

NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION

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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!

PHOTO BY JIM BARG

SO YOU FOUND A BLUE-GREEN TWIG?

HERE'S THE CULPRIT!

*(and look closely, especially on the
moist ground side of twigs...it's tiny!)*



Chlorociboria aeruginascens

WHAT'S INSIDE:

President's Message	2
Editor's Notes	3
Michael Kuo Lecture (Sang Park Lecture series)	3/4
Fungus Fest is coming on November 1	4/5
Calendar of Upcoming Events	6
In Memoriam - Viola Spock	7
Culinary Group news	8
Ask Gus	9
Who's In A Name?	10
Workshop Reviews	11/12
Foray Reports	begins on 13
Finding a New Mushroom	16
Bytes, Bits, & Bites	17
What You Missed at NEMF 2015	18
Becoming Unlost in the Woods	19
NJMA Photo Contest 2015	22

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



PRESIDENT'S MESSAGE

Accommodating Foragers

Many newer members of NJMA became interested in wild mushrooms because of the foraging movement. Actually, a desire to find edible mushrooms is the reason many of our members first got involved in NJMA. Our mission definitely supports this interest. Yet, our club activities support collecting edible mushrooms (a.k.a. “pot-hunting”) only indirectly. It’s just the nature of the beast.

Here’s why: All NJMA forays are conducted under a permit from the land owner/agency. Almost all the permits prohibit the collection of mushrooms for edible purposes. In addition, the permits generally allow collection of only three to five mushrooms of a given species. (We tell the site manager that strict compliance to this is not possible, since the mushroom collectors are spread out.) NJMA receives permits because we have expert identifiers who can provide the site manager with useful data: The list of the species of mushrooms we have found on their site.

Mushroom pickers who are on their own, fare worse. Here’s the regulation for NJ State Parks and Forests:

7:2-2.10 *Damage to property/tampering (a) A person shall not abuse, mutilate, injure, destroy, move or remove any plant or animal or natural resource on lands and water under the jurisdiction or control of the State Park Service without having first obtained the permission of the Superintendent or designee. Authorized fish, game and wildlife activities are excepted.*

Fortunately, municipal and county parks are sometimes less restrictive than the state of New Jersey. Edible mushrooms can be collected on some state lands in New York and Pennsylvania.

Even so, NJMA has a lot to offer the “pot-hunter” besides our workshops on mushroom identification. There are only a very few edible mushroom species that are fairly common, very distinctive, and don’t have poisonous look-alikes. Aside from these, it would be foolhardy to eat a mushroom you identified solely from the web or field guides. At NJMA forays, the table of identified mushrooms is a tremendous resource. You can pick up, smell, and photograph a mushroom you want to learn about. You can ask an expert what characteristics separate it from poisonous lookalikes. But finding wild mushrooms to eat? That’s up to you.

So why do so many people still stay active in NJMA even after they’ve learned to identify some edible mushrooms? For the connection with nature, for the challenge of learning to identify, for photography or dyeing, for the satisfaction of helping with the species database,

for the possibility that they may someday find a new species, for the opportunity to share their fascination with like-minded people – for lots of reasons.

Once, at a foray ID session, I was helping (I thought) a new person to identify a mushroom she had collected. That is, until she told me “I don’t care what its name is, I just want to know if I can eat it!” If you don’t know its name, you really *shouldn’t* be eating a wild mushroom, berry or herb; it can kill you. We can help you learn about mushrooms, although be warned, learning species identification is not a quick process. If you came to NJMA as a forager, we hope that somewhere along the way you will be seduced by the kingdom of fungi.* If that happens, you’ll definitely stay with NJMA, since we are the ones who share your obsession.

– Patricia McNaught

*Check out *The Kingdom of Fungi* by Jens H. Petersen. It’s a celebration of the beauty and complexity of fungi.

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facebook.com/njmyco

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!

Got a mushroom story to tell?

Share your experience with fellow mushroomers!

tell it here!

Send your articles and photos to njmaeditor@gmail.com



EDITOR'S NOTES

Congratulations to John Dawson for reaching a milestone in his series "Who's in a Name?" – the Big 5-0!! Quite an accomplishment, and he isn't finished yet! Thanks, John, from all of us who look forward to your column in each issue of *NJMA News*. I would also like to add a "thank you" to John for always getting his articles in on time, usually well before the deadline. It does make my life a little bit easier.

John is just one of a small group of NJMA members that contribute articles, foray reports, book reviews, photographs, drawings, etc. periodically to the newsletter. It is this same group, only about 10% of our members, that does all of the work that keeps NJMA functioning.

Why aren't the other 90% of our members more active? Is it because they are just so busy with other things? I can assure you that the active members are at least equally busy! They just find the time to do the jobs that need doing.

Is it because they are afraid they don't know enough about fungi to be useful? There are many jobs, if not most, that require absolutely no knowledge of fungi at all! Please check out Liz Broderick's Fungus Fest article for some examples as to how you can be an active participant in our major public outreach of the year.

There are also activities like the Culinary Group, which is a great place to meet and get to know your fellow members and enjoy a great meal at the same time. No mushroom knowledge required there, either – just a hearty appetite and some basic cooking skills.

Or maybe they do not participate because they do not feel welcome. Very surprisingly, I have recently been told by a number of members that, for a long time after they joined NJMA, they never felt comfortable at club events.

Is it that they have to travel too far to participate in club forays and activities? New Jersey is unique among the larger mushroom clubs in that most of the other large clubs are based in major metropolitan areas. Getting together for activities is a bit harder for us since our membership comes from such a broad area.

Is it because they are disappointed when they go on forays and do not leave with full baskets of choice edibles? Sorry, but there are no guarantees! Mother Nature can be pretty unpredictable. Ask any "old-timer" and they can give you lots of stories about the great years and the lousy ones. And, since we have many forays in state parks, we are restricted by their regulations (in other words, only five specimens of a species are to be collected, and that is for study purpose only. Nothing is to be collected for the table!)

Club forays are still the best place to learn about fungi. You have a sizeable group of collectors looking over a broad area so you can see many, many more species than you could going out on your own. The table of identified species is a great place to look at and compare many different fungi with the help of more experienced members who will be more than willing to help you learn how to use the field guides. Just be reminded that you can only learn a few different species on a foray. Do not try to remember everything you see. Bring a camera or a good smartphone and record what you see for further study.

Can you imagine what a fantastic club NJMA could be if only another 10% of our members became active participants.?

And, above all, remember that without you, there will one day be no more NJMA!

And that would be a shame!

– Jim Richards

SANG PARK LECTURE SERIES

DR. MICHAEL KUO LECTURE SUNDAY, OCTOBER 11, 1:30PM

at the Somerset County Environmental Education Center, Basking Ridge.

His topic: *"The names, they are a-changing: How taxonomic mycology works these days, and what you can do about it"*

The content will include non-technical discussion of the way mycologists work, these days, to determine what names to apply to species, as well as an encouragement for amateurs to help, as citizen scientists.

Dr. Kuo, the principal developer of MushroomExpert.com, is an English teacher and an amateur mycologist. He is the author of *Morels* (2005), and *100 Edible Mushrooms* (2007), *100 Cool Mushrooms* (2010, co-authored with Andy Methven), and *Mushrooms of the Midwest* (2014, coauthored with Andy Methven). (*from MushroomExpert.com*)

(More about the Sang Park Lectures and Michael Kuo on next page)




PHOTO BY SCOTT DRESSEL-MARTIN

ABOUT THE SANG PARK LECTURE AND DR. MICHAEL KUO

Sang Won Park Ph.D., was a research microbiologist, who upon retirement became interested in wild mushrooms. He was introduced to myxomycetes (slime molds) by Dr. Gene Varney, and quickly became an expert. (Myxomycetes are not actually fungi, and in some life stages they move about. Since, in other life stages, they resemble fungi, they are studied by mycologists.)

At the NAMA foray in West Virginia, Sang was the expert identifier for myxomycetes. Sang Park epitomizes the “citizen scientist” that some of us in NJMA aspire to. Sang Park’s family has provided NJMA with a fund for lectures, in honor of Sang.

