

MYCENA NEWS

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NOTICE

MSSF's April General Meeting returns to the Randall Museum in Corona Heights Park in San Francisco at **199 MUSEUM WAY**—NO LONGER at the County Fair Building/Hall of Flowers in Golden Gate Park



APRIL GENERAL MEETING:

Tuesday, April 17th, 2018
7-10pm
Buckley Room/ Randall Museum

Alissa Allen: Mushrooms for Dyes; Exploring Northern California's Regional Rainbow

MY TALK WILL be an introduction to the full spectrum of permanent color that can be extracted from mushrooms found in the Bay Area and Northern Coastal California. I will touch on safety, ethical harvest, the dyeing process and identification of dye species. There will be lots of colorful slides and dye examples on the display table. For people who can't make the event, you can find me at mycopigments.com

I have been looking at mushrooms most of my life, have studied mycology for almost 20 years, and have been sharing my passion for mushroom dyes for over 15 years! This unique set of interests has led me to a very interesting career path. My focus is studying regional mycoflora and utilizing the colorful dyes to entice people to pay closer attention to the role fungi play in our lives; from being a necessary yet understudied part of our

ecosystem, to a colorful addition to our wardrobes, to the bonding that foraging brings to families, friends and communities. Nothing brings me more joy than to share this with others. •

President's Post

Tyler Taunton

HELLO MSSF MEMBERS,

I am excited to announce that starting this April MSSF will be holding our meetings at the recently renovated Randall Museum. Council meetings will be held in the Buckley Room at 7:30 on 2nd Tuesdays and General Meetings will meet on 3rd Tuesdays and have a social hour with mushroom themed appetizers in the Buckley Room from 7-8 and then onto the theatre for the speaker presentation. I will send out an email to notify all members but please pass on this great news to all that it may concern.

I would like to thank Sean and Jill for the excellent talk about who and what Bay Area Applied Mycology does. Sounds like an excellent group to get involved with and learn from.

Keep checking MSSF.org for plans of a morel foray. It's been one hard year for planning a morel trip but our scouts are out and we are hoping to get dates nailed down soon. So stay tuned and hope to see you all on the 17th at the Randall Museum. •

Seeking Librarian

Brennan Wenck-Reilly

HELLO MSSF MEMBERS

Since leaving the Randall Museum due to their renovation project, our Library has been kept in storage for the past 2+ years. We have finally found a new home for our amazing book collection, and now we are searching for a willing volunteer to step up to become the MSSF Librarian. The duties are pretty simple: maintain the library, check out books to members who would like to borrow them, and then get the books back once they need to be returned.

The library will be housed at Cal State East Bay, and you will be granted access to the collection. We are looking for someone who lives in that vicinity who would like to undertake this task. There are a couple ways members could check out books, either via snail mail, or at General Meetings. It would be up to you to determine the best way to get the book to the borrower, and to get it back from that individual.

If you are interested, you can contact Brennan Wenck-Reilly at brennanwenck@gmail.com or by contacting any of the MSSF council members. We look forward to hearing from you. •

Gary Lincoff (1942–2018) In Memoriam

Britt Bunyard

THE MYCOLOGICAL COMMUNITY was heartbroken on March 16th, 2018 to learn of the passing of Gary Lincoff. He was the greatest mycologist of my lifetime, a great friend, and a great person. Gary was an American treasure. He was larger than life. Mycophiles and fans, upon seeing him for the first time in person, were nervous to approach—he was so famous. But he was the most welcoming, the friendliest, the most giving person I knew. That any of us knew. He gave absolutely all of his time to educating others. Every person in the mycological community in North America, and beyond, knew him. If you invoke the name “Gary,” everyone knows of whom you’re speaking.

Gary was born and grew up in Pittsburgh and enjoyed telling stories of early life there. But he was better known from New York City where he taught botany courses at the New York Botanical Garden. He and his wonderful wife Irene have lived many decades just a couple of blocks from Central Park in Manhattan. Anyone coming to The City was welcome at their home. They were avid foragers of everything (mushrooms included, of course), so lunch or dinner might include anything from seaweed to wild berry pies.

Pretty much every week of the year, if Gary was in town, he would lead a foray in Central Park (or Staten Island, or other parks in the area), spring, summer, fall, and oh yes even during the winter months, where, without fail Lincoff would not only find but be able to extol the virtues of some poorly dried out or dormant mushroom while the New York Mycological Society faithful would listen in rapt attention. I was so fortunate to go on many outings with Gary in New York, as well as throughout the East, Midwest, and West

Coast. He was the most sought-after guest mycologist at all forays in North America. And beyond. He doubtless gave thousands of lectures at mycological societies and conferences. He was so thoroughly knowledgeable, and such a gifted speaker, that he would have everyone’s attention from rote beginner to academic; in packed lecture halls, on the street in Telluride, or in the forest.

