

Spores Illustrated

A NEW COMA CHECKLIST - OMG: NOT NEW NAMES!

By Dianna Smith, NEMF President

A mushroom checklist, like a bird checklist, is useful in several ways. As you find various fungal species throughout the year, you put a mark next to those you come across each time you are on a walk. In doing this you will have a record of which fungi are common at particular times of the year in particular locations. You will also know which fungi to look up in your field guides for detailed descriptions so you can better familiarize yourself with their macro and microscopic characteristics. For me, one of the best perks of carrying around a fungi checklist is that I can use it as a 'cheat sheet.' I can pull it out of a pocket during a walk when I have trouble recalling the name of something I have seen in years past, but can't remember. This happens to me every year about the beginning of August, when the number of mushrooms we see suddenly skyrockets.

Don Shernoff, our club treasurer and foray organizer for many years, designed both an easy and an advanced checklist for COMA members to use. One of the nicest features of his checklists, especially for novices, was to include common names featured in Gary Lincoff's *Audubon Field Guide to Mushrooms of North America*, alongside the scientific names. They did not, however, include other fungi that we commonly see during a mushroom season, or fungi that haven't been assigned common names. They have, nevertheless, served us all well for at least the past twenty-five years. So if they worked well for us before, why change anything? Give me a chance to convince you that they are long overdue for a major modification. (*continued on p.2*)

Autumn 2014

Spores Illustrated is the newsletter of COMA, the Connecticut-Westchester Mycological Association.



Photographer of the Issue

Rather than feature a specific mushroom photo on the cover, this issue recognizes the amazing pictures that Boris Martinov has taken over the course of the 2014 mushroom season. Boris has been a fixture at walks, has taken hundreds of photos, and has been diligent in posting those pictures to both the COMA Facebook page and to www.comafungi.org. Unless stated otherwise, all photos in this issue are by Boris.

The updated checklist I put together is based on the data collected from keeping records of club finds over a period of twelve years. If we found a particular fungus in four or more of those years between 2001 and 2013, it was included on the final checklist. By this criterion, there are close to 700 fungi listed. While this represents a substantial increase in the number of fungi listed compared with those included on the old checklists, it is by no means a comprehensive checklist. Think about it: we typically find around 350 species of different mushrooms and other fungi during just three days of our annual Clark Rogerson Foray. Over the course of a year, we are likely to find at least twice as many. If you attend even half of scheduled mushroom walks, over the passage of two or three years you will eventually encounter all of the checklist fungi. And why limit ourselves to recognizing a much smaller number of fungi? The revised checklist could easily have included 1,200-1,500 or more names, rather than 700. You will notice, for example, that the Ascomycota list is deceptively small, especially considering that this division is in reality far larger than that of the Basidiomycota. Okay, most of the ascos are too small to see with our eyes. Had I been able to attend Mushroom University's Ascomycota seminar this past spring with Gary Lincoff and Roz Lowen, this section of the list would be much larger than it currently is.

From the photos I have seen posted on Facebook by COMA members, this checklist is missing many common fungi, especially all those tiny black dots and smears on wood that we don't see or pretend are not there. But to make one section larger, I would have to make the other smaller – so that it all could fit on both sides of one sheet of paper. So, I compromised and sacrificed including the Myxogastria as well as common names. These are fun extras, not terribly crucial for us to know. Besides, most described mushrooms don't have common names. But the main reason for designing an updated checklist is that so many of the species names, but particularly the genus names we have been using, have changed for a variety of reasons.

We are at the beginning of major breakthroughs in our understanding of the complexity and diversity of the fungi kingdom and its inter-connectedness with the rest of nature. Graduate and postgraduate students at well-endowed universities are using tools to identify fungi that were not available prior to the 1990s to the field mycologists who authored our favorite mushroom field guides. Using DNA analysis, many of these lab mycologists have been focused on defining and elucidating the family relationships between various fungi. So far we have learned that many fungi which have a certain set of common characteristics are not related to each other. Rather, their respective modes of development independently evolved, often many times over.