The Sang Park lecturer this year is also a “citizen scientist”. Dr. Michael Kuo’s day job is as an English instructor. But after taking up mushrooming (initially on a morel quest), Michael became an expert in many aspects of mushrooming and is the author of several mushroom books (see [previous article](#)) and scientific papers on mushrooms. NJMA members know well his website, mushroomexpert.com. We are pleased that Dr. Kuo will be our speaker for the Sang Park lecture. 

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.

ARTISTS AND CRAFTERS NEEDED FOR FUNGUS FEST

If you are an artist, photographer, or craftsman with mushroom-themed items that you would like to sell at this year’s Fungus Fest (Sunday, November 1st) please contact Jim Richards (jimrich17@icloud.com) to reserve space for your creations at the Arts and Crafts display. Please provide appropriate packing materials for your items so that they can be safely transported to the customer’s home. NJMA members who sell anything will pay NJMA a 10% commission on their sales.

Because Fungus Fest 2015 will be staged much later than normal, we feel that Arts and Crafts will be a more important part of the display than in the past. We hope you will be part of it. 

ATTENTION FUN-GALS FUN-GUYS



WE WANT YOU!

Our Fungus Fest has been scheduled for Sunday, November 1 at the Frelinghuysen Arboretum in lovely Morristown, NJ. This year’s Fungus Fest is later than usual due to a conflict with the **NAMA Blue Ridge Mountain Foray** which is being held in late September. Fungus Fest is our club’s most important public relations event of the year. We showcase the wonders of the Fifth Kingdom: A beautiful slime mold slide presentation, a mushroom identification table, a cultivation display, culinary demos, yarn and fabric dyeing, a beginners’ identification workshop, papermaking, and some fungal-related vendors are all part of the fun. We recruit many new members during Fungus Fest, and bring in donations to help fund our speakers and activities during the rest of the year. Come help out, reconnect with old friends, and make some new ones.

Please contact Liz Broderick, this year’s chairperson, if you are available to help set up from 9:00-12:00 on Saturday, October 31 or to help at Fungus Fest on Sunday, November 1. This event depends heavily on volunteers, and some of our longtime members are no longer able to help out so **WE NEED YOU!**

You can contact Liz at medhead72@comcast.net

Click on the poster to download a sharper PDF to print out for display.

The New Jersey Mycological Association presents

FUNGI FEST 2015

SUNDAY, NOVEMBER 1 • 10:00AM – 4:00PM

**FRELINGHUYSEN ARBORETUM
353 EAST HANOVER AVENUE, MORRISTOWN, NJ**

- Learn about mushrooms through informative exhibits, walks, talks, and demonstrations
- Bring in your mushroom samples for identification by experts
- Mushroom cooking demonstrations
- Mushroom cultivation
- Books, field guides, and arts & crafts available for purchase

Free and open to the public

Suggested donation: adult \$2.00, under 16 \$1.00

For more information, visit us on the web at njmyco.org

CALENDAR OF UPCOMING EVENTS

- Sunday, September 13 10:00am** **FORAY: WAWAYANDA STATE PARK**
Hewitt, NJ (Passaic County, north of West Milford)
Leader: Judy Gorab
-
- Sunday, September 20 10:00am** **FORAY: GRETE TURCHICK FORAY & PICNIC**
Stokes State Forest, Kittle Field, Branchville, NJ (Sussex County, off Route 206, use main park entrance) Bring food to share and your own picnic gear
Leader: Jim Barg
-
- Sunday, October 4 10:00am** **FORAY: JAKES BRANCH COUNTY PARK**
Beachwood, NJ (Ocean County, just southwest of Toms River)
Leaders: Lynn and Paul Hugerich
-
- Sunday, October 11 1:30pm** **SANG PARK LECTURE SERIES: DR. MICHAEL KUO**
Somerset County Environmental Education Center (SCEEC)
Basking Ridge, NJ. Dr. Kuo's lecture topic will be "The names, they are a-changing: How taxonomic mycology works these days, and what you can do about it"
-
- Sunday, October 18 10:00am** **FORAY: WELLS MILLS COUNTY PARK**
(Ocean County, near Forked River)
(in-depth identification with microscopes and chemicals follows)
Leader: Luke Smithson
-
- Saturday, October 24 6:00pm** **CULINARY GROUP INDIAN DINNER**
Unitarian Society, Tices Lane, East Brunswick
Reservations are required. Contact Carl Hoffman at CulinaryGrp@gmail.com.
-
- Sunday, October 25 10:00am** **FORAY: BRENDAN BYRNE STATE FOREST**
Woodland Township (Burlington County)
Leader: Igor Safonov
-
- Saturday, October 31 10:00 am - 12:30 pm** **NJMA BEGINNERS' WORKSHOPS** at the *Frelinghuysen Arboretum, Morristown*
• **INTRODUCTION TO MUSHROOMS** *Instructor: Patricia McNaught. \$5.00 fee.*
1:00pm - 3:30pm • **COLLECTION & FIELD IDENTIFICATION OF MUSHROOMS**
Instructor: Jim Barg \$10.00 fee for class materials.
Pre-registration is required for both classes. Visit <http://www.njmyco.org/education.html> to register.
-
- Sunday, November 1 10:00 am - 4:00 pm** **FUNGUS FEST 2015**
Frelinghuysen Arboretum, Morristown
Leaders: Liz Broderick and Terri Layton See poster on page 5 or [download it here](#).
-
- Saturday, November 7** **DEADLINE: NJMA PHOTO CONTEST 2015**
All entries must be emailed or postmarked by 11:59pm on this date!
Coordinator: Jim Barg See details, rules, and entry form beginning on [page 22](#).
-
- Sunday, November 8 10:00am** **FORAY: BELLEPLAIN STATE FOREST**
Woodbine (Cape May County)
Leader: Rod Tulloss
-
- Sunday, November 15 1:30pm** **MEETING & LECTURE**
Frelinghuysen Arboretum, Morristown
Our guest speaker will be **Lauren Czaplicki** from Duke University. Her topic will be "A Fungus walks into a Superfund site: A fungal biostimulation adventure"
-



IN MEMORIAM
VIOLA SPOCK

We are sad to report that one of our long-time members, Viola Spock, passed away at the age of 94 on July 21st after a long illness. Viola, along with her husband Joe and their daughter, Melanie, joined NJMA in 1978. Viola and Melanie exhibited their mushroom-dyed yarns and fabric creations at Fungus Fest for many, many years. Those of us who knew Viola always looked forward to the baked treats she would bring to club events, like the *kolache* (Polish jam filled pastries) and her Mini-Cherry Cheesecakes. Our picnics and potlucks would not have been the same without her famous Stuffed Cabbage. Most of our current membership never had the pleasure of meeting Viola because failing health prevented her from taking part in club activities in her later years.

Our condolences and thoughts go out to her daughters, Melanie and Kathleen, on their loss.



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.



**COLLECTING
AND
COLORING
MUSHROOMS**

Collecting and coloring mushrooms is fun
A lost art they don't teach in school
Something about it just makes me believe
The Mushroom God must be cool

This God must be really creative
To make so many mystical things
Some mushrooms have fluffy feathers
And others have colorful rings

Some mushrooms taste so delicious
Some others not quite so much
Some are so soft and furry
Some others you shouldn't touch

Some stand alone and some bunch in a clutch
Some hide themselves underground
We don't know the half of what mushrooms can do
And they're doing it all around

There are magical kinds that I still haven't found
Those send you to inner space
If you know where to look they are easy to find
They're growing all over the place

They help people see different colors
Observe with a new pair of eyes
Collecting and coloring mushrooms is fun
I think I might give it a try

– Steve Sterling

NJMA CULINARY GROUP NEWS

by Jim Richards, photos by Walt Meissner

On July 11th, the Culinary Group had a Caribbean Cookout at Harry Dunham Park in Basking Ridge. The favorite dishes of the afternoon were Guava-Goat Cheese Empanadas (a dessert) followed closely by two entrees, *Ropa Vieja* (braised beef) and Curried Goat. Mini-Jamaican Beef Patties, Jerk Chicken Wings and Mango-Coconut Cookies rounded out the top half-dozen dishes. For the complete menu and recipes for all seventeen dishes, please contact Jim Richards (jimrich17@icloud.com).

