



NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION
Volume 37-5 September - October 2007



NJMA OFFICERS

President – Jim Barg
Vice-President – Nina Burghardt
Secretary – Ania Boyd
Treasurer – Bob Peabody

DUES

Payable on calendar year
Individual: \$15.00
Family: \$20.00
Mail checks (payable to NJMA) to:
Bob Peabody
50 Alfalfa Hill
Milford, NJ 08848-1727

NJMA WEBSITE

www.njmyco.org
Bob Hosh and Jim Barg

NJMA NEWS

Editor: Jim Richards
211 Washington Street
Hackettstown, NJ 07840-2145
email: jimrich35@verizon.net

Art director: Jim Barg
email: jimbarg@bssmedia.com

Circulation: Susan Hopkins
Deadline for publication:
10th of even-numbered months.

Send ONLY newsletter submissions to the editor. All other correspondence should be sent to the secretary:
Ania Boyd
181 Highland Avenue
Montclair, NJ 07042

NJMA EVENTS HOTLINE

908-362-7109 for information on NJMA events or cancellations due to bad weather.

**fungus
fest**

SEPTEMBER 23, 2007
Frelinghuysen Arboretum
Morristown
10:00AM - 4:00PM

CALENDAR OF UPCOMING EVENTS

* **Sunday, September 2 10:00 am** **FORAY: Rancocas Audubon Nature Center**
Leader: Nina Burghardt
(A microscope session will immediately follow this foray.)

Saturday, September 8 2:30 pm **NJMA/EASTERN PENN MUSHROOMERS SPECIAL EVENT**
Reknowned mushroom photographer
TAYLOR LOCKWOOD
at Washington Crossing Historic Park,
1112 River Road, Washington Crossing, PA
*Taylor will make a special presentation on his new book, **Chasing the Rain**, and will answer questions and hold a book signing immediately following his presentation.*

* **Sunday, September 9 10:00 am** **FORAY: Washington Crossing State Park**
Leader: Glenn Freeman Special guest: Taylor Lockwood
(Please note that this is our regular foray location, on the New Jersey side of the river!)

Sunday, September 16 10:00 am **GRETE TURCHICK FORAY & PICNIC**
Stokes State Forest, Kittle Field area
Leader: Bob Hosh (Bring a food dish to share, along with a list of its ingredients, and bring your own picnic gear.)

Sunday, September 23 10:00 am **FUNGUS FEST 2007**
Frelinghuysen Arboretum, Morristown
NJMA's MEGA-EVENT! BE PREPARED TO VOLUNTEER
(Help also needed for setup on Saturday the 22nd at 1:00 pm)

September 27 - 30 **NAMA WILDACRES REGIONAL FORAY**
For more information, visit www.nama.org

September 28 - 30 **EASTERN PENN MUSHROOMERS' HELEN MIKNIS FORAY**
For more information, visit www.epennmushroomers.com

* **Sunday, October 7 10:00 am** **FORAY: Cheesequake State Park**
Leader: Bob Hosh
(Be sure to bring your membership card - you may need it!)

* **Sunday, October 14 10:00 am** **FORAY: Brendan Byrne State Forest**
Leader: Susan Hopkins

* **Sunday, November 4 2:00 pm** **MEETING AND LECTURE**
Frelinghuysen Arboretum, Morristown
Speaker TBA - watch the NJMA website!

Directions to forays, meetings, and events are at www.njmyco.org

* An added feature to our forays this year (if we find edible mushrooms) will be "mini cooking classes" which will run concurrently with our post-foray ID sessions, for those who are interested. (Note that this will only happen at NJMA forays, not at NEMF, NAMA, or COMA forays.)



PRESIDENT'S MESSAGE

Yes, it's that time of year again! Club veterans need not read this message, as I'm directing it toward our new members and members-to be.

For those who are new members reading the *NJMA News* for the first time, I want to welcome you to the club. Membership in NJMA is probably the single most rewarding experience you'll ever have as a mushroom enthusiast. NJMA is dedicated to fungal education, and our members, many of whom are considered the world's leading authorities on certain types of mushrooms, regularly attend our events and are always available to help you along. Yes, we get technical at times, and you may sometimes feel "lost in the dust" by big fancy words and microscopic distinctions between species of mushrooms. But let me assure you: Our people are the most enthusiastic you'll ever find, and the amount of knowledge you'll gain in just two hours with them at a foray or meeting will be some of the best time you've ever spent with anyone! I promise! (And in case you don't believe me...even after many years of being a member, these people STILL astonish me with their knowledge and thoroughness with mushrooms.)

Oh yes, we have fun, too! We regularly hold many group forays, culinary events, workshops, and things to keep your enthusiasm for mushrooms at its peak. NJMA is one of the most active clubs in New Jersey, and in any given month (winter too!), we have events going on. One of the highlights of the year for those who are into edible mushrooms is our annual Mycophagy (cooking with mushrooms) meeting, which is held in February. For beginners and the technically-minded, we hold classes in mushroom identification and other mycology topics in the late winter to sharpen up your knowledge. The enthusiasm of NJMA members is infectious, and soon you'll be bitten by the bug and find yourself saying things like "*Lactarius hygrophoroides*", "*Leotia lubrica*", and "*Daedaleopsis confragosa*" as if they were the names of your best friends.

NJMA is a club where you're given an opportunity to pursue any area of mycological interest which you desire. If you're scientifically or biologically inclined, we have the experts and the resources to keep your curiosity and interest going for many years. If you're into photography, we have experts in that as well, and we also hold an annual photo contest. If you are into cooking with mushrooms, you couldn't be in better company. We'll introduce you to some of the most delectable mushrooms which you'll never see in stores. And just as importantly, if not moreso, we'll help you to learn about those dastardly poisonous mushrooms *first*, to help make your mushroom collecting and dining experiences pleasant ones.

And the really fun part is, all your new friends in NJMA won't think you're nuts (like your other friends might!) Happy mushrooming!

– Jim Barg



EDITOR'S NOTES

Thanks to all for their contributions to this issue of NJMA News. For a change, we are in the position of having a surplus of material (and no space to put it all in!) But then, that is why we have a website, www.njmyco.org. I am sure that Jim Barg and Bob Hosh will want to add a lot of the material to the site, particularly a lot of the color photos that we received from Terri Layton, Susan Hopkins, Dorothy Smullen, and Rhoda Roper, to name just a few. With our limit of only one two-sided page of color per newsletter (and needing to use one side for the Fungus Fest poster in this issue), we had to use most of those photos we received inside or beside the articles accompanying them, and in black and white. Hopefully, they will be available in full color on the Internet.

A minor quibble for all of you who send us photos: If you can, please change the file names of your digital files to indicate the subject (even better, the captions for each of your photos) rather than your file number (like DSC98892). If you can do this, it would save an enormous amount of our time and help avoid confusion when we're assembling the newsletter. If you need help in doing this, just ask Jim Barg or myself and we will be more than happy to help in any way. Keeping the subject or caption attached to your photos will prevent slipups and embarrassing errors.

I'd like to give a special thanks to Terri Layton for having contributed what is certainly a record number of articles and photos for this issue. Thanks also to Eastern Penn Mushroomers' president (and NJMA member) John W. Dawson for another chapter in his ongoing series on mycological nomenclature, and also for his article "Newbies" that he wrote originally for the Eastern Penn Mushroomers newsletter.

And it is time, once again, to extend a very, very hearty THANK YOU!!! to Jim Barg for his tremendous talent and for the many, many hours he spends in making all the pieces fit together.

To all NJMA members: Keep the material coming! The deadline for our next issue is **October 10th!**

– Jim Richards

ASK A QUESTION OR SHARE YOUR KNOWLEDGE

NJMA YAHOO GROUP
tech.groups.yahoo.com/group/NJMYCO

A free forum on the Internet for NJMA members to share mushrooming experiences and to freely exchange any kind of mycological information.

For full details on joining this group, see the July/August issue of this newsletter.

Join now, and start communicating!

ADVICE FOR NEWBIES

by John Dawson, President, Eastern Penn Mushroomers
(reprinted from *The Keystone Cap*, newsletter of the Eastern Penn Mushroomers, Summer 2007)

I am pleased that several new members have recently joined our club. The club needs new blood to retain its vitality, and we welcome interested newcomers of all ages and degrees of experience. One of the club's most important functions is to help novices increase their knowledge of fungi and their identification skills; and with that in mind, I offer the following bits of advice.

