

NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION

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NJMA OFFICERS

President - Patricia McNaught
Vice-President - John Burghardt
Secretary - Richard Kelly
Treasurer - Igor Safonov

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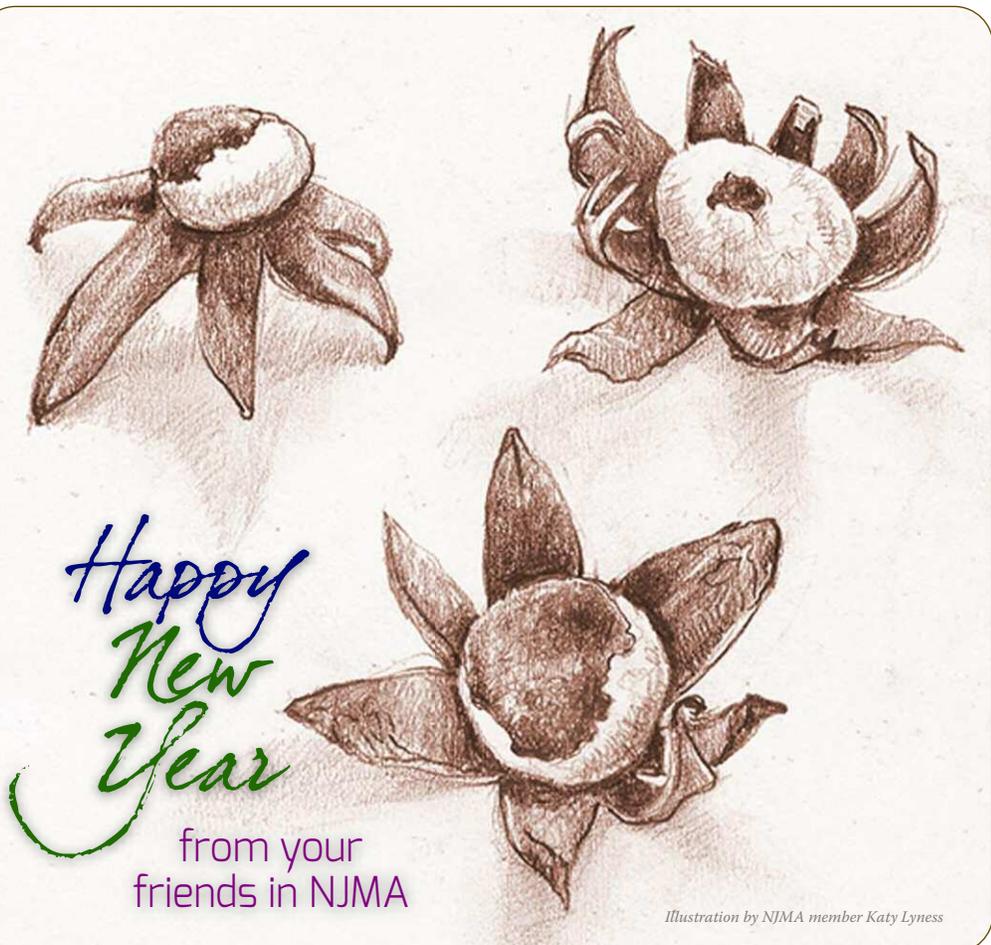
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NJMA EVENTS HOTLINE

908-227-0872 for information on
NJMA events or cancellations due to
bad weather. It is NOT for general
inquiries or to contact officers!



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PRESIDENT'S MESSAGE

The year has come to a close, and this seems an opportune time to recognize the many volunteers that contribute to NJMA.

At the December party, **Virginia Tomat** arranged the festive table decorations, including the calendar with a mushroom paper decoration that each attendee took home, while **Bob Hosh** organized food and **Jim Barg** organized the photo contest (for which **John Burghardt** served as judge for the technical category). Fungus Fest couldn't have happened without **Terri Layton's** impressive executive skills and the army of volunteers she mustered. Many volunteers led forays, and **Nina Burghardt** (taxonomy) and **John Burghardt** (species recorder) went to almost every foray, up and down the state, to be expert identifiers. **Liz Broderick** did a fabulous job at the Victor Gambino Foray (NJMA weekend in the Poconos). Volunteers gave up weekend time to lead NJMA workshops and to be at the NJMA table at outreach events throughout the state.

Jim Richards organized our Mycophagy event and ran the kitchen, while **Luke Smithson** demonstrated and shared mushroom recipes. Throughout the year, **Jim Richards**, as Newsletter Editor, and **Jim Barg**, as Art Director, take a mishmash of submissions and turn them into our incredibly professional-looking newsletter. **Jim Barg** is also our webmaster. These are all "front of the house" activities, but the contributions of those involved in "back of the house" operations are just as essential.

Phil Layton has toiled in the background for over two years to craft a set of proposed bylaws that is comprehensive and well-organized... and addresses the inadequacies of our current bylaws. He also worked to ensure a smooth transfer of NJMA's archives and financial data after Bob Peabody's passing.

Our forays happen because **Bob Hosh** has arranged for the necessary permits. To list all the contributions of **Igor Safonov**, Membership Chair, Secretary, and Registrar for many NJMA events would take up too much room, but among them are the NJMA directory and library catalog. **John Burghardt** stepped up very quickly to become Acting Treasurer, ensuring that NJMA's bills would be paid on time.

Lastly, there are the many volunteers who may not have an official role, but step up when they see a need. They are the kitchen elves and the folks who help to set up and stay behind to put away chairs and turn off the lights. I have been involved in many volunteer organizations, but I am in awe of the dedicated NJMA volunteers. Forget our bank balance; our volunteers are the most valuable resource for NJMA.

Club Business

I am pleased to announce that, at our December meeting, Igor Safonov was elected NJMA Treasurer and Richard Kelly was elected as NJMA Secretary. Richard and his wife Virginia Tomat joined NJMA in 2007, and he serves as Scholarship Chair. Richard's background is in pharmacology, and he currently teaches chemistry and physics.

Bylaws Update

The proposed bylaws are under review by the NJMA Board. There are significant changes from the version presented at the NJMA meeting in April of last year. There will be an informational meeting on the bylaws on February 8th at Frelinghuysen Arboretum. (Our Mycophagy program is also in February, on the 22nd in East Brunswick. Don't come on the 8th expecting to taste mushroom dishes!) The purpose of the informational meeting is to explain the rationale behind the many bylaw changes, and to allow members to comment on the bylaws before we finalize the version that members will vote on at a later meeting.

– Patricia McNaught

INOCYBE - FROM MICROSCOPY TO MOLECULAR

Preview of my January 10, 2015 lecture, by Dr. Linas Kudzma

I will discuss my studies of the diversity of Inocybe in the Northeast and how these hard to identify prototypical LBMs are among the most beautiful and fascinating fungi when studied under the microscope. I will display many photomicrographs with detailed explanations. I will also explain how molecular (DNA) studies go hand-in-hand with the classical morphological approach and give a virtual tour of my laboratory and techniques employed.

Dr. Kudzma's biography follows on [page 3](#).

WELCOME TO THE ONLINE EDITION OF NJMA NEWS

For the great majority of you who are viewing the online PDF of this newsletter, please note that **most web links and email addresses are clickable**. Clicking on a web or email address will launch your web browser and take you to the specified page or open your email software so you can send us an instant email. Just look for the "click finger" when you hover your mouse over these items.

No more clumsy "writing it down" or copying and pasting!

NJMA OFFICERS FOR 2015



The slate of officers for 2015 presented by Nina Burghardt, Nominating Committee Chair, and approved by acclamation at the December 14, 2014 meeting is:

(pictured left to right)

Treasurer: **Igor Safonov**
President: **Patricia McNaught**
Secretary: **Richard Kelly**
Vice-President: **John Burghardt**



EDITOR'S NOTES

It is the start of a new year and the time to once again thank our contributors. In all, we had articles, photographs, book reviews, poetry, foray reports, drawings, or BBB items from almost fifty members during 2014. Without your input, *NJMA News* would be a very different publication – certainly a much smaller one. Some of you contributed regular series of articles. Others sent in only a single item. All are welcome. We do need some writers who are willing to contribute to our weakest area: more technical articles.

We are so very lucky to have such a diversely talented group of members in NJMA. That fact was evident once again at the December Holiday Party where we were treated to a wide range of foods prepared by our cooks, whose dishes included many wild-collected mushrooms as an ingredient. Several of these members participate during the year in Culinary Group events, of which there were three this past year: Vietnam, Northern Italy, and a Southwest Cookout. The photographers whose work was on view during the Photo Contest gave us many new ways to look at the great variety of colors and shapes of mushrooms and how they relate to their habitats. It would be great if NJMA had a “photo group” that could meet throughout the year to share ideas and comments on one another’s works. It would be a good way for some of the less-experienced camera bugs to learn about composition, cropping and other simple techniques to improve their

(continues on [page 9](#))

DR. LINAS KUDZMA A SHORT BIOGRAPHY

Linus is a long-time member of NJMA, with a lifelong interest in mycology and microscopy. A research scientist at Baxter Healthcare, Linus has a Ph.D. in organic chemistry from Rutgers University and a B.S. in Biology from Fordham University. In recent years, he converted his basement darkroom into a personal molecular biology laboratory to further his studies of fungi, identifying new or cryptic species and their evolutionary relationships.

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COMING ON FEBRUARY 22ND MYCOPHAGY MEETING AND MYCO-AUCTION 2015

It is almost that time of year again - almost time for our most popular winter meeting: Mycophagy, which is a demonstration of cooking with mushrooms. Each February for almost 40 years, our meeting has been a demonstration by professional chefs or some of our more experienced cooks of ways that mushrooms can be used in the kitchen.

We are very happy to let you know that NJMA member and our “chef-in-residence”, Luke Smithson, will be our guide. He will be demonstrating (and you will be tasting) a number of his favorite recipes selected from cookbooks that have been reviewed in *NJMA News*. He is still looking through them to select exactly which dishes he will be preparing for us to sample. As many of you already know, Luke is the Executive Chef at Jamie Hollander Catering in New Hope, PA.

Pre-registration is mandatory in order to attend this meeting – no exceptions! This **free** event is for **NJMA members only!** You must be paid up through 2015 in order to attend. *No guests of any kind are permitted* (this includes relatives who are not part of a member’s household). **To register, contact Igor Safonov (njmycomember@gmail.com) or call him at 215-716-1989.**

Because of space limitations, attendance is limited to 80 members. Registration will end when that number is reached, or on Friday, February 20th.

To donate items for the Myco-auction, please contact Marc Grobman (marc@marcgro.com) or Frank Marra (marraman1@verizon.net).

To volunteer to help with setup, kitchen prepping, serving, and cleanup, contact Mycophagy Chairman Jim Richards (jimrich211@gmail.com) or call him at 908-619-1438.



CALENDAR OF UPCOMING EVENTS

Saturday, January 10*

1:30 pm

**NOTE: This is a corrected date!!*

MEETING & LECTURE

FRELINGHUYSEN ARBORETUM, Morristown, NJ

Speaker: Dr. Linas Kudzma, topic: "Inocybe - From Microscopy to Molecular"

Sunday, February 8

1:30 pm

SPECIAL MEETING: NJMA BY-LAWS REVIEW

FRELINGHUYSEN ARBORETUM, Morristown, NJ

Sunday, February 22

1:30 pm

MYCOPHAGY AND MYCO-AUCTION

UNITARIAN SOCIETY, Tices Lane, East Brunswick

Chef: Luke Smithson Coordinator: Jim Richards

Auctioneers: Marc Grobman & Frank Marra

This is a members-only event. Pre-registration is required.

Details on page 3.

Sunday, March 1

1:30 pm

MEETING & LECTURE

FRELINGHUYSEN ARBORETUM, Morristown, NJ

Speaker: Dr. Lawrence Millman, topic: "How to Get Rid of Evil Spirits"

Saturday, March 14

6:00 pm

NJMA CULINARY GROUP DINNER – "THE OTHER CHINA"

UNITARIAN SOCIETY, Tices Lane, East Brunswick

This is a members-only event. Pre-registration is required.

Contact Jim Richards at jimrich17@me.com if you wish to attend.

July 30 - August 2

2015 NEMF FORAY

NEW LONDON, CT

Details will be in a future issue of *NJMA News*.