The Culinary Group has been an active part of NJMA since April 1983. The group meets for a dinner about three times a year. Unlike the other food-oriented events like the Holiday Party, Picnic, and Wild Foods, the meals are NOT pot-luck. Each dinner is planned around a theme, which is usually a national cuisine with a coordinated menu. The costs of preparing the dishes plus the rental of the space are divided equally among the attendees, with the cost of the meals averaging about \$18.00 per person. Everyone brings their own tableware plus any beverages (wine, beer, water, etc). Coffee and tea are provided.

The cooking of India will be explored in the next dinner, which is scheduled for 6:00pm on Saturday, October 24th at the Unitarian Society in East Brunswick. Space is limited and you must be a current member of NJMA to attend.

To make a reservation, or for additional information, please contact Carl Hoffman (CulinaryGrp@gmail.com).



A Caribbean dinner plate



Tropical Fruit Salad & Goat Yoghurt



Goat Curry



Coconut Mango Cookies



ask gus!

WHAT ARE MYCORRHIZAE?

(This is an ongoing column for members to ask questions about any aspect of NJMA. The target audience is new members, but anyone with a question is welcome to send it in: njmaeditor@gmail.com and use "Ask Gus" as your subject.)

Dear Gus,

I have been hearing a lot of people in NJMA talk about mycorrhizae. What are they? And how important is it for me to know about them? How will it help me find mushrooms in the field?

Mycorrhiza really isn't a "they", it's a "what": an association of fungi with plant roots. From George Barron's glossary, mycorrhizae are "naturalistic, symbiotic associations between fungi and the roots of higher plants, particularly forest trees."

A mycorrhizal fungus can infect a plant's roots; usually in a good way. The fungus will take nutrients from the plant for its own survival, growth and reproduction. A plant makes these nutrients through photosynthesis. And what does the plant get out of the deal, you may wonder. Something akin to the internet! It becomes part of what researchers in the field are referring to as the "Wood Wide Web." Fungi have mycelia (*singular: mycelium*) for absorbing the raw materials needed for their survival from the surrounding soil, just like plants have roots. But the mycelium is much finer and farther-reaching than the roots of a plant. If you have ever lifted up a log and seen a web of fine white threads, what you are seeing is the mycelium of fungi. Being so much finer than the roots of a plant, the mycelium has a much greater surface area from which the fungus can absorb materials like water and minerals from the soil. As it does this, it passes on some of what it absorbs to the roots of the plant for the plant's own survival, growth and reproduction.

As the fungus spreads throughout the soil, it can form a large network of inter-connectivity between itself and many plants and trees and other fungi. New research suggests that these networks even allow for an exchange of chemical messages among the network participants, allowing plants to exchange nutrients through the mycelium. A really wonderful illustration of this inter-connectivity can be found at the website of the [Australian National Botanic Gardens and Australian National Herbarium](http://www.anbg.gov.au/fungi/mycorrhiza.html). Scroll down to the section titled "A thousand words", as in what a picture is worth. (For print edition readers, this address is <http://www.anbg.gov.au/fungi/mycorrhiza.html>)

Mushrooms are the fruiting bodies of all those mycor-

rhizal fungi we have been talking about. Scientists now think that over 80% of land plants benefit from mycorrhizal relationships. Those plants that we might grow in our garden for food have relationships with fungi that have fruiting bodies that are too small for us to see without a microscope. "No mushrooms to see here, move along." But with trees, as Barron notes, there you just might get lucky. This is the payoff and what you, an aspiring "Mushroom Hunter Extraordinaire," really wants to know...how it helps you to find mushrooms!

The mycorrhizal fungi worth tracking down are those that produce fruiting bodies that are big and good to eat. Some fungi are promiscuous and will partner with the roots of many different trees and plants. But there are others that tend to partner with a particular plant or tree. You can increase your chances of finding some desirable mushrooms by learning what plant or tree it is most likely to partner with. Here are some examples to get you started: Look for Black Trumpets (*Craterellus fallax*) around beech and oak trees. Smooth Chanterelles (*Cantharellus lateritius*) also like oak trees, while Chanterelles (*Cantharellus cibarius*) like birch trees. Look for the Chicken-Fat Bolete (*Suillus americanus*) in with white pine. Start studying up on what these trees look like; it just may get you to some good eating!

Have fun!

- Gus



PHOTO BY RAYMOND FATTO

Mycelia growing in a laboratory Petri dish



PHOTO BY JIM BARG

A very tiny mushroom showing the growth of mycelia at its base.

WHO'S IN A NAME?

Jafnea semitosta

by John Dawson (fiftieth of a series)

Jafnea semitosta (Berkeley and Curtis) Korf is a large cup fungus that resembles the much smaller *Humaria hemisphaerica*. Its generic name¹ is an eponymous acronym for the Swedish mycologist Johann Axel Frithiof Nannfeldt. Born 18 January 1904 in Trelleborg, Sweden, to Johann Frithiof Nannfeldt and Hedwig Antonia Elisabeth Andersson, Nannfeldt grew up in Linköping, where his father was a customs official, and died 4 November 1985 in Uppsala, the city in which he spent his entire scientific career. In 1935, he married Ragnhild Birgitta Grundell in Gävle, and she and an adopted son, Björn Grünwald, survived him.

According to the entry about him by Nils Lundqvist in *Svenskt biografiskt lexikon*,² his interest in nature was stimulated early in his youth by his father. An excellent student, he matriculated at the University of Uppsala in 1921, majoring in botany, and while still an undergraduate was employed as a scientific worker in the herbarium at the University's Botanical Institute (now the Institute of Systematic Botany). His first scientific paper, a revision of the taxonomy of the collective plant genus *Centella asiatica*, was based on work he did there and was



Johann Axel Frithiof Nannfeldt



Jafnea semitosta

published when he was just twenty.

Nannfeldt continued to publish on vascular plants throughout his career,³ but he became best known for his mycological work, especially his studies of discomycetes, which Lundqvist reports were suggested to him as a subject worthy of study by Einar du Rietz, “a plant ecologist... [and] keen lichenologist” at Uppsala.

Nannfeldt received his doctorate from Uppsala in 1932 and was immediately appointed as a docent in botany there. He was promoted to full professor of systematic botany at Uppsala in 1939 and remained so until his retirement in 1970, serving as Director of the Herbarium and Botanic Garden in addition to his teaching responsibilities. After retirement, he was able to

devote his full energies to research, which he continued up to the time of his death, even while hospitalized with terminal emphysema and being administered oxygen through a nasal tube.⁴

Nannfeldt's doctoral dissertation, “Studien über die Morphologie und Systematik der nicht-lichenisierten inoperculaten Discomyceten” (Studies of the morphology and taxonomy of non-lichenizing inoperculate discomycetes) contained a 56-page prologue in which he advanced the then-daring thesis that the higher ascomycetes did not form a natural taxonomic group, but that the true pyrenomycetes were closely related to the discomycetes and should be grouped together with them as the order Ascohymeniales, while the non-hymenial pyrenomycetes should be placed in a separate order, the Ascoculares.⁵ Nannfeldt did not engage in further work on general ascomycete taxonomy, and subsequent studies by others showed that matters were more complicated than he had envisioned, so that the orders he created are now no longer recognized. Nevertheless, his pioneering work in that area was very influential.

Nannfeldt did not make use of the more modern techniques (such as cladistics and electron microscopy) that came into use during the later years of his career, but he kept abreast of developments and collected specimens assiduously, both of fungi and vascular plants. Many of his 25,000 numbered collections were published as exsiccati;

¹ Created by Richard Korf in his article “*Jafnea*, a new genus of the Pezizaceae”, *Nagaoa* 7:5 (1960), 3–8.

² I am indebted to my colleague Cecilia Heydl-Cortinez for translating that entry for me from the Swedish. A somewhat abbreviated English version of it, also containing the portrait of Nannfeldt reproduced here, was published as an obituary tribute to Nannfeldt in *Transactions of the British Mycological Society* 87:3 (1986), 347–352.

³ His taxonomic work on the grass genus *Poa* is noted as being especially significant.

⁴ As reported by Lennart Holm in his obituary article “Ian Axel Nannfeldt, 1904–1985” (*Mycologia* 78:5 (1986), 692–693), the other principal source for this profile.

