

NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION
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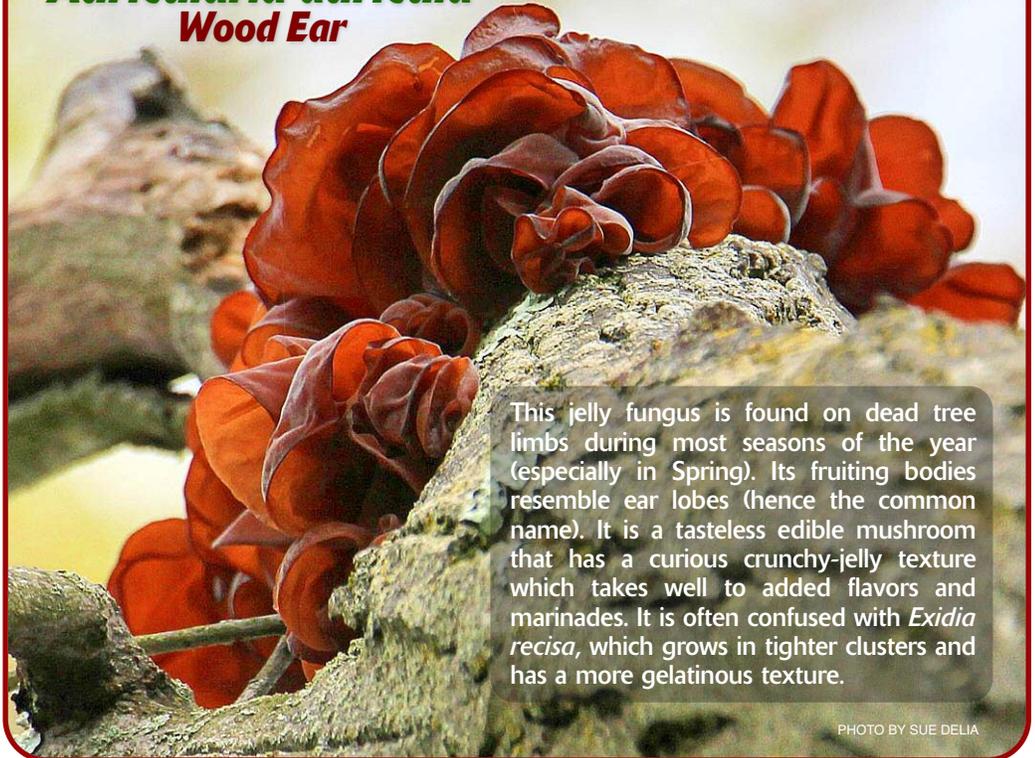
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NJMA EVENTS HOTLINE

908-227-0872 for information on
NJMA events or cancellations due to
bad weather. It is **NOT** for general
inquiries or to contact officers!

Auricularia auricula **Wood Ear**



This jelly fungus is found on dead tree limbs during most seasons of the year (especially in Spring). Its fruiting bodies resemble ear lobes (hence the common name). It is a tasteless edible mushroom that has a curious crunchy-jelly texture which takes well to added flavors and marinades. It is often confused with *Exidia recisa*, which grows in tighter clusters and has a more gelatinous texture.

PHOTO BY SUE DELIA

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PRESIDENT'S MESSAGE

Hello, everybody. I hope you are enjoying the winter meeting lineup with all of the great speakers. It has been a lot of fun taking a turn at programming our meetings and I am trying hard to make sure that we are providing a diverse lineup of subjects and speakers. I am currently working on the lineup for 2020, so if you have ideas of who or what you would like to see covered at our meetings, please let me know (njmaprez@gmail.com). If you happen to have some expertise on mycological matters and would like an opportunity to share, please let me know that as well.

In January, the NJMA Executive Committee met to discuss club business. The group is comprised of the club officers, board of trustees and committee chairpersons. We discuss things like meeting and foray schedules, finances, club projects, etc.. It is exciting to see our forays and education classes coming together, and very gratifying to see volunteers working together for the greater good of spreading mycological education!

Our club is currently looking for volunteers to help out in the following capacities:

- Fungus Fest committee: Fungus Fest is NJMA's largest public outreach; it happens every September and requires a coordinated effort of volunteers. We are currently seeking members for the 2019 committee.
- Website redesign committee: Our website is in need of an overhaul and needs a small committee of NJMA members who can work together to bring us up to speed. Ideally, we would find members who have a diverse skill set, including graphic design, editing, etc.

If you are willing and able to serve on either of these committees, please let me know! NJMA is comprised entirely of volunteers, all bound together with the common love of mycology! See you all at our next meeting!

– Luke Smithson

President, New Jersey Mycological Association
njmaprez@gmail.com

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.

Visit the NJMA Discussion Group



<http://tinyurl.com/jjualgz>



EDITOR'S NOTES

Thanks to all the members who responded to my requests:

- for comments on Mycophagy and the Mycoaction
- for writing longer, more detailed articles for *NJMA News*
- for volunteering to help with the newsletter

Sue McClary will be taking over as editor of the Bytes, Bits, and Bites column. Contributions to BBB should be sent to her at NJBBB@gmail.com.

We're looking forward to receiving your articles, comments, photos, and so on. Send them to njmaeditor@gmail.com.

– Jim Richards

CARPOOL LINKS

Except as noted for NEMF/NAMA, the access code remains as: *Mycena-2019*

Sunday, March 24, 2019 11:00am
Arboretum Walk and Lecture
with Greg Thorn - Morristown

<https://www.groupcarpool.com/t/sv3o84>

Sunday, May 5, 2019 10:00am
First Foray of 2019

Princeton Institute Woods - Princeton
<https://www.groupcarpool.com/t/eqf8xz>

Thursday, August 1-4
NEMF 2019 Foray - Lock Haven, PA
<https://www.groupcarpool.com/t/Sjbqws>
Access code: *NEMF-Carpool*

Thursday, August 8-11
NAMA 2019 Foray - Paul Smiths, NY
<http://www.groupcarpool.com/t/n9jioa>
Access code: *NAMA-Carpool*

REGISTER FOR NJMA'S SPRING 2019 EDUCATION PROGRAMS

Sunday, March 24

12:00 pm to 1:30 pm –

INTRODUCTION TO MUSHROOMS

Frelinghuysen Arboretum, Morristown
(before regular meeting)

For the new member or enthusiastic beginner who wants to learn more about structure, life cycle and ecology of mushrooms. Presented by John Burgardt, data recorder and past NJMA president.

NJMA members only.

\$2 fee. Limit 15 participants. Register online.

Saturday, March 30

10:00am to 1:30pm –

MICROSCOPE WORKSHOP

Foran Hall, Rutgers University, Cook College
New Brunswick, NJ

Club member and microbiologist Mike Rubin will present this hands-on workshop. Topics will include structure and calibration of a compound microscope, slide preparation and stains, actual observations of mycological cell structure such as hyphae, cystidia, asci, basidia, spore types, etc. Includes handouts. Members only *\$10 fee. Limit 15 participants. Register online.* Registrants will receive directions to the location.

Sunday, April 14

10:00 am to 1:00 pm –

COLLECTION & FIELD IDENTIFICATION OF MUSHROOMS

Frelinghuysen Arboretum, Morristown

Join Jim Barg to learn how to identify fungi through field characteristics. A skilled photographer, chef and identifier, Jim will teach you how to go about collecting mushrooms safely without flipping through field guides in hope of finding a picture that resembles your specimen. Includes handouts. NJMA members only. *\$10 fee. Limit 15 participants. Register online.*

NEMF 2019 – HELP NEEDED (VOLUNTEER)

FOR THE AUGUST FORAY AT LOCK HAVEN UNIVERSITY

Vendor assistant

Duties:

- Set up tables, which are already on the floor (and on wheels) and put them away on Sunday.
- Collect prizes for best mushrooms contest

Best Mushroom Finds Photographer

Duties:

- Photograph the best mushrooms, brought in from forays, as determined by ID mycologist
- Show the photos during the evening program

Contact Frank Marra, NEMF 2019 Chairperson,
nemfchair@gmail.com
if you're interested.



LEARN ABOUT MUSHROOMS DURING FOUR DAYS OF:

- LECTURES
- WORKSHOPS
- FORAYS
- MUSHROOM IDENTIFICATION

AUGUST 1 - 4, 2019

LOCK HAVEN UNIVERSITY
Lock Haven, PA

For more information, visit www.nemf.org or email nemfchair@gmail.com

NEMF 2019
SAMUEL RISTICH FORAY

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Views expressed herein do not imply New Jersey Mycological Association endorsement.