The question most commonly asked by newcomers at forays is, "Is this mushroom edible?" It's a natural question, since collecting for the table is the primary aim of many mushroom hunters. Unfortunately, however, experienced identifiers are apt to respond to that question in a manner similar to how parents respond to their children's query, "Are we there yet?" That's because, as posed, the question is not a good one, for two reasons:

First, it admits only three possible answers: "Yes", "No", or "I don't know without further study, and may not be able to say even then." No matter which of those answers is given, the questioner will, at most, learn nothing more than whether *the particular specimen in question* is or is not edible. Each time that person finds another mushroom, the question will have to be repeated.

Second, the question puts the burden on the respondent to do all the work, whereas the goal of the questioner *should* be to develop the skills necessary to identify future finds on his/her own. It is better, then, to ask, "How can I tell whether this mushroom is edible or not?", or better still, "If I want to identify this mushroom, how do I go about it?" Those questions express both an interest in learning about mushrooms and recognition that it will ultimately be *the questioner's responsibility* to make the final decision as to whether or not to ingest a mushroom.

The most important fact for novice mushroom hunters to understand is that before a mushroom is consumed it *must be identified to species* (or a closely related group of species), and *there is no simple test* for doing so. Mushroom identification involves studying a lot of references and making a careful and detailed examination of morphological features of specimens. That requires dedication, patience, persistence, a critical attitude ("Does this specimen really exhibit that feature?"), humility (rashness or overconfidence in one's abilities can be very dangerous), and a high tolerance for frustration, since there are so many mushroom species that many specimens collected will not be described in any readily available reference (and some may require microscopic examination or chemical testing to make a final determination).

It takes a lot of experience to become adept at mushroom identification, and there is always the danger of

becoming complacent. So how should a novice start out, in order to minimize the risk involved in consuming wild mushrooms? It is best to concentrate on learning one species at a time, starting with the *most poisonous species* (the genera *Amanita* and *Galerina*, and the common lawn mushroom *Chlorophyllum molybdites*) and going on to those edible species that are *least likely to be confused* with other species (e.g., giant puffballs, shaggy manes, and morels).

Study the field characters of the species in question very carefully, using the keys and detailed descriptions (not just the pictures) in a good field guide. Ideally, compare the descriptions in more than one guide. Pay special attention to discussions of similar species. If at all possible, *get a spore print*, since the color of the spores *en masse* is one of the most important characters for separating different mushroom genera. Also, try to collect specimens showing different stages of development of the mushroom. *Then*, once you've made your best effort to identify your find, ask an experienced identifier for assistance or confirmation.

Having confirmed the identity of an edible species, you should then observe the following precautions if you decide to ingest it:

1. **Double check** to make sure that all your specimens are the same species. Cull out any that look different or decayed, and clean the rest carefully to remove dirt, bugs and contaminants.
2. **Eat only a small amount the first time.** You don't want to become ill from simple overindulgence, and there is always a possibility that you may have an individual sensitivity to a particular species. (I speak from personal experience.)
3. **Save at least one specimen uncooked**, in case you've made a mistake. That way, should you exhibit symptoms of poisoning, an expert can tell whether the mushroom you ate is the cause.
4. **Do not eat any wild mushrooms raw**, as some (including morels) contain volatile toxins that are destroyed by cooking.
5. **Don't consume alcohol with the mushrooms.**

You will find that our club members are very generous in sharing both their knowledge and their finds, and we encourage you to participate in the club in that same spirit.



A SURPRISE AT MEADOW WOODS?

by Terri Layton

It sure was hot and dry! That translates into not much of a find for the ID table. But wait! Ania Boyd sprang up showering us with her presence equipped with sharp eyes and passion for fungi. She sure didn't miss a beat when it came to identifying various fungi despite her long absence from the NJMA forays...one year exactly, I think. It certainly was nice to watch and listen to her untiring fascination with fungi as she discussed what's what and as she rattled off scientific names as she was pointing out distinguishing characteristics.

We sure missed you Ania!



The heat didn't keep Bob Hosh from cooking up a mean *Lactarius hygrophoides* with noodles in creamy béchamel sauce in a makeshift kitchen. It goes to show that you don't need a fancy kitchen if you are good. Mmmmmmm. Delicious! The cooking demonstration was the first of its kind and popular judging by the number of members hanging around the food table instead of the ID table. Looks like taxonomists have their work cut out for them.

Lack of variety and a number of fungi forced some to fill baskets with shriveled up polypores and mostly-eaten russulas, but not all was lost. Wineberries were in great abundance, and some of us gorged/picked wineberries out in the full midday sun (that is where they grow best)...what were we thinking? I almost got heat stroke and walked around the rest of the afternoon with an ice pack atop my head to chill out, which solicited sympathy from members who thought I had a headache.

Susan Hopkins thought an ice pack to cool off was an excellent idea and complimented my ingenuity. Grudgingly, I had to donate one in gratitude for her compliment, and several witnesses discussed a commercial viability of such idea/product. My mind raced off to an opportunity/possibility of funding my retirement with such a great product. I had a clear vision of me standing next to Tiger Woods who was wearing my ingenious built in icepack hat and attesting to how he was able to

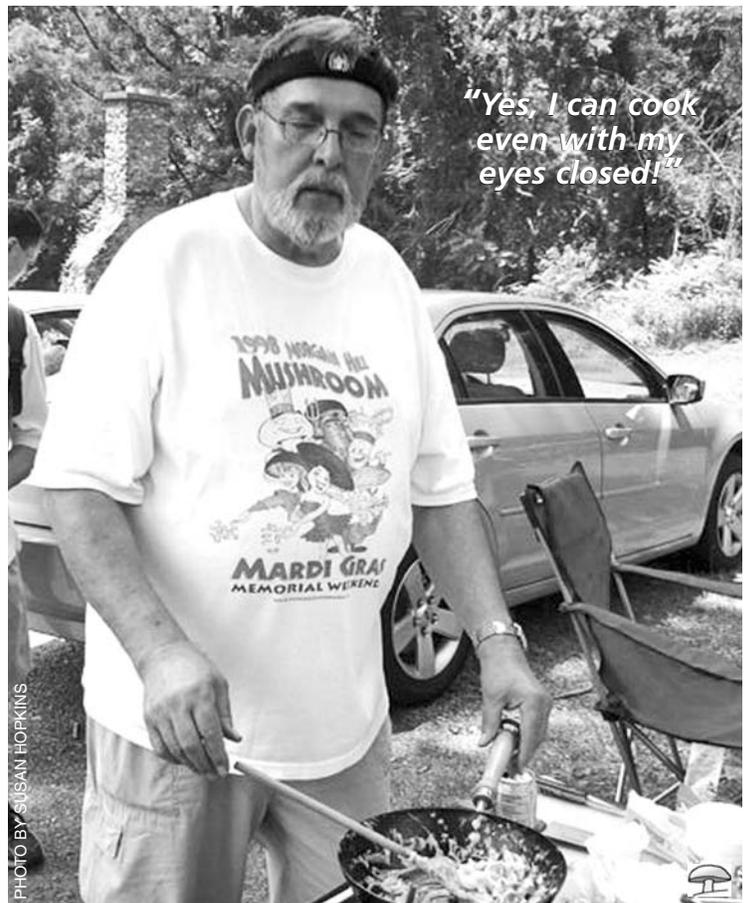


John Horvath, Marc Grobman, and Dorothy Smullen

keep his head cool during the golf championships on a Sunday morning infomercial. But my dream was swiftly and mercilessly crushed when Glenn Boyd, uninvitedly chimed in and announced that he knows of the existence of a hat with a built in mister to keep heads cool. (He should just stick to identifying Amanitas!) Come to think of it, we should order few mister hats and dole them out at our next Executive Meeting.

What silly things we dream and talk about when pickings are slim! But what fun!

All in all, it was a blast to see Ania in her element once again, and her unexpected but pleasant appearance kept complaints about the lack of fungi down to a minimum.





RECIPE FILE

Porcini Perfection

by Mary-Ann Guthrie from *Spores Afield*, newsletter of the Colorado Mycological Society, August 2007

- 1 large clove garlic, quartered**
- 1 1/4 lbs. fresh porcini or other boletes**
- Salt**
- Finely minced parsley**

Preheat oven to 450°. Combine 1/4 cup finest (light) extra-virgin olive oil with one large, quartered garlic clove in a wide ovenproof skillet. Cook on stove top over very low heat for about five minutes until oil is well flavored but garlic not browned; discard garlic. Cut mushroom stems into slices about 1/8 inch thick. Cut caps into slices 1-4 inch wide and 2 inches long. Heat seasoned oil until hot, toss mushroom until coated, salt to taste. Bake in oven until tender, about 5-8 minutes. Serve with parsley.

