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URBAN PARK QUICK START FORAYS November 14 Quick Start Foray Report *by Paul Koski*

There was hope for finding lots of fungi after a couple of rainy days in the week before the foray but after some preliminary scouting in Golden Gate Park, not many mushrooms were showing up. Nevertheless, on Saturday morning a dozen or so foragers met near the Polo Field in Golden Gate Park and then spread out to see what we could find. We were rewarded by scrutinizing shady, moist habitats in the park that produced more than a dozen species of fungi. Some of the more easily identified finds were shaggy manes *Coprinus comatus*, the yellow staining *Agaricus xanthodermus* and its close relative *Agaricus californicus*, the coastal *Agaricus bernardii*, deer mushrooms *Pluteus cervinus* growing on buried wood and *Armillaria mellea*, honey mushrooms also fruiting from buried wood.

Other less identifiable (for us novice foragers) included delicate *Mycena*, *Coprinopsis* and perhaps *Parasola* species growing in moist compost under the shade of plants. *Cryptosporus* was reported on a fallen tree and there were few other odd & interesting but unidentified finds. All in all, it was a fruitful morning & added to our knowledge of local urban park fungi.

[The next Quick Start Foray](#)

Mushroom of the Month:

Amanita muscaria
The Santa Mushroom, Fly Agaric

Ken Litchfield

This month's mushroom profile is one of my favorites, December's Santa mushroom. While prevalent at other times of the year in other places with more extensive rainy seasons, in the SF bay area the height of its season is the holidays. One of the most elegant, beautiful, and recognizable mushrooms in the world, the Santa mushroom is not only cosmopolitan and common, it is rich in lore and stately in demeanor, yet cuddly and not lugubrious, just like Santa himself. Decked in cheery cherry red and decoupedged with puffs of fluffy white, the Santa's cap jingles atop its ivory bearded veil leading down the long white chimney stipe to the skirty cummerbund constricting the top of the bulbous jolly belly.



Amanita muscaria © Fred Stevens

One of the many fruits of the roots of the pine, the Santa's red and white stop sign hohohoheyheyhey heralds from a distance the nearby presence of its associated shy porky little porcini buddy, drably disguised mushrumping among the pine needles -- the most tabloid-worthy mushroom couple in the world. There they hang with an entourage of other semifamous fungi further down the alphabet of celebrity lists like matsies, men-on-horseback, delicious slippery jacks and their hangers-on, the pine spikes.

Not only is the Santa mushroom one of my favorites, it's one of the world's favorites. From kitchykoo knickynacks at doilyworld.com to coo-coo theories about legendary origins for the icons of religion, ecstasy, and gift giving, the Santa mushroom's distinctive look and inherent pharmacology is loaded with wazoo volumes of scrumptious lore.

Perhaps you've heard of the two constituents or "toxins" in its sap, ibotenic acid and muscimol, that when its flesh is eaten the first toxin is converted into more of the latter by the mammalian physiology so that the urine excreted by the eater is more "toxic" yet desirable than the original mush-

[Continued on page 3](#)

PRESIDENT'S POST

Hello MSSF Members,

Wow, it is dry out there! So far we are at half of our normal rainfall for the current season, and at only 1/3 our normal rainfall for the year ([See Almanac](#)). Let's hope we get something very soon. Nonetheless, we did get a rather good show of diversity at the annual Mendocino Camp. I heard a rumor that there were about 120 different species collected during the weekend, however there was not an abundance of any particular species (with the exception of two very healthy finds of *Sparassis* and *Laetiporus* made by Amanda Owen-Walkup). The mushrooms are out there, just not in notable supply.

In addition to several forays, Katrina Blair and Gary Lincoff gave two informative and entertaining talks on mushroom foraging. I want to thank the staff and volunteers for making this year's camp possible. Special thanks go to Mendocino Camp Director Curt Haney for making this another wonderful and highly regarded event. "Forays, Food, and Fun" will be sure to describe Mendocino Camp as long as Curt is at the helm. Next year Curt has lined up Larry Evans to be our guest speaker, so be on the lookout for more information on next year's event come early September of 2016.

