NJMA NEWS

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NJMA EVENTS HOTLINE

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

WHAT'S INSIDE:

(Online readers: Click on page numbers to jump to that page)

PRESIDENT'S MESSAGE

When you read this, the morel hunters and the Franklin Parker Preserve crew will already have been out foraying. The rest of us are still gearing up: buying insect repellent and making sure the equipment in our baskets hasn't mysteriously migrated to parts unknown during the off-season. If you have been casual about tick protection, rethink your position. The good snow cover over the winter delighted gardeners (perennial plants overwinter better under snow), but also insured excellent survival of ticks. I found my first fully engorged black-legged or deer tick on March 23rd – fortunately on my cat, not me. There are even now reports of groundhog ticks in Hunterdon and Monmouth Counties. (Groundhog ticks can carry the sometimes-fatal Powassan virus.) So spray up and consider using permethrin on clothing. Just don't be scared off from getting out in the woods. Besides the thrill of rambling through the woods on the hunt for fungi, it's good for you.

Club Business

If you're excited about mushrooms, and want to share your enthusiasm, consider volunteering for an outreach event. NJMA gets more invitations to participate in environmental fairs and other events than we can manage with our current volunteers. If you're interested, contact Sharon Sterling or send an email to our Editor at ***njmaeditor@gmail.com.***

At our April 12th meeting, members passed new bylaws for NJMA. Some minor corrections from the proposed version (previously sent to all voting members) were made at the meeting. Many members had sent in comments about sections that were unclear to them, so at the meeting we approved some rewordings to improve clarity. The final approved bylaws will be sent out to all members.

Having a solid set of bylaws that NJMA will be following is like having insurance. If you don't pay your insurance premium, your day-to-day life may seem fine, but if a problem occurs, it quickly turns into a catastrophe. We now have the responsibility to implement the changes required in the new bylaws. In addition, you'll see a bit more formality at our membership meetings. As was explained by a lawyer to some of the officers in March, NJMA needs to act like a corporation in order that our officers are protected from individual liability under NJ law, in the event any problems arise.

Of all the people to thank for the bylaws, first and foremost is Phil Layton, who essentially wrote new bylaws "from scratch". Then there are the board members, who made changes and then added and subtracted until they had a consensus. Then, the past presidents of NJMA weighed in with early feedback. Many NJMA members, after carefully reading the proposed bylaws, pointed out errors that those of us who were close to it could no longer spot. And finally, thanks to the members who came to the April 12th meeting, or mailed in their proxies so that we would have a quorum at the meeting. It was especially gratifying to see long-time members Donald and Barbara Ecker, Doug Eveleigh, Jim Richards, and Dorothy Smullen vote for the bylaws at the April 12th meeting. Together they have 196 years of membership!

– Patricia McNaught

Visit NJMA on facebook
facebook.com/njmyco

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.

WELCOME TO THE ONLINE EDITION OF NJMA NEWS

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

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

EDITOR'S NOTES

Well, winter has finally left us and I have been getting reports from members detailing their morel finds. Many reports are not very good, but some are quite outstanding. I expect that a few photos will start arriving – documenting the ever-growing collections as the season progresses.

I look forward to getting the foray leader's reports after each foray. Please remember that if you are leading a foray, it is your responsibility to either write a report for *NJMA News* or to find a volunteer to do that task for you. It does not have to be long, and it definitely should not just be a list of all foray finds. I am interested in unusual finds, or anything else that makes your particular foray a little bit special. I am also hoping that we will start getting advance descriptions of the foray locations: habitat, dominant tree species, etc. from the leaders. Anything that will help attendees be better prepared is useful.

I would like to thank all the people who have been regular contributors to *NJMA News* with articles, book reviews, photos, drawings, and so on. I would like to extend a special "thank you" to Judy Gorab, one of our new members, for a very large and exceptional group of photos that you will be seeing in this and many issues of *NJMA News* to come. When Judy (who was the big winner in last year's photo contest) told me that she wanted to send me the photos, she said that they had not been identified because she is just a beginner. I sent the group to a few of our better identifiers to help put names on them. I would like to thank Dave Wasilewski, Igor Safonov and Luke Smithson for the great job they did of naming many of them. Emails went back and forth as they argued and agreed on most of them. We will be using many of her photos to illustrate articles, fill space, and even conduct a quiz or two. If you would like to be included in these "conversations", please let me know (***njmaeditor@gmail.com***). The more, the merrier!

Thanks also to Steve Sterling for the (quite literally) hundreds of photos he sends to me on a regular basis. And to Judy Glattstein, who finds many items for BBB and sends photographs of many club events. I have selected only a very few of our contributors to thank in this issue – highlighting some of our photographers. If I took the space to thank everyone, this would go on for far longer than anyone really wants to read.

Just remember: Everyone that sends in even a single item warrants a big "thank you". Please tell them that when you see them at club events.

– Jim Richards

MYCOPHAGY 2015

A "thank you" from Luke Smithson

I just wanted to drop the club a line, via our newsletter, and thank everyone for allowing me to cook once again at our annual Mycophagy meeting. Being able to combine my profession (cooking) with my favorite hobby (mushrooms, of course) is a pretty special thing, and I am always honored to be able to contribute to the club in my own way.

I am particularly thankful to all of the volunteers who help to put this event together. Assembling three courses for 60 people is no easy task, as our volunteers well know. Liz Broderick, Mike Ruben and Igor Safonov all did their fair share of chopping, plating and dishwashing. Todd McNaught worked hard as our expediter, Steve Sterling kept the lights, camera and mike running and, of course, Jim Richards kept the whole event running smoothly. I would have liked to have seen more of the auction items that Frank Marra and Marc Grobman were selling, but somebody had to man the ovens. And my daughter, Alex, would like to thank everybody for buying her Girl Scout cookies!

This year's theme was an interesting one for me, as it made me stretch out a little and explore recipes and cuisines that I was not so familiar with. I love Asian foods, but tend not to cook them at home that often. Some of the ingredients were wholly unfamiliar to me, such as the *Tremella* mushrooms. Other ingredients, like the shiitake, were certainly more familiar, but the combinations and flavors were new. It is always enjoyable learning new ways that mushrooms can work in dishes, from noodle salads, to sandwiches and surprisingly, in desserts. So this event was a learning experience for me, and I hope that everybody that attended was able to learn something as well.

(more on Mycophagy on page 14)

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

CALENDAR OF UPCOMING EVENTS

Sunday, June 7 **2:00pm - 4:30pm**	**WORKSHOP - "SEEING MUSHROOMS BY DRAWING THEM"** **Somerset County Environmental Education Center** *Instructor: Katy Lyness. Pre-registration required - go to* ***www.njmyco.org/education. html***
Saturday, June 13	**UNION COUNTY BIOBLITZ** *Contact* ***Dorothy Smullen*** *for info.*
Sunday, June 14 **10:00am**	**BOB PEABODY WILD FOODS FORAY AND POTLUCK** **Deer Path Park, Readington** (Hunterdon County, north of Flemington) *Leader: Sharon Sterling. Guest leader/speaker:* ***Rachel Mackow, Wild Ridge Plant Nursery****.* *Bring food to share and your own picnic gear.*
Sunday, June 21 **10:00am**	**FORAY: LAKE OCQUITTUNK FAMILY CAMPING AREA** **Stokes State Forest.** *Leader: Jim Barg*
Sunday, June 28 **10:00am**	**FORAY: HOLMDEL COUNTY PARK (Hilltop section)** *Leader: Randy Hemminghaus*
Saturday, July 11 **12:00pm**	**CULINARY GROUP COOKOUT** **Harry Dunham Pavilion, Basking Ridge** *Pre-registration is required. Contact Jim Richards at* ***jimrich17@icloud.com****.*
Sunday, July 12 **10:00am**	**FORAY: HORSESHOE BEND PARK** **Kingwood** (Hunterdon County) *Leader: Nina Burghardt*
July 30 - August 2	**2015 NEMF FORAY** **NEW LONDON, CT** Details will be in a future issue of *NJMA News.*
Sunday, November 1 **10:00am - 4:00pm**	**FUNGUS FEST 2015**

BYTES, BITS, & BITES

TASTY LITTLE TIDBITS FROM OUR MEMBERS

from Jim Richards:

Fungal nomenclature:
https://www.sciencenews.org/article/name-fungus

Training a truffle dog (from Zagat):
http://tinyurl.com/mhyjwyz

Foraged food ideas from Martha Stewart:
http://tinyurl.com/lzn4n8l

from Judy Glattstein:

The New York Times:
Mushrooms fill in the Blanks for the Meat-Free:
http://tinyurl.com/6c5du4a

from Suzanne Venezia:

A contribution for the newsletter – I wanted to send you something – just an idea and some musings.

