NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION VOLUME 53-4 FALL (OCTOBER-DECEMBER) 2023



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NJMA EVENTS HOTLINE

908-227-0872 for information on event cancellations due to unduly-inclement weather. It is NOT for general inquiries or to contact officers!



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PRESIDENT'S MESSAGE

Our 2023 mushroom season is just about over. It was a much wetter foray season than last year, sometimes resulting in less member turnout, as some appear to prefer not to walk or drive in the rain that occurred all too often on our weekend forays. But even so, I was able to meet many new members at forays.

As I end my two terms as NJMA president, the complete shutdown of indoor activities under the previous president, Frank Marra, finally ended. This, of course, had less to do with me than the current endemic Covid variant and lower hospitalization rates. Bringing back the full diversity of year-round, in-person activities that NJMA had in the pre-Covid 2019 days is still far from complete.

NJMA activities should be a reflection of our members' interests. But practically speaking, it is more a reflection of the interests or time available for those who are willing and able to take the lead and do the legwork it takes to define an activity, to find an activity lead (if needed), to select a low-cost location, to determine minimum and maximum attendance for a good attendee experience, to ask for additional volunteers to help, and to write up an activity description to send to our members. It may sound simple (and it can be), but maybe not for the first time you volunteer to do it. Fungus Fest 2023 gave a couple of dozen new volunteers exposure to the joys of sharing their knowledge with others. If you want more non-foray activities close to you, a good New Year's resolution might be to volunteer to organize a new NJMA activity or help bring back one NJMA had in the past.

- Sue McClary

Send in your articles and photos! SUBMISSION DEADLINES for NJMA NEWS

NJMA News is a quarterly publication timed roughly to correspond with the middle of each season. Send submissions to nimaeditor@nimyco.org. The new issue dates and deadlines for the coming year are as follow:

WINTER (February) issue: Deadline is 1/15/2024 SPRING (May) issue: Deadline is 4/15/2024 SUMMER (August) issue: Deadline is 7/15/2024 FALL (November) issue: Deadline is 10/15/2024

Visit the NJMA
Discussion Group



http://tinyurl.com/jjualgz



EDITOR'S NOTES

Hi folks,

As of this issue, I am stepping down from being the newsletter editor for the New Jersey Mycological Association. It has been a wonderful journey and a lovely experience, but due to my graduate studies, my position as a teacher, as well as other personal matters, keeping up with the mycology club is a bit more than I can handle! I'm also looking for someone to take over the Instagram in my absence—we've already amassed a number of followers!

Like I said before, thank you all for this lovely opportunity, and happy foraging!

- Sydney Hilton

Join us this and every Tuesday!

TAXONOMY TUESDAYS

Online every Tuesday evening at 7:00PM on ZOOM!

Download the ZOOM app to your phone, computer, or tablet and have digital photos of your mushrooms ready to present to the group.

Watch your email for details!

WELCOME TO THE ONLINE EDITION OF NJMA NEWS

For the great majority of you who are viewing the online PDF of this newsletter, please note that **most web links and email addresses are clickable**. Clicking on a *blue* web or email address will launch your web browser and take you to the specified page or open your email software so you can send an instant email. Just look for the "click finger" when you hover your mouse over these items.

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HOW TO PARTICIPATE IN THE FUNDIS NORTHEAST RARE FUNGI CHALLENGE

- 1. Take a look at the *fungi on the list* including their range and look-alikes. You can print off the *Challenge booklet, poster, or download them* onto your phone to reference in the field.
- 2. If you think you've found one of the Challenge species, follow the steps in the *booklet*. Take good photos of the specimen and its surrounding habitat and create a high quality observation on *iNaturalist* or *Mushroom Observer*. You can also email it to us at *Northeast_rare@fundis.org*. *What's a "high quality observation"?*
- 3. After you've taken your photos and posted your observation, collect the specimen! *See here* about how to collect and preserve the specimen properly, and how to send your specimen to FunDiS for DNA sequencing. Be sure to read about how to get collecting permits and land permission if you are interested in sending your special collection to a local herbarium/fungarium.
- 4. Share a picture of your find on *Instagram* or whatever social media platforms you're on and tag #northeastrarefungi. A story of how you found it would be even better!
- 5. Lastly, FunDiS is interested in all of your high quality fungal observations, not just the rare ones! You can help us understand fungal biodiversity and distribution across North America by adding your observations to our other conservation program, the *FunDiS Biodiversity Database* on iNaturalist. Instructions are *here*.

As always, it's important to have a collecting permit for areas where collecting is restricted.

The Northeast Rare Fungi Challenge has been proposed by the FunDiS Conservation Working Group after a very successful West Coast *Challenge*. Review Committee members who have suggested species and edited the accompanying information include Tim Baroni, Bill Bikaitis, Annabelle Langlois, Renee Lebeuf, Bill Neill, Don Pfister, John Plischke III, Noah Siegel, Dorothy Smullen, Walt Sturgeon, Rod Tulloss, and Rick Van de Poll. FunDiS Conservation Working Group members who have been instrumental in organizing the Challenge include Gabriela D'Elia, Alex Mayberry, Tiffany Theden, Liam Nokes, Else Vellinga, and Rick Van de Poll. It takes a community!

