NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION

VOLUME 47-2 MARCH-APRIL 2017

DUES

Payable for calendar year

Individual: $10.00 (online newsletter)
$35.00 (hardcopy newsletter)

Family: $15.00 (online newsletter)
$40.00 (hardcopy newsletter)

Mail checks (payable to NJMA) to:
Igor Safonov
115 E. Kings Hwy., Unit #348
Maple Shade, NJ 08052-3478

NJMA WEBSITE

www.njmyco.org
Jim Barg, Jack Barnett, Bob Hosh

NJMA NEWS

Editor:
Jim Richards
211 Washington Street
Hackettstown, NJ 07840-2145
njmaeditor@gmail.com

Art director:
Jim Barg
jimbarg@bssmedia.com

Hard-copy printing:
Castle Printing, Ledgewood, NJ

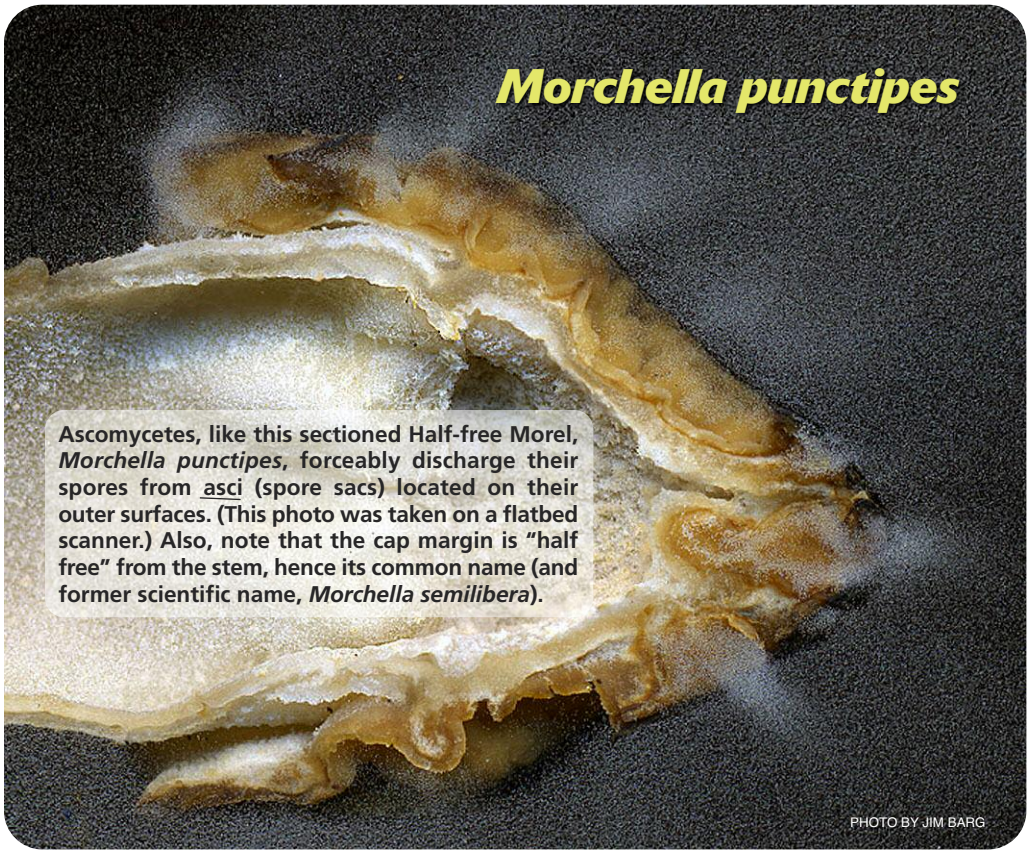
Deadline for submissions:
10th of even-numbered months.

Send newsletter submissions ONLY to the Editor.

All other correspondence should be sent to the Secretary:
Sharon Sterling
9 Fir Court
Flemington, NJ 08822
sterlingsharon6@gmail.com

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!*



Ascomycetes, like this sectioned Half-free Morel, *Morchella punctipes*, forceably discharge their spores from asci (spore sacs) located on their outer surfaces. (This photo was taken on a flatbed scanner.) Also, note that the cap margin is "half free" from the stem, hence its common name (and former scientific name, *Morchella semilibera*).

PHOTO BY JIM BARG

WHAT'S INSIDE:

PRESIDENT'S MESSAGE

Winter solstice and Valentine's Day are behind us. Can mushroom season be far off? Well, it's still a ways off, but we can plan, look forward, and occasionally get out in the woods for a walk.

This issue of *NJMA News* previews the programs planned for the next couple of months and provides a schedule for the foray season. I am looking forward to our lectures in March and April. Our speaker on March 12th will be João P.M. Araújo. He will speak about fungi that are parasitic on insects (entomopathogenic, see more on ***page 3***). Nearly one thousand known species worldwide in diverse genera of Basidomycetes and Ascomycetes are parasitic on many different insects. We identify this group infrequently, because they are small, easy to miss, and unless we are alert to the possibility they are entomopathogenic, we don't think to photograph or collect the host. Maricel Patino made a collection last year at the Victor Gambino Weekend, which keyed out to *Ophiocordyceps variabilis*. The fruiting body was two inches tall, growing from a rotted log. As I recall, Maricel had been careful to collect the substrate, which allowed us to see the larva it was growing on, and thus key it out. Hopefully, João Araújo will inspire us to be on the lookout for this interesting group of fungi.

Our speaker on April 2nd will be Dr. Denis Benjamin, a retired physician and avid amateur mushroomer. Dr. Benjamin is the author of *Mushrooms: Poisons and Panaceas: A Handbook for Naturalists, Mycologists, and Physicians* (Freeman, 1995)

His topic will be "Mushroom Toxins: Common Myths and Misconceptions". See page 3 of *NJMA News* 47-1 for more information. If you like to eat wild mushrooms, this is a program not to miss. Even if you never eat mushrooms, this talk will be interesting and well worth your time.

NJMA exists to share experience and knowledge of mushrooms, as well as to furnish information about and promote interest in them. Each of our committees and interest groups promotes one or more of these goals. I would like to highlight three of our committees in the hope that you might consider becoming involved.

Culinary Group For many years, our Culinary Group has met to enjoy good food and fellowship. Unlike many of our "potluck" eating events, the menu for each culinary dinner is planned. Each participant is asked to prepare a dish according to an assigned recipe. Cooks are reimbursed for the cost of their ingredients and the total cost is split among the participants. The Culinary Group has been guided by a small group of dedicated volunteers led by Jim Richards. Jim has coordinated the Culinary Group for decades, and now wishes to move to a less active role that he certainly deserves. So we are looking for a new coordinator who would be willing to work with the committee to plan and organize the Culinary Group dinners. Please contact Jim Richards (***jimrich17@icloud.com)*** or me, ***johnab19007@gmail.com***, if you might be interested.

Library Since 2006, our library has been stored at a member's home because we have not had the use of a public space where it could be accessible to our members. We continue to look for a home for our library. Another idea for making our library more accessible is to designate a small set of circulating books that would be available at our forays and meetings for members to examine and check out. This excellent suggestion requires one or more members who are willing to keep this circulating library and make sure it gets to club events with someone who can check materials in and out. Please contact me if you would be willing to lead or help in this effort or have a suggestion for a place that we might investigate as a home for the collection.

