NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION

VOLUME 43-1 JANUARY-FEBRUARY 2013

NJMA OFFICERS

President - **Phil Layton**
Vice-President - **Patricia McNaught**
Secretary - **Igor Safonov**
Treasurer - **Bob Peabody**

DUES

Payable for calendar year

Individual: $10.00 (online newsletter)
$20.00 (hardcopy newsletter)
Family: $15.00 (online newsletter)
$25.00 (hardcopy newsletter)

Mail checks (payable to NJMA) to:
Igor Safonov
2215 Arch Street. #501
Philadelphia, PA 19103-1323

NJMA WEBSITE

www.njmyco.org
Bob Hosh, Jim Barg

NJMA NEWS

Editor:
Jim Richards
211 Washington Street
Hackettstown, NJ 07840-2145
njmaeditor@gmail.com

Associate editor:
Patricia McNaught
pjmcnaught@gmail.com

Art director:
Jim Barg
jimbarg@bssmedia.com

Print circulation: **Mike Rubin**

Deadline for submissions:
10th of even-numbered months.

Send ONLY newsletter submissions to the Editor. All other correspondence should be sent to the Secretary:
Igor Safonov
2215 Arch Street. #501
Philadelphia, PA 19103-1323
igs109@yahoo.com

NJMA EVENTS HOTLINE

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

CALENDAR OF UPCOMING EVENTS

Sunday, January 20 **2:00 pm**	**MEETING & LECTURE** **Frelinghuysen Arboretum, Morristown, NJ** *Guest speaker:* **Dr. James F. White** *Topic:* "The Fungal Community"
Saturday, February 16 **6:00 pm**	**CULINARY GROUP PORTUGUESE DINNER** **Unitarian Society, Tices Lane, East Brunswick, NJ** *Registration required. See page 6 for details.*
Sunday, February 24 **2:00 pm**	**ANNUAL MYCHOPHAGY MEETING AND MYCO-AUCTION** ***Members only, FREE registration required.*** *Our guest chef will be* **Luke Smithson**, Executive Chef of Jamie Hollander Gourmet Foods, New Hope, PA. *See articles on page 3.*
Thursday - Sunday, **October 24 -27, 2013**	**NAMA ANNUAL FORAY 2013** **Shepherd of the Ozarks, Arkansas** Save the date! Mushroom collecting in the heart of the Ozark National Forest, Arkansas. Hosted by the Arkansas Mycological Society. More details coming in the spring at ***namyco.org***.

PHOTO BY STEPHEN STERLING

Directions to the Frelinghuysen Arboretum, Morristown

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

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

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

Directions to the Unitarian Society, Tices Lane, East Brunswick

From New Brunswick via Route 18: Take U.S. Highway 1 south, exit at Ryders Lane toward East Brunswick, continue to the second light, and turn left onto Tices Lane. The Unitarian Society is the 2nd drive on the right before you go under the NJ Turnpike.

From the south via the Garden State Parkway: Take Route 18 north toward New Brunswick to Tices Lane exit (take jughandle from right lane of Route18 across to Tices Lane). Follow Tices Lane until you pass under the Turnpike. The entrance is in the woods on the left just after you leave the underpass.

From the NJ Turnpike: take Exit 9 to Route 18. Take Rt 18 South into East Brunswick. From Route 18, turn right onto Tices Lane at the third traffic light. Follow Tices Lane until you pass under the Turnpike. The entrance is in the woods on the left just after you leave the underpass.

PRESIDENT'S MESSAGE

Wow! It has been a year since my first President's message. A lot has happened in that year. I have not succeeded in getting everything done that I had listed in my first message. I feel confident that I have made progress on most of them and dealt with several serious issues that were unexpected and unable to be planned for. All in all, I believe that the club is healthy and more efficient and productive in a lot of areas. That, actually, is the primary goal of any president. I am overwhelmed by the number of members who unselfishly gave of their time and resources over the last year. Thank you all.

Once again our fall lecture had to be cancelled due to the weather. Last year, it was a freak October snow storm that brought the whole area to a complete standstill. This year it was Superstorm Sandy. I spoke with numerous people at the holiday party and at other functions who think that the idea of a business meeting that is open to all members is a good idea. I will work it into the schedule for 2013 if at all possible.

The holiday party was a success (as it usually is). Although Jim Barg couldn't make it due to the passing of his father, the photo contest was well run by Dorothy Smullen and our judge, Charles Luce, who is a member of the New York Mycological Society. The food was very good and plentiful. The decorations were well done and, as always, there was plenty of help so that the whole event went smoothly. The major sadness was that the Varneys were not present due to Gene's health. I saw him today and he is mending.

By the time you read this, the holidays will be over and we all will be getting back to work. I will be back to clearing my NJMA to-do list. I look forward to working with all of you on the various club events and functions. Finally, I would like to thank all of you for your support during the past year.

– Phil Layton

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 now 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!

BYTES, BITS, & BITES

TASTY LITTLE TIDBITS FROM OUR MEMBERS

from Warren Marchioni:

I am a graduate of Humboldt State University in California, located up in the redwoods where fungi are diverse and common. However, the recent issue of my school's magazine tells of an area of even greater diversity - the rainforest of Guyana, South America. You might find the article interesting and possibly mention it to other members of the NJMA in the newsletter.

Check it out:

http://magazine.humboldt.edu/fall12/adventures-of-mushroom-hunters

from David Marsh:

Good morning – Yesterdays foray at Jake's Branch State Park was a really informative and excellent adventure thanks to Bob and his unbridled enthusiasm and knowledge of all things fungal! I would be honored if this picture were to make it into the newsletter. That is me in the photo (next to Bob Hosh). The photo was taken by a fellow forager, Sydney Campos, but she is not a member of NJMA. She gave me permission to use the photo as I wish.

(Here you go, David! - Ed.)

from Jim Richards:

I came across this article in one of the many food blogs that I receive. However, repeated requests to Great Performances, a catering firm in New York, were never answered. The article is an interview with a GP chef who forages for mushrooms and other wild edibles.

The World of Foraging

http://greatperformances.com/blog/world-foraging

(continues on page 4)

MYCOPHAGY MEETING AND MYCO-AUCTION, FEBRUARY 24TH

It is that time of year again, almost! We are getting ready for another Mycophagy demonstration and an auction of all things mycological from dried mushrooms and books to myco-tchotchkes of all kinds. This year's event will be held at the Unitarian Society on Tices Lane in East Brunswick and will begin at 2:00 PM. Executive Chef Luke Smithson (see separate article) will be our demo chef and Bob Peabody will conduct the myco-auction in between cooking demonstrations.

For those unfamiliar with the term, "mycophagy" is the eating of fungi. Each year since 1978, our February meeting has traditionally been devoted to a demonstration of how to cook mushrooms. Sometimes the cooks have been professional chefs and cookbook authors; other times the cooks have been experienced NJMA members. This year, we are fortunate to be able to combine the categories by featuring Luke Smithson, who is a member of NJMA and is also a professional chef. A sampling of the dishes he prepares follows the demonstration.

Last year, this event was the best-attended NJMA event other than Fungus Fest: almost 80 people showed up.

Pre-registration is mandatory – no exceptions!

This **free** event is for **NJMA members only**. You must be paid up through 2013 to attend. No guests of any kind are permitted, and this also applies to relatives who are not part of a member's immediate household.

To register, contact Igor Safonov at ***njmycomember@gmail.com*** or 215-716-1989.

Because of space limitations, attendance is limited to 75 **members**. Registration will end when that number is reached, or on Friday, February 22nd.

To donate items for the myco-auction, please contact Bob Peabody at ***pagprolog@aol.com***.

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

OUR 2013 MYCOPHAGY MEETING CHEF

LUKE SMITHSON

EXECUTIVE CHEF

JAMIE HOLLANDER GOURMET FOODS, NEW HOPE, PA

From Jamie Hollander Gourmet Foods:
"Luke has over a decade's worth of experience in the kitchen and at catering events of all sizes, from intimate wine pairing dinners to weddings of over 1,000 people. A graduate, with honors, of the Restaurant School at Walnut Hill College, Luke's love of local and natural foods runs deep. He spends a week of his vacation time at the PA Farm Show every year, and the rest of his time off revolves around foraging, gardening, and cooking with his family. As a gardener himself, Luke is especially in tune with what's growing when, and he searches out unique produce and other products for Jamie Hollander Gourmet Foods, whether it's colorful organic carrots or less-familiar grains like farro. He likes to share his extensive food knowledge through special tasting sessions, cooking demonstrations, and events such as the Heritage Conservancy's Farm to Table dinner."

From Luke himself:
"I've done cooking demos in the past for a company called Kitchen Kapers (a gourmet food and food equipment retailer) and for the Restaurant School, mostly involving either ethnic cuisines or basic culinary skill. I've also done demos for Jamie Hollander's and for my previous employer (Peachtree and Ward Catering).

As far as my experience with mushrooms: I have loved them all of my life. Growing up, we ate lots of cultivated mushrooms at home. We also spent a lot of time outdoors, fishing, deer hunting and foraging (although never for mushrooms – mostly berries and greens). When I was 18, I found my Dad's tattered copy of Euell Gibbons' "Stalking the Wild Asparagus" and picked my first edible puffball mushroom. Since then, I have eaten about 50 species of wild mushrooms that I have personally collected. So my interest in mushrooms runs deep (and mostly to my stomach). Unrelated to mycophagy, I also have a keen interest in mushroom biology and taxonomy.

EDITOR'S NOTES

To begin, I would like to apologize to Virginia Tomat for what she and her husband Richard took as an insult. In *NJMA News* 42-6, we ran a foray report that Virginia had written about the Washington Crossing Foray that she led. We also ran an article by another member, Irina K., which was critical of the foray. When I read Irina's "report," I thought that it was obvious that she was complaining primarily about the lack of edible mushrooms that she was able to collect. The fact that she wandered off from the group was her doing, and certainly should not be considered any foray leader's fault. It is a personal matter as to whether one follows the leader or strikes off on one's own or with a small group of fellow forayers. In all the years that I have been a member of NJMA, I can't recall a single foray where the group remained intact for the entire foray. While collecting with John Burghardt at Stokes, we discussed the Washington Crossing Foray. He told me that because of prior commitments, he and Nina did not get to the foray until it was almost over. He said that the group under Virginia's leadership did a great job of identifying (correctly) many of the finds. I asked him to write a short article for the newsletter to that effect. I had intended to print Virginia's foray leader report followed by Irina's article, followed by John's, thus there would be three viewpoints that would put things into perspective. That did not happen for various reasons. Blame it on Sandy! Why not? John's comments were included with Virginia's and followed by Irina's.

In no way was this intended as an insult to Virginia. She has been more that willing to pitch in and do whatever has been asked of her, whether doing the decorations for the last two Holiday Parties or, in this case, leading a foray for the very first time – and doing exceptional jobs of them all.

And now to the main topic of my bi-monthly: How do we get our members to read the newsletter? Of course, this is a strange place to ask this question, since the people that we are trying to reach will not be reading this. If you are one of the minority who *do* read these, please let us know by sending an email to ***njmaeditor@gmail.com*** or, when you see one of us (You know who we are: The two Jims, or any of the officers of NJMA. It is easy to click on the blue links in the electronic version of the newsletter to send emails to any of us).