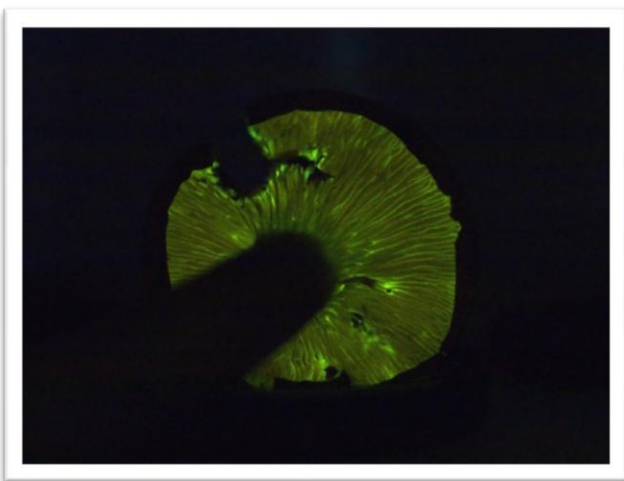


Metatrichia vesparium. Myxomycetes like this are no longer on our checklist, but that doesn't mean we have to stop appreciating them.



Morels may be the most photographed of mushrooms, but a good photographer's shots make us see them anew.

continue to rely on careful observation of field characteristics, coupled with chemical and microscopic tools to assist us with identification. If that day ever comes when we are using a handheld Star Trek Tricorder-like machine instead of our intellectual abilities, mushroom hunting won't be nearly as fun as it is today!



Taylor Lockwood gave a presentation this autumn on luminescent mushrooms – this is Boris' take on the topic.

In order to facilitate our understanding of these conceptual changes in thinking, I dropped Don's categorization of fungi groups having similar physical shapes as being "families." Fungi of similar shapes can still be found in the new checklist according to their particular morphological characteristics. As an example, on the old checklist, *Cantharellus*, *Craterellus*, *Gomphus* and *Turbinellus* are listed as belonging to the Chanterelle Family. In the new checklist they are simply categorized as "Cantharelloid" (vase-shaped) fungi. This is because *Gomphus clavatus*, for example, belongs in the family that includes stinkhorns, while *Turbinellus* is much more closely related to boletes than chanterelles.

In the future, I may design a checklist based on family relationships, but for now, it is more helpful to continue to follow the organizational scheme adopted by virtually all of our field guides. This is because it is easier to find a particular mushroom, whether on a checklist or in our field guides, by general morphological criteria. Understanding that a giant puffball (*Calvatia gigantea*) is more closely related to an *Agaricus* than it is to the smaller *Lycoperdon* species is intellectually satisfying, but it won't help us figure out and find what the fungus is that we are looking at. Until we all have portable devices to indicate what we find, we will

You may be wishing your field guide would be updated to reflect the new names for fungi. Updating a fungi checklist on an annual basis is far easier than updating a field guide. The fact is, nomenclatural changes are ongoing and will continue to occur at an increasingly rapid rate into the future. Any newly published mycology book will unquestionably be out of date before it is published! This is not a new phenomenon. There is a relatively long history of name changes for every fungal species we see: look up *Harrya chromapes* (previously *Boletus*, *Ceriumyces*, *Krombholzia*, *Tylopilus* and *Leccinum* before being assigned its current name (2012) based on molecular analysis. *Bothia castanella* is the tenth and most recent name for this member of the Boletaceae, the species type and sole representative of this genus. As many of you who attended Bill Yule's talk at the 2014 Clark Rogerson Foray know, soon the only boletes to keep their names will be those

in the *edulis* group.

You may be asking yourself why you should bother learning new names, when they will only keep changing. Simply put, the new names convey more information about any given species than previously. If you want to be able to speak the same language that mycologists are adopting (sometimes also reluctantly), you will want to continue expanding your vocabulary. Why wait for another 30 years before we adopt the new nomenclature, if ever? Yes, it is a bit challenging, especially for those of us who have spent several years trying to learn the previous names. On the other hand, if we make the new nomenclature available to beginners they will have to go through fewer hoops than we did.

