fungi are integral components of complex ecosystems, we are committed to advocating for responsible and sustainable study and collection methods. We focus on, but are not limited to, the three counties of the Pioneer Valley in western Massachusetts (Franklin, Hampshire and Hampden).

PVMA is a member of the Northeast Mycological Federation (www.nemf.org) and the North American Mycological Association (www.namyco.org).

www.PVMAmyco.org

Also visit Dianna Smith's educational site fungikingdom.net for articles, fungi photos, and more.

We Welcome Your Submissions!

This is your newsletter; we'd love to have you contribute to it!

Prose, verse, photos, drawings, recipes, scientific observations – send them all to:

jessicabensonevans@gmail.com sue.lancelle@gmail.com

From the President...

Happy Spring, everyone! We've made it through winter, and now the mushroom season feels within reach. If you're like me, you follow various mushroom groups from around the country on social media. I'm starting to see morel sightings popping up as close as New Jersey, so if that's



what you're into, you'll see them here in Western Massachusetts soon enough. You can also follow morel sightings at the <u>Great Morel website</u>, which offers a great mapping feature. It's exciting to see them creep northward!

I'm ready for the emergence of other (non-edible) spring fungi: my favorite *Vibrissea truncorum* should be out by late April or early May in cool-running spring streams. I'm also keeping an eye out for *Hohenbuehelia mastrucata*, which I spotted in my back woods last month and am hoping will fruit again in the same spot (see page 10).

Mary Obrzut and I are also very excited about this season's walk schedule and are grateful to all the members who have volunteered to lead walks this summer.

Looking forward to seeing you soon,

- Tessica

News from the Board of Directors

Earlier this year, we asked club members to vote for the sole position up for re-election this year on our board of directors: vice president. All votes cast were for our current VP, Mary Obrzut, and her role as our excellent vice president will continue for another two-year term. Many thanks to all who voted, and much gratitude to Mary for her willingness to serve our club in this vital volunteer position for another term.

We are pleased to welcome Jonathan Kranz as a new member of the board of directors. Jonathan is a mycological newbie who lives in Ayer with his wife, Eileen, the occasional visits from his adult daughters, and a vast collection of vinyl LPs. When he's not learning about mushrooms, he runs his copywriting business (Kranz Communications) and serves on the Ayer Planning Board.

We are always looking for more people to join the board of directors to help with

decision making and guiding the future of the club. We are a fun, friendly group. See our web page for more information about the board members. Please contact Jessica if you are interested!

2022 PVMA Walk Schedule

Coordinated by Mary Obrzut and Jess Evans

We are excited to bring you this year's walk schedule. Please print out the following pages so you have them handy. We will meet on Sundays and some Saturdays at 10:00 a.m. or 1:00 p.m. Please pay careful attention to time and day in the schedule.

With the exception of the three walks at Morse Hill in Shutesbury, the walks are for <u>current members only</u>. For the Morse Hill walks, guests are welcome for a fee of \$5, which will be applied to the membership fee if the guest decides to join the club.

We will require everyone to sign in upon arriving and sign out when leaving. We will look for fungi for approximately two hours and then, for anyone who is interested, meet back at the starting point to spread our collected finds on a table and try to identify them. This will aid us in compiling a checklist for each walk. Any unidentified fungi can then be claimed by members to take home to study if they wish. Members may choose to stay with walk leaders for identification or walk on their own and rejoin the group at the end.

Our walk sites are located across Western Massachusetts. A few have restroom facilities, most do not. We suggest that you bring water, bug/tick repellent, a knife, a collection basket and small paper or waxed bags for specimens. Sturdy, comfortable shoes and a hat come in handy, as well as a walking stick, camera, a mushroom field guide, and a small notebook and writing instrument to write down notes about specimens you collect. You can also download beginner or advanced checklists to use on the walks at https://www.pvmamyco.org/resources-1. We welcome you to post photos of the fungi you find on our Pioneer Valley Mycological Association Facebook site.

Best practices for walks:

- Please consider carpooling whenever possible.
- Sign in when you arrive at the walk and out when you leave
- Collect only one or two specimens of any fungi you find
- Take pictures! Then you have a permanent record and can always refer to it later.
- Take note of the surrounding trees (habitat)
- Take note of how the mushroom is growing (habit). For example: Growing from soil? On decaying wood? With many others or alone?
- Be aware of your surroundings: take care not to step on fragile plants, fungi or wildlife let's be kind to the environment.
 - · Know what poison ivy looks like and avoid it
 - Carry a small trash bag with you: let's leave the trails in better condition than we found them!
 - If you decide to leave the walk leader and go off trail, consider staying within earshot or line of sight.
- Strive to be kind: we are a wonderful and welcoming community of learners comprising many different ages, skill levels, and abilities.

Please avoid foraging on each trail for at least one week preceding the scheduled walk. For any questions or concerns, please email JessicaBensonEvans@gmail.com.

Sunday May 29, 1:00 p.m., Morse Hill Outdoor Education Center, Shutesbury, with Jess Evans. 380 Locks Pond Road, Shutesbury. *Guests welcome to join this walk for \$5.* Easy to moderate trails with seasonal streams. Summer camp property with access to restrooms and covered shelters in case of inclement weather. Entrance is located across from the Lake Wyola dam and parking is available around the driveway circle once you enter Morse Hill. Please do not arrive more than 15 minutes early; gate is locked until walk leader arrives.