In upcoming events the annual MSSF holiday dinner will take place on Monday, December 14th. Please go to www.mssf.org to register for a spot, as MSSF member Eric Multhaup is preparing an amazing menu with Chefs Michael Polite and Michael Brady of Vin Antico Restaurant in San Rafael, CA. Bring a friend, some dishware and a little holiday cheer as we share in some end of the year revelry.

The annual MSSF Fungus Fair is also upon us; it is scheduled for December 6th at the San Francisco County Fair Building, in Golden Gate Park. Stephanie Wright and Jackie Shay have been doing a great job setting up this year's lineup, so please help out by either volunteering at the Fair or spreading the word via friends, fliers, and social media. This is one of the MSSF's biggest fundraisers, so all your help is needed and very appreciated. To register as a volunteer, go to msmf.ivolunteer.com. There will be much more in store after the Fungus Fair and holidays, so be sure to keep up to date with the MSSF's activities by coming to general meetings, following our Yahoo group, or joining in on a foray. The rain will be sure to bring multitudes of mushroom possibilities.

Thanks again to all of you who continuously contribute to make the MSSF a great organization. I look forward to seeing many of you at the Fungus Fair, the holiday dinner, and many other MSSF events.

-Brennan Wenck-Reilly



NOVEMBER FUNGAL JUMBLE ANSWERS

King Bolete Tree Hosts in California

PREINHOSE

S H O R E P I N E

ACTIKUSPERS

S I T K A S P R U C E

VEILAKO

L I V E O A K

PUCASULTEY

E U C A L Y P T U S

PENPIBOSHI

B I S H O P P I N E

What you might call a small veranda?

A P O R C H I N I



Photo by Eric Multhaup

room. If the excreter be a human, the resultant yellow snow is such a great attractant for any reindeer in the vicinity that they supposedly trample the pee-er to get to the snow. Makes you wonder why anyone leaves red and white icing cookies around the base of the fireplace holiday pine to trap Santa when you could just eat this mushroom and pee on the roof for his reindeer. Surely the resultant prancing and pawing would pause St. Nick. Now there's a holiday tradition.



Amanita muscaria © Michael Wood

Perhaps you've heard that these mushrooms, provided by a Siberian welcoming party, were a favorite unprovable yet suspicious murder technique in the offing for naïve revolutionary Bolshevik commissars sent by Moscow to overlord the Siberian locals -- death by reindeer trampling. Or maybe you've heard the tale of the tzarist onepercenters who would eat recreational quantities of these mushrooms in their palaces and venture out to the Moscow street curbs, to trickle down their benefits to the groveling Rus riff-raff that collected the flows in bowls and cups. So arose the term "peons" for the 99ers.

Maybe you've heard about the stories of this mushroom and its influence on the beginnings of Christianity. Or the pillaging of the Vikings. Or the visions of Soma. There is a mini industry of books touting the lore of the Santa mushroom throughout the history of its use in various parts of the world, which you can google to fill your leisure time for months and years to come. At this point whether each of these stories has credibility no longer much matters, as the mushroom has transcended the credibility of its storytellers to embody them all.

Due to some of the constituent toxins like ibotenic acid, muscimol, and muscarine this mushroom is sometimes characterized erroneously as deadly, when most of this reputation is unverifiable. Perhaps the average adult would have to eat over a dozen of them to be at any real risk, not a very realistic likelihood considering its raw flavor fresh or dried. And those trying to get high usually don't need more than a half a cap to two or three to be plenty distracted by side effects of nausea, vomiting, diarrhea, sweats, chills, delirium, mood changes, euphoria, depression, sleepiness, excitement, salivation, cotton mouth, lack of physical coordination, blurred vision, auditory and visual hallucinations, and amnesia.

However, properly prepared the Santa mushroom is actually a great edible. I think it tastes better than any of the other Amanitas including the coccora and the spring amanita. You can google the paper by Rubel and Arora



that discusses the history of the edibility of *Amanita muscaria* and follow the sometimes elaborate recommendations for preparation from earlier times. However, Arora has a simple parboil twice and discard the water method that he has used many times safely. We have prepared this mushroom many times at MycoMendoMondo with a simple single 10-minute boiling and then sautéing similar to southern style poke salad. It has the nutty flavor and fine texture of a top-



notch edible with no more care needed in prepping than the potentially deadly poisonous morel.

