MO-NAMA 2020

PLAN AHEAD …. Mark on your calendar October 8-11 and make plans to attend the MO-NAMA2020. NAMA’s annual foray for 2020. While detailed plans are being finalized, you can make your plans to spend the weekend exploring the hills of the Ozark Mountains. The event will be held at Trout Lodge, 72 miles southwest of St. Louis. We will have transportation available from and to the St. Louis Airport.

The Missouri Ozarks offer excellent mushroom habitat. The terrain can be described, geologically, as a broad dome, the most extensive highland area between the Appalachians and the Rockies. We’ll foray in rolling hills interrupted by steep escarpments, traversed by meandering waterways and marked by caves. The forest includes many species of oak, hickory, walnut, red pine, and cedar.

Our chief mycologist will be Andy Methven, who is MOMS (Missouri Mycological Society) beloved Chef Mycologist. Other speakers and workshop leaders include Tom Volk, Britt Bumgard, Arleen and Alan Beasette, Rachel Swenie, and Rose Tursi, with more to be announced soon!

Trout Lodge itself has a rich and diverse history. The land originally was settled in 1904 by a Parisian who had traveled to St. Louis for the World’s Fair. The stream which runs through the property was used for raising trout and to power a sawmill. Over the years and through various ownerships, the land was expanded to include 52,000 acres and a 360-acre lake.

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Today, Trout Lodge is a branch of the YMCA of Greater St. Louis. The resort is beautiful, with lots of amenities available from and to the St. Louis Airport. The event will be held at Trout Lodge, 72 miles southwest of St. Louis. We will have transportation available from and to the St. Louis Airport.

For mycology experts to beginners, this year’s NAMA foray assures adventures and fulfilling times for everyone. Also, don’t forget to spend some time in St. Louis, a city with excitement for all. Whether it be sports, arts, history, or relaxation, you can find a place to celebrate fall in Missouri. You must be a current member of NAMA to attend. More to come in future publications.

Questions? You can contact either Sam Landes at treasurer@gamushroomclub.org or Maxine Stone at VeryMaxine@aol.com
Mushroom Art – Voyeur’s Edition

By Howard Goltz

I love photographing mushrooms, mostly for pleasure, and as a way of recalling some of my favorite places and “findings” in the woods. Up here in Minnesota it’s still a bit early for that activity and combined with the last few weeks of self-sequestering, I’ve been spending more time than usual checking out mushroom photographs on the internet… too much time according to my spouse. Maybe it’s my way of further deferring work on that long list of things I promised her I’d take care of when I had the time. In any case, to make the most of my squandered time, and to save you some too, I thought I’d share some of my favorite mushroom photography websites and Facebook groups with you, along with a few photos and a bit of editorial comment.

I’d be remiss if I didn’t start with the NAMA website which currently features the award-winning photographs from eleven years of our annual photo contest. It has categories for documentary, pictorial and judge’s option, as well as for separating previous winners from newbies. Get your mushroom photos ready to enter soon – usually in June. Thanks to John Plischke III for running this contest for as long as I remember.

Many of NAMA’s affiliated clubs conduct annual photo contests and feature their winning photos on the websites as well. Their websites are listed on the NAMA website under “Clubs.”

Many of you undoubtedly know of Taylor F. Lockwood, professional mushroom photographer, author and producer of DVD’s featuring his forays. Take a “worldwide trip” and explore his website, Mushroom Pro, which includes what seems to be thousands of excellent mushroom photographs, all referenced in his index of scientific names.

They may be tiny, but don’t overlook the beauty of Myxomycota. While not fungi, NAMA still allows slime molds to be entered in their annual photo contest. One of the best Facebook sites to learn of them and see their intricate beauty is Slime Mold Identification and Appreciation. Macro photography at its finest.

Professional mushroom photographer Stephen Axford is from Australia. He’s one of the Admins for the Facebook site, Fungi Fetish. The site is international and open to the public, but often features his work.