Gary was a tireless writer. He contributed to FUNGI Magazine; he published in many popular science journals, as well as scientific papers in peer-reviewed journals. He wrote essays, book reviews, recipes. He wrote about other mycologists. He wrote about Thoreau (a lot). He wrote humorous plays (on mycological themes). He kept lists of mushrooms collected and identified at just about every foray he attended. His on-going species count from Central Park is somewhere around the 1,000-species mark.

He authored (or co-authored) eight books on the topic of mycology and one book on general plant foraging: Simon and Schuster’s Guide to Mushrooms, The Eyewitness Guide to Mushrooms, The Mushroom Book (also by Eyewitness Guides), Mushroom Magik, The Complete Mushroom Hunter, The Mushrooms of Telluride, Toxic and Hallucinogenic Mushroom Poisoning: A Handbook For Physicians and Mushroom Hunters, The Joy of Foraging, and The Audubon Field Guide to Mushrooming, which is the most-sold guidebook to mushrooms for North America. And it was the very first mycological book of any kind that I owned. I purchased it when I was a kid.

A list of awards and honors bestowed on Gary Lincoff would be very lengthy. Mycological societ-

ies have awards or annual events named for him. In 2017 the Mycological Society of America (MSA) awarded Lincoff with the “Gordon and Tina Wasson Award for Outstanding Contributions to the Field of Mycology.” In a letter to Gary, MSA President Georgiana May wrote “...Many people, both who become mycologists and those who are simply fascinated with the enormous diversity of mushrooms that they see in the forest have likely referred to your Audubon’s Guide...It is wonderful that you bring in the writings of such luminaries as Charles Darwin and Henry Thoreau to educate your audience and I find it amusing that you have influenced the likes of Martha Stewart! In the words of one of your supportive MSA members nominating you for this award, “He captures the very essence of a professional amateur mycologist. He has educated and excited more people about mycology than practically any of us. Fundamentally, that’s what we are all about in MSA, the education and excitement of studying fungi and MSA very much appreciates your work to bring these fascinating organisms to light for the public. Your writing is prolific and your hosting of public forays and education workshops is tireless and generous...Thank you so much for your continued activities and service to the improving public understanding of fungi. The impact of your activities no doubt extend well beyond fungal biology to improving society’s understanding of science and the role that science can play in their everyday lives.”

Gary was president of the North American Mycological Association (NAMA) from 1983 to 1988. In 1986 he received NAMA’s most prestigious “Award for Contributions to Amateur Mycology.” In 2015 the name of the award was changed to honor Lincoff. It was Tom Volk, another household name among the mycological community, who proposed that NAMA change the name of

this award to “The Gary Lincoff Award for Contributions to Amateur Mycology.” In a speech to the NAMA Trustees in support of this proposal, Volk said “there would never be another person who would (or could) contribute so much to amateur mycology as Gary Lincoff.” The proposal was received enthusiastically, and the vote for the name change was unanimous.

Gary was a Founder of the Telluride Mushroom Festival and has been the heart and soul of the largest mushroom festival in North America for nearly 40 years. It was Gary who convinced me to accept the Telluride Institute’s offer to become Executive Director of the Festival in 2015. Lincoff starred in *Know Your Mushrooms*, an acclaimed documentary film about mushrooms, the Telluride Mushroom Festival, and crazy mycophiles.

Gary was a wonderful story teller and had a terrific sense of humor. I enjoyed every minute in his presence. We all did. When asked how he came to study mushrooms, he often told this one... “My grandparents were immigrant shopkeepers, watch cleaners, and, eventually, jewelers. My parents were professionals who, along with some of their brothers and sisters, were doctors. I don’t think the question ‘what do you want to do when you grow up’ was ever asked of them. Having read Henry David Thoreau’s *Walden* at an impressionable age, I only knew that I didn’t want to find out when I came to die that I had not lived, whatever that meant. In a way not totally unlike Thoreau’s I was drawn to the woods, to a life ‘outdoors.’ I didn’t know what interested me, partially because my undergraduate education was in philosophy. I somehow settled on MUSHROOMS, perhaps because it was thought of at the time as being of no account, a mere curiosity of nature, something that rotted everything else. My grandfather even had to say to me, when my

behavior was already too far along to be corrected, 'I like lettuce, BUT I don't study it!' Somehow I knew I was on the right track. I had the great good fortune to come under the tutelage of Clark T. Rogerson at the New York Botanical Garden, who showed me how he practiced mycology, something my uncle, an ophthalmologist, thought had to do with fungal diseases. Thanks to such giants in the fields of natural history and mycology as Sam Ristich and Rolf Singer, I came to appreciate not just the astounding beauty of mushrooms, but their place in the world, and in scientific classification. Had I not met Gordon Wasson, and soon after, Dr. Emanuel Salzman, the co-founder of the Telluride Mushroom Festival, I'd never have explored some of the places and met some of the people whose interactions with mushrooms so intrigued Gordon Wasson.