If you would like to partake of this mushroom during your holidays, slice two to three average sized mushrooms about an eighth to a quarter inch thick and toss into a pot of three to four times as much volume of roiling boiling water, for about ten minutes. Then strain out the mushroom slices and sauté them in butter until lightly browned (important because the mushroom takes in water after boiling), and add salt and pepper to try them for their own flavor. You could toss the now reddish water or, if you like, you could drink various amounts of it on an empty stomach to see your reaction to the water soluble constituents. They aren't heat sensitive like chicken-of-the-woods, so the water retains any of the inebriating effects -- as well as the side effects.

And if you would like to grow these beautiful mushrooms in your back yard, be sure to plant one or more of the little living holiday Italian stone pines that make pignolias that you find in the nursery section of drugstores, hardware stores, or big box stores, discounted right after the holidays. You can add a little mixed forest action with doug fir, birch, or *Cedrus deodara*, all decorative in their own right. Check the Cultivation Quarters in this month's MN for the details on how to cultivate mycorrhizal mushrooms like the Santa mushroom.

Come Celebrate the Holiday Season at the MSSF Holiday Dinner!

Monday, December 14

at the **San Francisco County Fair Building, aka the Hall of Flowers, at 9th Avenue and Lincoln Way.**

The cost is \$40 for members, \$45 for guests, and \$20 for children under 14.

Registration is on the MSSF [website](#) only, beginning November 1.

Menu by Chefs Michael Polite and Michael Brady of Vin Antico Restaurant in San Rafael, CA.

Appetizers - Please bring an appetizer for the appetizer buffet table.

This year there will be three awesome prizes awarded by distinguished judges.

Holiday Egnog (alcoholic and non)

First Course - Candy cap mushroom bread pudding toasts with truffle duxelles

Main Course – Porcini crusted filet mignon with morel cream sauce; celery root purée and truffled cauliflower; or vegetarian option upon request:

- herbed winter squash with mushrooms

- Multi-colored carrots and broccoli rabe with lobster mushrooms, white wine sauce and shaved Parmesan;

- Brown rice risotto (gluten free) with mushroom brodo, mixed mushrooms, crispy shallots, Bloomsdale spinach

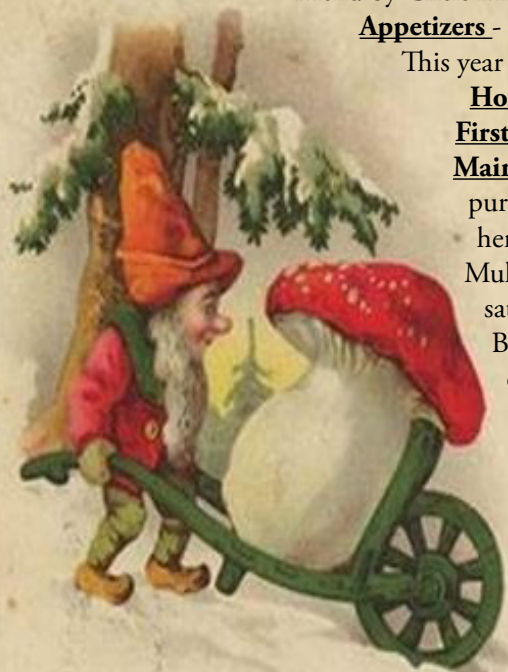
Dessert - Porcini dusted tiramisu

New raffle format with prizes donated by Sue Fisher King

(www.suefisherking.com if you are not familiar with the store)

Vin Antico is a farm-to-table restaurant well-known in Marin County for innovative mushroom dishes.

The Holiday Dinner Committee is looking for two volunteers to do the heavy lifting part of the set-up and take-down, plus some help in serving, for a free dinner. If interested, e-mail Eric at mullew@comcast.net.



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HOSPITALITY

The Hospitality Committee gives a shout-out to guest chef **Sarah Ruhs** for the October meeting.

Sarah made a flavorful mushroom quiche that was cleverly presented in bite-sized pieces. The ingredients were shiitake and trumpet mushrooms, cheese, eggs, milk, sage, salt, pepper, butter, and puff pastry.