Sunday, June 12, 1:00 p.m., Granville State Forest, Granville, with Lu Aptifer. Meet at Park Headquarters, 324 West Hartland Rd., Granville. Directions and more information: https://www.mass.gov/locations/granville-state-forest.

Sunday, June 26, 10:00 a.m., Rock House Reservation in West Brookfield, with Mary Obrzut. Directions: From Mass Pike exit 63 in Palmer, follow Rt. 32 N toward Ware where it joins Rt. 9. Stay on Rt. 32/9. Where it separates, follow Rt. 9 E for 1.1 mile to entrance. Details and map can be found here: https://thetrustees.org/place/rock-house-reservation/.

Saturday, July 2, 10:00 a.m., Jabish Brook Conservation Area, Belchertown, with Mike Ostrowski. On Rte. 202 going North towards Pelham from Belchertown on the right. Small parking area with a few additional spots just down the road on Route 202. You may also consider carpooling (coordinate on your own) from the parking lot of the North Brookfield Savings Bank, at the corner of Rts. 202 and 9 in Belchertown – parking is very limited at the trailhead.

Sunday, July 10, 10:00 a.m., Mt. Toby with Peter Russell. From the intersection of Routes 116 and 47 in Sunderland, Mass, follow Rt 47 north to the town line with Montague. Just after the town line sign, turn right onto Reservation Rd. Park on the right near the metal gates. (If you go down the road to the lake, you have gone too far).

Sunday, July 17, 1:00 p.m., Morse Hill Outdoor Education Center, Shutesbury, with Jess Evans. 380 Locks Pond Road, Shutesbury. *Guests are welcome to join this walk for \$5.* Easy to moderate trails with seasonal streams. Summer camp property with access to restrooms and covered shelters in case of inclement weather. Entrance is located across from the Lake Wyola dam and parking is available around the driveway circle once you enter Morse Hill. Please do not arrive more than 15 minutes early; gate is locked until walk leader arrives.

Sunday, July 24, 10:00 a.m., Whately Woods, Kestrel Land Trust Property, Whately, with Marty Klein. Trail entrance is off Chestnut Plain Road in Whately, approximately ½ mile south of Whately Center. Look for property entrance sign on the right if you're coming from the North.

Sunday, July 30, 10:00 a.m., Wendell State Forest with Claudia Phillips. 392 Montague Rd. In Millers Falls, Main Entrance. Directions: https://www.mass.gov/locations/wendell-state-forest. There may be a daily parking fee (\$8).

Saturday, August 6, 10:00 a.m., Quabbin Gate 33, New Salem, with Mary Obrzut. Fairly flat cart roads. Parking at gate and also across Rt. 122 on Blackington Rd. Directions From the West, take Rt. 9 E to Rt. 202 N. Take a right onto Rt. 122 E. Gate is aprox 2 miles on 122. From the east- Take Rt. 122 W, gate is aprox 3 miles after passing through Petersham.

Saturday, August 13, 10:00 a.m., Brooks Woodland Preserve, Petersham, with Jonathan Kranz. Trailhead is on Quaker Drive, Petersham, a well built dirt road off Rt. 32/122 East, from the southwest. Second parking lot with blue/green Trustees sign. If coming from the east, ignore Waze and other GPS tools because you will come face to face with a Jersey barrier. Set your GPS for the Country Store in Petersham off Rt. 32, proceed on Rt. 32S to the intersection of 122/32, take a left turn. Quaker Drive is approximately 2 miles on the left.

Sunday, August 14, 10:00 a.m., Fitzgerald Lake, Northampton, with Peter Russell. Cooke Avenue entrance. Go to https://www.broadbrookcoalition.org/files/Fitzgerald_Lake.pdf for map. Parking situation may change as construction is planned in that area; members will be notified via email of any updates. Shady mixed hardwood with streams and easy marked trails.

Saturday, August 20, 10:00 a.m., Dufresne Park, Granby, with Mike Ostrowski. Directions: Route 202 in Granby to Kendall St. Use Kendall St. Entrance Trailhead directly across from the pavillion. Mostly flat with a couple slight elevations.

Sunday, August 21, 10:00 a.m., Cadwell Memorial Forest, Pelham, with Jess Evans. From Amherst center, go East on Main St. through the intersection with Northeast St. At this point Main St. becomes Pelham Rd. Go past the police station and library to Enfield Rd. on your right. Turn into Enfield Rd. and go about one mile. Stay to the left at the first Y intersection. At the second Y intersection, Enfield Rd. becomes Packardville Rd. to your

left. The gate and parking area to Cadwell Memorial Forest are on your left about 100 yards beyond this intersection. Small parking area: please do not block the gate. This is an easy wide trail of mixed hardwoods/conifers and crisscrossing streams managed by UMass.

Sunday, August 28, 10:00 a.m., Chesterfield Gorge in Chesterfield, with guest mycologist Bill Yule. Take Rte. 9 West from Northampton, approx. 4.4 miles. Take a left onto Rte. 143 W Chesterfield Rd. At intersection of 143 and Ireland St go South 0.8 miles taking a left onto River Rd to parking area. For more information go to https://thetrustees.org/place/chesterfield-gorge/. This is a fairly flat trail that follows along the Westfield River. There are numerous interesting fungi. Always a fascinating walk!