2019 NJMA FORAY SCHEDULE

Driving directions to forays are on our website, www.njmyco.org/directions.html

Forays begin at 10:00 AM and identification activities usually last for several hours after the foray walk ends. Don't forget to bring lunch!

All forays will be held rain or shine!

We are pleased to announce the NJMA forays for 2019. There are a few changes.

Many of our foray locations require a permit to collect fungi for scientific purposes, to educate the public about fungi and identify what we find. Our permits do not allow us to pick for eating, so please do not put our ability to collect in these areas into jeopardy.

Also, people with cameras take note: If you're taking group shots and someone asks you not to take their photo, please give them the courtesy of respecting their wishes. Also, we *do* appreciate "people pictures" for our newsletter, but please get names and permission of the people in your photo(s) before submitting to our newsletter.

One other note: Some of the state parks charge admission from Memorial Day to Labor Day. Your NJMA Membership Card allows you to get in free of charge on our foray dates. Keep it in your wallet or glove compartment!

DATE	LOCATION
May 4 (Saturday)	Princeton Institute Woods
June 2 (Sunday)	Deer Path Park (Readington): Bob Peabody Wild Foods Foray and Picnic Walk will be led by David Siller, a Philadelphia-area forager specializing in wild plants, followed by a potluck picnic. Bring a dish for the picnic, which is open to members only . <i>Foray itself is open to all.</i>
June 28 (Friday)	NJ School of Conservation, Stokes State Forest (Branchville) <i>Members only - You will need to email Dorothy Smullen, dsbs@verizon.net if you are interested in attending.</i>
July 14 (Sunday)	Lake Ocquittunk Family Camping Area (Branchville)
July 20 (Saturday)	Meadowood Park (Mendham) followed by a Mushroom Cultivation workshop
July 28 (Sunday)	Stephens State Park (Hackettstown)
August 18 (Sunday)	Thompson/Helmetta County Park (Jamesburg)
August 25 (Sunday)	Teetertown Ravine Nature Preserve and Crystal Springs (Lebanon Township)
September 8 (Sunday)	Stokes State Forest - Kittle Field (Branchville) – Grete Turchick Foray & Picnic <i>The foray is open to the public, but the picnic is for members only.</i>
September 15 (Sunday)	Chestnut Branch Park (Mantua)
September 28 (Saturday)	Wawayanda State Park (Hewitt) <i>Joint foray with the New York Mycological Society</i>
October 6 (Sunday)	Wells Mills County Park (Waretown)
October 13 (Sunday)	Cattus Island County Park (Toms River) followed by a Mushroom Cultivation workshop
October 20 (Sunday)	Estell Manor Park (Estell Manor)
October 26 (Saturday)	Forest Resource Education Center (Jackson)
November 3 (Sunday)	Belleplain State Park (Woodbine)

Before attending any NJMA foray, READ and UNDERSTAND our foray guidelines!

MORCHELLA HORTENSIS?

"Discovered" and submitted by Jim Richards

Where did *Morchella hortensis* go?

When I was clearing out some old magazines, I came across this article in *Gourmet Magazine* from April 1954:

"...On to a totally unrelated but pleasant topic — the mushroom: *Morchella hortensis*, *Bond*, to be specific. *Morchella hortensis*, as we call it familiarly, is a rare mushroom, much prized by Europeans, who rush out in the spring, and conduct an intensive *Morchella hortensis* search. The delicious fungus had always refused to grow in the United States, even in specially prepared mushroom beds, and appeared to be lost to yearning American palates. Only appeared: The mushroom growers might have given up, but the Plant Sciences Department of Syracuse University had not. There three gentlemen — Dr. Carpenter, Dr. Klens and Dr. Koda — combined forces to outwit Nature at her ancient occupation of mushroom raising. With Dr. Carpenter advising, Dr. Klens imported several varieties of *Morchella hortensis* and started experimenting with special solutions in which the fungi would flourish. At this point, Dr. Klens left Syracuse for the Quartermaster Corps of the United States Army and Dr. Koda took up the struggle. Dr. Koda determined the right species of *Morchella hortensis* for cultivation and, after initial preparation, produced great crops of mushrooms in the space of four days, in a "soil" made of boiled potato extract, a little sugar, and various nutrients.

The new process is as simple as it is fascinating. A tiny bit of mushroom cap is placed in a test tube, in a gelatinous substance. After a few days, tiny specks of mushroom are put in a bottle filled with a liquid, and the bottle affixed to a machine which shakes the solution one hundred ten times a minute for four days. At that time, the process has produced about twenty-five pellets. Then, the pellets are chopped extremely fine, and placed in the glass tank in the "soil" aforementioned. Compressed air keeps the liquid "earth" moving, and in four days each of the tiny chopped bits has expanded into a mushroom ball. The proportion to the pellets was ten thousand to one, and the maximum yield (once the preparatory phase has passed) is produced in six days! Once this stage has been reached, whenever the good Doctor wants more mushrooms, he merely chops a few mushroom balls up and raises another crop.

The advantages to mushroom-hungry gourmets are numerous and varied. Not only can mushrooms be grown all year round in great quantity (raising mushrooms by present methods is seasonal and takes about seven weeks per crop), but the mushrooms themselves require almost no cleaning, because their "soil" is sterile enough to eat — that is to say, drink.

Naturally, the process is yet to be worked out completely,

and *Morchella hortensis*, *Bond*, is not arriving fresh at grocery shops. Dr. Koda has made soup from this mushroom, though, and his family found it delicious. (At first they were rather reluctant guinea pigs.) *Morchella hortensis* is being transformed into a seasoning even as we are writing and, in time, local markets may indeed sell mushrooms by the millions, of all types, agreeable month in and happy month out!"



PHOTO BY JIM BARG

This is NOT Morchella hortensis! We're sure of it (kind of!).



BYTES, BITS, & BITES

TASTY LITTLE TIDBITS FROM OUR MEMBERS

from The New York Times via Judy Glattstein:

Will mushrooms be the answer to saving the bees?

<https://tinyurl.com/ydghqpv>

from Judy Glattstein:

Why mushrooms are my muse - and a series of mushroom-related short videos:

<https://tinyurl.com/yxf5dh3s>

from The Food and Wine Blog:

The Metropolitan Museum of Art's new winter menu features mushrooms:

<https://tinyurl.com/y3lvvfnl>

from Martha Stewart Living:

What to do with your morels:

<https://tinyurl.com/yvt3ubng>

(continues on page 18)

THE BEST OF 2018: HIGHLIGHTS OF NJMA'S FUNGAL FINDS & DISCOVERIES

by John Burghardt and Luke Smithson

2018 was an exceptionally wet year, and it brought out an abundance of interesting fungi. Our forays were very well attended, so we had a lot of eyes on the ground looking for fungi. At our NJMA Membership Meeting, held on January 27, 2019, John Burghardt presented some of the more interesting finds from last year. In his presentation, John thanked a core group of identifiers within NJMA that have been driving the expansion of our list: Nina Burghardt, Tom Bigelow, Maricel Patino, Igor Safonov, Luke Smithson and Dorothy Smullen. We would be remiss if we did not include John himself in this list, and we also thank the many enthusiastic members who come to our forays and help with identification.

Two interesting *Amanitas* were collected in southern New Jersey during the 2018 foray season. The first, *Amanita pakimpondensis*, from section *Vaginatae*, is provisionally named by Rod Tulloss and Linas Kudzma (both NJMA members). It is named after the Pakim Pond area in Brendan Byrne State Forest, where it was originally discovered. Our collections came from both Franklin Parker Preserve and Cattus Island Park and are new to the NJMA list.

Amanita umbilicata (pictured below), from section *Validae*, is provisionally named by Rod Tulloss and is found in the NJ Pine Barrens.

Specimens were collected at Cattus Island Park. According to www.amanitaceae.org, it tastes faintly like a toy balloon!

(Note: Author is referring to a field taste for identification purposes. This is NOT an edible mushroom).

“2018...brought out an abundance of interesting fungi.”



PHOTO BY IGOR SAFONOV

Amanita pakimpondensis



PHOTO BY IGOR SAFONOV

Amanita umbilicata



PHOTO BY IGOR SAFONOV

Amanita pakimpondensis

Tricholoma grave is a very large, robust mushroom that was found twice this season. The epithet *grave* means “heavy”. Igor Safonov identified a specimen at Wells Mills County Park on November 4. A week later, a group of NJMA members found the same species, almost completely buried in sand, at Franklin Parker Preserve. These specimens each weighed upwards of one pound and stood at about eight inches tall. Known only from New England, this is the first time we have observed *Tricholoma grave* in New Jersey. Considering how large this mushroom is and how infrequently it seems to be collected, we can assume it is a very uncommon mushroom.