Photo by Eric Mulhaupt



YOU TOO can be a guest chef for a hospitality hour. Just e-mail George at george_willis@sbc-global.net, or Eric at mullew@comcast.net. You will have an \$80 food budget from the MSSF, and Hospitality Committee members available for advice and support.

CULINARY CORNER

by Heather Lunan

The MSSF Culinary Group November dinner was an All American Feast, and we did feast heartily. Attendees brought a vast array of mushroom-themed appetizers to pique our appetites for the delights to come.

Team Captains Bill and Carol Hellums organized a splendid repast for the evening. Bill Hellums smoked beef tenderloins over mesquite wood until they were just rare and supremely tender. The beef was paired perfectly with a rich mushroom gravy by Toni Kiely.

The vegetarian entrée by George Collier was a savory stew of white beans, leek, garlic, chanterelles, and gold and black trumpets, and garnished with shaved Parmesan, vegan mustard mayo, or crema fresca. Carol Hellums served tender baby potatoes in butter with fresh parsley and marjoram handpicked from her garden. Pat George transformed a full bushel of fresh spinach and “lots and lots” of cream into a decadent, creamed spinach. Al Carvajal presented refined carrots in lashings of butter, fresh dill and perfumed with powdered candy caps. Jon Harman tossed a delightful salad of spring greens and shaved vegetables in his homemade honey Dijon vinaigrette. Catherine Ung baked her famed luscious pear and blueberry cobbler with a cornmeal topping, and served with Mitchell’s vanilla ice cream, all washed down with hot decaffeinated coffee and teas by Carol Reed. The dinner was the utmost in luxury on a mild fall evening.



The highly anticipated Holiday Dinner is on December 14th, be sure to register early for a spot. The Culinary Group dinners will resume in January.

Thanksgiving dinner is around the corner and in my family my Grandpa Bennett would try a new turkey dressing, each year trying to top the last. One year, with delight, he said that he added a special “secret” ingredient - mushrooms. There are many mushrooms one can use to enhance a Thanksgiving dinner but I prefer *grifola frondosa*, the nutty and earthy maitake. I think he would have enjoyed this elegant version of dressing from Chef Becky Selengut, author of *Shroom*, featuring the maitake. I like this dressing with the herb and garlic cured pancetta from Boccalone and Acme levain.

MAITAKE, PANCETTA AND PORT-SOAKED CHERRY STUFFING

Ingredients:

- 9 cups of cubed artisan bread with a sturdy crust (a 22 oz. loaf)
- 1/2 cup ruby port
- 1/2 cup dried cherries, unsweetened
- 1 Tbl. fresh sage, minced, plus 3 whole leaves
- 1 Tbl. sea salt, plus more
- 1/4 pound pancetta (or bacon), unrolled and diced
- 4 Tbl. unsalted butter, plus more to butter the casserole
- 2 large yellow onions, diced small
- 6 stalks celery, diced small
- 1/3 cup dry white wine or vermouth
- 1 pound fresh mushrooms, use 1/2 maitake and 1/2 crimini or the mushroom of your choice, sliced
- 1/2 cup chopped fresh flat leaf parsley
- 1/4 cup pine nuts, toasted
- 2 tsp. fresh thyme, minced
- 1/2 tsp cayenne pepper, or to taste (I use less)
- 3 large eggs, beaten (I omit and add 1/2 to 3/4 cup heavy cream)
- 3 – 4 cups mushroom or turkey stock
- Ground black pepper

Method:

Heat the port in a saucepan and add the cherries, 3 whole sage leaves and a pinch of salt and let simmer until the liquid is mostly absorbed. Discard the sage and remove from the heat.

Preheat the oven to 300 F and spread out bread cubes on a baking sheet in one layer, bake for 30 minutes to dry out the bread. You can also leave out the bread for a day or two on the baking sheet until the cubes have dried, then store in plastic bags.

Raise the oven to 400 F.

In a large skillet over medium heat, sauté the pancetta and cook until browned and crisp. Remove to a plate, leaving the fat in the skillet. Add 1 Tbl. of butter and the onions, celery, 2 tsp. salt and cook, stirring, until the vegetables are soft and starting to brown, approximately 15 minutes. Add the vermouth and scrape the pan to dissolve any browned bits. Remove vegetables to a large mixing bowl.