Outreach is central to our goal of promoting knowledge and interest in fungi. Of course we hope outreach occurs at our forays and lecture programs when nonmembers participate. We are frequently invited to participate in many community events focused on Earth Day and the environment. At these events, we have a display highlighting the natural role of fungi as well as the diverse activities of our club. It is a wonderful opportunity to talk to interested people. We would love to have new members become involved in these community events. Enthusiasm is more important than expertise. If you would like to learn more or be made aware when outreach opportunities arise, please contact our Outreach Chair, Nancy Addotta, (email ***stovetop2@aol.com***, phone 732-816-1859).

Thanks to all for your support. We look forward to seeing you.

Respectfully submitted,
– John Burghardt

Visit the NJMA Discussion Group

facebook

http://tinyurl.com/jjualgz

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.

AT OUR MARCH 12TH MEETING

JOÃO P.M. ARAÚJO: "INTRODUCTION TO THE LIFE STYLES AND FORMS OF FUNGI LIVING ON INSECTS"

by John Burghardt
President, New Jersey Mycological Association

Have you ever heard of zombie ants? These are ants that have been infected by a fungus in the genus *Ophiocordyceps*. Once in contact with the ant, the fungus will penetrate through the cuticle and spread within the host's body. About two weeks after infection, the fungus will cause the ant to leave the nest, climb onto a tree, and bite onto a leaf or twig, in order to attach itself and ensure the proper fungal growth. To disperse its spores, this ascomycete produces a fruiting body that erupts from the back of the ant's head, from which it will actively shoot its mature ascospores.

Our speaker on March 12th, João P.M. Araújo, is an expert on entomopathogenic fungi (parasites on insects). João comes to us from Brazil by way of Penn State University, where he is completing his Ph.D. in the lab of Dr. David Hughes. Among other projects, he has done field work in the Amazon rain forest, West Africa and North America. He and his colleagues named seventeen new species of zombie ants belonging to the *Ophiocordyceps unilateralis* complex. João has also used *Index Fungorum* and *Mycobank* to document all known species of fungi that have conquered the insect body. His lecture will introduce us to this fascinating and diverse group of fungi that interact with insects.

MICROSCOPE WORKSHOPS

*by Nina Burghardt (**jnburghardt@verizon.net**)*

Many of you have expressed an interest in identifying fungi using a microscope. I have tried using microscopes at forays, but there is not enough time and everything is too hectic. Mike Rubin and I can organize the sessions but we will need your help. I think the best time would be off-season (January through May). If you are interested, please let me know. I need a central location; preferably free, preferably close to a train station. The location needs electricity, lights, heat, and bathrooms. Since most people work, I think we would need to meet on the weekends.

EDITOR'S NOTES

I must begin my brief message with an apology. In *NJMA News* issue 47-1, Lynn Hugerich was credited as the author and photographer of the Dye Divas article. The member who should have been credited for the wonderful article and photos is FRAN SHELDON. Thanks to Liz Broderick for catching my "senior moment" – or whatever it was.

In editing the articles for this issue of our newsletter, I was particularly struck by the last section of John's President's message. I have been active, one way or another, with the three activities he singled out; Culinary, Library, and Outreach.

The Culinary Group has been active since 1983. As John said, the dinners are planned events; generally centered on the cuisine of a particular country or region. We have done a number of other themed dinners: salads, soups, vegetarian, locavore, game, etc. It is a great way to get to know your fellow NJMA'ers in a relaxed setting with good food and conversation. We are looking for someone to help coordinate the meals. The next event will probably be a cookout at Harry Dunham Park in Basking Ridge sometime this summer. If you are interested in helping, contact me (***jimrich17@icloud.com***) or Marja van Ouwerkerk (***pamarjavo@gmail.com***).

Outreach can be a lot of fun: Spreading the word about NJMA and the world of fungi. You get to meet a lot of other nature-oriented groups. And you can even get lucky when people come up to you and show you the photos of mushrooms they have collected-and tell you where they found them. Contact Nancy Addotta if you would like to participate (***stovetop2@aol.com***).

The library is something that I have been involved with indirectly; through books that I have been able to get for review in these newsletters. After they are reviewed, the books are placed in the library for members to borrow. It is a great opportunity to look them over to decide whether you want to add them to your personal library. Or to scan some recipes. Or just to learn something new about mushrooms. Or maybe what to do with some foraged goodies.

On ***page 12***, you will find a list of the review copies that have been added to our library. To arrange to borrow them, contact the Library Circulation Manager Igor Safonov (***njmycomember@gmail.com***).

I would like to thank all of the contributors for getting the pieces for this issue to me on time, and with very little need for editing. It was a pleasure working with you! Let's do it again!

– Jim Richards

BYTES, BITS, & BITES

TASTY LITTLE TIDBITS FROM OUR MEMBERS

from the Specialty Food Association blog:

Coffee and Mushroom Powder Lattes Show Promise as Health Trend

http://tinyurl.com/zurp33d

from the BBC by way of Judy Glattstein:

Foraging for Your Salad in the UK

http://www.bbc.com/news/uk-scotland-38882971

response from Jim Richards:

Thanks. Are any or all of the weeds found here? I don't recognize the "common" British names for all of them.

response from Judy Glattstein:

Wild garlic, *Allium ursinum* – There's a similar native plant here: *Allium tricoccum*, North American wild leek, a.k.a. ramps.

Wild leeks, *Allium paradoxum* – Native in Iran, Caucasus, Turkey Non-native but naturalized in UK where it is illegal to plant in the wild.

Hairy bittercress – *Cardamine hirsuta* It is native to Eurasia but has been introduced in many countries across the world including USA. Difficult to eradicate lawn weed.

Pink purslane, *Claytonia sibirica* – Native to Siberia and western North America. The plant was introduced into the United Kingdom by the 18th century where it has become very widespread. Common name = Miner's Lettuce.

Chickweed, *Stellaria media*. – Widespread in North America, Europe and Asia.

Watercress, *Nasturtium officinale* or *Rorripa nasturtium-aquaticum* – Native to Europe and Asia, grows in

(continues on page 7)

WELCOME TO ALL OF OUR NEW NJMA MEMBERS!

We'd like to extend a warm welcome to the following members who joined us between December 19, 2016 and February 20, 2017. We look forward to seeing you at lectures, forays, and other NJMA events. Happy 'shrooming!

Linda Albella	Cranford, NJ
James & Pat Bonder	Cedar Knolls, NJ
Joseph Borowik	Kenilworth, NJ
Marianne Borowik	Pompton Lakes, NJ
Michael Borowik	Rockaway, NJ
Ann Borowik-Parker	Succasunna, NJ
Anthony Bruno	Warren, NJ
Linda Conover	Rio Grande, NJ
Willy Dittmar	Newton, NJ
Lisa Doyle	Mine Hill, NJ
Craig Gortler	Hillsborough, NJ
Susan Hess	Mays Landing, NJ
Thomas Jasonis	Plains, PA
David Klaus	New Hope, PA
Steven Knezick	Columbus, NJ
Barbara Kress	Berkeley Heights, NJ
Cirsche Kriek	Sparta, NJ
Sergey Lipshitz	Millstone, NJ
Tom Mason	Hopewell, NJ
John Parise	Allendale, NJ
Jennifer Parisi	Newfield, NJ
Tamara Phoebus	Southampton, NJ
Adam Urso	Atlantic Highlands, NJ

ANNOUNCING THE 2017 NEMF SAMUEL RISTICH FORAY

by Paul Sadowski, Treasurer, NEMF

The New York Mycological Society, Connecticut-Westchester Mycological Association, Mid-Hudson Mycological Association and Long Island Mycological Club are hosting the 2017 NEMF Samuel Ristich Foray at the Stratton Mountain Resort in southern Vermont July 27-30, 2017.