Tricholoma grave

Calliderma indigoferus is a blue Entoloma-type mushroom that was described by Ellis in 1886 and was apparently not collected again (at least not on NJMA forays) until several years ago when a single collection was anonymously deposited on the collection table at a foray. (Put your name on the collection tags...you never know when it might be important!) This collection went unidentified until it was sent to Professor Tim Baroni, who was able to finally give it a proper identification. In early August, the Burghardt's found several collections at Wells Mill County Park. They speculate that this mushroom may be more common than we realize and that we don't see it because we often avoid the Pine Barrens in midsummer due to the unpleasant conditions.



Calliderma indigoferus

A new bolete, *Xerocomus sclerotiorum*, was added to our list this year, collected by Jim Barg and identified by Igor Safonov. This bolete produces an orange, irregularly shaped sclerotia that stays hidden in the leaf litter or underground. Originally collected by Dr. Harold “Whitey” Hitchcock, its common name is sometimes “Whitey’s Bolete”.



Xerocomus sclerotiorum

Trametes lactinea (shown below) is a polypore that we saw once in 2017 at Wells Mill (although its identity eluded us at the time) and came out in abundance in 2018. During the late fall, it seemed to be fruiting everywhere in our region: New York Mycological Society members reported finding it in Queens, it was found in southern NJ and found multiple times in the Philadelphia area. This polypore was originally described by Berkeley in 1843 from Sri Lanka and has been regarded as an Old-World Tropical Polypore. It has begun to be seen in North America quite frequently and the homogeneity of American sequences point to a recent colonization of the American continent. In Florida, it is reported on both deciduous and conifer, but I think we have only observed it on deciduous wood in NJ thus far.



Trametes lactinea

Tramitopsis cervina is another polypore new to the 2018 list. It is fairly well documented throughout the eastern United States, but only recently so. Mushroom Observer's earliest observation is in 2012. We had never observed it in NJ until Maricel Patino identified it in 2018. It has the appearance of the smaller *Trametes*-type polypore with a pale tan cap surface but has large irregular tubes that split and form a hydneaceous hymenophore.



PHOTO BY MARICEL PATINO

Tramitopsis cervina



PHOTO BY TOM BIGELOW

Porothelium fibriatum

Porothelium fibriatum is a pale resupinate cyphelloid fungi (basidios that produce tiny cup-, saucer- or tube-like fruitbodies) that was found in the Delaware Water Gap during our June 2018 Victor Gambino Foray. It grows on decaying logs and is easily separated from the substrate. Tom Bigelow, the identifier, explains that this "cup" producing fungus is often mistaken for an ascomycete until put under a microscope. Only then do we realize that the tiny "cups" are cyphelloid fruiting bodies of a basidiomycete.

Stereopsis burtiana is an extremely rare member of the polyporales that has only been recorded a handful of times over the past century. The Global Fungal Red List Initiative has it listed 24 times and we can count a few more records in the Northeastern United States in recent years. Tom Bigelow found it at the Watchung Reservation and brought it to our attention at Fungus Fest in September. It is found growing in moss in temperate forest and should be looked for diligently by our members.



PHOTO BY TOM BIGELOW

Stereopsis burtiana



Tremella aurantia is a jelly fungus that parasitizes the hyphae of *Stereum hirsutum*. It is new to the NJMA list and Dorothy Smullen captured a very nice photograph of it along with basidiocarps of its victim *S. hirsutum*.

Stereopsis burtiana

The anamorph of another *Tremella* species, *Tremella mesenterica* (a.k.a. *Hormomyces aurantiacus*), was observed in the Delaware Water Gap during our Victor Gambino Foray. This *Tremella* species parasitizes *Peniophora* species. Anamorphs are the asexual reproductive stage of fungi that are often very different in appearance than the teleomorph (the sexual reproductive stage). Tom Bigelow identified this anamorph, as well as another anamorph of *Hypoxylon howeanum*, found by Luke Smithson. The *Hypoxylon howeanum* was found with both the anamorph and teleomorph stages appearing side by side.



Hormomyces aurantiacus



Hypoxylon howeanum

Finally, two ascomycetes were added to the list. *Leptographium terebrantis*, a.k.a. Blue Cushion Fungus, is found growing on the sap of pine trees. *Creosphaeria sassafras* is a member of the Xylariaceae family and is found on the bark of Sassafras trees. The substrate and mustard color powder that appears between the perithecia helps identify this species. (see photos on the next page)