⁵ Lundqvist, *op.cit.*, p. 347.

in particular, together with Seth Lundell he published *Fungi exsiccati suecici, praesertim upsaliensis* (dried Swedish fungi from the region of Uppsala), containing 3300 specimens, 900 of which he had collected.

Nannfeldt published important monographs on such fungal genera as *Camarops*, *Otidea* and *Helvella*, and “thoroughly revised” the taxonomy of European species of *Exobasidium*. Apart from discomycetes, he also published articles on such genera as *Sarcodon* and *Russula*, and in 1934, he collaborated with Elias Mellin on a large work devoted to studies in culture of various genera of mitosporic fungi that cause “blueing of ground wood pulp”.⁶ In addition, according to Lundqvist,⁷ Nannfeldt’s recognition that lichens were “lichenized fungi” and should be classified as such was an important contribution to lichen taxonomy.

The bibliography of Nannfeldt’s scientific publications appended to Lundqvist’s obituary tribute to him lists 110 items, including six posthumous ones. In addition, he was a co-author of a number of popular floras, including “Vilda växter i Norden” (Wild plants in the North), “Svenskt flora för skolor” (Swedish flowers for schools) and “Svenskt växter i text och bild” (Swedish plants in texts and pictures).

Besides his teaching and research, Nannfeldt served as Vice-President of the University of Uppsala from 1964–1970; was editor of several journals, especially *Symbolae Botanicae Upsalienses* (from 1942 to 1975); and was a member of numerous learned societies, including the Royal Swedish Academy of Sciences and the British Mycological Society, of which, at the time of his death, he was the “longest serving Honorary Member,” having been elected such in 1956.⁸



⁶ Information in this paragraph is taken from Holm, *op.cit.*, p. 693.

⁷ *Loc. cit.*

⁸ Lundqvist, *loc. cit.*

“WHAT’S ON THAT TWIG?” WORKSHOP

presented by Dorothy Smullen, summarized by Luke Smithson

The “What’s On That Twig” workshop was held this past April at the Scherman Hoffman Wildlife Sanctuary, presented by our own Dorothy Smullen. The class was attended by myself and two other students, all of us eager to dive into learning about these tiny, often overlooked fungi. After some small talk that included some book recommendations (see below), we settled down to view Dorothy’s slides.

The slide presentation primarily consisted of photos basically arranged by group: ascomycetes, basidiomycetes, and lichens, along with a conversation about their identifying characteristics. We discussed both macro and micro identification of these fungi, as well as

some tips and tricks for identification. For instance, we were told that a fresh *Stereum ostrea* should bleed when scratched, and that a drop of KOH will stain it black (often with a flash of red). A lot of new names were being thrown out here. As we all know, the names just keep changing! We also learned some new “common” names being coined by Gary Lincoff and the New York club. *Peniophora albobadia* = Giraffe Spots (corticoid Russulaceae that grow on stone fruit branches and look like giraffe spots). *Punctularia strigosozonata* = Bacon Strips (a white rot basidio that grows on Quaking Aspen and other downed trees and strongly resembles strips of bacon). They are a funny bunch up there! For Facebook fans, I would recommend “friending” Gary Lincoff and “following” the New York Mycological Society...they post a lot of good information on their pages.

After the slide presentation, we all went outside for a walk around the property. Down along the creek, we found a number of interesting species including lots of last years *Scorias spongiosa* (a sooty mold that grows on the honey dew of beech aphids) and several fresh specimens of *Guepiniopsis buccina*. *Guepiniopsis* is a very tiny, inconspicuous (although brightly colored) jelly mushroom that is generally considered uncommon. Only six Northeastern observations show up on *Mushroom Observer* over the last five years. We have found it twice at NJMA events over the past year. As discussed at this workshop, many of these tiny, uncommon mushrooms may not be so uncommon after all, but merely overlooked.



Guepiniopsis buccina

We spent the last portion of the workshop using microscopes to look at our finds and to take some photos. I came home with several pages of new mushroom names and descriptions, lots of new tricks up my sleeve to ID these mushrooms, and an even greater appreciation for the tiny, twig-inhabiting species. Learning these fungi will greatly expand our understanding of woodland ecology as well as expand the species list on our forays. Thanks Dorothy!

The books that we were discussing (and recommending to each other):

- *Poroid Fungi of Europe* (Ryvarden and Melo)
- *The Kingdom of Fungi* (Jens Petersen)
- *British Ascomycetes* (RWG Dennis)... I was told that this book is regularly supplemented with email updates.

(Editor’s note: the Ryvarden and Petersen books may be borrowed from the NJMA Library)



"SEEING MUSHROOMS BY DRAWING THEM" A WORKSHOP WITH KATY LYNESS

by Jim Richards

On Sunday, June 7th, professional artist and NJMA member, Katy Lyness, introduced a group of seven students to some of the techniques that she employs when making botanical illustrations.

She began by showing us some of her fabulous sketchbooks to give us an idea of what can be done with many years of practice and a lot of talent. Then, it was back to reality. The class began with a series of exercises to familiarize us with the equipment we would be using: a variety of pencils in different degrees of hardness, different types of erasers, and fine markers. After this beginning, we moved on to quick studies of shapes, shadows and perspective.

Finally, it was time for us to select the mushroom that we intended to draw. Patricia McNaught had led a small foray on the day before the class to find some specimens for us to "immortalize" in art. So we had a group of about thirty different kinds of fungi to select from: a wide range from tiny gilled mushrooms to larger polypores as well as store-bought buttons and shiitake.

We started by making a number of very, very quick sketches of the outline of the subject we had selected from different angles, etc. Once we had settled on the view that we wished to capture, we began work on the actual drawing. Katy circulated among us as we worked, giving suggestions that we could use to improve our technique. She used a small portable light to show us how, by changing to a stronger light source and increasing the shadows, we could sharpen the sketch and increase details. I was complaining that I thought my drawing was flat, and had no feeling of solidity. Her suggestions of adding a shadow, using an eraser to lighten some areas of the sketch, and really using a softer pencil to intensify others, made a big difference.

A couple of the workshop participants were talented, experienced artists who were looking for new subjects

to draw. Others of us were almost complete novices. We all agreed that taking the time to make a drawing of a mushroom really forces you to look at them. You get to see so much more than simply snapping a photo. Thank you for sharing your expertise with us, Katy! We hope we can do it again.



Katy Lyness coaches Stephanie Ritson and Patricia McNaught on the finer points of their drawing technique



A piece of mushroom art by Carolyn Thornton, one of the class participants



During the class, Katy showed some examples from her fabulous extensive sketchbook.

JUNE 14 – NJMA WILD FOODS WALK AND PICNIC

reported by Ellen Hess

Rachel Mackow is an active steward of Spaceship Earth. She and her husband, Jared Rosenbaum, run Wild Ridge Plants, a New Jersey native plant nursery that grows local native plants for ecological restoration, landscape design, permaculture, and herbalism. They both offer presentations and guided walks on plant ecology, edible and medicinal plants, landscape restoration, and native horticulture. On June 14th, NJMA members and guests were treated to a guided nature walk led by Rachel, featuring local New Jersey edible and medicinal wild plants.

The sun was already flexing its muscles as the group gathered to begin our walk. As the group moved from one shady spot to gather at the next one, Rachel offered a narrative tour of the many edible and medicinal plants growing at this New Jersey site, and their dietary and medicinal applications.

Rachel told us that, in spring, wild edible greens are frequently very bitter. That bitter aspect acts as a trigger to the digestive system because it acts as a blood purifier after our limited winter diet (your daily coffee is a bitter). She also informed us that dandelions, a European transplant and very common bitter, were used as diuretics (so much so that the plant was known as *pis-en-lit* in France). We viewed wild fruit and berry trees, common weeds and wild plants that frequently go unnoticed unless you are aware of their culinary or functional applications.

At the conclusion of the walk, NJMA members assembled under a covered picnic shelter and spread out an assortment of cold and hot foods prepared with some wild ingredients. Members enjoyed delicacies such as a Milkweed Frittata, Nettle Quiche and Redbud Blossom Muffin-tops, accompanied by Ursula's mouth-watering Morel Soup. Coconut Curried Veggies with Lambs Quarters, and Ramps in Butter were presented along with Charred Squash bathed in honey and nuts. For the adventurous, Braised Squirrel, slow cooked in an elegant wine sauce, offered the ultimate in wild gourmet dining experiences. Dessert offerings included Strawberry Rhubarb Crostata, Candy Cap Shortbread Cookies, and delicate crepes presented with a choice of elderberry or grape syrups.