Labor Day Weekend: Friday, Sept 2 – Monday, Sept 5, COMA Foray in Hebron, CT. Register beginning in June at http://www.comafungi.org/. No PVMA walk.

Sunday, September 11, 10:00 a.m., Lily Pond, Goshen, with Jess Evans. Easy, heavily wooded trail which slopes off steeply on either side to uneven rocky terrain in spots, leading to mossy wetlands and a bog. Directions: from Northampton take Rte. 9 to Goshen, turning left onto Ball Rd. Go about 1 mile; Ball Rd. will take a sharp left, but stay straight onto Lily Pond Lane, which ends in a circle. Park at the perimeter of the circle, where we will meet. The sign for the trail head is hidden by trees.

September 15-18: Annual NEMF Foray, planned this year in Joliette, Quebec! Information and registration https://www.mycomontreal.qc.ca/fr/. No PVMA walk.

Sunday, September 18, 1:00 p.m, Morse Hill Outdoor Education Center, Shutesbury, with Jess Evans. 380 Locks Pond Road, Shutesbury. *Guests are welcome to join this walk for \$5*. Easy to moderate trails with seasonal streams. Summer camp property with access to restrooms and covered shelters in case of inclement weather. Entrance is located across from the Lake Wyola dam and parking is available around the driveway circle once you enter Morse Hill. Please do not arrive more than 15 minutes early; gate is locked until walk leader arrives.

Sunday, September 25, 10:00 a.m., Valley Community Land Trust Woods, Colrain, with Gabriella Leah. 273 Shelburne Line Rd., Colrain. From 1-91 take the exit for Greenfield and go up the hill on Rt. 2W, then make a right on Colrain Shelburne Rd., until you get to Brooks Rd. Take a right on Brooks Rd. and than a quick left onto Fiskmill Rd. Fiskmill Rd. turns into Shelburne Line Rd. Park along the road, taking special care to be respectful of neighbors.

Sunday, October 2, 10:00 a.m., Federated Women's Club State Forest in Petersham/New Salem with Jessica Evans. Wide well-trodden mostly flat trails with deep leaf litter in a predominately oak and conifer forest. A wonderful home for fungi! Directions: From Rte. 202 turn onto Rte. 122, go 3.6 miles, turn right onto State Forest Rd, follow for 1.7 miles to gated entrance and pull-ins for parking. We will meet at the parking area in front of the gate. See www.mass.gov/dcr/massparks/region-central for directions from other parts of the state.

October 9, 10:00 a.m., Chesterfield Gorge in Chesterfield, with Mike Ostrowski. Take Rt. 9W from Northhampton, approx. 4.4 miles take a left on Rt. 143W Chesterfield Rd. At intersection of 143 and Ireland St. go South 0.8 miles taking a left on River Rd. to Parking Area. https://thetrustees.org/place/chesterfield-gorge/

Sunday, October 16, 10:00 a.m., Wendell State Forest with Mary Obrzut. 392 Montague Rd. In Millers Falls, Main Entrance. https://www.mass.gov/locations/wendell-state-forest There may be a daily parking fee (\$8).

A Fun Guide to Fungi: Helpful Hints, Tips, and Suggestions For Mushroom Beginners

By Jonathan Kranz

I'm entering my fourth season of mushroom foraging: far from enough experience to claim any expertise, but perhaps just enough to be helpful to those starting out. For new PVMA members and other beginners, I offer the following suggestions, hints, and tips.

When to look

Fungi can be found year-round. But there's a reason the PVMA's walk schedule usually begins in June: in the Northeast, the cap-and-stem mushrooms that occupy the bulk of our interest generally don't appear until then. Different regions have different seasons. In the Midwest where limestone is the dominant substrate and elm trees proliferate, morel-hunting starts midspring; west of the Rocky Mountains, winter is peak mushroom season. But for us in New England, give or take adjustments for precipitation, the season really blossoms from the 2nd week of July through the first week or two of November.

Where to look

One of the fantastic qualities of fungi is their ability to proliferate in even the most unlikely environments: on the outside walls of whiskey warehouses (*Baudoinia compniacensis*), in the depths of Chernobyl's abandoned nuclear reactor (*Cladosporium sphaerospermum*), and in the damp recesses of our own homes (*Peziza domiciliana*).

But for the cap-and-stem mushrooms many are most eager to find, fields and forests (especially forests) will be the most productive environments to explore. A few pointers:

- Among woodlands, generally the older the better. Look for trails among mature oaks, birches, beeches, pines, and hemlocks. Maples are common, but they find their fungal partners among the "arbuscular mycorrhiza" that do not produce the fruiting bodies we seek. Be aware of terrain: shaded, damp areas on north-facing slopes or low-lying wetlands will tend to be more productive than hot, dry turf on south-facing slopes or uplands.
- Grassy areas can yield treasures such as *Agaricus* campestris ("meadow mushroom") and *Marasmius*

oreades ("fairy ring mushroom"). But remember that mushrooms tend to absorb the chemicals they find in their local substrates; if you're looking for edibles, beware of treated lawns, like golf courses.

• HINT: Most cemeteries/graveyards have discrete waste areas where they dispose old wreathes, pruned limbs, grass cuttings, and other organic litter. These are often excellent hunting grounds for many mushrooms. The cemetery grounds themselves often include mature oaks and other species ideal for many mycorrhizal fungi (living in a symbiotic relationship with root systems), but remember the above warning about chemicals, i.e., pesticides and herbicides. For mushroom hunters, weeds are a welcome presence; if you see many, it suggests that the earth has not been chemically treated.