I thought of putting a survey in one of the newsletters to see what people like or dislike about *NJMA News* and what changes they would like to see to make the newsletter more useful to them. But, past experience indicates that there would be very few reponses.

Do you want a newsletter that is only a Calendar of Coming Events and the results of forays and so on? Would you like to see more or less recipes and food-related articles? Would like the newsletter to feature more or less technical articles? Book reviews? Personal bios? More or less secret locations of great troves of choice edibles, complete with GPS coordinates? (Just checking to see if you are reading this!) What things are missing from *NJMA News* that would make you *want* to read it?

We have been very fortunate to get more and more members who are contributing articles, photos, and book reviews on a regular basis, but we can't always use them as we receive them. We do sometimes reserve submitted articles for future issues. And, in order to reprint articles from other sources, we need to have permission from the publisher and/or author. In some cases, I get no response to requests for permission to reprint. In some cases, the articles are just too long to fit into the newsletter. The best way to submit articles from outside sources is to write a recap of them, being sure to cite the original source. You will find a list in this issue of locations to find a selection of webpages, etc. that we received (or that we found when surfing the web or reading magazines and newspapers). Any items that are not attributed to a contributor are items that I have added to the mix. Thanks to everyone who sent us "clippings."

As usual, we ask you to keep the material coming! We really do appreciate your contributions. Because this issue of *NJMA News* is running late, we have had to cut back on size so that some of the articles that we received will have to be held until the next issue. So there is a lot to look forward to in upcoming issues: several book reviews, more of our foray reports, etc.

Again, please let us know how we can make this a newsletter that you look forward to receiving every couple of months. And have a great 2013!

– Jim Richards

BYTES, BITS, & BITES *(continued from page 2)*

from Jim Richards:

A pretty amazing statistic: If you are under the age of 27, you have never experienced a month with below average temperatures. For more details go to:

http://grist.org/news/if-youre-27-or-younger-youve-never-experienced-a-colder-than-average-month

from Judy Glattstein:

Mark Bittman's article with kudos and links to recipes:

http://www.nytimes.com/2012/11/25/magazine/mushroom-magic.html?ref=magazine

from Steve Sterling:

Spectacular photos of tropical fungi!

http://steveaxford.smugmug.com/Living-Things/Fungi-the-recyclers/Mycena/5040334_w2h6j2/215197737_pCh4Y#!i=215198374&k=ij3sS

(continues on page 13)

MOREL DREAMING

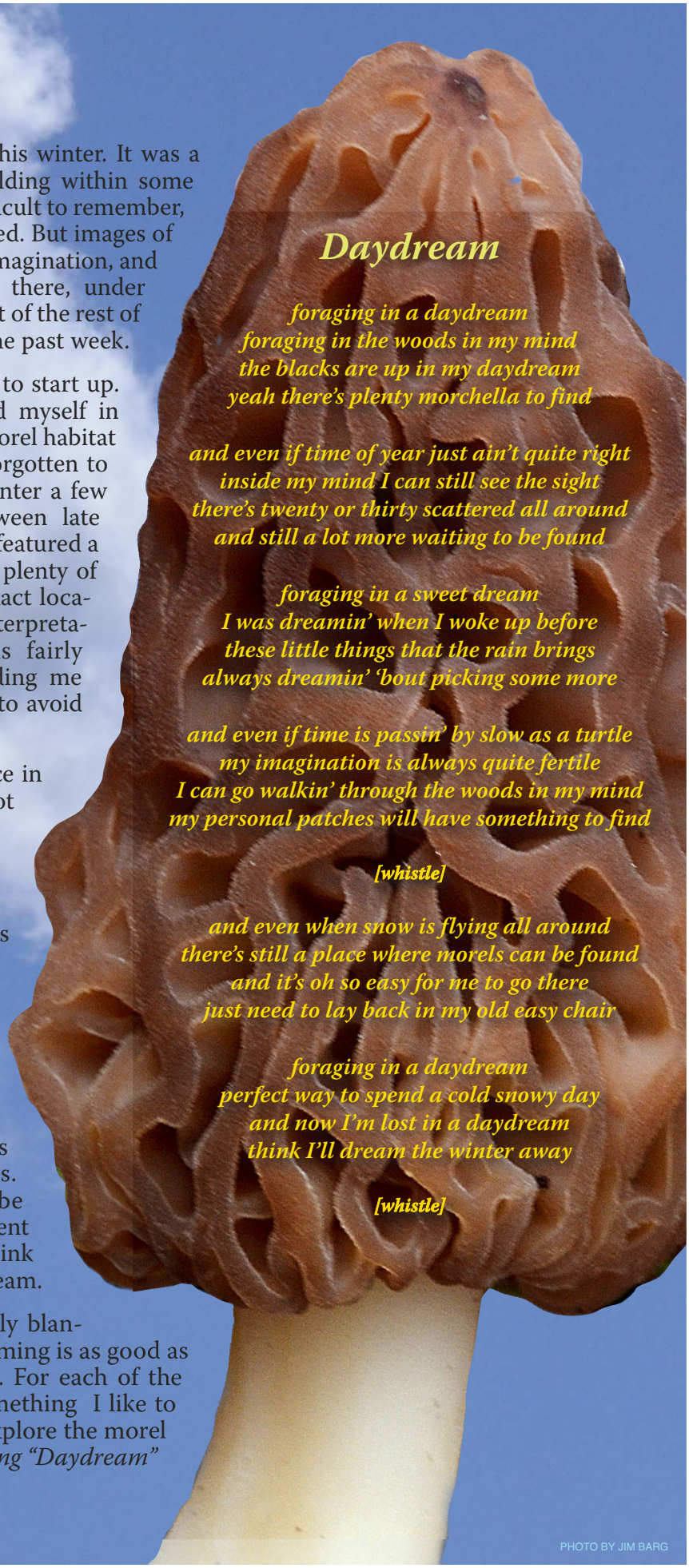
by Dave Wasilewski

Recently, I had my first morel dream of this winter. It was a long dream, with several subplots unfolding within some imaginary land. The stuff of dreams can be difficult to remember, as story lines tend to be strange, often disjointed. But images of tall black morels growing in the mulch of my imagination, and fat yellows sporadically appearing here and there, under hedges, by doorways, on roadsides; unlike most of the rest of the dream, these have remained with me for the past week.

It's a bit early in the winter for morel dreams to start up. Generally, mid-February is when I first find myself in some imaginary, and yet seemingly familiar, morel habitat with the haunting feeling that I had almost forgotten to check my various *Morchella* patches. One winter a few years back, I had three such dreams between late February and the end of March. Each episode featured a lot of local travelling from spot to spot, with plenty of mental effort applied in order to recall the exact locations. Perhaps notwithstanding Freudian interpretation, the meaning of these dreams seems fairly obvious. My subconscious is merely reminding me that I love to hunt morels, and that I'll need to avoid forgetting to visit any of my patches.

But this latest morel dream of mine took place in another state, maybe West Virginia, I'm not certain. While travelling through West Virginia during April 1993, I enjoyed my first really good morel hunt in which I gathered collections of three different *Morchella* species. Because of this, West Virginia has always held a personal mystique. But another unusual aspect of my recent dream is that the morels I was finding were growing at a very unusual time of year, late autumn. Here in the real world, I have been consciously contemplating making a trip out to the Rocky Mountains next summer, to explore one or more of the massive burn sites that have resulted from this past summer's fires. Several different types of morels may be collected in the high-elevation burns, in decent quantities, up until mid-September. So I think this is the reason for my early-winter morel dream.

At any rate, with 10 inches of snow currently blanketing the hills that surround my house, dreaming is as good as it gets for an avid morel forager like myself. For each of the dreamers out there, here's an example of something I like to call *karaoke-take* to accompany you as you explore the morel patches of your mind. *(The tune is from the song "Daydream" by John Sebastian and the Lovin' Spoonful.)*



Daydream

foraging in a daydream
foraging in the woods in my mind
the blacks are up in my daydream
yeah there's plenty morchella to find

and even if time of year just ain't quite right
inside my mind I can still see the sight
there's twenty or thirty scattered all around
and still a lot more waiting to be found

foraging in a sweet dream
I was dreamin' when I woke up before
these little things that the rain brings
always dreamin' 'bout picking some more

and even if time is passin' by slow as a turtle
my imagination is always quite fertile
I can go walkin' through the woods in my mind
my personal patches will have something to find

[whistle]

and even when snow is flying all around
there's still a place where morels can be found
and it's oh so easy for me to go there
just need to lay back in my old easy chair

foraging in a daydream
perfect way to spend a cold snowy day
and now I'm lost in a daydream
think I'll dream the winter away

[whistle]

PHOTO BY JIM BARG

THOUGHTS ON FUNGAL TAXONOMY

by Igor Safonov

Traditional mushroom taxonomy based on both macroscopic and microscopic properties of fruit bodies has come a long way since the "ancient" times of Linnaeus and Persoon. Each subsequent generation of professional mycologists around the globe continuously advances, redefines and refines this ever-developing field based on theories of the past and discoveries of the contemporary day. Thanks to the earnest efforts of "splitters" and "lumpers" spanning over the course of more than two centuries, numerous families and genera of mushrooms have been created and destroyed, species concepts have been erected only to be disproven later, binomial names have been given to new species only to be changed time and again, and countless species have been incessantly moved from one genus to another only to be finally relegated to one of several "wastebasket taxons" until better times. No other kingdom of life, with the exception of microbes, has perhaps undergone such an extensive and drastic reclassification since its inception than that of fungi. Although this optimization process is still very much alive with no end in sight, it seems that classical mushroom taxonomy may have already reached its apogee before having exhausted all its resources. A new "quantum leap", called DNA phylogeny, forged by recent advances in molecular biology as well as equally important ancillary technological breakthroughs, has shown that the genetic code is the only key that will allow us to unlock the evolutionary mysteries of the humongous and exquisitely complex fungal tree of life. However, even in our evolved post-genomic world, molecular phylogeny is still very much in its infancy, and thus far it has produced more questions than answers. One day, affordable hand-held mushroom DNA analyzers will be as common as smartphones are today, but until such time, our ability to identify mushroom species in the field will continue to rely heavily on the vast volume of printed literature brought to us by the classically-trained mycologists of the past and present.

ELECTION OF OFFICERS REPORT

The current slate of NJMA officers:

President	**Phil Layton**
Vice-president	**Patricia McNaught**
Secretary	**Igor Safonov**
Treasurer	**Bob Peabody**

was re-elected for 2013.

NJMA CULINARY GROUP

PORTUGUESE DINNER FEBRUARY 16TH

The next Culinary Group event will be a Portuguese Dinner on Saturday, February 16th at 6:00 PM at the Unitarian Center in East Brunswick. While the food of Portugal is close to that of neighboring Spain, there are many distinct differences due to the Moroccan influence. Dishes of pork, all kinds of seafood including the national favorite, *bacalao* (dried salt cod) and lots of cooked vegetable dishes and greens form the backbone of the cuisine. Kale and sausages make up the basis for one of the national soups *caldo verde*. Breads are served throughout the meal, whether the sweet cornbread *broa* of the north or the many different whole wheat or rye breads of the south. The major starches are rice and potatoes, which are often served at the same meal. And the Portuguese have an insatiable love for sweets of all kinds: pastries, puddings, etc. Beginning with the honey-rich sweets of Greece, Morocco and Turkey, the Portuguese have added the richness of eggs and meringues. There is lots to look forward to!