Gary was interested in and knowledgeable of everything ... natural history, botany, and mycology, of course. What I enjoyed most about my time with Gary was that we would talk, often for hours, and rarely about mushrooms or mycology. He knew about books and authors—he was a voracious reader—and he knew about history, politics, food (the more ethnic, the more off-the-beaten-path the better) and popular culture. Movies—old and new—television shows, opera ... you name it, he devoured it all with gusto. He lived life to the absolute fullest. And he made everyone's life much richer. And we will miss him dearly. •

***** EDITOR'S NOTE *****

Please send in your photos of Gary; we'll include them in the next issue

Hospitality

Eric Multhaup



THE HOSPITALITY COMMITTEE gives a shout-out to guest chefs Pat George, Ginny Garrett, and Theresa Halula for their sterling efforts for the February hospitality hour. Pat made a vegetarian and gluten-free mushroom soup from the very appealing ingredients of shiitake and agaricus from Berkeley Bowl, mushroom stock, onions, garlic, fresh herbs, and dry sherry. The list of ingredients doesn't begin to convey the umami flavor. Ginny and Theresa made mushroom pizzas with succulent variations, all of which were eagerly consumed.

YOU TOO can be a guest chef, with an \$80 ingredient budget, and support from the Hospitality Committee. If you are interested in volunteering—**AND WE NEED VOLUNTEERS**—log on to the website, click on "Contacts", and click on Hospitality—George and Eric to send us an e-mail. •

Finding Morels is Easy

Norman Andresen

Reprinted from April 2007 MN

FINDING MORELS IS easy...if you look in the right place. Morels fruit when the ground is around 50 degrees Fahrenheit, usually in the spring as the soil warms, near their food sources, which can be mycorrhizal companions, past or present or cellulose-rich plant materials. Rain or regular watering is normally required to provide the moisture necessary for fruiting but certain circumstances (including underground water sources such as stream banks, swampy areas, hanging aquifers, seeps, and lake shores) can provide sufficient water for fruiting, with rain causing the most widespread fruiting. In Northern California we have the best luck in burned or logged forest areas above 2,500 foot elevations. The soil warms more quickly at lower elevation and progresses up slope, so fruiting periods can be extended as heat travels higher in elevation. In my experience, the tree line is the upper limit to morel fruiting.

To my mind? The ideal habitat for morels is a dense conifer forest between 4,000–10,000 feet in elevation, under burnt ground covering, but with the larger trees alive and the ground gently sloping to provide moisture gradients. The forest floor should also be covered with needles to provide humidifying cover. The morels will start to fruit when the soil temperature reaches 50 degrees Fahrenheit, with precocious fruiting beginning two to three weeks earlier in sunny spots. A rainy spring will do the best with small rains every week or so, as in the 2004 Power Fire, which allowed a marginal habitat to produce in legendary quantities. Generally, at low elevations snowmelt will not provide enough moisture for wide spread fruiting. At higher elevations with good water holding capacity, snowmelt fruiting is pos-

sible but not guaranteed. Locally, morels fruit in several different types of habitats, such as newly landscaped areas, orchards, and among coastal ice plant.

The landscaped zones have most often been scraped clean of plants and covered with woody debris, chips, or beauty bark, and irrigated. There fruiting can be during any month and can continue for weeks, I think most often occurring from January through February. A famous fruiting was in Gilroy in July, so go figure. Our local native Morel seems to be *M. rufobrunnea*, which has quite different habits than burn morels; it is a “white morel,” but it can show up as blush pinkish.

The orchard fruiting morel is thought to be a mycorrhizal companion of the trees it is fruiting under, often old apple or pear, but olive fruitings have been reported. Generally the orchards have been tilled to remove weeds, which may be the necessary soil disturbance that makes the fruiting, older orchards more likely to produce.