We look forward to seeing what your community will find!

We'd love it if you would share this message with your community via email/newsletter/social media. We are also happy to speak with members of your organization via Zoom.

Thank you for helping to document, bring attention to, and protect fungi.

COMMON FUNGUS MIGHT FUEL ALZHEIMER'S ONSET

by Homa Warren. Reprinted from Spore Prints, newsletter of the Puget Sound Mycological Society, Fall 2023. Originally published at https://neurosciencenews.com/, Oct. 16, 2023.

Previous research has implicated fungi in chronic neurodegenerative conditions such as Alzheimer's disease, but there is limited understanding of how these common microbes could be involved in the development of these conditions.

Working with animal models, researchers at Baylor College of Medicine and collaborating institutions discovered how the fungus *Candida albicans* enters the brain, activates two separate mechanisms in brain cells that promote its clearance, and, important for the understanding of Alzheimer's disease development, generates amyloid beta (Ab)-like peptides, toxic protein fragments from the amyloid precursor protein that are considered to be at the center of the development of Alzheimer's disease. The study appears in the journal *Cell Reports*.

"Our lab has years of experience studying fungi, so we embarked on the study of the connection between *C. albicans* and Alzheimer's disease in animal models," said corresponding author Dr. David Corry, Fulbright Endowed Chair in Pathology and professor of pathology and immunology and medicine at Baylor. He also is a member of Baylor's Dan L Duncan Comprehensive Cancer Center. "In 2019, we reported that *C. albicans* does get into the brain where it produces changes that are very similar to what is seen in Alzheimer's disease. The current study extends that work to understand the molecular mechanisms."

"Our first question was, how does *C. albicans* enter the brain? We found that *C. albicans* produces enzymes called secreted aspartic proteases (Saps) that break down the blood-brain barrier, giving the fungus access to the brain where it causes damage," said first author Dr. Yifan Wu, postdoctoral scientist in pediatrics working in the Corry lab.

Next, the researchers asked, how is the fungus effectively cleared from the brain? Corry and his colleagues had previously shown that a *C. albicans* brain infection is fully resolved in otherwise healthy mice after 10 days. In this study, they reported that this occurred thanks to two mechanisms triggered by the fungus in brain cells called microglia.

"The same Saps that the fungus uses to break the bloodbrain barrier also break down the amyloid precursor protein into Ab-like peptides," Wu said. "These peptides activate microglial brain cells via a cell surface receptor called Toll-like receptor 4, which keeps the fungi load low in the brain, but does not clear the infection."

(continues on page 10)



NJMA NEWS NEEDS AN EDITOR!

As you've probably read earlier in this issue, Sydney Hilton is relinquishing her volunteership as editor of *NJMA News*. We sincerely thank Sydney for her time and hard work serving in this position.

Which leaves us to a position to run this "Help Wanted" article. *NJMA News* has been a staple of the club almost since its inception in the early '70s. We've strived to present information which is relevant to all facets of our club, and our editors have all done a magnificent job of poring through member submissions and other items which would interest our members.

Are you dedicated to NJMA? Do you have an interest in mushrooms, have a "nose for news", have some experience with writing and/or copy editing (including punctuation and grammar), are fluent with email and internet communication, can learn and adapt to our specifications, and can be a team player? This might be a position for you! Keep in mind that this is a *volunteer* (need we say, "time-consuming"?) position and we do work on deadlines.

If interested, please contact Jim (*jimbargg5@mac.com*) or Sue (*njmaeditor@njmyco.org*).

THE UNWRITTEN BUT MOSTLY ACCEPTED ETIQUETTE OF MUSHROOM COLLECTING

by Wren Hudgins. Reprinted from Spore Prints, newsletter of the Puget Sound Mycological Society, October 2023

Why Rules?

A mushroom spot is a precious resource. It may represent months (or even years) of searching and many miles of walking. It may also represent hundreds of actual dollars spent in gas to get to trailheads or other forest locations over time. Of course, it's possible to just stumble onto a good spot five minutes after leaving your car, just as it's possible for you to win the lottery.

But we have to recognize the two percent rule, which I made up, which is, I think, mostly true. This rule states that you will find those delicious mushrooms you seek in two percent of perfect habitat, with good timing, and zero percent of imperfect habitat. The mushroom spot then is precious because of scarcity. But since many species of mushrooms fruit in the same area year after year, that spot is precious also because it's a gift that keeps on giving. So, when someone shares the location of a spot with you, it's a significant gift. People don't do this easily or often; hence the secrecy which prevails in mushrooming. But if you are given such a gift, how do you respond?