To facilitate learning the new nomenclature represented on the checklist, I have added in parentheses the name of the genus or species to which the newly named fungi previously belonged.

This way, you can easily find the same fungi listed in your field guides. Eventually each mushroom or other fungus listed on the two-sided sheet will be posted on www.comafungi.org with active links to the photos I took over the course of the ten years. The *Ascos* have already been published to our site. Our web master, Lisa Solomon, will be posting the *Basidiomycota* photos soon. I will do my best to keep both the list and the photo collections accurately identified and up to date. I will depend on you to help straighten me out when I have made an error in



Lichens like these pixie cups (*Cladonia* sp.) got lots of love this year, from a dedicated issue of *Fungi* magazine to their own place on the Rogerson Foray collecting table and a presentation by attendee Nick Patch.

2014 COMA ANNUAL BANQUET

Thursday, Nov. 20 – 7:00 – 9:00

COMA requests the pleasure of your company at the annual banquet and election of the 2015 COMA officers and board.

Please bring a favorite dish (sufficient to serve six to eight people) for the buffet table. A \$10 per person donation to COMA is required as a reservation. Dishes containing wild mushrooms must be registered with Joe Brandt (203-544-9622, or JLBCO@hotmail.com), and must be labeled to show ingredients. Dishes should arrive ready for the buffet table, with serving utensils. They may be reheated at the meeting house. COMA will provide place settings and beverages.

Online registration at www.comafungi.org – click on the Calendar link and then on the event date.

identification. Remember, most fungi we see are the same as they always were; only their names have changed (except in cases where it is determined that a given species is actually a complex of similar-looking fungi)!

While looking up the characteristics of particular fungi in your field guides, take the opportunity to update them. Just add the new names (and their new familial relationships, if you are inclined) into your books. Doing so will actually help you learn the new terminology. I recommend using a pencil, since the chances of a name changing again is high, especially with certain genera. Let's face it: change is the normal state of everything. Embrace it! And enjoy the experience of knowing that the fungal

world is far more exciting and complex than we can imagine. [Dianna's checklist can be found on www.comafungi.org and is being emailed with this issue of *S.I.* – ed.]

*The Clark Rogerson Foray
Just Keeps Getting Better*
Article and photos by
J.J. Murphy

"It's not growing out of the acorn cap," said Gary Lincoff, this foray's Chief Mycologist, as he studied what I thought was an exciting find. "It's mycorrhizal. If it were growing from the acorn cap, we'd be able to cultivate it. We cannot cultivate russulas." Gary notices the most minute details; there was a tiny hole in the acorn cap through which the mycelia had been growing. The learning never stops, especially at a COMA foray. I was so sure I'd get a prize for the cutest mushroom. But

mycologists look at the fungi kingdom through a very different lens.

Meanwhile, another fungal find made Gary's eyes light up. "We need to look at this more carefully," he said, examining the fungal growth on a wallet found tossed in the woods. "I supposed you didn't notice the decomposing body," he said to Taro Ietaka, who found the wallet. We all laughed. Gary has a comic timing that resonates with mycologists who typically ignore all other distractions in pursuit of mushrooms.

COMA's Clark Rogerson Foray has the same basic elements of any other foray, but it's a smaller event, allowing for an intimacy that adds a special dimension to the experience.

It has been a very dry season, but when you send 80 or 90 mycologists out in to the field, they will find mushrooms. I was delighted to see a cordyceps and its truffle safely transported to the sorting room.

I spent some time in the field, but most of my time in the kitchen, witnessing Joe and Kathy Brandt create mushroom magic preparing dishes that tasted even better than they looked.. Most forays have one mycophagy,



A Russula growing through an acorn cap.

but COMA has two. The first foray was a pot luck. We have some very creative and talented members. And these are not simple tastings. They are family style culinary celebrations. I am always happy to chop onions or wash dishes just to see how they skillfully incorporate mushrooms into a dozen dishes. Their vegan and gluten free dishes were as tasty as the dishes for omnivores. I felt really pretty in the apron Kathy sewed and embroidered for each person who helped in the kitchen.