NJMA members can learn more about Rachel and Jason's business of growing locally adapted native plants at their website, wildridgeplants.com. Rachel also writes a regular column for *Edible Jersey* magazine. Her writing and photography may be found at theshagbark-speaks.blogspot.com.



PHOTO BY STEVE STERLING

Behold the wild chive! Rachel Mackow displays a young seedhead.



PHOTO BY STEVE STERLING

A potluck selection of dishes, many of them containing wild edibles



PHOTO BY STEVE STERLING

...and the crowd goes "wild"! (Foods, that is!)

JUNE 21 – LAKE OCQUITTUNK FAMILY CAMPING AREA (STOKES STATE FOREST)

report and photos by Nina Burghardt

It had rained off and on for several days before the Lake Ocquittunk foray. The night before, the rain came down in buckets and rain was predicted for that Sunday. As we drove into the parking lot, the sun came out, the sky turned blue, and the temperature could not have been better. (Poor Jim Barg, our original foray leader, was stuck at home waiting for a plumber.) We had a group of about 25 people, so half of us went up the Flatbrook and half of us went downstream.

As we entered the woods, *Marasmius* was covering the forest floor. The trouble with *Marasmius* is that they rehydrate after a rain for a few hours and then they are nowhere to be found. You put them into your basket to identify and when you get home they have disappeared.

There were plenty of mushrooms that did not disappear. There was the beautiful *Tylopilus chromapes* with its bright yellow foot. Clem and Dina found a rare *Caloboletus (Boletus) inedulius* (grey cap, yellow pores, pink and yellow stipe) that Igor identified. *Boletus*



Caloboletus inedulius



Boletus fraternus



Melanoleuca verrucipes

fraternus (small red cap, non-staining yellow pores, long rough stipe) was identified by Dave W. He also identified a bolete with a bright pink cap, yellow pores and stipe, as *Boletus pallidoroseus*.

There was a *Helvella elastica*. We often find *Helvella*s at this foray. *Helvella*s are ascomycetes (as are morels) so they have no gills or pores. *H. elastica* has spores with an enormous oil drop in the middle. *Microstoma floccosa* was another fairly unusual asco (small hairy pink cup) which appeared on the table.

A *Melanoleuca verrucipes* had a beautiful smell of almonds. New to our NJ list, it has crowded gills, a white spore print and spores that are amyloid. The stipe has dots under the cap.

As usual, there were a few unidentified fungi, such as the purple poroid fungus that Chris found and a fruity-smelling *Lyophyllum*. We always find odd fungi on this foray and this year proved to be no different.



Microstoma floccosa (Sarcosypha)

JULY 12 – HORSESHOE BEND PARK

by Nina Burhardt

On July 12, NJMA had a foray in Horseshoe Bend Park, owned by Kingwood Township, in Hunterdon County. This was a new venue for NJMA, and it turned out to be very productive with about 100 species named. There was good mix of genera except for *Agaricus*.

In 2001, Horseshoe Bend was going to be developed with 70 houses. There were negotiations back and forth to save the land, and in 2011, Horseshoe Bend became a park. Of course, the recession probably had a lot to do with it. The NJ Conservation Foundation paid \$444,679, and the Green Acres Fund chipped in with another \$694,679. The Hunterdon Land Trust, private donations and NJ state government also contributed. Now the park is enjoyed by people of diverse interests. There is a seven-acre dog park and a dog show in August. There are lots of equestrian trails and a horse show in September. Birders try to catch glimpses of bobolinks, meadowlarks and the rare grasshopper sparrow. The

butterfly people might catch a glimpse of the *Polygonia progne* butterfly. Boy Scouts and The Friends of Horseshoe Bend work to clear and maintain many trails. In the winter there is hunting.

Kingwood Township is very proud of the Morton Building where we had our identification session. This is a spacious, well-lit building with two mega garage doors which create a nice through draft. There are lots of overhead lights, outlets, toilets and heating in the winter. There is a camp in the summer and the DelVal Dawgs cheerleaders practicing in the cooler months. It was wonderful to be able to identify and photograph mushrooms in so much light. (I wish the many NAMA and NEMF conferences I have attended had as much light.)



PHOTO BY STEVE STERLING

Down the slopes at Horseshoe Bend Park



PHOTO © 2015 WM. P. WOODALL

Collecting a *Tylopilus alboater*

Most of the trails were well-marked. We divided up into two groups. One group walked along Bark's Run Creek and the other took the more upland Orange Trail. It is easy to get lost in the ten miles of trails, but everyone was accounted for. Horseshoe Bend Park is 450 acres, but it is stitched together with other Green Acres properties so that 800 acres in total has been saved for the use of the public.

This is a great place to collect mushrooms, walk, and run your dog. We thank Kingwood Township for allowing us to collect in such an interesting area.



PHOTO BY STEVE STERLING

Foragers assemble!

JULY 12 – MEADOWOOD PARK

by Dorothy Smullen

Although it had been dry, members found over 100 species. There was a lot of exchange of information along the way that beginners found useful. Many members went home with lots of black trumpets and smooth chanterelles. Cinnabar chanterelles were also present in great numbers along the stream. Back at the picnic shed, field guides were opened as members worked with the specimens together. Igor was busy identifying boletes and Bob Hosh found a *Russula earlii*.



PHOTO BY STEVE STERLING

One of the more unusual fungi found at Meadowood Park was *Asterophora lycoperdoides*. It is a parasite on darkening *Russulas* after they have begun to decay. Its gills are poorly formed, but it clones itself with asexual spores (powdery on top of cap) that are star-shaped, hence the name *Asterophora* – “star-bearer”.

See Tom Volk’s *December 2005 “Fungus of the Month”*.



PHOTO BY STEVE STERLING

“Look ma, I found chanterelles!”

FINDING A NEW MUSHROOM

by Dorothy Smullen

It is not very often that, after 40-plus years of working at the identification of mushrooms, I come across a specimen that I have never seen, either on forays or in field guides. I found such a specimen in the grass in my son’s back yard. I thought it might be pink-spored, but didn’t want to even guess the genus. I made a setup to collect a spore print, and upon checking the next morning, I found it was white (cream). That changed things, so I went online with a guess and typed in “Gymnopus in grass”. Of course, Michael Kuo’s website came up. His key to “collybioid” mushrooms instantly went to *Melanoleuca*. From there it looked like I had *Melanoleuca graminicola*.

The cap is smooth, brown with a slight center depression around a central bump. Gills are attached and white. Spores are ornamented with amyloid warts – about 7 x 5 microns average, which agrees with the website description. There were no cystidia. It doesn’t seem to be in any NEMF or NJMA records...perhaps a new record for New Jersey.



PHOTO BY STEVE STERLING

Slugfeast at the Meadowood foray! (on *Boletus separans*)



PHOTOS BY DOROTHY SMULLEN

Melanoleuca graminicola

UNION COUNTY BIOBLITZ

reported by Dorothy Smullen

Co-chairs Dorothy Smullen and Marc Grobman were assisted by Melanie Spock, Natalie Howe, Nina Burghardt, Mike Rubin, Hadas Parag, Patricia McNaught, Sharon and Steve Sterling, and Rhoda Roper. Thanks to all.

11 lichens and 51 fungi and slime molds were identified at Watchung Reservation.

17 new species were added to the list of 184 fungi, giving a total of 201 for the Union County Parks Bioblitz which occurs each June.



BYTES, BITS, & BITES TASTY LITTLE TIDBITS FROM OUR MEMBERS

from Patricia McNaught:

Lyme Disease that isn't: So maybe you had typical Lyme disease symptoms, but your test results for Lyme disease were negative. It's possible that you were infected with *Borrelia miyamotoi*. The first infection in the US was reported from NJ a couple of years ago. The symptoms are fever, chills, and headache as well as body and joint pain and fatigue. Untreated, it can lead to confusion and mental decline. *B. miyamotoi* is carried by black-legged (deer) ticks, as is *B. burgdorfi*, which causes Lyme disease. Only a few regional labs can test for *B. miyamotoi*, but it appears the disease it causes (which is as yet unnamed) can be readily treated. One study of patients being treated for Lyme symptoms showed that 21% of them actually were infected with *B. miyamotoi*.

