





# NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION  
Volume 41-4 July - August 2011



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Bob Hosh, Jim Barg

## NJMA NEWS

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10<sup>th</sup> of even-numbered months.

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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!

## CALENDAR OF UPCOMING EVENTS

- Sunday, July 10**  
**10:00 am**  
**FORAY: MANASQUAN RESERVOIR ENVIRONMENTAL CENTER** *Leader: Patricia McNaught*
- Saturday, July 16**  
**10:00 am**  
**FORAY: MEADOW WOOD PARK** *Leader: Dorothy Smullen. Special guest mycologist: Walt Sturgeon*
- Sunday, July 31**  
**10:00 am**  
**FORAY: WAYWAYANDA STATE PARK** *Leader: Nina Burghardt*
- August 4 -7**  
**NAMA FORAY**
- August 11-14**  
**35th Annual NEMF SAMUEL RISTICH FORAY**  
*(See article by Susan Hopkins on page 6)*
- Sunday, August 21**  
**10:00 am**  
**FORAY: RANCOCAS AUDUBON NATURE CENTER** *Leader: Glenn Boyd*
- Saturday, August 27**  
**10:00 am**  
**FORAY: HOFFMAN COUNTY PARK** *Leader: Bob Hosh*
- Sunday, August 28**  
**10:00 am**  
**FORAY: STEPHENS STATE PARK** *Leader: Randy Hemminghaus*
- Saturday, September 10**  
**10:00 am**  
**FORAY: WASHINGTON CROSSING STATE PARK** *Leader: Glenn Boyd*
- Saturday, September 17**  
**10:00 am**  
**GRETE TURCHICK FORAY & PICNIC STOKES STATE FOREST, KITTLE FIELD AREA** *Leader: Steve Zahorbenski. Bring food to share and your own picnic gear.*
- Sunday, September 18**  
**1:00 pm - 4:00 pm**  
**NJMA's 40th ANNIVERSARY CELEBRATION!**  
**Willowood Arboretum, Far Hills, NJ**  
Program will be followed by a buffet lunch. Free to attend, but registration is required. RSVP by September 1 to Igor Safonov at [igs109@yahoo.com](mailto:igs109@yahoo.com)  
Directions will be provided upon RSVP. Come celebrate with us!
- Sunday, September 25**  
**10:00 am**  
**NJMA FUNGUS FEST 2011**  
**Frelinghuysen Arboretum, Morristown**  
Volunteers needed! Contact Terri Layton at [mycoterri@verizon.net](mailto:mycoterri@verizon.net)
- October 7-9**  
**NJMA VICTOR GAMBINO FORAY**  
**Kings Gap Environmental Center, Carlisle, PA**  
Registration is required. A registration form is on page 11.  
Coordinator: Margaret Papai, [papai@rci.rutgers.edu](mailto:papai@rci.rutgers.edu)

### 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.



## PRESIDENT'S MESSAGE

It has been a strange spring, the world was supposed to have ended in May and we found a *Leccinum* in the Pine Barrens during our trip to Franklin Parker Preserve (FPP) in May.

This was the first FPP foray for 2011 organized by Nina Burghardt. Some of you may think it's crazy to stomp around to look for mushrooms in May, especially in the Pine Barrens, but if you have not yet seen the beautiful flora and mushrooms like *Mitula elegans* (Swamp



PHOTO BY JOHN DAWSON

Beacon), that grow in bogs, it is a sight to behold. If you are still not impressed or curious about the flora of the Pine Barrens, how about the fact that we saw a very large, just-molted male Eastern Pine Barrens Timber Rattlesnake (another story altogether)? Getting back to the *Leccinum*: as we were near the end of our foray, Nina plucked it out of a sand dune and held it up for all of us to admire. Finding this rare treasure sent some Bolete lovers running back into the barrens a few days later despite fears of chiggers and other blood-sucking creatures looming in the highbush blueberry patches.

The morel hunt at Princeton Water Works went off without a hitch, and there were many members present who we see only once a year. Judging by the smiles on most faces, we did pretty well. New members Lynn and Paul Hugerich got skunked, but were determined to

find morels and went back into the woods after lunch. They came out of the woods beaming ear to ear. Determination and perseverance do pay off.

This year's Education Workshops have been finished and many deserve kudos for stepping up to the plate to fill in for those transitioning back to health (namely, Gene V. and Bob P.) Both Patricia McNaught and Igor Safonov spent a whole lot of time putting together the program and registering members, respectively. It would be good to remind ourselves that things like these seem to appear magically only because of much hard work by dedicated members. Please read the workshops recap in this issue for details on each workshop.



PHOTO BY TERRI LAYTON

*A springtime Leccinum aurantiacum at Franklin Parker Preserve.*

On the Public Outreach Programs front, we completed two events in April. Randy Hemminghaus (our VP) and A.J. Bozenmayer represented NJMA at Manasquan Reserve. After having attended a public outreach program, Randy suggested making videos of our forays and a short lecture to show the public why fungi ROCK! I think this is an excellent and innovative idea to reach out to the public. I've noticed that some people are reluctant to ask questions (probably because they have no clue about what to ask) so I am all for it. Thank you,



PHOTO BY TERRI LAYTON

*Dr. Walter Bien of Drexel University handles an Eastern Pine Barrens Rattlesnake at our first Franklin Parker Preserve foray.*

Randy! We look forward to your videos in the near future. The other event was the Lewis-Morris Earth Day Celebration with NJMA represented by Glenn, Lisa, Igor and myself. A good time was had by all, and Glenn did a lecture on "Why Fungi Rock". Thanks to all who gave up their Saturdays for a good cause.

We had three BioBlitzes during June, all led by Dorothy Smullen. Thank you, Dorothy for tirelessly taking on the task of organizing and identifying fungi at these events. Dorothy is always looking for a few good members to help make these events a success. You don't have to know a thing about fungi. Just going out and collecting is an important part of this process. Besides, they feed you and give you free shirts!

Walt Sturgeon will be our special guest at the Meadow Wood foray on Saturday, July 16. See details on the front page, and be sure to show up and be prepared to stay a bit longer than usual if we find boletes. Walt is one of the best field mycologists, and one of the best field identifiers of boletes.

We just got the word that NAMA is officially fully booked, but there are still rooms left at NEMF in Saranac, NY.

Our annual Victor Gambino Foray will be held in October. Contact our new coordinator, Margaret Papai, and check out the registration form in this issue. I encourage new members to attend this event. There is nothing like spending a whole weekend mushrooming and having fun with fellow mushroomers.

If you can't wait 'til October and are looking for something to do in July, our friends at EPM (Eastern Pennsylvania Mushroomers) are having their annual Miknis foray in Mont Alto. Please contact me if you are interested.

Looking forward to 2012, on August 2-5, NJMA along with EPM and WPMA (Western Pennsylvania Mushroom Association) will be hosting NEMF 2012 at East Stroudsburg University. Plans are well on their way to ensure a successful foray. We look forward to your eager participation. Be sure to mark your calendar now so you don't miss this event.