If you want to travel the world of mushrooms while remaining sequestered behind your computer, there are many Facebook groups that focus on specific countries or regions. It’s also a chance to foster worldwide friendships. Through Facebook, I’ve become “friends” with mushroom enthusiasts, novices to professionals, from South Africa, Brazil, Italy, Greece, Australia, Japan, and Great Britain. Don’t let language be a barrier, as Facebook has an instant translator feature. Plus the photos are universal.

The Mycophile’s Mushroom and Fungi Photography Group, Photogenic Fungi – the Art of Mycography and Mushroom Photography are Facebook groups that focus on the “esthetics” of mushroom photography, but the postings sometimes lack the photographer’s or mushroom’s name. The photos are still enjoyable.

Enjoy your vicarious visits to the world of fungi on the internet, don’t work too hard, and take care.

Howard has been NAMA’s Secretary for the last 5 years and conducts the Minnesota Mycological Society’s annual photo contest. He prepares periodic articles on “Mushroom Art” for The Mycophile.
WPMC Assists AGH Doctors with Toxicology Research  
By Cecily Franklin

On November 1, I was contacted by Dr. Matthew Stripp, Director of Toxicology at Allegheny General Hospital (AGH), regarding an ongoing toxicology research project in the hospital’s Department of Emergency Medicine. The purpose of the study was to evaluate the accuracy of responses being provided to those who seek emergency identification of mushrooms through social media. WPMC has been recommended by the director of the Philadelphia Poison Center.

According to Dr. Stripp, healthcare providers are hesitant to accept information or identification from social media, in part because of the limits in ensuring adequate credentials on the part of those providing the information. AGH’s research hoped to determine whether “verified experts” agree with information provided to people online.

Dr. Stripp requested that WPMC have two experts independently review 30 case photos, with a third expert acting as a tiebreaker in the event of disagreement. WPMC Mycologists John Plischke and Garrett Taylor agreed to participate, and WPMC Past-President Richard Jacob served as the tiebreaker. We were not told of the identifications that had already been made on social media.

In addition to Dr. Stripp, we worked with Dr. Abigail Kerns, Emergency Medicine Resident at AGH, who sent us the photos. Our assignment proved to be quite a challenge, since some of the photos were of such poor quality that no identification could be made. In some cases, there were multiple species in the same photo! But our three experts ultimately made their “best guesses” and I summarized them. Dr. Kerns then compared our identifications with those from social media. Of the thirty photos posted on Facebook, 27 (or 90%) resulted in a positive identification. A positive identification was defined as any administrator proposing a matching answer to the verified expert identification. Complete lack of identification was considered positive if matching between groups.

AGH submitted its abstract to the American College of Medical Toxicology on November 15. Since then, it has been accepted for presentation in March, when a poster will be presented at the ACMT Conference in New York City. AGH also plans to submit a formal paper based on the work. Dr. Stripp expects to find significant interest among the medical toxicology community on this topic.

“Thank you so much for assisting us with this project! We really appreciate the efforts put forth by the Western PA Mushroom Club! We hope this will help open up a new area of research that has been under-examined to date. I hope that we can continue ongoing collaboration.”

Matthew Stripp, MD

THE TRESPASS  
By Steven King

That morn the woods rebirth was on
As Hank slipped out for the search.
A warm night rain was the harbinger
For hope and his annual yearn.

His quest not simply intuition, the
While mum most always guards a patch,
This tidbit had fell from neighbor Sam:
Morels were up by the fence!

In school the two had josted
For the hand of Jill, the round ball hero,
And Hank, a farmer’s son.

When Sam went off to college,
Too slow, too low to play that game,
Twan was then that Hank finessed his moves,
And Jill his wife became.

Single Sam returned to town,
With his habit to hug Jill too long,
And a jealous rancor simmered
For many years long gone.

At the local diner just last eve,
The hug-off course-and a stage-whisper... “Morels are up by the great dead Elm.”
(Near the fence that marked their lands.)

So Hank went there that springtime morn,
Aaaaah, yes! The edible fungi... So the sheriff put it all to end, With a simple observation: “Well, whatever else, you know, Hank had been trespassin.”

When you go out hunting,
For the mystical morel,
Abide this simple moral:
Be where you legally can.