Suzanne

MUSHROOMS - FROM RUSSIA WITH LOVE

Grand Romanov Duchesses pose for this photo in 1912 while mushroom hunting in Finland

from *The Hunting Sketches - Kassyan of Fair Springs*
by Ivan Turgenev

(continues on page 7)

MORCHELLAPENIA

by Steve Sterling

In April, I was diagnosed with Morchellapenia, which is Latin for a diet deficient of morels. It is fairly common among mycologists, though often goes undetected. Symptoms include salivating uncontrollably when hearing the word morel, and an irresistible compulsion to be near trees believed to have mycorrhizal relationships with them. In extreme cases, those afflicted have been reported to experience a delusional fever which causes them to see what is described as a "Morel Mirage" where the object of their desire seems to appear and then disappear.

Because it was too early for morels in New Jersey, my wife Sharon and I loaded the car and headed south to Asheville, North Carolina. We chose the location of NAMA 2015, hoping to familiarize ourselves with the area in anticipation of the fall foray there. The YMCA Blue Ridge Assembly has a wonderful Lodge-Conference Center with hotel-style rooms that include double beds and private bathrooms. It also has a massive modern dining hall with atrium windows, all surrounded by acres of mountain trails.

Biodiversity Statistics:

- More species of plants can be found in the mountains of North Carolina than in any other area of similar size in North America.
- Botanical studies have documented over 4,000 species of plants, 2,000 species of fungi, and 500 species of mosses and lichens in the region.
- The North Carolina mountains are home to more species of salamanders than any other place in the world.
- More old-growth forest stands survive in the mountains of North Carolina than in any other Southern Appalachian state.
- The Great Smoky Mountains boast more than 1,400 varieties of flowering plants and 100 species of trees (more species of trees than the whole of Europe).

With an endless wilderness to explore, we felt overwhelmed and didn't know where to begin. Turning to Facebook, I posted our plight on the "Asheville Mushroom Enthusiasts" page, asking if anyone could act as our local guide. Claude Jacob Matkin and Christina Kelley came to our rescue, guiding us to one of their favorite morel spots. This was an unprecedented act of generosity by any morel hunter's standards, but especially so in their case, because Asheville has an insatiable appetite for wild edibles. Freshly foraged foods are commonly found on restaurant menus, and Claude knows the best chefs in town. (Check out their page "Nature's Buffet" on Facebook).

If you've never been to Asheville, I would recommend extending your stay for a few days to experience its eclectic/artistic culture. Street performers abound among a variety of galleries, restaurants, theaters, and museums. Claude described it as "the blue dot in a red state".

Claude also told us about a man who had successfully grown morels by simply dispersing the water he had washed them in. Apparently, the solution contained enough spores to start a new batch. Who knew?

With morels in hand, Sharon and I raced back to our cabin in the woods and quickly consumed them.

Experiencing immediate relief from the Morchellapenia, I felt strong enough to return to New Jersey and resume the quest on familiar ground.

Morelmouth hits Asheville!

On the road – in search of the cure for Morchellapenia

WINTER MUSHROOMING WITH LAWRENCE MILLMAN

by Patricia McNaught

Lots of us are out in the woods in late winter and early spring, and we are rewarded with finding a surprising variety of ascos, polypores and yes, even gilled mushrooms. But when temperatures drop below 25°F and it's windy, and significant snow cover slows you down so you can't keep warm, it's a different experience. We discovered this when a few folks from NJMA went out mushrooming in late February with Lawrence Millman (our March lecturer).

Mushrooming in winter does have some advantages: no ticks, mosquitos or chiggers; and if it's cold enough, you can walk or snowshoe on frozen ground instead of slogging through swamps. It's also easier to spot a specific tree species, when the understory is mostly bare branches.

Larry arrived in New Jersey early Friday afternoon, leaving us enough daylight to visit two sites: one near the Watchung Ridge and one near the Passaic River. We found some old specimens of the common polypores *Lenzites betulina* and *Trichaptum biforme* – not very exciting. But Larry urged us to examine the *Trichaptum* with a hand lens. There were minute black 'hairs' projecting straight up from the upper surface of the specimen. This was *Phaeocalicium polyporaeum*, a saprobic ascomycete typically found growing on this polypore. At the Passaic River site, there was some brief excitement when Larry thought he had found a rare species. It turned out to be *Laxitextum bicolor*, a common species according to Larry, but one not in any of my field guides and new to me.

Lawrence Millman examining a specimen

Phaeocalicium polyporaeum

Larry had found *Echinodontium ballouii* in Massachusetts a few years ago.This species was originally discovered by William Hosea Ballou in 1909 in the NJ Pinelands, and hadn't been collected in the interim. It is found in the crown of ageing Atlantic White Cedar, and seems to be associated with a gnarl (*i.e,.* a canker of a *Gymnosporangium* species. Apparently *E. ballouii* fruits as a secondary wood decay fungus. Larry was interested in looking for *E. ballouii* in NJ. For the next two days we went mushrooming at sites with Atlantic White Cedar.

Almost all Atlantic White Cedar in NJ has been "logged out", including the trees where *E. balouii* was originally found. Because the Burghardts are so familiar with the Pinelands, on our second day, John led us to two prom-

ising sites at the Franklin Parker Preserve. There were a few mature cedars, and even a couple of gnarls, but no *E. ballouii*. Larry's judgement was that we needed to come back in 50 years or so. He did find some *Diplomitoporus linbladii*, another fungus that is not in my field guides, but common according to Larry. Clearly I need a better polypore guide.

I asked several NJMA members for suggestions on locations with Atlantic White Cedar, and Dorothy Smullen suggested High Point. So, on day three, off went the search party to High Point State Park. When it's snowy, access to the cedar swamp is limited to those on Nordic skis or snowshoes. (Alas, a bad fall on the ice at FPP had left me unable to snowshoe, so I stayed home.) It was a two-mile slog from the trailhead to the swamp, very slow on snow shoes. At the swamp, the snow was so deep, it would have been impossible to enter the swamp except on snow shoes. In hindsight, it would have been better to ski the trail in, and switch to snowshoes at the swamp. The pressure of returning in time so that Larry could deliver his lecture at Morristown left little time to explore the swamp, but the consensus was that the trees at High Point were also too young and healthy for *E. ballouii*. Perhaps we need to make a time capsule, for the NJMAers of 2066!

The importance of equipment for winter foraying was clear: For the Pinelands, high rubber boots when the swamps aren't yet frozen, and waterproof hiking boots with "gaiters" when they are frozen and snow covered. For High Point, the best choice would have been Nordic skis *and* snow shoes. And to look for *E. ballouii*, it's not enough to *own* binoculars, *you need to remember to bring them!* To appreciate your finds, it's best to have a deep knowledge of the overlooked and hard-to-identify fungi you're likely to find. Obviously, all the hazards of hiking in extreme winter weather apply, and the appropriate safety precautions should be taken.

Thanks to the NJMAers who accompanied Larry on these forays: Steve and Sharon Sterling, Luke Smithson, John Burghardt, Todd van Gordon, and new members Nicole Member (with her god-daughter) and Joe Blevins.


PHOTO BY STEVE STERLING

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

Her whole person was small and thin, but very neat and graceful, and her pretty little face was strikingly like Kassyan's own, though he was certainly not handsome. There were the same thin features, and the same strange expression, shy and confiding, melancholy and shrewd, and her gestures were the same…Kassyan kept his eyes fixed on her; she stood her stand on his side.

"Well, have you picked any mushrooms?" he asked.

"Yes," she answered with a shy smile.

"Did you find many?"

"Yes" she stole a swift look at him and smiled again.

"Are they white ones?"

"Yes."

