**NJMA OFFICERS**

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

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**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

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**NJMA WEBSITE**

[www.njmyco.org](http://www.njmyco.org)

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**NJMA NEWS**

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181 Highland Avenue  
Montclair, NJ  07042

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**CALENDAR OF UPCOMING EVENTS**

**Grete Turchick Picnic & Foray:**  
Stokes State Forest, Kittle field Picnic Area  
Bring a dish to share (with a recipe card listing the ingredients) and your picnic gear (plate, cutlery, linens, etc). This foray has always been one of the most popular each year — in part because of the potluck lunch, and in part because Stokes usually offers a lot of mushrooms at this time of year!

**September 29 – October 1**

**Wild Acres (NAMA Regional Foray)**  
To download an application form, visit:  
[http://www.namyco.org/events/wildacres06.pdf](http://www.namyco.org/events/wildacres06.pdf)

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**Fungus Fest 2006**

Frelinghuysen Arboretum, Morristown  
NJMA’s BIGGEST EVENT OF THE YEAR!  
*(Please note new times and location)*

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**Foray: Cheesequake State Park**  
Leader: Bob Hosh

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**Foray: Mahlon-Dickerson Reservation**  
Leaders: Glenn and Ania Boyd

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**Foray: Brendan T. Byrne State Forest**  
Leader: Rod Tulloss

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**Meeting & Lecture**  
at the Frelinghuysen Arboretum  
Our special guest will be Dr. Roy E. Halling, Curator of Mycology at the New York Botanical Garden. Topic TBA.

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**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 Whipppany 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 Whipppany 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.

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**Culinary Group Dinner – Andean Cooking**  
(Setup at 6:00 pm, dinner at 7:00 pm)  
For information or to sign up, contact Bob Saunders at (201) 568-3919 or at robertsaunders2005@earthlink.net
I’d like to start off this message by welcoming all if those who are reading this after attending Fungus Fest 2006, our first jaunt with Fungus Fest at the Frelinghuysen Arboretum. Fungus Fest, which has been NJMA’s annual public education event for over thirty years, is actually just a small taste of what the world of fungi has to offer.

If you choose to join the NJMA, we promise that there will be lots in store for you, whether you’re a beginner, a nature lover, a foodie, or even someone who’s interested in the identification and biology of fungi. NJMA is special in that we openly welcome people of all interests and levels of interest. We go out of our way to provide opportunities for everyone to go as far as they want in whatever mycological direction they prefer. If you’re a foodie, we’ve got lots of room for you, and if you’re a scientific type, we have lots of room for you too! And, if you’re a photographer or artist who wants to move on into the “science and technical” arena, we’ll certainly be happy to coach you along with that, as well...whatever you want. For most of us, mushrooms are an obsession, and some of us would be just as happy to find and identify a new species as others would be to find tasty (and safe) edibles to create the ultimate mushroom dish. That’s the nature of the NJMA, and we hope that you’ll stick with us, find your niche, grow with us, and keep us what New Jersey Monthly magazine has named as “The best club in New Jersey!”

To make your membership a rewarding and fun experience, don’t forget to attend our club events, meetings, spring education workshops, and forays. Get involved! You’ll get so much out of just attending one foray...imagine what you could learn by attending all of our events and activities. And, if you ever feel lost, or feel that something is “too technical”, speak with one of us, get to know us, and you’ll understand why we make it a point to provide a well-rounded look at the world of fungi. No one should ever feel “lost” as a member of NJMA, and it is my goal as President to be sure that our new members are as happy with their memberships as our seasoned members are. I always try to keep myself available by phone (908-362-7101) or email to all members in case you have a concern, an idea, or if you just want to “chat mushrooms”.

Speaking of mushrooms, what a year it has been! Even with a few dry spells in between, most of the spring and summer produced a banner year for fungal appearances in our woods, parks, and lawns. I haven’t heard of many members of NJMA who haven’t noticed that there are more fungi, and more fungi of species that have not appeared in quite some time, than in most any other year in memory. Yes, while most “normal” people sigh at the thought of more rain, we in NJMA have been dancing jigs whenever these soaking rains came our way. Okay, yes, we may be a little wierd, but years like this don’t come very often. And for some of us, there have been just enough mushrooms out there to cause us to have to invest in new freezers to store our bounty, and for others, there’s been little time to do much else other than to get out there with cameras, wax bags, and field guides. Wandering with glee through the rainbows of Russulas, Chanterelles, Cortinarius, polypores, boletes, Amanitas (and others too numerous to list), we gaze upon the wonders of nature and the mysteries of these least-studied members of natural world. Surely, we are special in our curiosity, no? Well, in a year like this, no one can blame us for being this way! Get out there and enjoy the rest of the season. (And if you wander into my “spots,” I promise I won’t yell at you. Those mushrooms belong to all of us.)

I cannot close this message without mentioning that this summer has not been the best one for the health of a few of our members. Please keep our secretary and great friend, Ania Boyd, and our longtime member and culinary guru, Bob Hosh, in your thoughts and prayers. (For those who didn’t know, both were hospitalized over the summer.) We also should not forget our dear friend, “club comedian”, and super-dedicated member Frank Addotta, who has been ill for quite some time, and his wife Nancy, who also has been having a rough time of it. All of you have been a big part of the life blood of our club, and you are all reasons why I (and others) joined and stuck with this club – please excuse me, but I needed to use this “soapbox” to personally wish these people all the best. I ask that the rest of our members join me in doing so as well. (And if I missed anyone else, these same thoughts and well wishes extend to you too!)

Finally, Editor Jim Richards and I would like to apologize for the lateness of this issue of NJMA News. As many of you have heard, my dad was recently hospitalized, and it caused me to miss quite a bit of work and to lose a good deal of my concentration. Things are back on track with him at long last and we now have a new issue of the newsletter. Thank you all for your kind wishes for my dad. See you at Fungus Fest!

– Jim Barg

DO YOUR SHARE FOR NJMA...

