

NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION

VOLUME 44-3 MAY - JUNE 2014



CALENDAR OF UPCOMING EVENTS

NJMA OFFICERS

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Vice-President - John Burghardt
Secretary - Igor Safonov
Treasurer - Bob Peabody

DUES

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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!

Sunday, May 4
10:00 am

FIRST FORAY OF THE 2014 SEASON
Institute Woods (Princeton Water Works)

Saturday, June 7
10:00 am

DNA WORKSHOP
Foran Hall, Rutgers University, Douglass Campus
Space is limited, *Preregistration required.* (see page 15)

Sunday, June 8
10:00 am

**BOB PEABODY WILD FOODS FORAY
AND PICNIC** Deer Path Park, Readington, NJ
The foray (10:00 am to noon) is open to the public.
The potluck picnic following the foray is for **MEMBERS ONLY.**

Friday, June 13
& 27, 6:00 pm

GENUS ID WORKSHOP, Parts 1 and 2
with Patricia McNaught. *Registration required* (see page 15)
Directions will be provided to registrants.

Saturday, June 14
10:00 am

MUSHROOM BREADS WORKSHOP
with Jim Richards. *Registration required* (see page 15)
Directions will be provided to registrants.

Saturday, June 28
10:00 am

**FORAY: LAKE OCQUITTUNK FAMILY
CAMPING AREA**, Stokes State Forest *Leader: Jim Barg*

Sunday, June 29
1:30 pm

SPECIAL MEETING & LECTURE
with Dr. Michael Beug, his topic will be "Ascomycete Fungi"
Frelinghuysen Arboretum, Morristown

Saturday, July 12
10:00 am

FORAY: MEADOWOOD PARK, Mendham, NJ
Leader: Dorothy Smullen

Saturday, July 19
2:00 pm

CULINARY GROUP SOUTHWEST COOKOUT
Harry Dunham Park, Basking Ridge
Reservations required. Contact Jim Richards (jimrich17@me.com)

WHAT'S IN THIS ISSUE:

| | |
|--|--------------|
| President's Message | 2 |
| Special Meeting featuring Dr. Michael Beug | 3 |
| Culinary Group Southwest Cookout | 3 |
| The Tyromycologist | 4 |
| NJMA joins the Mycoflora Project | 6 |
| Profile: NJMA's new Cultivation Chair | 7 |
| Who's In A Name? | 8 |
| 2014 Foray Schedule | 10 |
| Commonly-found NJ Fungi | 11 |
| Book Reviews | 12 |
| 2014 NJMA Education Workshops | begins on 14 |

(Online readers: Click on page numbers to jump to that page)



PRESIDENT'S MESSAGE

So much has been done in the last few months.

The NJMA Membership Directory is now available, thanks to much work by Igor Safonov and Jim Barg for getting it online.

The Members-Only section of our website is (nearly) operational, thanks to Jim Barg. When you get an email notice that it's ready, check it out – it's really spiffy.

Library books were retrieved from several locations and cataloged, and the catalog will be made available to members in the Members-Only section of our website. Books can now be borrowed, thanks to Nina and John Burghardt, Bob Hosh, Betty Wise, Terri Layton, and Igor Safonov. Terri has generously donated use of a small building to house the collection.

Occasional (and annoying?) flurries of “e-mail blasts” to keep members informed have been replaced by a monthly update sent in non-newsletter months, thanks to Jim Richards.

NJMA now has a presence on Facebook, thanks to Pete Bohan and Jeremy Kilar, with updating thanks to Randy Hemminghaus.

A list of the most common NJ fungi found on NJMA forays was updated for the first time in many years and will soon be available online (as well as in this issue of the newsletter) thanks to John Burghardt.

The herbarium has gotten a thorough “clean-up”, with records checked against specimens, thanks to Dorothy Smullen, Nina Burghardt, Nancy Addotta, and Igor Safonov.

A club weekend foray (our Victor Gambino foray) was planned for June, thanks to Liz Broderick, Nina



PHOTO BY PATRICIA McNAUGHT

John Burghardt, Dorothy Smullen, and Nancy at Taxonomy work day

Burghardt, Terri Layton, and yours truly. (We planned for 25 people, but by mid-April we had reached our absolute maximum of 30 and closed registration. What a response!)

What a terrific group of committed volunteers we have; some chickens, some pigs*, but all working together. As president of NJMA, I am especially grateful to the pigs; we both know who you are (and not all were named above!). Our organization is in great shape. Now we just have to trust that our very snowy winter will lead to a wonderful season of mushrooming. See you at Princeton!

– Patricia McNaught

*As in the fable of the chicken and the pig.

Directions to the Frelinghuysen Arboretum, Morristown

Traveling from the South: I-287 Northbound to Exit 36A (Morris Ave.). Proceed East approx. 1/2 mile in the center lane, past Washington Headquarters (on left). Take left fork onto Whippany Road. Turn left at 2nd traffic light onto East Hanover Avenue. Proceed for about 1/4 mile. Entrance is on left, opposite the Morris County Library.

Traveling from the North: I-287 Southbound to Exit 36, following signs for Ridgedale Avenue (bear right in exit ramp). Proceed to traffic light, then turn right onto Ridgedale Avenue. At 2nd traffic light, turn right onto East Hanover Avenue. Proceed for about 1/4 mile. The Arboretum entrance is on the right just past the traffic light at the Morris County Library.

Traveling on New Route 24: New 24 West to Exit 1A, (also labeled as Rt. 511 South, Morristown) onto Whippany Road. Stay in right lane. Turn right at 1st traffic light onto East Hanover Avenue. Proceed for about 1/4 mile. Entrance is on left, opposite the Morris County Library.



PHOTO BY PATRICIA McNAUGHT

Betty Wise and Nina Burghardt at NJMA library

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 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 us an instant email. Just look for the “click finger” when you hover your mouse over these items.

No more clumsy “writing it down” or copying and pasting!

NJMA'S "QUARTERMASTER"

by Patricia McNaught

NJMA has a legal obligation to keep track of our assets.

That's easy to do for money, but a challenge for our physical assets. We own an amazing array of stuff – alcohol burners, projector and screen, even (I've been told) a barbecue grill.

But our stuff is scattered, mostly at members' homes, and we don't have records of who has what. That is going to change, because Frank Katusa has agreed to keep track of our tangible assets, a role dubbed "quartermaster" by Phil Layton.

Frank will pass the information along to our Treasurer, Bob Peabody, who reports on our assets when he files our taxes. *Please make Frank's job a little easier: If you are the custodian of any NJMA "stuff", send him an e-mail (FJKatusa@gmail.com) with the item description. If applicable, include the model and serial number and the estimated value.* Don't make him hunt you down.



Dr. Michael Beug

NJMA SPECIAL MEETING

LECTURE BY DR. MICHAEL BEUG

SUNDAY JUNE 29TH

by Patricia McNaught

NJMA doesn't usually have indoor meetings in June, but when a prominent West Coast mycologist is coming east, it's time to adjust our schedule. On June 29th at 2:00pm at the Frelinghuysen Arboretum, Dr. Michael Beug will be speaking on the new book *Ascomycete Fungi of North America* (reviewed in this issue), which he authored with Alan and Arleen Bessette. Phylum Ascomycota, (which includes morels, jelly fungi and cup fungi), often gets short shrift in field guides, and this book aims to fill that gap.

Dr. Beug taught mycology, chemistry and organic farming at The Evergreen State College in Olympia, Washington for many years. He is active in NAMA (Chair of the Toxicology Committee and editor of the journal *McIlvania* as well as active in the Education Committee). His specialties are the genus *Ramaria* and toxic and hallucinogenic mushrooms. He is also doing research on oak-associated fungi of the Columbia River Gorge, especially *Cortinarius* species.

Come early and walk the 127 acres of grounds at the Arboretum (including an active fox den and an occasional black bear), but please, no collecting. Matilda's Café at the Arboretum serves light fare and opens at 1:00pm.

If you wish to purchase a copy of *Ascomycete Fungi* at the meeting, the cost will be \$61. Dr. Beug has offered to custom make autographed book plates for people if he has the names before he comes (including for people who have already purchased a book).

If you are interested, please send an e-mail to me by June 1st and indicate if you wish both a book and a book plate, or only a book plate because you have already purchased a book.



NJMA CULINARY GROUP

SOUTHWESTERN COOKOUT COMING ON JULY 19TH

If you enjoy tacos and tamales, guacamole and guavas, chilies and chorizos, you should join the NJMA Culinary Group for their next event. The outdoor event will be held at 2:00PM on Saturday, July 19th at the Harry Dunham Pavilion in Basking Ridge.

As with all culinary group events, this is *not* a potluck, but a planned menu. Recipes will be selected by the planning group and sent to the attendees about two weeks before the meal. As with any NJMA event involving food, you must be a member of NJMA to attend. Attendance is limited to 30 participants.