Of course, a spot may have a number of owners, perhaps all unknown to each other, having discovered that spot independently. This is more likely to happen for spots near trailheads or heavily visited areas. If you are the recipient of such a gift, it's up to you to get clear

on the owner's preferences and to respect them.

An exception to this rule applies for burn morels. Since those morels will not repeat abundant fruitings in years to come, that spot is a less valuable resource. I tend to freely give out burn morel locations, at least to guides inside the club, attempting to thank them for their service to the club. This concept of "ownership" operates at smaller levels, too. Let's say you are mushroom hunting with someone and that person whoops with delight upon finding a nice patch of chanterelles. You are only 30 feet away. What do you do? Well, what you DON'T do is rush right over and start picking, unless you are married to the finder, and even then, maybe not. You congratulate them, and if you are invited over, you may go. Even if invited over, don't take too many. If not invited, just continue your own hunting. They own that patch.

How much space to give them might depend on circumstances like how much good-looking terrain there is and whether the other person is a recreational hunter or a professional hunter. Often you can tell the difference by looking at their mushroom container. If they are carrying a wicker basket, they are likely recreational. If a five-gallon bucket, likely professional. As you may know, the professional hunter is making a living harvesting mushrooms in the woods, so there is risk of that person being more territorial about their hunting space. There have been conflicts, but mostly in the long-ago past. There have even been shots fired, but this was almost 20 years ago and I'm not aware of any deaths. Given that the professional hunter has much more at stake than the recreational hunter, I tend to be initially very friendly and quickly move away, giving them plenty of space.

Other Etiquette Guidelines

Moving away from the "finder equals owner" concept, there are other considerations recommended by etiquette. Such considerations dictate not picking every single mushroom in a patch, and not taking the really old or the really young. Instead of picking the very young, just enter a waypoint in your GPS so you can return to that spot in a week or 10 days. Don't disturb the ground and leave the forest a bit cleaner than you found it. I will sometimes wait until my buddies are looking and then I'll bend down and pick up that aluminum can. I'm conscious of my modeling effect.

These rules don't apply to everyone, of course. I have a few regular hunting buddies and we have no secrets between us. Everything is shared. Sometimes. at the end of the day, we'll equalize the amount collected between us. This arrangement is more relaxed and tends to work best when the participants are similar in skill level, knowledge, and fitness.

Finally, let's close the circle here by reminding ourselves why we have etiquette in the first place: Etiquette gives us guidelines for the default way of interacting with others so that we can show respect for them, reduce misunderstandings, and get along.

Sounds good to me.





KITTATINNY VALLEY STATE PARK FORAY – SEPTEMBER 9, 2023

by John Burghardt, NJMA Foray Recorder

Conditions at Kittatinny State Park were very good and a good mix of enthusiastic newcomers and veterans turned out. Significant rain had fallen in the ten days preceding our visit. We collected a broad array of fungi, some of it in good condition, some of it past its prime. It also seemed to me we were seeing a transition from summer to fall in the mix of species in our collection.

Click here for a PDF file containing the list of about 100 fungi that we identified, and 20 lichens. A note at the top right side of this page explains the table. The table contains Mushroom Observer (MO) numbers for some collections. Thanks, Sue and Nina, for making these posts. You can view photos of these collections by going to www.mushroomobserver.org and using the search function to search by MO number or the species name. Another option is to search for the location "Kittatinny Valley State Park" and request to see observations at that location. Thanks also to Jason Hafstad for another nice list of lichens this week.

I wanted to flesh out my comment about what I felt was a transition to seeing fungi that are usually found in the fall. An interesting aspect of collecting fungi is that many are seasonal in their fruiting. So I wanted to point out some fungi that usually fruit in the fall. As a rough measure, I considered each of our collections as a "fall mushroom" if it: (1) was named to species, (2) was recorded for the first time in 2023 at Kittatinny, and (3) is not "unusual", which I defined as having been collected in at least ten of the forty years we have kept track of our finds. This resulted in a count of 19 species, which I have highlighted in light orange in the table. I think this selection rule resulted in a pretty good list of "fall fungi". But I would welcome your feedback as to whether some of these are not "fall fungi" or I omitted some collections that really should be considered fall mushrooms.

Thanks to everyone who attended the foray, and especially to those who stayed around to help sort and identify.

WAWAYANDA STATE PARK FORAY SEPTEMBER 17, 2023

by John Burghardt, NJMA Foray Recorder

Wawayanda always reminds me of the woods in western Massachusetts, where I spent my summers as a child. This year, I explored the outcropping of igneous rocks behind the historic iron furnace adjacent to our meeting place. After an hour or so, I had as many fungi as I could carry. Apparently, everyone had the same luck. We had more fungi on the tables than we were

A NOTE ABOUT THE PDF SPECIES LISTS

The lists are arranged alphabetically within "form groups", which are defined by similarities in the structure of the spore bearing surface of the fungi. While this provides a straightforward way to group similar fungi, membership in the same form group does not reflect genetic relationships among the fungi. (See Timothy J. Baroni's *Mushrooms of the Northeastern United States and Eastern Canada*, Timber Field Press, 2017). The tables also show the frequency with which each taxon has been collected over the 42 years NJMA has kept records of its finds. I find this useful for recognizing common and uncommon species.

able to process, even with everyone pitching in. Overall, we had a varied collection of late summer and early fall gilled fungi, boletes, and chanterelles, as well as many polypores and ascomycetes.