Post the included Fungus Fest Flyer in a prominent public place!

(PAGE 9)
On October 8, at Frelinghuysen Arboretum in Morris-town, NJMA will be presenting Fungus Fest 2006.

The first Fungus Fest was held in 1979, which was the first year of my presidency of NJMA. I wanted to stage an event that would make the general public aware of NJMA's existence and what we were about.

That first Fungus Fest, as well as all others, were held at the Somerset County Environmental Center in Basking Ridge. This year's Fungus Fest has a new home – one that we hope will bring a whole new audience to what we do. Many of the most popular things that we have done in the past, including the mini-foray field walks, the identification of visitors’ mushrooms, the Foolproof Four slide show, the display of mushroom-based dyed fabrics, mushroom papermaking, the Children’s Corner, book and crafts sales, and cooking demonstrations will go on, but will be modified to fit our new site.

Also, thanks to Elizabeth Vigna, Events Coordinator at the Arboretum, there should be an article in New Jersey Monthly magazine about NJMA and Fungus Fest in the October issue. The interviews have been done, photos have been sent, and so on, so we expect to see a decent writeup in the magazine. If this article happens as anticipated, we expect to have have a huge turnout, so YOUR HELP IS ESSENTIAL TO MAKING THIS EVENT WORK!

It really is totally unimportant how much you know about mushrooms, fungi, toadstools, or whatever. What is important is that we need your body to be there to greet people, to help set up and tear down, to relieve volunteers, and so on. Setup will be on Saturday, October 7 from 1:00 pm to 4:00 pm, and the event itself will be on Sunday, October 8, from 10:00am to 4:00pm. A potluck dinner for all volunteers will follow (at the Arboretum) after we have broken down the exhibits on Sunday, so be sure to bring a dish to share with your fellow volunteers.

Fungus Fest has made the difference between NJMA being a group of 40 people who got together from time to time to collect wild mushrooms to being one of the most dynamic mycological forces in the Northeast with well over 300 members. Our success with this event directly affects the quality and size of our membership. By presenting a “friendly, professional, and helpful face” to the public, the strength and character of our organization will grow. Don’t assume that others will “do it for us”; make it a point to get involved and share our knowledge and hospitality with “the world”!

To get involved, call John Horvath now at 732-249-4257 or email him at johnterryh@verizon.com

I would like to thank everyone who contributed to this issue of NJMA News: Terri Layton, for her profile of Dorothy Smullen, and Marc Grobman, who contributed two articles, one about our Meadow Woods foray, and another about the Union County Bio-Blitz. Terri also contributed the very entertaining article on edibility and her conversion to taxonomy. We also thank Bob Saunders and Pat and Arlie Bogue for contributing articles about the Culinary Group.

I hope that Terri’s profile article will be the first of an ongoing series of member profiles. If you like it, if you have suggestions to improve it, or if you’d like to read about a particular member, please let me know. I really hope that some others of you will begin to contribute as well. The more voices that are heard from, the better this newsletter will be.

In a previous issue, I had asked for help with reviewing the newsletters that we receive from other mushroom clubs to choose reprint articles that would benefit our members. So far, I have had no takers. If we can get a number of people to volunteer, it would mean that each person would have only a couple of newsletters to review each month – and we’d have good “external” material to use when space permits.

Don’t forget to volunteer for Fungus Fest! And, see you at Stokes for the Grete Turchick Picnic!

– Jim Richards

Dining out?
Wild mushrooms NOT!

“If you are told that a dish on the menu of a fancy restaurant has ‘wild mushrooms’ in it, you can be pretty sure that the mushrooms were cultivated. The species likely to be served are shiitake, portobellos, or perhaps oyster mushrooms. These are wild only in the sense that anything other than the store-bought white button is a ‘wild’ mushroom. In time, it is possible that the term ‘wild mushrooms’ will be restored to its original meaning and include only such kinds as boletes and chanterelles that indeed cannot yet be cultivated.”

- In the Company of Mushrooms by Moselio Schaechter, (reprinted from OMS MushRumors)
Fungal Friends

The following easy-to-understand article on beneficial mycorrhizae is adapted from a University of Iowa Extension Service news release, and was published in the Oregon Mycological Society’s MushRumors newsletter.

In the late summer and fall, you may see a variety of mushrooms growing beneath the trees in your yard. What are these mushrooms doing under your trees? Do they harm the trees? How can you get rid of them? Surprisingly, the homely fungi that grow under trees during the late summer and fall are often not harmful; rather, they may be your tree’s best friends.

A mushroom is the short-lived reproductive structure of a large, thread-like fungal body that lives year-round in the soil and organic debris. Beneath the surface of the soil, these fungal threads are often attached to the roots of trees, providing the trees with extra nutrients and buffering them from stress. This association of a fungus, with a plant root is called mycorrhiza (plural: mycorrhizae).

“Mycorrhiza” means “fungus-root” in Greek and provides an intimate, mutually beneficial association between a fungus and a plant. The fungal partner extends long threads, called hyphae, through the soil, and around and into the roots of the plant. The fungus absorbs water and mineral nutrients from the soil, which it shares with the plant. Essentially, the fungus serves as an extension of the plant’s root system. In return, the plant gives the fungus the sugar it needs to survive. Plants with mycorrhizae have better access to water and minerals and grow faster than plants without mycorrhizae, especially in nutrient-poor soils. The trees develop larger, healthier roots and are better equipped to handle stress, especially drought. In addition, mycorrhizae protect plants from root diseases and help to improve the soil structure.

Amazingly, this association is so beneficial to plants that approximately 90 percent of plant species, including nearly all trees, are known to associate with approximately 2500 species of mycorrhizae fungi. Scientists now think that it was mycorrhizal associations that allowed the first terrestrial plants to leave the water and live in the harsh, dry conditions of land — paving the way for the evolution of all the land plants growing today.