To register, or for additional information, please contact Jim Richards at jimrich17@me.com or 908-619-1438.



Harry Dunham Pavilion in Basking Ridge

THE TYROMYCOLOGIST WHEN TO MUSHROOM

by Patricia McNaught

When I started mushrooming, *when* to go looking for mushrooms was as much a mystery to me as *where*. Field guide information on season seemed vague (almost everything was “summer or fall”). An unexpected source of information was an NJMA workshop I went to on “Preserving and Cooking Mushrooms”, led by Bob Hosh, who is NJMA Foray Chair and is passionate about cooking. At the workshop, Bob discussed the season and habitat (even some locations!) in addition to the best cooking and preservation techniques for each of about 40 edible species. I still consult my extensive notes.

Bob’s first exposure to wild mushrooms was when he was a little boy. His job was to herd his grandma’s ducks, and one morning he discovered they were terribly ill, from eating mushrooms growing in the pasture. His grandma saved most of the ducks by force-feeding them vinegar to make them vomit – not a technique recommended for humans. Bob learned his mushrooming in Michigan and has been collecting in New Jersey since 1982. Now that’s an experienced identifier. Best of all, Bob is generous with his knowledge.

Knowing when to expect particular species can really help in identification. It’s like wildflowers: a flower may look like an aster, but if it’s before Labor Day, chances are, it’s not. If you come across a monster Hen of the Woods in June, take a second look. Likely you’ve found the black-staining polypore. *Meripilus sumstinei*. Pinch it – if it’s fresh the pore surface will turn dark brown.

It’s true that unusual weather patterns make timing more unpredictable. It’s also true that for some mushrooms, the seasons are approximate. Morels fruit strictly in spring, but many other “spring” mushrooms continue into summer; and many “summer” mushrooms continue into fall. Some mushrooms start in spring and just keep on coming like *Psathyrella candolleana*, one of the few *Psathyrella* species I can ID to species. (It’s easier to “learn” a mushroom that you see for months.) But you are unlikely to find a fall mushroom in spring.

I was surprised when I learned that, while some genera are fairly consistent in their seasons, at least for their first appearance, closely related species in a genus may have different fruiting times. “Chicken of the Woods” was once considered a single species with two color variants. They are now regarded as two separate species, *Laetiporus cinnacinatus* which fruits in the spring and *Laetiporus sulfureus* which fruits in the fall. (There are additional Chicken of the Woods species outside the Northeast.)

You can get an approximation of the fruiting times for

many species by looking at the NJMA species list by foray. However, some mushrooms are more likely to occur in certain areas of New Jersey. If it’s a species more common in the Pinelands, it may seem to be a fall mushroom, but we generally go to the Pinelands late in the season. Also, we primarily visit wooded areas for their richness in mycohrrhizal fungi. You’ll find little information on those species of *Agaricus* and *Lepiota* that prefer grassy areas.

There may be others, but I know of only one field guide organized by season – *Bill Russell’s Field Guide to Wild Mushrooms of Pennsylvania and the Mid-Atlantic*. It’s a very portable little guidebook, especially appropriate if you’re interested in edibles.

So when you’re out looking for morels or doing your spring yard clean-up, keep your eyes open for other spring-fruiting mushrooms: *Pluteus cervinus*, *Polyporus squamosus*, winecaps (*Stropharia rugosannulata*), *Laetiporus cinnacinatus*, *Coprinus micaceus*, *Psathyrella candolleana*, *Collybia dryophila*, *Agrocybe dura*, and *Panaeolus foenicicii*.

This is my last “Tyromycologist”. My concept was a column for beginners focusing on aspects of mushrooming that are not well-covered in guidebooks. I still think it’s a good idea, but I’m too involved with other aspects of NJMA to continue. If you’d be interested in writing a beginner’s column for the newsletter, please contact editor Jim Richards (njmaeditor@gmail.com).



WELCOME TO ALL OF OUR NEW NJMA MEMBERS!

*We’d like to extend a warm welcome
to the following members who joined us
between February 23, 2014 and April 23, 2014.
We look forward to seeing you at lectures,
forays, and other NJMA events.
Happy ‘shrooming!*

| | |
|-------------------|----------------------|
| Adam Alb | Martinsville, NJ |
| Andrew H. Chong | Wyckoff, NJ |
| Marie Cooney | Plymouth Meeting, PA |
| Josef Ehntholt | Montville, NJ |
| Jeffrey Gillespie | Medford, NJ |
| Gordon S. Horn | Ringoes, NJ |
| Natalie M. Howe | Highland Park, NJ |
| Allison Jackson | Pennington, NJ |
| Jonas Koep | Pittstown, NJ |
| Elena M. Morgan | Martinsville, NJ |
| Brian Versek | Philadelphia, PA |

WANTED - ELLIS'S BLUE MUSHROOM

by Nina Burghardt, Taxonomy Chair

Last July, two young women in Manhattan were looking on the internet for a weekend activity. They found a free mushroom foray in New Jersey in a place called Wells Mills. It seemed like a lot of fun, so they got in a car and headed for the Pine Barrens. Unknown to them, July in the Pine Barrens is usually hotter than Hades, full of ticks and chiggers. Luckily for them, the temperature was comfortable with a breeze; better still, no one encountered any biting or sucking insects.

After everyone got back from collecting, these women produced a beautiful, perfectly collected, steel-blue mushroom with pinkish-white gills. They took pictures and left, never realizing that the mushroom they had just collected was last found and named 137 years ago.

We sent the mushroom to Dr. Tim Baroni, one of the country's foremost experts in the genus *Entoloma*. At first, he thought it might be an undescribed species similar to *Entoloma bloxamii*, but when the cap was examined, it had erect inflated septate cells on the surface. This identified the mushroom as *Calliderma indigofera*. Dr. Baroni has extracted DNA from our mushroom and will post the sequence on GenBank.

No one has documented finding this mushroom since J.B. Ellis first collected it in the white cedar bogs near his

home town of Newfield, NJ in 1876. (*Editor's note: I can remember Bob Peabody repeatedly suggesting that NJMA organize some summer forays to look for the mushrooms that J.B. Ellis had collected. That was back in 1976!*)

Rutgers' Chrysler Herbarium has a perfectly dried specimen of Ellis's find. How did he do it? How did he (or his wife) dry his mushroom so it stayed in perfect condition after so many years? There were no cars, no driers. How did he collect in the heat of the summer on horseback without the mushrooms rotting or getting crushed? Did he pack them in moss? Where in Newfield did he collect? Today are no cedar bogs close to town, but there are some to the northeast – maybe this is where he collected. Why has no one found this mushroom in the intervening years? Is it that the mushroom is extremely rare or that no one in their right mind goes looking for mushrooms in the middle of summer in the Pine Barrens?

It would be fun to find more specimens. To this end, I have made some posters which I will distribute around the Pine Barrens to involve everyone in the search for this rare mushroom. (*Also see John Dawson's article relating to J.B. Ellis on page 8.*)



BYTES, BITS, & BITES TASTY LITTLE TIDBITS FROM OUR MEMBERS

from Patricia McNaught:

"THIS IS FANTASTIC NEWS! Thank you so much." That was the response of Samantha, a graduate student at Rutgers, when she learned that NJMA had awarded her a travel grant to attend the Mycological Society of America meeting. Samantha is in the third year of her PhD program and is researching how fungi and plants interact with each other by volatile organic compounds. (Does this mean the mushrooms and plants are communicating with each other?)

A modest grant from NJMA can make a big difference to a graduate student. To contribute to the NJMA scholarship fund using PayPal, you can go to the Membership tab on our home page. Scroll to the bottom of the membership page to find the Optional Donations.

from Patricia McNaught:

I recently got a phone call from a man who was offering to donate a number of mushroom books to NJMA. He lives a distance from me, but our new membership directory sorted by zip code helped me find that Victor and Tatiana live near the book donor. Victor and Tatiana graciously agreed to pick up the books. Sometimes things work out just the way they should.

(continues on page 9)

WANTED BLUE MUSHROOM



CAP 2" HEIGHT 4"

LAST SEEN - WELLS MILLS 2013
PREVIOUSLY - PINE BARRENS 1876
TAKE PHOTO ONLY
NOTE LOCATION

CONTACT: njmyco@njmyco.org
New Jersey Mycological Association

NJMA IS MOVING INTO THE 21ST CENTURY

by Patricia McNaught

Have you noticed the crates of books that our experienced identifiers lug to forays? That is because there is no single comprehensive source of information for all the macrofungi of any area in North America.