Click here for a PDF file containing the list of just over 100 fungi that we identified, plus 14 lichens. (A note above explains the layout of the table.) Thanks to Jason Hafstad for another nice list of lichens this week.

Thanks to everyone who came to the foray, and especially to those who helped sort and identify.

SMITHVILLE PARK FORAY OCTOBER 1, 2023

by John Burghardt, NJMA Foray Recorder

The North Branch of the Rancocas River snakes its way through Smithville Park about mid-way between its origin east of Pemberton and its meeting with the South Branch shortly the Rancocas Creek empties into the Delaware River. The eastern section of the park where we met and walked has a big undisturbed stand of mixed hardwoods and slopes gently down to the river. The warm fall weather after plentiful rain and the beautiful stand of mature hardwoods produced many fungi and drew a large group eager to collect and examine the fungi.

Click here for a PDF file containing the list of over 100 fungi that we identified, plus 14 lichens.

BASS RIVER STATE FOREST FORAY OCTOBER 8, 2023

by John Burghardt, NJMA Foray Recorder

This was our first foray at Bass River State Forest and it worked out well. The woods were full of fungi, and many interesting collections came in. I walked in a relatively dry upland pine barrens area near the picnic area. I was surprised to realize on the walk back, that we had covered just a few hundred yards of trail. So many mushrooms, so little time.

(Foray reports continue on page 8)

FUNGUS FEST 2023 – RECIPES FROM COOKING DEMO

by Chef Nicholas Shankin

All recipes will serve 3-4 and serve as side dishes (these are not entree portions!).

1. Ginger-Soy Glazed Shiitake

INGREDIENTS:

10 oz Shiitake mushrooms, sliced medium-thin

2 tbsp Sesame oil or vegetable oi

2 tbsp Sweet chili sauce

2 tbsp Ginger, finely grated

1-2 Garlic cloves, chopped

Salt (to taste)

Black pepper (to taste)

2 tbsp Liquid Aminos

Note: Soy sauce may be substituted.

INSTRUCTIONS:

- (1) Lightly brush pan with vegetable oil or sesame oil.
- (2) Lightly salt mushrooms, then pan-sautee sliced mushrooms over medium-high heat for roughly 5 minutes on each side, cooking out much of the water from the mushrooms. Try not to disturb the mushrooms as they cook except to flip them.
- (3) Add a bit of sesame oil, the garlic, and the ginger. Stir gently until aromatic.
- (4) In a separate bowl, combine sweet chili sauce, salt, black pepper, and liquid aminos with ½ tbsp sesame oil.
- (5) Once mushrooms have cooked sufficiently, stir in remaining wet ingredients and allow to simmer 1-2 minutes so the mushrooms have a chance to absorb their flavors. Do not overcook!
- (6) Serve immediately.

2. Simple Cremini with Lemon-Herb Butter

INGREDIENTS:

1 lb Cremini mushrooms, sliced medium-thin

1 tbsp Butter

1 Garlic clove, minced

3 tbsp Olive oil

Salt (to taste)

Pepper (to taste)

½ cup Fresh thyme

Note: you can add/substitute any other fresh herbs you prefer!

2 tbsp Lemon juice

Note: Fresh squeezed is always better than packaged!

INSTRUCTIONS:

- (1) Heat the olive oil and butter over medium heat in a sauté pan.
- (2) Add mushrooms and garlic and cook for two minutes, stirring occasionally. Do not over-stir, we want the mushrooms to cook off some of their liquid.
- (3) Add the chopped thyme or other herbs of your



Thomas Marino, Fungus Fest chef Nicholas Shankin, and Joseph Groah

choice, salt, and pepper, and cook another 4 to 5 minutes, stirring occasionally.

- (4) Turn off the heat and add the lemon juice. Taste and add any additional salt and pepper as necessary. Do not continue to cook mushrooms, or the lemon juice will caramelize and the flavor will be altered.
- 5. Serve immediately and enjoy!

3. Royal Trumpets In Soy Glaze

INGREDIENTS:

- 1 lb Royal trumpet mushrooms, sliced medium-thin *Note: royal trumpets are also called "king oysters"*
- 3 tbsp Butter
- 2 tbsp Sweet chili sauce
 - 2 Garlic cloves, minced
- 2 tbsp Scallions, minced
- ½ tsp Black pepper (for sauce), the rest to taste
- 2 tbsp Vegetable oil
- 2 tsp Rice vinegar
- 2 tbsp Liquid aminos

INSTRUCTIONS:

(1) Brush pan with vegetable oil and add mushrooms, ensuring that each mushrooms touches the surface of the pan. Allow to sauté for 5 minutes on each side, not disturbing mushrooms as they cook.