In the skillet add 2 Tbl. of butter and sauté the mushrooms with salt and pepper until they release their water and the water is evaporated. Continue to cook to let the mushrooms brown, stirring occasionally. Add mushrooms to the mixing bowl. Add the bread cubes to the mixing bowl along with the cherries, pine nuts, herbs, and cayenne, and toss well. In a separate bowl, mix the eggs with 3 cups of the stock and 1/2 tsp. salt and stir to combine, and then pour into dressing. Mix well. If the dressing seems dry add more of the stock, the final mixture should be fairly wet.

Put dressing in a buttered 9” x 13” casserole dish and dot the top with 1 Tbl. butter, and cover with foil. Bake covered for 25 minutes, then uncover and bake another 15 – 20 minutes until the top is golden brown. Serves 6-8 with roasted turkey, goose, a large chicken, or pork chops.

BRAIN CHEMISTRY AND MYCOPHILIA

by Bob Sommer

In the May 2015 Atlantic, Sam Kean, author of “The Tale of the Dueling Neurosurgeons: the History of the Human Brain as Revealed by True Stories of Trauma, Madness, and Recovery” wrote an article about the physiological basis of exaggerated interests.

According to Kean, Dr. Andrew Lees a London neurologist and the world’s most highly cited Parkinson’s researcher, prescribed Pramipexole to several patients suffering from Parkinson’s, a disorder of the nervous system that causes difficulties with movement, muscle control, and balance. One of these patients was an anonymous 58-year-old naturalist who, after taking the drug, began “writing obsessively about mushrooms and toadstools— sometimes for 48 hours straight.” The patient started distributing sandwiches to drug addicts he encountered while walking around London and giving away money. All these activities were unusual for the man. When Dr. Lees reduced the dosage of Pramipexole, the patient’s unusual indulgences declined.

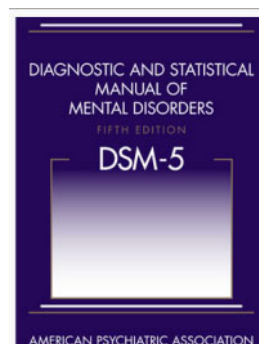
At a personal level, I hoped that Lee’s research could explain my obsession with all things fungal. I cannot walk around town without looking for mushrooms on watered lawns or around city trees, mushrooms which I am driven to collect, (sometimes illegally), paint, and, write about. I have over 600 scanned watercolors of fungi on the MSSF website with the originals housed in the MSSF library and hundreds more in file boxes at home. Friends and family cannot understand my preoccupation with fungi, most of which I don’t eat. I endure all manner of hardship — rain, mud, poison oak, ticks, and fear of arrest for trespassing or vandalism. When in the woods, I am always looking down at the ground, missing mountains and other scenery. I seek out year-old forest fires, traipsing through ugly burned areas covered with char in search of barely visible morels. The median number I have found per trip is zero, but no one writes about that. I learn Latin names which professional mycologists debate and change arbitrarily. My obsession has continued unabated for several decades. I also travel to distant locations in the company of fellow mycophiles to forage and discuss fungi we won’t be eating.

In his Atlantic article Sam Kean wonders if this type of obsession is a form of mental derangement. Based on Lees’ patient’s mushroom craving which worsened after taking the drug and got better when the dosage was reduced, he answers the question affirmatively. Lees attributes this change to the drug’s role as a dopamine antagonist. The pleasure and reward centers are damaged in Parkinson’s, reducing the patient’s ability to enjoy life, and when the drug restores the balance and the dopamine starts flowing, this brings a rush of excitement, culminating in exaggerated interest in things. I am inclined to agree with Lee’s assessment. I experience a heightened mycophilia when the rainy season starts and withdrawal symptoms if I can’t get to the foothills or mountains. This condition has been exacerbated by the California drought where I have nothing to write or paint. I find myself using the writer’s gambit (as I am doing here); when blocked, write about not writing.