Online newsletter facilitation will be beginning in October (see membership registration this issue). You will be rewarded if you sign up to GO GREEN. We are offering discounted membership fees as a reward for this. You will also be able to sign up and pay using PayPal beginning on or about July 30<sup>th</sup>.

Happy 40<sup>th</sup> to NJMA! That's right – we are celebrating our 40<sup>th</sup> on September 18, 2011 at the Willowood Arboretum in Far Hills. See the announcement in the calendar on the front page. RSVP will be required.

Happy mushrooming this summer.

–Terri Layton

## WALT STURGEON COMES TO THE MEADOW WOODS FORAY – JULY 16

Walt Sturgeon will be making a special appearance at the Meadow Woods Foray. He is a nationally recognized amateur mycologist who is a recipient of NAMA's Award for Contributions to Amateur Mycology and NEMF's Friend of the Amateur Award.

He has authored numerous articles on mushrooms and is an award-winning photographer. He is a consultant and photographer for the Audubon Field Guide. He serves as President of the Ohio Mushroom Society and is a poison center consultant.

Walt is an excellent field mycologist and will be discussing whatever (hopefully some boletes) we find at the foray. If you have not attended his lectures before or don't have a chance to attend either NEMF or NAMA forays this year, here is your chance to spend a whole day with one of the very best and be entertained by his wit!

Come and be prepared to have fun and learn from the expert! Dorothy Smullen will lead the foray.



Lance B, Walt Sturgeon, and Susan Hopkins at King's Gap 2009

## NJMA CULINARY GROUP NEEDS A TEMPORARY HOME

While we try to find a suitable location for our next dinner, the NJMA Culinary Group is currently "on hold". We usually have a summer cookout at the home of one of the group's members. For the last several years, we have met at Bob Hosh's home at Hageman Farm in Somerset. Because of construction and work on the premises this summer, and with Bob's health problems, we are unable to use his place this year. We have sent out several emails to group members asking for a volunteer to host the dinner but with no response – of any kind!

We basically just need a place where we can set up a couple of grills and where there is table space (we can bring tables and chairs) outside in good weather and indoor space for about twenty people if the weather turns nasty. If you have (or know of) an alternative, please contact me at [jimrich17@mac.com](mailto:jimrich17@mac.com) (908-619-1438) or Bob at [gombasz@comcast.net](mailto:gombasz@comcast.net) (908-869-6962).

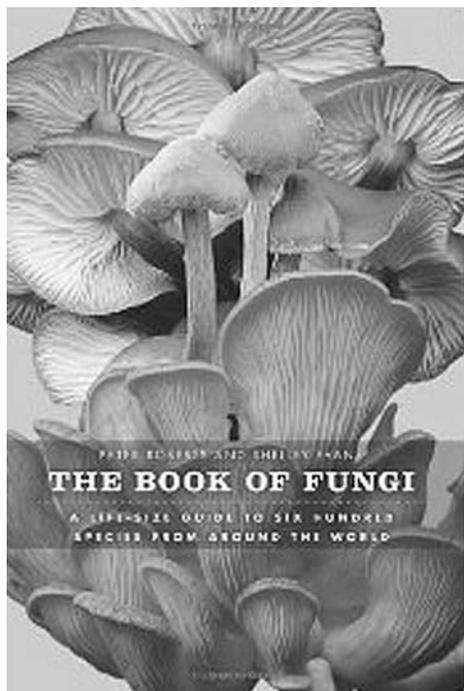
## BOOK REVIEW

# THE BOOK OF FUNGI: A LIFE-SIZE GUIDE TO SIX HUNDRED SPECIES FROM AROUND THE WORLD

**Authors: Dr. Peter Roberts and Shelley Evans**  
**University of Chicago Press, 2011**

List price: \$55; current Amazon price \$35 (free shipping available)

Reviewed by Patricia McNaught



It's hard to categorize this book. At a weight of seven pounds and 655 pages, it's definitely not a field guide.

Yet the way crucial information on family, habitat, association, growth form and spore color are neatly tabulated for each species would put many a field guide to shame. The authors' scholarly credentials are impeccable, but the emphasis is not on

technical details of the fruiting body. Even so, descriptive details are included in a sidebar for each species. In the forward, the authors describe the book as a celebration of the kingdom of fungi, with each species selected "not just for its appearance, but also for the role it plays in the great chain of life". On this basis, the book succeeds admirably.

In the introductory section, the authors use simple, straightforward language to describe fungi as decomposers and partners of plants and animals.

The main section of the book consists of descriptions of the 600 species of fungi. The format is one page per species, with one or more photographs of the fruiting body on a white background. A line drawing of each species highlights particular features not shown in the photos. The photos are excellent, as is the layout. A map at the top of each page shows the worldwide distribution for each species.

The main text for each species covers points of interest in a conversational tone. For example, *Marasmius crinisequi* sends a net of rhizomorphs over living branches in the tree canopy to capture dead leaves before they fall to the forest floor. And the Achomawi of California used

*Letharia vulpine* (a lichen) to poison arrow tips.

The discussion of similar species is helpful; it often references species that differ only by microscopic characteristics, or by their mycorrhizal partner. It extends the number of species discussed in the book to a number much higher than 600.

The species are organized into groups: agarics, boletes, bracket fungi, etc. Within each group they are ordered alphabetically by genus and species. Although there is not a key *per se*, there is a picture guide to the fungi which can guide the reader who is looking for a particular fungus.

A broad selection of fungi are included: crust fungi, flask fungi, club and coral fungi, and even lichens are well represented. All parts of the globe are represented: there are fungi that occur only in New Zealand, or South America, or Africa included in the selections.

The common names for each species seem to come mainly from the British 2003 *List of Recommended Names for Fungi*, and I suspect will be ignored by American readers; we are hardly likely to start calling russulas "brittle-gills". Unfortunately, synonyms for the scientific name are rarely included. Since the index by scientific name is by genus and species only, it can be tough to locate by name a fungus that has been reassigned to a new genus.

For me, the positives outweigh these negatives. I love the detail given by life-sized photos. I'm fascinated by the maps of the distribution, and I'm a sucker for the odd tidbits of information.

This is a book for those of us who think that fungi are intriguing, mysterious and beautiful. It won't replace your field guides, but it will ease your pain when you're not able to get out into the field. 

## FORAY REPORT

### MAY 1<sup>ST</sup> PRINCETON WATER WORKS

by Randy Hemminghaus (foray leader)

The weather leading up to the first foray of the season had been dry and pleasantly warm. About 25 people came to Princeton for the foray. The day was dry with a temperature of about 70. We were mainly looking for morels; but several other species were also found. The site has typical morel habitat: rocky, wooded slopes with mature trees, bordered by wet woodlands and marsh. It was a wonderful day in the woods, especially for the forayers who found morels in abundance.

#### *Oops. Same genus, different species...*

*The mushroom pictured on the back page of the last issue of NJMA News was incorrectly identified as Gyromitra esculenta. It is actually Gyromitra brunnea. Thanks to all who noticed!*

# NJMA SPRING 2011 WORKSHOPS – AN OVERVIEW

by Terri Layton

We started this spring season with “Introduction to Mushrooms” (with the old proven material mixed in with a slight new twist) and “Collection and Field ID” (formerly known as Gilled Mushrooms Field Identification).