Gary Lincoff, Faculty Chair, is assembling a group of local experts in the principal genera that we are likely to encounter during the foray, as well as some genera we may not encounter. There will be a microscopy lab available during the entire foray for participants to hone their microscope skills or to assay their collections.

Frank Marra, Walks Chair, has put together over a dozen interesting collecting venues for us to explore. No site is more than a half-hour's drive from the Resort on Stratton Mountain. The NYMS has visited this area every year since its rebirth in 1962, so there is a deep experience in these woods. We will even have access to the top of Stratton Mountain via a lift line!

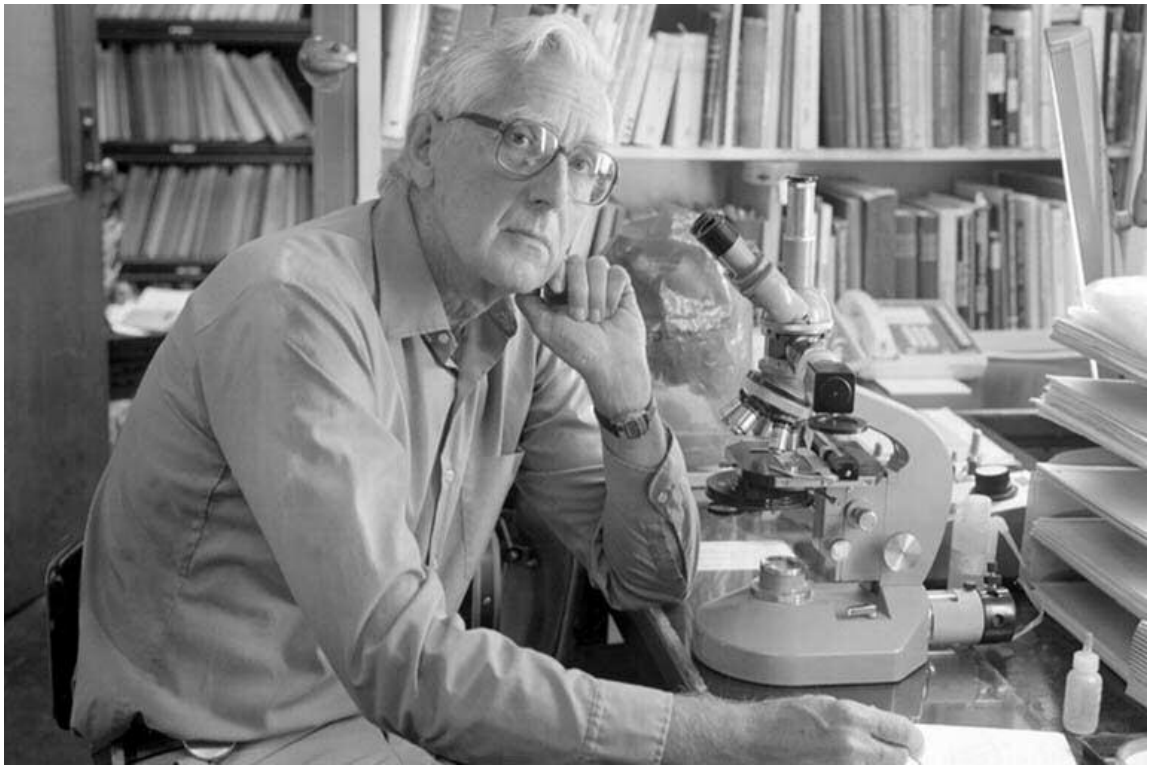
Our accommodations will be located in three lodges located in a resort village located about halfway up Stratton. All lectures, exhibitions, vendors, evening programs, socials and lunch & dinner meals will be found in one building, the Base Lodge, from where the lift goes up Stratton.

Black Bear, Lift Line & Long Trail Lodges will provide double occupancy accommodations and a continental breakfast. Black Bear and Long Trail Lodges are air conditioned, While Lift Line Lodge is not air conditioned, our experience in Vermont is that early summer may bring hot days, but the elevation provides cool relief at night. The accommodations in Lift Line will provide an economical sleeping option.

WHO'S IN A NAME?
Gyromitra korfii

by John Dawson (fifty-ninth in a series)

The false morel *Gyromitra korfii* (Raitv.) Harmaja is one of at least nineteen species of fungi bearing the generic names *Korfia, Korfiella* or *Korfiomyces* or the specific epithets *korfii, korfiana, ripakorfii* or *dickorfii*, all honoring the recently deceased American mycologist Richard Paul Korf.



Richard Korf in his laboratory, 1985

Born on 28 May 1925, Korf was the son of moderately wealthy parents who owned homes both in Westchester County, New York and New Fairfield, Connecticut. He received his pre-college education at Riverside Country School, a prestigious New York City boarding school, where at age sixteen he was placed in charge of the biology course after the instructor was called up for military service. It was that event, he later averred, that "had an enormous impact on [his] future and on [his eventual] decision to enter the teaching profession."[1]

Upon entering Cornell University the following year, he was undecided as to what studies to pursue, having only a "vague notion" that he "might like to become a gentleman farmer." But, during his freshman year, he encountered two professors, one in botany and the other in theatre arts, who strongly influenced his choice both of mycology as a career and of acting as a lifelong avocation. The former, in particular, suggested that Korf enroll the next year in a course in plant pathology, of which he "became instantly enamored." He graduated in 1946 with a bachelor's degree in botany and "immediately enrolled" in the doctoral program in plant pathology, "with a major in mycology and minors in genetics and general botany."

After receiving his Ph.D. in 1950, Korf taught mycology for one year at Glasgow University before returning to Cornell as an assistant professor, replacing his former mentor Harry Morton Fitzpatrick, who had died unexpectedly in 1949. He remained at Cornell for the rest of his career, becoming Associate Professor in 1955, Professor of Mycology in 1961, and Professor Emeritus in 1992 (though he continued to teach until 1998).

In the course of his career, Korf published over 400 papers, was co-founder in 1974 of the journal *Mycotaxon* (of which he served as Managing Editor from 1974–1991 and Business Manager from 1996–2006), and served as President of the Mycological Society of America in 1971. At Cornell, he served also as Director of the University Plant Pathology Herbarium, the fifth largest fungal herbarium in America,[2] to whose collections he contributed nearly 5000 specimens (including 257 type specimens),[3] not only from New York but from many European countries, as well as the Caribbean, New Zealand, Indonesia, Macaronesia and Japan. It was during his visit to the latter country in 1957 as a National Science Foundation Senior Postdoctoral Fellow at Yokohama National University that he met his wife, Kumiko Tachibana, a printmaker, with whom he had four children.