Although I accept Kean’s argument that excessive interests may have a physiological basis, I don’t believe that mycophilia represents a condition that requires treatment. After all, gambling disorder is the only non-substance related addiction listed in the current edition of the American Psychiatric Association’s diagnostic manual (DSM-V) used by the government and insurance companies to decide benefit claims. I am not sympathetic to the current diagnostic inflation, the tendency to medicalize ordinary human experience. When mushroom season comes around, I will go into the woods rather than take a pill.

Bob Sommer

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MSSF MENDOCINO WOODLANDS FORAY 2015

“Mendo Camp”

by Curt Haney

This year the annual MSSF Mendocino Foray/Camp attracted 140 members. Camp sold out this year in less than two days, and many MSSF members tried to sign-up for camp but were too late. I announce “Mendo Camp” every year by sending out an e-mail to all members telling them when the sign-up opportunity will begin on the MSSF website in September. Don't wait too long next year, register as soon as possible in order to be included. The camp motto for the last several years was “Food Forays & Fun” and this year it was no exception.

The meals provided to us by Chef Deborah Dawson and her crew at “Good Thyme Catering” in Mendocino was fabulous as always. All of our meals were infused with wild mushrooms provided by Far West Fungi in San Francisco and gourmet mushrooms provided by Mycopia in Sebastopol who supplied a box of fresh cultivated morels to camp from their farm in Michigan. In addition, Far West Fungi special delivered a box of 25 packages of their new product, Shiitake jerky, to camp.

Nine forays were conducted by MSSF volunteer staff members, and our two guest speakers Gary Lincoff and Katrina Blair lead two of them. Last year a little over 100 species were brought into camp, this year it was closer to 150, identified by our camp mycologists, Noah Siegel and Fred Stevens with assistance from Gary Lincoff. Camp went well this year with many MSSF and SOMA members in attendance. The only choice edibles discovered were very small baby porcini and some tooth fungi. However, several beautiful large *Sparassis* and Chicken of the Woods were found.

The guest speakers provided us with very interesting educational presentations and entertainment on both Friday and Saturday evenings. Katrina Blair gave an informative presentation on identifying and foraging for many of the various different wild foods available to us here in the forests of California. Gary Lincoff a three time guest speaker over the last eight years at camp came through again, with a very entertaining presentation which covered many topics including tales from the Telluride Magic Mushroom Festival.

Other activities included:

- A mushroom dye class conducted by Alissa Allen.
- A great raffle of unique fungi related collectible items by Curt Haney.
- A free tour of the Gourmet Mushroom farm, (Mycopia) in Sebastopol for a group of attendees on their way to camp on Friday.
- A great mushroom cooking demonstration on Saturday afternoon which provided appetizers to all the returning hungry foragers. Included was a marvelous soup that included eight different kinds of mushrooms accompanied by grilled gourmet bread. The chefs, Andy & Gail Still & company, also grilled Matsutake, Shitake, and King Trumpet mushrooms for all to enjoy.

Overall, it was another successful fall foray for the MSSF. I want to thank all the staff members and volunteers. These selfless MSSF members are what make this annual event possible.

I am already planning “Mendo Camp” for 2016. Speakers for Saturday next year will be a co-talk by Daniel Winkler & Larry Evans. The speaker for Friday is still to be determined.

See many of you all at camp next year!



[continued on page 8](#)