The lifestyle of our quarry is one that involves rapid exploitation of a cellulose or sugar rich habitat. The conversion of cellulose to fungal tissue requires the formation of sclerotia (i.e. resting bodies) in the soil. When the substrate is consumed and sclerotia are formed, some combination of conditions (probably appropriate moisture, critical temperature, and sclerotia density) trigger fruiting body (i.e. ascocarp) formation. Things that the successful morel hunter considers are substrate, moisture, and temperature. Most hunters develop a mental picture of past successful habitats. Without a stockpile of past finds, a newbie moreller will have to use a more systemic methodology to be successful. A morel hunter

asks, “Does this spot provide all the needs of the quarry: food, water, and warmth?” The habitat will be recently disturbed sometime last summer or fall, such as a burnt or logged forest. Salvage logging or slash piles the second year after the fire are also good, as the wood on the ground and the dying roots in the soil are the food source for the morel. Moisture is also a crucial element in ascomycete development. Having both humidity (i.e. airborne water) and a moist substrate are necessary for fruiting. The humidity can derive from soil moisture if air movement is impeded by a barrier (such as needle cover, brush, or tree cover) to impede the humidity dissipation. Be wary of wind, an enemy of mushrooms, since exposed habitats don’t produce well unless we’ve had a rainy spring.

Now that you have the perfect spot—it has everything: warmth, water, and food—the next question is, “When?” All things being equal, in a normal year you’re likely to find morels at sea level from January to February, at 4,000 foot elevations in mid-April, at 6,000 foot elevations in mid-May, and at 7,000 foot elevations and above as late as July.

Slope orientations are important, as this information can allow you to predict fruiting locations and timing. If you find a fruiting of morels on an east facing ridge, you know that they’re just starting; but if they are fruiting on a north facing creek bottom, that signals just about the end of fruiting in this area. Typically, the fruiting will last about three weeks at a given elevation, and progresses up slope roughly 1,000 feet a week.

Happy hunting! •

Morelore

Ken Litchfield

SPRING IS TRADITIONALLY the season for mushroom folk to anticipate and look for morel mushrooms, both in California and “back East.” Back East the morels start coming out like spring wildflowers and continue wherever there are summertime rains. Traditionally they might be associated with old abandoned apple orchards or burned scrap heaps or dead or dying elm forests.

And if you as a “back East” mushroom folk are successful in your foraging you might be finding a day’s worth of twenty or so sought after merckles, the miracle of back East morels. But this is California and twenty merckles out here is more like twenty grocery bags for a day’s worth if you’ve hit a mother lode Sierra burn zone at the correct springtime elevation.

Morels, especially burn morels, are one of the tastiest, most savory of all mushrooms. Since they are hollow they can be dried easier and faster than most mushrooms, while holding their integrity due to their thickly pitted, giraffishly patterned surface. Freshly cut vertically lengthwise it is easy to stuff the boat hollows with a savory melange of cheesy, buttery, savory, seafoody delights enhanced by the morel hulls in a baked casserole dish. Among the richest flavored savory mushrooms, morels are right up there with ripe porcini pores and fully fledged maitake wings for rich umami meat sauces.

Used to be that the MSSF organized at least one big spring morel foray at one of the Sierra camps like San Jose Family Camp, similar to Mendo Woodlands in the fall. Due to the fires and camp remodelings and complexities of organizing so many folks, we lowered our ambitions and settled on a group campout-style near Groveland as home base for group daytime foraging.

This still required folks getting their permits at the Groveland Ranger station on their own before the ranger station closed for the weekend. This year we aren't formally organizing any large group forays though we might reconsider that in the future.

Instead we will provide you with lots of morel foraging lore in this April issue of the Mycena News and you can organize yourselves and friends into your own forays to various locations around the state and neighboring states for the best moreling opportunities. And we at the Mycena News would be very appreciative of your pictures and words for articles about your collections and especially your observations.

One of the most common adages about morels has to do with their association with fire and burned areas and one of the common practices among morel aficionados is to make knowing nods to fellow morellers when hearing about summer fires that straddle large territories with diverse elevations in nearby mountains. Many morellers regularly check the latest summer fires for next year's potential springtime forays. Here's three of the sites regularly tracked by serious morellers:

http://www.fire.ca.gov/current_incidents
<http://www.fire.ca.gov/general/firemaps>
<http://fsapps.nwcg.gov/activefiremaps.php>

After locating the burn zones you can cross reference googlemaps for the best potential habitat by topographic terrain and water features and compare that with the most accessible dirt roads.