The Mycological Society of America (an organization of mostly professional mycologists) and the North American Mycological Association have a proposal that would fill that gap: The Mycoflora Project. It would link the dried specimens in herbariums with DNA bar code information, photographs and field notes on the fresh specimens, and the species descriptions in online, freely accessible monographs which are easy to update. In other words, it would be an authoritative single source of information, linked to (DNA verified) voucher specimens. What about NJMA's species lists? Well, to paraphrase the Mycoflora project, "without a sequenced specimen, it is only a rumor".

Sounds like a lot of work just to avoid lugging books. But here's an example of what developing this information can lead to: In the February 28th issue of *Omphalina*, an article by Andrus Voitk *et. al.* describes sites in Newfoundland where they "knew" (based on field ID) that two distinct species of morels grew: *M. angusticeps* and *M. septentrionalis*. But it turns out there was only one species, and the size and color differences were due to growing conditions and variability within the species. And, it was a new species, designated as *Mel-36* until officially named.

So, of the twenty-plus species of morels that have now been described for North America, which do we find in NJ? Right now, we can't be sure, especially since of the over 2000 fungal specimens in our Herbarium, none are morels! (Sadly, we ate them all.)

It's time for NJMA to "up our game", and we've already started. Nina Burghardt and the Library Committee have found a home for our books and devised a system to lend them out, including some monographs. Dorothy Smullen and the Herbarium Committee have been working on herbarium records, checking to see which specimens have good field notes. John Burghardt has matched herbarium records with our NJ species list, and generated a list of species for which we have no herbarium specimens. We will have a microscopy workshop this summer and a DNA workshop, both at Rutgers. At forays this season, we will be urging participants to record field information, especially for species that are unfamiliar. (Ask Nina Burghardt about the blue entoloma and you'll learn how frustrating it is to not have *in-situ* photos and field information.) (*Editor's note: See Nina's article on page 5.*)

Not everyone in NJMA wants to learn about DNA

analysis for fungi, or is interested in using a microscope. But we all can take pride that NJMA is true to our mission of contributing to scientific research. And do please consider donating a morel or two to our herbarium!

For more information on the Mycoflora project, go to: <http://tinyurl.com/ljs56sn>.



MUSHROOM ILLUSTRATORS WANTED

Thank you to all who have submitted mushroom illustrations which have allowed us to enhance *NJMA News* for our members.

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.

LANGDON COOK LECTURE

review by Lorna Wooldridge

On Sunday, March 2nd, Phil and I attended the NJMA meeting at the Somerset County Environmental Education Center to hear Langdon Cook, the author of "*The Mushroom Hunters*".

This fascinating talk drew us into the secret world of the mushroom hunters, the largest all-cash business in the United States. Langdon's photographs and detailed knowledge of this trade really helped us understand the life of a circuit-picker in the Pacific Northwest.

Langdon traveled with a semi-retired circuit-picker, and also researched the buying side of the trade by spending time with a man who has cultivated a whole network of pickers. The pickers for this trade frequently come from groups of refugees who have emigrated to the United States.

In some areas, the trade has become dangerous, and both pickers and buyers have taken to carrying guns. Pickers often need to obtain permits, but as Langdon explained, this can be a complicated process, and it is almost impossible to know all the legal requirements all of the time.

As mushrooms are perishable, time is of the essence and buyers often set up camp with the pickers. Mushrooms may also be sun-dried on screens at these campsites, and interestingly, many of these mushrooms make their way to Japan.

I had heard Langdon interviewed on the NPR Diane Rehm Show prior to attending this presentation, and I would highly recommend listening to this interview in the archives. It is located at <http://tinyurl.com/lv9rkvp>.

I've yet to read his book, but it looks like a good read.

(*Editor's note: Lorna's report originally appeared on her blog, which is located at <http://tinyurl.com/lo4c7yt>*)

INTRODUCING RAY PESCEVICH - NEW NJMA CULTIVATION CHAIR

by Terri Layton

Ray Pesceovich is our new Cultivation Chair and a relatively new member of NJMA. Some of you may remember seeing him at Fungus Fest last year along with his wife Gemma. Ray has spent the last four years participating in a SARE program (Sustainable Agriculture Research and Education) sponsored by Cornell University. He is participating in this five-year program after winning a grant by beating 15-to-1 odds. His better half (his words) Gemma also participated in the same program.

Ray first got interested in fungi back in high school. Ray went on to study chemistry, mathematics and computer science. He worked for Johnson & Johnson as an analytical chemist and later as a research scientist. Now he is busy working as a consultant in the pharmaceutical industry. He never lost interest in fungi, especially the medicinal aspect, and the timely grant by Cornell University has rekindled his enthusiasm.

He travels between New Jersey and West Virginia where he cultivates shiitake mushrooms. Ray says that growing shiitake in WV is perfect because his well water is just the perfect temperature for shocking logs to fruit. And, of course, land is more affordable in WV. In fact, he made a trip down to WV right before last year's Fungus Fest so he would have logs and mushrooms for display and sale. Ray is looking forward to taking a May course in New Hampshire on the feasibility of growing morels. We wish him the best and look forward to a workshop for cultivating morels.

Ray is also active in NOFA-NY (Northeast Organic Farmers Association of New York) and gives lectures on mushroom cultivation that draw big crowds. He is excited that mushrooms have become more mainstream and he sees many health benefits from eating mushrooms.

We look forward to Ray's workshops and lectures in coming years. Like most fungus lovers, Ray is reserved and quiet, but very intense and bright. We are delighted to have Ray and Gemma as members of NJMA. 



WHO'S IN A NAME?

Jobellisia luteola

by John Dawson (forty-second of a series)

It is unusual for both the first and last names of a mycologist to be incorporated in a single generic name. Such is the case, however, for the pioneer American mycologist Job Bicknell Ellis. For in addition to the current genera *Ellisia*, *Ellisembia*, *Ellisiella* and *Ellisiomyces*, his name is commemorated in the recently erected genus *Jobellisia*, as well as in the specific epithets *ellisii* and *ellisianus*.¹

So who was this so diversely eponymized individual?

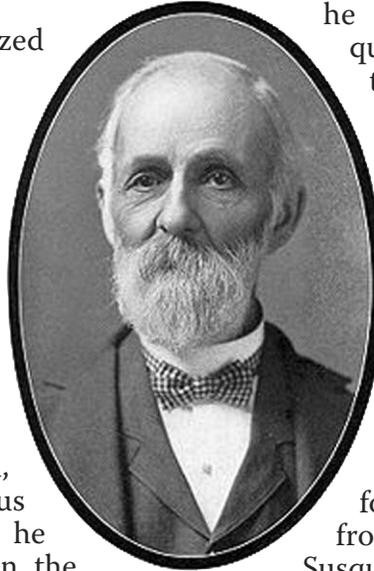
According to the Wikipedia entry about him and the obituary tributes to him published in the *Journal of Mycology*² (a periodical he co-founded) and *Mycotaxon*,³ Ellis was born on 21 January 1829 in Potsdam, New York, the tenth of the fourteen (!) children of Freeman Ellis and Sarah Bicknell. His father was a farmer and his mother a member of a prominent Vermont family. As a boy, Job helped his father on the farm, but he was also a bright and industrious student — so much so, that at age 16 he served for a term as a schoolteacher in the neighboring village of Stockholm.

Ellis enrolled at Union College in Schenectady in 1849 and graduated from that institution with an A.B. degree in 1851. He then taught classics at a succession of schools, in Germantown, Pennsylvania, and Albany and Poughkeepsie, New York. It was at that time that his interest in botany apparently developed, when he began collecting plants on weekend excursions with other teachers.

In 1855, Ellis headed south with one of his sisters to seek a more permanent teaching position in South Carolina or Georgia. But northerners were not welcome in the South in the years leading up to the Civil War, so the two soon returned home. Nevertheless, 1855 was a momentous year in Ellis's life, for it was then that he saw an announcement of the publication of Henry Ravenel's *Fungi Caroliniani Exsiccati* and initiated a correspondence with that South Carolina botanist and mycologist (profiled earlier in this series), resulting in a collaboration that lasted until Ravenel's death in 1887.

It is not clear whether Ellis and Ravenel ever met, for “with characteristic modesty” Ellis “refrained from attending scientific meetings” until his later years.⁴ Indeed, it was not until 1884, when he attended a joint meeting of the British and American Associations for the Advancement of Science at the Academy of Natural Sciences in Philadelphia, that he first met “scores of workers in the botanical and mycological fields whom he had known [for years] by name and through correspondence.”⁵ In any case, Ravenel became Ellis's mentor, advising him as to books he should acquire and

European botanists and mycologists with whom he should become acquainted. Ellis subsequently sent many specimens for identification to Ravenel, Mordecai Cubitt Cooke, Miles Joseph Berkeley and others.