STINKHORNS ALIVE!



If you look very closely, you'll notice that this stinkhorn is actually a famous mycologist. Can you name him?

(photo by Susan Hopkins, from NEMF 2007)

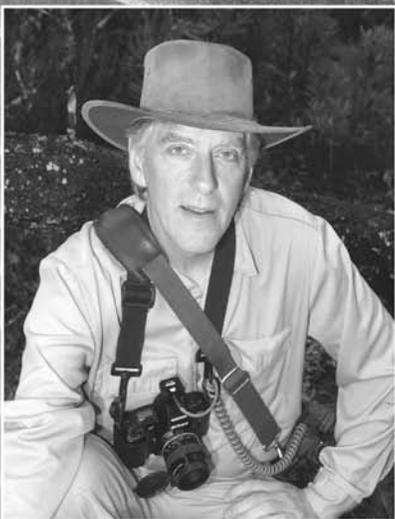
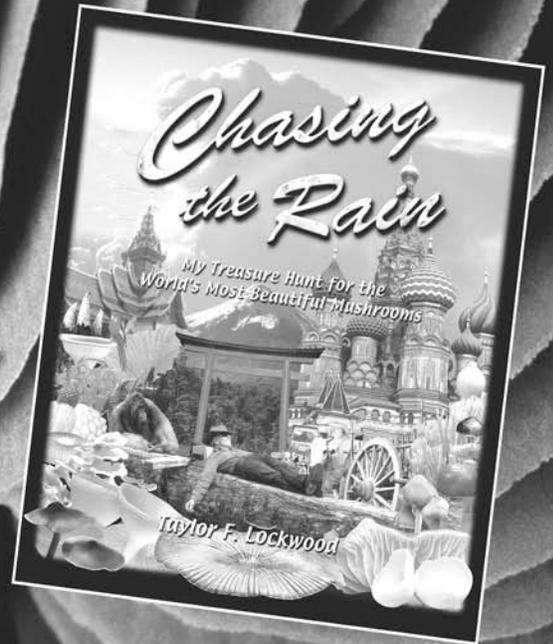
THE NEW JERSEY MYCOLOGICAL ASSOCIATION AND
THE EASTERN PENN MUSHROOMERS PRESENT

MUSHROOM PHOTOGRAPHER & AUTHOR

TAYLOR LOCKWOOD

"CHASING THE RAIN"

MY TREASURE HUNT FOR THE WORLD'S MOST BEAUTIFUL MUSHROOMS



**SATURDAY
SEPTEMBER 8 2:30 PM**

**WASHINGTON CROSSING HISTORIC PARK
(IN THE AUDITORIUM)
1112 RIVER ROAD, WASHINGTON CROSSING, PA**

**FOR MORE INFORMATION:
www.njmyco.org or www.taylorlockwood.com**



It wasn't a large group, but ain't they got fun?

A PEEK AT PEEC 2007

by Nina Burghardt

NJMA's annual Pocono Environmental Education Center (PEEC) foray weekend was held in June. Although it was dry, we did find a few fungi which we identified with the aid of the microscope and chemicals, as well as with books and our shared knowledge.

This year, we had Dr. Brandon Matheny tell us about another identifying tool: DNA. He described how mycologists are matching up fungi into "clades," which contain fungi which might look dissimilar to the naked eye. He patiently answered all our questions and joined us on our forays, as well.

As if that were not enough, Dr. Sang Park shared his lovely pictures of slime molds and helped us identify any which we found. Everyone seemed to enjoy themselves. It was a shame that more people did not attend.



*Leader, organizer, and
NJMA Vice President
Nina Burghardt*



*Dorothy Smullen, former NJMA President Jack Barnett,
Mary Anne Carletta, Rhoda Roper, and Dr. Brandon Matheny*



Dr. Brandon Matheny & Dorothy Smullen

NAMA – PIPESTEM 2007

by Glenn Boyd

We had a wonderful time at the Orson Miller Memorial NAMA Foray at Pipestem State Park. The area was beautiful, the facilities excellent, and the mushroomers, as always, were warm and friendly. The weather was dry, but despite a paucity of big charismatic fungi, the species list topped 330. For us, the fascinating lectures more than made up for dry weather. An unusual twist this year was an emphasis on molecular phylogeny (evolutionary trees), made possible by the attendance of a number of Orson Miller's former students.

The interest in DNA work surprised us, as every lecture was filled to overflowing, and the Saturday workshop extended an extra hour on popular demand. Rytas Vilgalys of Duke University was the star here, discoursing on the methods and conclusions from molecular work. Briefly, they start with a pinch of mushroom flesh in a buffer (CTAB), grind it to release the DNA from the cells, centrifuge the test tube, rinse in ethanol, extract the DNA floating at the top, and replicate the DNA many times via polymerase chain reaction (PCR). Sequencing involves attaching different colored fluorescent chemical tags to each of the four nucleotide bases (the "rungs" of the DNA ladder, denoted G, A, C, T) that make up the DNA code, then recording the colors in order. Based on the similarity of their DNA sequences, organisms can be placed on "family trees" called phylogenetic trees, or cladograms.

As a quick review, DNA base pairs encode the information for the assembly of proteins, RNA, regulatory control, or other functions. For example, the universal genetic code says the DNA sequence GGC will be translated into glycine, one of the 20 amino acids from which all proteins in all organisms are constructed. A string of DNA that encodes for a particular function – say, making a protein out of the specified series of amino acids – is called a gene. The human chromosome 19 is estimated to have about two thousand genes, composed of 60 million nucleotide base pairs.

Due to mutations, genes and non-coding "junk" DNA sequences differ across individuals and species. Molecular studies aim to deduce the ancestral tree of living organisms by comparing DNA. For example, Rytas showed that *Amanita muscaria* contains the sequence CAGCTCT on nucleotide positions 569-575, *Amanita vaginata* also has CAGCTCT, but *Lepiota tomentella* has CAGCTCC. The mathematical algorithm called "maximum parsimony" would conclude that the two *Amanitas* are more closely related than the *Lepiota*. Of course, in real work, hundreds of nucleotide bases are used, not just 7. The latest work also uses 5 or 6 genes – a huge improvement over just one or two genes just a few years ago.

The results of the work – a gigantic worldwide collabo-

ration called the "Assembling the Fungal Tree of Life" (AFTOL) project – change many traditional ideas about classification. While many genera such as *Amanita* are cleanly supported as monophyletic (have one common ancestor, so all the species are closely related), others such as *Tricholoma* are not. In the Saturday workshop, Rytas placed various fungal specimens on a diagram of the latest molecular hypotheses for the orders and clades (groupings) in basidiomycotina.

One of the interesting groupings shows the order Russulales containing not just *Russula* and *Lactarius*, but also *Stereum*, *Bondarzewia*, *Clavicornia*, *Omphalina*, and *Hericium*. Most members of the Russulales have spores with amyloid ornamentation (warts that stain blue in Melzer's), and specialized hyphae that stain black in sulfo-vanillin (like lactifers in *Lactarius*). The Agaricales developed gills independently of the Russulales, giving rise to *Amanita*, *Clitocybe*, and many other familiar genera. Within Agaricales is the family Agaricaceae, which includes *Agaricus*, *Lepiota*, *Lycoperdon*, and the true *Coprinus* (i.e., *C. comatus*). These tend to grow in grassy areas, often give rise to fairy rings, generally have a "ball and socket" attachment of the stipe to the cap, and contain a central cord inside the hollow of the stipe. The Boletales is a sister group to Agaricales, along with some corticioid (parchment) fungi called the Athelioids. The Cantharelloid clade (branch) includes *Craterellus*, but also contains *Hydnum repandum*. This highlights a general finding that the type of fertile surface – gills, pores, teeth – has little to do with ancestral affiliation.