Edibility

Club forays typically conclude at a table loaded with finds that a designated identification expert will describe. Inevitably, someone will pick up a decaying mess – swirling with flies, crawling with pale larvae on mushy, bruised tissue – and ask, "Is this edible?"

Sigh. If you wouldn't purchase a similarly distressed specimen from your supermarket, why would you eat it from a forest floor? More importantly, you have to build your basic identification skills. Nope, mobile apps and the opinions of obscure social media influencers on YouTube won't cut it. To **safely** enjoy edible mushrooms, you need to know two things:

- 1. The precise features and characteristics of the edibles you want to eat, AND...
- 2. The precise features and characteristics of the look-alike toxic mushrooms you don't want to eat!

For example, the popular and common chanterelle, (Cantharellus flavus, or C. cibarius) is a delicious, golden-yellow mushroom with decurrent (running down the stem) gills. The poisonous Omphalotus illudens ("jack-o'-lantern") is also yellowish with decurrent gills. Note that the chanterelle doesn't have true gills, but bluntly rounded folds versus the sharper gill "blades" of O. illudens, and the latter mushroom tends to grow on wood in clusters and has a more orangey appearance.

There's much more to learn about edibility, but for a guiding principle, we can keep things simple: When in doubt, throw it out.

Harvesting mushrooms

Remove your mushrooms with care. The base of the mushroom, the lowest part of the stem that meets or is anchored in the substrate, can be an important identification characteristic. The base's shape, size, color, texture — even the presence and color of mycelium — can all be keys to your mushroom's identity. To remove the mushroom intact, reach down and around the base with your fingers and/or an available tool, such as a knife. (I've been using a garden weeder; it can go deep without disturbing much of the underlying substrate.)

But if you're harvesting mushrooms to eat and you're absolutely certain of their identity, you'll want to cut them neatly near the ground, leaving the base – and all the debris around it – behind. That way you won't contaminate your edibles with dirt that would have to be cleaned from their gills or pores.

To protect your finds while carrying them in your basket, consider using wax paper or small brown bags. The wrapping helps retain moisture while preventing your mushrooms from getting crushed.

Books and web resources

Beginners often ask for the "best" mushroom guide. Truth is, no one book will do – you'll need several and, if you're like most of us, will eagerly (if somewhat guiltily) accumulate quite a library of references.

That said, I do have some recommendations. Go to any mushroom meet in which participants are encouraged to bring their own books and you'll almost always find this particular reference over and over again, often with frayed covers barely attached with packing tape: David Arora's *Mushrooms Demystified*. Yes, it's old (2nd edition, 1986) and biased toward West Coast species, but ... it contains outstanding keys, excellent species and genera descriptions, and important general information for beginners. Because of the clarity of its keys, I often start with Arora to arrive at genus, then use a regional guide and/or a genus/family-specific guide to get to species.

For guides specific to our area, I suggest *Mushrooms* of the Northeast by Teresa Marrone and Walt Sturgeon, and Mushrooms of the Northeastern United States and Eastern Canada by Timothy J. Baroni. The former is an easy-to-carry compact guide expressly intended for beginners; its use of icons to label seasons and habitats, plus green bold print to highlight

the most important ID characteristics, make it especially helpful. It also has a "top edibles" section and emphasizes the toxic look-alikes for each one. The Baroni book is bigger, presents a wider range of species, and includes deeper details (including spore characteristics) for those with a more scientific bent, making it a favorite of many PVMA members.

I also recommend getting your hands on *Mushrooms of North America* by Roger Phillips. At first, the book's photographic approach turned me off. Instead of presenting mushrooms in situ, within the beautiful habitats they occupy, Phillips presents his species on neutral gray-blue backgrounds. But I quickly learned that this liability is truly its virtue: although less sexy, Phillips' photography captures reality — what your specimens will actually look like by the time you go to your table and start identifying your finds. I'd begin with the other three books but encourage you to seek a used copy of Phillips online. (I got mine in decent condition for only \$10.)

In addition to these references, you may want to explore genus-specific guides for those genera that particularly interest you. Our area is so rich in boletes, for example, that I've found *Boletes of Northeastern North America* by Bessette, Bessette, and Roody, to be practically essential. Our own chief mycologist and club co-founder, Dianna Smith, recently published (with the above mentioned Bessettes), *Polypores and Similar Fungi of Eastern and Central North America* in 2021, an outstanding guide to the unusual mushrooms that persist year-round in our woods and on our decaying logs.

For a more comprehensive list of vetted books, see the list at https://www.pvmamyco.org/field-guides.

For web resources, begin with our club site, PVMAmyco.org and Dianna's widely respected project, FungiKingdom.net. Caution: FungiKingdom will suck you into its depths; before you enter, be prepared with sufficient snacks and potables. This is one of the best places on the web for trustworthy mushroom education.

In addition, ľm fond of Michael Kuo's MushroomExpert.com for its in-depth descriptions and continually updated mushroom nomenclature. (Inexpensive DNA analyses have led to a dramatic reshuffling and renaming of many species; I expect that by the time I type the last of this sentence, two or three of my favorite mushrooms will have changed names.) My last web recommendation is a little offbeat considering cannot speak French: that 1 MycoQuebec.org. Why bother with a reference in a

foreign language? Because MycoQuebec presents more photographs per species than any other site I know of – a truly handy feature given the many ways a single species may appear given weather, age, exposure to sunlight, and other variables. Also, adjectives dominate the descriptions, and these are relatively easy to understand in context.