Hey, just more reason to spray up before going off-trail.

from the Food53 blog:

The best use for mushroom stems:

<http://tinyurl.com/pepphh3>

from Cecily Franklin (Western PA Mushroom Club):

The Western Pennsylvania Mushroom Club is pleased to announce its 15th Annual Gary Lincoff Mushroom Foray on September 18-20, 2015. This year's foray will be a weekend-long event. Each day will be a separate activity and priced accordingly. Attendees will have the choice of attending any or all of the activities. Housing for the event will be the responsibility of the attendee. More details and registration form are available on our website:

<http://wpamushroomclub.org/lincoff-foray/>

from the New York Times:

Cutting out the Meat with Mushrooms

<http://nyti.ms/18obwwV>

from the Editor:

When the wild ones are not showing up:

<http://tinyurl.com/pwtm4n>

from Grub Street:

Inside the Intensely Secretive, Ultracompetitive World of Restaurant Foragers – “They are crazy and tend to be reclusive...You never ask where they found what they foraged or they might never...”

<http://tinyurl.com/qdoxqvp>

(continues on page 21)

WELCOME TO ALL OF OUR NEW NJMA MEMBERS!

We'd like to extend a warm welcome to the following members who joined us between June 21, 2015 and August 18, 2015. We look forward to seeing you at lectures, forays, and other NJMA events. Happy 'shrooming!

Thomas Astraski	Delran, NJ
Nicole Buglione	Clifton, NJ
Grant Carey	Little Egg Harbor, NJ
Daniel Esposito	Staten Island, NY
Samir Farag	South Plainfield, NJ
Richard & Faith Fernandez	Freehold, NJ
Deborah Hughes	Chester, NJ
David Kolet-Mandrikov	Princeton, NJ
Vladimir & Galina Krasnits	Edison, NJ
David Landry	Denville, NJ
Ann Lang	Farmingdale, NJ
Yanyuan Liu	Livingston, NJ
Michael Martin	Madison, NJ
Sue McClary	Hillsborough, NJ
Christopher Minarich	New York, NY
Kyoko Okabe	Glen Rock, NJ
Barbara Patrizzi	Philadelphia, PA
Lauren Perella	Frenchtown, NJ
Raymond Pogwist	Ocean, NJ
Ronnie Port	Riverside, NJ
Alexander Pustelnik	Fort Lee, NJ
Lynne Shapiro	Hoboken, NJ
James Springer	Jackson, NJ
Nina Stryker	Princeton, NJ
Paul Thurber	Glen Rock, NJ
Valerie Tomasino	Aberdeen, NJ
William Woodall	Bedminster, NJ
Helen Yang	Elmwood Park, NJ
Jingjin Yu	Edison, NJ
Maxim Zhukov	Staten Island, NY

WHAT YOU MISSED AT NEMF 2015

by Patricia McNaught

The North East Mycological Federation has an annual meeting with workshops and forays. The 2015 meeting was held at Connecticut College in New London.

In case you missed it, here are some highlights:

Walks: Looking for mushrooms in summer is always a crapshoot. Foraging at the NEMF sites was good to excellent, with the exception of one walk. But a couple of people said of that walk, “There weren’t any mushrooms, but how could I complain – I got to sit under a tree with an on-shore breeze and watch the waves roll in.”



Careful with that specimen!

Workshops: The workshops I went to were outstanding. Renee LeBoeuf presented an overview of the recent major revision of boletes. She essentially organized the many new bolete genera into a rational outline based on the original publications. I also went to Roz Lowen’s Ascomycete Workshops. The first part was an introduction to microscopy led by Jason Karakehian, but I was glad I went, because I learned a few things. For the second part we worked with asco specimens to determine their key characteristics. We could then check our observations against the descriptions in *Fungi of Switzerland*. I saw how “iffy” identifications based on field characteristics become spot-on secure IDs when you look at microscopic characteristics. I also saw how asco spores are very, very bizarre and beautiful.

Evening Programs: The evening programs were all excellent, but two stood out for me. Gary Lincoff described the survey of macrofungi in Central Park that the New York Mycological Society is conducting on an ongoing basis. They have “gone deep”, identifying the slime molds and crust fungi that often get overlooked. It was a good example both of how mushroom ID is collaborative (no one person can be an expert in all of the genera) and also of how urban dwellers can connect with mushrooms, and more broadly to the natural world without leaving the city. The other program I

(continues on next page)



Roz Lowen presents a review of some NEMF finds.



Alan Bessette conversing with a NEMF attendee



PHOTO BY MARY ANNE CARLETTA

A portion of the spectacular elegant NEMF mycophagy spread

found fascinating was on research being done by Ed Mena (LifePharms, Inc.) on evaluating mushroom compounds for anti-cancer, anti-viral and anti-fungal activity. He outlined the long, financially risky process involved, but ended on a promising note. NIAID is funding further testing (by Yale and by Case Western) of a compound he found to be active against drug-resistant fungal infections. (We've all seen fungus growing on mushrooms; it makes sense mushrooms would evolve some defenses.) Fungal infections are major risks for people with HIV, transplant recipients and cancer patients, and there is a need for new treatments.

Mycophagy: This was a tasting of mushroom dishes, and honestly, it just blew me away: Creative, elegant and delicious. Go to <http://the3foragers.blogspot.com/> for pictures and details. Kudos to the "Three foragers".

Next Year: The 2016 NEMF foray, hosted by the Boston Mycological Club, will be in Fitchburg, Massachusetts from July 28th to August 1st. 



Bill Yule studies a bolete while Gene Yetter looks on.

PHOTO BY STEVE STERLING

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BECOMING UNLOST IN THE WOODS

by Wren Hudgins

reprinted from *Spore Prints*, the newsletter of the Puget Sound Mycological Society, June 2015

The story goes that Daniel Boone was once asked if he had ever been lost in the woods. His oft-quoted response was some variation on "Well, there was a week or two where I was pretty confused as to where I was, but I've never been lost." Beyond the amusement, the story illustrates two important points:

- Being lost is a state of mind, almost a decision one makes. Boone didn't decide he was lost despite a week or two of wandering.
- The panic that often accompanies the state of being lost is optional.

This article will summarize research on the behavior of lost persons, discuss strategies potentially useful in the event one is already lost, and, finally, discuss prevention strategies. The research on lost-person behavior has been expertly summarized by Robert Koester in his 2008 book *Lost Person Behavior; a Search and Rescue Guide for Where to Look for Land, Air and Water*. Material from his book is used here with the author's permission. Information on obtaining his book is at the end of this article.

Being lost is a special case and a subset of being missing, which includes such circumstances as being stranded, overdue, trapped, incapacitated, and others. It's an important distinction because lost persons act differently from those who are missing for other reasons. So, for this article we focus only on the lost. A reasonable definition of "lost" comes from Ken Hill, as quoted in Koester's book, as having two components:

- confusion as to current location in respect to finding other locations
- inability to reorient

General Tendencies of Lost People

Search and rescue literature has come a long way and is much more statistically based than ever before. We know some general tendencies of lost-person behavior and we know more detailed tendencies of specific

groups. Mushroomers fall into the “gatherer” category, which would include anyone out in the woods collecting anything. In Koester’s database, mushroomers make up 70% of the “gatherer” category. However, first we’ll cover ten general tendencies of most lost persons:

1. The lost are not randomly distributed over the landscape, but cluster in somewhat predictable locations.
2. There is some evidence that solo lost persons fare worse than a group of lost persons and that solo males fare worse than both lost groups and lost solo females.
3. Lost combinations of an adult and a child tend not to wander very far.
4. The median length of a search is 3 hours and 10 minutes (median is the middle point, the 50th search out of 100).
5. The mean (average) length of a search is 16 hours and 20 minutes. (This is skewed by a few exceptionally long searches, so “median” may be a better measure of the central tendency.)
6. When lost without landmarks, people do tend to walk in circles; 55% veer to the right and 45% veer to the left.
7. When given a choice of paths in unknown woods, people make the following choices about turning:
 - 69% of right-handed people who drive on the right side of the road, go right,
 - 47% of right-handed people who drive on the left side, go left, and
 - 70% of left-handed people, no matter what side they drive on, turn left.
8. There is a tendency for both rescuers and lost persons alike to veer away from irritants like wind, steep slopes, and tight vegetation.
9. There is moderate evidence that lost persons tend to walk downhill more than uphill.
10. There is considerable evidence that lost persons walk much more during the day than during the night.