September 24-27

NAMA FORAY 2015

BLACK MOUNTAIN, NC

NJMA CULINARY GROUP DINNER

"THE OTHER CHINA"

SATURDAY, MARCH 14th, 6:00 PM

When you think of Chinese food, what is the first thing that comes to mind? Chicken Chow Mein? Wonton Soup? Sweet and Sour Pork? General Tso's Chicken? Well there is a whole world of cooking from China that has nothing to do with these Americanized dishes. Over three-fifths of China is populated by over 13 peoples who are not Han (the ethnically "True Chinese") and whose food is very different from what most of us think of as typical. Much of it is more like Indian or Southeast Asian, with curries and yogurt. Some of it is from the Mongols and other northern groups. Rather than using rice as the main grain, many of these peoples make breads and noodles from wheat rather than rice.

If you are interested in exploring the foods of the Tibetans, the Mongols, the Kazakhs, and other ethnicities with dishes like Yi Market Noodles, Steamed Tibetan Momos, Kazakh Cabbage, Stir-Fry with Lamb, Lhasa Beef and Potato Stew, and Eight-Flavor Tea with wolfberries, raisins, and dried fruits (and much more) come to the Culinary Group's "The Other China"!

The NJMA Culinary Group has been active since the spring of 1982, usually putting on three or four dinners

per year. The dinners are planned meals, usually with a national or regional cuisine as a focus, although we have done vegetarian meals, game dinners, summer salads as well as bread and soup suppers.

The organizers of the dinner plan the menu, select and distribute recipes to members and, in general, try to make sure that the meal goes smoothly. The meals are definitely not "potluck". We have plenty of those as it is. Each person who is assigned a recipe keeps track of the costs of their dish. At the end of the meal, all the cooks hand in the receipts for the ingredients used in their dish, all is added together, a donation for the church is added and the total divided by the number of participants. The average meal has been running about \$16 per person (a fantastic bargain for the quantity and quality of the much-appreciated dishes).

Everyone brings their own tableware, dishes, glasses, and cutlery as well as any wine, beer or other beverages they wish to enjoy with the meal. Coffee and tea are provided. The dinner will be held at the Unitarian Society, East Brunswick, on Saturday, March 14th at 6:00 pm.

To register for the dinner, or for more information, contact Jim Richards (jimrich17@me.com) 908-619-1438. *Registration is limited to 30 NJMA members, so sign up early.*

NJMA CULINARY GROUP WRAP-UP REPORT NORTHERN ITALIAN DINNER

as reported by Faith Perrin

On November 8, 2014, 28 hungry diners enjoyed an evening of good food and camaraderie at the NJMA Culinary Group's Northern Italian Dinner at the Unitarian Society in East Brunswick. As usual, the food was delicious and plentiful, and the company was engaging.

Attendees had not been assigned recipes for this dinner, but had chosen their own, which were then approved by the selection committee to ensure a well-rounded dinner with a variety of Northern Italian food, from appetizers to desserts. Lots of general information organized from several internet cooking



PHOTO BY BOB HOSH



PHOTO BY CHARLIE ZIELINSKI

including Sweet and Sour Onions, Roasted Eggplant, olives, fennel, and Marinated Cremini. Northern Italian cheeses and an assortment of meats such as *Prosciutto* and *Mortadella* were also presented. An antipasto of Roasted Red Peppers with Anchovies and Garlic was beautifully arranged, along with a selection of regional breads, such as *Pane di Como* and *Ciabatta*.

Next came the pasta courses: a Mushroom Risotto and Butternut Squash Ravioli with Sage Butter. Diners were sorry to have to limit their serving sizes, but much more food was on the way!

sites yielded the following: Northern Italian cuisine is generally more butter and dairy based, with less use of olive oil. Wine and broths are more likely to be used as liquids in cooking. Stuffed pastas are more important, and the flat and extruded forms are less commonly used. The Northern Italians eat more rice, beans and polenta, and less tomatoes and citrus than people from the central and southern regions. The most common meats are beef, veal, roasted pork and sausage, with lamb less likely to be available.

Appetites were initially whetted by a selection of Northern Italian antipasti,

Entrees, salad and vegetables were then brought to the table by their chefs: Lamb Stew, chicken prepared with rosemary and garlic, Ham with Mushrooms, a baked Polenta, Frittata with vegetables, Fennel Gratin, Sautéed spinach, *Taroz* (a bean/potato dish), and a green salad.

Diners who had left room for dessert then sampled the carefully crafted desserts: *Il Diplomatico* (an elaborate traditional cake), Hazelnut Torte, Apple Cake, and a Pear/blackberry Compote.

Coffee and tea accompanied the desserts and completed the dinner. All attendees look forward to the next culinary event. ☺

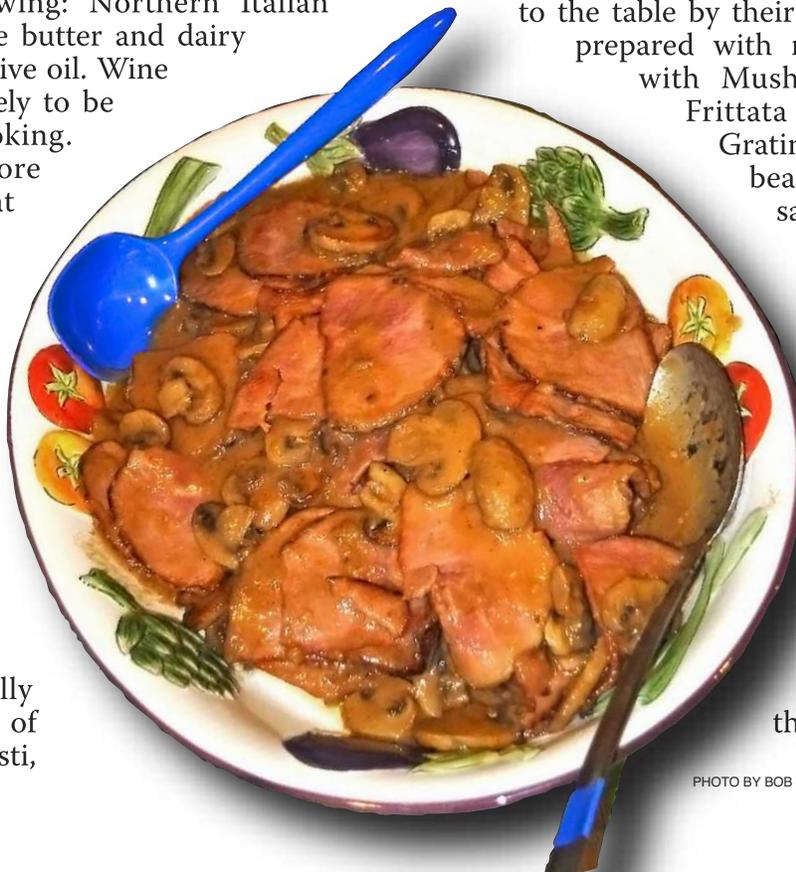


PHOTO BY BOB HOSH

BRENDAN BYRNE STATE FOREST FORAY REPORT

by John Burghardt

The up-and-down 2014 collecting season ended on a high note at Brendan Byrne State Forest on the last Sunday in October. The rains, followed by clear cool fall weather, finally aligned with our foray schedule to bring outstanding collecting conditions, many enthusiastic collectors, and more than the usual number of sorters and identifiers to our Brendan Byrne foray.

We were pleased to have many newcomers at the Brendan Byrne foray as well as several old-timers who ventured across the Hudson River to the Pine Barrens on this beautiful fall day. A large number of foray participants covered a lot of ground with diverse habitats. One group, made up mostly of new members and others new to mushroom collecting, walked the trail around Pakim Pond. Starting at the picnic area, the trail passes through upland pine/oak forest and disturbed open areas around to the northeast side of the pond. It crosses a causeway between the pond and a large marsh fed by the outflow of Coopers Branch Brook, the dammed stream that creates Pakim Pond. The group found a lot of interesting fungi and had many questions, so we moved at a slow pace through the damp area northeast of Pakim Pond.

A group of students from Princeton University drove with Nina Burghardt to an area with a mixture of upland pine/oak forest and a substantial Atlantic White Cedar swamp. Their enthusiasm to explore a challenging part of the park was greatly appreciated, as it considerably increased the numbers and diversity of the collected fungi. Other more-experienced foray participants disappeared into the surrounding forest in all directions and came back with loaded baskets.

As it came time to return to the Pakim Pond picnic area, I was wondering how we would sort through all the fungi and put names to them. To my great surprise and relief, our intrepid band of usual suspects for sorting and identifying (Nina Burghardt, Luke Smithson, Igor Safonov, and Marc Grobman) had been reinforced by three long-time members from across the Hudson River: Aaron Norarevian, Dennis Aita, and Tom Bigelow. In addition, many newcomers pitched in to help with the sorting, naming, and documenting.

Participants brought back a large, diverse collection. In the end, we identified over 80 species and another dozen or more went unnamed. Mycorrhizal species were abundant. They included five or six species each from the genera *Amanita*, *Cortinarius*, *Laccaria*, *Suillus*, and *Tricholoma*, and eight or nine species each from *Lactarius* and *Russula*. Below are some interesting

examples from each genus. Except as noted, the species mentioned are all common in the Pine Barrens in late October, but not often seen in other parts of the state or at other times of year.

Amanita polypyramis is a large, thick-set member of the *Lepidella* group in *Amanita*. It is fairly widely distributed and not uncommon, but we have recorded it only twice previously on NJMA forays and I don't remember seeing it in the Pine Barrens. *Cortinarius croceus*, a member of the *dermocye* group within the large genus *Cortinarius*, is prized as a dyer. It has yellow to yellowish-brown gills and cap, and produces a pinkish-brown or yellowish-brown color in dyeing.

Laccaria longipes, named for its long stem that dives deep beneath the surface, grows only in sphagnum bogs. I believe our specimen was collected in the wet area on the northeast side of Pakim Pond. *Lactarius proximellus* is a short-stalked, small golden brown, zonate fungus. Our collection of *Russulas* included the very common *Russula perlactea* and *Russula ventricosipes* as well as the unusual *Russula decolorans*, which has an orange cap and flesh that darkens on handling. *Suillus hirtellus* stands out among the *Boletes* that were collected. We have found it in three Pine Barrens locations this year, although it has been recorded just twice previously in 30 years. *Tricholoma* fruit in late fall, and we often find them at this time in the Pine Barrens. Most interesting to me were a collection of *Tricholoma focale* and one of *Tricholoma transmutans*.

We found a number of interesting fungi on wood or woody debris. Several specimens of *Rhopologaster transversarium* were collected. This is club-shaped gasteromycete with a rudimentary stalk and "cap". The "cap" is actually a sack, from which spores are dispersed as the sack tears. We see it frequently in the Pine Barrens. *Mushroom Observer* (www.mushroomobserver.org) has good photos of this unusual species taken at Brendan Byrne and Franklin Parker in 2012.

Another very interesting fungus on wood was *Guepiniopsis buccina*. This is a small yellow to orange trumpet-shaped jelly fungus. Dorothy Smullen and Nina Burghardt identified it for the first time at this year's August foray at Hoffman Park in Hunterdon County. It was surprising to find the same apparently unusual species in the Pine Barrens in late October.



Got a mushroom story to tell?
Share your experience with fellow mushroomers!
tell it here!
Send your articles and photos to njmaeditor@gmail.com

A FUNGAL FANTASY

Article and photos by Liz Broderick

Up until October, 2014 had not been a memorable year for collecting mushrooms for our family. The jars of dried morels, porcini, and black trumpets on my shelf were rapidly becoming depleted. Morel season had been disappointing due to the long, cold spring. July rains did bring some beautiful chanterelles, but otherwise I was returning empty-handed from my walks in the woods. August and September turned up only a few good edibles: a couple of *Boletus edulis*, one nice *maitake* and some Chicken of the Woods. Having grown up in California, I am member of the Sonoma County Mycological Association. Seeing the pictures of the beautiful boletes they were harvesting out west despite the drought, made me jealous of my left coast friends.