"Show me. Show me…"

MOTHERS AND MUSHROOMS - NABOKOV'S "MADELEINES"

from *Speak, Memory*
by Vladimir Nabokov

One of her greatest pleasures in summer was the very Russian sport of *hodit' po gribi* (looking for mushrooms). Fried in butter and thickened with sour cream, her delicious finds appeared regularly on the dinner table. Not that the gustatory moment mattered much. Her main delight was in the quest, and this quest had its rules. Thus, no agarics were taken; all she picked were species belonging to the edible section of the genus Boletus (tawny edulis, brown scaber, red aurantiacus, and a few close allies), called "tube mushrooms" by some and coldly defined by mycologists as "terrestrial, fleshy, putrescent, centrally stipitate fungi." Their compact pilei – tight-fitting in infant plants, robust and appetizingly domed in ripe ones – have a smooth (not lamellate) undersurface and a neat, strong stem. In classical simplicity of form, boletes differ considerably from the "true mushroom," with its preposterous gills and effete stipal ring. It is, however, to the latter, to the lowly and ugly agarics, that nations with timorous taste buds limit their knowledge and appetite, so that to the Anglo-American lay mind the aristocratic boletes are, at best, reformed toadstools.

Rainy weather would bring out these beautiful plants in profusion under the firs, birches and aspens in our park, especially in its older part, east of the carriage road that divided the park in two. Its shady recesses would then harbor that special boletic reek which makes a Russian's nostrils dilate–a dark, dank, satisfying blend of damp moss, rich earth, rotting leaves. But one has to poke and peer for a goodish while among the wet underwood before something really nice, such as a family of bonneted baby edulis or the marbled variety of scaber, could be discovered and carefully teased out of the soil.

(continues on page 13)

WHO'S IN A NAME?
Russula mairei

by John Dawson (forty-eighth of a series)

Russula mairei Singer (now *Russula nobilis*) is a common red Russula in the *emetica* group that, according to *Index Fungorum*, is one of 71 species of fungi in 17 different genera that now or once did bear the specific epithet *mairei*, in commemoration of the world-renowned French botanist and mycologist René Maire.[1]

Maire was born on 24 May 1878 in the town of Lons-le-Saunier. He attended secondary school in the town of Gray, where he not only received instruction in the sciences, but developed proficiency in several ancient and modern languages. In 1898, upon receipt of his licentiate (master's degree) in the natural sciences from the College of Sciences in Dijon, he was offered a position as laboratory assistant in natural history, first in the College of Medicine and later in the College of Sciences at the University of Nancy, where he worked while he pursued doctoral studies through the University of Paris. He was awarded his Doctor of Science degree in 1902, and in 1908, was appointed as a recitation instructor at the University of Caen. In 1911, he was then named to the chair of general and applied botany at the College of Sciences of Algiers, where he remained until his death on 24 November 1949, pursuing pioneering research at first in mycology and later in the phytogeography of the Mediterranean lands (especially North Africa).[2]

René Maire

Maire began to publish scientific papers at the age of fifteen, and during the course of his 55-year career he authored more than 450 notes, articles and treatises. His contributions to mycology centered principally on cytology and fungal systematics (taxonomy). In the former field, he made fundamental discoveries and introduced basic techniques that are now universally employed. In particular, he discovered the dikaryon (a binucleate cellular stage unique to fungi) and elucidated its role in the formation of basidiospores and ascospores.

Maire's taxonomic work combined biological, chemical and cytological perspectives, and was distinguished by its exceptional clarity and precision. He studied a wide range of genera, including rusts and some of the Laboulbeniales, and gave special attention to the genus *Russula*, whose taxonomy was then in an even more confused state than it is today.

Remarkably, Maire carried out microscopic work despite having lost the sight in one of his eyes during his childhood. But when, in the course of the First World War, he suffered an injury to his other eye, he was forced to turn away from mycology.

From then on, he devoted himself to the study of the distribution of seed plants in the Mediterranean region, work that led him to make numerous journeys throughout North Africa as far south as the southern Sudan, to collect plants and make botanical observations. He published the results of those expeditions in a series of 35 fascicles entitled "Contributions à la Flore de l'Afrique du Nord," and used the specimens he collected to build up an herbarium at the university in Algiers that comprised the largest collection of North African plants in the world, together with a library that contained almost everything ever written about the flora of the Mediterranean region.

In 1942, Maire began preparation of his magnum opus, entitled *Flore de l'Afrique du Nord*, of which, at the time of his death, three volumes (of a projected twenty) had appeared, with a fourth in press.

[1] *Russula mairei* should not be confused with *Russula mariae* Peck, a different species that Charles Horton Peck named after his wife Mary.

[2] As if that were not enough to occupy his attention, along the way he also earned an M.D. degree.

Sources: The photo of Maire reproduced here was scanned from the book *Die Gechichte der Mykologie*, by Heinrich Dörfelt and Heike Heklau. The text is my condensed translation of the account (in German) given by M. Guinochet in *Berichte der deutschen botanischen Gesellschaft*, vol 68a (1955), pp. 259-262.

THE OTHER CHINA:

ELLEN HESS REPORTS ON THE NJMA CULINARY GROUP DINNER, MARCH 14, 2015

Imagine catching sight of a large round tent as you walk a vast grassland plain in Mongolia. As you approach the doorway, aromas of lamb stewing with sesame fill the air. Next, picture yourself on a windy green mountainside in Tibet, where villagers are stirring a rich rice pudding over a burner, and flavoring it with local fruit and honey. Then picture yourself retracing the steps of Silk Road merchants traveling through the western borders of China, where residents bake Kazakh bread as the early morning fog lifts. What do these scenarios have in common? The diversity of cultures and regional cooking traditions are present in the politically and culturally diverse regions in and around present day China.

In the United States, 'American Chinese Cuisine' has evolved far from its cultural roots. According to Wikipedia, "In the 19th century, [immigrant] Chinese in San Francisco operated sophisticated and sometimes luxurious restaurants patronized mainly by Chinese, while restaurants in smaller towns served what their customers requested, ranging from pork chop sandwiches and apple pie to beans and eggs. These smaller restaurants developed American Chinese cuisine when they modified their food to suit a more American palate."

On March 14th, members of the NJMA Culinary Group prepared and shared a carefully chosen array of dishes from regions in and around China. Far from the bland Chow Mein and Chop Suey consumed by some, these ethnically diverse dishes spanned the taste spectrum from highly seasoned and spiced to the blended savory aromas of stews, the fresh, fragrant tastes of vegetable salads and the sweet, richly nuanced flavors of desserts.

Diners were greeted with bottles of Chinese wine on each table, generously contributed by Isaak Somershein. The meal started with intense Scallion and Ginger Explosion Shrimp and Dai Spicy Grilled Tofu, balanced by fresh and flavorful Hani Bean Sprout Salad and Napa Red Onion Salad. For the main course, participants enjoyed *Da Pan Ji* (Big Plate Chicken), Mongolian Sesame Lamb, and Lhasa Beef Stew accompanied with Stir-fry Lettuce (which had cooked *way* down), Hunan Eggplant with Spicy Meat Sauce, Brown Rice and Chickpea Salad. Diners dipped Kazakh Bread and *Uigher Naan* (a flat bread) into the savory sauces.

The meal concluded with an array of sweet offerings: beautiful, tart Crystallized Lemon Tarts, fragrant Tibetan Rice Pudding, and rich, delicious Burfi Cream Cheese Cake. In addition to the Chinese wine, the meal was complemented by an assortment of Chinese teas, including *Ting Tung* Oolong, *Ti Kuan Yin* Oolong, *Kaori* Green, *Lapsang Souchong*, and China Black (Yunnan).

PHOTOS BY JIM BARG

THE OTHER CHINA:

AN APPRECIATION, BY ROBERT SAUNDERS

China has one of the world's most complex and interesting cuisines. We were treated to a sampling of recipes that illustrated the breadth of this cooking on March 14, at the Unitarian Society in East Brunswick. The NJMA Culinary Group, spearheaded by Jim Richards with the help of Faith Perrin and Marja Van Ouwerkerk, put together a menu of Chinese dishes not usually encountered in the Western world, especially in Chinese restaurants. In China, there are 55 officially recognized minorities that have their own culture, customs, costumes and cuisine that are separate from the majority Han ethnicity. Although scattered throughout China, they are mostly in such provinces as Inner Mongolia, Tibet, Xinjiang and Yunnan. There are influences in their food from nearby India, Burma, the "_stans", and Russia. Since many of them are of other religions (Muslim, Tibetan Buddhism), lamb is more common and not the ubiquitous pork. Because many peoples live in high or cold climates, wheat and barley-based bread and noodles, and potatoes, are more frequent than the rice found throughout the rest of China. So it was a challenge to present a menu based on these cultures.