(continues on page 11)

WHO'S IN A NAME? Amanita violettae

by John Dawson (ninety-second in a series)

A species of *Amanita* originally collected in Bar Harbor, Maine, in 1901 and identified then by Charles Horton Peck as *Amanitopsis vaginata* var. *crassivolvata* was

recognized by Rod Tulloss in 1989 as a distinct species of Amanita. He renamed it *Amanita violettae* in honor of Violetta Susan White, the woman who had collected it and who illustrated it in her 1902 publication *Some Mount Desert Fungi.* White is also commemorated by the epithet *whiteae* in the currently valid species names *Cortinarius whiteae* Peck, *Entoloma whiteae* Murrill and *Rhodophyllus whiteae* (Murrill) R. Heim and Romagnesi.

White was born in Florence, Italy, on 10 May 1875 to wealthy American expatriates John Jay White and Louisa Lawrence (Wetmore) White. They named her Susan Elizabeth, but when her deep blue eyes led a nursemaid to call her Violetta her family soon began doing so as well. In 1904, shortly before her marriage to prominent attorney John Ross Delafield, she legally adopted Violetta as her first name and thereafter was known as Violetta White Delafield.

After her mother's death in 1890, Violetta and her four siblings returned with their father to America. For two years thereafter, she studied at the Brearley School in Manhattan, but she left without graduating. Apart from private tutoring that was the only formal schooling she ever received, since "by the aristocratic norms of New York high society" at that time "too much education of young women was suspect, and college education was not fashionable." What was fashionable for young ladies of high social stature was a sojourn in Europe, so Violetta traveled to Paris for piano lessons and then toured Italy before returning home.

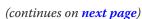
Back in America, she developed an interest in botany, especially mycology. In 1900, she began to study fungi

intensively, particularly Gasteromycetes, at the New York Botanical Garden. Only a year later, she became certified as a researcher there and authored a monograph in the *Bulletin of the Torrey Botanical Society* entitled "The Tylostomataceae of North America". It contained detailed descriptions of the morphological characteristics of the fungi listed therein, including eleven new species of *Tulostoma* that she had discovered, together with her

she had discovered, together with her own superb stippled drawings of their fruiting bodies, spores and hyphae. The next year, she published a second monograph in the same journal, "Nidulariales of North America" — the first treatment of North American bird's nest fungi. Both monographs remained standard references on their subjects for half a century afterward. About the same time, while working closely at the NYBG with Lucien Marcus Underwood and William Alfonso Murrill,3 she began corresponding with a number of distinguished American mycologists, including Charles Horton Peck and Curtis Gates Lloyd,⁴ to whom she sent specimens and watercolor paintings of fungi that she found.

Unfortunately, after such a promising start White's career in mycology was derailed by the deaths within the space of six years of a series of family members and colleagues: her brother

Arthur in 1901, her father in 1903, and her mentor Underwood, under whom she had begun work on a long revision of the genus *Geaster*, in 1907 (a suicide). According to the profile of her by David Rose cited in footnote 2, White was so devastated by that sequence of events that, after 1903, she used black-edged mourning stationery for all her correspondence. Following her marriage in 1904, she left the *Geaster* manuscript unfinished and began to devote her energies to her family. She bore a son just a year later, but grief continued to afflict her, for he was the only one of her four children who survived her. Her two daughters both died in childhood, one at age eight and the other the day after her birth.⁵





Violetta White Delafield

¹Bulletin of the Torrey Botanical Club 29, 550-563.

² Quoted from David Rose's article "Our lady of the Gasteromycetes: The mushrooms of Violetta White Delafield", *Fungi* 13:4 (Winter 2020), 37–43, the most detailed account of her life and work I have seen, on which most of the information in this profile is based. Available online at https://www.nybg.org/event/our-lady-of-the-gasteromycetes-the-mushrooms-of-violetta-white-delafield/.

³ The subjects of installments 12 and 63 of this series.

⁴ Profiled in installments 21 and 26 of this series.

⁵ Names, birth and death dates of her parents and children are given in the Find a Grave entry for her at https://www.findagrave.com/memorial/183881524/violetta-susan_elizabeth-delafield . The portrait of her reproduced here was also scanned from that source. It is reproduced too in the article cited above in footnote 2, where it is credited to the Bard College Visual Resource Center.

Following America's entry into World War I, Violetta became active in Red Cross volunteer work. She lived through the 1918 influenza epidemic and, at the war's end, she and her husband began vacationing at Buck Hill Falls, Pennsylvania, where she again began collecting mushrooms, making watercolor paintings of them, and corresponding about them with Murrill. In 1920, she contemplated resuming work on her *Geaster* manuscript, with the aim ultimately of publishing it, and sought Murrill's advice about the project. He was cautiously encouraging, but aware of her weakened state of health and the amount of time and effort such an undertaking would entail after a sixteen-year hiatus from mycological research. Mindful of that, she decided, in the end, not to do anything further regarding that endeavor; and when, in 1921, her husband inherited a large estate (Montgomery Place⁶) in Annandale-on-Hudson, New York, they moved there. She quickly became immersed in the management of the estate, especially its gardens. Nevertheless, for five more years, she continued painting mushrooms she found (mostly agarics).