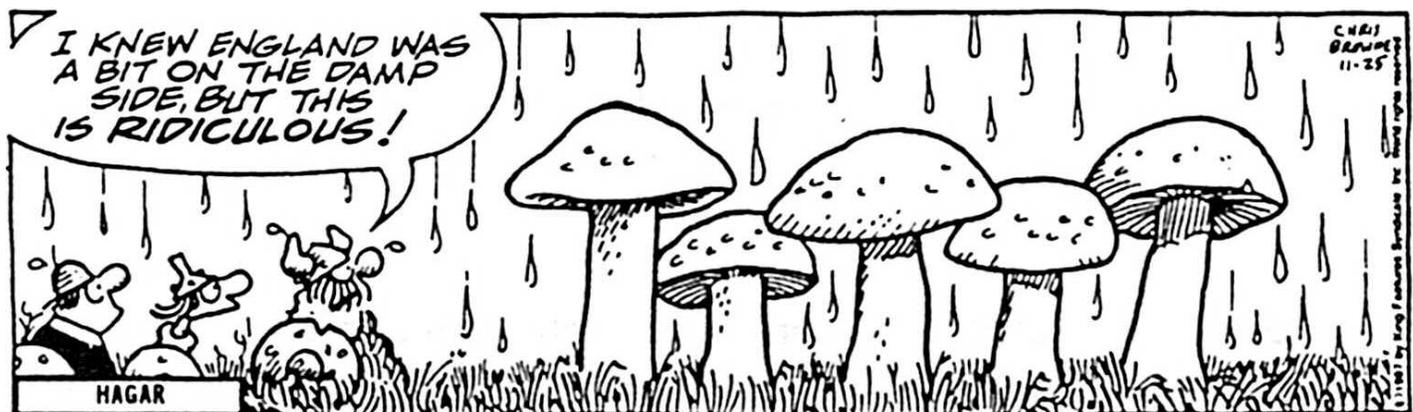


Leptographia terebrantis

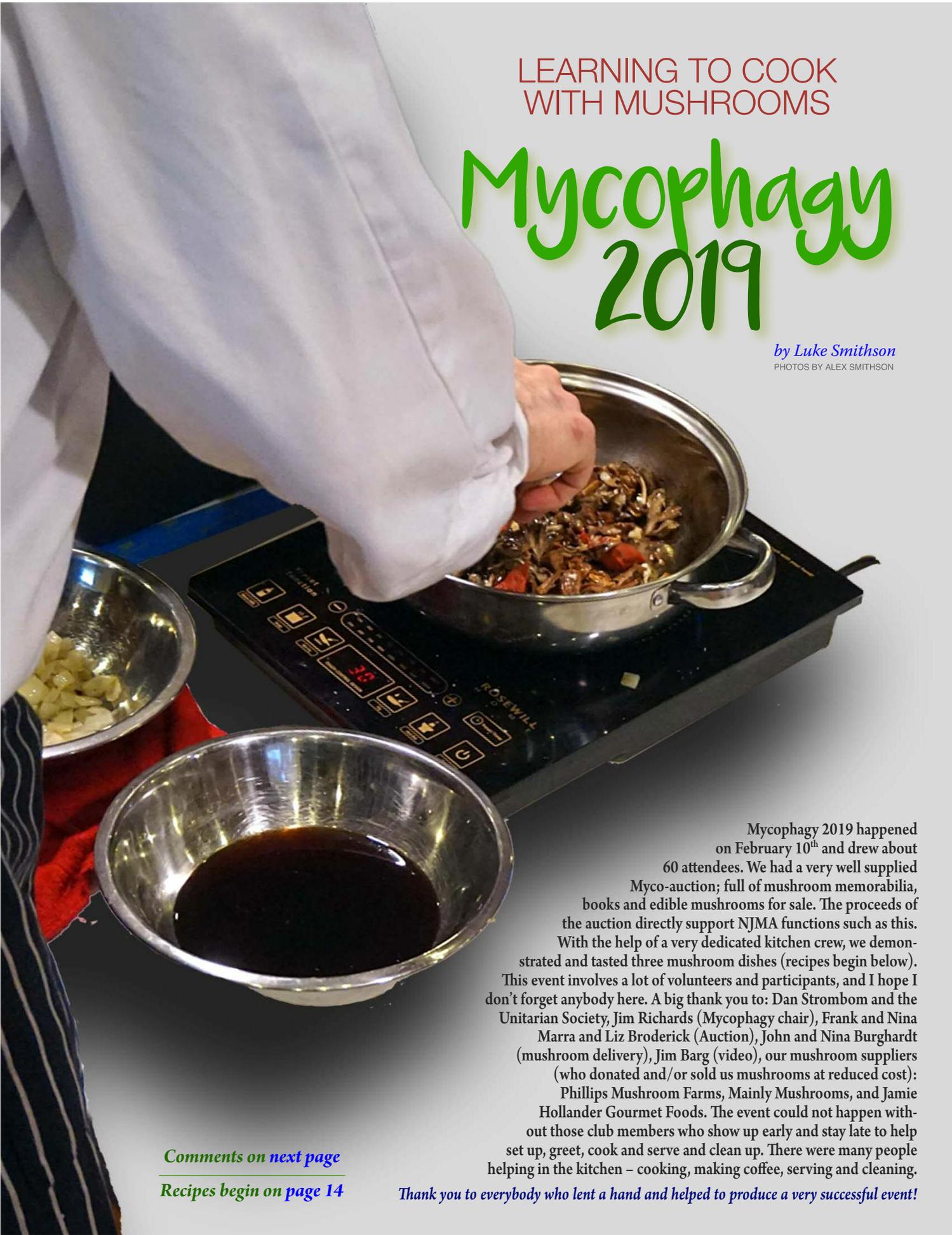
Creosphaeria sassafras

REFERENCES

- Tulloss RE. 2019. *Amanita pakimpondensis*. in Tulloss RE, Yang ZL, eds. *Amanitaceae studies*. [<http://www.amanitaceae.org?Amanita+pakimpondensis>]. accessed February 3, 2019.
- Tulloss RE, Rodríguez Caycedo C, Hughes KW. 2019. *Amanita umbilicata*. in Tulloss RE, Yang ZL, eds. *Amanitaceae studies*. [<http://www.amanitaceae.org/?Amanita%20umbilicata>]. accessed February 3, 2019.
- *Stereopsis burtina*. http://iucn.ekoo.se/iucn/species_view/339675/
- Bessette, Bessette, Roody, Trudell (2013) *Tricholomas of North America*. Austin, Texas: University of Texas Press
- Bessette, Roody, Bessette (2016) *Boletes of Eastern North America*. Syracuse, NY: Syracuse University Press
- Vlasak, Klout (2011) Tropical *Trametes lactinea* is widely distributed in Eastern North America. *Mycotaxon* Volume 115, pp 271-279
- Baroni, Timothy (2017) *Mushrooms of the Northeastern United States and Eastern Canada*. Portland, Oregon: Timber Press
- <http://www.ascofrance.com/forum/51495/creosphaeria-sassafras#>



Reprinted from the March 1998 issue of the newsletter of the Boston Mycological Society



LEARNING TO COOK WITH MUSHROOMS

Mycophagy 2019

by *Luke Smithson*

PHOTOS BY ALEX SMITHSON

Mycophagy 2019 happened on February 10th and drew about 60 attendees. We had a very well supplied Myco-auction; full of mushroom memorabilia, books and edible mushrooms for sale. The proceeds of the auction directly support NJMA functions such as this. With the help of a very dedicated kitchen crew, we demonstrated and tasted three mushroom dishes (recipes begin below). This event involves a lot of volunteers and participants, and I hope I don't forget anybody here. A big thank you to: Dan Strombom and the Unitarian Society, Jim Richards (Mycophagy chair), Frank and Nina Marra and Liz Broderick (Auction), John and Nina Burghardt (mushroom delivery), Jim Barg (video), our mushroom suppliers (who donated and/or sold us mushrooms at reduced cost): Phillips Mushroom Farms, Mainly Mushrooms, and Jamie Hollander Gourmet Foods. The event could not happen without those club members who show up early and stay late to help set up, greet, cook and serve and clean up. There were many people helping in the kitchen – cooking, making coffee, serving and cleaning.

Thank you to everybody who lent a hand and helped to produce a very successful event!

Comments on [next page](#)

Recipes begin on [page 14](#)

Mycophagy 2019

REVIEWS AND COMMENTS



"I enjoyed the format of the mycophagy auction and cooking demonstration. Very informative and truly enjoyed the event. I don't really have anything to add to improve it, except would definitely attend more cooking demos and some of the auctions. The only thing I guess I would add, come to think of it, is to set some guidelines on when the audience can ask questions, bc it seemed like the chef had to stop what he was doing several times to answer some questions and some of the questions did not seem relevant to the demonstration." - Joe Omansky

"The Mycophagy meeting was fun for me on several levels: Furthering the knowledge of a quite myco-aware friend, incl. gifting her first field guide. Renewing / catching up with friends in the club. [Smart people using brains, woo-hoo !!] Learning cooking techniques from Luke. Tasting, of course, that good eats... incl polenta, which i had thought of as one small step up from wallpaper paste. Nancy Addotta is still a stitch. Maiden voyage of my new, 10-yo Highlander station wagon. Impressed by Luke's induction heater, i bought one today in Costco. Amused by bidding wars among long-timers who must now rent warehouses for their new baubles / artwork. Sorry, brain fried from work all day except a 40' nap. Hope this helps." - Alex (Adams)

"Surprise! All the items in the auction sold during an incredibly tasty mycophagy. Numerous collections of mushroom shaped pottery, plates, sculptures and books were auctioned. Frank Marra ran the auction with his usual efficiency and enthusiasm. Luke Smithson demonstrated three inspiring mushroom recipes with his professional passion for teaching as well as cooking. The club members enjoyed the competitive bidding for some prized treasures while tasting Luke's delectable Stuffed Mushrooms with Bolete Sausage, Maitake and Porcini Stew, and Candy Cap Pudding. Thanks to all the volunteers who helped make this possible." - Nina Marra



"I realize it is a lot of hard work on the part of a lot of people, and I am grateful for it. I enjoyed the recipes, and demonstration. I also heard from many new members who enjoyed it, and learned. It is a good way to encourage them." - Bob (Saunders)

f

"it was my first mycophagy/mycoaction. i had a wonderful time bidding on some unique items, and bringing home a few. i also enjoyed the demonstration Luke put on - it was very informative for me. i LOVED the candy cap pudding! all in all a great afternoon spent with my new favorite past time - and some great minds. thank you for this group - i love my new hobby." - jamie forand

"We did buy some fresh & dried mushrooms from the auction. We will be on the lookout for mushroom items to donate for next year's auction. The crowd was great with lots of friendly members (just like the lots of friendly members in the 90's when were members the 1st time). We are very happy to have joined the group again to further our knowledge of mycology." - Garry & Linda Koehler

O "Our thoughts: Luke did a great job. Very well organized and selection of recipes were superb!! There is no other place we would have rather been, but at Mycophagy!!! Great company, great food and interesting auction :-)" - Judy (Mudrak)

"I really enjoyed the event. People are fun and passionate. The myco-auction is a great idea. A mushroom dessert was unexpected and delicious..." - Herve Barrier



"This year's Mycophagy meeting included some tasty, but simple recipes. Luke Smithson's Stuffed mushrooms with venison, pork and porcini were a standout. Thomas Marino concocted a savory pot of Wood Ear mushroom & chicken soup that was a creative way to incorporate an edible the can be forged during the winter months. The Mycoaction was a chance for me to recycle some seldom used mushroom guides and fungal nicknacks that no longer "bring me joy." However, I did manage to buy some lovely serving platters that do bring me joy. Those stuffed mushrooms are going to look extra delicious on my new platters the next time I have people over." - Liz Broderick

"The kitchen help was exceptionally helpful and really made my afternoon very pleasant. I only took a few minutes to peruse the mycoaction stuff, but I personally really liked all the myco books in there. I scored a book that Tim Baroni recommended last year!" - Luke



Maitake and Porcini Stew

A recipe by Luke Smithson (prepared at Mycophagy 2019)

This recipe is based on a *New York Times* recipe by David Tanis. I've adapted it to better make use of dried wild mushrooms and fresh cultivated mushrooms. Dried porcini add a deep, earthy mushroom flavor while the fresh maitake adds a lot of interesting mushroom texture. This is an extremely adaptable recipe and could use many combinations of fresh and dried mushrooms. Let the season and mushroom availability guide you.