And know...pursuits of purpose meet a line
In school the two had jousted
In a mesh bag brought along.

Death by falling limbs, they knew
Is a long-odds proposition.
Was it accident or evil act... Grounded in pure passion?

Still, Sam was a local legend,
Revered for the round ball game,
Exploits retold of glory old
As only Hoosiers may.

So the sheriff put it all to end, With a simple observation: “Well, whatever else, you know, Hank had been trespassin.”

The author is a mostly-retired Indiana trial court judge and lives in La Porte County, Indiana, where he grew up in the wooded village of Haskell. He savars there are no morels there.
2019 NAMA Photo Contest Winners

*The Mycophile* presents the final group of winners of the 2019 photo contest in the Pictorial category. These photos are beautiful shots of fungi, looking undisturbed in their natural setting.
If you don’t have time for reading, here’s the bottom line: anyone who has an interest in mushrooms should own this (actually these) big amazing book(s), regardless of whether you live in Europe or not. If you do have time for reading, I’ll explain why you should own this (actually these) big amazing book(s), regardless of whether you live in Europe or not.

I could also relate to the thoughts expressed in the Preface: “I am lost — I cannot fathom nature anymore...” exclaimed one of the authors to the other after having experienced parts of a forest completely devoid of fungal fruticolous bordering other parts with thousands. The longer you are in the game, the more you realize how little you understand. We have now been engaged in mycology and fungal identification for more than 40 years and a synthesis of our combined experience would seem desirable. It would have been easier if mycological knowledge had stabilized and many of the problems had been settled. Instead, we continue to discover new things — many constant change and much confusion. Our ignorance still appears to be monumental... Nevertheless, we hope that the concept applied in this publication will help the enthusiast to better understand the complexities and not feel completely at a loss when faced with an unfamiliar fungus.”

Thomas Lærssøe is a mycologist and senior researcher at the Natural History Museum of Denmark. He has previously been a senior scientific officer at the Royal Botanic Gardens, Kew and associate professor at the University of Copenhagen. He is the author of several guide books, wrote most of the text, and contributed many photos. Jens H. Petersen is a mycologist, graphic designer, and photographer and he provided the majority of the book’s photos as well as the “wheels” and also did the design and layout. He taught mycology at Aarhus University for more than 20 years and is the author of The Kingdom of Fungi (see The Mycophile July-August 2013 for two reviews). Petersen and Lærssøe also created the online identification tool MycoKey: www.mycokey.com.

The wheels (see example) are an effective way of summarizing key information (ecological group, substrate, spore and cystidia shape, general macro appearance, etc.) into an easily digestible form. Species are listed by scientific name, but the authors have generously made all the wheels available as a large (~180 MB) PDF file at www.mycokey.com. Large printouts of them would be excellent additions to mushroom displays at forays and exhibits.

Each set of species is introduced with its wheel, which includes page references to the (usually) genera. Species are listed by scientific name, but without the author. I wish those had been included. Common names are not used, probably because the book was originally published in Europe (in Danish, as Nordeuropas svampe) with an intended audience in many countries with different languages and, thus, different common names. The species treatments are all in running text, rather than the typical categorized (cap-gills-stem-edibility-etc) description as the authors rely on the photos to convey information more effectively than words often can. The text typically mentions the key identification characteristics, ecological occurrence, distribution and abundance, and a look-alike or two, using a coding system to indicate whether or not the mentioned species is treated in the book and, if so, in which direction you proceed to find it (up or down on same page, one page forward or back, or multiple pages forward or back; Occasionally a synonym or misapplied name is mentioned. The best edible and most dangerous poisonous species are indicated by green and red symbols; otherwise, edibility is not mentioned. At the top of each page is a helpful nutshell description of the group of species treated on that page, for instance, “dry brownish tricholomas” and “toffybolus with cabbage-like odor or rotting.”