Together with her articles in the *Torrey Botanical Society Bulletin*, it is White's paintings that constitute her mycological legacy. Though never published and not exhibited during her lifetime, they are preserved in the archives at Bard College. A selection of them was on exhibit at the Stevenson Library there from 1 October to 1 December 2019⁷, seventy years after White's death at age 73 on 1 May 1949. Images of 573 of them are accessible for viewing online.⁸ Her personal papers are archived in the Violetta White Delafield collection at the LuEsther T. Mertz Library of the New York Botanical Garden and in the Delafield Family Papers at the Firestone Library of Princeton University. She is buried in Woodlawn Cemetery in the Bronx, New York.

- ⁶Now the Montgomery Place Campus of Bard College.
- $^7\,\rm ^{\prime\prime}Fruiting$ bodies: The mycological passions of John Cage (1912–1992) and Violetta White Delafield (1875–1949)"
- 8 See https://tinyurl.com/29srz9v7



Click here for a PDF file containing the list of over 90 fungi that we identified at Bass River, plus 23 lichens. A note on *page 5* explains the layout of the table.

I had the impression we had found a very representative sample of the fungi one would expect to find in the New Jersey Pine Barrens in mid-fall. To test this impression, I compared our Bass River list with a list of fungi collected at Franklin Parker Preserve (FPP) in a survey that NJMA has conducted for the New Jersey Conservation Foundation over a 15-year period. FPP is about 15-18 miles as the crow flies to the northwest of Bass River in Woodland Township, Burlington County.

Confirming my impression, nearly 90 percent of the fungi we identified to species at Bass River have been collected at FPP. I highlighted the specific Bass River collections also found at FPP with a light orange shading in the leftmost row of this week's table.

Thanks to everyone who came to the foray and made collections. We especially appreciated your help in sorting and working to identify your collections. Special thanks to Jason Hafstad, who led the foray, and to Sue McClary, who posted photos of some of our collection on *Mushroom Observer*. You may view Sue's photos at *www.mushroomobserver.org*. To view these collections, use the web site's search function to find location "Bass River State Forest" and then click to see "observations" from that location.

CATTUS ISLAND PARK FORAY OCTOBER 14, 2023

by John Burghardt, NJMA Foray Recorder

Jutting out into Barnegat Bay, Cattus Island Park is our only current foray site washed by waters from the Atlantic Ocean. I always look forward to it for this reason. The threat of rain kept our attendance down this year. Fortunately, the rain held off while we were collecting. And park staff welcomed us into the park's Environmental Center where we had a comfortable space to sort and identify our collections.

Our species list for the day can be downloaded by clicking here. We found a nice assortment of late season mycorrhizal fungi, the genera Amanita, Lactarius, and Russula, as well as smaller numbers of species from Cortinarius, Hebeloma, Laccaria, and Tricholoma.

Thanks to everyone who came to the foray and made collections. Thanks to Sue McClary, Igor Safonov, and Nina Burghardt who posted photos of some of our collection on *Mushroom Observer*. You can view these and photos of our finds in former years at Cattus Island at the *Mushroom Observer* website (*www.mushroomobserver.org*). To view these collections, use the web site's search function to find location "Cattus Island" and then click to see "observations" from that location. Thanks also to Jason Hafstad and Liz DeCicco for a nice list of lichens.

ESTELL MANOR PARK FORAY OCTOBER 22, 2023

by John Burghardt, NJMA Foray Recorder

Conditions were excellent for our foray in Estell Manor Park. It had rained several days before our visit, and the fungi were taking advantage of excellent late fall conditions. We collected a wide variety of fall Pine Barrens fungi.

Our species list for the day can be downloaded by clicking here. We identified 115 taxa of fungi and 28

lichens. A note on the top of *page 5* explains the layout of the table.

Thanks to everyone who came to the foray and made collections. We appreciate your interest in identifying your collections. Thanks to Sue McClary, and Nina Burghardt who posted photos of some of our collections on *Mushroom Observer*. You may view these and photos of our finds in former years at Estell Manor at the Mushroom Observer website (www.mushroomob*server.org*). To view these collections, use the website's search function to find the location "Estell Manor". There are two locations with this name in the MO system, and both have relevant photos. For each location, click to view "observations" from that location. In addition, others have posted many observations of species we found and these may also be of interest, if you want to connect an image to the names on our list. Thanks also to Jason Hafstad and Liz DeCicco for a nice list of lichens.