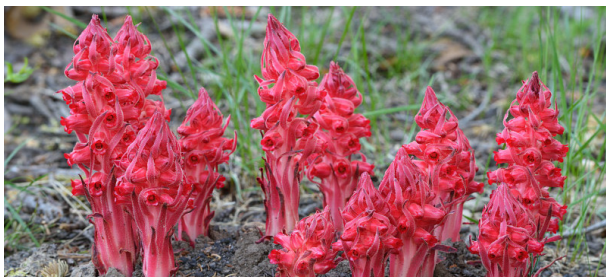
Once you think you have the areas that you would like to check out, you'll have to find out which national forest or national park or private logging property you might need permission or permits to forage. Logging properties might be

harder to garner permission just by trying to find the owners, but might actually be more laid back than officials overseeing public lands - as long as you get permission. Each national forest has its own regulations. This can vary from free but need-the-permit to \$20 unlimited picking for a whole season to various other permutations. Most national parks, including Yosemite, have allowable picking amounts without permits needed as part of the wildlands experience to allow visitors to actually partake in eating some mushrooms around the campfire. This might range from a pint to a quart, though weight is harder for most folks to adhere to compared with volume. Sometimes the particular parkland may not even have an apparent policy or may need permits but not enforce, or may be mercenary about revenue raising so fines can go into the hundreds of dollars. Usually, you can get by with a warning for first time offence but rangers can be severe with repeat violators that shirk their warnings. Sometimes jurisdictions may have no enforcement zones where it may be unclear where the jurisdictions border each other. Whatever you may want to quote to the officer who confronts you, this article won't supersede you actually checking out the regulations for the jurisdiction you may be infringing.

If you find a convenient burn zone within a reasonable distance to your home base in the Bayarea or to a friend's summer cabin in the Sierras, you'll want to explore googlemaps to find the details of road access and topographic elevations in the area. You are looking for several thousand feet of elevation changes within the burn zone that have access by roads on both the north and the south facing slopes. Beginning at the lowest elevations in the late spring you want to follow the snow melt as it rises in elevation each weekend. There will be slowly rising elevation band about 2-5 hundred feet thick and 2-4 weeks

in duration for prime picking each spring and early summer in the Sierras. You might be at 4500 feet in mid spring and each weekend that you go to check on morels you can move up 200 to 500 feet in elevation as the band rises, depending upon the weather, from the previous weekend. If you are moving up on the south facing slopes the following weekend you could expect to go back to roughly the same area but higher at around 47-5000 feet on the same sunny south facing side or at 200 feet or so lower in elevation around the back, north facing, shady side of the same mountain or ridge.

To find the correct elevation to start foraging you are seeking the brilliant red Snow Plant, *Sarcodes sanguinea*, in full though rare and irregular bloom, or the more common Flowering Dogwood, *Cornus nutallii*. The morel season band about coincides with the elevation band of the flowering dogwood which lasts for the two to three weeks of full bloom of the dogwood at any particular elevation. The apparent “flowers” of the dogwood are the large white bracts on the leafless tree, similar to red poinsettia bracts, while the actual true flowers are the little clump of white blossoms in the middle of the bracts. Morel season at that elevation is while the true flowers change from buds to open blooms to wilting, about two to three weeks. And the ground temperature will be about 50F wherever you find morels in full development. Best method for measuring soil temp is to stick a spike thermometer into the soil to check the soil temp at that elevation. If you are too cool then move down in elevation to warmer climes.



Sarcodes sanguinea



Cornus nutallii

Actually seeing the morels can be challenging due to them apparently evolving as cinder mimics. So often they look just like charred pine cones or charred snags. It takes a while to get your morel eyes “on” to pick them out against the background. One way to speed this up is to spread your legs a little and bend at the knees to make it easier to put your head lower to the ground and also sway back and forth at the knees to see the morels stand out against the background. This is similar to the lateral-head-moving parallax viewing that owls do to allow them to see and hear better for their prey. Part of the reason you want to be closer to the ground is also to be able to see the light colored stems standing out against the darker background going up under the darker morel tops.

Morel lookalikes in burn zones are most likely going to be false morels, *Gyromitras*, that can be edible or dangerous depending upon how much you cook them due to the prevalence of off gassing monomethylhydrazine which can be dangerously volatile in the skillet or the stomach. There might also be encounters with *Verpas* and *Helvellas* as lookalikes. Check mykoweb.com for all the *Morchella* genera and species and lookalikes on the California species list and read all the comments.

Often there are groupings of morels so where you find one you’ll find many in the similar

habitat. Often they will follow dry water courses that have more ambient soil moisture. Or they will be along stream banks where there is more humidity. Or they will be hiding in humid, burned out, tree stump holes.

Sometimes you will come upon a whole burned hillside, all the trees dead, but as far as the eyes can see there's nothing alive except a few fern fiddleheads but multitudes of perfect little Gumby Christmas trees, conditions that stimulate grown people to burst into squeals and giggles. When the ground is covered with dead, heat shed, pine needles as a continuous mulch this keeps all the mud and sand splash off the morels so they are much easier to harvest cleanly, while also holding in the soil moisture longer.