The photos are, for the most part, absolutely superb and are of generous size so that details are visible, reducing the need for a lot of descriptive verbiage. Occasionally there’s an ordinary one or two, and occasionally the color is exaggerated or not quite accurate, but even those are of at least good quality. In addition to the aspect shots, there are lots of inset close-ups of gill edges, marginal hairs, surface textures, etc. It took a lot of forethought to have taken all these photos — only a committed teacher would have done it. The Volume 2 photos are impressive enough, but they show mostly relatively large fungi — gilled mushrooms and boletes — and we’re used to seeing good-quality mushroom displays at forays and exhibits. One of the authors, Jens Petersen’s talent really shines. Some of the photos here, particularly of tiny ascos, are simply amazing.
of tiny slime molds were for their time, they would be no match for what can be done shooting through a dissecting microscope and stacking individually-focused exposures into a single stunning image using computer software.

No book is perfect, of course, I have a few nit-picky things to mention. There are far too many typos. It would have been nice to have more "also known as" mentions, given the name shuffling that many of the species have experienced. For my taste, far too many of the treatments begin with statements like "Tricholoma ustale is a medium-sized, sticky to slimy Tricholoma ... " — we don't need to be told it's a tricholoma, its name already told us that. The number of words that could be deleted then could have been used to add the authors to the species names. In many cases, the comments suggest that the species should be easy to identify. Perhaps true for Læssøe and Petersen with their combined 80+ years' experience and perhaps true once one figures out what genus the thing is in, but that latter task will often be difficult especially with the small cup fungi where genus-splitting has run rampant, even with the helpful aids provided. But these are minor quibbles.

So, a huge European book with lots of beautifully illustrated species — but how useful might it be for identifying mushrooms in North America? Not nearly as much as for Europeans obviously. Certainly many of the names are ones I recognize as being applied on this continent. But, with each year, we find that more of our similar-looking species actually are different enough to deserve their own names. Even with that caveat, however, finding a very similar species in the book will at least put you in a relatively small ballpark and, for many of the tiny fungi in this book, you won't be able to do that with our current guides. However, even if none of the species occurred in North America, the book would still be greatly valuable as a coffee-table denizen that you could page through bit by bit and provide lots of armchair foray opportunities.

As I said before, you will see things here that you will never see anywhere else. Anyone who has an interest in mushrooms should own this (actually these) big amazing book(s), regardless of whether you live in Europe or not. Although not cheap (price recently increased from $110), you get a heck of a lot for the money ($115 in hardcover).

Steve Trudell

The Mushroom Culinary Arts Corner

A Delicious and Healthy Mushroom Recipe:

Bird’s Nest Pasta With Mushrooms in Wine Sauce

By Salma St. John, committee chair and NAMA Vice President

If you eat wild mushrooms frequently, like me, a novel healthy recipe would be welcomed to add spice your culinary endeavors.

One of my favorite mushroom dishes, which I am sharing with you today, is bird’s nest pasta with mixed wild mushrooms in wine sauce. I came up with this recipe years ago, and it is still a mouth-watering hit every time I make it, especially when I entertain friends.

When I am cooking with wild mushrooms, I try to avoid heavy creams and butter. I prefer to keep my cooking — as you probably know by now — healthy, simple, and elegant. Mushrooms provide us with a bounty of health benefits, so there is no need to add unhealthy ingredients; that would be defeating the purpose.

The true heroes of this dish are the beautiful, healthy spices such as fennel, paprika, rosemary, bay leaves, oregano, and turmeric — yes, turmeric, which is an incredibly, powerful spice/root. As my mother used to tell me, "spices are the soul of the food".

Again, at MCA, we have a new approach to food, we call it healthy gourmet, where good health is never sacrificed for incredible taste; the two are in perfect harmony. This also includes healthy cooking techniques and cookware.

Without further ado, I present you with my recipe and I hope you all enjoy it.