And it was a challenge well met! We started with Explosion Shrimp, Dai Spicy Grilled Tofu, Hani Bean Sprout Salad, and Napa Red Onion Salad as appetizers. There were no casualties from the shrimp, but who knew tofu could be so interesting?

The main courses continued the excitement. Big Plate Chicken (*Da Pan Ji*), Mongolian Sesame Lamb, Lhasa Beef Stew, Stir-fry Lettuce, Hunan Eggplant with Spicy Meat Sauce, and *Nokot* (Chickpea Salad) were backed up by Brown Rice and Kazakh Bread. They were delicious, interesting and filling for sure. There were even two versions of the Spicy Eggplant, with one for the faint of heart (or palate). For those who felt overly challenged by the exotic, some recipes bore close resemblance to American dishes: The beef stew could pass as food from the Midwest, as could the Kazakh bread.

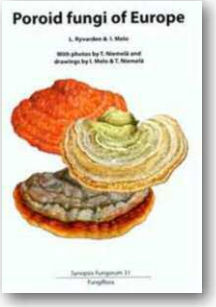
After such a feast, who could have room for dessert? We all could! Crystallized Lemon Tart, Tibetan Rice Pudding and *Burfi* (Cream Cheese Cake). Delicious! For a change, no coffee was served. Instead we had a sampling of excellent Chinese teas: Two Oolongs (*Ting Tong* and *Ti Kuan Yin*), a *Kaori* Green and a Yunnan Black. There was also a Chinese Liqueur, *Chu Yeh Ching* (Bamboo Leaf Green) made with twelve different flavorings. It had an intriguing and refreshing flavor without being harsh.

The evening was convivial and interesting, and a learning experience. Isaak Somershein gave a moving tribute to his wife Faith, who had supported him in many ways during his recent severe illness. But altogether, it was a great dinner, and we look forward to the next, on July 11.

BOOK REVIEW

POROID FUNGI OF EUROPE

a book review by Luke Smithson



Poroid Fungi of Europe

by Leif Ryvarden and Ireneia Melo

with photos by T. Niemela and drawings by I. Melo and T. Niemela

Synopsis Fungorum 31 Fungiflora. April 4, 2014.
ISBN-13: 978-8290724462

I had already read several good reviews of *Poroid Fungi of Europe,* so when I heard that NJMA had obtained a copy of the book, I was eager to see it. I am often disappointed by the lack of attention that polypores receive in the readily available literature, given the tremendous role they play in our forest. Considering that this new book contains descriptions of 394 poroid fungi, I was surely going to get my fill of polypores.

First, to dispense with the only negative thing I have to say about this book, it is written for Europe. Many of the species that are described surely don't exist here in northeastern North America. But quite a few of the species are described as "circumpolar" or "widely distributed in North America". As pointed out by the author, the Northern Coniferous forest that exists in Northern Europe covers the northern part of North America with common trees, and thus a common group of polypores. Similarly, the Central European hardwood forests share many similar trees. So even with the focal point of the book being Europe, the North American reader will find it useful. And considering that Ryvarden's *North American Polypores* book set is going for about $1000.00 (yes, that is one thousand dollars) on Amazon, we will just have to settle on *Poroid Fungi of Europe* for now.

The book lays the groundwork for its purpose early on: it is an identification book. It is not meant to be a study of the phylogeny of poroid fungi; it is laid out so that the reader will be able to come to a conclusive ID based on macroscopic and microscopic features. The ID section starts out with a key to families and genera. Both macro and micro features are used to determine genus. Once it has been identified, the reader flips to that specific genus section (laid out in alphabetical order) and finds the species alphabetically listed within the genus. Further keys are provided for some of the bigger genera. More than half of the species have large, high quality, color photos to accompany the descriptions. There are also many well-rendered line drawings of microscopic features: hyphae, spores, parts of hymenium, etc, with measurement scales. For the microscope user, the line drawings as well as the detailed micro-descriptions in this book are a bonanza of information.

But don't be discouraged if you are not overly interested in microscopic taxonomy. While this book does devote a lot of space to these descriptions, the overall feel of the book is not so technical that it is beyond the scope of the serious, but non-professional, user. Each generic chapter begins with a general description of the genus, gives you the name of the genus, and then some general remarks. Some knowledge of technical mycological terms is required, but there is enough "plain English" text that most readers will find useful information for identifying polypores. A basic myco-glossary, found in the back of many ID books (but not this one) will definitely help those who are not up on their technical jargon.

Beyond the descriptions and keys of genera and species, which make the up the bulk of the book, there are several very informative introductory chapters, which are written smoothly and are quite readable. Although short, they are deep and really delve into the concept of the polypore. The first chapter starts out with an outline of how the book was developed and defines the polypore. Chapter 2 devotes itself to Macromorphology and is really quite thorough. With no glossary to define the technical terms used in this book, the line drawings become particularly relevant and probably more helpful than the standard glossary. For example, Figure 3 (Chapter 2) provides schematic drawings of nine different types of pores: round pores, angular pores, radially-elongated pores, deadaleoid pores, etc. Chapter 3 is Micromorphology, and as already mentioned, it is a wealth of information for the microscope user. Chapter 4 briefly addresses taxonomy. Chapters 5 and 6 talk about decay characteristics and pathological significance…all quite interesting. A few more short chapters (Forest regions of Europe, Mycogeography, and advice on collecting) then the next 411 pages are nothing but beautiful photos, impressive drawings and super detailed descriptions.

This is a serious book for serious users. Its sole devotion to polypores means that there are many uncommon species including a number of corticioid (crust) type species. Indeed, the authors liken rolling over logs to opening Christmas presents! But if you consider yourself a serious mushroomer and would like to expand your knowledge of the polypore-type fungi, then you will find this book an asset.

Poroid Fungi of Europe is not available on Amazon. It can, however, be ordered directly from the publisher for $86.87, including worldwide shipping.

Visit ***www.fungiflora.no*** for more information on purchasing this fine book.

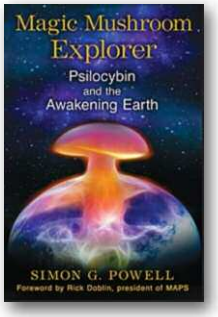
HAVE SOME FUN AND POLISH YOUR ID SKILLS

From time to time, NJMA News will include mystery photos contributed by our members. We figured it might be fun to turn this into a little quiz: Try your hand at identifying the fungi in the photos marked with a ?, then look for the correct answers elsewhere in the same issue. Good luck!

BOOK REVIEW

MAGIC MUSHROOM EXPLORER: PSILOCYBIN AND THE AWAKENING EARTH

a book review by Marc Grobman



Magic Mushroom Explorer: Psilocybin and the Awakening Earth
by Simon G. Powell

Park Street Press. 2015.
265 pages.
ISBN-13 (paperback): 978-1620553664
ISBN-13 (e-book): 978-1620553671

Synopsis: Not a field guide, or any sort of guide. Primarily the author's memoir of his experiences tripping on psilocybin, along with related and unrelated ruminations.

Magic Mushroom Explorer: Psilocybin and the Awakening Earth does not claim to be a field guide. Instead, the un-indexed and un-illustrated work, according to a back cover blurb, is a "guide" to "safely navigating and maximizing the healing and spiritual potential of psilocybin" by an author with more than twenty-five years of "sacred mushroom exploration." The blurb also claims it is interwoven with the most recent scientific studies" and "shows how the Earth's psychedelic medicines can reconnect us to the spirituality and wisdom of Nature *(sic)* and bring the human race back from the brink of ecological and existential disaster."

Psilocybin is a naturally-occurring chemical compound found in its most concentrated form in genus *Psilocybe*. It produces trips similar to but gentler than those from LSD and from mescaline, the psychoactive compound found in the cacti genera *Lophophora* and *Echinopsis*.

MME begins with an appealing populist argument positing psilocybin as the spiritual antidote to materialism: "Existential malaise," author Simon G. Powell declares, afflicts many of us because "huge houses, designer clothes, flashy cars, and fancy restaurants don't provide what the human spirit yearns for." They comprise "an endless mass of insubstantial stuff that does not fill the existential void within." However, he continues, a certain "humble fungus" can potentially connect us "to some kind of 'higher-order purpose' within it…this particular mushroom is assuredly a candidate for the legendary philosopher's stone." That's because "unlike manufactured brands that may be all glitz and packaging, the psilocybin brand of mushrooms really delivers."