Not all mycorrhizal fungi produce mushrooms, and not all mushrooms that grow below trees come from friendly mycorrhizal fungi. Mushrooms or shelf fungi that develop directly on the tree itself are usually signs of decay, and those that grow in “fairy rings” cause unsightly lawn problems without any benefit.

A majority of mushrooms seen in yards arise from beneficial mycorrhizae. One of the most common mycorrhizal fungi is Suillus (Slippery Jacks), the slimy, yellow-to-brown bolete (a mushroom with pores instead of gills) that grows under white pine. Several species of Russula, Lactaria, and Cantharellus also produce a variety of mushrooms during late summer and fall.

How are mycorrhizae important to a home gardener? First, mycorrhizal mushrooms that grow below trees should be appreciated for the help they provide the tree. Applying fungicide to the soil damages the precious mycorrhizal associations helping to keep your tree healthy. If you cannot tolerate the mushrooms on your lawn, remove them by hand. The only way to permanently eliminate the fungus is to remove the tree! It is much easier to learn to enjoy the mushrooms during the brief times these helpful fungi make themselves visible.

Second, mycorrhizal fungi are abundant in most natural soils. Sterilized, compacted, or highly disturbed soils (such as those in new housing developments) are often depleted of natural fungi and not conducive to mycorrhizal growth.

Several companies sell mycorrhizal inoculants, which are fungal spores in a powder or slurry that are applied to the soil or roots at planting. The inoculated fungi quickly develop mycorrhizal associations with the plant roots. These products may help trees and other plants become established in disturbed environments, such as in new landscape plantings. Inoculants are not usually necessary in natural soils, where other plants are growing well and the natural fungal population is healthy.

Although often unnoticed and unappreciated, mycorrhizal fungi are fungal friends that help to ensure the health, vitality, and beauty of our valuable trees and landscapes.

Adapted from an article by Christine Baker, Iowa State University, http://www.extension.iastate.edu/newsrel/2002/oct02/oct0208.html

HOW MANY SPORES ARE THERE?

- One specimen of the common bracket fungus, Ganoderma applanatum, can discharge 30,000,000,000 spores a day, for a total of 4,500,000,000,000 spores.

- One fructification of the wood-inhabiting ascomycete, Daldinia concentrica, can shoot 100,000,000 ascospores a day.

- A single wheat grain infected with stinking smut, Tilletia caries, contains 12,000,000 spores.

- One 2.5 cm diameter colony of the green mold Penicillium can produce 400,000,000 spores.

- And I have just done a rough calculation showing that a large specimen of the giant puffball, Langermannia gigantean, may contain about 1,000,000,000,000 spores, give or take a decimal place or two.

So you will not be surprised to learn that the air we breathe sometimes contains as many as 10,000 spores per cubic meter.

by Bryce Kendrick, from Fungifama, South Vancouver Mycological Society, Feb 1998.
Reprinted from Spores Illustrated, the COMA newsletter, Fall 2006.
NJMAers FIND FUNGI IN OBSCURE UNION COUNTY RESERVATION
by Marc Grobman

Mention the Ash Brook Reservation, and even most locals will ask for its whereabouts. And they'll still puzzle, even after hearing a range of directions: A mile northwest of Garden State Parkway exit 135. Or, I-78 exit 41, then five miles south to the Scotch Plains – Clark/Edison border, southeast of Plainfield, and southwest of Westfield. Or, finally: Off Raritan Road behind Union County Community College and the police academy. “Oh,” they'll respond. “Is there really a reservation back there?”

Yes indeed. But surrounding buildings cloak it from view, and the county parks department gives it barely more publicity than the U.S. Air Force discloses about Area 51, that high-security Nevada base of supposed military investigations into flying saucers. No road signs direct you to it, no signs tell you you’re at it, and designated parking areas are rare as morels on a Monday in February. Ash Brook Reservation is one of the most obscure reservations in the state.

But it recently gained a flash of fame when the Union County Department of Parks and Recreation and various outdoor groups picked it as the site for their 2006 “Bio-Blitz.” That’s when packs of biologists scour an area for 24 hours and attempt to identify as many different species as they can. Ash Brook held promise for finding a multiplicity of fauna, flora, and fungi species. Despite its petite 400-odd acre size, it offers diverse topographical and botanical variation.

A humus-rich hill anchors the northwest corner, with plenty of pin oaks, beech, and sweetgum trees, and scattered ash, sassafras, hickory and tulip trees. The northeast side - known as Red Hill - is a red dirt-based highlands formed by glacial action. A field occupies its center, populated by two species of conifers and two score or more blueberry bushes, descendants of bushes that researchers say Indians cultivated there 10,000 years ago.

Down Red Hill’s slope, the fields yield to river birches, locusts, black cherry, and pin oaks, and scattered holly, big tooth aspen, walnut, chestnut, and elms. Further down, a roughly fifty-foot-wide belt of thick-growing ferns circles the hill, along with ground pine (also known as princess pine), an uncommon underground vine that sends up eight-inch growths resembling miniature pine trees. At Red Hill’s base, wetland marshes, with prolific growths of spice bush and skunk cabbage, separate it from the northwest hill and cover most of the reservation’s remaining acreage.

Unfortunately, Bio-Blitz 2006 was set for June 23-24, which conflicted with NJMA’s PEEC Weekend, one of the year’s most popular mycological events. That drew away many NJMAers who might otherwise have joined the Bio-Blitz. Still, members Hadas Parag, Richard Balsley, Rose Kim, and this reporter, along with four local volunteers, spent several rainy hours slogging through forests, marshes, and fields, searching for fungi. Between expeditions, we visited with members of the Bio-Blitz herpetology, botany, and entomology teams. (Firefly factoids: Did you know there are roughly 20 different species of lightning bugs in New Jersey, and that entomologists can differentiate them by their flash patterns? And that in some species, the female will mimic the mating signal of another species, and when a love-struck male responds, will kill and eat him?)