This year, we added “Using Keys to Identify Fungi”, “Photographing Fungi”, and “Classification Workshop” to get members one step ahead in preparation for the coming mushroom season. We continue to offer ever-demanding “Cultivation”, “Cooking”, and “Myxomycota”. That just about covers the varied interests of members.

Here are some highlights from the classes:

## ***Introduction to Mushrooms and Collection and Field ID***

Introduction was taught by Terri Layton. Designed for new members, included in the course was an overview of the kingdom and emphasis on roles fungi play in our environment. The more scientific and technical parts were covered by Patricia McNaught and Igor Safonov.

Jim Barg filled in at the last minute for Bob Peabody (who could not teach for health reasons). Jim covered how to collect mushrooms safely and how to identify fungi through field characteristics. Jim certainly was lively and wooed his students with his beautiful mushroom pictures (too bad he can't submit his pictures for our photo contest since he is in charge of it!) and contagious enthusiasm. See Ellen Hess' review in the May/June issue of this newsletter.

## ***Cultivation***

A.J. Bozenmayer held this workshop at his home. A.J. is well known to some of us as a guy who grows blue oyster mushrooms on a phone book. Dr. Gene Varney, who was scheduled to teach with A.J., was not available due to a scheduled surgery. We look forward to A.J.'s ingenuity and his enthusiasm for growing mushrooms. A.J. is scheduled to conduct a workshop on growing mushrooms at the Schiff Nature Center in July if you missed his workshop in May.

## ***Using Keys to Identify Fungi***

Dorothy Smullen taught us the different ways that keys are organized. Dorothy shared many charts she has developed over the years to get to genus/species quickly. Those of us who attended her class did not escape a test (Dorothy is a retired teacher), but we all did well. After the class lecture, we strolled out for a walk on the beautiful trails at the NJ Audubon Center and found some interesting fungi.

## ***Photographing Fungi***

It was a picture-perfect day for a photo class – slightly

overcast! Class started out with a lecture on using different combinations of aperture and shutter speed. How to compose a picture, why use a tripod, why carry an umbrella (especially on a sunny day) and how to brighten up gills and ways to cut down a wind.

Instructor Klaus-Peter Steitz encouraged us to take many pictures and to experiment with different combinations until we get that perfect picture. Hey, it's digital, so it's instant gratification and no cost to print. Klaus-Peter, who, by the way, has been the judge of our photo contest, led us outside after a classroom lecture to practice taking shots. What he emphasized was that we should study the subject carefully and try different angles and play with lighting.

“Make a picture! Don't just take a picture!” is what he said.

## ***Myxomycota – Slime molds***

This class was postponed to this fall or winter. One good thing about slime molds is that they just need a bit of moisture and warmth. Dr. Varney cultures specimens and keeps them in his refrigerator until he needs them. We will let you know when we decide on a new date. Most of us are not familiar with this kingdom and just the name “slime molds” make most people crinkle their nose, but this is probably one of the most misunderstood and unknown groups of fungi. The world of Myxomycota is truly fascinating and beautiful!

## ***Common Genera***

This was a new class added this year. Glenn Boyd taught us how to identify various key macroscopic characteristics and how to narrow down to genus using *How to Identify Mushrooms to Genus VI* by David Largent and Timothy Baroni.

I admit that I have had this book for few years but only cracked it once or twice because, primarily, I didn't know how to use it and secondly (actually the main reason) that there are NO PICTURES. Someone else confessed that they had this book by the bedside maybe hoping for osmosis learning and was equally surprised that it was easier to use when compared to dichotomous keys. I hope to do less flipping through books (looking for pictures) and try this new scientific method to minimize my frustration.

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Thanks to Patricia McNaught, Education Coordinator, for putting together these wonderful workshops. Thanks to Igor Safonov for registering members. Thank you to all the instructors for spending many hours preparing for the classes. And thank you all to those who attended workshops. Without your attendance we would not be fulfilling one of the missions of our club:

*“...to furnish mycological information and educational materials to those who wish to increase their knowledge about mushrooms...”*

# NEMF 2011: AUGUST 11-14 PAUL SMITHS, NY

by Susan Hopkins

If you have any doubt about coming to this years NEMF at Paul Smith's College, I would urge you to sign up now even though by the time you read this it will cost you \$30.00 more. Paul Smith's College is located in the Adirondack Mountains of northern New York State and is about a six hour drive from central New Jersey. After Albany and Saratoga there is very little traffic on the Northway (Rt. 87) and the drive is easy with endless mountains and trees, most notably (from the road) White pines. Up here they think a lot of traffic is six cars stopped at a traffic light.

The 1980 Olympic sites are worth see-ing and along the way to Saranac Lake and Paul Smiths. Even if you do not stop, you can see the ski jumps, Whiteface Mountain and, if you are in Lake Placid, the Herb Brook Olympic Center Arena, site of the 1980 hockey "miracle on ice". The shopping in Lake Placid on Main Street is interesting, but expensive. Watch out for the parking. It is now easy meters or a lot near the Olympic Center for all day. If you need something related to outdoor activities such as camping, hiking, fishing, or boating, this is the area to buy it. If you want to bypass the town of Lake Placid on your way to Saranac Lake and Paul Smiths, look for Old Military Road which is a left fork just after the Intervale ski jumps. You cannot miss these unless it is a very cloudy day. The Horse Show Grounds will be on your right with a great view of Whiteface Mountain. Don't forget to get gas in Saranac Lake – there is no gas station in Paul Smith's.

Two other sites worth visiting while up here are the Adirondack Museum in Blue Mountain Lake, about one and a half hours' drive from Paul Smiths, and the Wild Center in Tupper Lake, which is about 45 minutes

drive from Paul Smiths. The Adirondack Museum is an open air museum featuring displays on regional history and development. Some of the best exhibits are rotating artwork on life in the Adirondack, some by Hudson River artists of the late 19<sup>th</sup> century, rustic furniture of all kinds, hors-drawn logging and snow removal equipment, and they have a fine small boat collection. The

café is small, but adequate, and overlooks an incredible view of Blue Mountain

Lake. Our own Ruth Varney

worked at the hotel that was

on the site where the

museum is today. Ask

her about it. The

Wild Center has

only been open

for five seasons,

but has become

a major cultural

center up here

all year

round. If you

do not have

your own trans-

portation, the

NEMF bunch is

planning an all-day

foray to the Wild

Center on Friday,

August 12, both to visit

the inside and to collect

mushrooms on the grounds. I

have been allowed to pick mushrooms

there because they really want an inventory of what

is growing on the property. The vegetation reminds me

of the NJ Pine Barrens, but with mostly Scotch pine and

no oaks. There is one area that has not been disturbed



PHOTO BY SUSAN HOPKINS



PHOTO BY SUSAN HOPKINS

*Paul Smiths Library*

too much, with a trail down to an overlook of the Raquette River. This is where the mushrooms grow – lots of good variety. There is a good soil/forest floor display with authentic-looking models of mushroom species we would recognize without their labels.