Sometimes you'll encounter clumps of very young morels that will clearly be larger by the following weekend if you can bring yourself to leave them till then - or possibly for someone else passing thru the same area. And often you will see the evidence of cut bases where others have preceded you. These are excellent places to seek out, for rarely does a forager collect all the morels in an area. They almost always miss at least a few that you can find. Plus you know that this is productive habitat and can learn to recognize its characteristics even better.

As you harvest, you'll want to have two types of bags to collect the morel tops for the skillet and the bottoms for the garden. A plastic grocery bag can be attached to your belt and, as you pull up a morel with one hand, you break off the dirty base with the other and drop the base into your cultivation plastic bag to take home and inoculate your compost bin. The old or moldy or past prime morels can also go into that bag for slurries in your garden mulch or organic matter.

The skilletable tops are dropped into paper grocery bags until each is half or so full so the

morel weight doesn't crush the ones in the bottom of the bag. If the grocery bags are only filled to one third to one half full, the bag can be folded down and be stacked on top of other one third to one half full grocery bags that won't crush the contents. The grocery bags could also be double walled to give more support. The folded grocery bags can be stacked on each other inside plastic style handled grocery bags from TJs that are colorful to see for finding in the woods or dark colored for coming out of the woods discretely loaded down.

One of the best tools you can have with you is a pair of binoculars to check on opposite sides of ravines before traipsing all the way over to check on the reality of what you might be seeing. Sometimes also a pair of binoculars around your neck, and maybe a birder's handbook in your hand, may help fend off any undesirables that may be inquiring into your activities.....

If you are spending a weekend or overnight in the woods you may or may not want to go ahead and high grade your morels from the days catch depending upon how cool the days and nights are for preserving the freshness of the morels. When cleaning your morels you might just bounce them to knock off most of the detritus or brush them for more rigor. Washing tends to sog the texture and dilute the flavor, but if you do wash them it is best to reuse and reserve the water for garden spore slurries.

Dry them crispy at low heat like 95-100F max and store them in sealed glass jars sorted by morel size. When drying your morels remember that they give off lots of spores so you can collect these with a brush or rag from inside your dehydrator and use them for cultivation slurries.

Continued in Cultivation Quarters...

Culinary Corner

Morgan Evans

Morchella Morchella!!

It's official! Spring is here and the thoughts of a keen mushroom forager likely turn to morels. Relegated to the Ascomycetes, a group or phylum of species in the fungi kingdom that are known as 'spore shooters', these mushrooms form their spores on a sac called an "ascus". This distinguishes them from the Basidiomycetes, the group that encompasses most all the rest of the edibles and forms their spores in, you guessed it, 'basidia'! Being an Ascomycete is just the beginning of what makes this regal mushroom unique. Let's begin with the morphological characteristics.



Morchella esculenta M.Evans

There are a handful of local edible species the color of which can vary from white to gray to black & tan to yellow. The cap itself has a wrinkled

honey-comb appearance which are in fact the 'ascus' or sacs where the spores are produced/dispersed. The stalk is always hollow in morels.



Note the hollow stem M.Evans

When looking for morels one must be aware that there are look-alikes out there as well. Playfully known as "elfin saddles" for their cap shape, these morel relatives can trip up a novice. These can easily be mistaken for a *Morchella* species.



Helvella vespertina or Western Black Elfin Saddle
M.Evans

With enough exposure, however, one can easily determine that the cap on the false morel is lobed rather than honeycombed like the true morel seen below.



Morchella elata or Black Morel M.Evans

True morels have been described as nutty and delicate in taste. Their porous caps are perfect for absorbing sauces, especially cream sauces for a French style preparation. Their hollow stems are also well suited to stuffing. The following recipe is best prepared with larger specimens.

Bacon Wrapped Chevre Stuffed Morels

20 large morels, cleaned
One 8 oz log of chevre
2 cloves garlic, finely minced
Small handful of herbs such as chives, tarragon
and chervil finely chopped
Salt and pepper to taste
4 T. EVOO
10 slices thin-cut bacon cut in half lengthwise
Fleur de sel

To make the stuffing, stir the garlic and herbs into the room temp chevre. Add salt and pepper and taste for proper seasoning. Place stuffing in a ziplock bag. Zip the bag shut making sure to get most of the air out. Cut a small hole in one corner of the bag. Pipe a small amount of filling into each cap without overfilling. Wrap each mushroom with a slice of bacon, pressing to seal the ends. Heat oil in a cast iron skillet and cook the mushrooms 2-3 minutes per side, making sure the bacon is fully cooked. Do the mushrooms in batches to avoid overcrowding the pan. Drain on paper towels and sprinkle with fleur de sel right before serving.