The Culinary Group has been active since the spring of 1982, usually putting on three or four dinners a 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 last was Moroccan (report on the next page), and we anticipate that our summer BBQ will be devoted to foods of the American Southwest.

The organizers of the dinner, currently Jim Richards and Bob Hosh, 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 dish 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 is then divided by the number of participants. The average meal has been running about $16 per person, which is a fantastic bargain for the quantity and quality of the much-appreciated dishes.

Everyone brings their own tableware, dishes, glasses, cutlery etc., as well as any wine (the Portuguese produce some great reasonably-priced reds as well as the most-famous dessert wines of the region Madeira and, naturally, Port), beer or other beverages they wish to enjoy with the meal. Coffee and tea are provided.

To register, or for additional information, contact Jim Richards (***jimrich17@mac.com*** or 908-619-1438) or Bob Hosh (***gombasz@comcast.net***) 908-892-6962.

Reminder: Registration is limited to 30 members and their guests so sign up early.

MOROCCAN DINNER REPORT
NJMA CULINARY GROUP – OCTOBER 27, 2012

submitted by Marja van Ouwerkerk

On the Saturday night before Hurricane Sandy struck, 34 happy diners congregated at the Unitarian Society in East Brunswick for a culinary tour to Morocco.

The recipes had been selected and assigned by Jim Richards and Bob Hosh to construct a varied menu with several courses. I am a vegetarian, therefore I can only comment on the non-meat or fish dishes. However, my guests Art and Barbara, who are omnivores, praised all the dishes they sampled as delicious and unusual.

The menu included eight starters, including Spiced Almonds which were baked in a mixture of ten different spices including cinnamon, coriander, cardamom and Harissa powder, Chickpea Spread with Pita chips, "*Msemmem*" pancakes, and Roasted Tomatoes with Pine Nuts. A crunchy orange and grated radish salad was very refreshing. Other starters included Roasted Beet Salad with Cinnamon, a Cooked "Wild" Greens Salad (including dandelions) and Eggplant *Zalouk*, a spicy stew with perfect texture.

Main courses included "*Bisteeya*" with chicken (and a second version with the addition of mushrooms), a Lamb *Tagine* with baby spinach, of which there were three different varieties, a *Tagine* of Cardoons (an artichoke-family vegetable) and Beef with lemon and olives, and Fried Sardines. An "Eclectic *Couscous*" made vegetarian by substituting mushrooms for the lamb in the original recipe was delicious and fragrant. *Marak* of Swiss chard was a simple stew with a small amount of rice and lots of fresh cilantro. The *Marak* of Okra and Tomatoes was interesting, I have never found okra appealing due to its sticky texture, but this dish was great.

The meal was rounded out by Moroccan Rice Pudding, Semolina Almond Cookies and Poached Pears with Plums. Moroccan mint tea and a variety of teas and coffees completed the evening. Diners had brought their own beer and wine, and lots of great conversation made us aware of new friends' interests and a grand time was had by all. At the end, we were all stuffed, and leftovers were divided among the interested for a snack later on.

Thanks go to the organizers and to all the amateur chefs and kitchen help who made this another very pleasant and memorable event.

Next trip: PORTUGAL, February 16th, 2013!

PHOTOS BY STEPHEN STERLING

WHO'S IN A NAME?
The order Kickxellales

by John Dawson (thirty-fourth of a series)

The group of fungi known as Kickxellales constitutes an order within the class Zygomycota. In the third chapter of his book *The Fifth Kingdom*,[1] Bryce Kendrick remarks that the teleomorphs (sexual forms) of fungi within that order "are unremarkable", but that the anamorphs (asexual forms) "develop some of the most complex [structures] known." Particularly remarkable are members of the genus *Spirodactylon*, found on rodent dung, whose multiply-branched sporangiophores are repeatedly interrupted by tight coils that resemble women's hair curlers. It is believed that those coils become entangled in the fur of the host rodents as they travel to and fro in their burrows and are then ingested when the rodents groom themselves. The spores pass through the rodents' guts and are subsequently excreted to perpetuate the fungal life cycle.

Jean Kickx fils

The order Kickxellales is named after the Belgian mycologist Jean Kickx *fils*, who was born in Brussels on 17 January 1803, the eldest of the five children of Jean Kickx (1775–1831) and Jeanne Catherine Van Merstraeten (who died when young Jean was just 13), and the only one to survive to adulthood. His father, author of the 1912 botanical work *Flora bruxellensis*, was a pharmacist who also served as professor of chemistry, botany, mineralogy and pharmacy at the École de medecine in Brussels, as professor of natural history at Brussels's Musée des sciences et des lettres, and as inspector-general of Brussels's hospitals and hospices.

The younger Jean was educated at the Brussels *lycée* and went on to study at the Université de Louvain. During his years as a student there, he competed four times in the *concours* examinations, each time winning a gold medal, and in 1830 he graduated with dual doctoral degrees in science[2] and in pharmacy. He then returned to Brussels to assist with his father's pharmacy, but upon his father's death the next year, he sold the pharmacy to one of his father's former students and acceded to all three of the aforementioned posts that his father had held.

Upon the creation of the Free University of Brussels in 1834, the École de medicine was abolished and Kickx was named to the chair of botany and mineralogy at the new institution. In December of 1935, however, he moved to the University of Ghent, where he was appointed assistant professor in charge of the courses in botany, plant physiology, phytogeography and 'vegetal anatomy'. Two years later, like his father before him, Kickx was elected to membership in the Brussels Royal Academy of Arts and Sciences, and in 1841 he was promoted to professor at Ghent and appointed director of the city's botanical garden.[3]

Beginning in 1830, Kickx devoted himself to cryptogamic botany (the study of the 'lower plants', including fungi, algae and bryophytes). The bibliography of his works given on the Belgian Wikipedia site[4] lists 25 publications, including the books *Flore cryptogamique des environs Louvain* (1835), *Esquisses sur les ouvrages de quelques anciens naturalists belges* [Sketches of the works of some Belgian naturalists of the past] (1852), and *Flore cryptogamique des Flandres* (his principal work, completed by his son and published posthumously in 1867), as well as articles in various journals, such as "Notices sur trois espèces peu connue du genre Sclerotium" [Notes on three little known species of the genus *Sclerotium*], "Sur une nouvelle espèce de polypore" [On a new species of polypore], "Sur quelques champignons du Mexique" [On some Mexican mushrooms], and "Recherche pour servir à la flore cryptogamique des Flandres" [Studies relevant to the cryptogamic flora of Flanders], which appeared in five installments in the *Nouveaux mémoires* of the Brussels Royal Academy of Arts and Sciences.

Kickx died suddenly and unexpectedly in Brussels on 1 September 1864. His son Jean Jacques (1842-1887), however, continued to carry on the family's botanical and academic traditions, eventually becoming Vice-chancellor of the University of Ghent.[5]

[1] Available online at ***http://www.mycolog.com/CHAP3b.htm***

[2] His dissertation for the science degree described mollusks that he observed in the Brabant province of Belgium.

[3] Between 1826 and 1840, Kickx became a member of at least 14 other learned societies, and in 1851 the King of Belgium conferred upon him the title Chevalier of the Order of Léopold.

[4] ***http://wiki.arts.kuleuven.be/wiki/index.php/Kickx,_Jean_%281803-1864%29*** (in French), one of the principal sources for this article, together with the obituary memoir of Kickx by C. Poelman published on pp. 101–121 of vol. 31 (1865) of the *Annuaire de l'Academie royale des sciences, des lettres et des beaux-arts de Belgique* (available online at ***http://www.archive.org/stream/annuairedelacad3133acaduoft#page/n131/mode/2up/search/kickx***).

[5] Source: ***http://www.calflora.net/botanicalnames/pageK.html***

FRANKLIN PARKER PRESERVE - 2012

by Nina Burghardt

In 2012, Franklin Parker Preserve once again proved to be a magical and fascinating place. We found fungi both unnamed and new to the New Jersey list. We had many people collecting; some from NJMA and others from the local area. Some people came only once while others came many times. I want to thank all those who showed up, especially Igor Safonov who put names to all the boletes, as well as listing some of our more unusual finds on *Mushroom Observer*. I also want to thank Dr. Rod Tulloss, who named many of the Amanitas.

Dorothy Smullen led a lichen walk in June. We learned and were able to name some of the foliar and "reindeer moss" (*Cladonia*) lichens. My dad would have been interested in the reindeer moss since he had to eat the stuff in his younger days in Denmark. I discovered that there are several types of tar lichen (the black stuff that covers the sand).

In July, Else Vellinga accompanied us on one of our forays. July is not the top mushroom month in the Pine Barrens, but she was able to find a *Leucoagaricus*, which is the genus she specializes in. She was also introduced to chiggers, but luckily she did not get too many bites.

We saw (and heard) lots of wildlife. In February, Igor discovered an Ox Beetle hiding in oak leaves. Later on, we saw the beautiful red-spotted Purple Admiral Butterfly fluttering in and out of the green leaves, the prehistoric Leaf-footed Bug sitting on a blueberry bush and Eastern Velvet Ants scurrying across the sand. There were Green Frogs and Leopard Frogs, and we heard the Pine Barren Tree Frog (identified by Terri Layton) and the hammering sound of the Carpenter Frog. Rail Lizard scurried up trees and a Hog-nosed Snake puffed himself up, telling us to leave him alone.

The folks at NJ Conservation Foundation have been working hard for many years to return the cranberry bogs to a more natural habitat. This has increased the number of birds in the area. A road was left around the old cranberry bogs in Speedwell, but this was washed out when 11 inches of rain fell in one day. Between the beavers and the floods, I think nature has done a pretty good job on her own of destroying man's manipulation of the land.

In general, 2012 was pretty dry. Often we would hear that it was raining in the Pine Barrens only to find that the rain had not arrived in Chatsworth. I hope we will have more consistent rain in 2013.

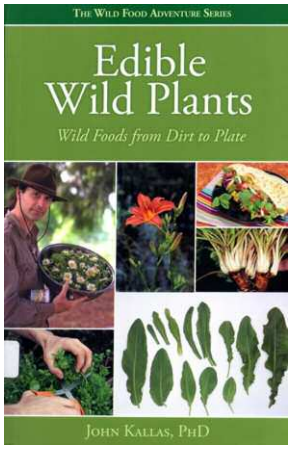
If you are interested in joining us in collecting and (hopefully) identifying Franklin Parker fungi, please let me know; my email is ***jnburghardt@verizon.net***. We collect and identify fungi all year long.

BOOK REVIEW

EDIBLE WILD PLANTS

WILD FOODS FROM DIRT TO PLATE

a book review by Judy Glattstein



Edible Wild Plants
Wild Foods from Dirt to Plate
by John Kallas, Ph.D.
Published by Gibbs Smith, Layton, UT
ISBN-13: 978-1-4236-0150-0
ISBN-10: 1-4236-0150-5
395 pages + references and index, color photos throughout

Are all the members of The New Jersey Mycological Association foragers at heart? I cannot say for certain as I've never seen a survey. But going by the enthusiasm displayed at the June Wild Foods Foray, complete with wild edibles shared at the potluck, I'd say the interest is there. Members happily take to the woods looking for mushrooms, discuss what's been found, and share recipes for the edible ones. We're careful about that; always cautioning that only the mushrooms properly identified and known to be edible should be consumed. Beyond mushrooms, there's a wide range of wild foods out there, if you know where to search, how to identify, and how to prepare for the most flavorful results. Which is where *Edible Wild Plants, Wild Foods from Dirt to Plate* is useful.