2 cups water

1.5 oz dried porcini

1 lb maitake mushrooms

Canola oil

1 medium onion

Salt and pepper

3 cloves garlic, minced

1 tsp chopped thyme

1 tsp chopped sage

1 tbsp tomato paste

3 small plum tomatoes, seeded and diced

1 tbsp butter

3 tbsp chopped parsley

Bring water to a boil. Add porcini mushrooms and remove from heat, allowing to steep.

Clean maitake mushrooms, breaking into bite size chunks.

In a large sauté pan, heat 2 tbsp of oil of medium high heat. Cook onion, seasoning with salt and pepper, stirring until translucent and browned, about 10 minutes. Remove onions from pan.

Add a little more oil to pan and add maitake mushrooms. While maitake are sautéing, remove porcini from broth (reserve liquid), squeezing them dry. Rough chop and add to pan when maitakes are about half cooked. Season with salt and pepper and stir occasionally, browning all mushrooms, for a total of about 6 minutes. Add garlic, herbs and tomato paste, cooking for 1 minute. Add tomatoes and cook for an additional minute.

Add about half of the porcini broth, using a strainer if needed, and allow to reduce to almost dry. Add remainder of broth and allow to reduce until thickened. Add butter and parsley, stir to melt and taste for seasoning.

Serve over polenta or pasta.

Yield: 6-8 servings

(more recipes on [page 19](#))

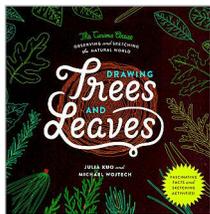


PHOTO BY ALEX SMITHSON

BOOK REVIEW

DRAWING TREES AND LEAVES: OBSERVING AND SKETCHING THE NATURAL WORLD

a book review by Marc Grobman



The Curious Artist: Drawing Trees and Sketching the Natural World

by Julia Kuo and Michael Wojtech

Published by Quarto Publishing Group USA, 2017. (144 pages)

ISBN 10: 1603587500
ISBN 13: 978-1603587501

Synopsis: An inaccurately titled book with an impressive number of oddities, and yet, pretty good.

Speaking of oddities, what in the hell is a review of a how-to-draw-trees book doing in a mycology publication? Well, that mycorrhizal relationship thing makes it relevant. A reminder: It goes something like this:

Fungus: “Hey Woody! I got some stuff, man. I can send you up more water and phosphorus than you can shake a stick at. (Ha-ha! Get it?). Whatcha got for me?”

Tree: “Fungus amigo, you’re in luck. I photosynthesize carbs and sugars 24/7; take ‘em from me; they’ll put your hyphae in heaven.”

About *Drawing’s* numerous oddities: when you open the book to the first page, you’ll probably notice it’s printed sideways. Then you’ll find that’s the case with every following page. In other words, except for the covers, *Drawing* opens like a steno pad, but since it doesn’t have a spiral binding, you can’t flip the cover and other pages all the way around to the back without mutilating the thing.

That makes it cumbersome to use, but, hey, things could be worse. And doggone it, they are! Several pages lack page numbers; in at least one instance, four pages in a row are unnumbered. That’s annoying when you use the index to try to find something.

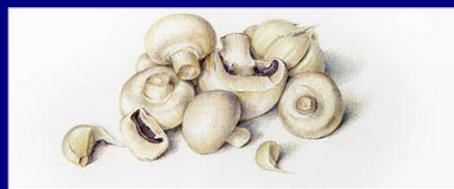
Those dutiful readers who read book introductions will be thrown a disorienting loop. *Drawing’s* intro, “Nature Sketching Basics,” cheerfully suggests that you “try using a tool that you’re comfortable with—maybe a pencil, pen, or colored pencil...” But when you get to your first set of instructions (“How to Draw Eastern White Pine Cones”), it’s not until the last step that you realize your tool options were limited: “[Step] 9. Erase your pencil lines and color the pine cone brown.” Oddly, there’s no “Drawing Materials” chapter with tips on choosing pencils, erasers, or paper types.

That drawing pine cones chapter illustrates yet another *Drawing* oddity. Here we have a book supposedly about drawing trees, but it doesn’t delve into the title subject until page 23.

Which brings us to the inaccuracy of the title “Drawing Trees and Leaves.” (Why “and Leaves”?) This is as much a book about trees (and leaves) as it is about drawing them. It offers well-written separate narrative sections on how trees evolved, life stages, photosynthesis, seeds, roots, flowers and fruits, identifying trees, planting them, benefits, etcetera and etc. There are also about a dozen pages discussing the interaction between animals and trees, including two pages on how to draw white-tailed deer, and two more on how to draw Luna moths and monarch butterflies. Actual tree-sketching info probably takes up less than half of the book.

But damn it! The drawing sections are good too! The generally six-to-ten step instructions are clear and succinct, and excel in showing how to draw different tree species. The wonderful two-pager, “How to Draw Shagbark Hickory Tree Bark,” begins with the instruction, “[Step] 1. Draw a trunk split into three sections,” which appears next to an example: a light blue pencil sketch of a trunk with two arcing lines across it. Next, “[Step] 2. Draw five or six strips over each section as if you were gluing paper strips to the top of the trunk while letting the bottom of each strip flare out,” borders a copy of the first drawing, now with the top third covered with strips.

Aside from the steno pad or sideways layout, the book is designed well. It’s a convenient size, is light weight, and has easily readable type. It appears manufactured to withstand rough trips to the field. The title on the cover is embossed, and the numerous illustrations are in color and “bleed off the page” – meaning they often reach the very edge of the page, which requires an extra step in (and adds more costs to) the manufacturing process. *Drawing* could reasonably be retitled “All About Trees and How to Draw Them.”



ARE YOU DRAWN TO DRAWING MUSHROOMS?

We are always interested in receiving accurate hand drawings, sketches, or artwork in any variety of media to grace our pages. While we cannot guarantee that your work will be published, we do file each submission and consider it for use either in conjunction with specific articles or for use as backgrounds or supplemental art when needed. You retain your copyrights and you’ll be credited in all cases.

Contact our Art Director Jim Barg at jimbarg@bssmedia.com for more information or to submit your work.

CALENDAR OF UPCOMING EVENTS

- Sunday, March 24 **WALK, WORKSHOP, AND MEETING/LECTURE:**
Frelinghuysen Arboretum, Morristown, NJ
- 11:00 am **ARBORETUM WALK:** Come brave the early spring weather for a walk on the arboretum grounds with our guest speaker Greg Thorn.
- 12:00pm - 1:30pm **WORKSHOP: INTRODUCTION TO MUSHROOMS**
Frelinghuysen Arboretum, Morristown, NJ
Instructor: John Burghardt
Fee: \$2.00 per person. *Limit:* 15 people. *Members only. Registration is required.*
Go to www.njmyco.org/education.html for more information and to register.
- 1:30pm - 4:00pm **LECTURE:** Greg Thorn “New Mushrooms in Your Backyard”
-

- MICROSCOPE WORKSHOP**
Foran Hall, Rutgers University, New Brunswick, NJ
Instructor: Mike Rubin
Fee: \$10.00 per person. *Limit:* 15 people. *Members only. Registration is required.*
Go to www.njmyco.org/education.html for more information and to register.
-

- Sunday, April 14 **WORKSHOP, LICHEN WALK, AND MEETING/LECTURE:**
Frelinghuysen Arboretum, Morristown, NJ
- 10:00am - 1:30pm **WORKSHOP: FIELD IDENTIFICATION OF MUSHROOMS**
Frelinghuysen Arboretum, Morristown, NJ
Instructor: Jim Barg
Fee: \$10.00 per person. *Limit:* 15 people. *Members only. Registration is required.*
Go to www.njmyco.org/education.html for more information and to register.
- 11:00am **ARBORETUM WALK:** Attend a lichen walk on the arboretum grounds with our guest speaker James Lendemer.
- 1:30pm - 4:00pm **LECTURE:** James Lendemer “Lichen Flora of New Jersey” (*see below*)
-

- Saturday, May 4 **FORAY- PRINCETON INSTITUTE WOODS**
10:00am *Leader:* Virginia Tomat
-

- August 1 - 4 **NEMF 2019 FORAY**
Lock Haven University, Lock Haven, PA (<http://nemf.org>)
-

- August 8 - 11 **NAMA 2019 FORAY**
Paul Smiths University, Paul Smith, NY (<http://namyco.org>)
-

- Sunday, September 22 **FUNGUS FEST**
10:30am Frelinghuysen Arboretum, Morristown, NJ
-

“LICHEN FLORA OF NJ”

A lecture by James Lendemer, Assistant Curator, Institute of Systematic Botany, New York Botanical Gardens

Lichens are a large and diverse branch of symbiotic fungi that are often overlooked on our walks in the woods. James Lendemer is the staff lichenologist and assistant curator at the Institute of Systematic Botany and spearheads lichen research and education. He has authored many research papers on lichens and recently co-authored “*Delmarva Lichens: An Illustrated Manual*”. His walks and talks are energetic and full of fascinating information about this group of fungi.