But when it comes to providing facts, MME itself does not really deliver. For a start, Powell identifies only one "brand" of the humble fungus, *Psilocybe semilanceata*, or Liberty Cap. That's misleading, because *P. semilanceata* is not the only source of psilocybin. The Paul Stamets book, *Psilocybin Mushrooms of the World*, describes almost 100 species.

"Magic Mushroom Explorer" would have been better titled, "My Magic Mushroom Trips: A Memoir." Instead of providing the promised how-to-navigate-and-maximize psilocybin's potential, it's mostly a diary and recollection of Powell's trips. Some of his travel accounts resemble what we might expect from a sophisticated cannabis stoner: "I was staring into the fire and was thinking about the notion of eternity. I was trying to work out how it was possible for something to have always existed. This is known in the philosophy trade as the 'first cause,' and I have always been fascinated by such a notion…The first cause is the prime mover that initiated the big bang and all the subsequent chains of cause and effect that can transpire once time, space, matter, energy, and laws are in existence. As the first cause is not caused by something else, it must be uncreated and have always existed." After three pages of such musings, enlightenment strikes: "For a split second, for the very briefest of moments, I actually grasped eternity! …The only way eternity could truly be understood was to become it! …No sooner did this extremely brief flash of 'understanding' occur than I found myself spiraling back outward! …Then the campfire came back into view."

But at least what he said about existence was clear. Some other mind travel accounts are not: "I was witness to a spinning vortex. It seemed as if all matter and energy, all things, were slowly spinning around and were gradually spiraling in to the funnel-like center of the vortex. I sensed that absolutely everything was being drawn into this thing! …I interpreted it as a symbolic delineation of the Omega Point, as discussed by Teilhard de Chardin, a point in the distant future toward which the reality process was being inexorably drawn, a state of maximum coherency and interconnectedness, an ultimate oneness, if you will, a singularity not at the beginning of time but at the end of time."

Other trip reports are very, very redundant: "There is no such thing as 'nothing.' 'Nothing' cannot exist. By definition, only 'something' can exist. Pure 'nothingness' is an idea that is impossible. Even empty space is something because it contains space. Likewise, dimensions are not 'nothing.' Thus, to reiterate [Hasn't he already?], there must always have been 'something.' And given that…"

At times, Powell veers from discussing psilocybin to a lengthy discussion of other topics. Some are pretty far out even in the context of the psychedelic universe. After dropping a rare hint on how to safely navigate and maximize psilocybin's healing and spiritual potential – that it's better to trip in wilderness areas than in urban settings – Powell somehow transitions to consider the theory that "at some point in the past advanced aliens genetically engineered the human race." (Really!) He then appears to boast of his courage in dismissing that claim: "Without mincing words, I suggest that such a belief is unwarranted for lots of reasons…" Here's one of his reasons: "Bonobo chimps are social and smart… social insects such as ants and bees…possess formidable swarm intelligence, evince complex communication

capabilities…" Then he slams promoters of the alien geneticist theory with this clincher: "Why don't we hear about aliens engineering those other highly impressive creatures?" After reading that clever rebuttal, you may think, "Well, by golly, he's sure convinced me!" But consider: Maybe the reason we haven't heard about aliens genetically engineering those other critters is because Big Government is suppressing the information! Powell doesn't address that counterargument, but he does present other convincing reasons to demolish the alien geneticist theory. He then goes on to consider matters of intelligence and DNA without mentioning psilocybin again for the next twenty-four pages.

Powell's sections on the politics of drugs, or, as he plausibly calls it, the politics of consciousness, are more cogent. He points to a variety of activities that are legal but far more dangerous than psilocybin use, ranging from white water rafting to alcohol and tobacco consumption, and says the criminalization of drug use not only enriches drug lords – "Pablo Escobar had bribed and killed his way to a whopping personal fortune of 3 billion dollars" – but also such big business profiteers as the alcohol production industry and the privatized prison industry. He also cites a study published in *The Lancet*, a highly-respected medical journal, that compared the relative harm of twenty psychoactive drugs, and ranked alcohol as the most harmful – more so than heroin or crack cocaine and psilocybin as the least harmful.

But on the whole, MME provides few solid facts. Although its back cover blurb claims its text contains an "interweaving [of] the most recent scientific studies," the entire book uses less than 200 words to describe them. If you are interested in detailed descriptions of studies showing psilocybin's promising results in treating cluster headaches, severe anxiety, depression, and obsessive-compulsive disorders, you're better off turning to other, easily-accessed sources, such as *The New York Times*, April 20, 2012 ("How Psychedelic Drugs Can Help Patients Face Death," ***http://tinyurl.com/84bloz4***), and *NJMA News*, November-December 2010 ("Clinical Studies Indicate 'Magic Mushroom' Substance Safe, Benefits Mental Health," ***http://tinyurl.com/pvf2tlj***). (Disclaimer: I wrote the *NJMA News* piece.)

Worse, MME hardly fulfills its main claim: that it can serve you as a "guide" to navigate and maximize psilocybin's healing and spiritual potential. Aside from the page 107 suggestion to take trips in a wilderness environment, I found only one other guideline. In a page 191 pre-trip reminiscence, Powell writes: "I was also very hungry – meaning that I had an empty stomach, which is a prerequisite for a serious mushroom voyage."

Powell writes well. He could have done better with MME. I hope that in any future work he will increase the quantity of informative material, and ease up on the diary-style content.

BYTES, BITS, & BITES *(continued from page 7)*

On overcast afternoons, all alone in the drizzle, my mother, carrying a basket (stained blue on the inside by somebody's whortleberries), would set out on a long collecting tour. Toward dinnertime, she could be seen emerging from the nebulous depths of a park alley, her small figure cloaked and hooded in greenish-brown wool, on which countless droplets of moisture made a kind of mist all around her. As she came nearer from under the dripping trees and caught sight of me, her face would show an odd, cheerless expression, which might have spelled poor luck, but which I knew was the tense, jealously contained beatitude of the successful hunter.

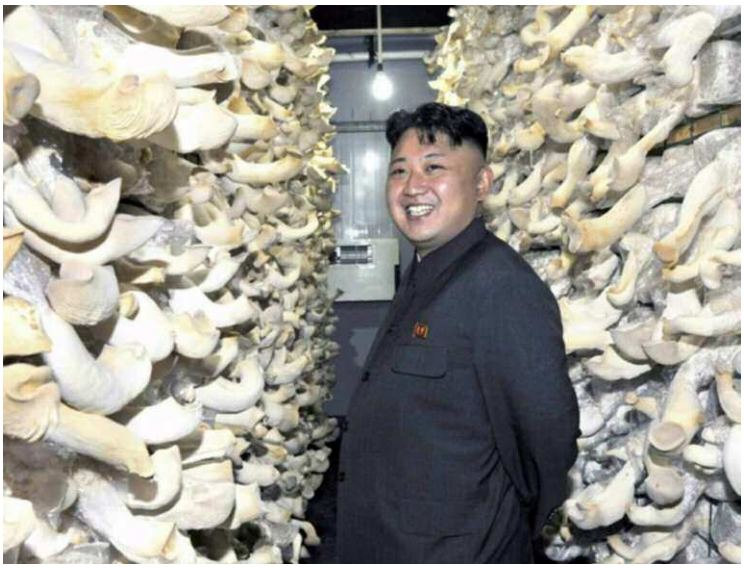
Just before reaching me, with an abrupt, drooping movement of the arm and shoulder and a "Pouf!" of magnified exhaustion, she would let her basket sag, in order to stress its weight, its fabulous fullness.
Near a white garden bench, on a round garden table of iron, she would lay out her boletes in concentric circles to count and sort them. Old ones, with spongy, dingy flesh, would be eliminated, leaving the young and the crisp. For a moment, before they were bundled away by a servant to a place she knew nothing about, to a doom that did not interest her, she would stand there admiring them, in a glow of quiet contentment.

from Judy Glattstein:

The New York Times:
Going meatless with mushrooms:
http://tinyurl.com/nln6ybp

from Judy Glattstein:

Mushrooms and he who should be known…



from Jim Richards:

From *Eater:*
Why People are 'Shrooming Out on Mushroom Tea:
http://tinyurl.com/o39h2la

(continues on page 15)

MYCOPHAGY MEETING AND MYCOAUCTION

AN INSIDER'S REPORT

by Marc Grobman

Jim Richards began NJMA's Mycophagy Meeting in 1978 during Bob Peabody's presidency. About six years later, the MycoAuction was added as entertainment to fill the dead time between servings while chefs Jim Richards and Bob Hosh prepared the next dish.