The latest data appear to have very strong support, and validate some earlier work. For example, the Duke lab reported 27 basidiomycete clades (groupings) in 2000 based on a single gene. With five genes, they can resolve 117 clades, but all 27 original ones are included. It seems that DNA may actually foster a classification scheme that doesn't change every few years. One of the advantages of DNA is that anyone can do it – you don't need to be an expert taxonomist with years of experience. Of course, the flip side is that, one day, DNA tests will be so easy and inexpensive (like a Star Trek tricorder, in Rytas's words) that field and microscope expertise will not be needed for identification. This is sobering for those of us who delight in that task, but DNA is also opening up new endeavors in areas like ecology. The ability to ID a scrap of fungal tissue without a fruit body has already brought insights into mycorrhizae, fungal soil populations, fungi that live inside leaves and lichens, and a variety of other areas.

DNA was certainly not the only topic. Many other lectures were excellent, and the display tables sported a number of novel mushrooms. These included a new species of *Xerula* (huge and orange), a rare *Innonotus dryadophilus*, an unknown *Amanita* that looks almost

like a *Leccinum*, and a *Fistulina radicata*. Of special interest for us was a new *Russula*, *R. pallidocrustosa* nom prov, being described by Bart Buyck and David Lewis. As the name suggests, it looks like a pallid crustosa (see photo below).

Our club had very strong representation at NAMA, with at least 20 members present. If you want more details on the event, it should be easy to find someone to give you the scoop.



Russula pallidocrustosa

TWO UNCOMMON NJ MUSHROOMS

by Dorothy Smullen

For the past two years, I have been attempting to catalog the macrofungi at the Great Swamp National Wildlife Refuge. I have been given a special permit to collect some specimens which I photograph and dry. Last year (2006), I came across a beautiful gilled pleuratoid mushroom with a gray quilted-looking cap – a *Hohenbuehelia*. I had never seen a species like this in the over 30 years I have been looking at mushrooms on NJMA forays. I sent the photo to Greg Thorn of Ontario, Canada. He identified it as *H. mastrucata*. This year I turned over a fragile brown-capped fleshy mushroom expecting to find gills underneath. To my surprise, I found white teeth. Susan Hopkins helped me with the identification. It was *Sarcodon atroviridis*. Both of these species have only one record in the NJMA data. The *Sarcodon* was found in the Pine Barrens in 1984 – on a NEMF foray.

I'm not sure whether these mushrooms are common but not usually identified or they really are uncommon or rare for New Jersey. But it certainly is exciting to find something new. (Photos of these mushrooms are on page 10)



PLEASE DON'T LET THEM EAT THE AMANITAS!

by Terri Layton

At one of our recent forays, I noticed a never-before-encountered young man bagging up a rather meaty *Amanita* as our identification was winding down. My curiosity got the better of me, and I asked what he intended to do with the *Amanita*. To my horror, his dinner plan included the lovingly-bagged *Amanita* and he proceeded to ask me for a recipe.

Naturally, I quickly explained the potential downside of eating any *Amanitas*. He seemed just as taken aback as I judged how quickly he dumped the *Amanita* back on the table. I referred him to Susan Hopkins and Bob Hosh who further explained the danger of eating any *Amanitas*.

I know there are member(s) who have tried *Amanitas* and who consume certain *Amanitas* regularly, but when we are representing ourselves at NJMA-organized functions, we need to strictly adhere to NJMA practices, not what we practice privately.

It never hurts to be on the safe side. And to work together.



FOREST SERVICE PLANS BROCHURE ON "HUMONGOUS FUNGUS"

reprinted from *MushRumors*, newsletter of the Oregon Mycological Society. (January 2007 issue)

This summer, the Forest Service plans to publish a brochure about the gigantic *Armillaria ostoyae* underlying 2,200 acres east of Prairie City in eastern Oregon's Blue Mountains, according to an article in the June 10, 2007 issue of the *Oregonian*. The fungus is at an elevation of about 6,500 feet near the Strawberry Mountain and Monument Rock wilderness areas. Some estimates suggest it could be 8,000 years old. said Forest Service researcher Catherine Parks, who has spent ten years studying it. Through DNA fingerprinting and a process called vegetative pairing, Parks' research team determined that the *Armillaria* is a single organism and therefore the biggest living thing on Earth.

An in-depth article about the gigantic *Armillaria ostoyae* is available on OregonLive.com.

Thank you to OMS's James Marshall for the heads-up on several recent fungus-related articles.



WHO'S IN A NAME?

Brefeldia maxima

by John Dawson (part 4 of a series)

As its specific epithet implies, *Brefeldia maxima* (Fries) Rostafinski is one of the largest of all slime molds. (Its aethalia may measure up to 30 cm in length!) In the eyes of many, it is also one of the ugliest. (Judge for yourself: Fine photographs of it at all stages of growth are available at <http://www.pbbase.com/crocodile/brefeldiamaxima>) And that, allegedly, is why the pioneer myxomycetologist Rostafinski chose the name *Brefeldia* for the new genus he created for it: to dishonor the German mycologist Julius Oscar Brefeld (1839-1925).

Rostafinski was not alone in his dislike of Brefeld. Indeed, according to the historical index of mycologists maintained by the Illinois Mycological Society (<http://www.ilmyco.gen.chicago.il.us/Authors/Brefeld671.html>), “almost all the American students who studied with [Brefeld] in Europe ended up leaving his lab because of his personality”. In particular, though highly sensitive to criticism of his own work, in his publications Brefeld lashed out unrestrainedly against colleagues with whom he disagreed – even, in his later years, against his distinguished teacher Anton de Bary, whom he had formerly revered.

Yet however disagreeable a person he was, Brefeld made major contributions to mycology in the face of great personal adversity. The son of a pharmacist, he was expected to carry on his father’s profession; but his interests were wide ranging, and after dutifully passing a state examination in pharmacy in 1863, he went on to earn a doctorate in chemistry. His plans for a career in that field were cut short, however, by a severe attack of pneumonia – the first of a long series of debilitating afflictions.

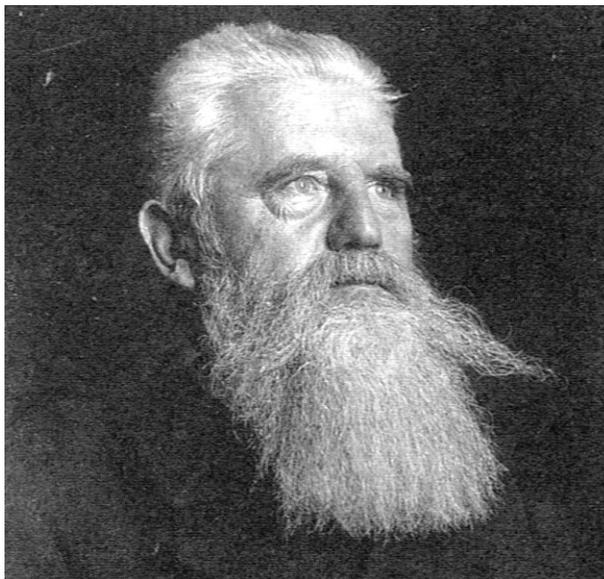
While recovering from pneumonia, he studied art in Italy. On his return to Germany, he then briefly managed the family pharmacy, while on his own he began to undertake research on fungi. In 1868, with his father’s support, he left to study mycology with de Bary in Halle. But those plans, too, were interrupted by the outbreak of the Franco-Prussian war. Brefeld was

drafted for army service as a pharmacist, contracted typhoid fever during the siege of Paris, and nearly died. After being discharged as an invalid, he spent several years convalescing. Eventually, though, he returned to Halle, and in 1871 became a *Privatdozent* (unpaid lecturer) in botany at Berlin.

Three years later he was appointed professor of botany at the Forest Academy in nearby Eberswald, where he suffered yet another calamity: While instructing a class outdoors in the rain, “he caught a severe cold, accompanied by ocular inflammation” that led to “retinal detachment, glaucoma, and surgical removal of [his] left eye”. He then spent another two years recovering from that.

He was finally able to resume mycological work in 1881. Three years later, he moved to Münster, near where he had grown up, and there, as professor of botany at the Royal Botanical Institute, he carried out the research for which he soon became world famous.