Within mycology, Korf was recognized as a world authority on the taxonomy of the discomycetes. His key to the Pezizales, published in 1973 in the fourth volume

(continues on next page)

[1] Quotations here and in the following paragraph are from Korf's 1991 article "An Historical Perspective: Mycology in the Departments of Botany and of Plant Pathology at Cornell University and the Geneva Agricultural Experiment Station", *Mycotaxon* 40, pp. 107–128.
[2] According to the obituary notice of Korf by Krishna Ramanujan in the *Cornell Chronicle*, August 25, 2016.
[3] Figures taken from the *Wikipedia* article on Korf.

of Ainsworth, Sparrow and Sussman's *The Fungi: An Advanced Treatise* "was one of the first synoptic keys" (allowing an unknown specimen to be identified starting from any set of characters) and has "yet to be replaced."[4] Korf received the Distinguished Mycologist Award of the Mycological Society of America in 1991, was named a Centenary Fellow of the British Mycological Society in 1996, and was honored with the Ainsworth Medal for extraordinary service to international mycology at the International Mycological Congress in 2010

Richard Korf as Elias Fries

As a thespian, Korf was active both as actor and director in theatre productions at Cornell and local theatre organizations in Ithaca, and he served as the chair of Cornell's Department of Theater Arts in 1985–86. In 1974, as part of the celebration of the 200th anniversary of the birth of Elias Fries at the Fifth International Congress of Mycology in Vancouver, British Columbia, Korf appeared in costume as Fries.[5]

Korf died at his home in Ithaca on August 20, 1916 at the age of 91.

[4] Quoted from Amy Y. Rossman and Wen-Ying Zhuan's memorial tribute "Richard Paul Korf (1925–1916): leading specialist on discomycetes and inspiring mentor", I*MA Fungus* 7(2), pp. 62–64.

[5] For further information about Korf's theatrical work and political activism, see the obituary memoir of him published in the *Ithaca Journal*, available online at ***http://www.legacy.com/obituaries/theithacajournal/obituary.aspx?pid=183025176***

MUSHROOM LEATHER AND THE FASHION INDUSTRY

by Susan McClary

Tired of showing your mushroom interest by wearing a T-shirt with a mushroom drawing?

Already using mushroom-based dyes for cloth? Are you ready for mycelium-based leather purses, belts, watchstraps, shoes and hats? If you search on the web for "mushroom leather", don't be surprised by what appears.

The American mycologist Paul Stamets wears a Romanian *amadou* hat from Transylvania made of *Fomes fomentarius* tissue (a.k.a. The Tinder Polypore). The commercialization of these old-world skills and traditions for using mushrooms are expanding and reaching new markets.

At the London College of Fashion, a student won the 2016 Kering Award For Sustainable Fashion for her shoes made from mushrooms. In Italy, Grado Zero Espace is producing up to fifty square meters per month of its softer-than-suede biodegradable mushroom leather, called "MuSkin", that you can order to create your own specialty products. MuSkin is made from *Phellinus sp.*, a parasitic fungus that attacks trees in the subtropical forests.

Back in the USA, a San Francisco company, MycoWorks, is promoting the environmental advantages of its sustainable mushroom products – biodegradable, carbon-neutral and created with minimal water use. Its mushroom leather can mimic their animal-based counterparts based on how it grows, how it is fed, and how it tans its fungal mat. How do they make mushroom leather? Their CTO says they "break down the cellulose and reorganize those sugars and proteins of mycelium" (Sorry folks, but no further details). They predict that, in a few years, their product may be able to compete on price at $5 dollars a square foot. It can grow its product in a couple of weeks instead of taking three years to raise the livestock for leather. Even a non-vegan can appreciate the business supply advantage of mushroom growing.

To those mushroom hunters tired of finding yet another inedible mushroom, I say "think, explore, and discover what other uses mushrooms can achieve for society". The founder of MycoWorks was a sculptor, not a scientist. So what is stopping you?

*reprinted from **Spore Prints**, newsletter of the Puget Sound Mycological Society, April 2016*

CALENDAR OF UPCOMING EVENTS

Sunday, March 12 **1:30pm**	**NJMA MEETING & LECTURE** **at the Frelinghuysen Arboretum, Morristown** ***with* João P.M. Araújo*, The topic will be "Introduction to the Life Styles and Forms of Fungi Living on Insects" See article on page 3.***
Sunday, April 2 **1:30pm**	**NJMA MEETING & LECTURE** **at the Frelinghuysen Arboretum, Morristown** ***with* Dr. Denis R. Benjamin*. His topic will be "Mushroom Toxins: Common Myths and Misconceptions"***
Sunday, May 7 **10:00am**	**FIRST FORAY OF THE YEAR** **INSTITUTE WOODS, Princeton, NJ**
July 27 -30	**NEMF SAMUEL RISTICH FORAY** **Stratton Mountain, Vermont** ***For more information, see the announcement on page 4.***
September 7-10	**NAMA NORTHWOODS FORAY** **Lakewood Resorts** **Lake NAMAkagon, Wisconsin**
September 24	**FUNGUS FEST** **at the Frelinghuysen Arboretum, Morristown**

NJMA News is published bimonthly by the New Jersey Mycological Association.
Annual subscription price is included in NJMA membership annual dues.
Except where noted, articles may be copied or reprinted with credit given to the author(s) and *NJMA News*.
Views expressed herein do not imply New Jersey Mycological Association endorsement.

(continued from page 4)

shallow water. In the United States in the 1940s, Huntsville, Alabama was locally known as the "watercress capital of the world". Different plant from the ornamental annual, *Tropaeolum majus*, whose buds are pickled as mock capers.

from The New York Times:

Wild About Mushrooms: a few recipes from the Well column:
http://nyti.ms/1z3JsZP

from Pat Bogue:

Very interesting article! I can believe it. I know I feel better when I walk in the forest!
– Pat
http://tinyurl.com/gp8pm2l

KATY LYNESS

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.

THE SECRET WORLD OF ENDOPHYTES

A TALK BY DR. JIM WHITE

reported by Dorothy Smullen

On January 8, 2017, Dr. Jim White (Plant Biology, Rutgers University) gave NJMA members a fascinating PowerPoint presentation entitled "The Secret World of Endophytes". Endophytes are non-pathogenic microbes (fungi or bacteria) that are present asymptomatically in tissues of all plants.

We first learned about many kinds of *Epichloe* (ascomycota) that can produce defenses in certain grasses against animal herbivores. Horses and other hoofed animals can develop diseases such as fescue foot, ryegrass staggers and sleepy grass narcosis from the toxins created by the endophytes.

Endophytic microbes (bacteria) can stimulate root hair growth in tomato seedlings. Treated seeds, with bacteria removed, show no root hair growth. The bacteria are internal in the root hairs and show intense hydrogen peroxide staining. Studies with Bermuda grass and endophytic *Pseudomonas* sp. show similar results.

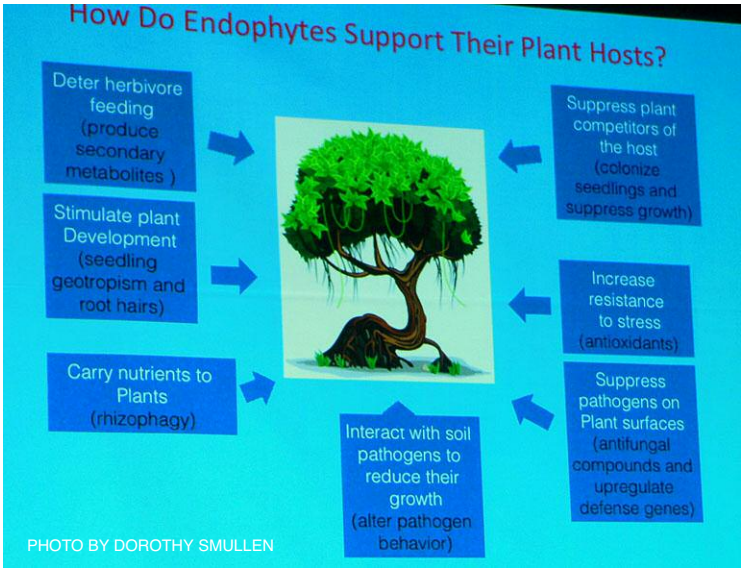
A cotton endophyte (*Bacillus* sp.) showed that the endophyte increased seedling growth and up-regulated auxin genes and antioxidants.