Knowing these tendencies gives you a chance to correct them. For example, if you are trying to contour around a slope and remain at the same elevation, you will know that over some distance, there is a tendency to drift downhill. You can then take steps to attend to that variable and stay level.

Reorientation Strategies

So, generally speaking, the following are the strategies lost persons tend to use to reorient themselves. I will list these in order of descending efficacy (in my opinion). Please bear in mind that a number of variables affect whether a particular strategy is a good one at any given time. My ordering is a general one, and suggestive, intended to provoke thinking.

1. Use travel aids (compass, GPS, landmarks, cell phone with GPS application).
2. Backtrack (only if you can do this carefully and actually recognize the ground you are covering as familiar, which, in turn, depends on being observant on the way in).
3. Stay put.
4. Enhance your view. Climb to a higher place to see the “big picture” and possibly get cell phone reception.
5. Sample different routes. Note where you are and follow paths in different directions to see if anything looks familiar, but keep the original place in sight; then return to the original place, sample a different path, etc.
6. Sample different directions. Same as above but in the absence of paths, sample east, west, north, and south.
7. Travel a route. Pick a path and keep following it.
8. Travel a direction. Pick a direction and keep traveling that direction.
9. Use folk wisdom. Follow such adages as “all streams lead to civilization” or “moss only grows on the north side of trees.”
10. Travel randomly. This is often accompanied by panic and follows the path of least resistance.
11. Do nothing to help yourself. Don’t travel, put on rain gear or warm clothes, build a fire, anything.

Mushroomers’ Special Risks

We mushroomers, however, present special risks because of a number of factors. The science, and it is a science, of finding lost persons becomes more exact when we focus on behaviors of specific groups like “gatherers.” Besides mushrooms, people gather berries, rocks, wood, Christmas trees, pinion nuts, ferns for floral arrangements, and other things. There are aspects of our behavior as mushroomers that complicate our rescue if lost. Koester says that compared to other groups in the gatherer category, “Mushroom pickers may not fare as well under long term survival conditions.” Here are some reasons why this statement is likely true:

“We mushroomers, however, present special risks because of a number of factors.”

- We tend to keep our destinations secret: We rarely tell anyone exactly where we are going.
- We tend not to be on trails, which would at least give us a 50/50 chance of going the right direction and getting out.
- We seldom have a mental picture of the general area.
- We spend all our time looking down.
- We walk in circles.
- 83 percent of us go out alone. We never plan to be out very long and tend not to bring extra clothes and emergency supplies.
- We have successfully navigated in and out of the woods before, so we believe this time will be no different.

- 81 percent of us who become lost, do so because of poor or missing navigational skills.

Recommended Steps

So, knowing all the above, there are some recommended steps you can take, which would greatly reduce the risk of becoming lost and, if already lost, would greatly decrease the chances of tragedy. These recommendations fall into two groups: (1) things you can do before you go out and (2) things you can do when already out. Much of this will seem like common sense, but sometimes common sense is a rare commodity in the woods. The following are recommended steps to take before going out:

- Check the weather forecast.
- Assemble the appropriate gear, perhaps in a backpack (all weather clothing and gear, 10 essentials, navigational gear, first aid, whistle, etc.)
- Learn to use your navigational gear.
- Charge your phone and/or take an extra battery or solar charger.
- Line up a hunting buddy.
- Take walkie talkies.
- Know how to send text messages.
- Consider carrying an EPRB (Emergency Personal Rescue Beacon).
- Take spare batteries for your devices (GPS, walkie talkies, etc.).
- Tell someone where you are going and when you intend to be back.

There are a few smartphone applications into which you program your contacts and your planned return time. When you return you must call up the application and tell it you have returned as otherwise it calls your contacts and tells them you have not returned. (I have not tested these.)

Finally, there are recommended strategies for once you are out in the woods, both before and after you lose yourself:

- Enter waypoints each time you leave your car or a trail. Label these so you will know what “Waypoint 004” for example, really means. Alternatively, you could write down what “Waypoint 004” means. The point is not to rely on your memory.
- Note and write down your compass bearing each time you head into the woods, whether on a trail or not. Again, do not rely on your memory.
- Notice landmarks frequently, especially when you leave the car or trail. When you are moving and stop to notice landmarks, turn around and notice what the way back looks like. Try to walk from one landmark to the next, with the last one always visible. If concerned about your ability to do this, consider loosely tying bits of bright colored surveyor’s tape

on your path so that one is visible from the next. Remove them on your way out.

- If you have an altimeter (most GPS units have one), note your starting elevation.
- If you have a map, locate yourself on it before starting to walk.
- Don’t hurry; it’s when most accidents occur.
- Recognize the feeling of panic, and when you feel it, make yourself sit down and stay put until relaxed. Do not make decisions when under the influence of panic. Use acronym STOP (stop, think, observe, plan).
- Trust your devices.
- When calm, carefully consider your options and make a plan. The plan that is best for you will not be the same every time or the same as the best one for someone else. For example, if you have no navigation devices and did not note landmarks on the way in, then backtracking, often a good plan, may not be as good a plan as staying put. Conversely, if you told no one where you were going but did note landmarks, then backtracking might be preferable to staying put.

In Summary

So there is no one best plan for every situation. Your best plan will depend on variables such as weather, the gear you have, whether or not anyone else knows where you are, how observant you were going into the woods, and especially your ability to stay calm. Panic is by far the biggest killer in wilderness emergencies. Preventing emergencies is much easier and preferable to managing them.

Reference

Koester, Robert J., *Lost Person Behavior; a Search and Rescue Guide for Where to Look for Land, Air, and Water*. dbS Productions, P.O. Box 94, Charlottesville, VA 22901 (www.dbs-sar.com) 2008. Also available on Amazon.com.



BYTES, BITS, & BITES (continued from page 17)

from *Fantastic Fungi*:

A little more about mycorrhizae and soil:

<http://tinyurl.com/pbhlc9z>

from *The Serious Eats* blog:

A Shopping Guide to Mushrooms:

<http://tinyurl.com/p5ung2c>

from *Luke Smithson*:

While not mushrooms, I thought this foray might interest some NJMAers. I may try to make it...particularly for the lichens.

<https://sites.google.com/site/andrewsforay2015nj/>

from the *Editor*:

Why getting out in nature is good for you:

<http://tinyurl.com/qyz6ccj>



NJMA PHOTO CONTEST 2015

Send us your best shots!

DEADLINE FOR ENTRIES: **NOVEMBER 7, 2015**

If you haven't already started doing so, get your photos together *now* and don't miss the deadline. Winners will receive valuable awards (see below), plus you'll receive heaps of praise from your fellow NJMA members. Also, your winning photos will become a permanent part of the NJMA Photo Library.

If you need technical assistance to prepare your digital-format photos for entry, contact Jim Barg at jimbarg@bssmedia.com or call him at 908-227-0872. You can send in your entries by email, with two important restrictions. ONE: You MUST send all your entries in one email message, and TWO: You MUST include a scanned copy of your completed entry form in that message.

You can submit photos taken in *any* year. You are not limited to photos taken only this year.

Also note that *we will only accept digital files* of photos from now on. If you have a slide or print, you must have it scanned before submitting it.

THE JUDGES FOR THIS YEAR'S PHOTO CONTEST WILL BE ANNOUNCED SOON ON OUR WEBSITE.

ENTRY CATEGORIES AND DIVISIONS

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

TECHNICAL (Divisions: *Novice and Advanced*)

This category is for photos that can be used to aid in the identification of fungi, as if they were going to be used in a field guide. Emphasis will be placed on portrayal of key morphological characteristics. The subjects may be photographed *in situ* or removed to a more photographically appropriate setting. Photos through the microscope are included in this category.