The author, John Kallas, has a doctorate in nutrition. He's a trained botanist. Moreover he's been foraging and eating from the wild since his teenage years. He's taught college classes in edible wild plants and currently has a full-time career at ***http://www.wildfoodadventures.com***, a teaching and research institution devoted to edible wild plants and other foragables.

This is his first book in what's intended to be a series, *Wild Food Adventures*. As such, it has as its focus common plants that are easy to identify and found across North America. Many of these are naturalized exotics that came over from Europe with the colonists, found conditions to their liking and made themselves at home. Thanks, no doubt, to his master's degree in education, Kallas presents lucid explanations, thorough detail, and gentle encouragement in the pursuit of wild foods.

Rather than merely saying thus-and-such is edible, he explains that edible needs definition: Is it the entire plant, part of the plant, perhaps even a seasonal aspect. There's an image of mature milkweed pods with brown seeds. A caption explains that the plant is both edible and poisonous, depending on the part and its stage of growth. Having defined *edible,* he moves on to *poisonous*, and then *medicinal* plants. A few pages discuss growth and tenderness. We're getting close to going out to forage, but first there's a detailed section on foraging tools, from diggers and cutters, spray misters, hand rags, collecting bags and more. Only after that (and we're up to page 65) does Kallas get to the plants.

Each of 15 different plants gets a chapter of its own. Each is described from seedling to maturity and seed production, from foraging to its morphing into food, preparation to consumption. Never have I seen a wild foods book as thorough in its presentation as is this one. Let's look at *Chenopodium album*, wild spinach, which is the first of his four "foundation" greens – mild, even neutral in flavor, good raw or cooked, fresh, or made into pesto. A wide range of images show germinating sprouts, variations in leaf form, toxic lookalikes to avoid, even seeds. How to harvest leaves – for a salad or mass collection. How to harvest/process flower buds and seeds. And, concluding the chapter, a relatively brief selection of recipes – raw as a salad either on its own or mixed with other greens, and a paragraph that notes wild spinach may be boiled or steamed. I must note that this is different from other wild foods discussed in this book, which have more detailed recipes, such as *Malva neglecta*, mallow, with recipes from chicken mumbo gumbo to mallowmallow (a forager's version of marshmallows.)

There are three greens such as sheep sorrel with tart flavor, four that are pungent – among which is my own *bête noir, Alliaria petiolata*, garlic mustard. He almost convinces me to change my mind about it, with a recipe for a cold salad/side dish of beans with garlic mustard and another for a tasty sounding omelet. And lastly, four bitter greens, including dandelion.

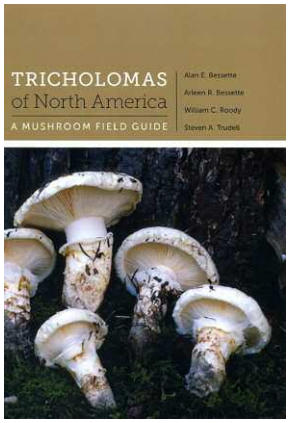
Most of us might be content to learn about these wild foods as a pleasant addition to our culinary repertoire, something unique that is not available at the grocery, even as a rationale for taking to the woods ("I'm picking a salad, not playing hooky."). Kallas suggests there's a deeper purpose to learning about and searching for edible wild plants. They're good for you in many different ways. Children, he says, don't know where food comes from. They don't get out to fields and forest to play with their friends. He believes that foraging is a great social activity, a wonderful way to connect with the natural world. Moreover, wild greens are high in nutrients, especially vitamins.

Whether you're looking to expand your knowledge of edible wild plants, interested in learning more about those you are already familiar with, or might perhaps enjoy the enthusiasm and experience that Kallas writes about so well – this is a book I can highly recommend.

BOOK REVIEW

TRICHOLOMAS OF NORTH AMERICA

a book review by Igor Safonov



Tricholomas of North America *by Alan E. Bessette, Arleen R. Bessette, William C. Roody, and Steven A. Trudell*
University of Texas Press, 2013.
208 pages. Retail price: $29.95

Recently, there has been a noticeable and much anticipated shift in the popular mushroom literature away from general field guides toward a series of publications dealing with an in-depth and individual treatment of selected notable genera. Indeed, the glut of the contemporary broad-scope mushroom literature intended to cast a wide net over the ever-changing taxonomic landscape of North American fungi, while typically of high quality and very successful at illustrating the breathtaking diversity of species within this kingdom through the use of high-quality color photographs and detailed morphological descriptions, has unwittingly exposed the inherent limitations of such an approach to promote mushroom identification to those amateur mycologists who have had enough of "horizontal" coverage and are perhaps ready to commit themselves to the study of a single genus. Unfortunately, unlike the situation in Europe, only a few non-technical monographs dedicated to specific groups of fungi found on this continent were published in the second half of the last century. Notwithstanding the initial impact on science back then and their continuing significance today, they are now in need of revision to keep up with the pace of modern advances both in traditional taxonomy and molecular phylogeny.

Earlier this year, I wrote a detailed review of the splendid monograph on North American waxcaps by the Bessettes *et al.* (see Vol. 42-1 of *NJMA News*).[1] This was the Bessettes' second book of this kind, following the release of an excellent guide to the genus Lactarius in October of 2009.[2] These well-documented and profusely illustrated works covering two prominent genera of North American gilled mushrooms are a welcome update of the corresponding seminal monographs by Hesler and Smith dating back to 1963 and 1979, respectively.[3] While gathering my thoughts and ideas for the waxcap review, I researched the bibliography of Alan Bessette on ***www.openISBN.com*** and found out that the first-ever guide on North American Tricholomas was due for publication in January of 2013 – a fact which I immediately brought to the attention of the editor of *NJMA News*.[4]

For most people in this country, who at least have a superficial familiarity with Tricholomas, the name *matsutake* might immediately be conjured. However, this choice edible, known by its binomial Latin name *Tricholoma matsutake*, doesn't even grow in North America; instead we have *Tricholoma magnivelar*e, also known as the American matsutake, whose gastronomical value is not as unquestionable as that of its esteemed relative commercially harvested both in Japan and Europe. Thus, the *matsutakes* seem to have grabbed the spotlight as the type species, though in reality, as one learns more about Tricholomas in this book, neither the culinary rating nor the distinct physical appearance of *T. matsutake/magnivelare* qualify either one to represent this sizeable genus of over 200 species worldwide.[5]

For those who have more taxonomic awareness, the genus name could perhaps evoke an ill-reputable association with the similar-sounding family Tricholomataceae, which for long has been a classic dustbin taxon. Though it has been considerably reduced to a more manageable size and less nebulous structure, it still consists of almost 80 mostly obscure and small genera of gilled mushrooms collectively containing over a thousand species.[6] Naturally, as the name suggests, the genus Tricholoma was and still is part of this ragtag collection of light-spored gilled mushrooms. Those who want to learn about Tricholomas must not, however, be discouraged by this unfortunate association for at least a couple of reasons. First, with a little field training, one can quickly begin to appreciate the gestalt appearance of these mushrooms, which is no different from learning the characteristic statures of such easily recognized and well-defined genera as Amanita, Russula and Lactarius.

[1] Bessette, A. E.; Roody, W. C.; Sturgeon, W. E.; Bessette, A. R. 2012. *Waxcap Mushrooms of Eastern North America.* Syracuse, NY: Syracuse University Press. 179 pp.

[2] Bessette, A; Harris, D. B.; Bessette, A. R. 2009. *Milk Mushrooms of North America: A Field Identification Guide to the Genus Lactarius.* Syracuse, NY: Syracuse University Press. 256 pp.

[3] Hesler L. R.; Smith, A. H. 1963. *North American Species of Hygrophorus.* Knoxville, TN: University of Tennessee Press. 416 pp.
Hesler, L. R.; Smith, A. 1979. *North American Species of Lactarius.* Ann Arbor, MI: University of Michigan Press. 856 pp.

[4] Unfortunately, we couldn't obtain a review copy early enough to try it out on the local population of Tricholomas found in the NJ Pine Barrens.

[5] Based exclusively on the gestalt morphology of the genus, and edibility aside, any of the common and widespread ringless Trichs, such as *T. equestre* or *T. portentosum*, might be appropriately suited to fit the official image of the species type.

[6] This information was obtained from the Wikipedia page on the family Tricholomatacea.

This appreciation is further facilitated by the fact that, at least in the Garden State, Tricholomas begin to appear only well into the fall months in the pine-oak woods of the coastal plain.[7] Last, but certainly not least, we finally have the first comprehensive Tricholoma guide to help us with identification!

In the preface, the authors lament that the study of North American fungi has been primarily hampered by the lack of appropriate funding. Another mentioned critical issue is mushroom taxonomy being in the perpetual state of upheaval due to the emergence of molecular phylogenetics, which may explain why mycologists are currently reluctant to publish comprehensive non-technical monographs. As far as the native Tricholomas are concerned, in addition to said reasons, the genus has historically received only a lukewarm attention from American mycologists of the past. As the result, reference materials and technical literature are both insufficient and difficult to procure – a fact that is amply supported by the limited inclusion of Tricholomas in contemporary general field guides and the inevitable overlap in the pool of species exemplified therein. Overcoming these and other difficulties, the authors marvelously succeed in providing us with a superb and easy to use encyclopedia of the genus Tricholoma.

"Frequently, mushroom identification keys can be confusing and difficult to work with. Not the one in this guide though!"

The introductory part of the book (pp. 1-9) starts out with the overall history of the genus Tricholoma from its inception by E. M. Fries in Europe in the first half of the 19th century to the present times. This is followed-up by a section covering the history of studies of Tricholomas in this country, beginning from the pioneering contributions by such well-recognized mycological giants as C.H. Peck and C.H. Kauffman to the efforts of the contemporary authority on the genus Dr. Clark Ovrebo. A significant portion of the introduction is also dedicated to the notes regarding the general approach to identification of Tricholoma species. It primarily relies on gross morphology other intrinsic properties of basidiocarps, such as odors and flavors of raw flesh, as well as their ecology and the current understanding of distribution limits, and less so on microscopic characteristics, which, nevertheless, can occasionally be helpful. With regard to the latter property, the authors compile a curious list of tricholomas with distinctive microscopic features for those brave souls with an access to a compound microscope (p. 28). The first section of this book immediately relevant to identification is the "Keys to the Described Species" (pp. 11-27). Frequently, mushroom identification keys can be confusing and difficult to work with. Not the one in this guide though! Actually, there are two keys for North American Tricholomas – one for species occurring east of the Rocky Mountains, which represents the bulk of the continental USA and parts of southeast Canada, and the other one for species reported to the west of that geographical "demarcation line" all the way to the Pacific coast. The authors, however, advise that since the known limits of species distribution are only approximate, both regional keys should be consulted in tough identification cases. Each of the regional keys is further broken down into four main sections according to the specially grouped cap colors. Of course, things can quickly get more complicated after that, but at least if your specimens are in good shape, choosing the right "color section" as the point of origin in your identification adventure should be a fairly straightforward exercise intended to dramatically narrow your search window and then unambiguously lead you a positive ID. As we all know, the bulk of any mushroom field guide is comprised of detailed species descriptions, accompanied by photographs. This book is certainly no exception in this regard; however, it does stand out from other existing popular mushroom literature in terms of how the material is presented and arranged. Unlike the pocket-sized (and thus inevitably "busy" and incredibly crammed with information of all kind) *National Audubon Society Field Guide* by Gary Lincoff, the Trichoma encyclopedia conveys a totally alternative style and personality. Two descriptor words immediately come to mind – spacious and relaxing, respectively. It's as if the book tells you "Just take time and pleasure in flipping through my thick, glossy pages, and you will eventually find your Tricholomas here". Each of the 71 alphabetically listed tricholoma profiles printed in mid-sized font is on a separate page, and frequently fills only half of it – the remaining space below is either left blank (!) or filled with a photograph. Incidentally, the color plates associated with individual species immediately follow each mushroom description; perhaps, this was done intentionally by the authors to encourage the reader to start the identification process of a specimen in hand from working through the keys first. Thirteen Tricholoma profiles have no photographic records to back them up, while fifteen other described species have anywhere between four and eight attached photos to account for a remarkable variation in their appearance. There are a total of 171 very large color plates, and the clarity and level of detail of any photograph here are simply breathtaking and amazingly revealing. Specifically, the smaller photographs measure a