MENDO 2015 SPECIES LIST (172 species) by Noah Siegel and Fred Stevens

<i>Agaricus arorae</i>	<i>Gomphidius subroseus</i>	<i>Pholiota brunnescens</i>
<i>Agaricus deardorffensis</i>	<i>Gomphus clavatus</i>	<i>Pholiota terrestris</i>
<i>Agaricus diminutivus group</i>	<i>Gymnopilus junonius</i>	<i>Pithya cupressi</i>
<i>Agaricus semotus</i>	<i>Gymnopilus punctifolius</i>	<i>Pleurotus dryinus</i>
<i>Agaricus smithii</i>	<i>Gymnopilus sp. similar to G. sapineus</i>	<i>Pleurotus ostreatus</i>
<i>Agaricus sp.</i>	<i>Gymnopus androsaceus</i>	<i>Polyporus badius sensu western NA</i>
<i>Alboleptonia (Entoloma) sericellum</i>	<i>Gymnopus dryophilus</i>	<i>Pseudohydnum gelatinosum</i>
<i>Aleuria aurantia</i>	<i>Gymnopus quercophilus</i>	<i>Pulveroboletus ravenelii</i>
<i>Amanita calyptroderma</i>	<i>Gymnopus villosipes</i>	<i>Ramaria acrisiccescens</i>
<i>Amanita gemmata</i>	<i>Hebeloma crustuliniforme group</i>	<i>Ramaria araiospora</i>
<i>Amanita muscaria</i>	<i>Helvella vespertina</i>	<i>Ramaria botrytis</i>
<i>Amanita pachycolea</i>	<i>Hemimycena spp.</i>	<i>Ramaria cystidiophora</i>
<i>Amanita smithiana</i>	<i>Heterobasidion occidentale</i>	<i>Ramaria Formosa</i>
<i>Amanita vaginata group</i>	<i>Hydnellum peckii</i>	<i>Ramaria gelatiniaurantia</i>
<i>Annulohyphoxylon thouarsianum</i>	<i>Hydnellum scrobiculatum group</i>	<i>Ramaria rubiginosa</i>
<i>Arrhenia epichysium</i>	<i>Hydnum repandum</i>	<i>Ramaria stricta</i>
<i>Atheniella aurantiidisca</i>	<i>Hydnum umbilicatum</i>	<i>Ramaria stuntzii</i>
<i>Auriscalpium vulgare</i>	<i>Hygrocybe acutoconica</i>	<i>Rhizopogon occidentalis</i>
<i>Bolbitius aleuriatus</i>	<i>Hygrophoropsis aurantiaca</i>	<i>Rhizopogon ochraceorubens</i>
<i>Boletus edulis</i>	<i>Hypholoma fasciculare</i>	<i>Rhodocollybia butyracea</i>
<i>Boletus erythropus seusu CA</i>	<i>Inocybe lilacina</i>	<i>Roridomyces roridus</i>
<i>Boletus mirabilis</i>	<i>Jahnoporus hirtus</i>	<i>Russula brevipes</i>
<i>Boletus regineus</i>	<i>Lactarius aestivus</i>	<i>Russula californiensis</i>
<i>Campanella 'veiny'</i>	<i>Lactarius alnicola</i>	<i>Russula fragilis</i>
<i>Cantharellus formosus</i>	<i>Lactarius rubrilacteus</i>	<i>Russula fragrantissima</i>
<i>Cantharellus subalbidus</i>	<i>Lactarius xanthogalactus</i>	<i>Russula sanguinea</i>
<i>Caulorhiza umbonata</i>	<i>Lentaria pinicola group</i>	<i>Russula xerampelina</i>
<i>Chalciporus piperatus</i>	<i>Lepiota cristata</i>	<i>Schizophyllum commune</i>
<i>Cheimonophyllum candidissimum</i>	<i>Lepiota flammeotincta</i>	<i>Scleroderma polyrhizum</i>
<i>Chlorociboria aeruginascens</i>	<i>Lepiota sequoiarum</i>	<i>Skeletocutis nivea</i>
<i>Chondrostereum purpureum</i>	<i>Leptonia carnea</i>	<i>Sparassis radicata</i>
<i>Chroogomphus tomentosus</i>	<i>Leucoagaricus rubrotinctoides</i>	<i>Stereum hirsutum</i>
<i>Chroogomphus vinicolor</i>	<i>Lycoperdon pyriforme</i>	<i>Stereum ochraceoflavum</i>
<i>Clitocybe trullaeformis</i>	<i>Lyophyllum</i>	<i>Strobilurus trullisatus</i>
<i>Clitopilus prunulus</i>	<i>Lyophyllum decastes group</i>	<i>Suillus caeruleus</i>
<i>Conocybe sp.</i>	<i>Marasmius plicatulus</i>	<i>Suillus lakei</i>
<i>Coprinus comatus</i>	<i>Melanoluca sp.</i>	<i>Suillus ponderosus</i>
<i>Coprinus comatus</i>	<i>Micromphale sequoiae</i>	<i>Suillus pungens</i>
<i>Cortinariua largentii</i>	<i>Mycena abramsii</i>	<i>Suillus umbonatus</i>
<i>Cortinarius cyanites</i>	<i>Mycena adscendens</i>	<i>Tapinella atrotomentosa</i>
<i>Cortinarius laniger group</i>	<i>Mycena aurantiomarginata</i>	<i>Tapinella panuoides</i>
<i>Cortinarius ponderosus</i>	<i>Mycena capillaripes</i>	<i>Teprocybe</i>
<i>Craterellus tubaeformis</i>	<i>Mycena citrinomarginata</i>	<i>Tetrapyrgos subdendrophora</i>
<i>Crepidotus mollis</i>	<i>Mycena epipterygia</i>	<i>Trametes betulina</i>
<i>Crepidotus sp.</i>	<i>Mycena haematopus</i>	<i>Trametes versicolor</i>
<i>Dacrymyces chrysospermus</i>	<i>Mycena maculata</i>	<i>Tremella aurantia</i>
<i>Entoloma bloxamii</i>	<i>Mycena oregonensis</i>	<i>Trichaptum abietinum</i>
<i>Fistulina hepatica</i>	<i>Mycena pura</i>	<i>Turbinellus floccosus</i>
<i>Fomitopsis cajanderi</i>	<i>Mycena purpureofusca</i>	<i>Tylopilus humilis</i>
<i>Fomitopsis pinicola</i>	<i>Mycena tenerrima</i>	<i>Xerocomellus chrysenteron group</i>
<i>Galerina badipes</i>	<i>Nectriopsis violacea</i>	<i>Xerocomellus mendocinensis</i>
<i>Ganoderma applanatum</i>	<i>Nidula candida</i>	<i>Xerocomellus zelleri</i>
<i>Ganoderma oregonense</i>	<i>Onnia triquetra</i>	<i>Xeromphalina campanella</i>
<i>Geastrum saccatum</i>	<i>Panellus stipticus</i>	<i>Xeromphalina caudicinalis</i>
<i>Geastrum sp.</i>	<i>Panus conchatus</i>	<i>Xeromphalina fulvipes</i>
<i>Gibellula sp.</i>	<i>Phaeolus schweinitzii</i>	<i>Xylaria hypoxylon</i>
<i>Gomphidius oregonensis</i>	<i>Phlebia tremellosa</i>	