FOR THE PASTA:

Ingredients:

- 4 bird’s nest pasta portions (for 4 people)
- 1 ½ Tbsp. extra virgin olive oil
- 3-4 thick slices of red onion
- A clove of fresh garlic cut in halves
- 1 ¼ c. vegetable broth
- Two Tbsp. white wine (such as Cabernet Sauvignon, Pinot Gris, or Chardonnay)
- ¼ tsp. tomato paste
- ½ tsp. salt
- 1 tsp. black pepper
- 1 bay leaf
- ½ tsp. ground fennel
- ½ tsp. paprika
- ½ tsp. rosemary
- ½ tsp. oregano
- ¼ tsp. ground turmeric

Method:

Place the vegetable broth in a measuring cup (for easy pouring) and add the tomato paste, wine, salt, pepper and the rest of the spices and herbs (except the bay leaf) - stir well.
On low/medium heat, place the olive oil, bay leaf, and the sliced onion in a Dutch pan or a covered skillet (please, try to use stainless steel skillets instead of Teflon or non-stick cookware, except for ceramic).

Place the 4 Bird nests in the pan and cook each side for about 2-3 minutes (very carefully, use a spatula to turn the Birds’ nest when the bottom starts to look golden brown).

Once both sides of the nests are golden brown, pour half of the liquid over the nests and cover the pan for 3-4 minutes or until the liquid is absorbed.

Turn the nests over and pour the rest of the broth in the pan not over the nests. Cover the pan and cook for about 3-4 minutes until there is just a little bit of liquid (check to make sure that the nests are tender and cooked al dente – don’t overcook them).

Turn the heat off, let the nests sit in the pan for a few minutes until the sauce is made.

**MUSHROOM SAUCE**

**Ingredients:**
- 8 oz. cleaned and sliced Shiitake mushroom (*Lentinus edodes*)
- ¾ c. *dried* Porcini mushroom (*Boletus Edulis*) and another of Lion’s Mane (*Hericium*) reconstituted in 1 cup warm water for 20 minutes (You can also use any combination of your favorite dried wild mushrooms – I use some dried mushrooms because they have a rich aroma)
- 2 Tbsp. extra virgin olive oil
- ½ c. thinly and finely cut red onion
- 1 large garlic clove, minced
- 1 Tbsp. minced/sliced black truffle (optional)
- ½ c. quality white wine (Sauvignon Blanc, Chardonnay, or Pinot Grigio)
- 1 c. of vegetable broth
- 1½ tsp. quality balsamic vinegar
- 1 bay leaf
- 1 tsp. sea salt
- some dried mushrooms because they have a rich aroma
- 2 Tbsp. extra virgin olive oil
- ½ c. thinly and finely cut red onion
- 1 large garlic clove, minced
- 1 Tbsp. minced/sliced black truffle (optional)
- ½ c. quality white wine (Sauvignon Blanc, Chardonnay, or Pinot Grigio)
- 1 c. of vegetable broth
- 1½ tsp. quality balsamic vinegar
- 1 bay leaf
- 1 tsp. sea salt
- ground black pepper
- ⅛ tsp. ground fennel
- ½ tsp. paprika
- ½ tsp. rosemary
- ½ tsp. ground turmeric
- 2 Tbsp. organic all-purpose flour
- 4 Tbsp. freshly grated Parmigiano Reggiano

(please, pay attention to “tea spoon” and “table spoon”)

**Method:**

Set a Stainless Steel electric skillet to 325 degree (low/med heat) (a Dutch oven or a covered skillet may be used on a low/med heat stove).

Place 2 tsp. of olive oil, one bay leaf and the onion in the pot and sweat the onion for 2 minutes until translucent.

Add fresh mushrooms (Shiitake) and sauté for 3 minutes or until liquid from the mushrooms is almost absorbed.

Add the crushed garlic and stir for a minute.

Mix all the liquids in a large measuring cup (vegetable broth, balsamic vinegar, and wine).

Pour half of the liquid over the mushroom mixture and stir until liquid is absorbed.

Add the salt, pepper and the rest of the spices to the mixture.

Add the dried mushroom mixture and mix well.

Dissolve the flour in the remaining liquid. Add the flour and liquids mixture a little bit at a time while stirring (to prevent from forming lumps) until it has a creamy consistency.

Simmer for 2-3 minutes.