Another study suggests that certain plants consume microbes as a source of nutrients. In an Agave plant study, nitrogen isotopes were used to check that the nutrient went from the endophyte into the plant chlorophyll.

The fungal endophyte *Fusarium* has been shown to aid in the salt tolerance of dune grass. *Epichloe*, in another study, gave resistance to Dollar Spot (disease of grass). A *Pseudomonas* endophyte from Phragmites is even capable of inhibiting seedlings of competitor species such as Dandelion.

NJMA member Carol Stober talks to Dr. Jim White

Check out the photo taken from the presentation with the many functions of endophytes.



It's a fascinating world out there, and there are "secret" connections of the fungal and microbe world being uncovered all the time!

"WASTING" MUSHROOMS

*by Michaeline Mulvey (reprinted from **Mainely Mushrooms**, newsletter of the Maine Mycological Society, March 2017)*

Wild foraged food is not the same as the food we take from the garden, or the market. Somebody planted the food that you harvest from your garden, farmers' market or supermarket, intending it for human use. The fungal fruiting bodies that we find have jobs to do in the environment: procreation to continue the hyphal job of decay, feeding the forest, slugs, insects and other inhabitants of forest and field in different ways. Unless you grew the mushrooms, the only way to waste them is to over-harvest, let them decay in your refrigerator or on your counter while you investigate their edibility. When you find edible wild fungi, please be aware that for us they are a gift for the environment; they are a necessity.

2017 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!

We are pleased to announce the NJMA forays for 2017. There are a few changes.

This year, we will be visiting Thompson/Helmetta Park in Jamesburg. Our club went there in the 1970's and 1980's so it will be interesting to revisit this area. The Thompson section is a typical mixed oak forest with easy walking trails. The Helmetta section is a couple of miles away with a Pine Barrens habitat: more walking, with the chance of ticks or chiggers!

The other new site is the New Weis Center for Education, Arts & Recreation (***http://www.highlandsnaturefriends.org***) in Ringwood. The New York mushroom club has gone there in the past and found a lot of fungi. The former Weis Ecology Center was recently acquired by Highlands Nature Friends, Inc., and they are eager to catalog the organisms that exist there. A swimming area is open to us (for $10 each) to cool off after our foray.

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.

Once again, if someone asks you not to take their photo, please give them the courtesy of respecting their wishes.

Note that some of the State Parks charge admission from Memorial Day to Labor Day. Your NJMA Membership Badge allows you to get in free of charge on our foray dates. Keep it in your glove compartment!

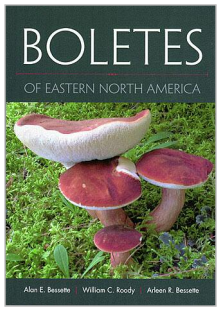
DATE	LOCATION
May 7	**Princeton Institute Woods**
June 4	**Deer Path Park** (Flemington)**: Bob Peabody Wild Foods Foray and Picnic** Leader: NJMA member Bob Saunders. Bring a dish for the Potluck Picnic, which is open to **members only**. *The foray itself is open to all.*
June 25	**Lake Ocquittunk Family Camping Area, Stokes State Forest** (Branchville)
July 8	**Wawayanda State Park** (West Milford) *NJMA ID required for free admission.*
July 15	**Meadowood Park** (Mendham)
July 23	**Thompson/Helmetta Park** (Jamesburg)
August 5	**Stephens State Park** (Hackettstown)
August 13	**To be announced**
August 20	**The New Weis Center for Education, Arts, and Recreation** (Ringwood)
August 27	**Stokes State Forest - Kittle Field** (Branchville) **– Grete Turchick Foray & Picnic** *The foray is open to the public, but the picnic is for* **members only**. *NJMA ID required for free admission.*
September 17	**Rancocas Nature Center and State Park** (Westhampton)
September 24	**Fungus Fest – Frelinghuysen Arboretum** (Morristown)
October 1	**To be announced**
October 8	**Brendan T. Byrne State Forest** (Woodland Twp.)
October 14	**Forest Resource Education Center** (Jackson)
October 22	**Wells Mills County Park** (Waretown)
October 29	**Belleplain State Park** (Woodbine)

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

BOOK REVIEWS

BOLETES OF EASTERN NORTH AMERICA

a review by David Wasilewski



Boletes of Eastern North America
by Alan E. Bessette, William C. Roody, and Arleen R. Bessette

Published by Syracuse University Press, 2016.
504 pages

ISBN 10: 0815610742
ISBN 13: 978-0815610748

A period of only 16 years separates the initial publication of *North American Boletes* from the recently published *Boletes of Eastern North America*. So, one may wonder why the authors, Alan E. Bessette, William C. Roody, and Arleen R. Bessette, chose to update their classic edition of 2000. Presumably, the main reason for this is to reflect the many changes in nomenclature that have been adopted over the past fifteen years. In *Boletes of Eastern North America*, I counted twenty-seven preferred genus names that had not appeared as such in the older book. In a few cases, this may just be a function of some long-standing debate over authorship of a given species. Is the correct name for the "ash tree bolete" *Boletinellus merulioides* or *Gyrodon merulioides*? However, most of the changes in genera have come about due to relatively newly discovered relationships among subgroups of boletes as per genetic analysis. If one deems it important to know the current scientific name for their "two-color boletes," then it's *Baorangia bicolor.*

"So does it make sense to purchase a book that uses names that may be depreciated within the near future? I believe so."

So, does *Boletes of Eastern North America* offer any new revelations about *Baorangia bicolor* other than the name? For one, this new book does not attempt to split bicolor into named varieties. Instead, the heading for this type of bolete is *Baorangia bicolor complex.* (*Boletus bicolor var. borealis* – which had seemingly been generically misplaced to begin with – is listed in the new book under genus Lanmaoa.) The authors have added new bicolor photos, and these are really nice photos that exhibit some of the morphological variability within this species complex. Moreover, the implication is that classification by variety – or perhaps even at the level of species – is an issue which will require additional study, presumably from the genetic perspective.

All this rapidly-changing nomenclature leads to a question: How long will the names found in *Boletes of Eastern North America* remain relevant? The book still documents the species (complex) *Boletus subtomentosus*, but two very similar species formerly included within Boletus are now combined into a single species of *Xerocomus, X. illudens/X. tenax*. Does *B. subtomentosus* belong in Xerocomus? Some sources believe so. But even if this answer is no, it is still likely that subtomentosus will not remain within Boletus. Current research indicates that genus Boletus in North America will eventually be whittled down to include only the "kings" – *B. edulis, B. variipes, B. separans*, and a few others.

So does it make sense to purchase a book that uses names that may be depreciated within the near future? I believe so. For the casual mushroom enthusiast, this future shock within the world of mushroom names takes some getting used to. If one wishes to get up to date with respect to these changes, then using *Boletes of Eastern North America* as one's new standard of bolete identification is a very reasonable beginning. The species descriptions are representative of what we have come to expect from a Bessette field guide. Whenever possible, terminology is non-technical, which makes for easy reading. Of course, when discussing observable mushroom traits, it is occasionally impossible to avoid vocabulary geared toward precision. To this end, an extensive glossary is provided. Many new excellent photos are included in *Boletes of Eastern North America*. In some cases – especially for uncommon types of boletes for which few good images exist – one finds the same photo that appears in the older book. Photos accompany species descriptions, as opposed to having separate text/photo sections as in the older book.