Mountain Morels! M.Evans

Once you have developed a taste for these highly prized mushrooms, you now have the challenge of finding them! I had been foraging mushrooms a good 15 years before I found my first specimens. Due in part to the fact that their mycelium is short lived, one does not have a reliable patch to return to year after year. Some guidelines in finding them is to look in burn areas in the foothills just after the snow melts. If that is too great an undertaking, I have been told they can be found in urban area parking lots, sprouting in landscaping wood chips. So always keep an eye out, whether you are on a formal foray or simply running errands at IKEA, you might just hit the fungal jackpot! Good luck and see you at the Culinary Chapter dinners!

who are interested in the gastronomical aspects of mushrooming. It meets on the first Monday of each month (with a few exceptions for holidays) at 7 p.m. at the San Francisco County Fair Building (Hall of Flowers), Golden Gate Park, 9th and Lincoln, San Francisco, so that members may enjoy each other's company, learn about mushroom cookery, and have a delicious meal. Culinary Group dinners are open to current members of MSSF and the Culinary Group, and their guests ~ go to www.mssf.org for information, to join the Culinary Group, and to register for its dinners. •

April Culinary Group Dinner

April 2, 2018, MSSF Culinary Group Dinner

Theme: **"GOT BEEF? SMOKIN HOT!"**

Captains: *Carol Reed, Bill Hellums*

Main Dish: *Smoked Beef Tenderloin Rubbed With Porcini Seasoning*

Vegetarian Main Dish: *Seasoned Roasted Portobello Mushroom*

Salad: *"The Wedge" with blue cheese dressing*

Side Dish: *Mashed Potatoes With Porcini Gravy*

Side Dish: *Asparagus With Lemon Garlic Vinaigrette*

Dessert: *Candy Cap Bread Pudding*

Coffee & Tea

April 2, 2018, 7 pm

Hall of Flowers (County Fair Building)

9th Avenue & Lincoln Way

Golden Gate Park

San Francisco, CA

The MSSF Culinary Group, an all-volunteer committee of MSSF, is open to all MSSF members

Morelore continued

Morels are one of the most prized of mushrooms for potential cultivation purposes. They are actually quite easy and aggressive to grow; they are just not easy to predictably fruit, except for some Chinese endeavors and those of Gourmet Mushrooms in Sebastopol. Both of these have successfully managed to grow and fruit cultivated morels but they have so far only produced flavorless and odorless morels, probably due to the genetic strain of species rather than the methodology. But we at the BAAMlab have come up with many techniques for cultivating them into fine food products that don't require actual morel fruiting bodies.

There is evidence for different morel species being variously saprobic, mycorrhizal/symbiotic, and/or parasitic and combinations thereof so they could well be opportunistic for all mushroom cultivation lifestyles.

It is known that it's easy to grow morels from those burn morel butts that you collect by pulling off the dirty bases from the main body of the morel and place into your cultivation bag along with a little added ashy substrate from the area around the harvested morels and the old or past prime morel bodies that you aren't going to eat. This bag of goodies can be kept in the fridge after you get home, for a few days to a few weeks, and at anytime planted at the base of your compost pile. Often you will open the bag to find it loaded with mycelium growing vigorously en masse. Whenever the conditions are right in your garden you may find morels sprouting anywhere, but not necessarily where you originally planted them.

One of the techniques involves growing them in conjunction with a grove of young elm trees.

If you mulch the trees deeply with wood chips and other organic matter and then after it has an opportunity to decay and have fresh wood chips added so there is an ongoing organic mulch layer that transitions from soil up into composty duff into partially decayed wood chips into raw wood-chips, then there is a transition from soil up to raw chips with everything partially infiltrated with elm tree roots. The roots going from the soil up into the duffy layer then can easily be exposed by raking back the duff and adding morel spawn or spore slurries to the exposed roots and raking back the duff and raw chip layers. In this manner the morels develop in conjunction with the elm trees, either symbiotically or parasitically, though maybe saprobically initially. After a few years the young elm trees are cut down and the dead or dying trees and roots sprout multitudes of young morels in the spring.

Many theories have been proposed for the notorious bumper crops of morels in Western burn zones from the California Sierras to Oregon, Washington, Idaho, British Columbia, and Alaska. Some say that the fires burn off all the organic matter from the long standing forest, the rich ash of the summer/autumn fires is then covered with snow, and the morel mycelium grows in the rich substrate all winter under the snow, and then fruits with abandon with the spring melt. Others say that the morel mycelium is always there, constantly making sclerotia, little nutlike tubers that may sprout smatteringly at any time into baby morels or be stimulated to all flush at once after the forest burns and the smoke extract from the burn stimulates the sclerotia to sprout.