The county parks department had set up tables inside a large tent, and on day 2, I placed our finds on paper plates, grouping them by structural type: bracket fungi, puffballs, jellies, gilled mushrooms, etc., along with flyers about the NJMA, Fungus Fest, the Foolproof Four, and a list of books for beginners. The general public visitors were impressed by the number and variety of mushrooms we displayed; a Megacollybia platyphylla with a five-inch diameter cap attracted the most attention. It lay cap down on a paper plate, and when people lifted it by the end of the stipe, its heavy, flexible cap drooped down like a turned-out umbrella, causing its large, wide gills to ripple. “Wow! Look at this!” the surprised visitors would cry out to each other.

After the Bio-Blitz, Dorothy Smullen and Gene Varney examined the specimens the Fungi Team collected, and identified 28 different species. Though several teams bested us numerically (the Entomology Team, for example, found over 70 species of insects and bugs) we did very well, considering that we had fewer members than some other teams, and only had time to cover parts of the reservation’s northern edge. Also, it was just before mushrooms there really began to proliferate. In a visit just two weeks later, I found Amanitas, corals, boletes, and jellies that eluded us during the Bio-Blitz. But enough grousing. Here’s what Dorothy and Gene said we found:

Agrocybe pediades (Hemispheric Agrocybe), Amanita crenulata, Amanita vaginata (Grisette), Auricularia auricula (Tree-ear; Leafy Jelly Fungus), Ceratobasidium fruticulosum (Corn Slime), Clitocybe gibba (Funnelform Clitocybe), Crepidotus mollis (Jelly Crep), Diatrypa stigma, Fuligo septica (Scrambled-egg Slime; Loaf of Bread), Gânoderma applanatum (Artist’s Conk), Hormomyces auranticus, Lactarius hygrophoroides (Hygrophyrous Milk; Delicious Lactarius), Lycoperdon perlatum (Gem-studded Puffball), Marasmiellus ramealis, Megacollybia platyphylla (Platterful Mushroom; Common Spring Mushroom), Mycena galericulata or Mycena inclinata (Common Mycena), Oligoporus caesia (aka Postia caesia) (Blue Cheese Polypore), Phaeomarasmius erinaceellus (Powder-scale Pholiota), Piptoporus betulinus (Birch Polypore), Pluteus cervinus (Fawn Mushroom), Polyporus elegans (Elegant Polypore; Black-footed Polypore), Russula mariae (Purple-bloom Russula), Schizophyllum commune (Common Split Gill; Split...

Note for people interested in foraying or hiking in the Ash Brook Reservation: I’ve developed a map of the reservation, which shows a trail, landmarks, and where you can park your car. I’ll be happy to email you a copy of the map in PDF, or surface-mail you a printed copy if you send me a self-addressed stamped envelope. Email: marcgro@comcast.net. Surface mail: Marc Grobman, 94 Paterson Rd., Fanwood, NJ 07023.

Note: sometimes timing is everything!

*This beautiful red and yellow bolete showed up at the Ash Brook Reservation just two weeks after the Bio-Blitz.*

**CULINARY GROUP PLANS**

**ANDEAN DINNER FOR SATURDAY, NOVEMBER 11**

Submitted by Bob Saunders

Andean Cooking: cuisine of the countries that contain the Andes Mountains of South America, especially Peru, Bolivia, Ecuador, Chile, and Columbia. An ancient cuisine that predates the Inca Empire, it gave us many of the staples we live on today: potatoes, tomatoes, peanuts, quinoa, and cocaine (oops, none of that at the dinner). It’s substantial, interesting, sometimes exotic, rarely spicy, and here’s your chance to try it on November 11 at the Long Hill Rescue Squad in Gillette. Setup is at 6:00 pm, dinner begins at 7:00 pm.

Bob Saunders and Rhoda Sidney will coordinate the recipes. If you’d like to participate, you can call them at (201) 568-3919, or email robertsaunders2005@earthlink.net (no hyphens!) Remember, Culinary Group dinners are planned themed dinners and are **not** potluck, but we take suggestions if you have an old family favorite that fits into our theme.

The recipes that are being considered for our menu include:

- **Ceviche**: marinated fish in lime juice, usually spicy
- **Anticuchos**: appetizers, little grilled shish-kebabs of marinated beef heart (really, they are good)
- **Papas a la Huancahina**: potatoes in a cheese sauce; very bland
- **Aji de Gallina**: Chicken in somewhat spicy sauce; very tasty
- **Fish Stew with lots of vegetables**, (can’t remember the exact name right now); not spicy
- **Roast Chicken**
- **Quinoa**: a tasty grain, especially with shreds of Mozzarella
- **Salteado**: sort of like pepper steak (beef, green peppers), not spicy.
- **Pisco Sour**: delicious mixed drink, dangerous.

I don’t think we can get **cuy** (Guinea pig), or at least not at a reasonable price.

Andean food is mostly not spicy (not like Mexican), a few dishes have spice that can easily be toned down. Potatoes are the staff of life.

My favorite Andean cookbook is *A Russian Jew Cooks in Peru* by Violetta Autumn.

As usual, bring your own dishes, silverware, and beverages to the Long Hill First Aid Squad, directions available from Bob Saunders or Jim Richards. See you there!

**STEPHENS STATE PARK FORAY**

Submitted by Jim Richards

On a very miserable Sunday morning a few weeks ago (August 27th to be exact), eight obviously certifiable NJMA members plus one “truffle-hound-in-training” explored the mycological riches of Stephens State Park, which is a very small part of Allamuchy Mountain State Park (the largest natural area in New Jersey). It had been raining for several days before the foray and it continued through the foray itself. We had about a half hour of overcast, but not rainy, weather at the start of the foray. But, after we had walked for about 30 minutes, the skies opened up. We got back to the cars and decided to move to the pavilion at the upper end of the park to sort through and attempt to identify the soggy specimens that we had collected. Not surprisingly, we had collected 50 or 60 different species on our abbreviated foray. (Stephens has always been good at providing us with a variety of ’shrooms, and usually (at least) a couple of unusual, or noteworthy ones to add to the herbarium.)