Mushroom identification and taking notes

Mushrooming doubles your fun. We follow the joy of the outdoor hunt with the satisfaction (tempered with frustration, as you'll soon see) of identifying what we've found, usually with the help of reference resources. Basically, identification is a two-part process of 1) close observation and 2) matching observed features to the definitive characteristics recorded in the scientific literature — in our case, mostly field guides and websites.

Important note: You won't be able to identify everything you find – even the experts are occasionally stumped. Your finds might not be represented in your resources; aging, weather and other conditions may render your specimen unrecognizable; but most frequently, you'll come across fungi that cannot be identified by macroscopic means (what you can see without the aid of a microscope) and require microscopic examination and/or DNA analysis.

While you're in the field, take pictures! You want to capture as much identifying information as possible, so be sure to include the substrate around the mushroom body. Photograph the underside of the cap to get a good look at the fertile surface (e.g., gills, pores, teeth), and capture as much of the stem as you can. If you're fortunate enough to find multiple specimens of the same species, see if you can photograph the full fruiting body life cycle from emerging "egg" to unfolding cap, through maturity and into early decay.

Back at home or lab, successful identification begins with excellent note taking. Before you crack open your books, get out your pencil and record, to the best of your ability, the following points:

- **Date of harvesting:** Your future self will thank you because these dates help you learn and remember the seasonal rhythms of fungal fruiting.
- Location: Where did you find it?
- Habitat and environment: Again, location, but with more local detail. Did you find it in a field or forest? If the latter, what kind of trees were nearby? Was it found in a dry upland or a damp wetland?
- **Substrate:** What was the mushroom growing on? Ground near trees? Open grasslands? On decaying stumps or branches? Moss? Other mushrooms?

- "Social" characteristics: Was your mushroom solitary? Grouped near others? In a ring or line? Or even clustered with other mushrooms at the base?
- **Spore print:** What color are the spores? Many keys a diagnostic "process of elimination" for identifying specimens start with spore color, so it's important to know. HINT: Before you pick a mushroom, look around; often you'll find spore deposits on the substrate under the mushroom, sometimes even on the caps of nearby fruiting bodies.
- Cap characteristics: What's the diameter? How about the shape: like a bell, a cone, or flat (planar), etc.? Check the texture: does is have "hairs" (fibrils)? Is it sticky or gooey? Dry, rough, or smooth? Check the margin: does the cap stop where it meets the fertile surface ("even") or do you see a thin edge of loose, sterile tissue? Any other tissue hanging from the cap? Any "warts" or remains of the universal veil (common among Amanitas, for example)? Of course, you should record color, but of all the cap characteristics, color is the most problematic as color can change with age, weather, and other conditions.
- Cap flesh: What's the color? Does it change when it's cut? How thick is it?
- Aroma/scent: Any distinctive smells? Some common ones include flour/yeast, cucumbers, rotting fish, watermelon, and plain old "mushroom." Uncommon ones include ashtrays (Hemileccinum rubropunctum) and rocket fuel or skunk cabbage (Phyllotopsis nidulans).
- Fertile surface (gills, pores, teeth) qualities: Do you see gills, pores, or teeth? If gills, are they densely packed or far apart or somewhere inbetween? Are they broad or shallow? Does the edge have color? Most importantly, how are they attached (or not) to the stem? Are they "free" (not attached), fully attached (adnate), barely attached (adnexed), notched near the stem, or even running down part of the stem (decurrent)? What color are they? What's their texture: brittle, waxy, greasy? If you cut or bruise them, do they change color? Do they exude a liquid ("latex") when cut? Any partial gills or forking? If you see pores, are they tiny and packed or large and angular? Again, what color are they, and does the color change with handling?
- Stem/stipe: How long and thick is it? Is it uniform along its length ("even") or does it enlarge toward the apex (top) or base (bottom)? What's its color? Do you see any particular textures, like reticulation (raised lines), punctae (raised dots) or chevrons (a snakeskin quality)? When you cut it, do you find it solid, hollow, or "stuffed" (loosely packed with material)? If you see larval tunnels, what color are they? Look at the bottom: does it have a bulb? A

club shape? A "pinched" quality? Any remains of the universal veil ("volva")? Any mycelium (fungal threads) attached? What color are they? How is the stem attached to the cap? Centered, off-centered, or missing altogether ("sessile")?

• Ring/annulus: Back to the stem: does it have a "ring" or ring remnants on it? Any dangling threads? Is the ring big and floppy, or barely visible?

If all this seems like a lot, it is – and there's far more to observe and record. Consider the above as a mere starting point. As you grow in experience, both your mushroom vocabulary and your powers of observation will improve - that's part of the pleasure of the process.

Finally, a few thoughts on mycological etiquette and foray behavior. Learn from the more experienced mycologists around you. It's generally considered bad form to ask for specific locations of prized mushrooms, but you're always encouraged to ask questions about mushroom characteristics and identifying features.