In 1856, Ellis was appointed principal of the Canton (N.Y.) Academy, and in April of that year he married Arvilla Jane Bacon, who bore him a daughter (their only child) the following January and later assisted him substantially in his mycological endeavors. The couple moved back to Potsdam in 1863, where Ellis bought thirteen acres of land, began farming, and taught in the public schools for a year before serving in the Union navy from 1864-65. As a sailor aboard the U.S.S. *Susquehanna* he participated in the bombardment and capture of Fort Fisher in Wilmington, North Carolina, but according to his diary⁶ felt “degraded” by the experience and vowed never again to allow himself to be put in such a position. Upon his discharge from military service, Ellis briefly returned to Potsdam, but then moved with his family to Newfield, New Jersey, a newly-established community recommended to him by a fellow sailor. He remained there until his death on 30 December 1905.

In Newfield, Ellis continued to farm and occasionally teach school; he and his wife reared their daughter, who became a professional musician; and they became active in civic affairs. Meanwhile, he continued to improve his mycological knowledge and to correspond with others in that field. In 1874, he published the first of his 202 scientific papers. Two years later, he wrote to William Gilson Farlow at Harvard, who became an influential supporter. And in 1877, he began compiling a collection of exsiccati (dried fungal specimens mounted on sheets), to which he gave the Latin title

¹ Formerly he was also commemorated in the genera *Ellisiellina*, *Ellisiodothis*, and *Ellisiopsis*!

² W.A. Kellerman, Obituary — Job Bicknell Ellis, *J. of Mycology* 12 (1906), 41–45.

³ Geraldine C. Kay, Job Bicknell Ellis 1829–1905, *Mycotaxon* XXVI (July–September 1986), 29–45, the most detailed source consulted for this profile.

⁴ Kellerman, *op. cit.*, p. 43.

⁵ *Ibid.*, p. 45.

⁶ Quoted in the *Wikipedia* entry about him and in Kay, *op. cit.*, p. 35.

Fungi Nova-Caesareenses — that is, *Fungi of New Jersey*.⁷ On completing the first two hundred specimens, Ellis sent a copy to Farlow, who persuaded him to recall the sheets so far issued, to broaden the scope of the collection and retitle it *North American Fungi*, to print descriptions of the specimens in English rather than Latin, and to publish them in bound volumes. Farlow himself financed the publication in book form of 35 copies of the first 200 specimens. During the next twenty years, a further 3400 specimens were to follow, the books for which “were made by hand by Mrs. Ellis”, who, because the list of subscribers eventually grew to 60, in the end “made some 2000 books and prepared and packaged some 200,000 specimens”!⁸

From 1878 onward, Ellis devoted himself entirely to mycology, carrying on a “mammoth” correspondence with mycologists and collectors throughout the United States and Europe (though he himself rarely left the region around his home). He and his wife were supported by sales of the exsiccata (including a later collection of 5100 specimens entitled *Fungi Columbiana*, the final 36 volumes of which were published posthumously by the Kansas mycologist Elam Bartholomew), by her part-time work as a seamstress, and, after 1880, with financial support from Benjamin Everhart, “a wealthy merchant ... and knowledgeable mycologist” in Westchester, Pennsylvania.⁹

Ellis published on all types of fungi and in several major journals, including, besides the *Journal of Mycology*, the *Bulletin of the Torrey Botanical Club*, the *Botanical Gazette*, and *The American Naturalist*; but his primary focus was on parasitic fungi. Apart from his exsiccata, his major work was the nearly 800-page volume *North American Pyrenomycetes*, co-authored with Everhart.

When his wife died in 1899, Ellis ceased further work on exsiccata, and soon afterward his own health began to decline. Three years before he had sold most of his herbarium to the nascent New York Botanical Garden, which then purchased the rest (amounting altogether to some 80,000 specimens), as well as most of his library, in 1900.

Both amateur and professional mycologists have regarded Ellis “as one of themselves: ... amateur in that he was largely self-taught, professional in the pioneering scientific work he did [with limited facilities] in systematizing thousands of [previously] undescribed species.”¹⁰ Among the more than 4000 species he discovered and described was *Entoloma indigoferum*, whose recent exciting rediscovery is described in Nina Burghardt’s article on page 5. Because he was a pioneer, Ellis’s work has been superseded in many cases by later discoveries. But his legacy, as well as his generous assistance to others in the field, is recalled in the species named after him.

The contributions to mycology of Ellis’s wife Arvilla were also posthumously recognized. An obituary

tribute published in *Science* on 11 August 1899 declared that though “not known as a botanist, not a member of a scientific society, [and] not the author of a scientific paper, she nevertheless contributed more to the advancement of our knowledge of the fungi than many of those whose names are frequently appended to scientific articles”. Two months later, a notice in the *Bulletin of the Torrey Botanical Club* (vol. 26, no. 10, p. 553) likewise averred that “When the annals of botany are estimated with a just hand, the wives of botanists who have silently sacrificed in order that the husband’s work could be more successfully carried to the end will receive their due reward. ... Arvilla J. Bacon [was one such]. ... [For] to her extended labor ..., no less than to that of Mr. Ellis, are American mycological students indebted for the valuable and extended issues of exsiccata that for the past twenty years ... issued from [her] quiet house.”



⁷ He had, after all, been a teacher of Greek and Latin, and is reported to have been familiar with French, Spanish, Italian, German, Polish and Swedish as well. (Kay, *op. cit.*, p. 36)

⁸ *Ibid.*, p. 37.

⁹ *Ibid.*, p. 39.

¹⁰ *Ibid.*, p. 42.

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

from Patricia McNaught:

Speaking of books, not all the books in the NJMA library have been recovered. We have a listing of books that were cataloged a number of years ago. A number of them are “missing in action”. If you have an NJMA book (except the ones that were borrowed at the April 13th meeting), please send a note to Igor Safonov, who is the library circulation manager.

from Nina Burghardt:

On last Saturday, March 29th, John and I went to the Eastern Penn Mushroomers monthly meeting to find out about Laboulbeniales (Labouls). Labouls are microscopic asco fungi found on beetles, mites and ants. They are often host specific. The presenter, Danny Haelewaters, is presently studying Labouls which live on ladybugs.

Labouls are two celled organisms that attach to insects by way of a foot which they use to penetrate the shell so they can get nutrients from the bug juice. They do not have hyphae and they do not appear to kill their host. They do weaken the host insect by reducing their ability to mate, reducing their winter survival and reducing the insect’s ability to recognize predators.

In the 1890s, Roland Thaxter wrote a five-volume study of Labouls with fantastic illustrations. Since then, very little has been studied about this genus. At present, there are only five people studying Laboulbeniales.

If you want to see some for yourself, find a bunch of ladybugs, get yourself a magnifying glass and start

(continues on page 18)

2014 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!

| DATE | LOCATION | LEADER |
|-------------------------|---|--------------------------|
| May 4 (Sunday) | Princeton Water Works (a.k.a. Institute Woods) | Terri Layton |
| June 8 (Sunday) | Deer Path Park: Bob Peabody Wild Foods Foray and Picnic <i>Bring food to share and your own picnic gear.</i> | Bob Peabody and Bob Hosh |
| June 28 (Saturday) | Lake Ocquittunk Family Camping Area, Stokes State Forest | Jim Barg |
| July 12 (Saturday) | Meadowood Park | Dorothy Smullen |
| July 20 (Sunday) | Holmdel County Park, Hill Top section | Bob Hosh |
| July 27 (Sunday) | Wawayanda State Park | Patricia McNaught |
| August 2 (Saturday) | Stephens State Park | Jim Richards |
| August 16 (Saturday) | Schiff Nature Preserve | Dorothy Smullen |
| August 24 (Sunday) | Hoffman County Park | Igor Safonov |
| September 6 (Sunday) | Manasquan Reservoir Environmental Education Center | Patricia McNaught |
| September 14 (Sunday) | Washington Crossing State Park | Virginia Tomat |
| September 20 (Saturday) | Stokes State Forest – Grete Turchick Foray & Picnic <i>Bring food to share and your own picnic gear.</i> | Jim Barg |
| September 28 (Sunday) | Fungus Fest – Frelinghuysen Arboretum | Patricia McNaught |
| October 4 (Saturday) | Mahlon Dickerson Reservation | Jim Barg |
| October 5 (Sunday) | Cheesequake State Park | Nina Burghardt |
| October 12 (Sunday) | Wells Mills County Park | Luke Smithson |
| October 18 (Saturday) | Jake's Branch County Park | Lynn Hugerich |
| October 26 (Sunday) | Brendan Byrne State Forest | John Burghardt |

REGIONAL (non-NJMA) FORAYS (both of these require pre-registration and fees)

August 7 - 10 NEMF 2014 Samuel Ristich Foray, Brunswick, Maine

October 9 - 12 NAMA 2014 Foray, Eatonville, Washington

Before attending any NJMA foray, READ and UNDERSTAND our foray guidelines!
(Foray guidelines are available on our website, www.njmyco.org/guidelines.html)