The pavilion was (as predicted) dry, but it was also very, very dark, so Terri Layton and Benjamin Burghardt spent
part of the time sorting our finds with the help of flashlights.

Susan Hopkins, who, along with John and Nina Burghardt, did most of the identifying, suggested that some of the more interesting finds were *Boletus pallidus*, *Phellodon confluens*, *Hydnellum scrobiculatum*, *Hydnum spongiosipes* (which lived up to its name by the amount of water it had soaked up) and *Lactarius grisei*. I know that the Hydneums and Phellodon were of particular interest to Susan because we had found them at earlier Stephens forays and they are great mushrooms for dyeing.

Jane Burghardt, our truffle-hound-in-training, found nothing of interest, but had a good walk in the woods, leading various Burghardts where she choose to go. And we learned that we should reserve the pavilion for our Stephens foray in 2007, just in case Mother Nature decides to toy with us again. (Photos from this foray and others of the summer are on page 10, in full glorious (and wet) color!)

### BUT CAN YOU EAT IT?
**by Terrri Layton**

Growing up right after the Korean conflict, when food was not plentiful, I am somewhat preoccupied with anything edible. But my experience does not compare to what my mom went through when she was growing up. Whenever I visit my mom, her first question is not “How are you?” but instead “Have you eaten?” and she dashes off to the kitchen not bothering to wait for an answer. My mom’s need to feed us is still strong even after living in this country where food is plentiful for many years.

Back in the old country, eating was a serious business and we had meal rules. Breaking rules resulted in temporary expulsion from the table (although mom always came through). I had most rules down pat except the rule about ‘no talking’. The ‘no talking’ rule was particularly maddening if it revolved around the supposedly criminal acts I committed against my older brother (who got what was coming to him). Then I just had to blurt out my innocence and then my father would thunder, “If you are not hungry, leave the table!”

Anyway, I remember supplementing my diet with roasted grasshoppers (now, don’t scrunch your face) in autumn with aid of my cousin (he was fast and knew how long to pop them) and consuming vast quantities (≈ cheap) of steamed (gray-brownish) silk worms at my older brother’s urging in winter. (Come to think of it, I don’t recall seeing my brother eating them….I think he just handed me the bag. Hmmm…my brother was not the sharing kind….I wonder?) Believe me, these were not considered delicacies by the mainstream (definitely not chocolate-covered), but I thought they were pretty good at the time (pretty disgusting, huh?) I don’t know about roasted grasshoppers, but canned silkworms are available at your local Asian grocery store. Oh joy, but I prefer grasshoppers (not quite as squishy… and the color is better).

Now you ask, what does this have anything to with NJMA?

I’ve joined NJMA to learn to distinguish the EDIBLES from the ‘don’t bothers’. Yes! To fill my belly!

Allow me to share a typical exchange at forays I have attended asking the same boring repetitive question:

**MYCOLOGIST:** “Look, look, look! (obviously excited and pointing to a big meaty mushroom) Here is blah, blah, blah…”

**ME:** “Can you eat that?”

**MYCOLOGIST:** “It’s beau-ti-ful!” (Obviously ignoring my question)

**ME:** “Can you eat it?” (A little louder this time)

**MYCOLOGIST:** “This fungus (Oh, here comes Latin) blah, blah, blah, appendiculated…bleh, blah, blah…”

**ME:** “But can you eat it?” (Screaming by now)

**MYCOLOGIST:** “Well…..NO…”

**ME:** (Starts to walk away obviously irritated for time wasted)

Pardon me, mycologists!

In my humble non-mycological opinion, it seems silly for a bunch of grownups (you know who you are) to get all excited about tiny, itsy bitsy, little mushrooms not worth bothering with, put them under obviously very, very, very expensive microscopes, speak in foreign tongues, go flipping through countless books (with no color photographs, let alone mention of edibility) and get into passionate discussions with other mycologists about basidia, cystidia, convergent, cellular, filamentous, ixoderm, cystoderm, ellipsoid, amyloid, dexitri-noid, adnexed, decurrent, floccose, zonate, lactate, saccate, appendiculation, striation, reticulation. Really!

But I have seen the light (although pretty dimly) after hanging around NJMA folks for few years. To a casual observer, fungi people seem like regular folks, but underneath there is an incredible breadth and depth of knowledge; and kaleidoscope of colorful characters. To me, mastering fungi requires a fair amount of intelligence and tenacity. It also helps if you are patient, detail-oriented, are of scientific mind and are familiar with Latin/Greek. Not to mention an ability to find your way out of woods after spending hours going around in circles with head bent close to the ground.

Too much trouble you say? Don’t feel qualified? *Au, contraire, mon ami* (that’s French)! You are in luck, because our dedicated NJMA folks will gladly hold your hands and teach you everything you want to know and maybe tell you much much more than you really want.
to know (no free lunch). Mind you, they’ll not just talk about fungi, but trees, plants, soil composition, lichens, slime molds, birds, frogs, toads, salamanders, butterflies, dragonflies, wildflowers, photography, Latin, Greek, cooking, dying, knitting, baking, gardening... Somebody stop me, please!

For sure, your busy brain won’t get a chance to collect cobwebs, and just think of the benefits from all that fresh air. Hanging around NJMA folks is definitely a great way to find out if you really can eat it! One more benefit with hanging around NJMA folks is that some of them don’t care about eating their finds (I am not kidding), so you can walk away with some great freebies.

The wonderful mixture of talent, intelligence, passion, and diverse interest is what make NJMA members an interesting group of folks. NJMA people are dyers, knitters, cooks, bakers, artists, photographers, gardeners, birders, biologists, chemists, naturalists, plant pathologists, polymer scientists, etc. Some are physicists too! Did I mention mycologists?