[7] Not a single Tricholoma species associated with hardwoods was reported in the NJMA's extensive 2011 and 2012 foray species lists. Apparently, all Tricholoma species listed therein grow in a strict association with *Pinus rigida* and other conifers found in the NJ Pine Barrens.

respectable 4" x 2.75", while the standard size of the larger photos, which dominate numerically, is approximately 5.7" x 3.75" (only two plates of the latter size fit on a page). All illustrated mushrooms, featuring at least two fruit-bodies per each collection, were photographed *in situ*, giving a glimpse of their natural surroundings, and arranged in such a way that allows the reader to visualize their morphology and match it with the corresponding information in the text.

The authors also include a section containing a just over a dozen Tricholoma species, most of which were collected in Florida and West Virginia, whose identity remains unclear at this time. Additional vouchered collections are needed to investigate their taxonomic status. In that regard, amateur mycologists and even ordinary mushroom foragers across this country are in an enviable position to make significant contributions to help further our knowledge not only about these rare or little-known Tricholomas, but also hundreds of other undescribed taxa in North America.

The book concludes with a list of excluded Tricholoma species about two and a half pages long (the authors give several convincing reasons to account for their decision to do so, and I leave it to the reader to find out what these are), followed by the glossary, list of references and index to scientific names.

In summary, *Tricholomas of North America* occupies a very special place among the monographic mushroom guides of today primarily by virtue of being the first one to thoroughly educate us on this historically overlooked genus of ecologically important mushrooms from a wastebasket taxon. Surprisingly, the authors take a very modest approach in promoting their book in this regard. Instead they call it an "approximation," containing information that "will require revision in the future". Be as it may, this book still undoubtedly represents the major step forward toward providing a comprehensive and popular guide, whose contents are perfectly in line with the current state of taxonomic affairs pertaining to the genus Tricholoma.

BYTES, BITS, & BITES *(continued from page 4)*

from Bob Saunders:

One of the blogs I follow, *forageahead*, mentions a couple of interesting articles:

http://clintonherald.com/cnhins/x1501146230/Massive-mushroom-discovered-in-Massachusetts-woods

which shows a huge hen from a locally-famous mushroomer, and a Massachusetts restaurant boldly lists it on their menu as wild.

And here's a story about a "fungi massacre" in Italy:

http://www.upi.com/Top_News/World-News/2010/08/29/Fungi-massacre-in-Italy-claims-victims/UPI-29481283112996/?rel=20411351783173#axzz2CzWwSJTC

from Lorna Wooldridge:

I just received this in my Association of Gravestone Studies latest newsletter. Phil and I laughed to see our interest in fungi, or in this case lichen, combined with our interest in gravestones. I think this would be very interesting and appropriate for the next NJMA newsletter.

Recent Lecture:
Study of fungi in a Petersham (MA) Cemetery

On November 7, Professor Anne Pringle gave a presentation, "Life and Death in a Petersham Cemetery: The Dispersal and Demography of Fungi" at Harvard University. Last year, Anne had a fellowship at the Radcliffe Institute to study lichens and gravestones and this talk summarized her work. For more information, visit:

http://www.radcliffe.harvard.edu/people/anne-pringle

http://news.harvard.edu/gazette/story/2010/05/exploring-a-world-within-a-world/

http://www.loe.org/shows/segments.html?programID=11-P13-00010&segmentID=5

(An interesting aside: If you follow the links in the articles, you will discover that Professor Pringle has co-authored with Rod Tulloss articles on Amanitas – Ed.)

from Igor Safonov and Lorna Wooldridge (separately):

http://news.yahoo.com/poison-mushroom-soup-kills-2-elderly-women-223939274.htm

from Jim Richards:

An excellent article on Truffles by Eugenia Bone in the New York Times, including a good description of the varying types of truffles and the dubious quality of most truffle oils can be found at:

http://www.nytimes.com/2012/12/26/dining/truffles-a-buried-treasure-filled-with-mystery.html?pagewanted=1&tntemail1=y&_r=0&emc=tnt

from Jim Richards:

An interesting (and very trendy) way to cook mushrooms (in this case, *porcini*, but I am sure other varieties would work) is adapted from Chris Cosentino's new cookbook, *Beginnings, My Way to Start a Meal* in the December issue of *Food Arts* involves taking the sliced mushrooms and wrapping them in parchment with salt and pepper, *foie gras*, and Douglas Fir branches and baking them in a 450° oven until they sizzle (about 10 to 12 minutes) Slice open the packets at table. The aromas should be spectacular.

BAY NATURE MAGAZINE OCTOBER - DECEMBER 2012

a report by Paul Funk

Aside from our familiar mycological periodicals, very few magazines have issues reporting on mushrooms. Among the few that have are *Arizona Highways, Smithsonian,* and *National Geographic.* Many of these lay publications, which contain articles on fungi, emanate from the 1960's, 70's and as far back as the 1920's, and are therefore rather dated.

Fortunately for mycophiles, the October-December 2012 issue of *Bay Nature* magazine contains a fresh article on fungi "Planet Fungi – Journey into the Kingdom of Mushrooms" by Joe Eaton. Just as one might imagine studying the genus Psilocybe with Wasson in Mexico when reading a 1950's issue of Life, mushroomers can imagine finding and photographing elegant red fly agarics in California when reading this issue of *Bay Nature.*

I would like to thank NEMF for causing me to add this magazine to my personal library. For it was at the recent NEMF Samuel Ristich Foray when a brief conversation with NJMA member and fellow photographer Steven Sterling prompted my interest in California. Steven related how he believed the upcoming NAMA foray would be a very good event. So, after remembering how bleak the winters can be here in New Jersey and hearing Dr. Else Vellinga's description of the Scotts Valley Foray I decided California was the place I ought to be!

Shortly after returning home from NEMF, I began to search for places in central California that would serve as additional mushroom sites when the NAMA foray was over. The best local resource for such places seemed to be the website of *Bay Nature* magazine. ***Baynature.org*** offers back issues from Volume 1 (2001) to the present, and links pertaining to natural history in California. I found a few back issues with articles on mushrooms and nice pictures of Californian landscapes on their covers. I ordered these and a three year subscription.

Giving that *Bay Nature* primarily reports on hiking conditions, conservation and wildlife, imagine my surprise when the first issue arrived possessing a cover resplendent with the western Jack-o-Lantern mushroom *Omphalotus olivascens*! This cover photo is by photographer Tom Wolf. Though not as flamboyant as Igor Safonov's "Best in Show" photo of *Omphalotus olearius*, if one looks at this cover of *Bay Nature* they might imagine that a majestic Pacific sunset participated in the lighting of this darker relative *Omphalotus olivascens*. The cover story, written by Joe Eaton, is also richly illustrated with many photos of California fungi. The possibility for me to participate in NAMA's Scotts Valley foray waxed and waned and actually never came to fruition. I will therefore be relegated to photographing yellow fly agarics here in New Jersey instead of the elegant red and white *Amanita muscarias* of California. My consolation however, is this magazine that will serve as a wonderful souvenir of the Scotts Valley Foray and also be a quarterly reminder that California is the place I ought to be.

Baynature.org has a link to the photographer Ron Wolf's website. There, one has access to almost one thousand original images of fungi. His striking images are identified by both common and scientific names. The locations are triangulated, if you will, by giving the date taken, name of park and a nearby topographic feature. Buy this issue or visit the website for a virtual fungal foray in California!

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.

NJMA 2012 PHOTO CONTEST

BEST IN SHOW

"My name is Jack – Jack O'Lantern"

IGOR G. SAFONOV

NJMA 2012 PHOTO CONTEST
FIRST PLACE WINNERS

NOVICE PICTORIAL
Amanita muscaria
JENNIFER DeSIO

CREATIVE
"Fungal Flair"
JIM RICHARDS

ADVANCED PICTORIAL
Phlebia tremellosa
R. ALLEN SIMPSON

ADVANCED TECHNICAL
Phlebia tremellosa
JOHN DAWSON

NOVICE TECHNICAL
Boletus parasiticus
PAUL S. FUNK

NOVICE ACTIVITY
"Checking things out at Hacklebarney"
STEPHEN STERLING

2012 PHOTO CONTEST WINNERS

Below is a list of all winners in the 2012 NJMA Photo Contest. All will be displayed in rotation all year on our website, ***www.njmyco.org***. Thank you to all who entered, and thank you to our judges, Charles Luce and Dorothy Smullen. Most of all, congrats to the winners!

NOVICE DIVISION:

Pictorial:

First: **Jennifer DeSio**
Amanita mucaria

Second: **Stephen Sterling**
(untitled)

Honorable Mention: **Stephen Sterling**
Schizophyllum commune

Activity:

First: **Stephen Sterling**
"Checking things out at Hacklebarney"

Second: **Stephen Sterling**
"*Laetiporus sulphureus*…in Flemington"

Honorable Mention: **Stephen Sterling**
"2012 Fungus Fest Walk"

Technical:

First: **Paul S. Funk**
Boletus parasiticus

Second: **Natalya Zak**
"Chicken of the Woods…"

Honorable Mention: **Paul S. Funk**
Pseudocolus fusiformis

ADVANCED DIVISION:

Pictorial:

First: **R. Allen Simpson**
Phlebia tremellosa

Second: **R. Allen Simpson**
Mycena inclinata

Honorable Mention: **R. Allen Simpson**
Paxillus atrotomentosus

Activity:

First: (no award given)

Second: **Susan Hopkins**
"Noah Siegel photographing…in bog"

Honorable Mention: **Susan Hopkins**
"Multicolor mushroom dyeing…IFFS"

Technical:

First: **John Dawson**
"Gymnosporangium juniperii-virginia…"

Second: **Susan Hopkins**
Gymnopus dryophilus

Honorable Mention: **Susan Hopkins**
"Sarcosoma globosa group"

CREATIVE DIVISION:

First: **Jim Richards**
"Fungal Flair"

Second: **Jim Richards**
"Hickory Circle"

Honorable Mention: **Stephen Sterling**
"*Amanita virosa* at Tillman Ravine…"

BEST IN SHOW:

Igor G. Safonov
"My name is Jack – Jack O' Lantern"

AMANITIN POISONING RESEARCH

by Susan Goldhor
Reprinted from the *Boston Mycological Society Bulletin*, #67-3, September 2012

Since I'm never sure how many readers persist until the end of these ramblings (actually, I'm not sure how many even start), I feel that the most urgent message should come first. So, here it is. Imagine that you find yourself faced with a case of amanitin poisoning. Of course, all BMC members are far too knowledgeable to eat a toxic Amanita. So it's not you, moaning and retching in the ER; it's an acquaintance. Or perhaps a total stranger, and you've been called in to give advice because of your known interest in matters fungal. Or — the most likely scenario of all — a vet's office and a deathly ill dog. What advice do you give? The doctors are madly Googling, and talking about oral administration of activated charcoal, extract of milk thistle (silymarin) and antibiotic. Or even worse, a liver transplant. You know that the antibiotic plus oral charcoal and milk thistle might work but might not. And that a liver transplant depends upon a suitable and willing donor. Here's where you save the day and emerge as a superhero. You tell them to rehydrate the patient immediately; to set up nasobiliary drainage, and to send posthaste to Europe for intravenous silymarin (Legalon®), manufactured in Germany by Madaus. (Information courtesy of a recent email from Michael Beug saying that he now believes that oral milk thistle is totally useless, but that "there is a second treatment that is very important – that involves a tricky surgery to set up a drain for the bile duct (called nasobiliary drainage) so that amatoxin does not keep recirculating through the liver. It is an old treatment that had been seldom used but has seen considerable recent success in dogs and in humans.")