*(continued on next page)*

The real reason to come to NEMF is for the mushrooms. This area has a lot of conifers – White pine, spruce, balsam fir, scotch pine, hemlock, and tamarack (or larch). What is not conifers is northern hardwood forest consisting mostly of maple, beech, white and yellow birch and aspen, no oaks. This means that the



PHOTO BY SUSAN HOPKINS

mushroom flora is quite different from New Jersey. Many mushrooms we are familiar with grow here in greater numbers. Last year I saw hundreds of *Amanita bisporigera* and *Suillus pictus*. At the 1997 Fungi Fibre Symposium (also at Paul Smith's), we had a table piled high with Lobster mushrooms that came in from every trip. Your cell phones will work on Paul Smith's campus, Saranac Lake, and Lake Placid, but do not expect it to work everywhere else, like in the woods. You can walk in any direction from campus and be in good mushrooming woods within 10 minutes. There is a path from campus over to the Visitor Interpretive Center (VIC), which has miles of easy walking trails (no roots) through many different habitats. I think the VIC will be an earlybird foray, but it is easy to get back to all weekend either by foot or car. The views are amazing any time of year. The NEMF website has a list of this year's faculty and some information on each. Tim Baroni, a good friend of NJMA, is the chief mycologist. Those who are expected to come, as of this writing, are Roy Halling of the NY Botanical Garden, Bart Buyck (we hope) from France, Jim Gouin from Fungi Perfecti, Kathie Hodge from Cornell, Andy Methvane, Gary

Lincoff, Noah Siegel, Roz Lowen, Walt Sturgeon, Bill Yule, our own Rod Tulloss and me (mushroom dyeing this time). Also invited is Sarah Longley, a chef-instructor at Paul Smith's Culinary Arts department, who will be doing a mushroom cooking demonstration.

The food is the usual college stations for many choices and easy continuous flow. They seem to always have an OK salad bar, a hot food area, a pizza area, a cereal and bread area, and drink machines. The cookies are always good. The main food hall is in the Student Center, which is in the middle of the campus with a good view of St. Regis Lake and mountain while you eat. The Student Center will be where the presort, mushroom display, recording (and probably sales) will be – all very close together. The campus is much the same as it was when NEMF first came in 1987. We found over 400 species that year, with 347 people. Let's hope the mushrooms will come up again this year for us. I moved up here for the mushrooms – what more do I need to say?

Hope to see you all soon!

*Editor's note: Because of space requirements, I had to condense Susan's article. If you would like to read more of the travel tips, contact me at [njmaeditor@gmail.com](mailto:njmaeditor@gmail.com) and I will email you an unedited copy.*




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**Gotta mushroom story to tell?**  
Share your experience with fellow mushroomers!

**tell it here!**

Send your articles and photos to [njmaeditor@gmail.com](mailto:njmaeditor@gmail.com)

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## INTRODUCING SOUTH JERSEY MUSHROOM SUPPLY

by A.J. Bozenmayer

NJMA member and Cultivation Group chairperson A.J. Bozenmayer has started a small business to supply mushroom spawn and other mushroom growing equipment and supplies. Called "South Jersey Mycological Supply", the company will focus on offering mushroom growing kits, as well as dowel spawn of mushroom strains isolated from wild NJ specimens.

Current species available: Oyster (both white and blue/gray strains from New Jersey), Lion's Mane (*Hericium erinaceus*) (New Jersey and commercial strains), Reishi (*Ganoderma tsugae*) (Poconos strain), Shiitake (*Lentinula edodes*) (commercial strain), and Enoki (*Flammulina velutipes*) (commercial strain).

The company can be reached at [sjmyco@gmail.com](mailto:sjmyco@gmail.com)

## WHO'S IN A NAME?

### *Geastrum lloydianum*

by John Dawson (twenty-sixth of a series)

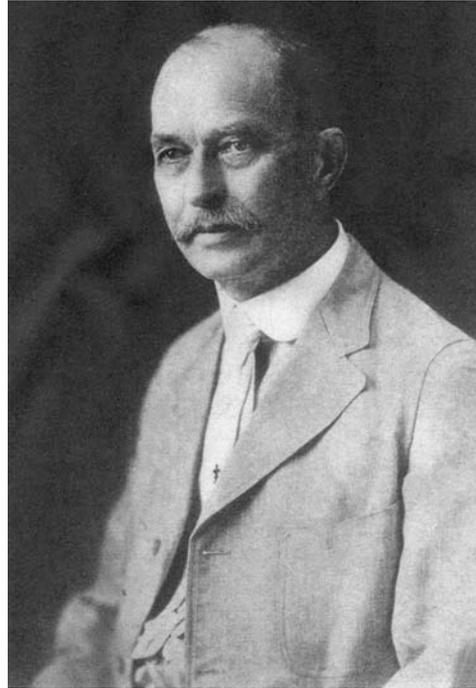
The earthstar *Geastrum lloydianum* (Rick) Ponce de Léon, a spectacular photograph of which may be viewed at [http://www.mycodb.fr/photo.php?file=Geastrum\\_lloydianum\\_2011\\_mp\\_1.jpg&filter=](http://www.mycodb.fr/photo.php?file=Geastrum_lloydianum_2011_mp_1.jpg&filter=), is named after the American mycologist Curtis Gates Lloyd. It is fitting that a gasteromycete be named in his honor, since one of Lloyd's most important publications was a 24-page monograph on that group.<sup>1</sup> Yet Lloyd's ghost might be chagrined at his being so commemorated, since during his life Lloyd became notorious for his unremitting crusade against the citation of authorities for fungal names. Lloyd felt that that practice encouraged mycologists to draw attention to themselves by describing purportedly "new" species too hastily, thereby burdening the field with a proliferating synonymy. In his view, the citation of authorities served no purpose save the gratification of human vanity; he was blind to its usefulness in tracing the naming of species, which in fact makes it *easier* to determine whether a species has already been described in the literature.<sup>2</sup>

Lloyd was born at Florence, Kentucky, on July 17, 1859, the third son of two teachers, Nelson and Sophia Lloyd. When he was nine his family moved to Crittenden, Kentucky, where he lived until 1877. He was educated by his mother in the schools in Florence and Crittenden where she taught, but he never attended any institution of higher learning. Instead, he left home at age 18 to become an apprentice in a retail drug store in Cincinnati. There he earned his certificate as a pharmacist and subsequently became a salesman for a wholesale drug firm. In his spare time he also began to develop a personal herbarium of flowering plants.

Lloyd later became bookkeeper and manager of a publishing firm, and while so employed began, with his brother John Uri Lloyd, to publish a quarterly periodical, *Drugs and Medicines of North America*. In 1886, John Uri and another brother, Nelson Ashley Lloyd, gained control of the Cincinnati pharmaceutical firm of H.M. Merrell, renamed it Lloyd Brothers, and offered Curtis a 1/3 interest in it. Within the firm his job was to locate and describe "plants with known or potential medical benefits", from which his brother John would then attempt to extract useful medicines.<sup>3</sup>

Lloyd Brothers prospered, but in 1887, following a meeting with Andrew Price Morgan, Curtis developed a passionate interest in mycology. He ceased further work on *Drugs and Medicines of North America*, began an intensive study of the gasteromycetes, and in 1905 retired from active participation in Lloyd Brothers. During the next few years he traveled widely around the world, visiting important museums and herbaria and amassing a large collection of botanical books.