I know of no other organization with such a diversity of knowledge and talent. Yes, I’ve heard of mushroom clubs that exclude non-mycologists. I’ve also met non-NJMA folks who treat non-mycologists with some trepidation (putting it mildly – I pretended to be one of them). But NJMA members embrace diversity and see its wisdom. Each member of NJMA, each one of us, can find a niche and also have opportunities to migrate, to expand our repertoire, or to evolve into other areas in the study of fungi. NJMA is a place to learn from the experts, keep your mind supple, and surprise yourself.

My father frequently commented that political demonstration and philosophical beliefs were only for the rich. If he heard me talking of such things he would say, “You are talking like your belly is full.” Of course, he would be absolutely right! But after three years in the NJMA, my freezer is chock-full of frozen edible fungi and my pantry is bursting at the seams from dried edible fungi, and I’m ready to tackle something new... So:

Attention mycologists – move over and make room for one more!

(P.S. In this article, I used “mycologists” instead of “taxonomists”, which some NJMA members prefer to call themselves.)

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ASTRAEUS SPECIES WANTED FOR BIOMEDICAL RESEARCH

Once again the fungi show their importance to mankind! Extracts of *Astraeus pteridis* have shown exceptionally strong suppression of certain human pathogenic bacteria in collaborative research by Drs. Samir Ross of the University of Mississippi and Jim Trappe of Oregon State University. Substantial quantities of specimens are needed to follow up the exciting results of their preliminary studies. Ross and Trappe solicit dried specimens of both *A. pteridis* and *A. hygrometricus*. Send them to Jim Trappe, Forestry Sciences Laboratory, 3200 Jefferson Way, Corvallis, Oregon 97331.

Astraeus species resemble earthstars in the genus Geastrum, but their spore sacs are sessile, sitting flush on the cracked, inner peridium. The peridium opens as star-like rays to expose the spore sac in wet weather (see the figure), but the rays close around the spore sac in dry weather. *A. hygrometricus* is about 2-4 cm broad and rounded when the rays are closed, the “star” is 4-6 cm broad and sometimes up to 9 cm when the rays are open. *A. pteridis* can be even larger.

Suppliers of specimens will be gratefully acknowledged in any publications that result from this research.

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An opened specimen of *Astraeus pteridis*. (Photo supplied by Dr. Jim Trappe)
NJMA AND MEADOW WOODS: PERFECT TOGETHER

by Marc Grobman

Some fungus forays yield an abundance of edibles, benefiting the epicureans. Others offer a variety to those seeking taxonomic challenges. But the NJMA July 15 outing at Meadow Woods Park cheered both groups. This way-off-the-beaten-path wilderness near Mendham, a few miles west of Morristown, is known for its wealth of finds; several of the pictures in Roger Phillips’ book, *Mushrooms and Other Fungi of North America*, are of specimens collected there.

The gourmands were rewarded the instant they entered the woods, where they met up with ripe ruby-red wineberries (*Rubus phoenicolasius*). Resembling red raspberries transformed into sticky jewels, these strong-flavored Asian natives momentarily diverted several people from the hunt for fungi. But self-discipline soon kicked in, and they rejoined their comrades, scouring the ground for fungi.

Almost immediately, the earth served up a platter of strong-flavored edibles. Less than five minutes from the parking lot, we discovered a big batch of black trumpets (*Craterellus fallax*) poking through the leafy forest floor, clustered more densely than dandelions on the unmowed lawn of an abandoned house. Then we sighted another batch. And another! (A standing ovation for the NJMA foray committee’s amazingly astute scheduling. When this reporter returned six days later for a successful thirty-minute ground search for a pocket knife he’d dropped, he didn’t see a single black trumpet.)

After the foray, we gathered to eat lunch and show and identify our finds. Herb Pohl estimated his black trumpet take at about two pounds, and reviewed with amusement their scary name. “In German, they are ‘toten trompete,’ or ‘trumpets of death,’” he said, “because of the dark color.” In France, they’re ‘Trompettes de la mort’, which means the same.

In addition to providing semantic entertainment, black trumpets also satisfy those with a utilitarian outlook. “They are a good edible,” said Ursula Pohl, and “You can dry them easily.” But she warned it was a different story with the three different species of chanterelles she picked. Dried chanterelles, she warned, are “like leather.” It’s better to eat them fresh, or freeze them, she advised.

We also found fungi with triple crossover appeal, attracting the hunters of edibles, those seeking to determine species, and those who like their mushrooms robust. What else but boletes? What other mushroom is full-bodied enough to grab when you want to bop someone over the head and not even cause a bruise? What other mushroom covers the underside of its caps with first-class fake foam rubber? (Boletus’ undersides are honeycombed with pores, not gills.) Oh, we had a boletus bounty: *Boletus variipes*, *Boletus hortonii*, *Xanthoconium affine v. maculosus*, and something that looked a lot like *Boletus bicolor* but wasn’t. (At the foray the following week, we found something that looked a lot like it that was identified as *Boletus rubropunctus*.) They, too, offered an identification challenge.

We also did well with the big genus with the genus name *Lactarius*. While some *Lactarius* species resemble the members of the genus *Russula*, only *Lactarius lactate*. That is, they act like milkweed, oozing a milky substance when you score their gills or stipes.

We found a trio of *Lactarius* samples, all “common as muck” and much alike, said Susan Hopkins. Quite so. The top of the caps of two of them, *Lactarius volemus* and *Lactarius hygrophoroides*, were identical to this reporter’s eyes. Both had surfaces that were orange to rust-brown, smooth, and dry. But when Susan turned them over, the difference was readily apparent. *L. volemus* had very closely-spaced gills, while *L. hygrophoroides* has wide gills. Its cap, Susan added, is sometimes scalloped on the edges. And, Jim Barg said, *L. volemus* has a fishy smell, its white latex stains the gills brown, and it has much closer gills than the odorless, non-staining *L. hygrophoroides*. The third member of the genus we found, *Lactarius corrugis*, sometimes (but not always) has oddly wavy gills, reminiscent of frizzed-out hair, especially when conditions are dry.