While riding my bike on a beautiful fall day at the beginning of October, I spotted a gorgeous *Boletus edulis* emerging from a thick bed of needles under an ancient White Pine. The cap was brownish red, and a little viscous; white reticulations were present on the stem and the pores were white on the surface but yellowish-olive once sliced. The tree was in front of a friend's historic house which was built around 1840 and I would estimate that this pine was probably 70-80 years old. In the past I have found *B. edulis* under Norway Spruce, but read that it was mycorrhizal with other conifers too. I checked out some locations that I knew had very old White Pines in Mercer, Burlington and Monmouth Counties. My hunch paid off and I found three areas with old White Pines that had a prolific fruiting of



Amanita muscaria, but also produced a few *B. edulis*. They grew under very old White Pines or Norway Spruce with a thick bed of needles. We started scouting these spots regularly, and by mid-October we hit a bolete bonanza. October 17 was a rainy cold day, but we donned our rain gear and took off for a walk in the woods. There were so many "Kings" that we had to go back to the car for another basket. That day we harvested eight pounds of *bouchons*, and for the next three weeks we found two or three pounds every few days. These exCEptional *ceps* were free from insect larvae and very firm. The joy of finding these fabulous fungi rivaled the excitement of an eight-year old kid on a treasure hunt.

Finding those little beauties began to turn into an obsession. My husband Kevin and I couldn't wait to jump out of bed early in the morning to check our trusty spots and see what the new day would bring. My very competitive husband would lay on the ground looking for "mushrumps", and was thrilled when he found the prize King of the Day. For three weeks, dinner consisted of some *porcini*-related recipe: *Porcini Risotto*, Mushroom Soup, *Carbonara* with *Ceps* (thanks to Luke Smithson for the inspiration), *Chicken Marsala* with *Ceps*, omelets, *Porcini* with garlic and butter on toast, *Porcini* sautéed with peas, *Grilled Porcini* with olive oil and balsamic, and *Fettuccini* with parmesan and *porcini*, etc. We shared our bounty with friends and family and ran our dehydrator incessantly to help preserve our bonanza. I had to buy a second dehydrator. This incredible harvest continued until November 17th when the freezing weather lasted for a couple of days.

Today is a snowy December day, and I am sitting at my kitchen table with a hot cup of tea writing this article. I remember the intoxicating scent of the White Pine and the thrill of the hunt. I glance at the jars on my shelf that are brimming with dried *Boletus edulis* and start thinking about what to make for dinner. I am grateful for such an abundant harvest, and glad to live on the right coast.



REPORT ON THE FRANKLIN PARKER PRESERVE PROJECT

by Nina Burghardt

2014 will complete the sixth year of NJMA's Franklin Parker Preserve Project. In 2009, the New Jersey Conservation Foundation asked our club to conduct a survey of the fungi in the Franklin Parker Preserve (FPP). FPP is located in Chatsworth, NJ, which is often referred to as the heart of the Pine Barrens. The New Jersey Conservation Foundation owns and manages FPP. I manage the NJMA FPP project. I have a list of people who have expressed an interest in the project and I send out emails anytime we are going to collect. We meet at an arranged location, select an area to collect (depending on the weather conditions), collect everything fungal, identify what we can in the field, and take the rest home for further macro- and microscopic examination.

FPP has many different habitats: wetlands, cedar bogs, airplane runway deadpan, oak-pine scrub upland, maple-tupelo lowlands, railroad track and streambed. Each habitat has its own unique fungi as well as some shared by all the habitats. Some mushrooms have appeared in the same place for six years while others fruit once or for a few years and then don't reappear.

During summer and fall, northern and central New Jersey usually have quite a bit of rain, while the Pine Barrens have to wait for the rain until October or November. This



These unidentified *Hygrocybes* were found in hot dry sand in May.

year, we would leave the brown grass of central Jersey only to find puddles in Chatsworth. Unluckily, I think the dry conditions in the rest of the state scared people away because we had very few collectors.

On May 31, we identified 18 species with many unidentified, including a pretty orange *Hygrocybe* with red splashes on the cap, growing in the usually hot, dry airplane runway.

“This year, we would leave the brown grass of central Jersey only to find puddles in Chatsworth.”

Another time, we arrived just after a rainstorm. John found a black-brown mushroom growing in a sphagnum-covered low spot covered with several inches of water. I figured that it was probably rotten, but we took it

home anyway. It dried out and dropped a black spore print. It did not seem to fit anywhere. The spores were too big, it was not growing on wood or dung. After much research, we came to the conclusion that it was a *Bogbodia udna* (peat brownie) which used to be called *Hypholoma udum*, and before that *Psilocybe uda*. I guess no one else could figure out where to put it, so now it has its own genus.



Bogbodia udna, the Peat Brownie

This year, *Suillus decipiens* (previously found only four times in FPP) (see photo on next page) was all over the place, growing to enormous sizes, starting in July and continuing until November. There was no sign of *Amanita mutabilis* (a white mushroom which turns bright pink when scraped and smells like almond) which has been very plentiful in the previous years. In fact, there were very few Amanitas this year compared to the previous five years. (continues on next page)



PHOTO BY NINA BURGHARDT

Suillus decipiens made quite a showing this year.

We scheduled a collecting day on November 21. It had dropped into the twenties the night before, so our expectation were low. When we arrived at the Speedwell section of FPP, the whole road was erupting with *Tricholoma*. Everywhere we looked there were mushrooms. Some were still frozen, but we took them home and they even dropped spores after they warmed up.

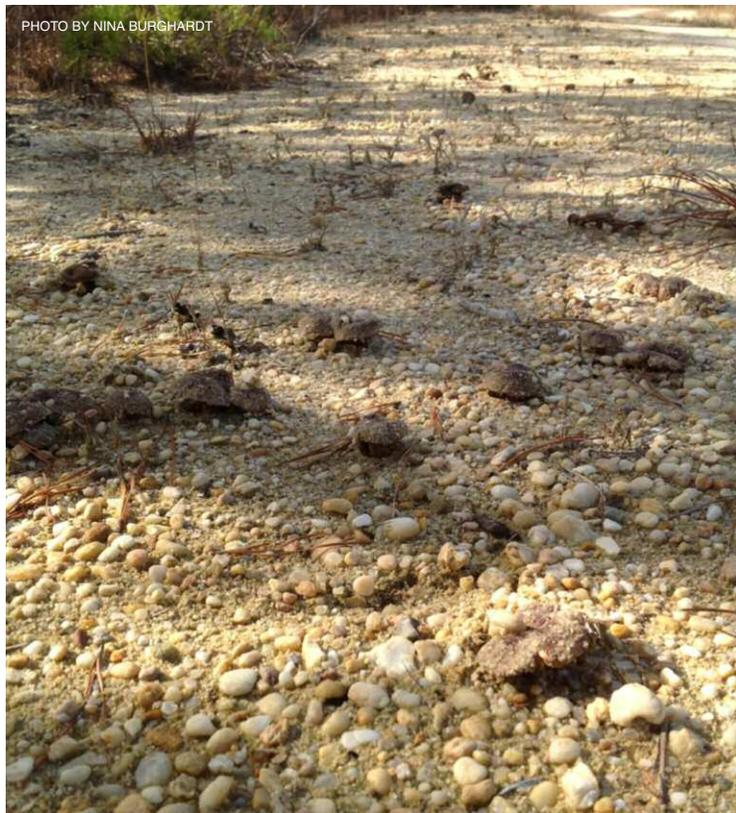


PHOTO BY NINA BURGHARDT

Mushrooms popping up out of the sand

We have identified many of the mushrooms that grow in FPP, but there are many more to find and name. We need more people. Members who have been very helpful in collecting and identifying this year were Igor Safonov, Paul Funk and, of course, my husband, John Burghardt. If you are interested, please contact me (jnburghardt@verizon.net) and come join us next year.

NJMA MEETING & LECTURE – MARCH 1ST “HOW TO GET RID OF EVIL SPIRITS”

by *Lawrence Millman*

In this presentation, I will introduce my audience to ethnomycology by examining the non-culinary uses of fungi among the northern Native peoples, including the Inuit, the Cree, the Alaskan Yupik, and the Siberian Chukchi. With these people, puffballs are used exclusively as styptics, while polypores are used as insect smudges, fire-starters, and as a means of ridding one's dwelling place of evil spirits. All the material in the presentation will be based on fieldwork I've done in the North — 40+ trips and expeditions.

LAWRENCE MILLMAN: A SHORT BIOGRAPHY

Lawrence Millman is the author of 16 books, including such titles as *Last Places*, *Lost in the Arctic*, *A Kayak Full of Ghosts*, *Fascinating Fungi of New England*, *Hiking to Siberia*, and — most recently — *Giant Polypores & Stoned Reindeer*. He is among the few current practitioners of expedition mycology, which means he travels to remote places such as Spitzbergen and the Yap Archipelago to document the local fungi. Besides finding the first wood-inhabiting basidiomycete in East Greenland, he also found a polypore in nether New England that was thought to be extinct since 1909. He lives in Cambridge, Massachusetts.

EDITOR'S NOTES (continued from page 3)

entries for future contests. (It might encourage more people to contribute their work to *NJMA News* as well) To start, it could be as simple as people getting together at forays to look at their camera photos. If you are interested, please contact me at jimrich211@gmail.com. We would need someone to coordinate the group. I have too much going on with the newsletter, mycophagy, and the culinary group to take on anything else. But I am willing to help interested people get in touch with one another.

NJMA also has members who are proficient in using mushrooms for various crafts such as jewelry, dyeing, papermaking, and so on. Articles about those crafts would make great additions to the newsletter.

With any luck, this will be a better collecting year statewide, and the foray reports from the northern tier will equal those of the southern forays. In only four short months we will be finding morels again, and then the 2015 season will be underway.

Contributions to *NJMA News* should be sent to njmaeditor@gmail.com. Thanks in advance!

– *Jim Richards*

NJMA HERBARIUM UPDATE

by Nina Burghardt

The list of fungi in our herbarium is now electronically transcribed. It has to be checked for omissions. The next task is to go through the drawers to make sure that the specimen is still there, is in good condition and all the written information matches. We collected a lot of material from the 2014 forays which needs to be accessioned and placed in the herbarium. After this has been completed, we will be ready to put our list on the web.

NEW FORAY COMMITTEE CHAIR

by Patricia McNaught

After many years of being Foray Committee Chair, Bob Hosh has decided to resign and spend less time working on schedules and permits and more time on things he loves (mushrooming, cooking, and cats). Nina Burghardt will be our new Foray Committee Chair for 2015. If you have suggestions about the NJMA foray schedule or locations, please contact her:

jnburghardt@verizon.net



LOWER ATTENDANCE AT THE 2014 NJMA HOLIDAY PARTY

by Bob Hosh

Attendance at the NJMA Holiday Party this year was not as great as in years past. A total of 36 club members came to the festivities and contributed a wide variety of food. Some of the dishes were cleverly done, such as the small Amanita-like appetizers creatively made of quail eggs, cherry tomatoes and mascarpone cheese by Virginia Tomat, who also provided the table setting and decorations.



Virginia Tomat's "Tomanitas" - a tomato and quail egg appetizer

Luke Smithson brought a delicious Black Trumpet Pate. Among the main courses were Chicken Marsala with *Boletus edulis* foraged in New Jersey and made by Jim Barg. Bob Hosh contributed a crockpot of *Szekely*



Chicken marsala with *Boletus edulis*

Goulash, a stew with sauerkraut, pork, sour cream, potatoes and paprika. Ursula Pohl made her delicious Chanterelle soup. It was quite a spread!

Officers for 2015 were elected and attendees watched a splendid slide show of entries club members made to the annual photography contest. And there were contest winners aplenty.



A selection of salads and breads

As usual, the holiday party provided a chance for club members to socialize and get to know one another. And we all are looking forward for a bountiful mushroom crop in 2015!



MUSHROOM ILLUSTRATORS WANTED

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

We are always interested in receiving accurate hand drawings, sketches, or artwork in any variety of media to grace our pages. While we cannot guarantee that your work will be published, we do file each submission and consider it for use either in conjunction with specific articles or for use as backgrounds or supplemental art when needed. You retain your copyrights and you'll be credited in all cases.

Contact our Art Director Jim Barg at jimbarg@bssmedia.com for more information or to submit your work.

WHO'S IN A NAME? The genus *Macowanites*

by John Dawson (forty-sixth of a series)

As described in David Arora's *Mushrooms Demystified*, members of the genus *Macowanites* are gastroid agarics that are "intermediate in aspect between [the genera] *Russula* and *Lactarius* and certain genera of false truffles." They are "not truly hypogeous, [but] are frequently only partially exposed at maturity." The genus is named after Peter MacOwan (1830–1909), an English botanist who was born in Hull, Yorkshire, but spent most of his career in South Africa. (MacOwan's father, a Wesleyan minister from Scotland, was also named Peter, but spelled his last name McOwan. Perhaps to distinguish himself from his father, his son later changed the "Mc" to "Mac".)