In 1907, Lloyd purchased a building at 224 West Court St. in Cincinnati that he remodeled to serve as his home



Curtis Gates Lloyd

and to house the Lloyd Brothers' growing collection of books and research manuscripts. Ten years later he sold his interest in Lloyd Brothers to his brothers and established a trust that opened the Court St. building to the public as the Lloyd Library and Museum, an institution that today (in larger quarters nearby) is one of the largest repositories of pharmaceutical and mycological documents in the world.

From then until the end of his life Lloyd, who never married, used his considerable wealth to pursue and publish his research in mycology, to expand the holdings of the Lloyd Library,

and to preserve important tracts of natural lands. In particular, he purchased a 365-acre farm in Crittenden from a childhood friend, where he experimented with new methods of farming and new types of crops.<sup>4</sup> Left to the state of Kentucky in his will, it is today part of the Curtis Gates Lloyd Wildlife Management Area. Lloyd also purchased three tracts of land in New York, whose management he entrusted to Cornell University. They are known today as Ringwood Ponds, McClean Bog, and the Slaterville Wildflower Preserve.

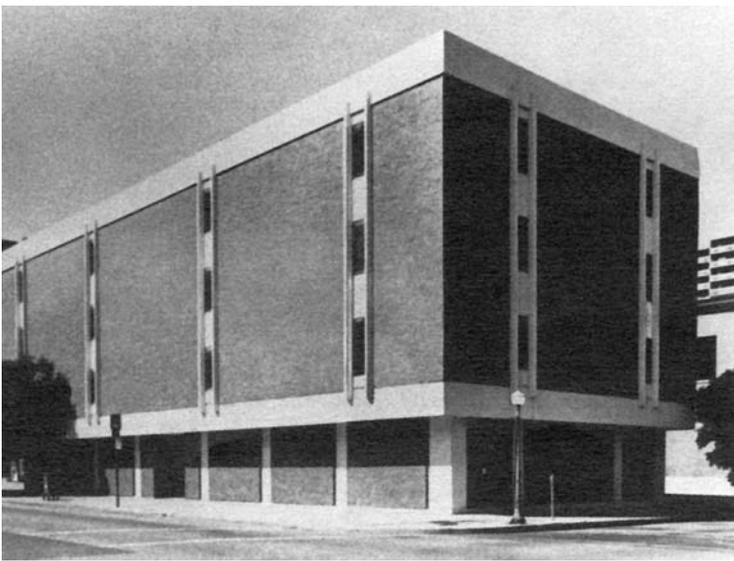
Lloyd published his discoveries and observations in the *Bulletin of the Lloyd Library*, six issues of which were written by him on mycological subjects, and, especially, in his *Mycological Notes*, comprising 75 issues published over a span of 28 years. The latter were "distributed gratis to a large mailing list"<sup>5</sup>, and it was in

<sup>1</sup> C.G. Lloyd, *The Genera of Gastromycetes* [sic], Cincinnati, 1902 (published by the author)

<sup>2</sup> That Lloyd targeted the citation of authorities rather than the eponymous naming of genera and species was perhaps because the latter is usually done by others than the discoverers.

<sup>3</sup> Information in this paragraph is taken from the biographical sketch of C.G. Lloyd at [http://www.lloydlibrary.org/archives/inventories/curtis\\_gates\\_lloyd\\_papers.pdf](http://www.lloydlibrary.org/archives/inventories/curtis_gates_lloyd_papers.pdf).

<sup>4</sup> *Ibid.*



The Lloyd Library in Cincinnati

those self-published volumes that Lloyd, living outside academia and unrestrained by financial concerns or editorial oversight, was free to carry out his campaign against the citation of authorities and to pillory and parody mycologists who published sloppy or hasty work. He did so with apparent relish, even creating a fictional professor, N.J. McGinty, whose spurious reports of bizarre new “discoveries” amused some readers of the *Notes* and gulled others. Indeed, in a 1917 article entitled “The Myths of Mycology” Lloyd confessed that exposing “the mistakes, blunders and personal foibles of mycological writers” was his “chief source of pleasure”. He claimed that in doing so he had “spared neither friend nor antagonist”, but had “always tried to be good-natured”, and that most of those whose works he attacked “took it more as a joke on themselves” and as a mark of his own “idiosyncrasy”.<sup>6</sup> Some, however, especially George Atkinson (profiled earlier in this series), were wounded by Lloyd’s persistent ridicule and never forgave him.

Lloyd is credited with having described about a thousand species of fungi new to science, primarily ones that could be examined without the aid of a microscope. His fungal herbarium, now part of the National Fungus Collections at Beltsville, Maryland,<sup>7</sup> is said to be “especially rich in Gast[e]romycetes, Polyporaceae, Thelephoraceae, [hypogeous] Ascomycetes, and the larger Pyrenomycetes.”<sup>8</sup>

Lloyd died of complications of diabetes in a Cincinnati hospital on November 11, 1926. His body was cremated and the ashes scattered on his farm in Crittenden, near a tombstone<sup>9</sup> he himself had erected five years earlier — as its inscription says, “for himself, during his own life, to gratify his vanity”! His papers are preserved in the archives of the library he founded.

For further information on Lloyd, see the chapter “The Odd Couple” in Nicholas Money’s *Mr. Bloomfield’s Orchard*.



## MEN EXPEND MORE ENERGY IN MUSHROOM GATHERING THAN WOMEN

from *Evolution and Human Behaviour*, May 2010  
via *MushRumors*, Oregon Mycological Society, Jul./Aug. 2010

A recent study tracked the foraging pathways of 21 pairs of men and women from an indigenous Mexican community searching for mushrooms in a natural environment. Using GPS navigation devices and heart rate monitors, Luis Pacheco-Cobos of the National Autonomous University of Mexico and his colleagues followed mushroom gatherers from a village in the state of Tlaxcala for two rainy seasons to see how many mushrooms they gathered and how long it took. The GPS system mapped all the routes taken, and the heart-rate monitors detailed the energy expended.

Results indicated that although men and women collected similar quantities of mushrooms, men traveled farther, climbed higher, and used a lot more energy - 70 percent more - than the women. The men did not move any faster, but they searched for spots with lots of mushrooms. The women made many more stops, apparently satisfied with, or perhaps better at finding, patches of fewer mushrooms.

According to the study, these findings are consistent with arguments that male and female navigational skills evolved differently over time because men were the hunters and women the gatherers. The male strategy is the most useful for hunting down prey—a practice that has led modern man to navigate by creating a mental map, then imagining their positions on it. Women, however, are more likely to recall their routes by using landmarks if they are retracing paths to the most productive patches of plants.