Evenings at most forays are dedicated to lectures. Bill Yule, Larry Millman, and Gary Lincoff are all engaging storytellers. You realize later, if you take good notes, how much information they skillfully weave in to their presentations.

Just in case you have not had enough to eat, most forays feature a social every night, where even more



Black trumpet cheesecake – what a treat!

fungal creativity can be found. During the COMA socials, I sampled black trumpet vodka (3 different recipes) that was really smooth and flavorful. The chanterelle vodka was inspired. People made beverages from chaga, cookies from candy cap mushrooms – and of course there was wine, fruit and cheese. It's amazing any of us got up early, feeling fit and ready to hit the trail.

Saturday evening things wrap up as awards are presented for truly fascinating fungal finds and any other mushroom-related entertainment. Thanks to Sandy Sheine, I learned that COMA has been around since 1975 and it is still going strong - a lot like Sandy and Jerry Sheine who have been there since the beginning.

This is the only foray that features the "tchotchka (trinket) auction." Leon Shernoff and Joe Brandt shine as comic auctioneers. While this COMA fundraiser has some trinkets, members also contribute many valuable books, tools and mushroom goodies. I was out-bid twice by my fellow mycophiles.

Events like this are a huge undertaking, especially for an individual club. But COMA has strong and dedicated members. Their diligence has paid off over time. People traveled from Michigan, Maryland, Pennsylvania, New Hampshire, North Carolina, Massachusetts and New Jersey. Of course Connecticut and New York were very well represented – by COMA members and members of many other clubs, including NYMS.

COMA and NYMS have had a strong relationship as long as I have been involved. It feels good to be a member of two such strong organizations supported by truly knowledgeable, creative and nurturing people.

[J.] received a 2014 Sylvia Stein scholarship to attend the NEMF foray in Maine. –ed.]

*My Stellar Experience at
Eagle Hill
Article and photo by
Josh Hutchins*

I arrived in Steuben after seven long hours of driving from good old Rhode Island - boy was I glad to turn the car off! I immediately walked off the main entrance road into the woods to find a gorgeous patch of *Cantharellus* which I photographed and then collected (see photo). I also found a nice fruiting of *Asterophora parasitica* growing on an old white *Lactarius* that was now black and slimy, so again I took more photos.

After meeting the owner of the Eagle Hill Institute and finding my room, I was glad when I saw Dianna Smith and Joe Metzen, a couple of familiar faces. Besides being the new president of NEMF, Dianna is just an awesome person who is very knowledgeable when it comes to all fungi. Joe is another mycophile from my home state and I will definitely ask to carpool if I return next year. Then I met Alan and Arleene Bessette, the instructors of the class I had come for: Boletes, the Genus *Lactarius*, and Other Fungi of New England. I can't tell you how nice both the Bessettes are! I have found some true friends and teachers who are so bright, positive and helpful. I also was pleased to get a free comedy show when driving around to different mushroom spots with them as Alan would constantly need Arleen to assist with directions while I would be distracting her with my silly jokes! It was so much more fun than being at summer camp as a kid, plus I was learning a lot about *Boletes* and Milky mushrooms the whole time.