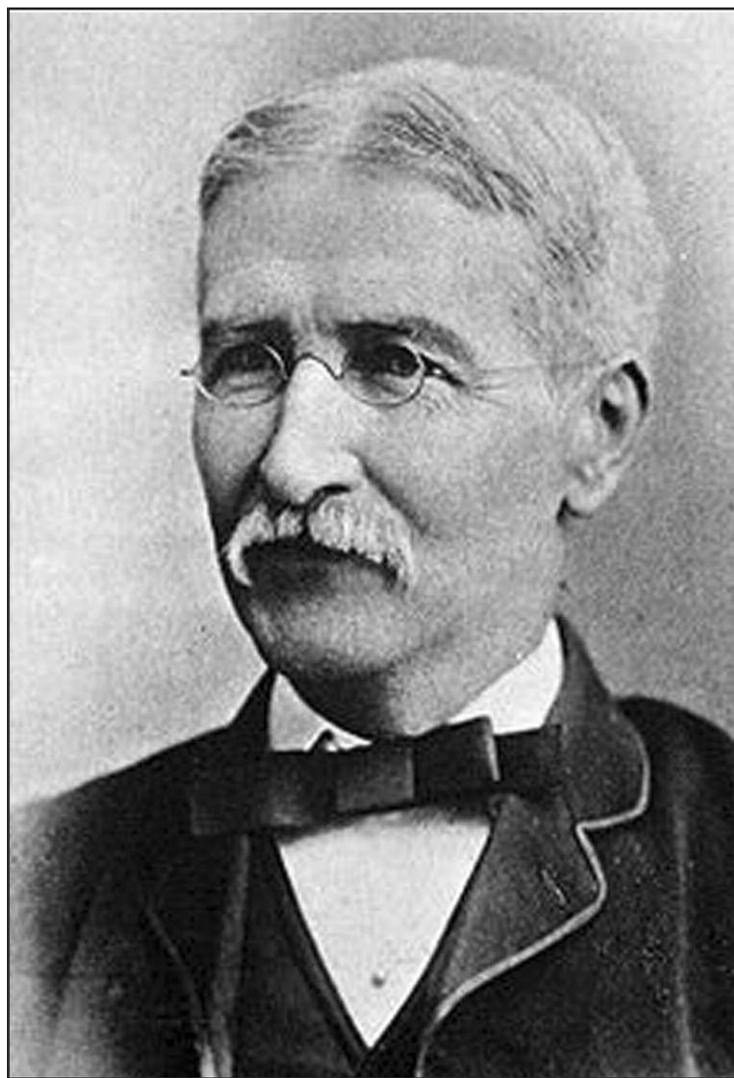
MacOwan attended schools in Bath, Colchester and Leeds, and went on to earn a degree in chemistry from the University of London in 1857. One year before that he married Amelia Day, a young woman from Bristol, and upon his graduation the couple moved to Huddersfield, where he was appointed Professor of Chemistry. He suffered, however, from chronic asthma, and found the English climate deleterious to his health. Consequently, in 1862 he left Huddersfield to become principal of Shaw College (now Kingswood College), a Methodist boarding school in Grahamstown, Eastern Cape Province, South Africa, where his health soon markedly improved. Academically, however, his new post was not on a par with the one he had left, and he gave up chemistry to pursue the study of botany.

MacOwan had begun collecting specimens of flowers and mosses at age 18, and after his move to South Africa he collected sedulously, sending many specimens to William Harvey in Dublin, whose *Flora Capensis* was then in preparation. He also exchanged specimens with Asa Gray in the United States and Sir William Hooker at Kew Gardens in London. Eventually, the work of carrying on such exchanges became very time-consuming, so to ease that burden, MacOwan founded the South African Botanical Exchange Society, an organization of dedicated amateur botanical collectors.

In 1869, a new university, Gill College, was founded in the town of Somerset East, and MacOwan moved there to become head of natural sciences. He remained there until 1881, when he was appointed director of the Cape Town Botanic Garden, curator of the Cape Government Herbarium, and chair of botany at South African College (which, nine years after MacOwan's death, would become the University of Cape Town). Six years later, he was appointed consultant in economic botany to the Cape Government, an action that, according to the

Wikipedia entry on MacOwan,¹ marked the formal start of the science of plant pathology in South Africa. MacOwan resigned his chair at the College in 1889² and his directorship of the Botanic Garden in 1892, when he was named Government Botanist, a post he held until his retirement in 1905. He then returned to the Eastern Cape Province, where he lived in the town of Uitenhage until his death on 14 November 1830, sixteen days after his 79th birthday.

The only source I have found that mentions MacOwan's contributions to mycology is the online site "Neglected Science" (<http://www.neglectedscience.com/alphabetical-list/m/peter-macowan>), which lists 28 species and one genus (*Lopharia*) of fungi that he was the first to describe. He was evidently also a prolific writer, as the JSTOR site cited in footnote 2 notes that "During his career he ... produced hundreds of botanical articles and books." In addition, in 1886, he "served as president of the South African Philosophical Society (later the Royal Society of South Africa)." 



Peter MacOwan

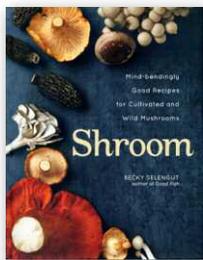
¹ The principal source of information for this article, from which the portrait of MacOwan was also taken.

² According to the JSTOR site <http://plants.jstor.org/stable/10.5555/al.ap.person.bm000005300>

BOOK REVIEWS

SHROOM

reviewed by Luke Smithson



Shroom

by Becky Selengut

Andrews McMeel Publishing (2014)
240 pages.
ISBN-10: 1449448267
ISBN-13: 978-1449448264

Out of Washington State comes another good mushroom book, this time a comprehensive cookbook called *Shroom*. Written by Becky Selengut, the book is divided up into chapters that devote themselves to individual mushroom species. Chapter One covers the Portobello family, Chapter Two Beech Mushrooms and so on. Fifteen different species of cultivated and wild mushrooms are covered in this cookbook, each chapter containing five recipes that are organized from easy to advanced.

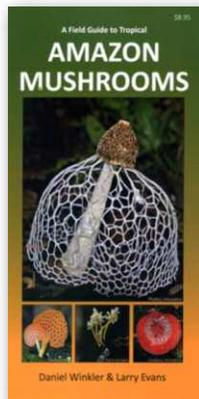
There are plenty of nice photos in this book, but the emphasis is clearly on the recipes and information concerning the mushrooms. There is even a companion “ShroomTheCookbook” Channel on YouTube to help further explain some techniques commonly used in mushroom cookery (cleaning, rehydrating, roasting, etc.). The recipes are punctuated with witty, slightly off-the-wall humor. Becky’s favorite way to eat her Black Trumpet Pate with Sage and Marsala? With a spoon, while blocking other diners from it with her arms.

The recipes themselves are well written and easy to follow. They are quite diverse in their scope and cultural influence, reflecting the contemporary culinary trend of multi-cultural menus, chefs not being bound by single cuisines. I tested three of the recipes over the last several weeks. I do have to issue a disclaimer: I am not a very good recipe tester. I tend to improvise a lot, cooking *au pif*, or in English, by the nose. So I don’t think that I truly tested any of the three recipes, as I used what ingredients I had on hand, changing the recipes as I needed to fit what I was available. But I did try “Fried Duck Eggs with Artichoke and Morel Salad”, which was enjoyed by my immediate family. I also cooked a double batch of the Black Trumpet Pate with Sage and Marsala, although I used Brandy instead of Marsala. This went over quite well at a Thanksgiving gathering. And I was eating it with a spoon! I also took that recipe to work (the actual Marsala version) and sent it out on a catering party. Finally, I made the Portobello Shakshuka with Baked Eggs and Israeli Feta for a staff meal in the restaurant that I work in. Again, I changed the recipe, because I was feeding fifteen hungry people instead of the four that Becky’s recipe feeds and didn’t have that many portobellos on hand. But that recipe was awesome...I will definitely be using it again!

In conclusion, this is a great cookbook. I don’t find too many cookbooks that I feel really have a nice balance of simple to advanced recipes, but this book manages to do it, using mushrooms in every recipe...definitely a plus in my book! I would recommend this cookbook to people with any skill level in the kitchen, and I look forward to trying out more of her recipes.

A FIELD GUIDE TO TROPICAL AMAZON MUSHROOMS

reviewed by Nathaniel Whitmore



A Field Guide to Tropical Amazon Mushrooms

by Larry Evans and Daniel Winkler

Mushrooming Publications (2014)
ISBN-10: 0990423808
ISBN-13: 978-0990423805

Before I left for Peru several years ago on a trip to learn about plants, I had attempted to find some references for fungi. If my memory serves me correctly, I found only a couple of narrowly technical and/or expensive works – nothing to add to my library or take with me on my travels. During my expedition, I met a number of folks who were quite knowledgeable about plants, but only one young man who seemed to know much about mushrooms. A guide to fungi would have been appreciated.

Because *A Field Guide to Tropical Amazon Mushrooms* is a laminated fold-out, it is not comprehensive enough to allow me to find a name for the purple ganoderma I saw in the jungle. It does, however, list a couple of earth-stars, and I wonder if the species I saw while in Peru is of the same type as one that is pictured. I would have been very happy to have this guide with me on my travels.

Evans and Winkler have teamed up to produce a beautiful guide with color pictures and well-done descriptions. They start the brochure with a succinct description of mushroom biology and ecology. This may be a bit basic for many NJMA members, but I am sure it could be quite enlightening for the average South American tourist. Anyone interested in fungi should carry this guide into the Amazon. It is laminated to protect against jungle dampness and has a small ruler for field use. It describes over 50 species from over eight basic groups, including cup fungi, cordyceps and allies, jellies, and polypores. Deficiencies inherent to a fold-out travel guide are supplemented with the recommended website, which is neotropicalfungi.org.

I am very glad to see some literature shedding light on mushrooms of the Amazon, which is one of the most biologically diverse areas on the planet.





BYTES, BITS, & BITES

TASTY LITTLE TIDBITS FROM OUR MEMBERS

from Charlie Zielinski:

Hey Jim,
Take a look at these boletes I found today underneath leaves:



response from Jim Richards:

Charlie,
Identifying anything from a sliced-up cap is not easy. In the future, take photos of the entire mushroom, making sure to get it from top to bottom. Then, a section (mushroom cut in half) showing staining, etc. is also helpful.

It is obvious that this is a bolete, that it does not stain when cut, and that the pores are yellow.

I am sending this reply to Igor, Bob Hosh and Jim Barg. They are all better at identification than I am. Were there others or just this one specimen?

Jim

response from Bob Hosh:

Well, this sure is a challenge! All we have in the photo is the cap context, the young tubes, and interior portion of the stipe! It is safe to say it is some sort of bolete, but we have no cap coloration, stipe ornamentation, nor habitat location or association with trees! All I have to go on is past personal experience and that suggests it might be *Suillus luteus* based on the white context and the bright yellow of the young tubes. I used to blanch and freeze *S. luteus*, and the blanched slices looked a great deal like Charlie's photo, but I'd need photos of the cap, stipe and habitat information to confirm identity.

response from Jim Barg:

I still can't see enough of the critical details to point me in a specific direction. I am suspecting that it's a *Suillus* judging from the shape of the context when sliced, but that's very little to go on. Other boletes sometimes have the same "sectional context shape" too.

response from Igor Safonov:

Gents,

I agree this has to be a *Suillus* sp. based on the date the picture was taken. I am not aware of any other boletes with yellow tubes/pores that would fruit in November in NJ. As far as the species is concerned, it would be nice to "unslice" the mushroom and recreate the gestalt fruiting body. The two most common species of *suillus* are *S. granulatus* and *S. luteus*. Between the two, I would go with Bob and vote "luteus".

response from Charlie Zielinski:

Thanks for the help, Jim

from Mike Rubin:

From the BBC – on the wood-wide net:

<http://tinyurl.com/l9q2dlu>

from Stephanie Ritson:

Hi Jim. I found these on my hike yesterday. My first thought was some kind of young *Xylaria*, but I'm not confident as the top seems to be wrong. I know identifying from pics is a pain, but just wondering if you have any thoughts on possibilities. I'm stumped.