Brefeld is known especially for his development of fungal culture techniques. In the entry on him in the *Dictionary of Scientific Biography* (from which the quotations above and much of the biographical information in this article is taken), Claude Dolman describes Brefeld’s cultural methods as “far more precise than Pasteur’s”; and Ainsworth & Bisby’s *Dictionary of the Fungi* notes that Brefeld used gelatin to make solid culture media ten years before Koch (who is often wrongly credited with having developed that technique). Brefeld grew thousands of fungal species in pure culture, demonstrating *inter alia* that cereal smuts could be grown saprophytically. His studies were very wide ranging, including research on the



Julius Brefeld

growth and development of slime molds, Zygomycetes, Basidio-mycetes, Ascomycetes, yeasts, and smuts.¹ He published over forty papers on mycology and plant pathology, and during the years 1872-1912 produced a fifteen-volume compilation of his observations, aptly titled *Untersuchungen aus dem Gesmatgebiete der Mykologie* (Investigations from the Entire Realm of Mycology). Lavishly illustrated, the work was “replete with classic observations, novel findings, and prophetic conjectures, recorded in colorful style,”² and even today

¹Dolman comments that “the indirect practical benefits to North America of Brefeld’s work on smuts, especially of wheat, are inestimable.”

² Dolman, *op.cit.*

³ Ainsworth & Bisby, *op.cit.*

it provides “a mine of details on spore germination and the growth and development of fungi.”³

Nevertheless, as Dolman remarks, that work also “contains some errors of observation and interpretation, as well as ... vituperative passages.” In particular, Brefeld never accepted de Bary’s view (later confirmed) that the higher fungi exhibit sexuality, and he attacked de Bary (to whom he had earlier dedicated the first volume of his *Untersuchungen*) both for holding that belief and for claiming that Brefeld’s thesis that yeasts are conidial forms of higher fungi was “too sweeping”.

Tragedy continued to stalk Brefeld in his later years. He married at age 57, but his wife died six years later, shortly after giving birth to their only child; and three years after that he was forced to give up teaching when glaucoma affected his remaining eye. He resigned in 1907, became totally blind in 1910, and spent his last years in long-term care facilities.



A MUSHROOM JOKE

as told by Judy Stark, reprinted from the newsletter of the Western PA Mushroom Club, August-September 2007

A group of country neighbors wanted to get together on a regular basis and socialize. As a result, about ten couples formed a dinner club and agreed to meet for dinner at a different neighbors' house each month.

Of course, the lady of the house was to prepare the meal. When it came time for Jimmy and Susie Brown to have the dinner at their house, like most women, Susie wanted to outdo all the others and prepare a meal that was the best that any of them had ever lapped a lip over. A few days before the big event, Susie got out her cookbook and decided to have mushroom smothered steak. When she went to the store to buy some mushrooms, she found the price for a small can was more than she wanted to pay. She then told her husband, “We aren’t going to have mushrooms because they are too expensive.” He said, “Why don’t you go down in the pasture and pick some of those mushrooms? There are plenty of them right in the creek bed.” She said, “No, I don’t want to do that, because I have heard that wild mushrooms are poison.” He then said, “I don’t think so. I see the varmints eating them all the time and it never has affected them.”

After thinking about this, Susie decided to give this a try and got in the pickup and went down in the pasture and picked some. She brought the wild mushrooms back home and washed them, sliced and diced them to get them ready to go over her smothered steak. Then she went out on the back porch and got Ol’ Spot’s (the yard dog) bowl and gave him a double handful. She even put some bacon grease on them to make them tasty. Ol’ Spot didn’t slow down until he had eaten every bite. All morning long, Susie watched him and the wild mushrooms

didn’t seem to affect him, so she decided to use them.

The meal was a great success, and Susie even hired a lady from town to come out and help her serve. She had on a white apron and a little cap on her head. It was first class. After everyone had finished, they all began to kick back and relax and socialize. The men were visiting and the women started to gossip a bit.

About this time, the lady from town came in from the kitchen and whispered in Susie’s ear. She said, “Mrs. Brown, Spot just died.” With this news, Susie went into hysterics. After she finally calmed down, she called the doctor and told him what had happened. The doctor said, “It’s bad, but I think we can take care of it. I will call for an ambulance and I will be there as quick as I can get there. We’ll give everyone enemas and we will pump out everyone’s stomach. Everything will be fine. Just keep them all there and keep them calm.”

It wasn’t long until they could hear the wail of the siren as the ambulance was coming down the road. When they got there, the EMTs got out with their suitcases, syringes, and a stomach pump. The doctor arrived shortly thereafter. One by one, they took each person into the master bathroom, gave them an enema and pumped out their stomach. After the last one was finished, the doctor came out and said, “I think everything will be fine now,” and he left. They were all looking pretty peaked sitting around the living room, and about this time, the town lady came in and said, “You know, that fellow that ran over Ol’ Spot never even stopped!!”



HEN-OF-THE-WOODS STOCK

Recipe according to Connie Borodenko, in Connecticut Valley Mycological Society’s newsletter, Summer 2007

From one good-sized hen-of-the-woods, prepare fronds in your favorite way. With the trimmings and the solid core, make a stock by chopping the mushroom into smallish pieces and place in stock pot. Add water to cover. Do not add salt or seasonings at this point. Bring to a simmer and cook for 30 to 45 minutes. Dip out the mushroom solids if you wish to reduce the stock further. Discard solids. Pour stock through fine sieve or clean cloth. Cool and package for the freezer to use throughout the year. Add flavorings of your choice at the time you use stock to make soup.

This is the perfect vegetarian broth according to Connie. It has a depth of flavor and an almost buttery quality. Good hunting!

FOUR MUSH-K-TEACHERS AT RUTGERS

By Terri Layton

Wondering what to do between morel and chanterelle season? Challenge yourself by attending the spring classes which are offered by NJMA at Rutgers (and the Great Swamp Gift Shop) to sharpen your skills as an amateur mycologist and get a jump-start on the season. You can learn to feel confident using a state-of-the-art microscope and make wonderful slides to impress your loved ones. Thanks largely to Dr. Gene Varney's long-time affiliation with Cook College at Rutgers, we have access to a laboratory there.



Teachers Dorothy Smullen, Glenn Freeman, and Gene Varney

Drs. Glenn Freeman and Gene Varney have taught microscopy classes for years. Even if you feel ho-hum about microscopic work, you will catch the bug from Glenn. His enthusiasm for microscopic study is both entertaining and catching. It's so much fun to see Glenn running from one student to another and always getting excited each time as he peers into scope and exclaims "IT'S BEAUTIFUL!", "That's wonderful!", or chuckles and says "Oh, I think that's an air bubble!". If nothing else, Glenn can teach us to distinguish air bubbles from real spores and, more importantly, help us to learn to find pleasure in the most mundane and insignificant things in our lives.

Added to this year's microscopy class was a section on the hand lens. Our teacher, Dorothy Smullen, taught a useful course on how to effectively use the hand lens. It's one of those times I found myself saying "So, that's how that works" and became confident using that little contraption dangling on just about everyone's neck.

Some of us may never actually go out and purchase a microscope for home use, but I guarantee you that once you look through the scope at unexciting looking fungi, you will never look at any fungi quite the same way.

Plain looking brown specs will transform into beautiful objects of art with aid of a microscope and capture your imagination. It's sort of "beauty is more than skin deep".

Microscopes can cost anywhere from a few hundred up to three thousand dollars depending on quality. Some can capture digital images directly from the scope. Maybe we should add a microscopic section to our annual photography contest. Why not? (*Editor's note: There is one already. You can submit microscope photos into the technical categories.*)

I know what you culinary-minded folks are thinking: that's a lot of money to spend to figure out if something is really edible (as my mother likes to say, "The belly button is bigger than the belly" Translation: It would be more practical to throw out any questionable mushrooms than to buy an expensive contraption to determine if you can really eat it. I mean you can literally purchase a lifetime supply of edibles with the money you would be forfeiting with such purchase, not to mention the time invested. So if you side with my mother, then your belly button is not bigger than your belly.)

Another brand-new class was added this year, taught by Dr. Gene Varney, on slime molds. It was a wonderful introduction class to something most of us know very little about. There was also a slide presentation of beautiful slime molds by Dr. Sang Park. Sang was recently sought out by slime molds expert Dr. Steve Stephenson to gather data for slime molds from South Korea. Surprisingly, Sang doesn't travel to his native county to gather specimens, but instead asks friends and relatives in South Korea to send tiny pieces of bark for his collection. So far, his cultivation success rate is about 10% on 400 samples, although collectors have no idea about what they are gathering.