A noted change in this new book is the absence of the "chemical reactions" category. The older book included a separate category documenting color changes associated with application of chemicals for nearly all of the species descriptions. But, this new book only occasionally mentions chemical reactions within the "overview" section. In the appendix, one finds a short section devoted to chemical reagents. The authors point out that color changes associated with application of a given chemical may not be as consistent as one would hope. They offer a few potential explanations for this, and include specific recommendations for storage and expected shelf life of chemicals. A specific suggested technique for applying chemicals to mushrooms is included.

One thing I was hoping to find in this new bolete book is the status of at least some of the "undescribed boletes," of which twenty seven different types were pictured in the 2000 edition of *North American Boletes* (NAB 1-27). I browsed *Boletes of Eastern North America*, looking for mention of them, but I found none. Have one or more of them been lumped into an

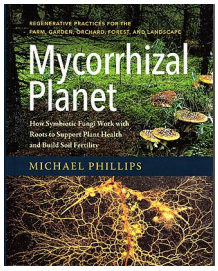
(continues on next page)

existing species concept? Perhaps when summer comes and I'm actively using this book to try to understand my bolete collections, I'll run across a reference to one of the NAB species. The new book includes eight "undescribed species" (UB 1-8). There is no indication which, if any, of these are the same as the undescribed species in the older book.

My own copy of *Boletes of Eastern North America* is a paperback version, which cost me around $50. The hardcover version is significantly more expensive. I figure that the pages in my book will eventually become dog-eared, the binding will begin to fail, and there will be rips, stains, and pieces of mushroom stuck here and there. But by that time, I should be ready for yet another new edition of a North American bolete book. With additional changes in the understanding of these mushrooms, a new book will likely be available by that time.

MYCORRHIZAL PLANET

a book review by Luke Smithson



Mycorrhizal Planet: How Symbiotic Fungi Work with Roots to Support Plant Health and Build Soil Fertility

by Michael Phillips

Published by Chelsea Green Publishing, 2017.
256 pages

ISBN 10: 160358658X
ISBN 13: 978-1603586580

Anybody who grows plants knows that there are many things that they need to flourish; water, sunlight, nutrients, minerals, etc.. Conditions have to be arranged so that your plants have these requirements, or they will not thrive. In the wild, plants have evolved many strategies to meet these needs; strategies that many savvy growers have learned to replicate in their gardens and fields. One of these strategies, arguably one of the most important strategies for many plants, is developing a symbiotic relationship with mycorrhizal fungi and many associated bacteria. This is the subject of Michael Phillips new book, *Mycorrhizal Planet*.

The author is a holistic farmer and writer from New Hampshire, where he and his family grow organic apples and medicinal herbs. In this publication, he explores the complex interactions between plants, fungi and bacteria. The first chapter devoted to fungi, the second to botany. Think of these chapters as "Mycology 101" and "Botany 101" where the basics of fungal and botanical concepts are covered. The complex cellular interactions between fungus and plant found in mycorrhizal relationships are well covered here, with an emphasis on how plants use this relationship to stay healthy. Plant health is a recurring theme in this book, with a very proactive attitude. Phillips states "Why obsess on disease when we might work directly to facilitate plant health"?

Chapter 3 continues exploring fungal roles in the plant world and really starts to talk about soil health. This is where we really begin to grasp the "mind boggling complexity in the interaction of fungi, bacteria and plant". A vast network of underground, soil-dwelling organisms are introduced in this chapter, showing that the healthier your soil, the greater the diversity. Detailed explanations of the often-changing lifestyles of fungi are offered and we also begin to see some practical applications of this knowledge. The fourth and fifth chapters offer detailed instruction on feeding the fungi/plant matrix and building up fungal diversity in the soil, respectively. Practical applications and techniques really begin to be covered in these chapters, with Chapter 6 culminating in a full discussion on building and managing soil. In this chapter, many different non-disturbance techniques for building fertility are covered for growers of all sorts: gardeners, landscapers, orchardists, foresters and farmers. This is the most extensive and useful chapter for those interested in applying the lessons covered earlier in the book and really shows that anybody can use mycorrhizal fungi in their growing systems. The techniques are not overly complicated; on the contrary Mr. Phillips demonstrates that the use of symbiosis is really quite simple.

Chapter 7 briefly describes a variety of edible mycorrhizal mushrooms. Considering that the overall theme of this book is invoking soil health, this chapter seems somewhat out of place and would probably be better left for a book on wild mushroom gathering. But tasty mushrooms are a big plus when it comes to many mycorrhizal species, so they get a brief treatment here before the author wraps up his book. The indices cover an array of resources that will help the reader take the next step in soil health, plus extensive sections of footnotes, a glossary to help keep the heavy terms sorted out, and his bibliography.

"The overall message, though, is quite simple: a holistic approach to growing food. When it comes to soil fertility, the whole is greater than the sum of its parts."

The information in this book is top notch. Mr. Phillips has done his research and possesses a deep knowledge of the subject. He is also very passionate about the subject and presents a philosophy that is both forward thinking and forgiving, giving growers' permission to not be perfect overnight. He gives the impression of a patient teacher trying to convey a very complicated message to the crowd. The overall message, though, is quite simple: a holistic approach to growing food. When it comes to soil fertility,

(continues on next page)

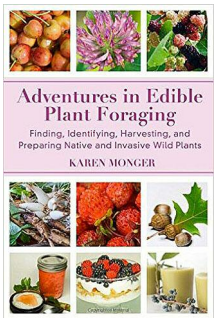
the whole is greater than the sum of its parts.

My only real gripe about the book is the cadence and wording of the dialogue. At times, I found it not clear and concise, but rather too flowing and a bit too informal for a complicated subject that I find needs a certain amount of concentration in order to fully grasp. In short, I found the choice of words and rhythm more of a distraction instead of being helpful. Putting aside my personal dislike of the writing style, though, I do intend to add this book to my library.

Mycorrhizal Planet is really intended for growers, but with enough information on the workings of mycorrhizal relationships to interest those who have a more academic interest in fungi and plants. My recommendation for growers: Add the book to your library. My recommendation to fungophiles who do not garden: Borrow the book from the library. It is due to be published by Chelsea Green Publishing on March 15, 2017. It is a very good contribution to a library, particularly for those interested in the practical uses of mycorrhizal fungi for growing the very best plants.

ADVENTURES IN EDIBLE PLANT FORAGING

a book review by Nathaniel Whitmore



Adventures in Edible Plant Foraging: Finding, Identifying, Harvesting, and Preparing Native and Invasive Wild Plants
by Karen Monger

Published by Skyhorse Publishing, 2015.
232 pages

ISBN 10: 1634504070
ISBN 13: 978-1634504072

Karen's 2015 publication is an introductory look at a number of wild edibles. Five of the thirteen chapters (the bulk of the book) describe common wild edible plants arranged by type of food; berries and fruits, flowers, vegetative portions, roots, and nuts.

Besides some unique recipes, the experienced forager probably won't find much new and noteworthy. Collectors of foraging field guides might already be familiar with much of the information or have it sitting on the shelf. Much has already been printed and can be found in a selection of field guides since, and including, those of Euell Gibbons. If you haven't already accumulated such a collection of books, Ms. Monger's volume could be a nice place to start. It includes sections on identification, habitat, harvesting, and cooking so that the plants are pretty well explained. Significant focus is given to recipes, which could be especially helpful for the uninitiated to begin adventuring into the world of wild foods.