Watch where you walk. Our sturdy oaks and pines are complemented by more fragile growth - mosses, ferns, lichens, wildflowers, and more - that suffer under our feet. When you see litter, pick it up; we like to leave our foray sites cleaner than before we arrived. When we find edibles, we share. (In one of our early forays last season, we found a mother-load of Laetiporus sulphureus, aka, "chicken of the woods," on a large standing snag. Even though we left much of it on the tree, everyone who wanted a share got enough to make a substantial meal.) As a last, finger wagging injunction, please never collect everything available; leave some behind to allow the fungus to be fruitful and multiply.

Let's begin. Go outside, get your hands dirty, and fill your notebooks with observations. The fungal world awaits.



Discover NAMA: The North American Mycological Association

Did you know that there's a national organization for mushroom enthusiasts, just like PVMA but much, much bigger? The North American Mycological Association, also known as NAMA, is a non-profit organization of both professional and amateur mycologists. Our club is a NAMA-affiliate, which means that we work in partnership with NAMA to provide education and information for folks interested in fungi. This affiliation also means that membership in NAMA costs less for our members, just \$25 a year for two adults/one family or household.

Members of NAMA enjoy access to the bi-monthly newsletter, The Mycophile, as well as the ability to register for various regional and national forays. For example, this year's NAMA foray will be held in Potosi, Missouri (see page 14 of this newsletter). They also offer a regional foray every year, in conjunction with various NAMAaffiliated clubs. These extremely popular forays are open only to NAMA members and registration fills up

quickly. This year's regional foray in Wisconsin is already

fully registered and waitlisted!

Beyond publications and forays, NAMA also presents a wide range of information on their web page for mycologists and myco-enthusiasts. You can find information on mushroom poisonings, resources on cultivating fungi, educational materials for teaching children and adults about mushrooms, and links to their mushroom art contest (this year's contest is ongoing!) A rainy day is a wonderful time to poke around on the NAMA website. which can be found



https://namyco.org/. Whether or not you decide to become a paid member, you can still access many of their great resources online for free. Click on the graphic above to enjoy this video produced by NAMA, which helps detail what they are all about: Keep an eye out for our very own Dianna Smith!

A call for fungi from Clark University

By Jessica Benson Evans

Dr. David Hibbett of Clark University, whose PhD student, Prasanth Prabhu, continues to look for collections of *Hohenbuehelia*, asks that we be on the lookout for these mushrooms. There are four species described on MushroomExpert.com that should be in New England.

From Dr. Hibbett: "Hohenbuehelia is a close relative of Pleurotus, which includes oyster mushrooms. Together, they form the family Pleurotaceae. You all know oyster mushrooms, but you may not be familiar with Hohenbuehelia (I confess that I have never seen it in the field—lousy mycologist that I am). The cool thing about Hohenbuehelia, and the subject of Prasanth's research, is that it traps and consumes nematodes. Pleurotus does this also, and it seems to be a unifying attribute (a synapomorphy) of the Pleurotaceae.

Prasanth and I would be most grateful for any assistance you can provide. If you have seen these taxa in the field, we'd be interested to know where you saw them so that we might go look for ourselves. Thanks for your consideration. Please feel free to email me if have any questions: dhibbett@clarku.edu."



Hohenbuehelia mastrucata

Image ©Jessica Benson Evans

I found the pictured specimen of *H. mastrucata* in my back woods while "rolling logs," a favorite pastime of winter and early spring mycophiles. I rolled over a piece of decorticated hardwood that was sitting on top of the fallen trunk of the same tree and discovered several beautiful, fresh fruiting bodies. I was able to pull off the section of wood containing the specimens and carried it back home with me.

It took a day or two to identify my find, during which time the wood and specimens sat on my kitchen counter, drying. I included a picture in a short newsletter sent out to members, and David Hibbett reached out to me right away. I had forgotten that his graduate student was looking for them, and by that time

my specimen was too dry for use in the research.

I now have instructions about what to do if I find this specimen again. Dr. Hibbett recommended that I get a spore print on tin foil right away, while the specimen is fresh. Then, I should contact him to arrange for pickup of the specimen and spore print. Now that I know where it has fruited in the past, I am hoping to find it again this spring!

*Side note: *Hohenbuehelia* has the distinction of being stuck in my mind since last summer, when member Brenda Clark sang the syllables to cement then in her mind. It sounds just like the six syllables of a conga line: Ho-hen-Bu-a-Hel-ia! (The same can be done with *Inocybe tahquamenonensis*.)



Hohenbuehelia grisea. Image ©Tom Bigelow. Used under CC BY-NC 4.0, cropped. Accessed at iNaturalist.



Hohenbuehelia angustata.

Image ©John Plischke. Used under CC BY-NC 4.0, cropped. Accessed at iNaturalist.

Hohenbuehelia petaloides

Image courtesy C Russell. Accessed at iNaturalist.



It's morel season! Let's look at their names

Bv Dianna Smith

There are at least twenty or so different species of morels in North America. Prior to 2012, we tended to call them by their common names or we used the wellknown binomial names established by European mycologists. With DNA analysis, it has been shown that there are roughly four or five species of morels common to our region in the Northeast and they are genetically different from the European versions. I will try to help you figure out what species we have and the current terminology we should consider using for what we find. Of course, remember that calling them by their the mushrooms common names won't offend themselves. Our various morel species are addressed below in the order in which they tend to appear in the spring.



black morel, now known as Morchella angusticeps has a conical subor conical cap and at maturity exhibits dark vertically arranged ridges and paler pits. The cap barely overhangs the granular stalk to which it is attached. Like all true morels. M. angusticeps has a hollow cap and stalk.