The first published report of the use of injectable silymarin for amanitin poisoning was in the 2008 Toxicology Report of the North American Mycological Association by Dr. Michael Beug (***http://www.-fungimag.com/summer-08-articles/12_Beug_-Final.pdf***). He writes: "Legalon® is used in 13 European countries where it is considered to be the only effective therapy for combating amatoxin poisoning. The effects were dramatic when it was used this January in California. On four patients with LFTs in excess of 10,000 (up to 18,000) and prothrombin times and thromboplastin times (clotting factors) so high that one would expect on average 84% mortality (my conclusions from the data) all four patients showed dramatic improvement in liver function after injection of Legalon® (Todd Mitchell, MD, personal communication). All soon recovered liver function, though the most elderly 83 year-old patient succumbed to kidney failure. There is no way that there will ever be a clinical trial to prove that Silymarin helps in these cases but there is also no evidence to suggest that it should not be used. Indeed, this one dramatic case leads me to

conclude that we should do everything we can to support making injectable Silymarin available for experimental use in these relatively rare poisonings. Silymarin has been experimentally tested in dogs and it is highly effective in treating dogs poisoned by deadly Amanita species." Since this report was written, there has been broader acceptance of injectable silymarin, although it must still be imported from Europe and treated as an experimental drug. Note that there is a now a clinical trial in the U.S., whose P.I. is the aforementioned Dr. Todd Mitchell of Dominican Santa Cruz Hospital, Santa Cruz, CA.

Psychologists tell us that a person's best and worst traits are two sides of the same trait. I think that's true. And sometimes I think that the same can be said of toxins. We think of amanitin as a destroyer of livers and kidneys, but German medical researchers are working on a way to use a-amanitin to save lives. Because amanitin is so toxic to cells, it can be used to destroy cancer cells. The problem is that you can't simply administer it to the patient because it will kill all the other cells as well. (This is, in fact, the general problem with chemotherapy, and why it can have such terrible side effects.) What Drs. Moldenhauer and Faulstich are doing is to attach the amanitin to a cancer-cell-surface-specific antibody (not 100% specific but as good as it gets). It turns out that accomplishing this requires walking a diabolical tightrope. Amanitin is a great candidate for this procedure because it's a small molecule that our immune system doesn't recognize as foreign (one reason why it's a great toxin), and it's robust enough that you can carry out the procedures needed to attach it to an antibody. The toxin must enter the cancer cell and detach there from its antibody carrier, but it can't detach earlier when it will poison normal cells. The dosage must be tightly calibrated, since small amounts of the target molecule are on the surface of normal cells. It has worked on mice, and we can only hope that when human trials start, it will work on us as well. I had read about this earlier in the medical literature and was reminded of it in Puget Sound's *Spore Prints*, excerpted from: ***http://www.sciencedaily.com/releases/2012/04/120402112934.htm***, where you can read about it as well.

WHAT LURKS IN LOGS

by Carl Zimmer, from ***Discovermagazine.com***, August 10, 2012

The world, it bears reminding, is far more complicated than what we can see. We take a walk in the woods and stop by a rotting log. It is decorated with mushrooms, and we faintly recall that fungi break down trees after they die. That's true as far as it goes. But the truth goes much further.

These days, scientists do not have to rely on their eyes alone to observe the fungi on a log. They can drill into the wood, put the sawdust in a plastic bag, go to a lab, and fish the DNA out of the wood. A group of scientists did just this in Sweden recently, sequencing DNA from 38 logs in total. They published their results this week in the journal *Molecular Ecology*. In a single log, they found up to 398 species of fungi. Only a few species of fungi were living in all 38 logs; many species were limited to just one.

Consider that on your next walk in the woods. The one or two types of mushrooms you see on a log are an extroverted minority. The log is also filled with hundreds of other species that don't make themselves known to you. Their invisible exuberance is a paradox. The fungi that live on rotting logs all make a living by releasing enzymes that break down wood. It's puzzling that so many species can coexist in a log this way, instead of a single superior fungus.

The forces that drive up the diversity of fungi in a log are similar to the ones that foster the thousands of species of microbes in our bodies. For one thing, a log or a human body is not a uniform block of tissue. They both have geography. A microbe adapted to the acid bath of our stomach won't fare well on the harsh desert of the skin. Likewise, what it takes to succeed as a fungus in a branch is different from what it takes in the heartwood of the trunk.

The human body changes over time, and a rotting log does, too. Babies are colonized by pioneer microbes, which alter the chemistry of their host and make it more welcoming to late-arriving species. The pioneers on a fallen log may include the spores of some species of fungi lurking in trees while they're still alive. They burst into activity as soon as the tree crashes to the forest floor. Other species, delivered by the wind or snaking up through the soil, find it easier to infiltrate a log that's already starting to rot. The early fungi may go after the easy sugar in the log, while later species unlock the energy in tougher tissues, like lignin and cellulose. Which particular pioneer starts to feed on a log first can make it inviting to certain species but not others.

Warfare also fosters diversity in a log. The fungi inside a log battle each other for food, spraying out chemicals that kill off their rivals. Each species has to balance the energy it puts into making enzymes to feed and weapons for war. Sometimes the war ends in victory for one species, but very often the result is a deadlock that leaves several species in an uneasy coexistence. There are more peaceful forces at work in a log, too. Many species of fungi in a log depend on each other. One species may feed on the waste produced by another, and supply another species with food in turn.

The world in a log influences the world as a whole. If it wasn't for wood-rotting fungi, forests would be strewn with the durable remains of dead trees. When the first massive forests spread over the land 350 million years ago, fungi hadn't yet adapted to decomposing logs. Instead of turning to soil, many trees ended up as coal. The great age of coal ended about 300 million years ago—right around the time that tree-rotting fungi emerged. Their emergence may have brought the age of coal to an end.

REPORT ON NJMA FORAYS IN 2012

by John Burghardt • photos by Nina Burghardt

The 2012 collecting season was interesting and productive despite dry conditions at several of our forays. The June foray at Lake Ocquittunk in Stokes State Forest produced many interesting fungi, although rainfall had fallen off there in late June and the woods were beginning to dry out. But the four July forays (Rancocas, Holmdel, Meadow Woods, and Hoffman) were hot, dry, and produced unusually small numbers of collections for each location. Although we usually see many mychorrizal fungi in July, fewer than two dozen mychorrizal species were identified across the four July forays (a few Amanitas, Russulas, Boletes, and one Inocybe). Most collections were polypores and other lignicolous species. The poor luck of the draw for rainfall seemed to plague our scheduled July forays, as some locations had more moisture and better collecting conditions.

Our luck changed after the break for NEMF, and the late August forays at Manasquan and Stephens were unusually productive for each location, with many Amanitas, Boletes, and Russulas. At Stephens, there was also the usual great diversity of fleshy fungi. We added several new species to the list at these forays, including a *Hygrophorus ponderatus* at Manasquan and *Amanita elongata, Lactarius volemus var alba, Pholiota multifolia,* and *Hypomyces melanocarpus* at Stephens. The September forays at Schiff, Waywayanda, Washington Crossing, Stokes, and Fungus Fest showed a more normal pattern. In most years, Fungus Fest, Stokes, and Schiff are among our most productive forays, as they were this year. Our late season forays usually focus on the Coastal Plain area, and this year we visited a new site, Jakes Branch Park in Ocean County, in addition to Cattus Island. However, we did not get to Wells Mills (due to a scheduling mixup) or to Brendan Byrne (due to Hurricane Sandy). In addition, NJMA continued its inventory of fungi at the Franklin Parker Preserve in Ocean County, which the club is conducting at the invitation of the New Jersey Conservation Foundation.

Despite the dry conditions in some places early in the season and the disruption of Sandy in late October, the 2012 collecting season was highly successful. The accompanying species list for 2012 contains 507 entities, including 33 that were identified for the first time this year. Readers interested in which species were found at each foray location may download the 2012 NJMA List of Species by Foray as a .pdf file at ***www.njmyco.org/forays.html***.

The Franklin Parker inventory is listed as a single foray in our records for the year, although it operates somewhat differently than our regular forays. More than 30 members of the club and interested members of the public visited various parts of the 19,000 acre Franklin Parker Preserve on 21 occasions and in every month except April. The collections made at Franklin Parker contributed 129 species to the 2012 list that were not found at other forays, and accounted for 23 of the 33 new species recorded this year.

Amanita scalaris

Thanks to the generous assistance of Rod Tulloss throughout the season, our list of new species for the year includes five Amanitas - *Amanita elongata* (from Stephens), *Amanita elliptosperma, Amanita scalaris, Amanita sp. 33,* and *Amanita sp. N47* (from Franklin Parker). The *Amanita scalaris* (Tulloss *nom prov*) is one of my favorite species this year. After a very productive trip to Franklin Parker in late July with Igor Safonov and Paul Funk, Nina and I stopped to show Rod our Amanitas on the way home. Since we had dozens of Amanitas, and were arriving on very short notice, I thought we should show him a few of our Amanitas for the day. But Nina insisted we show Rod all of the dozen or so Amanita collections we couldn't identify. As usual, she was right. Rod immediately fastened upon a bedraggled specimen in the corner of our box, which he identified as *Amanita scalaris*, the "terraced Lepidella". Rod's website, ***www.amanitaceae.org***, includes the following note about *Amanita scalaris*:

> "To date, this species is known only from two pine-oak 'barrens' sites in New Jersey. The first of these sites has sustained extensive damage from off-road vehicles in recent decades despite preservation

Amanita scalaris *viewed from the side*

attempts. An extensive search for this mushroom in the original site and other locations in New Jersey and in similar pine barrens localities on Long Island is now required."

– R.E. Tulloss, C. Rodríguez Caycedo, and N. Goldman

Franklin Parker Preserve is the second of the two sites referred to in Rod's note above. Interestingly, the *Amanita scalaris* found there was also found in an area that has been, and continues to be, badly abused by off-road vehicles. We will be on the lookout for this entity in years to come.