I learned a whole lot of new taxonomy. I



learned of the new genus *Multifurca* comprised of *Lactarius* and *Russula* mushrooms belonging to the same clade. This new genus has a whopping 1 species so far and its name is *Multifurca furcata*. I also learned of sometimes Pleurotoid genus of *Lactarius* occurring primarily in the Southern Hemisphere having thick walled elements, gills bearing sphaerocysts and Lamprocystidia as a common feature called Lactifluus. Almost every mushroom that Alan gave to me to key out I did and we would check my determinations. I correctly identified a few species on my own including *Suillus subaureus*, *Suillus subalutacea*, *Boletus badius* (*Imleria badia*) and *Pulveroboletus ravenelii*. But to top everything on my list as the best experience I had at Eagle Hill was to win the "Mushroom ID Challenge". I had a team of three including Jill Montgomery from NH and Mike King from NY. The first two mushrooms were already in my head from the previous days notes so I got the first two mushrooms immediately. The third and final mushroom was a picture of a *Lactarius* with a couple of hints as to habitat and distribution though it was really tough to identify because of there not being any images to refer to in the *Lactarius* monograph. I read every description until I found the best match and turned in our guesses. I will never forget what Alan said as I claimed to be finished.....He said loudly, "You're done already?!" One second later....."Team Three wins!!" I admit I yelled a bit too loud as I had never been so happy in my entire life. Thank you, COMA!! I had the best time ever at Eagle Hill and I would love to go back as soon as possible.

[Josh received a 2014 Sylvia Stein scholarship to attend this course in Maine. Josh is a great addition to the club and has been a valuable contributor at the Rogerson forays. We just wish he lived closer than Rhode Island. -ed.]

BOOK REVIEW by Kathy Americo

The Mushroom Hunters

by Langdon Cook, Random House Publishing Group. ISBN-13: 9780345536259

On March 4, author and forager Langdon Cook presented a program based on his new book, *The Mushroom Hunters*, at the Friends Meeting House. The book and presentation focus on the commercial side of mushroom foraging in the Pacific Northwest, the source of most of the wild mushrooms that reach restaurant tables.

To research the book and feed his passion for foraging, Cook joined the Pacific Northwest world in which the pickers live and trade. Some of the picking is done on state and federal land, where it is prohibited. Occasionally, a picker will have a good patch on private land, where it is also illegal to pick without permission.

The book is in part a sociological study of the underground culture of mushroom pickers, a group of very colorful people who live on the margins of society. They are mostly transients, a mix of Caucasian male older hippies, Asian families and the newest group, Latino migrants. They set up camp deep in the forest and pick for weeks at a time



Tree volvariella (*Volvariella bombycina*)

until they exhaust the area and it's time to move on to the next flush. Cook does a superb job of telling their story and explaining the wild, unknown, and sometimes illegal side of the mushroom supply chain.

After hearing Cook's talk, I read the book and enjoyed it immensely. Cook describes the pickers, the buyers, the chefs, and the retailers in vivid detail. His description of the vast quantities of morels, chanterelles, lobsters and black trumpets the pickers sell had my mouth watering.

Cook liberally sprinkles the book with interesting recipes and serving suggestions. I have to agree with Eugenia Bone, who described this book as "food and nature writing at its finest."

News from NEMF

A Northeast Mycological Federation (NEMF) Board of Trustees meeting took place during the Sam Ristich Foray held Sept. 7-10 of 2014 in Maine. The schedule of forays and the sponsoring clubs for the next five years was announced as follows:

- 2015 – Connecticut Valley Mycological Society (the foray will be held at Connecticut College, New London, in late July-early Aug.)
- 2016 – Massachusetts
- 2017 – New York
- 2018 – Mid-York and Susquehanna
- 2019 – New Jersey, EPM and Western Penn

*Mycology Club
News*

Dianna Smith of COMA and the Pioneer Valley, MA clubs was elected as the new President of NEMF. She is replacing Ursula Hoffman, who received an award for her many years of outstanding service to the organization. Bill Bynum of the Connecticut Valley club, the foray chair for 2015, automatically became Vice-President for the coming year. In other news, the NEMF web site is in the process of reorganization, and a motion to allot \$1000 for its further development (primarily for scanning of photos) was approved. It was also stated that the establishment of the Sam Ristich archive at the New York Botanical Garden would be completed by the end of 2014.