PICTORIAL (Divisions: *Novice and Advanced*)

The entries in this category should be more concerned with pictorial beauty and aesthetics. It is expected that most entries will be taken *in situ* to illustrate the fungus and its surroundings. Judging criteria include consideration of both technical (focus, depth of field, exposure, lighting, color, absence of distracting elements) and artistic (composition, color, background, lighting) aspects.

JUDGES' OPTION (Divisions: *Novice and Advanced*)

The entries in this category should be mushroom-themed or mushroom-club-related and can depict anything not covered in the Pictorial or Technical Categories. For example, they may depict either people working (or playing) with mushrooms or the results of this work or play. You can use this category for photos of club or regional events, forays, and gatherings (NJMA, NEMF, NAMA, etc.) or use it for creatively-manipulated photos involving mushrooms. It may also show people cooking mushrooms (or the dishes prepared). The use of a mushroom theme as part of a craft project and the finished objects are also appropriate entries for this category...basically, anything that is *not strictly* a mushroom photograph. (If you use digital manipulation, we will **not** need to see your originals, but it is imperative that all components of your image be your original work.) Creative use of text in the image is acceptable.

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

NOVICE DIVISION	ADVANCED DIVISION
T echnical	T echnical
P ictorial	P ictorial
J udges' Option	J udges' Option

AWARDS

All entries will be shown and winners will be announced at our annual Holiday Party meeting in early December.

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

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

BEST IN SHOW (chosen from the six First Place winners): \$50.00 NJMA gift certificate

As always, winners' photos will become part of the permanent photo collection of NJMA. We also reserve the right to publish any of your entries (winners or not) on our website, in our newsletter and other NJMA publications with due credit.

SEE NEXT PAGE FOR CONTEST RULES AND HOW TO ENTER

NJMA 2015 PHOTO CONTEST RULES *(Please note that there are changes since last year!)*

1. This contest is open to current NJMA members, officers, and photo contest committee members only. Images that have previously won (including Honorable Mention) are not eligible. You are permitted to enter photos from *any* year – you are *not* limited to photos taken only during the past year.
2. You are only permitted to enter photos in one Division or the other (Novice or Advanced). Novice contestants may not enter the Advanced Division (unless they have won a First Place award in previous years – see Rule #3), and Advanced contestants may not enter the Novice division. **You must check the box on the top of the entry form indicating your entry into either the Novice or Advanced Division.** If the Photo Contest Committee determines that you have entered into the improper division, you will be reassigned to compete in the proper division.
3. **Which Division to enter:** The following types of contestants may **only** enter the Advanced Division and are not permitted to enter the Novice Division: (a) Professional photographers or those who earn any portion of their livelihood with their photographs, and (b) Anyone who has won a First Place award in the Novice Division in any previous year.
4. **All entries must be made by electronic file (.jpg or .tif) in their original resolution.** If you have a slide or print that you wish to enter into the contest, you must have it scanned and converted to a digital .jpg or .tif file. (Most copy centers now have good quality scanning services and can provide you with files in either of these formats. We recommend scanning at 300 dpi resolution at an image size of roughly 8"x10") All judging will be done on a computer monitor. If you're not sure how to prepare your digital files for submission, please call Jim Barg at 908-227-0872 for technical assistance.
5. **LABEL EACH ENTRY!** Name each file with **your initials**, followed by the **category code** (see previous page), followed by the **number of your entry**. For example, if your name is **John Doe**, and you are entering into the **Technical** category, and this is your first entry, the entry code on your first slide should read **JD-T-1.jpg** or **JD-T-1.tif** (don't forget the .jpg or .tif suffix!). **Record this same number on the entry form under "Entry Code".**
6. Fill out the entry form below, recording your entries using this code and also, if they are mushroom photos, providing your best attempt at determining the scientific name of the mushroom(s) included in the photo. (*Improper ID is no longer a cause for disqualification, but we are a mushroom club, and we'd really like you to attempt a proper ID!*) We suggest that you make a photocopy of the entry form and keep it for future reference.
7. Digital image files should be submitted by email or on optical media such as CD-R or DVD-R or PC/Mac flash storage devices (NOT the cards which are used in your digital camera). At your request, we can return flash storage devices if you provide us a stamped, self-addressed envelope (SASE) along with your entry. We accept entries by email, **but you must include a scanned (or clearly photographed) copy of the completed entry form.** If you choose to email your entries, we cannot take responsibility for lost, damaged, or undelivered files. If we receive your entries by email, we will send a confirmation when we get them.
8. **For photos entered in the Pictorial and Technical categories only:** If you do any digital manipulation to your photo, you **MUST** provide us with the original file or print to allow us to see the manipulation you did. Cropping, color correction, contrast and brightness adjustment, dust, dirt, or scratch removal, grain reduction, and sharpening are acceptable forms of digital manipulation in these two categories. Digitally-manipulated photos will not be considered for judging if we do not receive a copy of your unmodified original (It is acceptable to watermark this copy if you wish). If you intentionally add, subtract, or move any element or object that's in the original photograph, your entries will be disqualified. (Entries in the Judges' Option category are exempt from this requirement.)
9. **For photos entered in the Judges' Option category only:** Your subject must include mushrooms or anything mushroom-related (club activities and food photos are permissible just so long as they are identified in the title of the work.) You may do whatever manipulation, augmentation, subtraction, filtering, effects...whatever you wish. Any components you use must be your work (e.g., not scanned from a book or magazine or taken from the Internet). You may also creatively use text or other elements of your own making in your entry. You do **NOT** need to submit your originals.
10. Entries are limited to 12 photos per contestant, including any which may be disallowed for improper or non-permitted forms of digital manipulation.
11. By submitting to this contest, you grant NJMA the right to reproduce or publish your photos (without compensation, but with due credit) in the club newsletter, on the NJMA website, on promotional posters, or in any publication which NJMA provides to its membership or prospective members.
12. Entries must be postmarked (or date-stamped if sending by email) by 11:59 PM on November 7, 2015.

SUBMITTING YOUR ENTRIES

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

**Jim Barg
NJMA 2015 Photo Contest
220 Millbrook Road
Hardwick, NJ 07825-9658**

Email entries should be sent in ONE email message (either as multiple attachments, a Dropbox or Google Drive notification, or one .zip file containing all photos – and don't forget to include your completed entry form!) to jimbarg@bssmedia.com. We repeat: **YOU MUST** also attach a scanned copy of the entry form in your message or in whatever location you send your entries to us. Multiple email messages containing one photo each are confusing and will NOT be accepted. If you do not know how to add attachments to an email message, use Dropbox or Google Drive, or if your outgoing email cannot handle large files, please US Mail/UPS/FedEx your entries on CD-R, DVD-R, or USB flash drive to the above address.

The 2015 NJMA Photo Contest Committee members are Jim Barg and Jim Richards, with advice & discussion with NJMA President Patricia McNaught.

NJMA PHOTO CONTEST 2015

OFFICIAL ENTRY FORM

(Please fill out according to the instructions and make a copy for your records.)

I AM ENTERING IN THIS DIVISION	
<input type="checkbox"/>	NOVICE
<input type="checkbox"/>	ADVANCED

NAME OF ENTRANT _____

ADDRESS LINE 1 _____

ADDRESS LINE 2 _____

CITY, STATE, ZIP _____

EMAIL ADDRESS _____

TELEPHONE (DAY) _____ TELEPHONE (EVENING) _____

ENTRY NUMBER	ENTRY CODE <i>(see items 5 and 6 in Rules)</i>	CATEGORY <i>(check one per entry)</i>	IDENTIFICATION or CAPTION
1		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
2		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
3		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
4		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
5		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
6		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
7		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
8		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
9		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
10		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
11		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTN <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	
12		<input type="checkbox"/> TECHNICAL <input type="checkbox"/> JUDGES OPTION <input type="checkbox"/> PICTORIAL <input type="checkbox"/>	

Please remember that photos submitted on digital media will not be returned unless you enclose a SASE with your entry.

Also remember that, if you digitally manipulated or retouched your entry in the Pictorial or Technical categories, you must enclose the original (or an unmodified copy of the original, or a watermarked copy of the original) as well!

DEADLINE FOR ENTRIES IS 11:59 pm, SATURDAY, NOVEMBER 7, 2015.