M. angusticeps is

typically the first of

the four or five main

eastern morels to

growing solitary or grouped under sev-

eral different spe-

in

It is found

the

appear

spring.

Formerly known as

Morchella elata, the



shows the hollow cap and stalk common to all true morels.

of hardwood cies conifer trees, and including tulip pop-Morchella angusticeps. The lower image pines and М. prava are lars, of oaks.

Morchella punctipes (formerly known as Morchella semilibera), the "half-free morel," is found growing

scattered about or solitary under a variety of hardwoods from the Great Plains eastward. The name was changed because it was discovered that M. semilibera is a species European genetically different than our half-free morel. Like our black morel, it tends to appear earlier in the season than the yellow morels. It has a relatively small cap compared with other morels and a comparatively long, thin, somewhat granular stalk. The cap is attached to the stalk for about half its length, resulting in the "half-free" moniker.





Morchella diminutiva

not found under pine. As might be guessed from the name, it is more petite than the large morels favored by most morel hunters. In fact, it most closely resembles the black morel, М. angusticeps, except that its sterile ridges and fertile pits are paler in comparison. Also, it

may or may not have a smooth stipe. M. diminutiva is common from the Great Plains eastward.

I am not positive about the identification of the morel depicted in the image on the right, though its habitat and morphological features suggestive of Morchella prava. The dark pits and pale ridges more randomly arranged than our other morel species. This mushroom tends to be found under pines and oaks and in



Possibly Morchella prava

wet, sandy environments near water from the 43rd degree latitude North.

Morchella americana (syn. M. esculentoides) is the meaty yellow morel most desired and sought after by morel hunters. It is the easiest of all our morels to serve stuffed with favorite cooking ingredients. Morchella americana is common east of the Rocky Mountains, and is found under dying American elms, living ash trees, and under very mature apple trees. It is also found in river bottoms and urban locations in the west. Note its pale infertile ridges and the irregularly



Morchella americana (syn. M. esculentoides)

shaped fertile pits. The base of the cap is attached to the stipe. There is a lookalike found a bit further west called *Morchella cryptica*. It is apparently impossible to distinguish the two species without DNA analysis.



Verpa bohemica. Image ©Ryzhkov Oleg. Used under CC BY-NA 4.0, cropped. Accessed at iNaturalist.

There are a few so-called "lookalikes" of morels found in our Verpa bohemica resembles the "half-free morel" or Morchella punctipes, but the cap is attached to the stem only at the apex, while the caps of M. punctipes are attached to the stem over about half of their length. For detailed а discussion of V. bohemica, see this entry at iNaturalist: https://www.inaturalist.org/taxa/ 126131-Verpa-bohemica.

The convoluted-capped *Gyro-mitra* sp. don't resemble any morel, but they are nevertheless often confused with them by



Gyromitra fastigiata (left) and G. gigas (below). Note that the inside is "stuffed," unlike the hollow interiors of all Morchella species.



inexperienced mushroom hunters. Both have a stuffed rather than hollow interior. Both contain toxins and can reportedly be deadly eaten raw. The compounds in *Gyromitra* break down into monomethlhydrazine, a key component of rocket fuel. Although the amount and toxicity varies by species and from fruitbody to fruitbody, it is possible that the effects of consuming *Gyromitra* may be cumulative.

While all morels are considered choice edibles by most of us, the large yellow *Morchella americana* (syn. *M. esculentoides*) is a world-wide favorite. Often it is paired with wild leeks, which appear at the same time of year. Most of us prefer them cooked in butter or cream than in oil. Be aware that like *Gyromitra*, they are known to cause severe gastric distress when eaten raw or partially cooked. Also, note that some people have reported becoming sick after eating morels accompanied by a drink or two of an alcoholic beverage. So whatever you call them, be sure to cook them all thoroughly and savor their complex flavors.

For more detailed descriptions of any of these mushrooms, please consult Michael Kuo's website mushroomexpert.com and Michael Beug, Arleen Bessette, and Alan Bessette's reference book, *Ascomycete Fungi of North America*. A search on iNaturalist will also lead you to detailed discussions of these various species.

2022 Multi-Day Forays

Attending a multi-day foray is an exciting and rewarding experience. These forays provide opportunities for amateurs to rub elbows with professionals and well known advanced amateurs, go on fungus hunting walks in areas that are unfamiliar to you, hear talks from some of the foremost mycological experts, attend interesting workshops, and make new mycophile friends. Some forays that our members have attended are listed below. There are many others around the country; check "Events" in the NAMA web site if you are interested. To help defray the cost of attending a foray, PVMA has a limited number of \$200 scholarships available for current PVMA members. The deadline to apply is June 1. See the application procedure on page 15. NEMF also has a scholarship program for attendance at the NEMF annual foray, with a deadline of the end of May; details are at: https://www.nemf.org/samuel-ristich-foray/homola-scholarships/



Annual Foray of the Fédération québécoise des groupes de mycologues (FQGM) and the Northeast Mycological Federation (NEMF)

organized by
the Cercle des mycologues de Montréal (CMM)
Friday, September 16th – Monday, September 19th, 2022
Hôtel Château Joliette
450, Saint-Thomas Street
Joliette, Québec J6E 3R1

From Chantal Paquet, Présidente, CMM:

It's really finally happening! The FQGM-NEMF foray will take place this year. After two long years of uncertainty and the pandemic, we will have the pleasure of welcoming mycologists from Quebec (FQGM) and from throughout the northeast (NEMF). Wonderful get-togethers and conversations are on the horizon.