WHO'S IN A NAME?

Cordyceps hesleri

by John Dawson (seventy-first in a series)

Cordyceps hesleri Mains, pictured on p. 289 of Beug's and Bessettes' *Ascomycete Fungi of North America*, is a parasite of cicada nymphs that is found in the Great Smoky Mountains. It is one of fourteen fungi listed by *Index Fungorum* as bearing the epithet *hesleri*, honoring the American mycologist Lexemuel Ray Hesler.

Hesler was born on 20 February 1888 on a farm near Veedersburg, Indiana, a small town about halfway between Danville, Illinois and Crawfordsville, Indiana. In 1907 he graduated from Veedersburg High School and enrolled at Wabash College in Crawfordsville, intending, after a time, to transfer to Purdue University and obtain a degree in civil engineering. But two years later, influenced by a dynamic academic advisor, he switched his major to botany and remained at Wabash, from which he earned his A.B. degree in 1911. In his senior year, a paper he wrote won the college's Eastman Prize in Biology and was published in the Proceedings of the Indiana Academy of Science.

Hesler went to Cornell for graduate study, where he held a fellowship in plant pathology his first year and served as an instructor from 1912 to 1914. In the latter year, he received his Ph.D. and wed Esther Collins, to whom he was married for 63 years. He stayed on at Cornell as Assistant Professor until 1919, when he left to become Professor and Head of the Department of Botany at the University of Tennessee. He remained at Tennessee the rest of his career, serving as Dean of Liberal Arts from 1934 until his retirement in 1958.

Hesler was the author of more than 100 scholarly articles on mycology and plant pathology, as well as nine books, six of which appeared after his retirement.¹ Among them are *Manual of Fruit Diseases* (with H.H. Whetzel), *Mushrooms of the Great Smokies*, and monographs on the North American species of *Hygrophorus*, *Crepidotus*, *Pholiota* and *Gymnopilus* (all but the last co-authored with A.H. Smith). Two of his books had to be rewritten after a disastrous fire at the University in 1934 destroyed them in manuscript, together with his large personal library and the collec-

tion of fungi he had made up to that time (despite which, at his death on 20 November 1977, his herbarium contained nearly 30,000 specimens.)

Apart from his mycological work, Hesler was also active in musical and athletic endeavors. As a youth he studied piano; at Cornell he sang in several choirs; and at Tennessee, he was a member of the University Concerts Board. In high school, he competed in the high jump, and in the summers of 1912 and 1913 he pitched for a semi-professional baseball team in New York. In 1921, he helped to organize and coach the first track team at Tennessee, and from 1924 until his retirement he was a member of the university's Athletics Council. He attended the Olympic Games in Los Angeles in 1932 and in Rome in 1960 and amassed a large collection of Olympic memorabilia that are included among the materials in the Hesler Collection at the Special Collections Library of the University of Tennessee at Knoxville (the finding aid to which² was the principal source for the information contained in this profile).



Lexemuel Ray Hesler

Hesler met, corresponded and shared specimens with many other prominent mycologists, including C.H. Peck, C.G. Lloyd, W.A. Murrill, and W.C. Coker, and (according to the obituary memoir cited in footnote 1) prepared a series of biographical sketches of American mycologists that have remained unpublished. He was a member of the American Association for the Advancement of Science and the Mycological Association of America and in 1953 was awarded an honorary LL.D. by Wabash College.

Personal note: In a backhanded way, it was Hesler's guide to the mushrooms of the Great Smokies that first piqued my own interest in fungi. On a road trip in 1964, on the way to my junior year in college, my parents and I drove through the Smokies and I was struck by the many colorful mushrooms we saw there. I purchased Hesler's book hoping to identify what they were, but was utterly frustrated to find that nothing I observed was illustrated therein. Like all field guides of that time, it contained only non-technical descriptions and color photographs of species, but no keys to them. Convinced that there had to be some systematic way to classify and identify fungi, I developed a lingering desire to find out how to do so, an interest I was finally able to indulge after I completed my doctoral dissertation in mathematics in 1972. I've been hooked on fungi ever since.



¹ A bibliography of his publications, compiled by Hesler himself, is included in the obituary of him by Ronald H. Petersen that appeared in *Mycologia*, vol. 70, no. 4 (1978), pp. 757-765. The photograph of Hesler reproduced here is also taken from that source.

² Available online at <https://web.archive.org/web/20100703225544/http://dlc.lib.utk.edu/f/fa/fulltext/1384.html>

WELCOME TO ALL OF OUR NEW NJMA MEMBERS!

We'd like to extend a warm welcome to the following members who joined us between January 1, 2019 and March 12, 2019. We look forward to seeing you at lectures, forays, and other NJMA events. Happy 'shrooming!

Naomi Alwis	Parlin, NJ
Shaun Armhold	Manalapan, NJ
Ayelet Benzvi	East Brunswick, NJ
Matthew Beyers	Hillsborough, NJ
Megan Byrne	New Milford, NJ
Cheryl Cain	Bridgeton, NJ
Ling Chang	Pipersville, PA
Matthew Cowan	Iselin, NJ
Ethan Crenson	Brooklyn, NY
Jeannette Dumas	Philadelphia, PA
Joseph Geronimo	Emerson, NJ
Michael Guarriello	Emerson, NJ
Marc Hannah	Millville, NJ
Deborah Harps	Stroudsburg, PA
Brandon Iskra	Bound Brook, NJ
Sigrid Jakob	Brooklyn, NY
Lori James	Manalapan, NJ
Judith Jurewicz	Sicklerville, NJ
Douglas, Sarah & Ben Kligman	Radnor, PA
Yiming Lu	Springfield, NJ
Lena Macaluso	Ocean, NJ
Teresa Mantone	Madison, NJ
Matthew Maycock	Brooklyn, NY
Zachary McMahon	Mount Laurel, NJ
Douglas Melini	South Orange, NJ
Lindsey Meyer	Lebanon, NJ
Patty Oliveira	Bridgewater, NJ
Jeffrey Oppenheim	Moorestown, NJ
Jayson Pifer	Jersey City, NJ
Joseph Queor	Brick, NJ
Edward Rainer	Toms River, NJ
Maha Raman	Monroe Township, NJ
Osvaldo Ramirez	Dover, NJ
David Rogers	Great Meadows, NJ
Bryan Ruegg	Madison, NJ
Ricardo Garcia Sanchez	Pennington, NJ
Emily Schroeter	New Hope, PA
A. Mozes	Plainfield, NJ
Kathleen Spaeth	Tyngsboro, MA
Kay Spurlock	New York, NY
Jason Ur	South Amboy, NJ
Luis Vieira	Bloomfield, NJ
Peter Vita	High Bridge, NJ
Orna Ziv	Tenafly, NJ

OPRAH GETS A FUNGUS NAMED FOR HER

*from the New York Botanical Garden, submitted to NJMA News
by Judy Glattstein*

A New York Botanical Garden scientist and his colleague have named a new species of lichen that can be identified in part because of its bright glow under ultraviolet light in honor of a media and entertainment figure who has been in the spotlight for four decades: Oprah Winfrey. Oprah was born in the region where the lichen is found. It is the first plant species named for Ms. Winfrey.

The new species, *Hypotrachyna oprah*, was discovered in the southeastern United States by James C. Lendemer, Ph.D., an Assistant Curator in the Botanical Garden's Institute of Systematic Botany, and Jessica L. Allen, Ph.D., an Assistant Professor of Biology at Eastern Washington University. The new species is considered rare and was possibly confused with another lichen species in the past.

Drs. Lendemer and Allen describe *Hypotrachyna oprah*, which they have given the common name "Oprah's sunshine lichen," in a paper for *Castanea*, the journal of the Southern Appalachian Botanical Society.

To read the full document, read the PDF press release from NYBG at <https://tinyurl.com/y6dg4l8d>.

Editor's note: Dr. Lendemer will be the speaker at our April 14th meeting at the Frelinguysen Arboretum.