**Over 4,000 years ago, the pharaohs of Egypt believed that mushrooms were the “food of the gods” and had magical powers. They believed eating mushrooms could bring about immortality, and decreed that only royalty could eat them.**

<sup>5</sup> Quoted from the obituary tribute to Gates by H.M. Fitzpatrick, *Mycologia* 19:4 (July/August 1927), pp. 153-159, from which the portrait of Lloyd was also copied.

<sup>6</sup> Quoted by Fitzpatrick, *op. cit.*, pp. 157-158.

<sup>7</sup> As reported by Harold W. Keller and Karl L. Braun in *Myxomycetes of Ohio: Their Systematics, Biology and Use in Teaching* (Ohio Biological Survey, 1999), p. 12. The photo of the Lloyd Library building reproduced herein was also scanned from that source (p. 11).

<sup>8</sup> Fitzpatrick, *op.cit.*, p. 156.

<sup>9</sup> See the photograph of it online at the end of the article [http://www.lloydlibrary.org/history/lloyd\\_brothers.html](http://www.lloydlibrary.org/history/lloyd_brothers.html)

## BOB PEABODY WILD FOODS FORAY AND PICNIC

submitted by Terri Layton

On Sunday, June 12<sup>th</sup>, our walk leader was Ralph Celebre, Registered Herbalist AHG and proprietor of Basil Bandwagon Natural Market in Flemington, NJ. He led our walk in Deer Path Park and talked about the many uses of plants growing around the edges of the park. Ralph has a degree in Environmental Science from Rutgers, and spent a fair amount of time around wild plants while doing his favorite things like backpacking and camping.

Ralph has gardened organically since age seventeen and studied with David Winston, herbalist and NJMA member who was a guest lecturer at our Wild Foods Foray a few years back. Ralph must practice what he preaches judging by his vitality and healthy energy. He talked about the importance of collecting certain plants at the optimum time. Matching plants with the patient is an important ingredient in the success of herbal treatments. It was interesting to find out that using common dandelions, *Taraxacum officinale*, as a diuretic can be beneficial since this weed (many still consider this one) does not leach potassium from the body (unlike most pharmaceutical diuretics). By the way, *officinale* means that it's used medicinally.

After the walk, we stuffed ourselves with a wonderful array of foods that members brought and then lingered on having lively conversations. We had many new members join us, adding a twist to the walk as well as adding new tastes to the table. It's always nice to just sit and talk with people of common interest with your belly full of good food. 

## ATTENTION ARTISTS AND CRAFTERS! FUNGUS FEST ARTS AND CRAFTS

It's not too soon for NJMA's artists and crafters to be thinking about displaying and selling their work at Fungus Fest 2011, which will be held on Sunday September 25<sup>th</sup>.

Last year we had a goodly number of our very talented painters, photographers, papermakers, jewelers, dyers and other talented people who displayed (and sold) some of their work at Fungus Fest 2010. We will again have several tables and panels available for the display and sale of NJMA members' works.

If you have pieces that you wish to display and sell at Fungus Fest, or for additional information, please contact Jim Richards [jimrich17@mac.com](mailto:jimrich17@mac.com) or 908-619-1438 to make sure that space is made available for you. The only charge to sellers is a 20% commission on all sales that will be collected by NJMA. 

## WORKSHOP REVIEW HOW TO IDENTIFY...

by Patricia McNaught

On June 18, Glenn Boyd led a workshop on classification to genus at Frelinghuysen Arboretum in Morristown. Glenn based his workshop on *How to Identify Mushrooms to Genus VI: Modern Genera* by Largent and Baroni. Many of the participants already owned the book; they just had never figured out how to use it. Glenn provided guidance and charts, and slides (pictures) from NJMA's library to practice on. With much discussion, the group worked through the slides and then worked on some of the fresh specimens available. Glenn also discussed how to use the Amanita and Bolete "cheatsheets" he has developed to identify first to section and then to species.

One of the attendees shares his perspective on the workshop:

I went to this workshop to see if I could gain some perspective for identifying mushrooms in a timely fashion. Little did I know the workshop was deeper than I expected. Our goal was finding characteristics of a mushroom that identifies its "stature" so we could then place it in a genus.

Glenn started the workshop with reviewing the physical characteristics of the mushroom. He had great slides that gave us a chance to verbally express what we could see and identify. Glenn was talking about adnexed, decurrent, notched or free gills. It was way over my head. But surprisingly, the group of devoted 'shroomers enthusiastically started using Glenn's chart and helped point out the physical parts of each mushroom and assigning the mushroom to a stature. Amazingly I started to grasp some of that spilled-over knowledge. Everyone was pointing out what was obvious and also what wasn't easily apparent to one's eye. I learned that a good part of the time you can find the color of the spores on the top of the ring, and I also learned the different ways the gills can be attached. The gill edges can even be serrated. The stipe can be cartilaginous or fleshy and snap when you bend it.

The enthusiasm started getting infectious. I even started to pick out characteristics of the margin of the cap and helped with identifying the smell and type of gills. I found it a blessing to have the tables loaded with all types of mushrooms that we could feel, view and smell.

It was a great joy to learn little steps that Glenn and the group pointed out to me with so much fun. The exchange of viewpoints was exciting!

Thank you, Glenn, and group for sharing.

Respectively,  
Samuel Chanowich



# NJMA 2011 Victor Gambino Foray

## King's Gap Environmental Center, Carlisle, PA

Located near Pennsylvania's beautiful Michaux State Forest and Colonel Denning State Park

### October 7-9, 2011

Join your fellow NJMAers at the King's Gap Environmental Center for two nights' accommodations in the mansion, feast on *delicious meals*, and attend forays and lectures – Only three hours away from Morristown, New Jersey!

#### REGISTRATION FEES

**\$175** for two nights' accommodations and meals, including Friday dinner to Sunday lunch.

**\$100** for meals and programs for the entire weekend. No overnight accommodations.

**\$55** for Saturday programs and dinner only. No overnight accommodations.

- **\$30** extra for single occupancy.

*Camping is available at Colonel Denning State Park and at a hostel at Pine Grove Furnace State Park.*

**Register early! Overnight accommodations limited to 30 people!**  
**Deadline for registration is August 20, 2011**

### NJMA 2011 VICTOR GAMBINO FORAY REGISTRATION FORM

NAME 1: \_\_\_\_\_ (CIRCLE YOUR CHOICE)

NAME 2: \_\_\_\_\_ VEGETARIAN MEALS: Yes / No

PHONE: \_\_\_\_\_ ROOMMATE PREFERENCE: Male / Female

EMAIL: \_\_\_\_\_ ROOMMATE NAME: \_\_\_\_\_

I will be attending:  WEEKEND w/ACCOMMODATIONS  WEEKEND-MEALS & PROGRAMS ONLY  SATURDAY ONLY

**Total number of people attending** \_\_\_\_\_ **x FEE** (see above) = \$ \_\_\_\_\_ (Enclose check)  
(Be sure to add \$30 for single rooms)

**Liability waiver:** By signing below, I release New Jersey Mycological Association and King's Gap Environmental Center, and their officers and members, from any and all liability and loss arising from any accident, injury, or illness which may result from activities of the October 7, 8, and 9<sup>th</sup> weekend foray.