Jim still chairs the nearly 40-year-old bash, and after this year's MM&MA event asked me to report on it for the newsletter. "Are you serious?" I asked. I was slightly traumatized. I had just completed my first stint as an auctioneer.

Fortunately, I'd really only served as a co-auctioneer, gratefully alternating with co-hawker Frank Marra. But I still felt as if I had been on a roller coaster ride. I was as jittery as if I'd swallowed five cups of coffee, and as unsteady as if I'd slugged six shots of rum. During the auction, I had became so confused I couldn't figure out how to use the microphone, even though it was the same model that I use for another organization where I'm in charge of the sound system. "How," I asked Jim," could I possibly write this up? It was all a blur to me." Jim responded with a smile and mysterious eye-squinting that communicated either reassurance or sadistic joy: "You can write it up from the view as an insider. Great story angle."

I don't even remember what dishes Mycophagy Chef Luke Smithson demonstrated except that I enjoyed them. But I do recall some lessons I learned as a MycoAuctioneer:

1. Bidders will pay for their wins onsite with cash, so bring change. Fortunately, both Frank and I thought to do that.

2. For the auction to proceed at a good pace, two people are needed, and three are even better, because there are many tasks requiring attention. While the auctioneer describes the object being auctioned, the assistant holds it or moves it so it's properly placed for a large-size screen projection, and whispers occasional suggestions to the auctioneer ("Tell them that even though the salt shaker is missing a cork they can get one at Home Depot or Pottery Barn.") After the item is sold, the auctioneer has to select the next item for auction, while the assistant has to remember the amount of the winning bid, who won it, give it to the winner, and calculate change. Meanwhile, the auctioneer is already announcing the next item up for bids.

3. Revamp the system of accepting payments for winning bids. We had a floor-level basket filled with loose dollar bills. To make change, Frank or I would have to squat and sort through a jumble of four different denominations. At times, that slowed the auction action, especially when we sold five identical lots and would then have to make change for five people at once. Fortunately, most people had correct or near-correct change. But if someone had tried to pay for a $2 win with a $20 dollar bill, it would have required rummaging through the change pile for at least five different bills ($10, $5, $1, $1, and $1). Next year, it will be better if auctioned lots are moved to a different location entirely where a non-auctioneer can accept bid payments and make change from a box that's resting on a waist-level table and has dividers for different bill denominations.

4. Trust the audience's good feelings toward you and laugh at your mistakes. When I served as auctioneer, I rushed to keep the auction moving at a fast pace and in my haste sometimes forgot the current bid. (Me: "I have six dollars, six, six, six… Do I hear seven?" Audience member shouts out, laughing: "You already have eight!"). If you become exasperated at yourself when you make mistakes, the audience will also feel exasperated. If you laugh at yourself, the audience will feel it's OK to also laugh at you and enjoy doing so. If you laugh at yourself with enough conviction, they'll think you're making the mistakes on purpose to entertain them and will enjoy your bumbling even more.

5. We had so many items to auction that some were piled on top of each other on the table where they sat for prospective bidders to inspect. Next time, if we can get two tables for display, along with a sign, such as "Donated Items to Be Auctioned," it will be easier for everyone.

But the biggest lesson I learned as a co-auctioneer was that an incredible number of people work to make the MM&MA happen. Foremost, there's the hard work and planning of NJMA member and *NJMA News* contributor Luke Smithson, who provided the informative cooking demonstration. Luke shared the knowledge he employs as Executive Chef at Jamie Hollander Gourmet Foods and Catering, New Hope, PA. Their website (***jhollandergourmet.com***) says what was obvious to MM&MA attendees: "Luke likes to share his extensive food knowledge through special tasting sessions, cooking demonstrations, and events."

We gotta also give thanks to the many people who donated items for the MycoAuction. I didn't count how many lots we auctioned; I'd guess it was thirty or more. I did get to thank some people for their donations, but to those of you I didn't acknowledge, please accept my (our) thanks. Long-time NJMA supporter Phillips Mushroom Farms merits a special shout-out for their donations to both Mycophagy and the MycoAuction. (Visit their website at ***phillipsmushroomfarms.com***.) All of these donations brought in some needed funds for NJMA's treasury. While we have a lot of donated help and materials, we do need money for such expenses as meeting space, expenses, honoraria, and supplies for Mycophagy.

(continues on next page)

The mycophagy kitchen crew, including Luke

During and between the MycoAuction segments I sometimes had to rush to the kitchen area for supplies or help. Every time I found several people missing out on the Mycophagy demonstration because they were busy preparing food, serving food, or cleaning up. Some of the volunteer hidden kitchen workers who worked nearly full-time were Mike Rubin, Liz Broderick, Igor Safonov, and Jim Richards. Todd Van Gordon helped as needed in the kitchen, and Steve Sterling expertly managed the video, lighting, and sound system.

Thanks also to the people who helped prepare our meeting area before this year's MM&MA began, who helped clean up and move tables and chairs afterward, and to those who helped in other ways. Your efforts help make the MM&MA such a fun and informative occasion that it reaches near- or full-capacity every year!

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

from Dorothy Smullen:

Exhibit of Mushroom Art (some by NJMA members)

Treasures of the Forest Floor is an exhibit that was inspired by the portfolio of Thelma B. Rowley. The focus of the various works of art show how fascinating the world of fungi can be.

Thelma was the wife of Elmer Rowley, former board member in 1970 and society president in 1974 and 1975. Both were dedicated to conservation issues throughout New Jersey and community outreach. Elmer is credited with expanding the society's existence and his efforts helped achieve preservation of the Pinelands. He retired from the board after serving a couple decades, and was recognized with a lifetime Honorary Vice President.

The watercolors found here are part of a portfolio that was donated by Thelma in 1994. It encompasses 40 different charming examples of various fungi that she painted in the mid 1950's, while they lived in Westchester County, New York. All are life like and painted from actual specimens found in the field. Many are also found here at the Scherman Hoffman Wildlife Sanctuary.

She happily offered these with the hopes they would be of educational value and use. We are pleased to showcase these treasures of the forest floor.

(continues on next page)

from Norbert Rousseau:

Foraying spot?
http://tinyurl.com/ownkw92

from Luke Smithson:

Why some mushrooms glow in the dark:
http://tinyurl.com/nvumtjk

from Jim Richards:

A terrible waste of morels:
http://tinyurl.com/pbb3pq9

from Bob Hosh:

From *The New York Times Magazine*, advice from French chef Eric Canino...

Morel Mushrooms
"They are the only mushrooms that we can find in spring. In a starter, it should be cooked twice: the first time with olive oil, and a second time with white wine and poultry juice. Serve them with asparagus."

from Charlie Zielinski:

Hey Jim,

Thought you would find this interesting. New species of mushroom identified in England:
http://tinyurl.com/kwy3fqd

from Jim Richards:

From *Edible Manhattan* magazine:
New York City Mushrooms
http://tinyurl.com/lbn7259

From *The New York Times Magazine*:
Growing and selling mushrooms
http://tinyurl.com/l4867t3

From Marx Foods, a few morel
(and other mushroom) recipes:
http://tinyurl.com/no3trqa

PHOTO BY JUDY GORAB

WELCOME TO ALL OF OUR NEW NJMA MEMBERS!

We'd like to extend a warm welcome to the following members who joined us between February 26, 2015 and May 1, 2015. We look forward to seeing you at lectures, forays, and other NJMA events. Happy 'shrooming!