Gene adds that slime molds would be a wonderful hobby for old folks who can't get around much because all you need is a well-rotted wood stump in your yard. I



Elena Greene looking glad to be there, and Phil Layton looking occupied



"Is that an air bubble or is it...is it...IT'S BEAUTIFUL!"

add that it really helps if you have a real big belly button (I forgot to mention: You really need a dissecting scope in addition to a microscope for this not-well-known and somewhat misunderstood Myxomycota kingdom.)

There are many good reasons to try out Myxomycetes as a hobby:

- Year 'round activity
- No need to wonder if it's edible, since they are too small to bother with
- Most are beautiful and colorful
- You're able to witness different stages of life cycle in a short period
- Easy home cultivation which takes up very little space
- Easy to be an expert...who would argue?
- 'Scope is a fraction of cost compared to joining a country club and a set of a decent golf clubs

How about it folks?

Don't miss next year's showdown of our very own Four Mush-k-Teachers at Rutgers!



Sang Park, another of the microscopy workshop's teachers

WINE, MUSHROOMS CAN BE TRICKY PAIRING

Extracted from an article by Andrew Dornenburg and Karen Page, Washington Post from "Inside Bay Area," reprinted from MushRumors, the newsletter of the Oregon Mycological Society

We've come to think of mushrooms as the red meat of the vegetable kingdom (even though we know they're fungi) because – almost invariably – the sometimes-earthy, sometimes-meaty flavor of mushrooms says “red wine” to us. In fact, it's hard for us to think of mushrooms without immediately having Pinot Noir come to mind. The two are a match made in heaven.

Of course, mushrooms don't have a singular flavor profile. as they range from the mildest of button mushrooms to porcini that pack a punch. Each suggests a different wine pairing, from lighter-bodied and more delicate for the former to fuller-bodied and more powerful for the latter.

Scott Calvert, a fine-wine consultant to restaurants and private collectors (www.tastevinwines.com), shared some of his mushroom pairing secrets with us. “Earthy mushrooms pair best with earthy wines,” Calvert advises, in explaining why he pairs black trumpets, chanterelles, and shiitakes with earthy reds such as Burgundy, Nebbiolo and Pinot Noir.

Likewise, meaty mushrooms – such as cremini, morels, porcini, and portobellos – pair best with meaty wines, among which Calvert counts Pinot Noir (which “can go either way” as earthy or meaty), San Giovese and Syrah/Shiraz.

The mushrooms themselves are only the starting point: What you do to and with them matters, too.

With more ambitious dishes, such as “Portobello Mushrooms Pretending to Be a Filet Mignon,” other dominant elements of the dish come into play. Calvert recalls, “I found it was best with a Sangiovese that was brightly acidic to match the tomato, with a bit of a gamey scent to play with the meatiness of the portobello, plus nice, sweet fruit to bring out the sweetness of the caramelized shallot. With simpler fare, such as a mushroom pizza, we tend to think regionally – the first rule of food and wine pairing. While such food goes well with wines as varied as red Burgundy and Chateauneufdu-Pape, we like to opt for an Italian red, such as a Sangiovese.

Now for those exceptions: even Calvert likes a Pinot Gris (which he says can have “a smoky, bacon quality”) with meatier mushrooms.

“When we encounter milder mushrooms in butter or cream sauces, a full-bodied white can be the way to go. For special occasions, a 100 percent chardonnay-based champagne or sparkling wine works beautifully.”



NEMF AND NAMA FORAYS

by Terri Layton

I am beginning to suspect that August is not a good month to forage in the woods. That was the case for this year's 31st Northeastern Mycological Foray (NEMF) and the North American Mycological Association (NAMA) Orson K. Miller Memorial Foray.

This year's NEMF and NAMA were back to back. NEMF was in Orono, Maine (quite a distance up north) and NAMA was in Pipestem, WV. The Varneys had just enough time in between the trips to stop over at home to get some laundry done and fill the bird feeders.

Dorothy Smullen who has attended all 31 NEMF forays summed up the trip: You could say "we left the wet ground of NJ to drive 9 hours north and south to drier ground, but it was great fun to meet old friends. Both NEMF and NAMA offered lectures and workshops on



Dr. Brandon Matheny sketching the mushroom "Tree of Life"

phylogeny (the study of the evolutionary relationships between fungi). The ways fungi disperse their spores (i.e. gills, pores, teeth, etc.) have evolved many times in different orders. The Friesian groups of our field guides do not show us the evolutionary relationships. (Remember Gary Lincoff's lecture on clades?) It will be exciting to read about the data from the last ten years and the new work to come."



Rod Tulloss and Dr. Samuel Ristich

NEMF had a tribute and roast of Sam Ristich, and NAMA had a tribute honoring Dr. Orson Miller, who passed away recently. Both Drs. Ristich and Miller are/were passionate mycologists who infected many with their enthusiasm. They changed the course of many lives of those fortunate enough to have known them.

Our own Rod Tulloss was among one of them. Rod, Amanita researcher extraordinaire, got pulled into Sam's circle and, as they say, "the rest is history." Rod learned to cultivate a sense of wonderment from Sam and in turn, Rod honored Sam by naming an Amanita after him: *Amanita ristichii*. It's not a common species, and is found mostly in Canada, NH, and ME areas. It's a cute little thing with a white cap (short striation), orange/pink gills, and a fragile ring.

Despite our effort to find *Amanita ristichii* for this special occasion, we came up dry. But all was not lost, because someone actually carved and painted a piece of wood to resemble *Amanita ristichii*. Only if you picked it up to examine it, would you have felt its weight and texture to realize that it was a wooden carving. The talents among us are amazing!

Rod was also ecstatic to see one rare species called *Amanita aureosolea*. This one has a yellow foot below the soil level that turns red/brown upon excavation due to oxidation.

At NEMF, Gene Yetter reports (at www.nemfdata.org): Total number of species collected: 266, including 37 that are new to the NEMF master list. When the foray was held at Orono in 1983 and 1991, collection counts numbered more than 350 species. Unfortunately this year, habitats had just not been primed with enough precipitation all season long to offer the foray typical collecting for the locale. Also, during those prior foray events, lichen records were not being kept. In 2007, lichens constitute about 20% of the list.



Dorothy Smullen looking at lichens with Jim Hinds of Maine

At NAMA, over 300 species were collected, including a new species of *Russula*. Glenn Boyd was busy preparing slides between lectures. His comments on DNA and

other technical stuff is in this newsletter. And, yes, Ania was there too.

Ursula Pohl worked hard and overcame electrical problems to prepare delicious fungi appetizers at NAMA mycophagy for over 200 people, and Herb showed up to help his wife despite his discomfort due to recent illness. Now that's dedication!

Sang and Debbie Park were seen attending lectures and working together on Myxomycota (for better or worse, in fungus and in slime molds.)

Except for a lobster dinner in Maine, the food was marginal (I heard many NJMA seasoned travelers say that you don't go there for good food...and I thought they were just kidding!) Although, I managed to make our lobster feast less appetizing for those unfortunate to sit with me at the same table by slurping on that gooey green stuff inside a lobster (the best part as far as I am concerned. Yummmmm!)



It DOES look kind of like the picture!

Following is a long and not that funny story, but this is the only entertainment in town as they say. When we arrived in Maine, communal bathroom (dorm style) signs were dubbed over with temporary signs (Women to men, vice versa). During the night, someone removed the temporary signs, which caused some consternation on our floor. Men and women alike were seen going in and out of the same bathrooms and seen scratching their heads or giving strange stares to each other. And for once, there was no line at women's bathroom.

I actually stumbled into the men's room early next morning (without my glasses), didn't notice the absence of a sign, and managed to literally run into three puzzled guys who were shaving. They all looked at me

like I was an alien. Hmmmm. I used to turn heads when I was much younger (OK, stop that snickering), but this was definitely not that kind of look. Alas, mystery was later solved: our dorm rooms were previously occupied by a bunch of football campers and the temporary signs were, shall we say, not removed promptly.

Oh well, never a dull moment. I warned you it wasn't that funny. I guess you had to be there.

What comes to mind with dry conditions at forays is that familiar phrase, "If life hands you lemons, well, make lemonade" (a splash of moonshine certainly helps!)

To illustrate, in Maine, Phil and I signed up for an all-day foray at Sears Island (what was I thinking?). Believe me, an all-day foray does not mean twice the fungi as a half-day foray when pickings are slim. It just means you get to eat a soggy stale sandwich, get sore feet, and get really cranky.