We spared no effort in finding inspiring speakers, drawing on excellent advice from Renée Lebeuf, whom so many of you already know. You are invited to come and discover Lanaudière, a rural region north of Montreal which lies between the St. Lawrence River and the Laurentian Mountains. Thanks to the Cercle des mycologues de Lanaudière et de la Mauricie (CMLM) and its president, Yvan Perreault, we look forward to abundant and varied mushrooms on our walks.

For Sunday afternoon, we have a special outing to the Abbey Val Notre-Dame in St-Jean-de-Matha, where the monks, who once made the famous Oka cheese, have lived since 2009. The monastery, with its dramatic, contemporary design, is the masterwork of renowned architect Pierre Thibault. It is located at the foot of Coupée Mountain, in the heart of a 460-acre forest, bordered by the Assomption River. Since 2014, the monks have promoted edible forest products made from materials they get from the land where they live. You will find more details about this visit in the program.

Information on the walks and presentations will be found here. Please fill out one registration form for each participant so that we can make note of your preferences.

All that remains is for me to hope for rain beforehand, and beautiful sun on the weekend of September 16 to the 19th.

Don't wait too long to register: first come, first served!

COMA Clark Rogerson Foray



Sept. 2-4, 2022 Camp Hemlocks in Hebron, CT

Attendees may register for 1-3 nights or as day visitors for either or both of the two full days, Saturday or Sunday. This year's rates and registration details will be available soon on the Connecticut-Westchester Mycological Association website with registration open in June.

http://www.comafungi.org/special-events/clark-rogerson-foray/

If you are a member of COMA, you may apply for The Ursula Hoffmann Scholarship to cover the cost of attendance. More details here:

https://www.comafungi.org/learn/scholarships/

NAMA Annual Foray

September 29 - October 2, 2022 Trout Lodge near Potosi, Missouri

This fall there will be a fabulous NAMA Annual Foray, in partnership with MOMS. You may ask, what is MOMS? It is the Missouri Mycological Society lovingly called MOMS, a proud NAMA-affiliated club that engaged in extensive planning for the 2020 Annual Foray. But we all know what happened then... So, the last weekend in September 2022, MOMS will get the chance to show you around our neck of the North American woods! Here's the MOMS website: https://momyco.org/



Missouri is a large state with diverse natural habitats, so MOMS consists of 5 dynamic chapters with over 400 members total. MOMS takes pride in offering lots of forays, monthly educational Zoom meetings and many other events, including an annual winter luncheon, mushroom dinners at restaurants, our spring Morel Madness, our summer Sweat and Chanterelles, and so much more. You can bet that MOMS will bring that energy, enthusiasm and organization to the NAMA Annual Foray!

NAMA's 2022 Annual Foray will be held at the Trout Lodge YMCA in Potosi, Missouri, a sister property to last year's Snow Mountain Ranch in Colorado, located about 1 ½-2 hours from St Louis. Transportation from the airport will be available! From the Trout Lodge website: https://gwrymca.org/locations/ymca-trout-lodge "... just 90 minutes from St. Louis, is a family-favorite nonprofit resort with a whole host of amenities and facilities, all within walking distance from one another. Everything is nestled into gently rolling forest-covered hills beside a beautiful lake."

There is a lot to do when not mushroom hunting and/or for partners who choose not to hunt mushrooms. Horseback riding, zip line, water sports, games galore, and so much you'll need to look at their website to find out. There's also a lot to do in the surrounding area, including a nice winery, antique shops, golf, Elephant Rocks, Tom Sauk Mountain, Minna Falls, Johnson Shut-ins and lots more.

Our forays will take place in the middle of the Mark Twain National Forest. With 1.5 million acres of public land, over 750 miles of trails and 350 miles of perennial streams; Mark Twain National Forest has everything you could think of for wonderful mushroom hunting. Miles and miles of trails wind through the various sections that are perfect for hiking and mushroom hunting — and we definitely are here for the mushrooms!

Look for more details and registration info coming by the first of May at https://namyco.org/annual_foray.php.

Guidelines For PVMA Scholarship Application

The application is for current PVMA members and should be comprised of a letter to the scholarship committee that includes:

- 1) Which foray or educational workshop you want to attend.
- 2) Your specific interests in the field of mycology and how attending the foray will aid you in furthering your mycological education. Examples include learning about edibles, learning more about a particular group of fungi, wanting to hear presentations from experts in the field, etc.
 - 3) Why you think you're a good candidate for the award.

The application deadline is due June 1. If there are no applicants by the deadline, late applications may be considered. In the event of a limited amount of funds, and there are multiple scholarship winners, the total award may be split. If a winning applicant is unable to attend the foray due to an extenuating circumstance, the award will be forfeited and given to the next qualified applicant. We must receive a copy of the foray registration before the award will be disbursed. Note: The number of scholarships in any given year will be dependent upon the PVMA treasury balance. Scholarship recipients who wish to re-apply in subsequent years will be considered after those who have never applied before.

Please email all inquiries and/or applications to Philip Hadley, chair of the scholarship committee, **mphadley03@comcast.net**



A fine example of what persistent searching (and log rolling!) can uncover, even in winter. Jess Benson Evans found this beautiful, but unidentified, mushroom in March of this year.