But while the gills of *L. corrugis* looked unusual, the fungus was ordinary-looking compared to the specimen of *Mutinus elegans* that someone found. This strange stinkhorn looked like the limp appendage that hangs out of a longneck (“steamer”) clam, but with one exception: It was blood red.

What else? *Strobilomyces confusus* and *S. floccopus* are edible, but didn’t attract as much enthusiasm among
the gourmand group, even though their crusty-black surfaces with white cracks mimicked marshmallows roasted too long over a campfire. So close, said Susan Hopkins, they’re both called Old Man of the Woods.

We also found coral mushrooms (some white, some purple) that may or may not have been of the same species. And there were two puffball finds: Scleroderma cepa - a smooth spherical puffball about 1.5” (25mm - 40mm) in diameter, with a black spore mass, and S. areolatum, measuring a petite .25” (7mm) in diameter, and already old and brown.

Finally, there was an easy one for beginners to learn because it’s so distinctive: Galiella rufa. The top of its cap is wrinkly, leathery and brown; its underside is smooth black. Cut it, and you expose flesh that looks like a black jelly. It also has a wonderfully unique common name, the Hairy Rubber Cup.

Fortunately, a knowledgeable and indefatigable team was on hand to guide the identification work. It included Glenn and Ania Boyd, Gene Varney, Bob Hosh, Susan Hopkins, Jim Barg, and, almost certainly, some other folks to whom this reporter apologizes for not acknowledging.

What a wonderful foray! For many years, Meadow Woods has delivered the bounty, and this year was no exception. The NJMA foray planners and identification leaders made it educational and enjoyable.

Although some people refer to Strobilomyces species as the “Old Man of the Woods,” they more closely resemble a marshmallow roasted over a campfire.

PAN-ASIAN BARBEQUE
by Pat and Arlie Bogue

The NJMA Culinary Group held a Pan-Asian BBQ, hosted once again at John and Terry Horvath’s gracious home, on Saturday, August 12. The dinner was based on recipes from a number of Asian countries including Thailand, Korea, Vietnam, and China, to name a few. Fifteen people contributed to and enjoyed the culinary delights.

What added greatly to the ambiance of the setting was the plush Desert Rose plant in full glorious bloom of Fuchsia flowers brought in by Betsy Sherwin.

The dinner started out with dishes of Vegetable Mandoo and Shrimp Mandoo, which consist of a variety of vegetables (and shrimp) and spices wrapped in a wrapper and served with a chili sauce.

These were followed by Shrimp Sate with a peanut sauce, Bob’s Thai BBQ chicken, and Pulgogi, which is a marinated grilled Korean beef recipe. These were accompanied by Cucumber Salad infused with vinegars and ginger; Green Papaya Salad with Thai chilis, garlic, coconut-palm sugar, fish sauce, lime juice, and crushed peanuts; Seasoned Spinach cooked with soy sauce, garlic, green onions, sesame oil and seeds, and hot red pepper; Broccoli Thai-style, which contained garlic, soybean paste, and fish sauce; Carrot and Daikon Radish Pickles; southern Yunnan Dai Mint and Tomato Salad (also containing chili, scallions and chili oil); and Thai Cellophane Noodle Salad with oyster mushrooms embellished with garlic, ground pork, scallions, coriander leaf, lettuce, and lime with a dressing of lime, fish sauce, red chilies, and sugar.

To top off this sumptuous repast, we reveled in our desserts of Korean Fruit Soup with ginger, honey, lemon and grapefruit juice, rice wine, apples, pears, grapes, peaches, watermelon, strawberries, oranges, pine nuts, and cinnamon with mint sprigs for garnish; a beautiful and absolutely delicious Tashi’s Favorite Black Rice Pudding of Thai origin, and settled with satisfying Financiers cookies.

Every dish was delightful, and there was enough garlic present to ensure no vampire visits for the foreseeable future. Our heartfelt applause to all who created these culinary delights. We thoroughly enjoyed them.

Pictures and recipes can be found at: http://web.mac.com/jimrich17/iWeb/NJMACulinary
MEMBER PROFILE:
DOROTHY SMULLEN
A profile from the perspective of Terri Layton

Most of us know Dorothy Smullen as a lady who takes the mystery out of fungi. Even if you have never met her, you can pick her out from the crowd. Dorothy is a regular at our forays and her head is usually bent over a fungus that she is intensely looking at through a loupe and declaring lots of “oohs” and “aahs”, and frequently speaks in a foreign tongue (Greek or Latin).

She also smiles a lot! But make no mistake, she is a no-nonsense lady who will track you down if you happen to find something interesting. She will interrogate you about its habitat and demand that you give up your treasure for the sake of science.

Yes! Dorothy is one of NJMA's key identifiers and is an expert in microscopy.

Recently, I attended her beginner class and was amazed at the variety and wealth of information she presented: starting with kingdoms and domains, typical life cycles, evolution, roles fungi play in the ecosystem and various uses of fungi. There were plenty of fascinating and interesting tales about fungi mixed with a slide show of beautiful, poisonous, and delicious fungi, stimulating our artistic and gastronomic senses. Dorothy certainly raised the level of curiosity (judging from the number and types of questions). Come to think of it, isn’t that what teachers are supposed to do? Raise curiosity and lay out the possibilities?

Dorothy grew up in Brooklyn and got her BA and MA in biology from Brooklyn College and taught science after her two children Diane and William James III were grown. It’s no surprise that Dorothy, a retired science teacher, is always excited to share her knowledge. A long time friend and fellow instructor herself, Bob Peabody, describes Dorothy this way: “I think her primary purpose in life is to be a teacher.”

Her passion for mushrooms started in 1969 when she moved to New Jersey from Brooklyn. Soon after joining NJMA, she quickly became very active – she has served as President, Vice President, Newsletter Editor, Executive Committee member, and in numerous other positions during the last 30-plus years. One noteworthy contribution that she made while serving as newsletter editor in late 1970s (along with many other dedicated NJMA members) was to transition what was considered a ‘folksy’ newsletter to one that is rich with educational, technical, informative, and fun-filled articles encompassing all aspects of fungi, thus appealing (continued on next page)

“In wilderness is the preservation of the world”
– Henry David Thoreau, 1862
to many levels of interest.