(continues on page 14)

BYTES, BITS, & BITES (continued from page 13)

response from Igor Safonov:

This is not *Xylaria polymorpha*, however it could easily be another ascomycete. Since I don't have Beug's book, I cannot comment any further on this fungus.

from Dorothy Smullen:

I thought you would be interested in this story I found on MSN:

"Drone made of fungi can disintegrate to keep its spying activities a secret"

<http://tinyurl.com/pxk29gu>

from Judy Glattstein:

New mushroom on campus:

<http://tinyurl.com/q5784tn>

Luke Smithson's comment on this posting:

Good article. I like the shout out to the "citizen scientist". I never feel the term "amateur" does justice to many of the mushroom hunters I know.

BTW...did you see the article on Rod Tulloss in the December issue of *Scientific American* magazine? Short, but nice, writeup about him and his work. I only have a photocopy of it, but it may be available online.

response from Patricia McNaught and Liz Broderick:

The article in *Scientific American* about Rod Tulloss:

<http://tinyurl.com/nntwa89>

from Judy Glattstein (also Patricia McNaught and Bob Hosh):

Eugenia Bone's article on Psilocybin in the *NY Times*:

<http://tinyurl.com/pre9qs5>

from Jim Richards:

December 3rd – The world's largest white truffle (from the blog *Eater*):

<http://tinyurl.com/llebcov>

December 8th: From *Grub Street* (New York Magazine blog):

The 'World's Largest' Truffle Sold for \$61,250
"I wish I could take a picture of the smell."

<http://tinyurl.com/pg72ls3>

No million dollar fungus here!

from Judy Glattstein:

Not a free sample!

<http://tinyurl.com/nlf5n2d>

from Luke Smithson:

The "Bliss" molecule:

<http://tinyurl.com/o5d8prw>

from Patricia McNaught:

Subject: Article on mushroom poisonings in *Lehigh Valley (PA) Express Times*

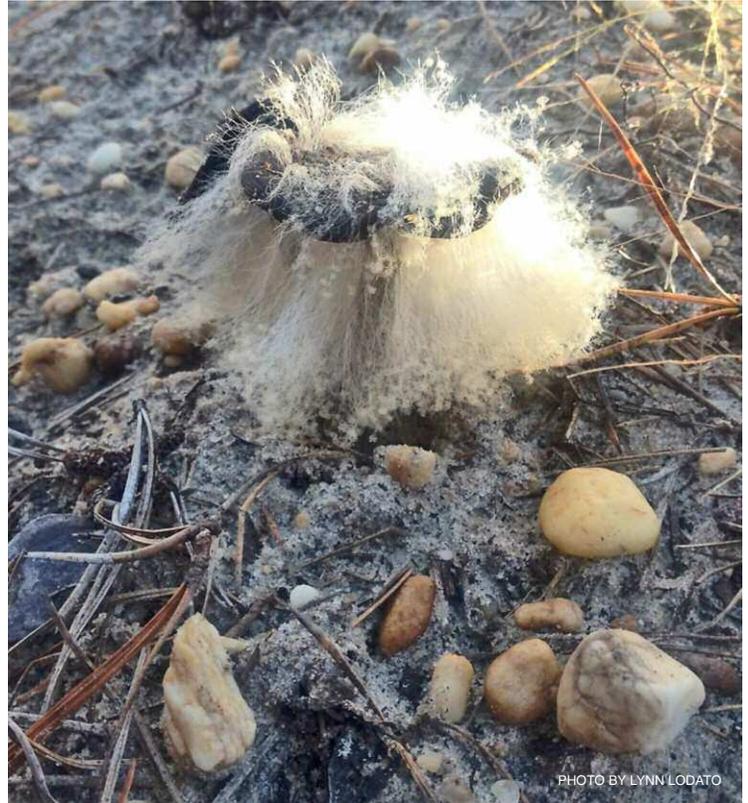
Hi, Michael Beug spotted this article and told me about it. The reporter had called me for a phone interview.

Patricia

<http://tinyurl.com/p6mhhd2>

from Lynn Lodato:

Taken in October:



response from Tom Bigelow:

Hi Jim,

Nice find! Looks like *Syzygites megalocarpus*, a Zygomycete with a pretty wide range of hosts (I usually see it on boletes, especially *Gyroporus castaneus*). Check out the link:

<http://zygomycetes.org/index.php?id=66>

All the best,
Tom

response from Nina Burghardt:

I think this is a mold. It might be *Dactylium mildew* (cobweb mold). It would be good to know what it is growing on.

from Judy Glattstein:

Martha Rose Shulman's article on cooking with mushrooms in the *New York Times*:

<http://tinyurl.com/ok6m5m3>

(continues on next page)

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

from Jim Barg (also Judy Glattstein):

How anyone could consider this as “news” is totally beyond me. It’s sort of like “Diapers Found in Royal Baby’s Room”. Ho hum.

<http://tinyurl.com/kox5nq4>

from Judy Glattstein:

Mushroom Lasagna recipe from *The New York Times*:

<http://tinyurl.com/oxh455f>

from Paul Funk:

“Gathering the Right Mushroom”
(*Bay Nature Connections*)

<http://tinyurl.com/oexhlqw>

from Jim Richards:

A good selection of useful information and recipes:
Martha’s Mushrooms

<http://tinyurl.com/n5jzdvp>

from Jim Richards:

What truffling is really like:

<http://tinyurl.com/lm3gmf3>

from Jim Richards:

This guy thinks mushrooms can save the planet:

<http://tinyurl.com/kweqgk6>



WELCOME TO ALL OF OUR NEW NJMA MEMBERS!

*We’d like to extend a warm welcome
to the following members who joined us
between October 20, 2014 and December 17, 2014.
We look forward to seeing you at lectures,
forays, and other NJMA events.
Happy ‘shrooming!*

Benjamin & Emily Burghardt	Flemington, NJ
Lori Estadt	Cedarville, NJ
Judith Gorab	West Milford, NJ
Dominick Granato, Jr.	Franklinville, NJ
Jason Hendershot	Newton, NJ
Christina Kotlar	Clifton, NJ
Jonathan Lezak	Asbury, NJ
Justin Mays	Rumson, NJ
Nazar Pereymybidia	Fort Lee, NJ
Helen Ringus	Ringoes, NJ
Kathleen Ryder	Andover, NJ
George Yager	Laurence Harbor, NJ

NEWER NAMES DOMINATE THE NJMA 2014 PHOTO CONTEST WINNERS’ ROSTER

by Jim Barg

It’s always exciting to see fresh faces and new photographic points of view whenever receiving the entries into each year’s NJMA Photo Contest. This year, it was even more exciting to see that some of our newer faces were also big winners in the contest.

Overall, we had 17 entrants representing 118 entries spread over all categories. Most popular was the Novice Pictorial category, but the technical categories presented the greatest challenge to judge.

Big winners included new member Judy Gorab (in the Novice Division) and recently-joined member Tom Bigelow (in the Advanced Division). Some of our club photo veterans, Susan Hopkins, Virginia Tomat, Rhoda Roper, and R. Allen Simpson also received accolades for their astute camera work.

Klaus-Peter Steitz, Photo Editor for the North Jersey Media Group (*The Record* and *Herald News* of Bergen County and Passaic County, respectively) returned as our judge. Many in the club had asked for his return because of his excellent eye and friendly advice to our budding photographers. He was more than willing to accept our invitation, and we are grateful for his excellent service.

In addition, John Burghardt, NJMA Vice-President and Foray Recorder, acted as the judge for the Technical categories. John said that he pored tirelessly over the entries for days, and his final choices do seem to represent the best photos which could be used in a field guide (which is the criterion upon which he was to base the majority of his decisions). John puts so much time into NJMA, and we can’t thank him enough for being so careful with his decision-making process.

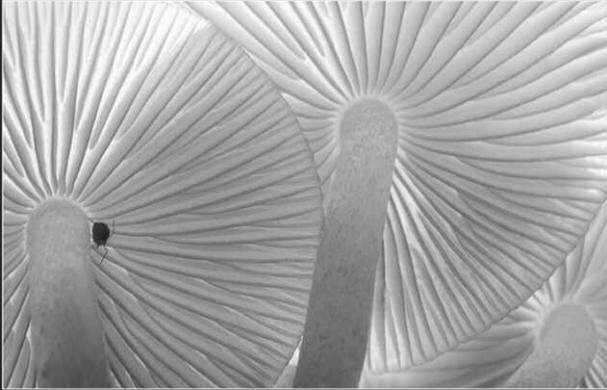
The first-place winners are posted on the next pages. The Best-In-Show and first-place winner of the Novice Pictorial category (a stunning black-and-white) is printed in larger size on [page 17](#). The list of all winners at all award levels is posted at the bottom of that page, as well.

Congratulations to all the winners. We extend a big “thank you” to all who entered. We hope that you value the advice and opinions of our judges and will take their advice into account the next time you’re out in the field.

For the 2015 contest, we invite anyone who’s taken a photo of a mushroom, a group activity, or still-life setting to participate in our photo contest. You’ll be able to win generous prizes which can cover your membership dues, books, or attendance at NJMA events and classes which require a registration fee...not to mention a few pats on the back and requests for your photographic advice! Happy snapping, folks!



NJMA PHOTO CONTEST 2014 FIRST PLACE WINNERS



NOVICE PICTORIAL
JUDY GORAB
[untitled]



ADVANCED PICTORIAL
TOM BIGELOW
Chromosera cyanophylla and *Ceratiomyxa fruticulosa*



NOVICE ACTIVITY
JUDY GORAB
"Baba picking properly"



ADVANCED ACTIVITY
SUSAN HOPKINS
"Ann and Muriel in Estonia woods photographing a Bolete"