COMMON FUNGI OF NEW JERSEY

COMPILED FROM RECORDS OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION

GILLED FUNGI

Agaricus campestris
Amanita amerifulva
 amerirubescens
 bisporigera
 brunnescens
 citrina group
 crenulata
 flavoconia
 flavorubens
 muscaria v guessowii
 onusta
 rhacopus (= ceciliae)
 vaginata v vaginata
 volvata v volvata
Armillaria gallica
 mellea
 tabescens
Clitocybe clavipes
 gibba
 odora
Coprinus micaceus
Cortinarius alboviolaceus
 armillatus
 caperatus
 iodes
 semisanguineus
Crepidotus applanatus
Entoloma abortivum
 strictius
Galerina autumnalis
Gymnopilus luteus
 penetrans
Gymnopus dryophilus
 subnudus
Hygrocybe borealis
 cantharellus
 conica
 flavescens
 marginata v marginata
 miniata
Hygrophoropsis aurantiaca
Hypholoma fasciculare
 sublateritium
Laccaria amethystina
 laccata
 laccata v pallidifolia
 ochropurpurea
Lactarius camphoratus
 chrysorheus
 corrugis
 deceptivus
 gerardii
 hygrophoroides
 lignyotus v lignyotus
 piperatus v piperatus
 subvellereus v subvellereus
 vinaceorufescens
 volemus v volemus
Lentinellus ursinus
Lepista nuda
Macrolepiota procera
Marasmius rotula
 strictipes
Megacollybia rodmanii
Melanoleuca alboflavida
Mycena galericulata
 haematopus
 inclinata
 luteopallens
 pura
Panellus stipticus
Pholiota aurivella
 suarrosoides
Pleurotus ostreatus
Pluteus cervinus

Psathyrella candolleana
 delineata
Rhodocollybia butyracea
 maculata v maculata
Russula brevipes v brevipes
 compacta
 crustosa
 cyanoxantha
 foetentula
 laurocerasi
 mariae
 modesta
 ochroleucoides
 pusilla
 silvicola
 variata
 vinacea
 virescens
Schizophyllum commune
Stropharia rugosoannulata
Tricholoma sejunctum
Xerula furfuracea
 radicata

BOLETES & RELATED FUNGI

Boletinellus merulioides
Boletus badius
 bicolor v bicolor
 chrysenteron
 edulis v edulis
 pallidus
 pulverulentus
 subglabripes
 subvelutipes
Gyroporus castaneus
Leccinum scabrum
Omphalotus illudens
Phylloporus rhodoxanthus
Strobilomyces confusus
 strobilaceus
Suillus americanus
 granulatus
 salmonicolor
Tapinella atrotomentosa
Tylopilus ballouii
 felleus
 plumbeoviolaceus
 rubrobrunneus
Xanthoconium affine v affine

CHANTERELLES

Cantharellus cibarius
 cinnabarinus
 lateritius
 minor
Craterellus fallax
 ignicolor

CORAL FUNGI

Clavaria cristata
Clavulinopsis fusiformis
Artomyces pyxidata

CRUST FUNGI

Merulius tremellosus
Stereum complicatum
 ostrea
 striatum
Xylobolus frustulatus

JELLY FUNGI

Auricularia auricula
Clavulina cinerea
Dacrymyces chrysospermus (= palmatus)
Tremella mesenterica
Tremellodendron pallidum

POLYPORES & SIMILAR FUNGI

Bjerkandera adusta
Cerrena unicolor
Coltricia cinnamomea
Daedalea quercina
Daedaleopsis confragosa
Fistulina hepatica
Fomes fomentarius
Ganoderma applanatum
 lucidum
 tsugae
Gloeoporus dichrous
Grifola frondosa
Hapalopilus nidulans
Inonotus hispidus
Laetiporus cincinnatus
 sulphureus
Lenzites betulinus
 elegans
Neofavolus alveolaris
Oxyporus populinus
Phaeolus schweinitzii
Phellinus gilvus
Piptoporus betulinus
Polyporus badius
 leptocephalus (= elegans)
 squamosus
Poronidulus conchifer
Postia caesia
Pycnoporus cinnabarinus
Trametes versicolor
Trichaptum bifforme
Tyromyces chioneus

PUFFBALLS & SIMILAR FUNGI

Calostoma cinnabarinum
Lycoperdon perlatum
 pyriforme
Crucibulum laeve
Mutinus elegans
Scleroderma areolatum
 cepa
 citrinum
 geaster

TOOTH FUNGI

Hydnum repandum v repandum
 umbilicatum
Hydnochaete olivacea
Irpex lacteus
Hydnellum spongiosipes

ASCOMYCETES

Bispora citrina
Chlorociboria aeruginascens
Leotia lubrica
Galiella rufa
Sarcoscypha occidentalis
Scutellinia scutellata
Hypomyces chrysospermus
 hyalinus
Daldinia concentrica
Xylaria polymorpha

MYXOMYCETES

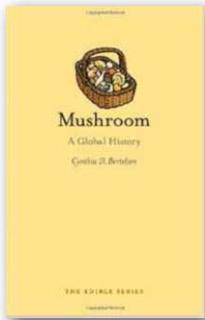
Lycogala epidendrum
Tubifera ferruginosa
Fuligo septica
Ceratomyxa fruticulosa



BOOK REVIEW

MUSHROOM: A GLOBAL HISTORY

a book review by Bob Hosh



Mushroom: A Global History

by Cynthia D. Bertelsen

Reaktion Books - Edible, London, 2013.
Hardcover, 160 pages.
ISBN-10: 178023175X
ISBN-13: 978-1780231754

This short book (160 pages) is a history of mushrooms as civilization evolved. It is an excellent introduction for the person who knows nothing about mushrooms. The author, Cynthia D. Bertelsen, is a culinary historian and food writer who lives in Virginia.

She begins by listing the essentials of what mushrooms are, citing both ancient recorded references and modern research. This is followed by brief descriptions of foraging for them, cooking them and preserving them; all from a historical perspective. Thus the reader will learn what noted commentators from ancient Greece, Rome, China, Russia, France and England had to say about them. The author then covers, in some detail, R. Gordon Wasson's proposal in the 1950s that cultures are either mycophilic (mushroom loving) or mycophobic (mushroom fearing); leading to the role mushrooms play in human nutrition, medicine, and religion.

Poisonous mushrooms are also discussed; illustrated by all the folk superstitions about how to identify toxic ones. There are short chapters on mushroom cultivation and the development of commercial mushroom growing. The reader is provided with contacts to mushroom associations and mushroom study organizations.

The chapter on mushroom recipes is truly historical in perspective starting with the Roman cook Apicius "Fresh mushrooms are stewed in reduced wine with a bunch of green coriander..." to "Zuppa di Funghi Porcini" from Tuscany (1998).

The book is small in size, and as a result, the illustrations and color photographs are somewhat small. The author researched her subject very well and writing in this historical perspective results in a fun read!

Highly recommended!



"...as for the cooks, I really cannot be expected to put up with this ham essence, nor the excessive quantity of morels and other mushrooms, pepper, and nutmeg with which they disguise perfectly good food."

– Voltaire (1694-1778)

BOOK REVIEW

ASCOMYCETE FUNGI OF NORTH AMERICA A MUSHROOM REFERENCE GUIDE

a book review by Michael Rubin



Ascomycete Fungi of North America A Mushroom Reference Guide

by Michael W. Beug, Alan E. Bessette,
and Arleen R. Bessette

University of Texas Press, 2014.
ISBN-10: 0292754523
ISBN-13: 978-0292754522

When Jim first asked me to review this book, I thought to myself "this must be the year of the ascomycete," with Gary Lincoff focusing on ascos in his Mushroom University program through COMA and now this new reference guide by Michael Beug and Alan and Arleen Bessette. I never really thought much about ascomycetes other than anxiously anticipating the arrival of morel season and having spent some time in the company of Roz Lowen on various forays.

First, let me say that this identification book is not set up in a traditional way. It is interestingly set up as a picture key. While dichotomous keys typically give you a choice between two descriptions, this book uses photographs to highlight these features. This makes it so much easier for those of us that are visual learners to make the correct choice in order to move to the next section of the key. I would not describe this book as a field guide, but I would keep it in my car for post-foray identifications because it is so visual – and therefore may be quite helpful for field identifications.

The pictorial key is followed by the bulk of the book which is comprised of taxon descriptions illustrated with great photographs (contributed by many people you have met at the regional forays such as John Plishke III, Noah Siegel, Diana Smith, and Arleen Bessette), so when you do finally make your choice, you can go into greater detail about the macroscopic and microscopic features. Speaking about microscopic features...for the most part, you don't need a microscope to use this book until you come to the choice between amyloid asci (the genus *Peziza*) and not amyloid asci (Notice I didn't say inamyloid!). A microscope will also be useful if you want to confirm your final decision.