I am a simple cook and don't turn to books on foraging for recipes. Usually I just want to know the basics of how a certain plant is cooked or if it even needs to be. Can it be eaten raw, or does it need to be cooked a little, thoroughly cooked, repeatedly boiled, dried first, or whatever? Once I know how much cooking something requires, I then simply stir-fry, steam, simmer in soup, or prepare by some other basic method. A couple of recipes in Karen's book, however, did catch my eye, such as Autumn Olive Ketchup and Japanese Knotweed Fruit Leather. The clearly-written recipes and botanical descriptions definitely help make this a strong choice as a beginner's book. Its weakness is that many descriptions and explanations are a little oversimplified so that even the novice will want for other references to verify or clarify certain points.

Overall, it is well written. I appreciated various tidbits, like that Dandelion root crowns (with the leaf bases) are known as "lawn squid". But this is one example of the author's use of common language where more technical accuracy would better describe the accompanying picture. It shows the purple leaf bases, which do indeed look squid-like, while the caption reads, "purple root crowns". Please pardon my nitpicking. Certainly, I have done worse. But, the spoken word is much more flexible than the printed one (though, many would not even notice and/or not care). Karen offers much from her own experience, which is the point of the book. What foragers want at all different levels of experience is to learn from the experiences of others.

Especially considering the price ($14.99), it has lots of information regarding common edibles. Plus, it is not difficult for me to recommend a book with novel recipes for plants like Japanese Knotweed.


PHOTO BY JIM BARG

NJMA 2017 COMMITTEE CHAIRS AND ACTIVITY/INTEREST GROUP LEADERS

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

Archives/Historian	**Phil Layton**
Book Sales	**Randy Hemminghaus**
Culinary Group	**TBD**
Cultivation	**Frank Kushnir**
Dyeing	**Ursula Pohl, Melanie Spock**
Education **	**Patricia McNaught**
Forays **	**Nina Burghardt**
Herbarium **	**Dorothy Smullen**
Library	*Chair* - **Nina Burghardt** *Circulation Manager* - **Igor Safonov**
Membership **	**Igor Safonov**
Microscopy	**Mike Rubin**
NAMA representative	**Ursula Pohl**
NEMF representative	**Mike Rubin, Dorothy Smullen**
Newsletter **	*Editor* - **Jim Richards** *Art Director* - **Jim Barg**
Nomination **	**Nina Burghardt**
Outreach **	**Nancy Addotta**
Fungus Fest	**Liz Broderick**
Ray Fatto Scholarship **	**Mike Rubin**
Social Media	**Stephen Sterling** *(Facebook page)* **Luke Smithson** *(Discussion group)*
Special Events	
Mycophagy	**Jim Richards**
Holiday Party	**Virginia Tomat**
Photo Contest	**Jim Barg**
Taxonomy **	**Nina Burghardt**
Victor Gambino Foray	**Liz Broderick**
Website	**Jim Barg**

NJMA REVIEW BOOKS

All are available to borrow from the NJMA Library.

Contact Igor Safonov (njmycomember@gmail.com) to borrow a copy today!

CATEGORY	TITLE	AUTHOR
Wild foods	Adventures in Edible Plant Foraging	Monger, Karen
Monograph	Agaricus of North America	Kerrigan, Richard W.
Cookbook	Art of Cooking Morels, The	Johnston, Ruth Mossok
Monograph	Ascomycete Fungi of North America	Beug, Bessette, Bessette
Wild foods	Backyard Foraging	Zachos, Ellen
Monograph	Boletes of Eastern North America	Bessette, Roody, Bessette
Fungi	Book of Fungi, The	Roberts, P. & Evans, S.
Field Guide	California Mushrooms	Desjardin, Wood, & Stevens
Fungi	Chaga, King of Medicinal Mushrooms	Wolfe, Beaumier, & Saad
Field Guide	Common Lichens of Northeastern North America	McMullin, Troy & Anderson, Frances
Field Guide	Complete Mushroom Hunter	Lincoff, Gary
Cookbook	Cook's Initiation Into the Gorgeous World of Mushrooms	Emanuelli, Philippe
Cookbook	Cooking Wild Mushrooms (for People who Don't Like Mushrooms)	Leavitt, Binger, Moorman, & Roberts
Cookbook	Dried Foods	Marrone, Teresa
Misc	Drink the Harvest	Chase, Nan K. & Guest, DeNeice C.
Misc	Drunken Botanist, The	Stewart, Amy
Wild foods	Eating on the Wild Side	Robinson, Jo
Wild foods	Eating Wildly (proof)	Chin, Ava
Field Guide	Edible Mushrooms	Forsberg & Lindberg
Wild foods	Edible Wild Plants	Kallas, John
Cultivation	Essential Guide to Cultivating Mushrooms, The	Russell, Stephen
Fungi	Fascinating Fungi of New England	Millman, Lawrence
Wild foods	Feast of Weeds, A	Ballerini, Luigi
Field Guide	Field Guide to Tropical Amazon Mushrooms	Winkler, Daniel & Evans, Larry
Misc	Flowers & Mushrooms	Stoss, ed
Wild foods	Foraged Flavor	Wong, Tama M. & Leroux
Cookbook	Forager's Cocktails	Zavatto, Amy
Cookbook	Forager's Kitchen, The	Bird, Fiona
Fungi	Giant Polypores & Stoned Reindeer	Millman, Lawrence
Misc	Introducing Larry & Gill	Welegala, Rita M.
Wild foods	Joy of Foraging, The	Lincoff, Gary
Fungi	Kingdom of Fungi. The	Petersen, Jens
Misc	Laws Guide to Nature Drawing and Journaling, The	Laws, John Muir
Fungi	Magic Mushroom Explorer	Powell, Simon G.
Fungi	Magic Mushrooms in Religion and Alchemy	Heinrich, Clark
Monograph	Milk Mushrooms of North America	Bessette A. E., Harris, D. B. & Bessette, A. R.
Misc	Mushroom Hunters, The	Cook, Langdon
Field Guide	Mushrooming With Confidence	Schwab, Alexander
Field Guide	Mushrooming Without Fear	Schwab, Alexander
Fungi	Mushrooms	Laessoe, Thomas
Field Guide	Mushrooms of North America in Color	Bessette, Alan
Field Guide	Mushrooms of Ohio and the Midwest	Sturgeon, *et al*
Field Guide	Mushrooms of the Northeast	Marrone & Sturgeon
Fungi	Mushrooms, A Global History	Bertelsen, Cynthia D.
Fungi	Mycelium Running	Stamets, Paul
Fungi	Mycological English – Latin Glossary, A	Cash, Edith
Cultivation	Mycorrhizal Planet (Galley proof)	Philips, Michael
Wild foods	New Wildcrafted Cuisine, The	Baudar, Pascal
Cultivation	Organic Mushroom Farming and Mycoremediation	Cotter, Tradd
Field Guide	Pocket Guide to Wild Mushrooms, The	Holmberg, P. & Marklund, H.
Monograph	Poroid Fungi of Europe	Ryvarden, L. & Melo, I.
Wild foods	Preserving Wild Foods	Weingarten, M. & Pelzel, R.
Fungi	Psychedic Gospels, The	Brown, Jerry B. & Brown, Julie M.
Cookbook	Put 'em Up Preserving Answer Book	Vinton, Sherry Brooks
Fungi	Radical Mycology	McCoy, Peter
Cookbook	Shroom	Selengut, Becky
Field Guide	Texas Mushrooms – A Field Guide	Metzler, S. & Metzler, V.
Monograph	Tricholomas of North America	Bessette, Bessette, Roody & Trudell
Misc	Unseen City	Johnson, Nathanael
Monograph	Waxcap Mushrooms of Eastern North America	Bessette, Alan
Wild foods	Wild Edibles	Boutenko,Sergei
Cookbook	Wild Mushroom Cookbook	Holmberg, I. & P.
Cookbook	Wild Mushroom Cookbook *(duplicate)*	Holmberg, I. & P.
Wild foods	Wild Table, The	Green & Scott

HILDEGARD HENDRICKSON WILD MUSHROOM IDENTIFICATION CLINIC – WHAT IS IT?