Veronica Daly	Mendham, NJ
Johanna Dominguez	Somerset, NJ
Veronica Fischer	Vernon, NJ
Jake Huff	North Brunswick, NJ
Kerry Lukas, Jr.	Basking Ridge, NJ
Dmitry Megrish	Warren, NJ
Paul Stettner	West Orange, NJ
Tad Teichert	Jamison, PA
Julia Ehlers	Livingston, NJ
Desiree Martone	West Milford, NJ
Richard Toledo	New York, NJ
Michael Volpe	Pompton Lakes, NJ
Salvatore Turdo	Oakland, NJ
George & Kerry Autry	Long Valley, NJ
Tad Grzegorzewski	Oak Ridge, NJ
Maya Kang	Cherry Hill, NJ
Sarah Klingler	New Brunswick, NJ
Katie Taylor	Bethlehem, PA
Sally Perkins	Beverly, NJ
Nicole Grant	Sparta, NJ
Taylor Rivera	Keyport, NJ
Andrew Bernosky	Millburn, NJ
Gabriella Perez	Jersey City, NJ
Jianxing Huang	Bethlehem, PA
Edward Dougherty	MIllburn, NJ
Anthony Montileone	Glendora, NJ
Raymond Vitale	Burlington, NJ
Inna Riva	West New York, NJ
Donna Buxton	Princeton, NJ
Kathleen Cicero	Lumberton, NJ
Daniel Casaburi	Bound Brook, NJ
Linda Dimario	Doylestown, PA
Lianne Gabe	Moorestown, NJ
Stephen Estok	Kendall Park, NJ
Christopher Wang-Iverson	Stockton, NJ
Caitlin Solano	Flemington, NJ

RECIPE FILE

Shiitake-Noodle Salad with Nuoc Cham and Herbs *(Prepared by Luke Smithson at NJMA Mycophagy 2015)*

from Shroom: Mind-Bendingly Good Recipes for Cultivated and Wild Mushrooms
by Becky Selengut, Andrews McMeel Publishing, 2014

This recipe is based on one of my favorite summertime dishes: Vietnamese bun or noodle salad. Traditionally room-temperature rice noodles are served with both hot and cold garnishes and sauced with what I consider the "salsa" of Vietnamese cuisine: nuoc cham or spicy lime and fish sauce. Shiitakes are my favorite cultivated mushroom, and they really take a starring role in this dish. They are bursting with flavor, especially when you add ingredients that support their savory nature – ingredients with natural glutamates such as soy sauce and tomato. This healthful and light dish is an excellent example of the whole being greater than the sum of its parts. The mushrooms can be made the day before and reheated. The dressing can be made several days ahead. If you end up frying the shallots for the bonus garnish (and I highly recommend it), they can be fried earlier in the day and left at room temperature.

1 heaping tablespoon kosher salt
1½ pounds wide rice noodles *(it may say "stir-fry rice noodles" on the packaging; I use thin pad thai noodles for this dish)*

SHIITAKE SEASONING
- ***1 tablespoon tomato paste***
- ***2 teaspoons soy sauce***
- ***2 teaspoons seasoned rice vinegar***
- ***2 teaspoons toasted sesame oil***
- ***2 tablespoons coconut oil, melted, plus more for brushing the pan***
- ***Freshly ground black pepper (optional)***
- ***1 teaspoon Porcini Powder*** *(recipe follows)*
- ***1 pound shiitake mushrooms, stems removed*** *(saved for stock)*

BONUS GARNISH
- ***1 cup vegetable oil***
- ***½ cup thinly sliced shallots, separated into rings***
- ***⅛ teaspoon fine sea salt***

FIXINGS
- ***1 head red leaf or green leaf lettuce, cut into bite-size pieces***
- ***1 medium carrot, peeled and julienned***
- ***1 medium cucumber, seeded and julienned***
- ***1 cup thinly shredded red cabbage***
- ***½ cup roasted, salted peanuts***
- ***1 cup packed fresh basil leaves***
- ***½ cup fresh mint leaves***
- ***Nuoc Cham Sauce*** *(recipe follows)*

Place a rack in the middle of the oven and preheat the broiler to high.

Bring a medium pot of water to a full rolling boil. Add the salt and then the noodles, turn off the heat, stir well, and let sit in the water for 8 to 12 minutes. Stir from time to time. Check for doneness at about 8 minutes. You want the noodles to be al dente (soft but just slightly firm in the middle). As soon as they are done, drain them through a colander and run cold water over them to stop the cooking. Set aside at room temperature.

In a small bowl, whisk together all of the ingredients for the shiitake seasoning. Add the mushrooms and, with your hands, mix the seasoning onto the shiitakes. Brush a little melted coconut oil onto a parchment paper-lined baking pan and add the shiitakes, gills down. Broil for 5 to 6 minutes on one side, until browned, then flip over and broil on the other side for 3 to 4 minutes. Alternatively, grill over a medium-hot fire until caramelized on both sides.

(continues on next page)

To make the garnish, heat the oil in a small saucepan to 350°F. Add the shallots and fry until lightly browned. Remove with a slotted spoon and drain on paper towels. Sprinkle the salt over the top of the shallots and reserve at room temperature until ready to serve.

To serve, rewarm the mushrooms either in a hot oven or in a skillet, if necessary. Place an equal amount of lettuce at the bottom of 4 bowls. Top with the noodles, carrot, cucumber, cabbage, peanuts, basil, mint, fried shallots, and warm mushrooms. Serve the nuoc cham sauce at the table. Instruct your guests to apply liberally.

Nuoc Cham Sauce
⅔ cup water
½ cup freshly squeezed lime juice (about 4 limes)
2 tablespoons fish sauce
¼ cup sugar
6 Thai chiles, minced (substitute 1 serrano chile with seeds and 1 Cherry Bomb chile, seeded)
2 cloves garlic, minced and mashed to a paste
2 tablespoons finely shredded carrot (optional)

Whisk the water, lime juice, fish sauce, sugar, chiles, garlic, and carrot, if using, together in a bowl. Make sure the sugar gets dissolved. This sauce will keep in your fridge for 1 week.

PORCINI POWDER: Break high-quality dried porcini (avoid buying really dark, dusty, broken, or worm-eaten pieces) into small pieces and buzz to a fine powder in an electric spice grinder. Store in a plastic freezer bag or glass jar in the freezer for up to 6 months. There are several ways to use this powder. You can mix it with hot water and then cook it into a soup or stew, or use it along with salt and pepper as a crust for beef or fish, or add it to boost the earthiness in a vegetarian dish. See www.shroomthecookbook.com for a video demonstration of how to make porcini powder. Please note that the porcini powder you make will be uncooked. You will want to cook this powder, by simmering it into the soup or stew, by searing the meat in the pan, and so forth. Keep in mind that you can't really remove the gritty sediment from porcini when you are making porcini powder (as you would when rehydrating). Make sure you choose clean-looking high-quality dried porcini and grind to a very fine powder. Do that, and you shouldn't have any grit problems.

Serves 4. Pairing: French Riesling

STROPHARIA RUGOSOANNULATA, WINE CAP, GARDEN GIANT, BURGUNDY TOP

*by Mike McNally. Reprinted from **Mainely Mushrooms**, newsletter of the Maine Mycological Association, April-June 2015*

This mushroom goes by many names, but the bottom line is the same. These are delicious to eat and easy to propagate, especially in outdoor beds. My story starts on hole #5 at our local golf course. This is the same hole where I scored a "hole-in-one" the previous summer. Sticking up through the wood chip mound on the backside of the green was a pretty reddish-topped mushroom with a noticeable white stem. Waving down a passing golf cart (friends of mine), I asked if they would gently transport this mushroom treasure back to the clubhouse and I would pick it up after my golf game. After much laughter they agreed.

When I got home, the mushroom keyed out to be a wine cap, as I had hoped. The spore print was a beautiful dark purple brown with close-to-medium gill spacing. This particular mushroom had some age on it so the gills were a charcoal gray, attached, with a slightly domed top, white stem and a distinct partial veil, hence the name *annulata*. When young, this mushroom has white gills and white stem and usually a very pretty burgundy top. Warning!! The top color can change with age and individual mushroom to a brown tan. As previously stated, almost always found in and around wood chips with white rhizomorphs (root like attachments) on the end of the stems. Fully mature mushrooms can reach weights of over 3 lbs. (usually not good to eat at this point).

Now comes the fun part, establishing a mushroom bed. No expensive equipment necessary. Here is the by-the-numbers method of establishing your own mushroom garden.

1. Take 3 quart-size Ball jars with covers and drill 5/8" holes in the lids. Size of hole can vary from 1/2" to 3/4". Stuff holes with poly fill.

2. Get some rye grain (can even use millet, bird seed or other types of grain) from local feed store. Put grain in pan with water and rinse 3 times. Use a mesh strainer with mesh small enough for the water to pass through but retain the grain. Strainers can be purchased at a dollar store (get two).

3. Take your grain, put it in a pan with enough water to cover it in good shape, boil for 10 minutes and let cool overnight. (Grain will double in size.)

4. The next day, use your strainers to remove as much excess water as possible. Fill your quart Ball jars two-thirds full with the prepped grain.

5. Put covers with holes and poly fill on jars and additionally cover the top of the jars with a double layer of aluminum foil.