WELLS MILLS COUNTY PARK FORAY OCTOBER 29, 2023

by John Burghardt, NJMA Foray Recorder

I always look forward to visiting Wells Mill Park because it offers the opportunity to collect in both a typical upland pine oak forest and in a wet area with mature Atlantic white cedar and a variety of deciduous trees. This year, the upland area I walked in was becoming quite dry, and the wet area on the west side of the lake was beginning its recovery from a fierce storm that had upended many of the mature Atlantic white cedar trees. Park staff had created a comfortable walking path through the fallen Atlantic white cedar trees. I was heartened to see many Atlantic white cedar saplings seeming to flourish. I look forward to seeing, in the coming years, which saprobic fungi appear and how their work progresses.

Our species list for this year's visit to Wells Mills can be downloaded by clicking here. We identified 85 taxa of fungi and 26 lichens. A note on the top of page 5 explains the layout of the table. We identified a nice assortment of fall fungi, including many from genera that are mycorrhizal, such as Amanita, Cortinarius, Craterellus, Hebeloma, Laccaria, Lactarius, Leccinum, Rhizopogon, Russula, Suillus, Tricholoma (Melanoleuca), and Tylopilus. The list underrepresents the numbers collected in some genera because we were not able to identify all collections to species, especially in Cortinarius, Hebeloma, and Russula.

Thanks to everyone who came to the foray and contributed collections. We appreciate your interest and many careful collections Thanks to Sue McClary for posting photos of some of our collections on *Mushroom Observer*. Thanks also to Jason Hafstad and Liz DeCicco for another nice list of lichens.

You may view Sue's photos at the Mushroom Observer

website (www.mushroomoberver.org). To view the collections, use the web site's search function to find the "location "Wells Mill". You will then have the option of selecting "Observations from this location". Sue's recent observations will be near the beginning of the observations retrieved. You will also have access to observations posted by others in past years, including several species we collected this year. These may also be of interest.

BELLEPLAIN STATE FOREST FORAY NOVEMBER 5, 2023

by John Burghardt, NJMA Foray Recorder

NJMA's final foray of 2023 was at Belleplain State Forest in Cape May County on the first Sunday in November. We were fortunate to enjoy mild clear weather, but dry conditions reduced our species count. In these conditions, I often think to myself "We will have a nice walk in the woods and something unusual might surprise us". It was a nice walk and there were some interesting surprises.

The species list for the day can be downloaded by clicking here. We identified 65 taxa of fungi and 26 lichens. A note on the top of page 5 explains the layout of the table.

The interesting surprise was that our list includes five collections of species we recorded for the first time in 2023. Three of these are Basidiomycetes and two are Ascomycetes. All five have interesting stories.

Cuphophyllus pratensis f. pallidifolia. This is a "form" of Cuphophllus pratensis, which has a lighter color fruiting body than C. pratensis has. It does not appear to be a separate species. (photo on next page)

Strobilurus esculentus. This is a small gray-brown capped mushroom that grows on decaying spruce cones. Over the years, it has been classified as a *Collybia*, *Mycena*, and *Marasmius*. The Rubinsky family collected and identified our collection. Nina confirmed that key microscopic features matched the description in Tim Baroni's *Mushrooms of the Northeastern United States and Eastern Canada*. The specimen was dried. (photo on next page)

Fistulina americana. DNA analysis has confirmed that Fistulina hepatica does not occur in eastern North America. My understanding is that all NJMA collections listed as Fistulina hepatica (a total of 86 collections over 38 years) are, in fact, Fistulina americana. We have three collections of Fistulina hepatica in our herbarium, and hopefully at some point it will be possible to determine whether their DNA matches Fistulina americana.

Arthopyrenia fallaciosa. Jason Hafstaad sent me this name as an addition to our list for Belleplain. I assumed it was a lichen, but decided to look it up. My understanding from what I read is that this species has evolved over the millenia. It was 1) first a non-lichenizing ascomycete fungus (that is, a saprobe which derives its food energy

(continues on next page)



Strobilurus esculentus at Belleplain

from dead plants), and then 2) later acquired the ability to live as a lichen (a.k.a. "lichenize", or live as a mututalist with a photosynthesizing plant), and then 3) lost its ability to lichenize, and went back to being a saprobe.

Phyllosticta kalmicola. Jason also identified this one. It is a leaf spot fungus that lives on the leaves of mountain laurel (Kalmia latifolia) as a parasite.



Cuphophyllus pratensis f. pallidifolia at Belleplain

ALZHEIMER'S ONSET (continued from page 3)

Candida albicans also produces a protein called candidalysin that also binds to microglia via a different receptor, CD11b. "Candidalysin-mediated activation of microglia is essential for clearance of Candida in the brain," Wu said. "If we take away this pathway, fungi are no longer effectively cleared in the brain."

"This work potentially contributes an important new piece of the puzzle regarding the development of Alzheimer's disease," Corry said.

"The current explanation for this condition is that it is mostly the result of the accumulation of toxic Ab-like peptides in the brain that leads to neurodegeneration.