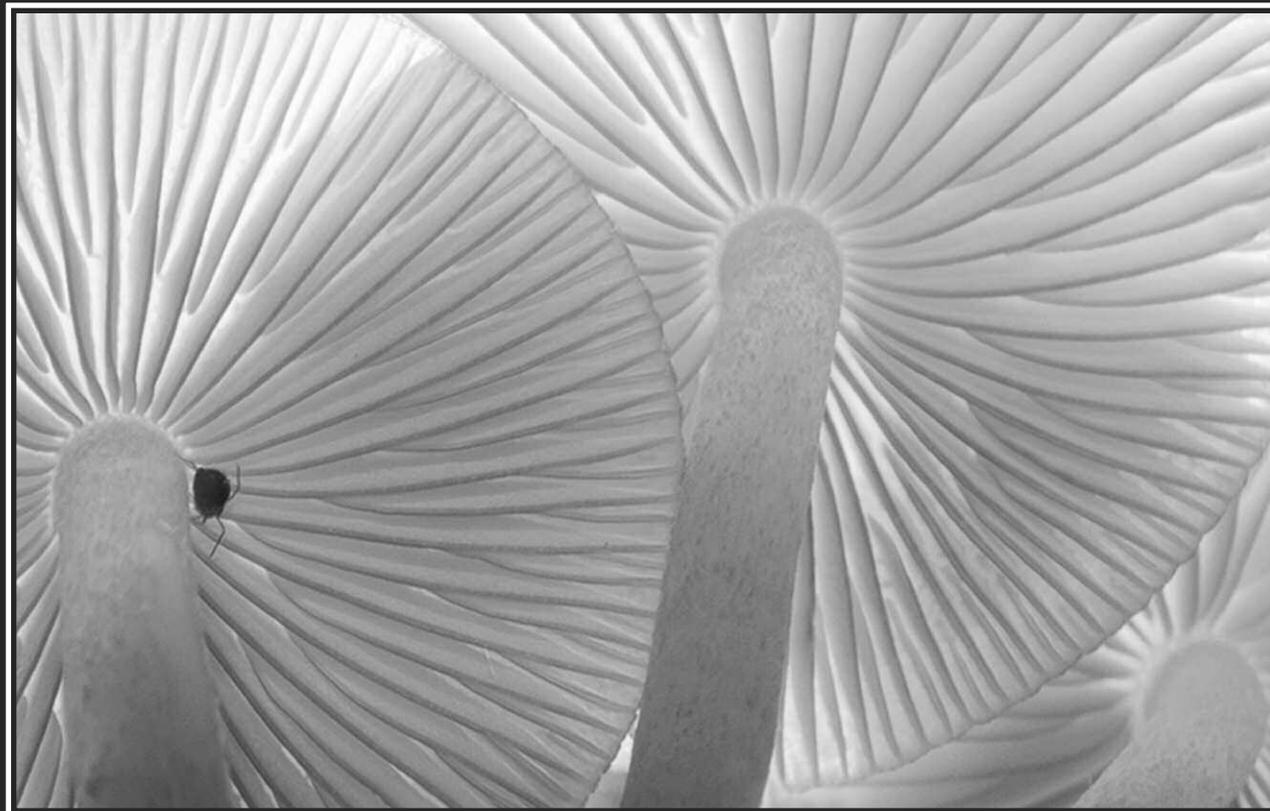


NOVICE TECHNICAL
LUKE SMITHSON
Dacropinax cf. elegans



ADVANCED TECHNICAL
TOM BIGELOW
Climacodon pulcherrimus

BEST IN SHOW
JUDY GORAB



COMPLETE LIST OF WINNERS – NJMA PHOTO CONTEST 2014

NOVICE DIVISION

PICTORIAL

FIRST Judy Gorab
SECOND Judy Gorab
HONORABLE MENTION Judy Gorab

TECHNICAL

FIRST Luke Smithson
SECOND Rhoda Roper
HONORABLE MENTION Luke Smithson

ACTIVITY

FIRST Petrusia Kotlar Paslawsky
SECOND Bob Hosh
HONORABLE MENTION Virginia Tomat

ADVANCED DIVISION

PICTORIAL

FIRST Tom Bigelow
SECOND Tom Bigelow
HONORABLE MENTION R. Allen Simpson

TECHNICAL

FIRST Tom Bigelow
SECOND Tom Bigelow
HONORABLE MENTION Tom Bigelow

ACTIVITY

FIRST Susan Hopkins
SECOND Susan Hopkins
HONORABLE MENTION Susan Hopkins

BEST IN SHOW Judy Gorab

REPORT ON NJMA FORAY COLLECTIONS IN 2014

by John Burghardt

The 2014 NJMA foray season was another very good one. This may surprise readers of the excellent foray reports featured in the NJMA newsletter over the summer and fall. These foray reports reflect the great variation in rainfall across our foray sites. Dry conditions prevailed during July and August and into September at most of our forays in the northern part of the state. But the southern sites received a surprising amount of rainfall, especially in October. Despite the seeming lack of fungi, and especially edibles, the number and diversity of the fungi collected across all of our forays made 2014 another very productive foray season.

Why was the 2014 foray season very productive?

First, despite dry conditions at some usually productive sites, we identified 536 taxa, including the usual complement of identifications to genus. In the locations where we collected in both 2013 and 2014, the 2014 totals were higher in seven locations, lower in six, and unchanged in three. But wait, you might think, 2013 wasn't the best of years either. But, in both years, we recorded over 500 taxa, which we have done in just six of the 33 years the club has been keeping records. In addition, we added 33 species that had not been previously recorded on club forays. The new species comprised about six percent of collections. This number of new species added is similar to our experience in recent years and in line with what we expect in a good year.

Second, as a measure of the diversity of our collections, over half of the taxa recorded this year (54 percent) were recorded at just one of our 18 forays. In addition, each foray site contributed unique species to this year's list. At Princeton (where we collect in early May) and Franklin Parker Preserve (where we collect many times and throughout the year), about four out of ten species identified were not found elsewhere this year. At Princeton, this is due to the many spring mushrooms (including morels!) that are not found later in the year. At Franklin Parker, the high proportion is due to the fact that we visit often, which affords the opportunity to find unusual species that fruit at different times of the year. At our regular foray sites, the proportion found only at that location this year was about one in four at Wawayanda, Hoffman, Washington Crossing, Stokes, and Wells Mills, and ranged from one in five to one in ten at the other foray locations. At PEEC and Fungus Fest, about one in four species identified was unique for the year.

Third, about one-third of the taxa recorded this year have been recorded less frequently than once every five years over more than 30 years of continuous recording. NJMA has maintained a continuous record of fungi the club has found on its forays each year since 1981. This gives us a 30-plus year record to gauge the frequency with which specific taxa have been found, and thus to identify unusual or rarely-occurring species among the ones we identify.

For this report, I have designated taxa found in six or fewer years as unusual or "seldom seen". Each foray afforded participants the opportunity to see some "seldom seen" taxa. Unfortunately, we are usually not able to recognize the "seldom seen" in the field. For one thing, it often takes detective work after each foray to come up with a name. For another, even if we do come up with a name at the foray, few of us have a long enough history or good enough memories to recognize a "seldom seen" species. Among our usual forays, PEEC, Fungus Fest, Wawayanda, Hoffman, Washington Crossing, Stokes and Brendan Byrne, each recorded between ten and twenty "seldom seen" taxa. At the remaining eleven regular foray sites, between one and nine "seldom seen" taxa were recorded.

I have not included information from Franklin Parker Preserve in the "seldom seen" discussion so far. Comparing Franklin Parker collections with those of other foray sites using data on the frequency with which various taxa have been found on club forays is an apples to oranges comparison. In fact, 88 of the 171 "seldom seen" species this year are from Franklin Parker. One factor that makes this not comparable to the counts for regular forays is the many visits per year made to Franklin Parker Preserve: More unusual species can be observed because we see taxa unique to each season and habitat within the Preserve. However, a second factor confounding the comparison is that, historically, relatively little of the club's overall collecting has been done in the southern part of the state including the Pine Barrens where Franklin Parker is located. Consequently, an inordinately high proportion of what we collect at Franklin Parker is "seldom seen" according to my definition. We see lots of new and unusual species at Franklin Parker because relatively little NJMA collecting has been done in the Pine Barrens.

In summary, the 2014 NJMA foray season was a very good one, because it revealed again the great diversity of fungi in New Jersey and nearby Pennsylvania on our northwestern border.

The accompanying table lists all the species identified in the 2014 collecting season. For each taxon, it shows the number of times collected in 2014 and the number of years collected from 1981 to 2013. This allows the reader to see which taxa were collected at just a single location this year and which were taxa among the "seldom seen" group. Taxa new to the cumulative list are also shown in the table. Readers interested in what species were identified at each location (and from various unknown locations at Fungus Fest) are invited to download a copy of the **full list by location** at www.njmyco.org/ofinterest.html. (The list will be published there no later than January 8th.)

We look forward to the 2015 collecting season. If our members and curious members of the public go and look for fungi with the energy and enthusiasm shown this year, 2015 will be another productive year whatever the weather conditions.



SPECIES FOUND ON NJMA FORAYS - 2014

SPECIES NAME	NUMBER OF YEARS SPECIES WAS RECORDED 1981-2013		NEW TO LIST	FOUND AT ONE FORAY IN 2014	FOUND IN SIX YEARS OR LESS 1981-2013
	↓	↓			
BASIDIOMYCETES					
<i>Agaricus campestris</i>	2	24			
<i>Agaricus silvaticus</i>	1	19		1x	
<i>Agaricus sp.</i>	1	14		1x	
<i>Agrocybe acericola</i>	1	8		1x	
<i>Amanita abrupta</i>	2	11			
<i>Amanita amerifulva</i>	3	33			
<i>Amanita amerirubescens</i>	6	33			
<i>Amanita atkinsoniana</i>	1	6		1x	ss
<i>Amanita bisporigera</i>	4	26			
<i>Amanita brunnescens v brunnescens</i>	3	32			
<i>Amanita brunnescens v pallida</i>	1	20		1x	
<i>Amanita canescens</i>	1	4		1x	ss
<i>Amanita citrina v citrina</i>	5	32			
<i>Amanita citrina v lavendula</i>	2	11			
<i>Amanita crenulata</i>	1	22		1x	
<i>Amanita daucipes</i>	4	22			
<i>Amanita dulciarii</i>	3	7			
<i>Amanita flavoconia</i>	7	33			
<i>Amanita longipes</i>	2	14			
<i>Amanita muscaria v guessowii</i>	7	31			
<i>Amanita muscaria var. persicana</i>	1	3		1x	ss
<i>Amanita polypyramis</i>	1	2		1x	ss
<i>Amanita pseudovolvata (nom.prov.)</i>	1	12		1x	
<i>Amanita rhacopus</i>	5	29			
<i>Amanita rubescens v alba</i>	1	2		1x	ss
<i>Amanita sagitaria</i>	1	1		1x	ss
<i>Amanita scalaris</i>	1	1		1x	ss
<i>Amanita sinicoflava</i>	1	19		1x	
<i>Amanita sp.</i>	7	15			
<i>Amanita sp.-S01</i>	1	2		1x	ss
<i>Amanita subcockeri</i>	1	5		1x	ss
<i>Amanita subsolitaria</i>	1	7		1x	
<i>Amanita vaginata v vaginata</i>	2	32			
<i>Antrodiella semisupina</i>	1	6		1x	ss
<i>Armillaria gallica</i>	1	23		1x	
<i>Armillaria mellea</i>	6	32		0	
<i>Armillaria tabescens</i>	1	28		1x	
<i>Arrhenia epichysium</i>	2	1			ss
<i>Artomyces pyxidata</i>	4	33			
<i>Astraeus hygrometricus</i>	2	13			
<i>Auricularia auricula</i>	3	28			
<i>Bankera fulgineoalba</i>	1	5		1x	ss
<i>Basidioradulum crustosum</i>	1	0	N	1x	ss
<i>Bjerkandera adusta</i>	1	19		1x	
<i>Bogbodia udum</i>	1	6		1x	ss
<i>Boletus auripes</i>	1	9		1x	
<i>Boletus badius</i>	2	28			
<i>Boletus bicolor v bicolor</i>	1	32		1x	
<i>Boletus chrysenteroides</i>	1	12		1x	
<i>Boletus chrysenteron</i>	1	26		1x	
<i>Boletus edulis v edulis</i>	2	22			
<i>Boletus fagicola</i>	1	0	N	1x	ss
<i>Boletus gracilis</i>	2	19			
<i>Boletus illudens</i>	1	15		1x	
<i>Boletus innixus</i>	2	6			ss
<i>Boletus miniato-olivaceus</i>	1	2		1x	ss

SPECIES NAME	NUMBER OF YEARS SPECIES WAS RECORDED 1981-2013		NEW TO LIST	FOUND AT ONE FORAY IN 2014	FOUND IN SIX YEARS OR LESS 1981-2013
	↓	↓			
BASIDIOMYCETES (continued)					
<i>Boletus nobilis</i>	1	5		1x	ss
<i>Boletus oliveisporus</i>	1	2		1x	ss
<i>Boletus pallidus</i>	1	28		1x	
<i>Boletus projectellus</i>	2	8			
<i>Boletus pulverulentus</i>	1	26		1x	
<i>Boletus rubropunctus</i>	1	6		1x	ss
<i>Boletus spadiceus</i>	1	8		1x	
<i>Boletus subglabripes</i>	1	28		1x	
<i>Boletus subvelutipes</i>	2	21			
<i>Boletus variipes</i>	1	12		1x	
<i>Boletus viscidicorrugis</i>	1	3		1x	ss
<i>Calocera cornea</i>	1	17		1x	
<i>Calostoma lutescens</i>	1	3		1x	ss
<i>Calostoma ravenelii</i>	1	3		1x	ss
<i>Calostoma sp.</i>	1	1		1x	ss
<i>Calvatia cyathiformis</i>	1	23		1x	
<i>Cantharellula umbonata</i>	2	19			
<i>Cantharellus cibarius</i>	2	30			
<i>Cantharellus cinnabarinus</i>	8	33			
<i>Cantharellus ignicolor</i>	3	20			
<i>Cantharellus lateritius</i>	1	29		1x	
<i>Cantharellus minor</i>	1	33		1x	
<i>Cantharellus xanthopus</i>	1	10		1x	
<i>Cerrena unicolor</i>	2	19			
<i>Chalciporus rubritubifer</i>	1	0	N	1x	ss
<i>Cheimonophyllum candidissimum</i>	1	3		1x	ss
<i>Chromosera cyanophylla</i>	1	4		1x	ss
<i>Chroogomphus rutilus</i>	1	5		1x	ss
<i>Chroogomphus vinicolor</i>	3	13			
<i>Clavaria cristata</i>	2	33			
<i>Clavulina cinerea</i>	2	23			
<i>Clavulinopsis fusiformis</i>	1	31		1x	
<i>Climacodon septentrionale</i>	1	17		1x	
<i>Clitocybe clavipes</i>	1	30		1x	
<i>Clitocybe gibba</i>	2	21			
<i>Clitocybe intermedia</i>	1	2		1x	ss
<i>Clitocybe odora</i>	2	28			
<i>Clitocybula familia</i>	1	0	N	1x	ss
<i>Clitopilus prunulus</i>	2	15			
<i>Coltricia cinnamomea</i>	3	31			
<i>Coltricia perennis</i>	2	17			
<i>Coprinopsis atramentarius</i>	2	12			
<i>Coprinus disseminatus</i>	1	6		1x	ss
<i>Coprinus micaceus</i>	2	26			
<i>Cortinarius acutus (cf)</i>	1	0	N	1x	ss
<i>Cortinarius alboviolaceus</i>	3	22			
<i>Cortinarius annulatus</i>	1	1		1x	ss
<i>Cortinarius armillatus</i>	2	31			
<i>Cortinarius caperatus</i>	4	28			
<i>Cortinarius corrugatus</i>	1	17		1x	
<i>Cortinarius croceus</i>	2	3			ss
<i>Cortinarius iodes</i>	6	31			
<i>Cortinarius lacera</i>	1	17		1x	
<i>Cortinarius mucosus</i>	3	6			ss
<i>Cortinarius obliquus</i>	1	10		1x	
<i>Cortinarius sanguineus</i>	2	6			ss