BYTES, BITS, & BITES (continued from page 5)

from The Chicago Tribune via Sue McClary:

How to sauté mushrooms to crispy, browned perfection:
<https://tinyurl.com/y6yzahq3>

from Epicurious:

When Are You Actually Supposed to Salt Mushrooms?:
<https://tinyurl.com/yxppjtlq>

from Atlas Obscura:

These Mushroom Clouds Are Made From Actual Mushrooms – A team of artists create horror out of fungi
<https://tinyurl.com/yyddzlfw>

from Alex Adams:

Comments on the Else Vellinga talk on February 24th as part of the Sang Park Lecture Series:

“Insomniac geezer needs help from fellow fungiceps. Yesterday’s program left me with a few of take-aways, but surely i missed a few due to hearing difficulty & awkward sleep schedule prompted by the bed monster.

(continues on page 22)



Candy Cap Pudding

A recipe by Luke Smithson (prepared at Mycophagy 2019)

Candy caps are extremely interesting mushrooms (*Lactarius rubidus*) that grow on the west coast of North America and have a wonderful maple aroma. They are not cheap, but you do not need many to infuse your foods with the rich, earthy maple aroma that they possess. You can purchase them from specialty mushroom suppliers (I source mine from Mainly Mushrooms, owned by NJMA member Chris Darrah (mainlymushroomsllc@gmail.com))

½ cup candy caps
3 cups whole milk
1 cup brown sugar
¼ cup cornstarch
½ teaspoon salt
½ tsp vanilla
4 whole large egg yolks
2 tablespoons butter
Whipped cream, to serve

Scald milk and add candy caps. Cover and steep for 1 hour, strain and discard mushrooms.

Gently whisk together the brown sugar, cornstarch and salt in a medium sauce pot.

In a separate bowl, whisk together the milk and vanilla. Pour the sugar mixture into the milk mixture and whisk until smooth. Return mixture to sauce pot and heat until nearly boiling (don't allow it to boil)

Put egg yolks in a mixing bowl and slowly add the hot milk in a thin drizzle while whisking. When about half of the milk is incorporated into the egg yolks, return the mixture to the remainder of the warm milk.

Return pot to the heat and cook over medium low heat, stirring gently until the mixture just starts to bubble and get thick. (approximately 10 minutes). As it thickens, reduce heat to low so you don't scorch the mixture. When it reaches pudding consistency, stir in the butter until melted, remove from heat and chill for at least 1 hour or until very cold.

Serve with whipped cream.

Yield: 6-8 servings

(another recipe on [next page](#))



Lactarius rubidus
“Candy Caps”

PHOTO © MICHAEL WOOD
courtesy of MykoWeb.com



Stuffed Mushrooms with Mushroom Sausage

A recipe by Luke Smithson (prepared at Mycophagy 2019)

In this recipe, we make our own sausage using dried mushrooms and the ground meat of our choice. Cutting the meat with dried mushrooms reduces the amount of meat that we need to use and adds an extra mushroom boost to the classic stuffed mushrooms. With morel season coming up, this recipe will be extremely adaptable to using big, hollow morels as the stuffing vessel and the tougher stems or last years dried morels as the sausage seasoning. I would use a lighter meat for morels, such as ground chicken or veal.

1 cup water

½ oz dried boletes

1 lb. ground pork (or any ground meat that you like: venison, turkey, chicken, faux meat)

1 clove garlic, chopped

1 tsp dry thyme (or 1 tbsp fresh)

1 tsp fennel seed

1 tsp red pepper flake (if desired)

Generous pinch of salt

Black pepper

18-24 large white mushrooms (silver dollar size)

Parmesan cheese, if desired

Heat water to a near boil and pour over boletes (use a shallow bowl so that mushrooms are covered). Allow to steep for 15 minutes, then strain and wring mushrooms dry. Strain liquid and reduce by half.

Mince soaked boletes and allow to fully cool.

Mix pork, garlic, thyme, fennel seed, red pepper flake and salt. Fold in minced mushrooms and reduced soaking liquid (add liquid slowly...if it is getting too wet, stop. The goal is to have a soft, moist meat mix but not for it to be swimming in liquid).

Rinse off white mushrooms as needed. Remove stem and flip mushroom over so that they are sitting upside down. Chop up stems and throw them in your sausage.

Salt and pepper the inside of your mushrooms, then stuff each one with the mushroom sausage. Sprinkle top of each mushroom with parmesan cheese.

Bake at 350°F for 15 minutes or until both mushroom and sausage are fully cooked.

Serve hot.



PHOTO BY ALEX SMITHSON

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*(bold and ** indicate Permanent Functions specified in by-laws)*

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Mike Rubin, Dorothy Smullen

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Art Director - Jim Barg

Nominating**

John Burghardt, Nancy Addotta,
Dorothy Smullen

Outreach**

Nancy Addotta

Fungus Fest

[open]

Ray Fatto Scholarship**

Mike Rubin

Social Media

Maricel Patino

Taxonomy**

Nina Burghardt

Special Events

Mycophagy

Jim Richards

Holiday Party

Virginia Tomat

Photo Contest

Jim Barg

Victor Gambino Foray

Liz Broderick

Website

Jim Barg

BYTES, BITS, & BITES (continued from page 18)

Please feel free to augment this meager list if ya can, and TIA.

1. Nitrogen in soil can have dramatic effects on fungi, incl. complete shutdown of fruiting. Varies by Genus, some are enhanced but often badly discouraged.
2. Global warming is coming for fungi near you: changes in climate can damage, enhance, or relocate both good and bad, affecting mushrooms by predation, removal of host trees, disappearance of insects, and reduced winter-kill of pests. If emerald ash borer kills off the ashes, it's dooom for *B. merulioides*, your favorite disappointingly-muddy bolete.
3. Over-harvesting can reduce not only the spore population, but damage fungal habitat, e.g. extensive raking in search of truffles & matsutake.
4. The US has no program to study, protect, preserve, etc. fungal diversity. The IOCN red-list has ~200 fungal species, world-wide.
5. Fungal conservation is dependent upon all myco-folk, as many factors can lead to extinction before even noticed. Soil quality is a major concern here, potential effect on food crops.
6. Thanks to Jim Richards, Randy Hemminghaus, and Liz Broderick for schlepping books, books, and cawfy, resp.

Editor's note: Alex and Carol Titus edited NJMA News from 1992 to 2002.

reply from Liz Broderick:

Hi Alex,

Welcome to the retired geezer club! There is an amazing wealth of information online now. *Mushroom Expert* is a great site. Several online keys are available for specific species like *Amanita* and *Russula*. A great way to boost your learning curve and refine your ID's is *Mushroom Observer*. You create an ID and post your finds online. Experts (like Dave Wasilewski & Igor Safonov) will weigh in and many of them will give you reasons why they think an ID is correct or incorrect. It is a bit cumbersome at first, but worth the time and effort if you have problems with an ID. If you post an ID with an older name, *Mushroom Observer* will give you the new taxonomy. Some of the commenters on this site can be kind of snarky, but they have been reined in (besides who cares). *iNaturalist* is an easy-to-use app or website, but doesn't seem to help with more difficult IDs. These online sites help citizen scientists like us map which species grow in different parts of the world. As far as hard copies go, I find Bessette's *Mushrooms of Northeastern United States* and their latest bolete book to be very useful. I still love my old *Mushrooms Demystified*, which has some great info on different genera and is fun to read.

Hanging out with some of our experts like John and Nina, Dorothy, and Igor are probably the best way to learn. We are lucky to have so many really knowledgeable club members. Come to NEMF in August at Lock Haven, PA for an immersion in all things fungal.

Best,
Liz



MUSHROOM RECIPE WINS NATIONAL CONTEST

from <https://www.wifr.com/>, Sept. 11, 2018. Reprinted from MushRumors, newsletter of the Puget Sound Mycological Society, October 18, 2018

ROCKFORD, IL. (WIFR) - A local woman won a national recipe contest, and because of it hundreds of senior living residents will have that recipe on the menu.

Lu Bartosiak lives at Cherryvale Place, one of hundreds of Envilant communities around the country. Lu was chosen out of more than one hundred entries nationwide for the Enlivant recipe contest. And now Lu's stuffed mushroom recipe will be served at Envilant communities' menus across the U.S.