North American Mycological Association (NAMA) News

Ann Bornstein served as NAMA's membership chair for over thirty years and is ready to explore other interests. It was decided for the time being anyway that NAMA will contract with Vieth Consulting to add a member management system to the NAMA website. Rebecca Radar, who took on the position of NAMA Executive Secretary for three years, has decided to step down from this important paid position as of the end of December. If you are interested in volunteering to serve as Membership Chair, or taking on the role of the Executive Secretary, please contact NAMA President, David Rust via e-mail at incredulis@yahoo.com. Other changes:

- Susan Hopkins will head the Mushroom Dyes and Papermaking Committee
- Joshua Birkebak will serve as Voucher Collection Coordinator
- Willow Nero is the new *McIlvainea* Editor
- Maxine Stone has accepted the role of Foray Committee Chair
- Elinoar Shavit will be the new Medicinal Mushrooms Chair

The various regions representing the NAMA associated clubs and members were reorganized. The Twelve Regional Trustees will be responsible for maintaining regular communication with the elected trustees of each NAMA affiliated club in an effort to increase awareness of NAMA resources and improve its relevancy to local organizations.

NAMA's annual membership fee for members of associated clubs will go up \$1.00 in 2015 to just \$25. If NAMA members also want a hard copy of the bi-monthly newsletter, *The Mycophile*, mailed to their home address, they will have to pay an additional \$15 or \$40 total.

Finally, pending approval of the Asheville Mushroom Society board of trustees next year, the NAMA Foray will be held in Black Mountain, NC from the 24th to the 27th of September.

Congratulations!

The second half of 2014 saw some happy events in the lives of our members:



- Alex Krupp and Casey Hallen were married on October 11, 2014 at the Norwalk Aquarium. Alex has also joined the COMA board and will be taking on the walk coordinator position.
- Damon Brunette and his wife Jen welcomed their second child, Patrick Mathias, on October 10. Two evenings later, Damon gave a presentation on using online resources to identify mushrooms at the Friends Meeting House in Purchase. That's dedication!
- Zaac Chaves, who has been our walk coordinator for several years has moved to Boston. Zaac took a job with an IT company a few hours away, but he still makes appearances at COMA events when he can. We miss Zaac but are glad we still get to see him once in a while.
- Rena Wertzer has taken on the role of COMA's librarian. A list of the books available for loan from the Dianna Smith library is available on our COMA Facebook page – click the Files tab.

COMA officers and committee members are:

<i>President</i>	Taro Ietaka (taro@ietaka.com)
<i>Vice-president</i>	Joe Brandt (jlbco@hotmail.com)
<i>Secretary</i>	VACANT
<i>Treasurer</i>	Don Shernoff (donshernoff@yahoo.com)
<i>Membership</i>	Carol McLeod (mcleod6@optonline.net)
<i>Publicity</i>	Kathy Americo (kathyamerico@gmail.com)
<i>e-Media</i>	Lisa Solomon (lmsolomon@verizon.net)
<i>Walks</i>	Alex Krupp (alex.krupp@gmail.com)
<i>Spores Illustrated</i>	Taro Ietaka
<i>Rogerson Foray</i>	Don Shernoff, Diane Alden (daldenpc@verizon.net), Carol McLeod, Taro Ietaka, Joe & Kathy Brandt
<i>Scholarships</i>	Sue Rose (chair) (susanmbrose@gmail.com), Rena Wertzer (renawertzer@hotmail.com), Stephanie Scavelli
<i>Programs</i>	David Rose (tomashunders@gmail.com), Rena Wertzer, Zaac Chaves, Lisa Solomon, Joe Brandt
<i>Mushroom U.</i>	Taro Ietaka & Carol McLeod
<i>Rules</i>	Morris Palmer (morrarians@msn.com)
<i>Hospitality</i>	Jen Keane (nykeane@aol.com)
<i>Past presidents</i>	David Rose, Morris Palmer, Dianna Smith (diannasmith1@me.com), and Sandy Sheine

2014 was a good year for the Hygrophorus Milky (*Lactarius hygrophoroides*). This and other photos in this issue are by Boris Martinov unless attributed otherwise.