SPECIES FOUND ON NJMA FORAYS - 2014

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	↓	↓			
BASIDIOMYCETES (continued)					
Cortinarius semisanguineus	4	25			
Cortinarius sp.	4	24			
Cortinarius vibratilis	1	5		1x	ss
Cortinarius violaceus	2	3			ss
Craterellus cornucopioides	2	5			ss
Craterellus fallax	4	32			
Crepidotus applanatus	4	27			
Crepidotus crocophyllus	1	15		1x	
Crepidotus nephrodes	1	12		1x	
Crepidotus sp.	1	5		1x	ss
Crucibulum laeve	3	30			
Cryptoporus volvatus	1	16		1x	
Cyathus stercoreus	1	7		1x	
Cyathus striatus	1	23		1x	
Cystodermella granulosa	2	6			ss
Dacrymyces chrysospermus	3	26			
Dacryopinax elegans	1	0	N	1x	ss
Daedalea quercina	2	24			
Daedaleopsis confragosa	6	33			
Entoloma abortivum	1	32		1x	
Entoloma exile	1	0	N	1x	ss
Entoloma striatum	1	1		1x	ss
Entoloma strictipes	1	5		1x	ss
Entoloma strictius	2	30			
Exidia recisa	1	15		1x	
Fomes fomentarius	5	30			
Fomitopsis pinicola	1	3		1x	ss
Fomitopsis spraguei	7	16			
Galerina paludosa	1	0	N	1x	ss
Galerina tibiicystis	1	5		1x	ss
Ganoderma applanatum	7	33			
Ganoderma lucidum	5	33			
Ganoderma tsugae	5	33			
Gerronema strombodes	1	18		1x	
Globifomes graveolens	1	4		1x	ss
Gloeophyllum sepiarium	1	14		1x	
Gloeoporus dichrous	3	26			
Gomphus floccosus	3	18			
Grifola frondosa	3	30			
Guepiniopsis buccina	2	0	N		ss
Gymnopilus luteus	1	25		1x	
Gymnopilus penetrans	6	21			
Gymnopilus biformis	1	11		1x	
Gymnopus confluens	1	3		1x	ss
Gymnopus dichrous	1	12		1x	
Gymnopus dryophilus	6	31			
Gymnopus sp.	2	2			ss
Gymnopus subnudus	1	21		1x	
Gyroporus castaneus	2	33			
Gyroporus subalbellus	1	7		1x	
Hapalopilus nidulans	3	25			
Harrya chromapes	1	22		1x	
Hebeloma crustuliniforme	1	11		1x	
Hebeloma sp.	1	4		1x	ss
Heterobasidion annosum	1	0	N	1x	ss
Hohenbuehelia angustata	1	5		1x	ss

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BASIDIOMYCETES (continued)					
Hohenbuehelia mastrucata	3	1			ss
Hydnellum conrescens	1	14		1x	
Hydnellum pineticola	3	5			ss
Hydnellum sp.	1	3		1x	ss
Hydnellum spongiosipes	3	21			
Hydnochaete olivacea	5	26			
Hydnum repandum v repandum	2	29			
Hydnum umbilicatum	3	23			
Hygrocybe cantharellus	2	25			
Hygrocybe coccinea	1	18		1x	
Hygrocybe irrigata	1	11		1x	
Hygrocybe laeta	2	23			
Hygrocybe marginata v concolor	2	12			
Hygrocybe marginata v marginata	2	27			
Hygrocybe miniata	1	24		1x	
Hygrocybe nitida	1	12		1x	
Hygrocybe psittacina v psittacina	1	18		1x	
Hygrocybe virginea	1	11		1x	
Hygrophoropsis aurantiaca	1	26		1x	
Hygrophorus agathmos	1	3		1x	ss
Hygrophorus hypothejus	1	6		1x	ss
Hygrophorus minutulus	1	6		1x	ss
Hygrophorus ponderatus	2	1			ss
Hygrophorus purpureofolius	1	2		1x	ss
Hygrophorus russula	1	10		1x	
Hygrophorus sp.	1	16		1x	
Hymenochaete tabacina	1	6		1x	ss
Hypholoma capnoides	1	10		1x	
Hypholoma fasciculare	9	30			
Hypholoma sublateralium	2	30			
Inocybe caesariata	1	13		1x	
Inocybe lanuginosa	1	2		1x	ss
Inocybe rimosa	1	17		1x	
Inocybe rimosoides	1	3		1x	ss
Inocybe sp.	3	15			
Inonotus dryadeus	2	8			
Inonotus hispidus	5	20			
Inonotus radiatus	1	5		1x	ss
Inonotus tomentosus	1	22		1x	
Irpelex lacteus	4	29			
Laccaria bicolor	3	16			
Laccaria laccata v pallidifolia	4	20			
Laccaria longipes	2	7			
Laccaria nobilis	1	6		1x	ss
Laccaria ohiensis	1	11		1x	
Laccaria proxima	3	14			
Laccaria striatula	1	11		1x	
Laccaria trichodermophora	1	1		1x	ss
Laccaria trullisata	3	12			
Lactarius aquifluus	3	16			
Lactarius camphoratus	4	32			
Lactarius chelidonium	1	14		1x	
Lactarius chrysotheus	3	27			
Lactarius corrugis	2	28			
Lactarius deceptivus	5	31			
Lactarius gerardii	1	26		1x	

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BASIDIOMYCETES (continued)					
Lactarius hygrophoroides	2	30			
Lactarius imperceptus	1	8		1x	
Lactarius indigo v indigo	2	2			ss
Lactarius lignyotus v lignyotus	1	29		1x	
Lactarius mutabilis	2	12			
Lactarius nigroviolascens	1	0	N	1x	ss
Lactarius paradoxus	3	10			
Lactarius peckii	2	20			
Lactarius piperatus v piperatus	3	32			
Lactarius proximellus	3	5			ss
Lactarius quietus v incanus	2	14			
Lactarius rimosellus	2	5			ss
Lactarius sp.	3	8			
Lactarius subpurpureus	5	19			
Lactarius volemus v volemus	3	32			
Laetiporus cincinnatus	3	22			
Laetiporus sulphureus	7	33			
Leccinum albellum	2	14			
Leccinum oxydabile	1	2		1x	ss
Leccinum piceinum	5	18			
Leccinum scabrum	4	27			
Leccinum snellii	1	24		1x	
Leccinum sp.	1	10		1x	
Lentinellus flabelliformis	1	0	N	1x	ss
Lentinellus micheneri	1	9		1x	
Lentinellus ursinus	2	30			
Lentinus sp.	2	0			ss
Lenzites betulinus	6	29			
Lepiota cristata	1	15		1x	
Lepista irina	1	14		1x	
Lepista nuda	2	29			
Leucopaxillus laterarius	1	1		1x	ss
Lycoperdon curtisii	1	1		1x	ss
Lycoperdon marginatum	1	15		1x	
Lycoperdon molle	1	6		1x	ss
Lycoperdon perlatum	4	33			
Lycoperdon pyriforme	5	31			
Lyophyllum decastes	1	15		1x	
Marasmiellus opacus	1	6		1x	ss
Marasmius rotula	2	27			
Marasmius siccus	2	23			
Marasmius sp.	1	14		1x	
Marasmius sullivantii	1	17		1x	
Megacollybia rodmanii	8	33			
Melanoleuca alboflavida	1	24		1x	
Melanoleuca niveipes	1	1		1x	ss
Meripilus sumstinei	2	23			
Merulius tremellosus	3	25			
Morganella subincarnatum	1	2		1x	ss
Multiclavula mucida	1	4		1x	ss
Mutinus elegans	2	27			
Mycena acicula	1	7		1x	
Mycena alcalina	1	4		1x	ss
Mycena citrinomarginata	1	1		1x	ss
Mycena delicatella	1	0	N	1x	ss
Mycena epipterygia	2	10			

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BASIDIOMYCETES (continued)					
Mycena haematopus	2	31			
Mycena inclinata	4	30			
Mycena leaiana	3	16			
Mycena luteopallens	1	21		1x	
Mycena megaspora	1	1		1x	ss
Mycena pseudoinclinata	3	9			
Mycena sp.	3	15			
Neofavolus alveolaris	5	33			
Nidularia deformis	2	0	N		ss
Nolanea luteum	1	5		1x	ss
Nolanea murrayi	1	15		1x	
Nolanea quadrata	2	15			
Nolanea sp.	2	4			ss
Omphalotus illudens	1	27		1x	
Oxyporus populinus	4	28			
Panellus stipticus	10	31			
Peniophora incarnata	1	0	N	1x	ss
Perenniporia subacida	1	1		1x	ss
Phaeolus schweinitzii	1	27		1x	
Phaeomarasmius erinaceellus	1	18		1x	
Phallus impudicus	1	0	N	1x	ss
Phallus ravenelii	1	26		1x	
Phellinus everhartii	3	6			ss
Phellinus ferruginosus	1	5		1x	ss
Phellinus gilvus	1	32		1x	
Phellodon confluens	1	6		1x	ss
Phlebia radiata	1	17		1x	
Pholiota squarrosa	2	13			
Pholiota squarrosoides	2	27			
Pholiota veris	1	2		1x	ss
Phylloporus boletinoides	1	5		1x	ss
Phylloporus rhodoxanthus	2	31			
Phylloporus rhodoxanthus spp americanus	1	3		1x	ss
Phyllotopsis nidulans	2	22			
Piptoporus betulinus	8	33			
Pisolithus tinctorius	3	21			
Pleurotus ostreatus	8	30			
Pleurotus sp.	1	2		1x	ss
Pluteus admirabilis	1	17		1x	
Pluteus cervinus	11	33			
Pluteus petasatus	3	21			
Pluteus sp.	2	4			ss
Pluteus thomsonii	1	0	N	1x	ss
Polyozellus multiplex	1	12		1x	
Polyporus arcularius	1	17		1x	
Polyporus badius	1	27		1x	
Polyporus leptoccephalus	8	33			
Polyporus squamosus	3	28			
Polyporus varius	3	8			
Poronidulus conchifer	1	22		1x	
Postia caesia	2	30			
Psathyrella candolleana	1	20		1x	
Psathyrella sp.	5	14			
Pseudoboletus parasiticus	2	19			
Pseudocolus schellenbergiae	1	10		1x	
Pseudohydnum gelatinosum	2	8			