*by Wren Hudgins (reprinted from **Spore Prints**, newsletter of the Puget Sound Mycological Society, December 2016)*

One service offered to the public by the Puget Sound Mycological Society is wild mushroom identification. We have many club activities, but it's worth stressing that this identification clinic is not for members only; rather, it is for everyone. We have offered this service for many years, but after Hildegard Hendrickson, our friend and mentor, went missing a few years ago, we renamed the clinic in her honor. Brian Luther, chair of our identification and field trip committees and Danny Miller, our education chair, conspired to rename the clinic, a change which was welcomed by everyone involved. In the spring and fall seasons, we staff this clinic between 4:00pm and 7:00pm on Monday afternoons at the Center for Urban Horticulture. The starting and ending dates are not known in advance because the weather is not known in advance. However, these dates (different every year) are listed on our website and are accessible by everyone (not just members).

Bringing Specimens

There are a few guidelines which would enable customers to maximize their experience:

1. **Identifiers need the entire specimen.**

   This includes underground parts. We are handicapped if the mushroom is cut off at ground level, or worse, if only the cap is brought in.

2. **We always prefer to have the actual specimen.**

   Increasingly, people are bringing in photographs on their cell phones. We can rarely be 100% certain of an identification from a photo, but we're willing to try to identify from photos if there is time and no one with actual specimens is waiting. Our chances of a successful identification are increased if we have a photo of the entire specimen, including stem and underside of cap. Even with complete photos, we don't have an actual specimen, we can magnify, test with chemicals, smell, and taste. These are all identification aids, and not having them is one reason photo IDs are problematic.

3. **The state of the mushroom is important.**

   Mushrooms are, on average, about 93% water. Once collected, mushrooms start to dry out. That moisture has to go somewhere. If mushrooms are placed in plastic bags or other non-breathing containers, all that moisture gets turned back on the mushroom and it starts to rot much more quickly than would otherwise be the case. Bring specimens in paper bags, open baskets, or anything that allows them to breathe. Identifiers won't be able to tell much about a rotten specimen, so the trip in to the ID Clinic won't be very satisfying for the customer.

Who Comes?

Our "customers" come with varying degrees of mushroom knowledge, but basically fall into one of two groups: The first and largest group consists of those folks who are interested mainly in edibility. The second group is more curious, and members of that group want information beyond edibility. Often they have studied their mushrooms before coming in and have educated guesses about identification. These folks tend to stay after their mushrooms have been identified so that they can learn from others. They take notes. They tend to ask questions. They often take photographs. Some might stay for the entire three hour length of the clinic (or most of it). Often, they return another week and do it again. These are our "regulars," but they are few in number compared to the total customer numbers.

The staff from PSMS usually consists of two or three experts who can identify almost everything that comes in, and then three to five developing or aspiring identifiers who know enough to be helpful to most customers but who need help from the "aces" when something esoteric comes in.

How it Works

Identifiers set up one to three tables; each is staffed by one or more identifiers, and customers come to any table that is open. If all tables are full, customers simply sit down at the table of their choice and wait for their turn. If the clinic is busy, identifiers work rapidly, identify edible versus nonedible, label each species if desired, and move to the next customer. If the waiting customer seems interested in the process, we (identifiers) might slow down and offer information beyond edibility.

When It Works Best

This process works best when we have as many customers as we have identification tables. When this happens, there is no rush, because no one is waiting, so we can slow down and actually discuss issues much deeper than edibility. We can discuss why this mushroom differs from its lookalikes and how we arrive at its identification. Customers and identifiers alike have the luxury of floating to other tables or consulting other identifiers for additional information. This is a time of learning for all of us. Speaking just for myself, this is the period of greatest satisfaction; when I maximize learning. I suspect the same is true for our regular customers because many of them have told me so.

Who Benefits?

Everyone. The public benefits by having their questions answered. Whether they are interested only in edibility or whether they want deeper information, they usually come away satisfied. For identifiers, we have the ability to perform a public service and also to increase our own learning. PSMS needs to develop more identifiers and participating in the identification clinics serves that

goal. The club also benefits because identifiers get the opportunity to promote the advantages of club membership and annual show attendance. Customers who come to the clinic undoubtedly talk to others who did not come to the clinic. That said, there are benefits to the larger community, even including those who never come to the clinic. I believe that we increase the safety of mushroom hunting in general because we frequently talk with customers about safety procedures, and hopefully that information gets passed on to non-clinic attendees. Beyond that, I think we increase interest in fungi, generally speaking, and I think we stimulate curiosity. Mushrooming is a somewhat geeky hobby, but one quality that binds us all together is a high level of curiosity. Curiosity is a good thing.

STALKING THE WILD CHANTERELLE

*by Pat Neal, **patnealwildlife.net**. **Peninsula Daily News**, October 19, 2016. (reprinted from Spore Prints, newsletter of the Puget Sound Mycological Association, November 2016)*

Now that the rains have come, it's the best time to stalk the wild chanterelle mushroom .... probably one of the most popular ways there are to get lost in the woods.

Perhaps you are driving down a road through a forest of second-growth Douglas fir and spot a flash of color in the woods.

Mushroom pickers can become so excited they slam on the brakes in the middle of the road, fling open the door, and hit the brush in the excitement of the mushroom hunt.

With your eyes focused on the ground, you walk through the woods, scurrying from one mushroom to the other like a kid on a big Easter egg hunt until you find the treasure trove, a golden carpet of mushrooms that covers the forest floor.

You don't rip the tree out of the ground to pick the apples, and you don't rip the mushrooms out of the ground to pick the mushroom.

It is very important to cut chanterelles to avoid disturbing the mycelium from which they grow.

You want a sharp knife that has been specially adapted for harvesting chanterelles by taping a small paintbrush to the handle. That's so you can brush off the inevitable dirt and fir needles that adhere to the mushrooms. This will save hours of cleaning when and if you do eventually get home.

None of that matters now as you see more and bigger mushrooms just over the hill and down the little gully where you cannot believe your eyes.

You had no idea there could be this many mushrooms left on Earth, what with all the people out picking them.

Good thing you didn't tell anyone where you were going on your mushroom hunt, or you're liable to have someone homing in on your prize.

The mushroom fever has you in its grip by now.

You race through the woods with visions in your head of smoked salmon and chanterelle marinara sauce, chicken-fried grouse with chanterelle gravy, and chanterelles with venison medallions.

At some point, it occurs to you that you are hopelessly lost.

You try to retrace your steps, but the forest looks the same in every direction.

As darkness descends, you walk faster in what you are sure is the wrong direction.

People say you shouldn't panic when you are lost, but these are the same people who say you shouldn't panic when attacked by a cougar or the Internal Revenue Service.

Fortunately, at that very moment, I heard a car horn honking.

I walked toward the horn to discover the cause.

My truck was blocking the road.

That's when I figured there's only one way to avoid getting lost in the woods while picking mushrooms: Don't go.


PHOTO BY JIM BARG