Stuffed Mushrooms

a recipe by Lu Bartosiak

Prep Time: 1 Hour

Serves: 4-5

Ingredients

- 20 large white button mushrooms
- 1 lb bulk pork sausage (*a.k.a. breakfast sausage*), browned
- 8 oz cream cheese, chopped into small cubes
- 1 bunch green onions, chopped
- 1/2 to 1 cup milk
- Parmesan cheese (optional)

Directions

1. Pre-heat oven to 350 degrees.
2. Brown sausage and crumble well.
3. Drain sausage from skillet leaving a thin coat of oil, and sauté onions in oil until slightly wilted.
4. Return sausage to pan with onions and cream cheese.
5. Over low heat, stir sausage, onions, and cream cheese until well blended.
6. Remove stems from mushrooms and stuff each mushroom cap with sausage mixture.
7. Top with Parmesan.
8. Add milk to bottom of baking dish, place mushroom caps on top and bake until heated through and mushrooms are beginning to leak their water (20-25 min.).

A MICROSCOPE? ME? YOU GOTTA BE KIDDING!

by Leslie Reid, reprinted from *Mycolog*, newsletter of the Humboldt Bay Mycological Society, November 2018

If someone had told me a year ago that I'd be spending several days a week staring down the tube of a microscope—and enjoying it — I would have scoffed. But here I am today, taking a break from microscopy to write this. I got my first 'scope in January and my second in March, when I'd out-grown my first.

What possessed me? Frustration. I wanted to be able to identify those beautiful little lepiotid species, but the attributes that distinguish them are, in effect, invisible to mere mortals. As luck would have it, my first microscope arrived a week after the last *Lepiota* departed, so the first mushroom I examined was an unknown *Cystoderemella* — either *C. cinnabarina* or *C. granulosa* (“...is very similar...but lacks the cystidia on its gills”). I focused on the gill edge at 200x, and there, clear as day, were the cystidia. I was hooked. Or Leeuwenhoeked, I suppose.

It only got better after that. Spores are remarkably beautiful, and the ability to test one's own field IDs is amazingly empowering. By March, I was needing better resolution and a better way to capture microscope images, so I upgraded.

So who “needs” a microscope? Probably only those particularly interested in identifying mushrooms for the joy of identifying mushrooms, and those wanting a glimpse of a really intriguing miniature world that most will never see.

And how much microscope do you need? Not a lot to get started— about the price of a nice dinner for two in San Francisco (which is how I rationalized mine). You need a compound microscope that can give you 1000x magnification to get a good look at spores (400x works, but is frustrating). The least expensive scopes make it to 1000x by using a 25x eyepiece with a 40x objective, which isn't ideal — the poor optical quality of the eyepiece is guaranteed to give a blurry image that has enough color aberration to be reminiscent of a Jimi Hendrix album cover, and you can't get a 25x reticule eyepiece for making measurements without a camera. This is the one I started with, and I was still able to measure spores using photos — all you need is another photo of a calibration slide at the same magnification so that you can interpret the measurements.

Much better would be a 'scope that gets to 1000x using a 10x eyepiece and a 100x objective, but they have the added complication of requiring you to add a drop of special oil to fill the gap between the objective and the slide. It sounds complicated, but it very quickly becomes routine. You'll see some 'scopes that advertise 2500x magnification, but if they're affordable, they're

getting there by using a 25x eyepiece with a 100x objective, and your image resolution won't actually be much better than the 1000x will give you — the blurriness will just be bigger. And more colorful. Save your money for a...

...camera. If you have a cell phone, you already have a pretty good microscope camera. I don't, so I got a camera that is built to slip into the 'scope's optical tube in place of an eyepiece, and I find it very convenient. These cameras attach to a PC via a USB port and are controlled from the computer.

They come with software, but full functionality for most of the software seems to be restricted to PCs rather than Macs. Most will still work with a Mac, but you won't have access to some of the bells or any of the whistles.

Once you've got the 'scope and a camera, you don't need a lot of other equipment: slides, cover slips, a calibration slide if you're going to make measurements, a slotted box for storing slides (that's how I dry them after I clean them), forceps, eye-dropper, lens paper (for cleaning the oil-immersion lens), immersion oil, and you're good to go.

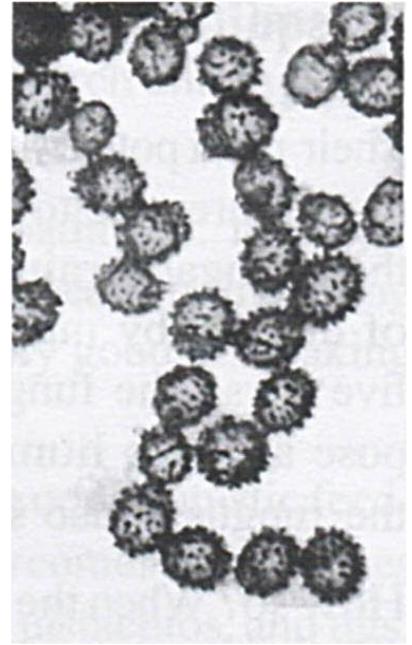
There's a bit of a learning curve involved, but it's a short one that isn't particularly steep. A good website gave me much of the information I needed to get started:

<http://www.mushroomexpert.com/microscope.html>

A second one was even more complete, but is now off the air; it lives on in PDF form in the files section of the Pacific Northwest Mushroom Identification Forum on Facebook.

I usually have Dave Largent's *How to Identify Mushrooms to Genus III: Microscopic Features* open next to me while I'm working with the microscope. The terminology can be esoteric, but a good way to deal with that is to start by examining mushrooms you've already identified to see how the published descriptions compare to what you're seeing.

Where do you buy a microscope? There are lots of online sources, but the very best source I've found is local: I got my new microscope from Humboldt County's own Dave Imper, who refurbishes used 'scopes.



Russula atroviolacea spores
PHOTO BY THE AUTHOR





**2019 Samuel Ristich Foray: 43rd Annual Foray – Northeast Mycological Federation
August 1--4, 2019 – Lock Haven State University**

Registration Form -- Registration closes July 15. A late fee applies after June 30.

Name(s): (Nickname for nametag?) _____ Organization and/or Hometown _____ If child, age _____

Home Phone: _____ Cell Phone: _____

Address: _____

Email address: _____

_____ I want to share a room/suite with: _____

_____ Please assign a roommate. I am _____ male _____ female.

_____ I want a single room; to assign a suitemate, I am _____ male _____ female.

Liability waiver-ALL adults in your party must sign: By signing below, I release Lock Haven State University and the Northeast Mycological Federation, Inc., the host clubs, their officers and members, foray participants and instructors from any and all liability and loss arising from any accident, injury or illness which may result from activities while attending the NEMF foray.

Print name	Signature	Date
_____	_____	_____
_____	_____	_____

If you need more lines, attach a copy of this sheet.

Special needs (We will do our best to accommodate needs such as handicap access, special dietary, late arrival, etc.):

_____ I can help at the foray. _____ I am interested in being a vendor.

Fees (see note below):	<u>Number of persons</u>	<u>Fee</u>	<u>Total</u>
➤ Resident (double occupancy rate is per person)*:			
-Adult: 3 nights (Thurs.-Sat.), single occupancy	_____ X	\$405 =	_____
-Adult: 2 nights (Fri.-Sat), single occupancy	_____ X	\$340 =	_____
-Adult: 3 nights (Thurs.-Sat.), double occupancy	_____ X	\$390 =	_____
-Adult: 2 nights (Fri.-Sat), double occupancy	_____ X	\$325 =	_____
-Child 4 to 12: 3 nights in suite with parents	_____ X	\$100 =	_____
-Child 4 to 12: 2 nights in suite with parents	_____ X	\$75 =	_____
➤ Commuter, Thurs--Sun:			
All activities including 8 meals & socials	_____ X	\$240 =	_____
➤ Commuter, Fri—Sun:			
All activities, including 5 meals and socials	_____ X	\$215 =	_____
➤ Student or commuter -- activities only, no meals or socials	_____ X	\$100 =	_____
➤ Late registration (after June 30):	_____ X	\$30 =	_____
➤ 2019 T-shirt _____ XXL + _____ XL + _____ L + _____ M + _____ S	_____ X	\$15 =	_____

*Note: 3 nights includes 8 meals (Thurs. dinner dinner—Sun. breakfast), 2 nights includes 5 meals (Fri. dinner—Sun. breakfast).

Total owed: _____

Make check out to NEMF (in US dollars on a US bank) for the total, and mail with this form to:

NEMF Registration
 c/o John and Cheryl Dawson
 393 Waters Road
 York, PA 17403-4751

Confirmation of registration and detailed directions will be sent by email if an address is provided, otherwise by regular mail. Questions may be directed to the registrars, John or Cheryl Dawson, by email at nemf2019@comcast.net, or by phone at 717-846-1225. Find more information at www.nemf.org.