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BASIDIOMYCETES (continued)					
<i>Psilocybe coprophila</i>	1	2		1x	ss
<i>Puccinia mariae-wilsoni</i>	1	1		1x	ss
<i>Puccinia podophylli</i>	1	12		1x	
<i>Punctularia strigosozonata</i>	1	0	N	1x	ss
<i>Pycnoporus cinnabarinus</i>	4	28			
<i>Radulodon copelandii</i>	1	0	N	1x	ss
<i>Ramaria sp.</i>	2	17			
<i>Resinomyцена rhododendri</i>	1	3		1x	ss
<i>Resupinatus applicatus</i>	1	8		1x	
<i>Retiboletus griseus</i>	2	18			
<i>Retiboletus ornatipes</i>	1	22		1x	
<i>Rhizomarasmius pyrrocephalus</i>	2	16			
<i>Rhizopogon luteolus</i>	1	0	N	1x	ss
<i>Rhizopogon parksii</i>	1	2		1x	ss
<i>Rhizopogon roseolis</i>	1	3		1x	ss
<i>Rhizopogon rubescens</i>	1	8		1x	
<i>Rhizopogon sp.</i>	4	14			
<i>Rhodocollybia butyracea</i>	2	31			
<i>Rhodocollybia lentinoides</i>	1	4		1x	ss
<i>Rhodocollybia maculata v maculata</i>	1	27		1x	
<i>Rhodocollybia maculata v scorzonerea</i>	1	2		1x	ss
<i>Rhopalogaster transversarium</i>	2	10			
<i>Rickenella fibula</i>	2	16			
<i>Russula abietina</i>	1	13		1x	
<i>Russula adulterina</i>	1	0	N	1x	ss
<i>Russula albonigra</i>	1	10		1x	
<i>Russula alcalinicola</i>	1	0	N	1x	ss
<i>Russula barlae</i>	1	12		1x	
<i>Russula bicolor</i>	1	2		1x	ss
<i>Russula brevipes v brevipes</i>	4	30			
<i>Russula brunneola</i>	2	18			
<i>Russula claroflava</i>	1	21		1x	
<i>Russula compacta</i>	9	33			
<i>Russula cremoricolor</i>	2	1			ss
<i>Russula decolorans</i>	2	6			ss
<i>Russula decora</i>	1	1		1x	ss
<i>Russula densifolia</i>	1	15		1x	
<i>Russula dissimulans</i>	3	19			
<i>Russula earlei</i>	1	14		1x	
<i>Russula foetentula</i>	1	26		1x	
<i>Russula fragrantissima</i>	1	15		1x	
<i>Russula granulata</i>	1	7		1x	
<i>Russula heterophylla</i>	1	12		1x	
<i>Russula incarnateps</i>	1	4		1x	ss
<i>Russula inedulis</i>	1	0	N	1x	ss
<i>Russula laurocerasi</i>	4	30			
<i>Russula mariae</i>	2	33			
<i>Russula melliolens</i>	1	1		1x	ss
<i>Russula modesta</i>	3	26			
<i>Russula nigrescentipes</i>	1	1		1x	ss
<i>Russula ochroleucoides</i>	3	25			
<i>Russula ornateps</i>	1	17		1x	
<i>Russula paludosa</i>	1	4		1x	ss
<i>Russula pantoleuca</i>	2	3			ss
<i>Russula parvovirescens</i>	1	6		1x	ss
<i>Russula peckii</i>	1	4		1x	ss

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	↓	↓			
BASIDIOMYCETES (continued)					
<i>Russula pectinatoides</i>	1	20		1x	
<i>Russula perlactea</i>	2	10			
<i>Russula pseudolepida</i>	1	14		1x	
<i>Russula pusilla</i>	1	21		1x	
<i>Russula rosea</i>	2	5			ss
<i>Russula roseipes</i>	1	0	N	1x	ss
<i>Russula rugulosa</i>	1	15		1x	
<i>Russula sericeonitens</i>	3	13			
<i>Russula silvicola</i>	5	31			
<i>Russula sp.</i>	10	19			
<i>Russula subgraminicolor</i>	1	12		1x	
<i>Russula variata</i>	4	33			
<i>Russula ventricosipes</i>	2	19			
<i>Russula vesicatoria</i>	1	8		1x	
<i>Russula vinacea</i>	8	30			
<i>Russula virescens</i>	2	17			
<i>Sarcodon atroviridis</i>	1	5		1x	ss
<i>Sarcodon sp.</i>	1	1		1x	ss
<i>Sarcodon stereosarcinon</i>	2	0	N		ss
<i>Sarcodontia setosa</i>	1	2		1x	ss
<i>Schizophyllum commune</i>	5	33			
<i>Scleroderma areolatum</i>	1	23		1x	
<i>Scleroderma cepa</i>	4	29			
<i>Scleroderma citrinum</i>	7	33			
<i>Scleroderma geaster</i>	4	30			
<i>Scleroderma lycoperdoides</i>	1	0	N	1x	ss
<i>Scleroderma meridionale</i>	1	1		1x	ss
<i>Scleroderma sp.</i>	1	0		1x	ss
<i>Scleroderma verrucosum</i>	1	0	N	1x	ss
<i>Sparassis crispa</i>	1	6		1x	ss
<i>Spongipellis pachydon</i>	2	16			
<i>Spongipellis unicolor</i>	1	2		1x	ss
<i>Steccherinum ochraceum</i>	3	16			
<i>Stereum complicatum</i>	9	30			
<i>Stereum hirsutum</i>	1	15		1x	
<i>Stereum ochraceoflavum</i>	1	1		1x	ss
<i>Stereum ostrea</i>	12	33			
<i>Stereum striatum</i>	5	24			
<i>Strobilomyces confusus</i>	1	25		1x	
<i>Strobilomyces sp.</i>	3	1			ss
<i>Strobilomyces strobilaceus</i>	2	31			
<i>Stropharia rugosoannulata</i>	1	28		1x	
<i>Stropharia sp.</i>	2	3			ss
<i>Suillus brevipes</i>	3	7			
<i>Suillus decipiens</i>	1	8		1x	
<i>Suillus granulatus</i>	4	32			
<i>Suillus hirtellus</i>	3	2			ss
<i>Suillus luteus</i>	1	21		1x	
<i>Suillus salmonicolor</i>	3	22			
<i>Suillus spraguei</i>	1	19		1x	
<i>Suillus subaureus</i>	1	2		1x	ss
<i>Sutorius eximius</i>	2	1			ss
<i>Tapinella atrotomentosa</i>	3	30			
<i>Tephrocybe palustris</i>	1	5		1x	ss
<i>Tetrapyrgos nigripes</i>	1	21		1x	
<i>Thelephora terrestris</i>	3	19			

SPECIES FOUND ON NJMA FORAYS – 2014

SPECIES NAME	NUMBER OF YEARS SPECIES WAS RECORDED 1981-2013		NEW TO LIST	FOUND AT ONE FORAY IN 2014	FOUND IN SIX YEARS OR LESS 1981 - 2013
	↓	↓			
BASIDIOMYCETES (continued)					
Thelephora vialis	2	15			
Trametes gibbosa	8	17			
Trametes hirsuta	5	21			
Trametes pubescens	3	12			
Trametes versicolor	14	33			
Tremella foliacea	1	19	1x		
Tremella mesenterica	6	29			
Tremella reticulata	1	7	1x		
Tremellodendron pallidum	3	31			
Trichaptum abietinum	4	14			
Trichaptum bifforme	15	33			
Tricholoma aestuans	2	4			ss
Tricholoma caligatum	1	15	1x		
Tricholoma equestre	2	16			
Tricholoma focale	1	1	1x		ss
Tricholoma fumosoluteum	2	9			
Tricholoma magnivelare	1	2	1x		ss
Tricholoma myomyces	1	5	1x		ss
Tricholoma pessundatum	2	8			
Tricholoma portentosum	1	5	1x		ss
Tricholoma saponaceum	1	8	1x		
Tricholoma transmucans	1	3	1x		ss
Tricholoma vaccinum	1	1	1x		ss
Tricholomopsis decora	1	9	1x		
Tubaria sp.	1	0	1x		ss
Tylophilus ballouii	1	27	1x		
Tylophilus felleus	6	31			
Tylophilus griseocarnus	1	5	1x		ss
Tylophilus indecisus	1	16	1x		
Tylophilus peralbidus	1	4	1x		ss
Tylophilus sp.	2	0			ss
Tyromyces chioneus	9	33			
Tyromyces fissilis	1	9	1x		
Ustilago maydis	1	1	1x		ss
Volvariella bombycina	1	3	1x		ss
Xanthoconium affine v affine	3	26			
Xanthoconium affine v maculosus	2	17			
Xanthoconium stramineum	1	2	1x		ss
Xeromphalina campanella	1	20	1x		
Xerula furfuracea	8	23			
Xerula radicata	2	24			
Xylobolus frustulatus	3	26			
ASCOMYCETES					
Biscogniauxia atropunctata	1	3		1x	ss
Bisporella citrina	3	29			
Chlorenchocelia versiformis	1	0	N	1x	ss
Chlorociboria aeruginascens	6	25			
Chlorosplenium chlora	2	7			
Daldinia concentrica	3	31			
Diatrype stigma	5	6			ss
Flavoparmelia caperata	1	0	N	1x	ss
Galiella rufa	3	30			
Geoglossum glabrum	1	2		1x	ss
Geoglossum simile	1	2		1x	ss

SPECIES NAME	NUMBER OF YEARS SPECIES WAS RECORDED 1981-2013		NEW TO LIST	FOUND AT ONE FORAY IN 2014	FOUND IN SIX YEARS OR LESS 1981 - 2013
	↓	↓			
ASCOMYCETES (continued)					
Hypomyces chrysospermus	2	29			
Hypomyces hyalinus	2	28			
Hypomyces lateritius	1	4		1x	ss
Hypomyces luteovirens	2	25			
Hypomyces melanocarpus	1	1		1x	ss
Hypomyces polyporinus	1	0	N	1x	ss
Hypoxyton fragiforme	2	16			
Kretzschmaria deusta	1	8		1x	
Leotia lubrica	1	31		1x	
Leotia viscosa	2	8			
Mitruia elegans	1	4		1x	ss
Morchella elata	1	9		1x	
Morchella esculenta	1	18		1x	
Morchella semilibera	1	21		1x	
Orbilina crenatomarginata	1	0	N	1x	ss
Parmotrema hypotrypium	1	0	N	1x	ss
Peziza badiocconfusa	1	11		1x	
Peziza repanda	1	14		1x	
Sarcoscypha occidentalis	1	29		1x	
Scorias spongiosa	2	5			ss
Scutellinia scutellata	1	31		1x	
Spadicoides clavariae	1	4		1x	ss
Trichoglossum farlowii	1	2		1x	ss
Vibrisea truncorum	1	0	N	1x	ss
Xylaria hypoxylon	1	17		1x	
Xylaria polymorpha	2	32			
MYXOMYCOTA					
Ceratiomyxa fruticulosa	3	27			
Fuligo septica	2	29			
Hemitrichia calyculata	1	14		1x	
Lycogala epidendrum	9	33			
Pleurocolla compressa	1	5		1x	ss
Stemonitis axifera	2	20			
Stemonitis fusca	2	16			
Symphytocarpus confluens	1	12		1x	
Tubifera ferruginosa	2	28			

Total Number of Species Found: **536** **33** **287** **176**

The New Jersey Mycological Association is a 501(c)(3) non-profit organization whose aims are to provide a means for sharing ideas, experiences, knowledge, and common interests regarding fungi, and to furnish mycological information and educational materials to those who wish to increase their knowledge about mushrooms.

PLANTS AND FUNGI PLAY THE 'UNDERGROUND MARKET'

reprinted from the newsletter of the Maine Mycological Society, April 2014

Plants and fungi cooperate and trade with each other on a biological 'underground market', changing their trading partners if they don't get a fair deal.

The finding was made by an international team, including Oxford University scientists, examining how plants trade energy-rich carbohydrate they make using photosynthesis for phosphorus fungi collect from the soil. They found that plants use their roots to actively search out fungi to trade with but will attempt to avoid 'cheating' fungi which 'hoard' phosphorus instead of paying their fair share in return for carbohydrate.

"This is one of the first recorded examples of a "biological market" operating in which both partners reward fair trading rather than one partner having the advantage and exploiting the other," said Professor Stuart West of Oxford University's Department of Zoology, an author of the paper. "We've shown that both plants and fungi can be choosy, 'playing the market' and looking for a better trading partner if they aren't getting a good deal."

The team used the plant *Medicago truncatula*, which is related to alfalfa, and then observed its interactions with three different species of fungi: *Glomus intraradices*, *Glomus custos*, and *Glomus aggregatum*, which exhibit different levels of cooperation.

They used radioactive tags to track the carbon produced by the plant and the phosphorus harvested by the fungi. The results showed that not only was more carbon supplied to the more cooperative – 'fairer trading' – species of fungi, but also that more phosphorus was supplied to more cooperative plants.

"We think that this sort of biological market, reminiscent of a market economy, has arisen because there are so many different individuals either partner could trade with," said Professor West. "Rather like with human traders, if they are given a chance both plants and fungi will go elsewhere to get a better deal."

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The Parasitic Bolete

Pseudoboletus parasiticus

Grows as a parasite on *Scleroderma citrinum* (Pigskin Poison puffball); somewhat uncommon.



PHOTO BY JUDY GORAB