The variety of fungi found in the ascomycetes is truly astounding. Cup fungi with eyelashes (*Scutellinia scutellata*), saddle fungi (*Hellvella*), and stalked cups (*Sarcoscypha occidentalis*). There are extensive sections on hypogeous ascos (truffles!) and fungi that grow on insects (*Cordyceps*). And who knew there were so many types of morels?!

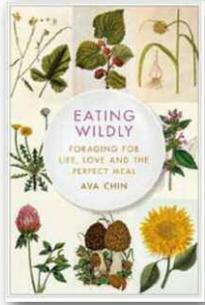
In summary, I think this will be quite a useful reference guide for those 'shroomers that find cup fungi and other ascomycetes on their forays. Many of us ignore the smaller and cup fungi because we are looking to fill our baskets with edibles; but, as we wander around the world one can't help but notice all the intricacies that nature has to offer. Keep your eyes (and mind) open and you will see a whole world of fungi and other delights that you may have missed before.



BOOK REVIEW

EATING WILDLY: FORAGING FOR LIFE, LOVE, & THE PERFECT MEAL

a book review by Nathaniel Whitmore



Eating Wildly: Foraging for Life, Love, and the Perfect Meal

by Ava Chin

Simon & Schuster, 2014.
Hardcover, 256 pages.
ISBN-10: 145165619X
ISBN-13: 978-1451656190

Eating Wildly: Foraging for Life, Love, and the Perfect Meal by Ava Chin is a story of the author's life woven from memories of her family (mostly mom, grandma, and grandpa, and including an estranged father), her love life (or lack thereof), and her experiences with wild foods. The wild food anecdotes are those of a beginning forager. As such they could likely provide some novelty for a reader with some interest but little knowledge, but the seasoned forager might not find much stimulation in the stories.

Expecting a book on wild edibles, I found myself much more intrigued by the stories of the habits, beliefs, and foods of the author's Chinese grandparents. Of course, they knew something about wild edibles as well as some folk knowledge about foods, and about life itself. Reports of her dating life weighed in heavily for a book on wild edibles, so I would consider this more of a memoir. Chin illustrates the forager's experience – the excitement of the find, the wonder behind the seasons and plants and interconnectedness, and the joy of finding something other than what one was looking for.

The book could be a nice pick for a leisurely read. Look elsewhere if you want to learn about edible wild plants.



Got a mushroom story to tell?
Share your experience with fellow mushroomers!

tell it here!

Send your articles and photos to njmaeditor@gmail.com



EDITOR'S NOTES

When I first began thinking about this issue's Editor's page, message, rant, whatever-you-want-to-call-it, I decided that I really did not want to write one. I was so "annoyed" about how many of the articles that were planned for this issue were very late (or completely missing) that I decided that no one really wants to read about my complaints. And, then things started to come in, and when all was said and done most of the material was here.

I decided that I had been looking at this all wrong. I needed to apply some NLP (Neural-Linguistic Programming) and reframe my thoughts. Rather than dwelling on the pieces that were missing, I needed to concentrate on the material that had been submitted. I realized that while a few individuals were late in getting items to me (or failed to submit their promised articles), that there were many more members who had contributed to this issue – and to many others before as well. In all, 21 NJMA members have contributed to this issue of *NJMA News* (a really substantial number). Even if it is only a one-sentence or one-photo contribution to BBB, thank you! It is really pretty amazing that we get as much as we do, considering that no one is getting paid to do it. Everything that we do in NJMA, whether as an officer, a member of a committee, a foray leader, an identifier, a newsletter contributor, or any of the many other things we do, is done because we want to do it. Or someone convinced us that we wanted to do it ☺. As we finally get a chance to start collecting fungi once again, I look forward to even more people getting involved with foray reports, more photos of great finds, recipes, etc. With the revived interest in taxonomy and the herbarium, maybe we will start to get more technical articles for the newsletter as well. That is the one area in which we have been needing more input. In truth, this is what makes *NJMA News* different from almost every other club's newsletter: The great diversity of our members' interests and their willingness to share with the rest of us. Thank you! Keep them coming!

On a final note, I would like to thank Patricia McNaught, our Associate Editor, for the great job she has done with her *Tyromycologist* column. It is a valuable resource for newcomers to NJMA and a great reminder of things that we should have known for the rest of us. Her many other responsibilities (as NJMA's President and as Chair of the Education Committee) plus her interest in taxonomy and working with the *Mycoflora* project (and being an occasional book reviewer, and so on) leave her with no time for *Tyromycologist*. We are looking for a volunteer to continue with something similar. Please contact me if you are interested.

Have a great collecting season. 2014 has to be better than 2012 and 2013, doesn't it???

– Jim Richards

NEW AND EXCITING EDUCATION WORKSHOPS FOR 2014

by Patricia McNaught

- If you come to NJMA events, you've surely sampled some of the wonderful breads and other goodies baked by Jim Richards. Jim will be leading a workshop on **Baking Mushroom Breads**, to be held in his home.
- Nathan Wilson, originator of *Mushroom Observer*, will lead a workshop on June 22nd at the Victor Gambino foray (at PEEC) on **Using *Mushroom Observer***. We believe that the workshop is full, but we will confirm with foray registrants that they plan to attend the workshop. If there are any openings for the workshop, we will post them in the June NJMA monthly update.
- The **Mushrooming 201/202 Workshop** was developed after conversations on the plight of beginning mushroomers with Anna Gerenday, a name that long-time NJMAers will recognize. Many of her suggestions have been incorporated, including having more than one session and holding it in June.
- NJMA has held lectures on **Using DNA for Fungi** in the past, but from what I'm told, many attendees quickly got lost when confronted with unfamiliar terms and concepts. A workshop format will make it easier for us to stay in the game. In addition to her research on fungi at Rutgers, Iverlisse teaches classes.
- What else? Well, that's up to you. If there's a particular workshop that you would like to see, please send an email to me (pjmcnaught@gmail.com) with "NJMA Workshop" in the subject line. If there's sufficient interest, there's no reason we can't add other workshops to the 2014 schedule. Possible workshops include shiitake cultivation, lichens, or having the Intro to Mycology and Field ID in July as well as October.

The current class schedule is posted on the next page. You can register online by clicking on the blue links on the registration page.

The education committee members are Patricia McNaught (chair), Dorothy Smullen, Gene Varney and Igor Safonov. 

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

WHY THE CHANGES IN NJMA'S EDUCATIONAL WORKSHOPS?

by Patricia McNaught

Over the last several years, some unsettling trends involving NJMA workshops have been evident. Workshops have often had very low registration. Because we have paid for the rented space and the workshop leader has made the effort of preparing the presentation and materials, our response has been a flurry of telephone calls and e-mail blasts in order to find registrants. Even then, we still had some workshops with very few participants, and we had to cancel many workshops. It's time to change how we do things.

We are making several changes. We are running fewer classes, and most classes are focused on aspects of mushroom identification. Members may be interested in mushroom photography, cooking, cultivation and crafts, but those workshops are very hard to fill. We are running smaller classes; they're easier to fill. And with the smaller workshops, we may not have to rent space. Another strategy is to gauge interest ahead of time, which we did for one of the new workshops being offered this year.

Two of the new workshops in 2014 reflect comments we've received. Some beginners who have taken the Intro to Mycology and Field ID workshops report that they still feel "stuck" in their efforts to learn mushroom ID. Long-time members have expressed the concern that NJMA needs to move into DNA analysis of fungi, but we don't yet have a clear direction.

On a final note, I was asked at the executive board meeting to respond in the newsletter to questions from some members about the workshop registration fee. Some members have asked why should they be charged for workshops since they already pay dues? NJMA dues (\$10 individual membership with electronic newsletter) are lower than those of almost every other club in the country. Our dues cover the costs for our lecture meetings (rent for the space, honorariums and travel costs for the speakers), the February Mycophagy event, liability insurance, and expenses like our web server, postage and membership cards.

The registration fee for educational workshops covers workshop rental space, materials, refreshments and an honorarium and travel costs to workshop leaders if they are not NJMA members. Workshops with high costs (due to rental cost or materials) are partially subsidized by workshops with lower costs. The two beginner workshops (Intro to Mushrooms and Field ID) are heavily subsidized. Workshop leaders who are members of NJMA (and a few who aren't) volunteer their time. So please, don't forget to thank them. 

NJMA EDUCATION WORKSHOPS for the 2014 SEASON

Only registrations from members will be accepted (by mail, or electronically, using PayPal® by clicking the blue workshop titles below) until at least June 1st. (These online registration links will be active after May 4th.) After that time, registration for most of the workshops will be open to non-members. Non-members should go to the [NJMA website home page](#) after June 1 and click on the “Workshops” link under Brief Announcements to register.