6. Put jars in a pressure cooker with appropriate amount of water. After cooker reaches 15 psi, boil for 90 minutes. (This should kill nearly all microbes).

7. Allow jars with grain to cool to room temperature.

8. Put a shot glass in a pan with water, boil for 15 minutes.

9. While the water is boiling, take a syringe and draw up from 3cc to 15cc of water, allow it to cool in the syringe.

10. Spread a clean paper towel on a clean sideboard, and, with tongs, remove the shot glass from the water, placing it upside down on a paper towel allowing it to cool to room temperature.

11. Take the syringe with needle or point and scrape spores from spore print into upturned shot glass, mixing water and spores together. Allow to sit for at least 12 hours.

12. Shake syringe with spores to mix and inoculate the grain thru the poly fill. Place inoculated jars in plastic tub with tub top on and with aluminum foil off the jars. Keep in warm spot (greater than 60ºF). After mycelium starts to appear, usually between 4-7 days, shake jars with grain vigorously a couple times a week. Ready to use in approximately three weeks.

13. Find a shaded spot in your yard, use a shovel or rake to disturb the soil then dump and spread your inoculated seed on the ground.

14. Cover with about 1 cubic yard of hardwood chips and spread to depth of four to six inches. You can usually find a place to buy in bulk. I get mine off Church Road in Brunswick. Fresh $12/cubic yard, partially composted $25/cubic yard. This will cover an area about 50 to 80 square feet. Keep watered for the first couple of weeks, then let nature take over.

I established my first bed in August 2013 and got my first flush first week of June 2014. It produced mushrooms nearly every day through the summer and well into the fall. Estimated, harvest 40-50 lbs., maybe more. According to Paul Stamets, a mushroom expert from the state of Washington, these beds will continue to flourish every year as long as a couple of inches of wood chips are added.

Like any mushroom, one should be cautious about eating it for the first time. Be sure of your identification and eat only a small amount in the beginning. A number of sources state that this mushroom can cause severe indigestion (by blocking important digestive enzymes) if too much is eaten at once, or if eaten more than a couple times a week. I had no such trouble.

POISONOUS MUSHROOMS COULD BE KEY TO DRUGS WITHOUT SIDE EFFECTS

*by Ryan Whitwam, **http://www.geek.com/science**, December 7, 2014*
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Some species of mushrooms are perfectly safe to eat, but others that look very similar can land you in the hospital or worse. In studying how these fungi manage to be so poisonous, a team of Michigan State University researchers may have found a way to create a new generation of pharmaceuticals with highly targeted effects. Imagine chemotherapy drugs with no side effects or antibacterial agents that can clear out severe infections without damaging other tissues. That's what poisonous mushrooms could do for medicine. Specifically, it's an enzyme used by these fungi to manufacture poisons.

This research used mushrooms of the genus *Amanita*, which includes the notorious Death Cap mushroom. These fungi produce quite a lot of proteins, but a few are incredibly toxic if ingested. Not only that, but these are hearty little proteins. They can survive cooking and exposure to stomach acid just fine, then pass into the bloodstream. It isn't until they reach the liver that their deadly effects are felt. The hepatotoxic effects of a-amanitin proteins can cause permanent liver damage, as well as death without treatment.

You definitely don't want to get a-amanitin anywhere near your mouth, but it's the way this protein survives all the way to your liver that has scientists interested.

Toxic compounds like a-amanitin are what are known as cyclic peptides. Like all proteins, they are composed of chains of amino acids, which are assembled in cells. However, cyclic peptides are linked together by a strong covalent bond in a ring orientation rather than being folded up and held together by weaker interactions. This makes a cyclic peptide extremely durable, ensuring it can survive the journey through your digestive tract and end up wherever it needs to go.

The MSU team was able to pull apart the *Amanita* toxins and study the way they are produced. This led to the discovery of a second enzyme used in the mushroom's cells called POPB. This is what takes the freshly produced linear chain of peptides and converts it into a nearly indestructible ring that delivers a deadly payload to your liver. Of course, that's not the goal of the medical research. Pharmaceutical researchers want to use POPB to create new drugs that can carry therapeutic compounds through the body instead of deadly toxins. You have to admit, that sounds better.

POPB itself isn't a drug that will cure anything. It's like you had a missile carrying a nuclear warhead, but you

were able to pry out the nuke. Now you're left with a missile that could be used to deliver something other than unstoppable atomic fire. The problem is figuring out how to formulate the payload to do the most good. The team has already designed several hundred compounds that could be transformed into cyclic peptides, but that's only the start. There could be billions of potential variants, and most of them won't be of any clinical significance. One of them might be the magic bullet, though.

THE MIGHTY BIRCH POLYPORE, KING OF THE BRACKET FUNGI

*from **abovetopsecret.com**, December. 1, 2014 via The Spore Print, Los Angeles Mycological Society, December 2014.*

All hail *Piptoporus betulinis* and bow down to the sheer wonder of what it can do for someone stuck alone in the woods! I love these mushrooms. They grow all over the place by me on just about any Birch tree (Silver and Downy Birch in my locale) that is dead or dying, and that's usually about half of them, whether they be standing or fallen. And once you see one of them, you'll begin to notice that they are all over forests with Birch in them, and they'll swiftly become one of the resources that you spot first, because they really are bloody useful! Otzi the Iceman carried the stuff, and you'll see why soon enough.

Some can grow to the size of a dinner plate; they are easily broken off and exist in such profusion on dead or dying Birch trees that there is no guilt or damage to anything in taking one when many others can be found nearby. They are distinctive, as long as you can tell a Birch from a Beech (and you will therefore avoid the slimy, but similar, *Ganodermas*) and they are not poisonous. In fact according to *Wild Food UK,* they are edible. In my experience, I'd rather dig to the bottom of the laundry basket and eat the oldest sock I could find: still, this kind of knowledge can save lives. But this is the very least of their properties.

They used to be commonly known as "Razor Strop Fungus" for their ability to finely hone knives and razors. Just pick a larger example and cut out a rectangular block of it. It's got a polystyrene-like density/resistance to cutting when fresh, but dries hard – and when dry, simply hone or strop in a normal fashion. Alternatively glue a little slice to a stick for a smaller strop. As long as you keep it dry and away from burrowing insects it will last for months at least, I've had some that lasted for two or three years.

Just like the Tinder Hoof Fungus, Birch Polypores are great for fire lighting, and dry powder or fine shavings take a spark and make a decent tinder. Not only this, they can also be used to carry an ember as a block of the stuff will smolder for a couple of hours or more if treated with care – make a container of Birch bark (for example), line the bottom with fresh leaves, insert the smoldering lump and then sprinkle with its own shavings and dust. Ensure air can get to it by adding some holes in the container and with practice you will be able to start a fire with it later in your travels.

The smoldering property can be used in another way too. It gives off an acrid smoke that gnats and mosquitoes will avoid. Set some smoldering in a bowl or on a stick and you won't get bitten half as much as you would otherwise.

They are also medicinal and contain the antibiotic Piptamine. Otzi may have been carrying birch polypore as a preventive medicinal cure. Perhaps the polypore was used to help retard or rid himself of metazoans and mycobacteria from his body.

According to Paul Stamets, medicinal properties of birch polypore include that it stops bleeding, prevents bacterial infection, is an antimicrobial agent against intestinal parasites and has anti inflammatory effects. The fungus shows antiviral properties that may be of help in times of HIV outbreaks and other biodefense threats. Betulinic acid of this fungus may act on malignant melanoma and other tumor development. Pretty awesome huh? Well I'm going to enthuse a little more. You can also make woodland plasters from the stuff – I've treated my own jagged bow-saw cuts on fingers with the stuff, and very effectively. Find one of them that has a nice clean white underside. This thin (under 1 mm approx.) bottom layer is of a felt like texture, and by slicing a rectangular section of this off you can wrap it around a finger, for example (the inner layer should be touching the wound, not the potentially dirty outer layer) and tie with a little grass.

It will quickly dry hard and adhere to itself quite effectively, making it stay in place without binding, retarding minor bleeding and aiding in healing as well as protecting the wound from dirt and infection if like me, you're sometimes daft enough not to take a first aid kit with you into the woods. Obviously clean the wound as soon as you are able.

Otzi even used lumps of the stuff, in the opinion of myself and a few others, as pegs to secure items to his tool belt. So thank you for reading, I hope it's of use to someone someday.

A: Panellus stipticus

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