Aside from teaching newcomers to NJMA (and many other NJMA duties too numerous to list), she and her husband Bill somehow have managed to host many Culinary Group meetings at their home over the years—even going to far as to allow a large pit to be dug in their back yard so that the group could roast a pig (it took their lawn a long time to recover from that!)

Dorothy is also an original member of North East Mycological Federation (NEMF) and serves as a Recorder for NEMF. This is certainly an opportunity for Dorothy to showcase her excellent taxonomical and organizational skills and make us all proud to be associated with her. In recognition of her dedication, she has received several awards over the years from NEMF. (By the way, she’s also proud of having never missed a NEMF foray since the beginning. Wow! That’s over 25 years!)

For fun, she travels extensively to various fungal forays and workshops. Her latest, and so far the most enjoyable trip, was to Denmark for the week-long 12th International Fungi & Fibre Symposium. She proudly wears a Danish-style belt made with wool that she colored with fungal dyes. She also proudly wears her mushroom-dyed sweater made from wool that she dyed, which was then knitted by her long-time traveling companion, Susan Hopkins.

Dorothy is also an accomplished photographer and some her pictures are included in the well-known National Audubon Society Field Guide to North American Mushrooms by Gary Lincoff. She now coordinates NJMA’s annual Photo Contest.

She is passionate about gardening and loves orchids. Her newest passions are lichens and dragonflies. She has loved birds and wildflowers since she was a little girl. (What happened to the nice “city” girl from Brooklyn?)

Recently, Dorothy and her husband Bill became proud grandparents. Dorothy is very excited to show their grandson, William James IV, all she knows and loves to hold him. (Oh! Did I mention that she has been a vocalist in her church’s choir since sweet sixteen?)

Aside from being active in NJMA, she has served as a director of Reeves-Reed Arboretum in Summit, NJ and is currently a regular speaker for garden and nature Clubs. She is also a member of the Board of Friends of the Great Swamp, and routinely conducts guided tours at the Great Swamp and at the NJ Audubon Society.

Thank you, Dorothy, for all your contributions of commitment, time, energy, dedication, your passion, and your expertise to make NJMA what it is today. We are truly fortunate to have you!

Michael Beug offers the following cautions concerning Leccinum:

“Leccinum ponderosum is one of several orange-capped boletes with scabers on the stipe that give the stipe a rasp-like appearance and mark it unmistakably as a Leccinum. There are several difficult to distinguish orange-capped Leccinum species that I lump together as the Leccinum aurantiacum complex. The cap color is usually light to dark orange but can be almost white to a little pinkish. I used to consider all members of the Leccinum aurantiacum complex to be edible and choice. My favorite procedure was to saute them until browned and then scramble in some eggs. They often turn an unappetizing gray-black on cooking, but the flavor is great.”

“Recently there have been a number of reports of gastrointestinal distress coming from Colorado and Montana. I do not know whether they have a look-alike species that is not good to eat or have an unusually large number of individuals who “cannot tolerate” Leccinum species. The symptoms can be very severe vomiting with diarrhea. Individuals can be gassy, dizzy, stiff and sore. Recovery can sometimes take as long as five days. Most poisonings are from consuming raw mushrooms, but some come from cooked ones as well.”

(From Introduction to Mushrooms, revised April 2000, by Michael W. Beug, beugm@evergreen.edu, The Evergreen State College, Olympia, WA, http://www.evergreen.edu/mushrooms/introm/s29.htm)
NJMA PHOTO CONTEST
Regulations
Slides and Digital Images Accepted

Contest Deadline: All entries are due by our November meeting date. All photos will be displayed at our December Holiday Party.

Contest Categories: Technical, Pictorial, and Activity Judge’s Option

For each of these categories, there will be both a 35mm slide and a digital camera section, as well as two divisions: one for novice and one for advanced (which includes semi-professionals and those entrants that have won first place three times in the last five years.) Call 908-647-5740 for further clarification. There will be 12 first place winners, one from each of the each following categories:

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<td>35mm Slide – Technical</td>
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<td>35mm Slide – Pictorial</td>
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<td>35mm Slide – Activity Judge’s Option</td>
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<td>Digital Image – Pictorial</td>
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Contest Rules:

The contest is open to all NJMA members. 35mm slide entries are limited to a total of 15 for each contestant. Please mark each slide with a projection dot at the lower left corner of the mount when viewed right-side-up out of the projector. Label each slide on the dot side with your initials, category initial (T, P or J) and slide number (for example, JD-ST-1. In this case, this code stands for John Doe, Slide, Technical, number 1).

Digital images are limited to five entries per person per category. Submit on a CD-ROM or floppy disk. Digital images should be kept at their original resolution. If the photo has been manipulated, original file must also be included (cropping is not considered manipulation). The preferred file format is TIFF (.tif), but JPEG (.jpg) files will be accepted.

For slides, be sure to include a page with your name, address, e-mail and phone and a listing of your entries with title and category.

For digital images, list as above and include a file name under each image that includes the first three letters of your last name (not your initials).

All entries may be used for publication in our newsletter or be duplicated for our slide library and future digital library.

Winners will be announced at our Holiday Meeting. Slides will be shown in the traditional way. Digital images will also be projected.

Mail or deliver slides or images to:

Dorothy Smullen
141 River Road
Millington, NJ 07946
In this issue:

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- **BUT CAN YOU EAT IT?**
- **MEMBER PROFILE**
- **BIO BLITZ**
- **ANDEAN PREVIEW**
- **SPORE COUNTS**
- **PRESIDENT’S MESSAGE**

...plus much more!

**Grifola frondosa**
*(Maitake, Hen of the Woods)*

Emerging at the base of oak at the first hints of autumn, this feathery (and delicious) polypore often attains sizes exceeding 18” across.