Add 2 Tbsp. of parmesan cheese. Mix well and let it simmer on low heat for 2-3 minutes – until the sauce thickens – it should be saucy, not too think or too thick. Turn the heat off (if sauce is too thick, add some wine or water to it and stir well while hot).

Place a bird’s nest on a plate, top with ½ c. of the mushroom sauce and garnish with a table spoon of Parmigiano Reggiano. Serve it hot with a side of steamed asparagus.

This dish can be paired with any chilled white wine, such as Sauvignon Blanc, Pinot Gorgio, or Chardonnay.

**HEALTH BENEFITS OF SHIITAKE MUSHROOM**

This mushroom has been revered in Asia, particularly Japan, for its health and medicinal benefits. According to researchers, this mushroom has anti-tumor, anti-viral, and anti-bacterial properties. It is rich in many minerals and vitamins such as vitamin B and D. It also contains minerals such as Calcium, iron, manganese, magnesium, phosphorus, potassium, selenium, and zinc. It also has a decent amount of protein and fiber.

**A RECOMMENDED BOOK ON THE BENEFITS OF SHIITAKE MUSHROOM:**

“Health and Nutritional Benefits of Shiitake Mushroom: Revealing the Medicinal Secrets of Shiitake Mushroom”. By Daniel Rois, Ph.D.

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**The Mushroom Culinary Arts Corner**

**To wash or NOT to wash, That is the FUNGAL Question**

**By: Salma St. John, Committee Chair**

There is no doubt that the benefits of eating mushrooms are well established and recognized, not only for the delectable taste of such amazing creatures but also for their health benefits. But let us not ignore common sense when it comes to preparing and eating mushrooms. We all know that one should NEVER eat raw or unidentified mushrooms. Like many foraged foods, mushrooms may have insects and parasites that may cause sickness if eaten raw; therefore, they should be cooked well. But there is always a nagging question that remains: should mushrooms be washed?

If you ask diehard mushroom enthusiasts whether mushrooms should be washed, the answer will be resoundingly “no” and they may add that mushrooms should be only lightly brushed to remove any debris.

But what if there is more than just “debris” in the mushrooms such ants, bugs, or even worms, which can find a comfortable home and a source of nourishment inside the mushrooms? Of course, some of those creatures may be harmless, and as some may say, they are “extra protein”, but if you are squeamish like me, you may think twice before welcoming such mortal souls to your unsuspecting stomach.

I decided to do an experiment. As a proud hunter, I came home one glorious afternoon with some gorgeous, nice-size morels. I immediately arranged my beauties on a plate and took a picture of them as you see at left.

Looking at the mushrooms, I started to fancy some risotto cooked in truffle oil, Sauvignon Blanc, Parmigiano, garlic, fresh herbs and, of course, some of the freshest morels. I turned on my Chopin music and without delay I got started on dinner. First, I wanted to wash my morels (remember, I am squeamish, and I don’t need the extra protein). I filled a pot with two quarts of water and added ½ a cup of food grade hydrogen peroxide - diluted for “vegetable wash” according to instructions. The mushrooms were gently placed in the pot and enjoyed a nice bath. Five minutes later, I glanced
at the mushrooms and saw the surface of the water covered with hundreds of little creatures that came swarming out of the mushrooms as if they just heard a fire alarm go off – as you see at right.

I decided to look at one of the insects under a microscope. When I focused on the creature, there was a feisty bug (put accurately, a worm) moving restlessly as if it was protesting against me examining it.

I watched the bugs march out of the mushrooms and float on the surface of the water in a rhythmical motion, as if they had just heard a Mariachi band playing. The show went on for almost thirty minutes until all the bugs finally stopped moving. At that moment, I pronounced them “lifeless.” I then rinsed the mushrooms in water a couple of times, drained them well in a colander, placed them on a paper towel, and placed them in the fridge for an hour or so before I used them.

So to answer the question: washing may not be a bad idea, especially if the mushrooms are not very fresh or look older. However, you may elect not to wash, or do the experiment yourself - then you will know whether “to wash or not to wash.”

By the way, washing the morels, did not affect the integrity of the mushroom! Also, the Risotto was delicious!