Our list of new species also includes three Hygrophorus species (*Hygrophorus ponderatus, Hygrophorus purpurascens, Hygrophorus singerii*), one Hygrocybe, (*Hygrocybe irrigata*), and two Boletes (*Boletus oliviesporus* and *Xanthoconium stramineum*). Although we found nearly 40 Russula species, *Russula emetica* was the only new Russula added to the list. This is a rare species, but the entity we found keyed out to *Russula emetica* using Ray Fatto's key.

One final group of fungi new to the list that I would like to highlight have in common that they were collected "out of season". Our collecting season traditionally starts in early May when everyone is stir crazy and eager to find morels. And our latest forays are typically in early November. In recent years we have we have

Boletus oliviesporus

attempted to visit Franklin Parker at least once in each month of the year, and the visits in December through April have produced a surprising number of species new to the NJMA list. This year we found a *Datronia mollis* in January; a *Geastrum quadrifidum, Hapalopilus croceus,* and *Steccherinum bourdotii* in February; a *Peziza silvestris* and *Monlinia vaccinicorymbosi* in March; and a *Mycena praelonga* in May. All of these were new to the list. Though we don't yet know what December 2012 will produce, collections in

Geastrum quadrifidum

December 2011 included a *Russula subochrophylla, Russula fragiloides, Mycena epiptyregia* var *lignicola*, and *Peniophora gigantean*, which were all new to the NJMA list. We don't think of winter and early spring as a season for fungi, except for the occasional warm spell that brings fruitings of *Pleurotus ostreatus*. But the many unusual fungi collected in just one "off-season" makes me want to get out as often as possible in winter. One advantage of winter collecting is that the small numbers of fungi and the preponderance of polypores and crust fungi that won't rot right away allows for leisurely identification.

Hapalopilus croceus *from above*

Hapalopilus croceus *underside*

My personal favorite collection of the season was among the trove of Amanitas we took to Rod Tulloss on that afternoon in late July. That group included a delicate entity with a yellow cap, which was buried deep in the sand. Igor Safonov found this, and I will forever remember it as Igor's Yellow Amanita. Careful excavation around the base revealed a long, loose, very graceful white sack surrounding the foot of the fungus and reaching up the stipe. Rod identified this for us as *Amanita whetstoneae*, the "Whetstone Amidella", named for the founder of the Minnesota Mycological Association, Dr. Mary Whetstone. Returning to this same location, we found several more specimens of this entity up through the end of August. We look forward to seeing if it turns up next July.

Amanita whetstoneae

AMANITA INFO ON THE WEB

Rod Tulloss recently updated his website dedicated to the Amanitas of New Jersey and nearby states. The link to the revamped site is:

http://www.amanitaceae.org?US+-+NJ+and+PA

It features over 100 species of known and novel mushrooms from all sections of the genus *Amanita* that have been reported from our neck of the woods. This website is of tremendous value to both novice and more advanced mushroomers/taxonomists in our club who want to learn about this fascinating genus.

John Burghardt and Igor Safonov photographing an Amanita

CONFESSIONS OF A TRUE NOVICE

by Betty M. Wise

On a recent foray, I was told that by now I "should know more!" Well, the actual words were to the effect that since I have been a member for a couple of years, I should know more by now! It is a noble requirement, and assumption by some.

Sure, I wish I *knew more* by now, too! I also know it will take me some time.

Who is to say what one *should* know? Is the assumption that all my waking moments are spent in mycological pursuits? I know my knowledge has increased tremendously over the past year. I also know I have a long way to go before I can call myself an expert. Sometimes, being the expert is not the primary goal for everyone.

The scientific names and identifying expertise will come with practice. It would also help me to take notes while on forays. That way when an expert identifies a find during a foray, I could write it down to research it more at a later time. That way, it would be more likely for me to commit it to memory. This is easier said than done. Taking notes while hunting takes time and effort away from the actual hunt.

Sometimes we may see the same species in varying states of maturity. They can look quite different from each other. This is just one area where experience helps with the identification.

On many forays we have also learned things about trees, birds, and wood decomposition, in addition to mushrooms and fungi. The goal of the novice should be a willingness to learn, and more importantly, to have fun. Enjoy being out in nature. Enjoy being in places not normally visited. Enjoy the thrill of the hunt.

It is the thrill of the hunt that draws me. You never know what you might find. I know I am getting better at spotting "things." For me it's addicting, especially when the find is an edible and delicious mushroom! But it's not always a mushroom that is found. Once on a foray at Manasquan Reservoir, I spotted a branch that looked like a Pileated Woodpecker. The branch was also the exact size of the woodpecker! It was quite a find. My foray buddy was less impressed, but I could see its potential.

While housebound following surgery, I finally painted the branch. *(See the picture on the right)*

The bird was mounted onto another piece of forayed wood that contained *Chlorociboria aeruginascens*, the green Elf Cup Mushroom which had stained the wood a characteristic green color. So the bird has mycological significance after all!

PHOTO BY BETTY WISE

NEW JERSEY MYCOLOGICAL ASSOCIATION

Species Identified on forays and number of times found in 2012

BASIDIOMYCETES

Abortiporus biennis 1
Agaricus campestris 1
Agaricus placomyces 1
Agaricus pocillator 1
Agaricus silvaticus 2
Agaricus sp. 1
Albatrellus caeruleoporus 1
Albatrellus confluens 1
Albatrellus ovinus 1
Amanita ameirubescens 7
Amanita muscaria v guessowii 5
Amanita abrupta 1
Amanita amerifulva 5
Amanita bisporigera 7
Amanita brunnescens v brunnescens 5
Amanita brunnescens v pallida 1
Amanita citrina v citrina 5
Amanita citrina v lavendula 1
Amanita cokeri 1
Amanita crenulata 2
Amanita dulciarii 2
Amanita elliptosperma 1 new
Amanita elongata 1 new
Amanita farinosa 1
Amanita flavoconia 5
Amanita longipes 4
Amanita morrisii 1
Amanita mutabilis 1
Amanita onusta 2
Amanita phalloides 1
Amanita rhopalopus 1
Amanita scalaris 1 new
Amanita sp. 4
Amanita sp. 33 1 new
Amanita sp. 36 1
Amanita sp. N11 1
Amanita sp-N47 1 new
Amanita spreta 1
Amanita subcokeri 1
Amanita vaginata v vaginata 7
Amanita volvata v volvata 1
Amanita whetstoneae 1
Armillaria mellea 4
Armillaria tabescens 2
Artomyces pyxidata 4
Astraeus hygrometricus 1
Aureoboletus auripororus 1
Auricularia auricula 3
Austroboletus subflavidus 1
Bankera fuligineoalba 1
Bjerkandera adusta 3
Boletellus chrysenteroides 1
Boletinellus merulioides 2
Boletus oliveisporus 1 new
Boletus badius 1
Boletus bicolor v bicolor 3
Boletus frostii 1
Boletus illudens 2
Boletus innixus 1
Boletus pallidus 2
Boletus palustris 1
Boletus parasiticus 1
Boletus projectellus 3
Boletus roxanae 2
Boletus rubropunctus 2
Boletus spadiceus 1
Boletus subgraveolens 1
Boletus tenax 1
Boletus viscidcorrugis 1
Bondarzewia berkeleyi 1
Bothia castanellus 2
Calocera cornea 1
Calocera viscosa 2
Calostoma cinnabarinum 2
Calostoma ravenelii 1 new
Calvatia cyathiformis 1
Calvatia gigantea 1
Cantharellula umbonata 1
Cantharellus cibarius 2
Cantharellus cinnabarinus 9
Cantharellus ignicolor 1
Cantharellus lateritius 3
Cantharellus minor 5
Cantharellus tubaeformis 1
Cerrena unicolor 9
Chalciporus piperatus 1
Chlorophyllum molybdites 1
Chroogomphus rutilus 1
Chroogomphus vinicolor 2
Clavaria cristata 5
Clavaria rubicundula 1
Clavulina cinerea 3
Clavulinopsis aurantio-cinnabarina 1
Clavulinopsis fusiformis 4
Climacodon septentrionale 1
Clitocybe candicans 1
Clitocybe clavipes 1
Clitocybe dilitata 1 new
Clitocybe gibba 1
Clitocybe odora 1
Clitocybe sp. 1
Coltricia cinnamomea 4
Coltricia perennis 1
Coprinus disseminatus 1
Coprinus micaceus 2
Coprinus quadrifidus 1
Cortinarius alboviolaceus 1
Cortinarius armillatus 1
Cortinarius caesiocanescens 2
Cortinarius caperatus 4
Cortinarius corrugatus 2
Cortinarius croceus 2
Cortinarius flexipes 1
Cortinarius iodes 8

BASIDIOMYCETES (continued)

Cortinarius lilacinus 1
Cortinarius mucosus 2
Cortinarius orellanus 1 new
Cortinarius pseudosalor 1
Cortinarius sanguineus 1
Cortinarius semisanguineus 3
Cortinarius sp. 4
Craterellus cornucopioides 2
Craterellus fallax 4
Crepidotus applanatus 1
Crucibulum laeve 2
Cryptoporus volvatus 1
Cyathus stercoreus 1
Cyathus striatus 1
Cystoderma granulosum 1
Dacrymyces palmatus 4
Dacryopinax spathularia 1
Daedalea quercina 1
Daedaleopsis confragosa 8
Datronia mollis 1 new
Dictyophora duplicata 1
Entoloma abortivum 3
Entoloma sericeum 2 new
Entoloma sinuatum 2
Entoloma sp. 1
Entoloma strictipes 2
Entoloma strictius 2
Exidia glandulosa 2
Exidia recisa 2
Fistulina hepatica 1
Fomes fomentarius 2
Fomitopsis spraguei 2
Galerina autumnalis 2
Galerina tibiicystis 1
Ganoderma applanatum 5
Ganoderma lucidum 6
Ganoderma tsugae 6
Geastrum quadrifidum 1 new
Geastrum saccatum 1
Gloeophyllum sepiarium 3
Gloeoporus dichrous 5
Gloeostereum incarnatum 1
Gloeotromera alba 1
Gomphus floccosus 1
Grifola frondosa 1
Gymnopilus humicola 1
Gymnopilus penetrans 4
Gymnopilus spectabilis 1
Gymnopus confluens 1
Gymnopus sp. 1
Gymnopus subnudus 1
Gyroporus castaneus 4
Gyroporus purpurinus 2
Gyroporus subalbellus 3
Hapalopilus nidulans 1
Hapalopilus croceus 1 new
Hebeloma crustuliniforme 3
Hericium coralloides 1
Hydnellum peckii 1
Hydnellum pineticola 2
Hydnellum scrobiculatum 2
Hydnellum spongiosipes 1
Hydnochaete olivacea 6
Hydnum repandum v albidum 1
Hydnum repandum v repandum 3
Hydnum umbilicatum 2
Hygrocybe flavescens 1
Hygrocybe psittacina v psittacina 1
Hygrocybe virginea 3
Hygrocybe borealis 1
Hygrocybe cantharellus 3
Hygrocybe coccinea 2
Hygrocybe conica 3
Hygrocybe irrigata 1 new
Hygrocybe laeta 2
Hygrocybe marginata v concolor 3
Hygrocybe marginata v marginata 4
Hygrocybe miniata 1
Hygrocybe nitida 3
Hygrophorus fuligineus 1
Hygrophorus hypothejus 1
Hygrophorus ponderatus 1 new
Hygrophorus purpurascens 1 new
Hygrophorus purpureofolius 1
Hygrophorus singeri 1 new
Hygrophorus sordidus 1
Hygrophorus sp. 1
Hygrophorus squamulosus 1
Hygrophorus subsordidus 1
Hymenochaete badio-ferruginea 1
Hymenochaete rubiginosa 1
Hypholoma capnoides 1
Hypholoma fasciculare 2
Hypholoma sublateritium 2
Inocybe albodisca 1
Inocybe caesariata 3
Inocybe fuscodisca 1
Inocybe geophylla v lilacina 1
Inocybe lanuginosa 1 new
Inocybe sp. 1
Inonotus hispidus 3
Inonotus tomentosus 2
Irpex lacteus 5
Ischnoderma resinosum 1
Laccaria amethystina 1
Laccaria bicolor 3
Laccaria laccata 1
Laccaria laccata v pallidifolia 4
Laccaria longipes 1
Laccaria nobilis 3
Laccaria ochropurpurea 4
Laccaria proxima 4
Laccaria sp. 1
Laccaria striatula 3