Sclerotia are small nut or tuberlike growths produced by certain unrelated fungi that can

sprout into mushrooms. *Claviceps purpurea*, *Polyporus tuberaster*, *Ophiocordyceps sinensis*, *Psilocybe mexicana*, *tampanensis*, and *galindoi*, and *Morchella* all produce sclerotia, though not each of these have the same anatomical development. Sclerotia are also known as “truffles” in the underground magic mushroom growers forums though this isn’t the same as mycorrhizal truffles on the roots of oaks which aren’t usually called sclerotia since they don’t sprout into a mushroom. These magic mushroom sclerotia can sprout into a mushroom but are usually grown and used in the nut stage. These “stones” have also been popularly associated with the “Philosopher’s Stone” of ancient and alchemical lore by new marketing exploitations in the heads of magic mushroom stonerheads.

There is a “truffle tek” method of growing stoner-sclerotia-producing magic mushrooms that may or may not be of use for producing *Morchella* sclerotia.

If you would like to grow food products using morel mycelium to flavor barley for morel barley soup, or brown rice, garbanzo beans, or pecans for a soy-less but very meaty flavored tempeh, you can just grow the morel mycelium on the edible sterile substrate of your choice. It will even produce sclerotia, actual morel flesh, in the container to add to the flavor and texture of the product. These techniques you can learn and produce in our BAAMlab at OmniCommons in Oakland.

Those interested in the life cycle of morel sclerotia production may wish to check out this Tom Volk article:

Tom Volk’s Morel Life Cycle:

http://botit.botany.wisc.edu/toms_fungi/morel.html

And here are some other morel cultivation techniques from previous MN Cultivation Quarters:

Cultivation Quarters for March 2003:
<https://www.mssf.org/mycena-news/pdf/0303mn.pdf>

Cultivation Quarters for May 2007:
<https://www.mssf.org/mycena-news/pdf/0705mn.pdf> •

Mushroom Sightings
Rivkah Khanin, East Bay



Clitocybe nuda Blewit



Cantharellus californicus
Chanterelle



Amanita muscaria Fly Agaric



Amanita velosa



Mycena News Submissions

Please do send in your submissions for the May Mycena News pronto. The new monthly official deadline is now midnight the 20th of each month. (Any month that the 20th falls before or on the general meeting the deadline will be the Wednesday after the general meeting, ie Nov 22 2017, Feb 21 and Mar 21 2018)

This does not mean to wait until the 20th of each month to turn in your stuff; it means that is the deadline and you should shoot for getting it in starting by the first of the month.

If you have something that is dependent on the general meeting like photos of the mushroom ID table or the hospitality preparations, etc. you now can get that in before the deadline.

Please email your submissions to:

mycenanews@mssf.org

Please use this MN email address as, if you send it to newsletter individuals, it can get lost when we try to search down all the submissions if they aren't submitted to the official email address.

Best format is to "save as" a Microsoft Word Document, 97-2003, with a minimum of formatting in the doc. You may also use a "notepad" style document with only "plain text."

We ask that you please follow these conditions:

- Please DON'T use any ALL CAPS.
- Please DON'T use any indents, tabs, or bullets.
- Please DON'T use any bolding, underlining, or any other italics besides:
- Please DO include italics for scientific names or foreign words.
- Please DO use single spaces between words and ends of sentences.
- Please DO use ONLY left justification for all paragraphs, titles, signoffs, etc.
- Please DO use 11pt New Times Roman font if you have it, but NOT multiple fonts or unusual fonts or multiple sizes.

For bibliographies that often have special formatting included in your submitted doc, if you have lifted them from other docs, you may just leave all the original formatting, and we can see better what was intended and make modifications for the masterdoc, if needed.

Please follow these above conditions for your official submissions, however if you would like for us to see how you envision the formatting of your submission, you can also submit a second version formatted in that manner and we may be able to make use of that.

As we get submissions they are each incorporated into a MN masterdoc with certain in-house MN master formatting for the final design layout. The design layout software removes all previous formatting from the masterdoc, so any extra formatting you insert, beyond the above parameters, only complicates the prepping of the masterdoc, so please DON'T do that, and DO follow the above submission conditions. •



Mycological Society of San Francisco
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199 Museum Way, SF, CA 94114

Find us on social media

MYCENA NEWS

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Please e-mail photos, comments, corrections, and correspondence to mycenanews@mssf.org

To subscribe, renew, or make address changes, please contact Stephanie Wright:
membership@mssf.org

Past issues of Mycena News can be read online at <http://mssf.org/mycena-news/issues.html>

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To learn more about all council and committee positions, go to: www.mssf.org members-only area, file archives, council member position descriptions. Or email president@mssf.org.

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