Pre-registration is required for all workshops! If you prefer to register by mail, a printable registration form is on page 19. You can also click on the workshop title to be taken to the registration section of our website.

Saturday, June 7

10:00 am to 1:00 pm – USING DNA TECHNOLOGY WITH FUNGI

Foran Hall, Douglass Campus of Rutgers University in New Brunswick

Learn the basics of DNA technology and how it can be used in mycological research. The workshop will consider the questions to be asked before carrying out a DNA analysis. General principles of extraction and DNA analysis will be covered. Attendees will have the chance to interact, ask questions and engage in discussions, as well as see first-hand some of the equipment and reagents. Whether your interest is to identify fungi, find relationships between groups of fungi or study fungal communities you will find this workshop useful. Led by Ivelisse Irvary, a fourth-year Ph.D. student in Dr. White’s lab at Rutgers. Ivelisse is also a teaching assistant.

\$10 fee. Limit 20 participants.

Friday, June 13 and Friday, June 27

6:00pm to 9:00pm – IDENTIFICATION TO GENUS, *sensu lato*

This is *one* two-session workshop! Light supper provided.

Basking Ridge, NJ (*directions provided to registrants*)

Take hope: mushroom identification becomes easier when the genera are broadly defined. It’s then possible to learn what characteristics place a specimen in a particular genus. This is a “hands-on” workshop and we will use a variety of techniques. Participants will receive a photographic guide grouping the genera of the 150 most common mushrooms in NJMA foray data. The workshop is intended for those who have already taken the Intro to Mushrooms and Field ID workshops, and have attended at least a few forays. Led by Patricia McNaught with consulting expert identifiers Bob Hosh (June 13) and Dorothy Smullen (June 27). *\$25.00 fee for this two-session workshop. Limit 6 participants.*

Saturday, June 14

10:00 am to 3:00 pm – MUSHROOM BREAD WORKSHOP

Hackettstown, NJ (*directions provided to registrants*)

In this hands-on class you will learn how to make three kinds of yeast doughs and then use them to make a variety of yummy mushroom breads. We will be making a traditional *ciabatta* with dried porcini and fresh mushrooms, a no-knead *focaccia* with mushrooms and Many-Mushroom Buns using Chinese bun dough. Students will take their creations home. *\$25.00 fee. Limit 6 participants.*

Sunday, August 17

10:00 am to 1:00 pm – MICROSCOPY FOR MUSHROOMERS

Foran Hall, Douglass Campus of Rutgers University in New Brunswick

Looking at spores under a microscope can instantly point a beginner to the right genus. More advanced mushroomers may look at spore ornamentation or spore size to determine the species. Aspiring experts may be looking for specific microscopic features like cheilosystidia to help them in their quest. So whatever your level of expertise, come to this workshop to learn how to use a microscope or get more out of one that you own. Led by Mike Rubin.

\$15.00 fee. Limit 16 participants.

(continues on the following page)

Sunday, October 19

10:00 am to 12:30 pm – INTRODUCTION TO MUSHROOMS

BEGINNER WORKSHOP (Location to be determined)

Learn how mushrooms are more like people than like plants, how they mate (the mushrooms, not the people), and how they help trees. Terri Layton and Patricia McNaught will present an overview of fungi that is suitable for the new mushroomer, and for the enthusiast who wants to learn more about the structure, life cycle and ecology of mushrooms. *\$5.00 fee.*

Sunday, October 19

1:00 pm to 3:30 pm – COLLECTION AND FIELD IDENTIFICATION OF MUSHROOMS

BEGINNER WORKSHOP (Location to be determined)

Jim Barg will enable the enthusiast to collect mushrooms safely and learn how to identify fungi through field characteristics and assignment to Friesian type. It is essential for any mushroomer who is tired of flipping through field guides in the hope that a picture will resemble the specimen in question. *\$10.00 fee.*

INSTRUCTORS

Jim Barg can do everything with mushrooms superbly – find them, identify them, photograph them and cook them. He is also one of the people who make enormous contributions to NJMA behind the scenes. He is Art Director of our newsletter and website.

Terri Layton joined NJMA in 2004, and was Foray Chair for NEMF 2012. She is a semi-retired CPA who met some wonderful and welcoming folks at NJMA. She returns the favor by serving as Outreach Coordinator and Fungus Fest Chair for NJMA.

Patricia McNaught is an unapologetic science geek, who finds in fungus a convergence of her love of science and the outdoors. For years she did flavor and food research, then taught high school science, and still tutors chemistry and physics.

Jim Richards has worked in professional kitchens and still works as a framer, including several NYC museums among his clients. In addition to editing the newsletter, he coordinates the NJMA Culinary Group which has been going nearly as long as NJMA.

Dorothy Smullen has more than thirty years' experience collecting, identifying, and especially, learning about mushrooms, lichens and other creatures of the natural world. She leads workshops at the New Jersey Audubon Society, and serves as an expert fungi identifier at regional (NEMF) and national (NAMA) forays. She is an NJMA trustee.

Bob Hosh recently retired from his position as Government Documents Specialist at the Rutgers Libraries. He learned his mushrooming skills in an adult education course taught by mycologist Professor Robert Schaefer from the University of Michigan in Ann Arbor, a very long time ago. Bob does cooking demonstrations at Fungus Fest and fed a dozen mushroom dishes to 175 people when NJMA hosted NEMF in 2012.

Mike Rubin received his Ph.D. in Microbiology from Rutgers and works in the pharmaceutical industry. He has been an NJMA member since 1984 and besides serving as Taxonomy Chair is frequently found working at essential but unglamorous tasks at NJMA. He sees what needs to be done and does it.

Ivelisse Irizarry has a B.S. in Industrial Microbiology, an M.S. in Environmental Science, and is currently a Teaching Assistant and a Ph.D. candidate at Rutgers. She has been involved in various research projects on microbial endophytes and symbiotic fungi since 2005.

A printable version of the Education Workshops Registration Form is on page 19.

Foldscope – A microscope for a dollar?!

Original article from *The New York Times*: <http://tinyurl.com/kcpjw7f>

Website of the creator: <http://www.foldscope.com/>

Original publication by the creator: "Foldscope: Origami-based paper microscope", James Cybulski, James Clements, Manu Prakash (arXiv:14.03.1211 [physics.optics])

Cornell library link: <http://arxiv.org/abs/14.03.1211>



The Vietnamese appetizer spread



Jim Richards "blessing" the food beforehand!



Shrimp in Caramel Sauce



The Spiced Fruit Bowl, one of the popular desserts



Time to dig in!

Vietnamese Food in the NJMA Culinary Group Way

by Marja vanOuwkerk

On March 8, about thirty eager virtual travelers experienced a delicious variety of Vietnamese delicacies. The menu was loosely based on traditional family meals which consist of several appetizers, followed by a large pot of steaming broth (*pho* – pronounced like fun, without the n) to which a wide array of additional ingredients is added depending on the diner's preferences.

Vietnamese ingredients vary depending on the region of the country. One area is more fish-based, while others are based on meat. There is also still an influence of the former French colonial cuisine, including a type of sandwich, *bahn mi*.

We started with the appetizers, which included Spring Rolls, a crunchy Cucumber Salad, a Table Salad comprising many different greens, including fish mint, which had a very distinctive flavor. A Green Papaya Salad was wonderfully tangy and crunchy. Shrimp in Caramel Sauce, lovely Spinach and Mushroom Pancakes, a tasty Asparagus and Shiitake Stir Fry, steamed Jasmine Rice and fish-based and vegetarian dipping sauces.

After the appetizers, the group started on the noodle soups, a rice noodle *Pho* with beef and a vegetarian noodle soup, these were garnished lavishly with the addition of herbs, greens, sprouts and thinly sliced meats. Many fresh herbs and greens are used to complement the broth, which is poured onto the greens, just barely "cooking" them, as was the case with the thinly-sliced raw beef added to the beef broth, which instantly turned it from bright red to pink.

Most of us went back for seconds and thirds with differing combinations of additional ingredients. To cap the meal off, there were some delicious desserts, including tangy Tangerine Ice, Currant Cookies, Spiced Fruit Bowl, crunchy Sesame Cookies and smooth Coconut Flan, accompanied by teas and coffees.

A wonderful evening was had by all with great company and new friendships being forged. We look forward to the next dinner, later this summer with a Southwest theme.