BASIDIOMYCETES (continued)

Laccaria trullisata 2
Lactarius allardii 1
Lactarius aquifluus 3
Lactarius atroviridis 1
Lactarius camphoratus 1
Lactarius chelidonium 2
Lactarius chrysorheus 2
Lactarius corrugis 5
Lactarius deceptivus 6
Lactarius gerardii 1
Lactarius gerardii v subrubescens 1
Lactarius hibbardae 1
Lactarius hygrophoroides 2
Lactarius lignyotus v lignyotus 3
Lactarius mutabilis 1
Lactarius paradoxus 1
Lactarius piperatus v glaucescens 1
Lactarius piperatus v piperatus 3
Lactarius proximellus 3
Lactarius rimosellus 1
Lactarius rufus 2
Lactarius sp. 4
Lactarius subpurpureus 1
Lactarius thyinos 3
Lactarius volemus v alba 1 new
Lactarius volemus v volemus 2
Laetiporus cincinnatus 2
Laetiporus sulphureus 7
Leccinum aurantiacum 4
Leccinum scabrum 2
Leccinum sp. 1
Lentinellus cochleatus 1
Lentinellus micheneri 1
Lentinellus ursinus 2
Lentinus rigosus 2
Lenzites betulinus 8
Lenzites elegans 4
Lepista nuda 3
Leptonia serrulata v serrulata 2
Leucoagaricus americanus 1
Leucoagaricus atrodisco 1
Leucoagaricus leucothites 1
Leucopaxillus sp. 1
Leucopholiota decorosa 1
Lycoperdon echinatum 1
Lycoperdon molle 1
Lycoperdon perlatum 3
Lycoperdon pyriforme 4
Lycoperdon sp. 1
Lyophyllum connatum 1
Lyophyllum decastes 1
Marasmiellus ramealis 1
Marasmius capillaris 2
Marasmius delectans 1
Marasmius olidus 1 new
Marasmius pyrrhocephalus 1
Marasmius rotula 2
Marasmius siccus 1
Marasmius sp. 1
Megacollybia rodmanii 7
Melanoleuca alboflavida 1
Meripilus giganteus 1
Meripilus sumstinei 1
Merulius tremellosus 2
Mutinus elegans 1
Mycena acicula 1
Mycena algeriensis 1
Mycena epipterygia 1
Mycena epipterygia v lignicola 1
Mycena haematopus 3
Mycena inclinata 5
Mycena leaiana 1
Mycena luteopallens 1
Mycena praelonga 1 new
Mycena pura 1
Mycena sp. 3
Nolanea luteum 1
Nolanea conica 1 new
Nolanea quadrata 1
Nyctalis asterophera 3
Omphalotus illudens 1
Oxyporus populinus 3
Panaeolus subbalteatus 1 new
Panellus stipticus 10
Paxillus panuoides 1
Phaeolus schweinitzii 1
Phallus ravenelii 2
Phellinus everhartii 1
Phellinus gilvus 5
Phellinus nigricans 1 new
Phellodon sp. 1
Pholiota malicola v malicola 1
Pholiota multifolia 1 new
Pholiota sp. 1
Pholiota squarrosa 3
Phylloporus boletinoides 1
Phylloporus foliiporus 1
Phylloporus leucomycelinus 2
Phylloporus rhodoxanthus 1
Phylloporus rhodoxanthus spp americanus 1
Piptoporus betulinus 4
Pisolithus tinctorius 4
Pleurocybella porrigens 1
Pleurotus ostreatus 4
Plicaturopsis crispa 2
Pluteus cervinus 8
Pluteus petasatus 1
Polyporus alveolaris 9
Polyporus arcularius 2
Polyporus badius 2
Polyporus leptocephalus 3
Polyporus squamosus 1
Polyporus varius 2
Porodaedalea pini 2

BASIDIOMYCETES (continued)

Postia caesia 4
Postia fragilis 1
Psathyrella candolleana 2
Pseudohydnum gelatinosum 1
Psilocybe coprophila 1
Pulcherricium caeruleum 1
Pycnoporus cinnabarinus 5
Ramariopsis kunzei 3
Retiboletus griseus 1
Rhizopogon roseolis 1
Rhizopogon rubescens 1
Rhodocollybia butyracea 1
Rhodocollybia maculata v scorzonerea 1 new
Rhopalogaster transversarium 2
Rickenella fibula 3
Russula adusta 1
Russula aeruginea 1
Russula albonigra 3
Russula betularum 1
Russula brevipes v brevipes 4
Russula compacta 2
Russula cremeirosea 1
Russula crustosa 2
Russula cyanoxantha 1
Russula cystidiosa 1
Russula earlei 2
Russula emetica 1 new
Russula foetentula 1
Russula fontqueri 2
Russula fragiloides 1
Russula fragrantissima 4
Russula incarnaticeps 1
Russula ionochlora 1
Russula laurocerasi 3
Russula mariae 1
Russula modesta 2
Russula nigricans 2
Russula obscuriformis 1
Russula ochroleucoides 1
Russula operta 1
Russula pantoleuca 1
Russula perlactea 3
Russula rosea 2
Russula sericeonitens 3
Russula silvicola 1
Russula sp. 6
Russula stricta 2
Russula subochrophylla 1
Russula subpunctata 2
Russula variata 4
Russula ventricosipes 3
Russula vesicatoria 1
Russula vinacea 2
Russula vinosa 1
Russula virescens 1
Sarcodon atroviridis 1
Schizophyllum commune 10
Schizopora paradoxa 1
Scleroderma areolatum 7
Scleroderma cepa 3
Scleroderma citrinum 7
Scleroderma geaster 3
Sparassis spathulata 2
Spongipellis pachyodon 2
Steccherinum bourdotii 1 new
Stereum complicatum 12
Stereum ochraceoflavum 2 new
Stereum ostrea 12
Stereum striatum 5
Strobilomyces confusus 4
Strobilomyces strobilaceus 4
Stropharia rugosoannulata 1
Suillus americanus 2
Suillus decipiens 1
Suillus granulatus 3
Suillus grevillei 1
Suillus pictus 1
Suillus salmonicolor 4
Tapinella atrotomentose 5
Tephrocybe palustris 1
Tetrapyrgos nigripes 1
Thelephora palmata 2
Thelephora sp. 1
Thelephora terrestris 2
Tomentella sp. 1 new
Trametes hirsuta 1
Trametes pubescens 2
Trametes versicolor 12
Tremella concrescens 1
Tremella mesenterica 1
Tremellodendron candidum 1
Trichaptum abietinum 2
Trichaptum biforme 12
Tricholoma aurantium 1
Tricholoma caligatum 1
Tricholoma columbetta 2
Tricholoma equestre 2
Tricholoma fumosoluteum 1
Tricholoma myomyces 1
Tricholoma pessundatum 2
Tricholoma saponaceum 1
Tricholoma sejunctum 2
Tricholoma sp. 1
Tricholomopsis decora 1
Tricholomopsis formosa 1
Tricholomopsis sulphureoides 1
Tylopilus alboater 1
Tylopilus ballouii 1
Tylopilus felleus 3
Tylopilus griseocarneus 1
Tylopilus indecisus 1
Tylopilus peralbidus 3
Tylopilus plumbeoviolaceus 1
Tylopilus rubrobrunneus 1

NEW JERSEY MYCOLOGICAL ASSOCIATION

Species Identified on forays and number of times found in 2012

BASIDIOMYCETES (continued)

Tylopilus violatinctus 1
Tyromyces chioneus 6
Xanthoconium affine v affine 1
Xanthoconium affine v maculosus 3
Xanthoconium purpureum 1
Xanthoconium stramineum 1 new
Xeromphalina campanella 1
Xerula furfuracea 7
Xerula megalospora 1
Xerula radicata 1
Xylobolus frustulatus 3

ASCOMYCETES

Aleuria aurantia 1
Chlorociboria aeruginascens 4
Cordyceps capitata 1
Cudonia circinans 1
Daldinia concentrica 1
Galiella rufa 2
Geoglossum difforme 1
Helvella lacunosa 1
Helvella macropus 1
Helvella sp 1
Hypomyces chrysospermus 1
Hypomyces hyalinus 1
Hypomyces lateritius 1
Hypomyces luteovirens 3
Hypomyces melanocarpus 1 new
Hypomyces micospermus 1 new
Hypomyces ochraceus 1
Hypomyces sp. 1
Hypoxylon fragiforme 3
Hypoxylon sp. 1
Leotia lubrica 2
Mitrula elegans 1
Morchella sp. 1
Otidea grandis 1
Peziza silvestris 1 new
Peziza vesiculosa 1
Scorias spongiosa 1
Scutellinia scutellata 1
Spadicoides clavariae 1
Trichoglossum hirsutum 1
Kretzschmaria deusta 1
Xylaria hypoxylon 1
Xylaria polymorpha 4

MYXOMYCETES

Ceratiomyxa fruticulosa 1
Ceratiomyxa fruticulosa v porioides 1
Fuligo septica 2
Lycogala epidendrum 6
Physarum sp. 1
Stemonitis axifera 4
Tubifera ferruginosa 1

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 27th and December 31st. We look forward to seeing you at lectures, forays, and other NJMA events. Happy 'shrooming!

Rachel W. Asarnow	Maplewood, NJ
Diana T. Bella	Hackettstown, NJ
Michael J. Guidice	Cranford, NJ
Meredith V. Griggs	Milford, NJ
Becca S. Gutwirth	Medford, NJ
Douglas Jerkowicz	Little Egg Harbor, NJ
Emily Job	Newtown, NJ
Sabrina King	Princeton, NJ
Robert C. Klein	Hackettstown, NJ
Charles F. & Mary A. Leck	Kendall Park, NJ
Douglas McCrea	Annandale, NJ
Gretchen Munnelly-Scheer	Sparta, NJ
Julius L. Raichle	Pine Beach, NJ
Stephanie Ritson	Hackettstown, NJ
Jessica L. Schoner	Boonton, NJ
Jessica L. Telano	Atlantic Beach, NJ
Sachiko S. Tripp	Montclair, NJ

NJMA News is published bimonthly by the New Jersey Mycological Association.
Annual subscription price is included in NJMA membership annual dues.

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

FIRST CLASS MAIL

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

In this issue:

GRAPHIC & PHOTO BY PAUL FUNK