The dominant thinking is that these peptides are produced endogenously, our own brain proteases break down the amyloid precursor proteins generating the toxic Ab peptides."

Here, the researchers show that the Ab-like peptides also can be generated from a different source — C. albicans. This common fungus, which has been detected in the brains of people with Alzheimer's disease and other chronic neurodegenerative disorders, has its own set of proteases that can generate the same Ab-like peptides the brain can generate endogenously.

"We propose that the brain Ab-peptide aggregates that characterize multiple Candida-associated neurodegenerative conditions including Alzheimer's disease, Parkinson's disease, and others, may be generated both intrinsically by the brain and by *C. albicans*," Corry said.

"These findings in animal models support conducting further studies to evaluate the role of *C. albicans* in the development of Alzheimer's disease in people, which can potentially lead to innovative therapeutic strategies."

Summary

Researchers explored the link between the fungus Candida albicans and Alzheimer's disease. They found that C. albicans produces enzymes breaking down the blood-brain barrier, allowing it to access the brain and produce toxic amyloid beta-like peptides, typically associated with Alzheimer's. These peptides activate microglial brain cells to keep fungal load low but don't clear the infection. The study suggests that the amyloid beta aggregates in Alzheimer's could be generated both by the brain and by *C. albicans*.

Source: Baylor College of Medicine



This year marks the return of NJMA's Annual Holiday Potluck. It will be held at the Unitarian Society in East Brunswick on Saturday, December 16th from 1:00pm to 5:00pm.

This event requires a \$10.00 per person fee (plus a food contribution to the buffet) to offset the costs of the event.

Alongside this potluck meal, there will be viewing of member-contributed photos. This will not be a photo contest. (Perhaps, in 2024, our photo contest will return – consider this as a sneak peek at your potential competition!).

You must preregister on the NJMA website prior to December 9. Click here to sign up.

For more information, send email to HolidayEvent@njmyco.org

COOKING DEMO RECIPES

(continued from page 6)

- (2) In a separate bowl, melt the butter in a microwave and then combine all remaining ingredients except for the rice vinegar and scallions (they will be added at the end).
- (3) Flip the mushrooms after 5 minutes, cook for another 5 minutes, and then turn off heat.
- (4) Immediately combine the pre-mixed liquid ingredients into the pan, stirring occasionally.
- (5) Finish with rice vinegar and black pepper to taste, then garnish with scallions. Serve immediately.

4. Tamari-Sauteed Lion's Mane

INGREDIENTS:

- 1 lb Lion's mane, loosely hand-shredded
- 4 tbsp Tamari

Note: soy sauce or liquid aminos may be substituted, though the taste will differ slightly

- 2 Garlic cloves, minced Salt to taste Pepper to taste
- 4 tbsp Butter
- 1 cup Parsley, chopped
- 2 tbsp Scallions, minced

INSTRUCTIONS:

- (1) Shred mushrooms by hand into manageable, crabmeat like pieces.
- (2) Add the butter to a hot skillet. Once melted, add mushrooms, tossing briefly to coat mushrooms and then letting them cook untouched until golden brown on the bottom.
- (3) Once mushrooms are golden brown on one side, flip and repeat process for the other side.
- (4) Add the tamari and garlic about 30 seconds-1 minute before mushrooms are finished cooking, and turn off the heat as soon as liquid has cooked off.
- (5) Garnish with a pinch of course salt, pepper, and parsley to taste before serving immediately.

It's dues time? Yes. Renew <u>now</u>!

If you joined NJMA prior to July 1, 2023, it's time to renew. Don't lose your membership!

You can quickly handle it online at www.njmyco.org/joinrenew.html

MORE PHOTOS FROM FUNGUS FEST 2023

PHOTOS BY RICHARD KELL

NOTE: Download a species list from Fungus Fest by clicking here.

Ayesha Dolasa, leader of the cultivation demos





Virginia Tomat (c) with two of her daughters, Adriana (t) and Aluen (r) at the papermaking demonstration



Ursula Pohl – just one of the members answering dyeing questions



Fungus Fest cultivation blocks



ave you read something interesting concerning mushrooms or foraging? and it to njmaeditor@njmyco.org and share with the rest of our members!

All items in this issue are from Sue McClary:

Highly poisonous NJ mushrooms are hospitalizing more people:

https://tinyurl.com/nhke8whk

Top chef reveals secret spots in NJ forests where he finds rare mushrooms in new film:

https://tinyurl.com/2dp3amtb

Barrington boy discovers mushroom never seen in Rhode Island:

https://tinyurl.com/5ae2zp7f



Cladonia peziziformis

A LOOK BACK AT THE APRIL 2023 HEN WORKSHOPS PHOTOS BY DOROTHY SMULLEN



Both April lichen workshops were on rainy days, but not all members at the Batsto workshop were deterred



Cladonia macilenta - the "Lipstick lichen"



A stubble lichen on wood



Lichen expert Dennis Waters at Batsto Lichen Workshop