Another popular dessert item, Currant Cookies from Dan Strombom

BYTES, BITS, & BITES (continued from page 9)

looking. I dashed home after the talk and the very first ladybug I looked at was full of yellow hair-like Labouls. Happy hunting !

a video from Judy Glattstein:

Phallus indusiatus

<http://tinyurl.com/kppynaq>

from the Editor:

Preparing mushrooms – from the *Food 52* blog:

<http://tinyurl.com/mq3tdeh>

from Dorothy Smullen:

An article on fungi in New Jersey Wildlife:

<http://tinyurl.com/kaqjz5w>

from Judy Glattstein:

A rare Northumberland fungus

<http://tinyurl.com/nrwgn72>

from Mike Rubin:

I saw this article on fungi and bananas and thought it would be interesting for the newsletter, or even as a lecture.

<http://tinyurl.com/kgo3zvz>

from Judy Glattstein:

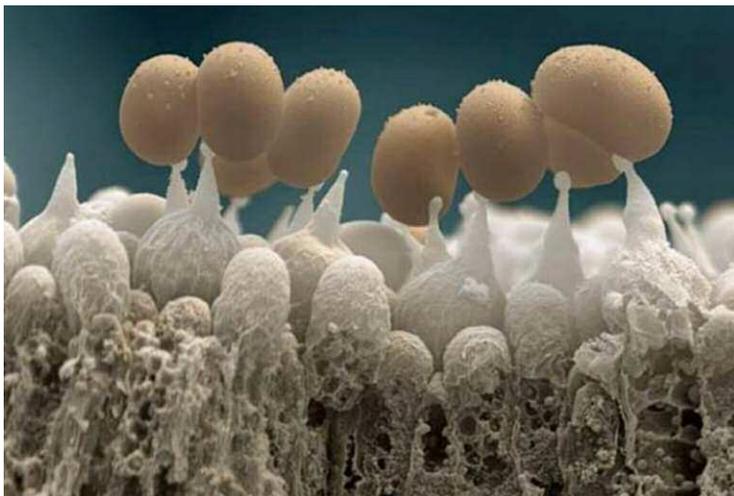
Hi Jim,

I'm cleaning out old e-mails. Came across this one with several fascinating images. Thought this one of mushroom spores would amuse you.

Amazing Scanning Electron Microscope Photos

All these pictures are from the book *Microcosmos*, created by Brandon Brill from London. This book includes many scanning electron microscope (SEM) images of insects, human body parts and household items.

These are the most amazing images of what is too small to see with the naked eye.



from Dorothy Smullen:

I just found out Duke Farms is having a Bioblitz on Saturday, June 28. I have said I will be there. I'm hoping many of you and more will be able to help out. Details will follow. Please let me know if you are interested.

(Patricia notes that there is a NJMA Foray at 10:00 am at Lake Occquitunk)

ALSO...The 10th UNION County Bioblitz will be held on June 13-14 (Friday night through Saturday 5 pm) at Ash Brook and Oak Ridge Parks in the Scotch Plains, Fanwood area. Everyone who is interested *must* sign up online...

It's easy – just search for Union County Parks – click on events at the right and you'll see a box in the summer line (Bioblitz)...click on that and then hit the line to register.

from the Editor:

From *The Vicar Died Laughing* blog:

Wild Mushroom Ragu

<http://tinyurl.com/lzpg6r>

(Marigold Bouillon is a vegetarian product – available on Amazon)

from the Editor:

From *FWX* blog:

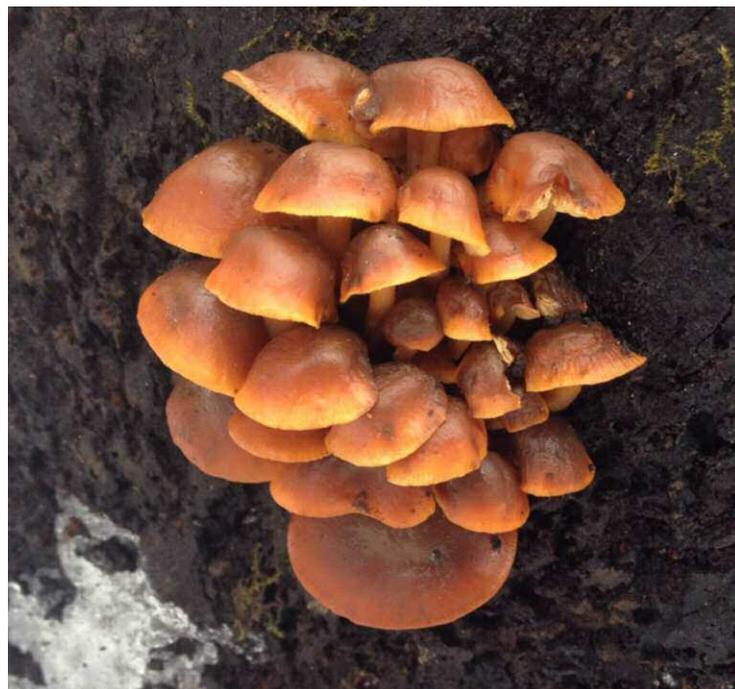
Seven facts you never imagined about mushrooms:

<http://tinyurl.com/ll8fawh>

from Stephanie Ritson:

Hi Jim.

I saw my first signs of fungal life here in Hackettstown this morning. Just thought I'd share. :)



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

from Igor Safonov:

Could this be *Flammulina velutipes*?

from Jim Barg:

I can't see the base of the stem, which would firmly plant the ID as *Flammulina velutipes* if it were darker brown and velvety. But, seeing that it's growing in a cluster, and that there aren't very many fungi that fruit on wood at this time of year, they're brown with a light margin, and they're growing on wood, *Flammulina velutipes* would be the first thing I'd refer to in my field guides. See if you can get a picture with a better view of the bases of the stems.

from Nina Burghardt:

Before I would eat this mushroom, I would check to see if it had a black foot at the base of the stipe. I cannot see it in the photo.

from Liz Broderick:

Hi Jim,

Thought this might be newsletter – worthy or at least including the link if it's too lengthy.

<http://tinyurl.com/m2urtex>

from Judy Glattstein:

...except at least half of them are frequently foraged.

<http://www.mostunwantedweeds.com/>

Ah well. – Judy

from Bob Hosh:

Here's one of the weirder fungal items: Rather ghoulish, but interesting. – Bob

<http://tinyurl.com/ljrtbe3>

from Mike Rubin:

Naming of Fungi from *Science News*

<http://tinyurl.com/lxnhsva>

from the Editor:

More than you really want to know if you ever go outside:

<http://tinyurl.com/lxztlfq>

And even more in the May 2014 issue of *Prevention Magazine* about Lyme Disease and Borrelia.

from the Editor:

The Foray Labrador Newfoundland newsletter devoted to Morels, check out *Omphalina* Vol V. issue 2

<http://nlmushrooms.ca/O-V-2.pdf>

NOTE: You may wish to copy the other side of this page before clipping and mailing this application.

REGISTRATION FORM for NJMA EDUCATION WORKSHOPS 2014

You can also register fast and easy ONLINE at www.njmyco.org/education.html using PayPal®

NAME _____

ADDRESS _____

TOWN/ZIP _____

PHONE _____

EMAIL _____



Please mail your check, along with this completed form, **at least 10 days before the first workshop** for which you're registering. Remember – some workshops are limited in size.

Send check, payable to "NJMA", to:

Igor Safonov, 115 East King's Highway, Unit #348, Maple Shade, NJ 08052-3478

| | | | | |
|-------------------|-----------------------------------|----------------|---------|-----------------------|
| JUNE 8 | USING DNA TECHNOLOGY | \$10.00 | x _____ | persons = total _____ |
| JUNE 13/27 | IDENTIFICATION TO GENUS | \$25.00 | x _____ | persons = total _____ |
| JUNE 14 | MUSHROOM BREAD WORKSHOP | \$25.00 | x _____ | persons = total _____ |
| AUGUST 17 | MICROSCOPY FOR MUSHROOMERS | \$15.00 | x _____ | persons = total _____ |
| OCTOBER 19 | INTRODUCTION TO MUSHROOMS | \$5.00 | x _____ | persons = total _____ |
| OCTOBER 19 | COLLECTION / FIELD I.D. | \$10.00 | x _____ | persons = total _____ |

Questions? Call Igor Safonov at 215-716-1989
or Patricia McNaught at 908-766-9565

TOTAL AMOUNT ENCLOSED \$ _____

NJMA NEWS

c/o Jim Richards
211 Washington Street
Hackettstown, New Jersey 07840

FIRST CLASS MAIL

NJMA is a non-profit organization whose aims are to provide a means for sharing ideas, experiences, knowledge, and common interests regarding fungi, and to furnish mycological information and educational materials to those who wish to increase their knowledge about mushrooms.

IT CAME FROM THE SWAMP!

***Mitrula paludosa* – The Swamp Beacon**

A brightly-colored (but diminutive) fungus which grows in swamps and bogs, usually on floating dead leaves.