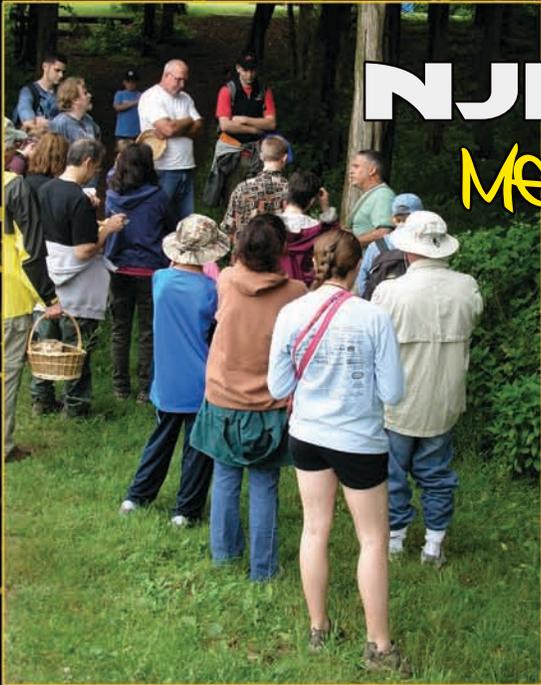
SIGNATURE NAME 1: \_\_\_\_\_

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Make your check payable to "NJMA" and send payment, along with this completed form, to:  
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Telephone: 732-297-4462 • Email for info: papai@rci.rutgers.edu

# NJMA ACTIVITIES

## Members staying involved!



The assembled group listens intently at Wild Foods 2011



Preparing to get stuffed at Deer Path Park.



Wild food foragers out standing in the field.



WILD FOODS FORAY PHOTOS  
BY JIM RICHARDS

Guest group leader  
Ralph Celebre of Basil  
Bandwagon in Flemington  
orients the group at the  
Bob Peabody Wild Foods  
Foray on June 12.



PHOTO BY TERRI LAYTON

Photo instructor Klaus-Peter Steitz with the "Photographing Fungi" class



PHOTO BY PAUL FUNK

Instructor Dorothy Smullen takes the "Using Keys to Identify Fungi" class into the woods.

# OYSTER MUSHROOMS CAN BREAK DOWN 90% OF DIAPER MATERIALS WITHIN 2 MONTHS

by Michael Graham Richard, *Treehugger*, May 24, 2011, via the Puget Sound Mycological Society

Sometimes, discovery is about putting things together in new ways. We know that mushrooms can be great at breaking down pollutants, and we know that disposable diapers are a huge problem, with mountains of the slow-degrading poop-containers filling up landfills. So how about finding a kind of mushroom that feasts on diapers? That's what researchers at the Metropolitan University in Mexico City have apparently done.

In an article published in *Waste Management* (the journal, not the company), Alethia Vazquez-Morillas notes, "Cultivating the right type of mushroom on soiled nappies can break down 90% of the material they are made of within two months. Within four, they are degraded completely."

What is more, she says, despite their unsavory diet the fungi in question, *Pleurotus ostreatus* (better known as Oyster mushrooms), are safe to eat. To prove the point she has, indeed, eaten them.

Oyster mushrooms are good at this job because they feed on cellulose, the main material used in disposable diapers. In the wild, the Oyster mushrooms grow on dead trees, so they have the enzymes to break down cellulose.

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## EAST FUKUSHIMA SHIITAKE BANNED

by Kanako Takahara, *The Japan Times*, April 13, 2011

Prime Minister Naoto Kan on Wednesday banned the shipment of shiitake raised outdoors in eastern Fukushima Prefecture near the crippled nuclear power plant after radioactive substances exceeding the government standard were detected.

Subject to the ban are shiitake harvested outdoors on logs in the cities of Date, Soma, Minamisoma, Tamura, and Iwaki, and the towns of Shinci, Kawamata, Namie, Futaba, Okuma, Tomioka, Naraha, and Hirono as well as the villages of Iitate, Katsurao, and Kawauchi.

"Shiitake mushrooms subject to the shipment ban this time are those raised outdoors and those produced indoors did not exceed the standard," Chief Cabinet Secretary Yukio Edano said. "We will lift the ban when the (level of radioactive substances) stays below the standard in a stable manner."

According to government regulations, a shipment ban will not be lifted unless contamination levels of produce near the Fukushima No. 1 nuclear plant remain below legal limits in three consecutive tests.

A test Sunday found 12,000 becquerels per kilogram of radioactive iodine and 13,000 becquerels per kilogram of cesium in shiitake harvested in Iitate. The figure is well above the legal limit of 2,000 becquerels for radioactive iodine and 500 becquerels for cesium.

Shiitake in Iwaki were found to have 3,100 becquerels of radioactive iodine and 890 becquerels of cesium.

## AN UNKNOWN MYCOLOGIST AND HIS THEORY

by Lawrence Millman, reprinted from the newsletter of the Boston Mycological Society, #66-2

Aficionados of 19th century Russian literature may be familiar with the work of Sergei Aksakov (1791-1859), but I doubt that either these aficionados or mycological bibliophiles are aware that Aksakov was a passionate mushroomer. Toward the end of his life, he began writing a book entitled "Remarks and Observations of a Mushroom Hunter," but only managed to compose half a dozen pages. Even so, this fragment is a remarkable document. Let me quote a few sentences from it:

"I believe that the key to the mystery of mushroom birth lies in the roots [of trees]. This is most convincingly shown by what seems to me an obvious detail: around the tree stumps where a certain species once grew in life-giving shade, that same species will continue to grow for ten years or more. Roots die slowly. When they do die, the mushrooms cease... The complete dependence of mushrooms on the roots of a tree is shown by the fact that certain trees only produce their own kind of mushroom. If only moisture, shade, and coolness were needed, all kinds of mushrooms would grow under all kinds of trees ..."

The German botanist Albert Frank is usually regarded as the first person to propose the close association between tree roots and fungi, but Aksakov wrote these lines some thirty years before Frank drew the scorn of his colleagues with his hypothesis. Could the author of *A Family Chronicle*, among other Russian classics, have been the first person to recognize the existence as well as the importance of mycorrhizal relationships?

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Membership list (pages 14-17 plus this half of page 18  
is not available in this online edition.

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## NEW PAPER REVEALS 100 NEW SPECIES OF LICHENIZED FUNGI

*Press release from The Field Museum. Chicago, February 14, 2011*

In an unprecedented coming-out party, 100 newly discovered species were revealed to the world in a single scholarly paper coordinated by scientists of The Field Museum in Chicago.

The 100 organisms are lichens, a type of fungus that forms associations with algae and populates environments from arctic tundra to tropical rain forests. And the usual inattention bestowed upon new lichens is one reason for aggregating so many new ones in a single paper in the Feb. 18 issue of the journal *Phytotaxa*.