Fortunately, all was not lost because Bob Hosh (who should have known better) was also silly enough to sign up for this trip. Our group was thoroughly entertained by his abundant knowledge of plants, flowers and trees. Of course, he shared his secret recipes for various plants and told us how they got their names. At one point, I started to wonder if he was pulling them out of his hat. I wrote down the names as Bob was rattling them off for my future verification. I just couldn't fathom that Bob would be that GOOD (sorry Bob!)

The following day, I decided to make lemonade and made a beeline to Acadia National Park instead of suffering through another unfruitful foray. One of the many stops at the Park happened to be a nature center where flowers and plants I had seen the day before with Bob had labels! (Behold! Bob is that GOOD!) I even stopped to have a lunch at a lovely lakeside place and had a delicious lobster salad.

I don't know about you, but I am definitely planning on going to Storrs, CT for next year's NEMF foray, and am packing my moonshine.

PS: If you get stuck, ask Bob for a lemonade recipe!



NJMA PHOTO CONTEST 2007

Send us your best shots!

DEADLINE FOR ENTRIES: **NOVEMBER 4, 2007**

This year's NJMA Photo Contest has been revised to streamline the categories and to award a prize for a single "Best In Show" photograph. We've eliminated the "medium" distinction (film or digital) and now we call a photo a photo, no matter what kind of camera it was made in. We're also changing the prizes to be awarded: Gone are the days of a roll of film or a package of photo paper! This year, we're awarding NJMA gift certificates which you can spend for books from our book table, membership, or special events (such as our annual Holiday Party). We hope you'll welcome the changes!

This year's judge: Klaus-Peter Steitz, Photo Editor of *The Record* (based in Bergen County), one of New Jersey's leading newspapers. He is an award-winning photographer in his own right, having been a staff photographer for *The Record* for much of the past 20+ years. His photo experience runs the full gamut of photographic subjects and styles. Visit his web site at www.klauspetersteitz.com

ENTRY CATEGORIES AND DIVISIONS

For all entries, the main considerations in judging will be composition, clarity, lighting, and all the other factors and skills that make for a good picture, whether by using a digital or film camera or a scanner. Entries will be accepted in three categories in two divisions (novice or advanced), for a total of six first-place awards :

TECHNICAL (Divisions: ***Novice and Advanced***)

The purpose of entries in this category is to aid in the identification of fungi. The subjects may be photographed *in situ* or removed to a more photographically appropriate setting. Photos through the microscope are included in this category, as well. To aid the judge in this division, we will appoint an experienced member to offer comments as to how well the photo illustrates some particular aspect of the fungus. (Professional division entries will require that an exact ID by scientific name be attached.)

PICTORIAL (Divisions: ***Novice and Advanced***)

The entries in this category should be more concerned with pictorial beauty and aesthetics. It is expected that most entries will be taken *in situ* to illustrate the fungus and its surroundings. (Professional division entries will require that an exact ID by scientific name be attached.)

ACTIVITY (Divisions: ***Novice and Advanced***)

The entries in this category should depict either people working (or playing) with mushrooms, or the results of this work or play. This category is for photos of club or regional events, forays, and gatherings (NJMA, NEMF, NAMA, etc.), or of people cooking mushrooms (or the dishes prepared), use of a mushroom theme as part of a craft project and the finished objects...basically, anything that is *not* recognized as a mushroom photograph.

Here is a summary of the categories and divisions in which prizes will be awarded (please note the boldface initials, for use when submitting):

<u>N</u>OVICE DIVISION	<u>A</u>DVANCED DIVISION
<u>T</u>echnical	<u>T</u>echnical
<u>P</u>ictorial	<u>P</u>ictorial
<u>A</u>ctivity	<u>A</u>ctivity

AWARDS

BEST IN SHOW (chosen from all entries): \$50.00 NJMA gift certificate

FIRST PLACE in each division of each category (six prizes total): \$25.00 NJMA gift certificate

SECOND PLACE and **HONORABLE MENTION** will be given in each division of each category.

As always, winners' photos will become part of the permanent photo collection of NJMA. (We will make copies of slides and return your originals. Digital photos will not be returned.) We also reserve the right to publish them in our newsletter and other NJMA publications with due credit.

SEE NEXT PAGE FOR CONTEST RULES AND HOW TO ENTER

NJMA 2007 PHOTO CONTEST RULES

1. The contest is open to all NJMA members.
2. The following types of contestants may **only** enter into the Advanced Division: (a) Professional photographers or those who make any type of income with their photographs, and (b) Anyone who has won First Place in the NJMA Photo Contest three times over the past five years.
3. All entries must be made either by electronic file (.jpg or .tif) in their original resolution or on color transparencies (slides). If you have a print that you wish to enter into the contest, *you* must have it scanned and converted to a digital .jpg or .tif file. (Most copy centers now have good quality scanning services and can provide you with these file formats. We recommend scanning at 300 dpi resolution at an image size of roughly 8"x10") All judging will be done with projected images. For technical clarification about the photos you'd like to submit, please call Jim Barg at 908-362-7101.
4. For slides, be sure to mark each slide with a projection dot at the lower left corner of the mount when viewed right-side-up out of the projector. Also label each slide on the dot side with your initials, category initial, division initial, and your photo number (in that order). For example, if you are entering into the Technical category as a novice, and your name is John Doe, the entry code on your first slide should read JD-TA-1.
5. For digital image files, use the same convention for naming as for slides, being sure to include the file suffix .jpg or .tif as well. Using the previous example, you'd name your file JD-TA-1.jpg or JD-TA-1.tif.
6. Fill out the entry form below, recording your entries using this code and also providing the genus or full scientific name of the mushroom(s) included in the photo. (This does not apply to entries in the Activity categories.) We suggest that you make a photocopy of the entry form and keep it for yourself for future reference.
7. Electronic images should be submitted on optical media such as CD-R or DVD-R. Do not email your entries. (Floppy discs, which had been accepted in the past, are no longer acceptable.)
8. If you do any digital manipulation to your photo, you **MUST** provide us with the original file or print to allow us to see the manipulation you did. Cropping, color correction, contrast and brightness adjustment, dust and scratch removal, grain reduction, and sharpening are acceptable forms of digital manipulation. Such digitally-manipulated photos will not be considered for judging if we do not receive your original. If you intentionally add to, subtract, or move any element or object that's in the original photograph, your entries will be disqualified.
9. Slides may be cropped using opaque tape to mask out the area you wish to hide.
10. Entries into the Advanced divisions of the Technical or Pictorial categories must be provided with an accurate identification to genus and species. It is suggested that novice entries include a good and reasonable attempt at identification to genus (we will try to correct you if you're wrong).
11. Entries are limited to 12 photos per contestant, including those which may be disallowed for lack of ID (if submitting into Advanced) or improper or non-permitted forms of digital manipulation.
12. Current members of the Photo Contest Committee may not enter into this contest.
13. By submitting to this contest, you grant NJMA the right to reproduce or publish your photos (without compensation, but with due credit) in the club newsletter, on the NJMA website, on promotional posters, or in any publication which NJMA provides to its membership or prospective members.

SUBMITTING YOUR ENTRIES

Please be sure your entries are labeled properly (see Rules, above) and enclose them *with your entry form* and mail or deliver them to:

Jim Barg
NJMA 2007 Photo Contest
220 Millbrook Road
Hardwick, NJ 07825-9658

THE NJMA 2007 PHOTO CONTEST COMMITTEE

This year's Photo Contest categories, rules, and prizes were determined by a committee consisting of Jim Barg, Jim Richards, and Rob Robinson. The committee appreciates hearing your comments, which will help us to make this contest even better the next time around. Our judge will be assisted in the Technical categories and species identification (in the Advanced division) will be by veteran NJMA members Glenn and Ania Boyd.

NJMA PHOTO CONTEST 2007

OFFICIAL ENTRY FORM

(Please fill out and make a copy for your records.)

NAME OF ENTRANT _____

ADDRESS LINE 1 _____

ADDRESS LINE 2 _____

CITY, STATE, ZIP _____

EMAIL ADDRESS _____

TELEPHONE (DAY) _____ TELEPHONE (EVENING) _____

ENTRY NUMBER	ENTRY CODE or FILE NAME <small>(see items 4 and 5 in Rules)</small>	DIVISION <small>(check one per entry)</small>	CATEGORY <small>(check one per entry)</small>	ID (GENUS & SPECIES) <small>(required for Advanced Division entries)</small>
1		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
2		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
3		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
4		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
5		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
6		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
7		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
8		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
9		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
10		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
11		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	
12		<input type="checkbox"/> NOVICE <input type="checkbox"/> ADVANCED	<input type="checkbox"/> TECHNICAL <input type="checkbox"/> PICTORIAL <input type="checkbox"/> ACTIVITY	

*Please remember that photos submitted on digital media will not be returned.
Also remember that, if you digitally manipulated or retouched your entry, you must enclose the original as well!*

DEADLINE FOR ENTRIES IS AT THE CLOSE OF OUR NOVEMBER 4, 2007 MEETING



The ring can be carefully rolled up and down the stalk without breaking. The scales are difficult to rub off. Extreme Caution must be used.

PARASOL MUSHROOM

Macrolepiota procera (*Lepiota procera*,
Leucoagaricus procerus)

OTHER COMMON NAMES: Parasol Mushroom

FAMILY: Agaricaceae

DESCRIPTION: 5 to 16 inches tall. Flesh: White. Does not stain reddish when injured. Cap: From 2 inches to 11 inches wide and ¼ to 1 inches thick. It emerges from the ground looking like half of an egg, later becoming convex. Ultimately becoming almost flat. It can look like an umbrella with age. The cap can be removed from the stalk without breaking or tearing the stalk or cap. akin to pulling an arm out of a socket. There is a nipple-like part on the very center of the cap (called an umbo) that does not have scales and feels smooth and is darker in color. The cap is white to cream-colored and has scales ranging in color from tan to beige to brown-red. It often has white cracks or is white between the scales. or may be fairly even in color. The scales are not easily rubbed off or removed from the cap since they are part of it. Gills: not attached to the stalk. White becoming cream colored with age. From ⅝ to ¾ inch deep. Spore Print: White. Stalk: 4 to 15 inches tall and ¼ to ⅝ inches wide. Many people think that it has a snakeskin-like pattern on its stalk. Usually this pattern is below the ring and it is smooth, without scales, and often lighter in color above the ring. The stalk has a round bulge at its base. It also has a thick double-edge ring (like the sides of a quarter) rather than single (like the sides of a sheet of paper.) Ring edges are rough. It can have white string-like mycelium attached to it if it is pulled out of loose rolling leaves. It is similar in color to the cap & hollow.

RANGE: Eastern and central North America & Europe

HOW OFTEN THEY'RE FOUND: Occasional to common.

HOW THEY'RE GROUPED: They are usually in groups or scattered but can grow singly and sometimes grow in fairy rings.

SOCIAL PLANTS: I have seen clover, broadleaf plantain, wild carrot, and dandelion in with the grass, but there can be no social plants when growing in the woods.

WHEN TO LOOK: July to October in the north and the season starts later and ends in December in the south.

LOOK-ALIKES:

- The poisonous Green Spored *Lepiota*, *Chlorophyllum molybdites*, has a green spore print, while gills that can turn green.
- The edible Reddening *Lepiota*, *Lepiota americana*, which bruises reddish.
- The edible and typically smaller Shaggy Parasol, *Lepiota rachodes*, which has a stalk the snake-like pattern of scales and its flesh turns reddish brown when bruised and its cap has much larger scales.
- The edible and choice *Lepiota gracilentata*, spores are 10x13 long instead of 15x20.
- The edible *Lepiota acutesguamosa*.
- Amanita species, many of which are poisonous, also share free gills and white spores but its cap warts typically rub off easily. The rings on their stalks typically break when rolled up and down the stalk.

EDIBILITY: Edible and Choice **with extreme caution**.

COOKING INSTRUCTIONS: I snap off the stems from the cap, because they are very fibrous and only eat the caps. The cap is excellent fried in butter, and has a flavor that is better than Morels! The cap can be breaded and fried. When fresh dried out mushrooms are found in the woods I often save them for later use. The younger mushrooms that do not have expanded caps are excellent stuffed. This is one of my very favorite mushrooms.

MACROCHEMICAL REACTIONS: The spores turn reddish brown in Meltzer's.

(Article and photo by John Plischke III, reprinted from the newsletter of the Western PA Mycological Society.)



The Sonoma County Mycological Association Presents the 11th Annual

SOMA

WILD

MUSHROOM

CAMP

SAVE THE DATE!!

January 19—21, 2008
Martin Luther King Weekend

Three days of great fun!

Forays
Feasting
Presentations
Mushroom Chefs!
Classes & Workshops
Expert Speakers—TBA!
Artwork & Specimen Tables

LOW FEES: \$275 full weekend
\$215 with offsite lodging
\$125 Sunday only

Check Website for
♥Early Bird Specials♥
Before November 15th!!

Includes lodging in shared,
comfy cabins, all meals, and
great mushroom camaraderie.

Please REGISTER ONLINE at: www.SOMAmushrooms.org
SOMAcampinfo@SOMAmushrooms.org or 707-773-1011

NJMA NEWS

c/o Susan Hopkins

P.O. Box 291

Oldwick, New Jersey 08858

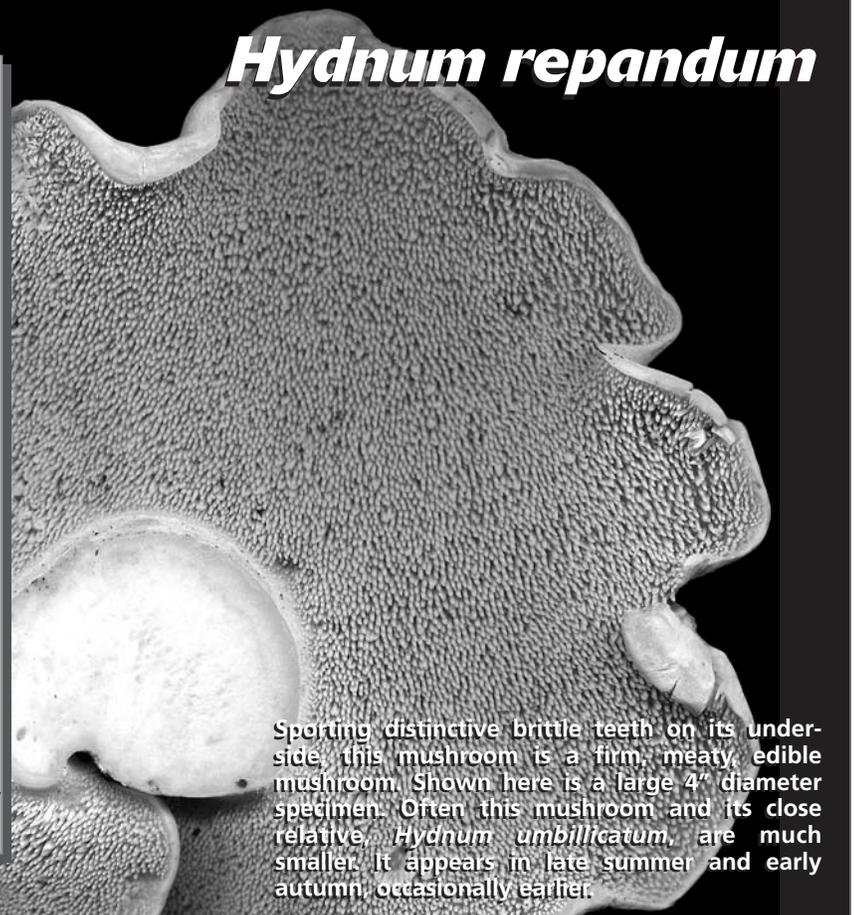
FIRST CLASS MAIL

In this issue:

- **FUNGUS FEST 2007 POSTER**
- **NEMF/NAMA FORAY REPORTS**
- **MEADOW WOODS SURPRISE**
- **WHO'S IN A NAME, PART 4**
- **MICROSCOPY TEACHERS**
- **NJMA PHOTO CONTEST 2007**
- **EAT AMANITAS? DON'T!**
- **ADVICE FOR NEWBIES**
- **TWO UNCOMMON NJ SPECIES**
- **MACROLEPIOTA PROCERA**

...plus much more!

Hydnum repandum



Sporting distinctive brittle teeth on its underside, this mushroom is a firm, meaty, edible mushroom. Shown here is a large 4" diameter specimen. Often this mushroom and its close relative, *Hydnum umbilicatum*, are much smaller. It appears in late summer and early autumn, occasionally earlier.

PHOTO BY JIM BARG