A massive collaboration such as the lichen project has some benefits over traditional biology that is done by individuals or small groups, Thorsten Lumbsch of the Field Museum said. Descriptions of the lichen species provided in the *Phytotaxa* article are more uniform than would likely be true if the 100 new species each appeared in a single article.

Lumbsch and his Field Museum colleague Robert Lücking recruited 102 lichenologists from 37 countries to write the massive paper to help draw attention to huge shortfalls in our knowledge of the diverse life on Earth.

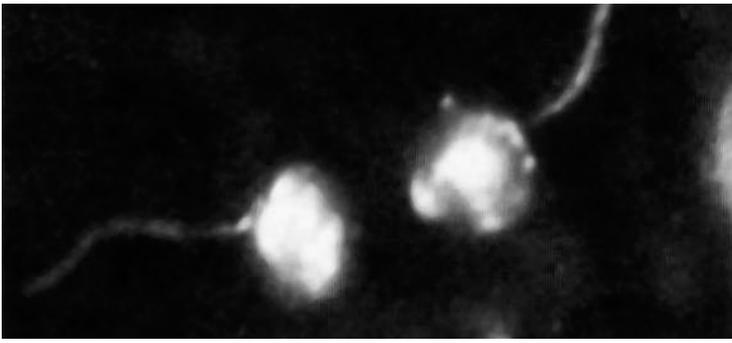
The lichen collaboration is intended to demonstrate to biologists that even though they join with a large group in presenting their findings, they still receive full credit and don't lose authority over their discovery, he said. "We wanted to show these scientists how easy it is to contribute their information to the Encyclopedia of Life and how useful that is," said Lumbsch.

While biology traditionally has been more solitary, many in the field acquired an appetite for larger collaborations with the project to map the human genome more than a decade ago. Since then, such collaborations have become more common, especially in projects that seek to coordinate understanding of life on the planet, Lumbsch said.

Recruiting biologists to join the lichen collaboration wasn't difficult, he said, but "sometimes getting them to pay attention to deadlines wasn't so easy."

The project, which took about a year to complete, would have been impossible without the Internet and e-mail, Lumbsch said, but even with e-mail, communications were very time consuming.

"I would like to do it again," he said. "But first I will talk to some information specialists to learn how we might facilitate communications so my e-mail inbox doesn't keep overflowing!" 



Two fungal cells, possibly from an ancient lineage, each show a curvy, tail-like flagellum during a mobile stage in their life cycle.

## OLDEST, ODDER FUNGI FINALLY PHOTOGRAPHED

by Susan Milius, *Science News*. Reprinted from the newsletter of the Puget Sound Mycological Society, June 2011.

Images of little dots, some wriggling a skinny tail, give scientists a first glimpse of a vast swath of the oldest, and perhaps oddest, fungal group alive today.

The first views suggest that, unlike any other fungi known, these might live as essentially naked cells without the rigid cell wall that supposedly defines a fungus, says Tom Richards of the Natural History Museum in London and the University of Exeter in England. He calls these long-overlooked fungi cryptomycota, or “hidden fungi.” Of the life stages seen so far, a swimming form and one attached to algal cells, there’s no sign of the usual outer coat rich in a tough material called chitin, Richards and his colleagues reported online May 11 in *Nature*.

“People are going to be excited,” predicts mycologist Tim James of the University of Michigan in Ann Arbor, who also studies an ancient group of fungi.

Other research indicates the new group exists, but the current study starts to reveal the biology. “The question is, is there another stage in the life cycle that does have cell walls?” he says.

By analyzing DNA pulled directly from the environment, Richards and his colleagues have confirmed that the hidden fungi belong on the same ancient branch as a known genus named *Rozella*. Although researchers have picked up DNA traces of fungi that didn’t quite fit in any group for at least a decade, the organisms (so far) won’t grow in labs. That in itself isn’t astounding for fungi, which can be difficult to culture.

As the researchers examined DNA sequences from databases, the ancient group “just got bigger and bigger [in genetic diversity] until it was as big as all previously known fungi,” Richards says.

Lakes in France, farms in the United States, and sediment deep in the sea have all yielded DNA sequences in

this group. The one habitat it doesn’t seem to like is open ocean, Richards says. “The big message here is that most fungi and most fungal diversity reside in fungi that have neither been collected nor cultivated,” says John W. Taylor of the University of California, Berkeley.

Exeter team member Meredith Jones spotted the hard-to-detect organisms by marking them with fluorescent tags. The trick revealed fungal cells attached to algal cells as if parasitizing them. One of the big questions about early fungi is whether they might have arisen from “some kind of parasitic ancestor like *Rozella*,” says Rytas Vilgalys of Duke University.

Interesting, yes. But loosening the definition of fungi to include organisms without chitin walls could wreak havoc in the concept of that group, objects Robert L. Uecker of the Field Museum in Chicago. “I would actually conclude, based on the evidence, that these are not fungi,” he says. Instead, they might be near relatives – an almost-fungus.



### *Mushroom Toxicology Simplified*

by Judy Jacob (Boston Mycological Society)

During the course of my research on 18th-19th century architectural-paint recipes (hardly of interest to mycologists, I know), I came across a short note on mushrooms in *The Manufacturer and Builder*. A question is posed regarding poisonous mushrooms and their identification. The answer that is given is clear, concise, and most assuredly eliminates all uncertainties regarding the subject, except for the identification of the mushroom described. That is left up to the reader.

*Poisonous Mushrooms.* – The fall season is the time to search for mushrooms. I know they can be utilized to make a deliciously flavored dish, therefore I wish to ask how the eatable kind may be distinguished from the various poisonous varieties.

– D.M., Belle Plain, N.J.

*Poisonous Mushrooms.* – Fortunately the characteristic differences are so marked that it is quite easy to give a satisfactory answer to this question. For the subject under consideration we may divide the mushroom into three classes – poisonous, non-poisonous but not good for eating, and the eatable ones. Of the latter there are many kinds; one of them, the most commonly used, and largely imported as a preserve, when quite young has the form of a little ball on a short and very thick stem (never pick any with thin stems ; ) this ball soon develops into an umbrella shape, white above with thin flat ribs of a light salmon color underneath; when growing older the salmon color underneath turns into a brown, while the top becomes flat and light brown; finally the top turns up, exposing [sic] the brown nat ribs underneath. When this stage has been reached, the mushroom is no longer fit for eating, not that it has become poisonous, but because it has become tough, and has lost the peculiar agreeable flavor possessed at the earlier stage of growth when the top is white, umbrella-shaped, and the under side of a delicate salmon color.

“Notes and Queries,” *The Manufacturer and Builder*, Volume 8, Issue 12, December 1876, pp. 287-288.

## **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.*

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- **WALT STURGEON VISIT**
- **GAMBINO FORAY REGISTRATION**

*...plus more!*

## ***Lactarius hygrophoroides***

A wonderful early summer edible, it has an orange-brown/velvety cap with widely-spaced gills and bleeds whitish milk when bruised. It has a lookalike (also edible), *Lactarius volemus*, whose gills are tightly spaced with a whitish milk that stains the gills (and your fingers) brown and also has a fishy smell.