MYCOMENDOMONDO REPORT *by Wendy So*

MycoSendoMondo is an after hours Mendocino Camp event lead by Ken Litchfield and David Gardella where the sleepless campers take over the kitchen and experiment with various edible and quasi edible mushrooms collected during the day. While snacking on candy cap honey butter smoked salt popcorn, folks sampled these mushrooms in the 2015 MycoSendoMondo: scarlet lace chanterelle, *Ramaria botrytis* or possibly *botrytoides* according to Norm, shaggy mane, *Suillus*, porcini, a batch of cultivated morels from Gourmet Mushrooms, and a comparison tasting of *Leccinum manzanitae* vs *Boletus edulis*. The mushrooms for tasting were all cooked the same, sliced and sautéed with butter and finished with a little plain salt and pepper except for the *Amanita muscaria*, which was sliced and boiled for 10 minutes in five times the amount of water once, then drained and sautéed until lightly brown like the other mushrooms. Everyone enjoyed tasting mushrooms they had never tasted before and no one reported any adverse reaction to the mushrooms. Some preferred the *Leccinum* over the porcini but taste is in the tongue of the beholder.

Besides mushroom tasting, David provided home made and commercial samples of several meads, and the night owls experimented with wild mushrooms with wild ingredients like sparasis fritters with acorn flour (gluten-free), and explored making a mushroom dessert like candy-cap coconut ice-cream. Because there was an abundance of chicken of the woods (COW), they were precooked by slicing and boiling and distributed to everyone to take home to cook as they pleased. Thank you Amanda, for sharing your COW excess and helpers for preparing them for everyone.



ANNOUNCEMENTS / EVENTS

MSSF Urban Park Quick Start Forays!

The MSSF Education Committee is planning forays for people new to, or interested in, local mushrooms. These forays are intended to familiarize beginners with field collecting and characters useful in helping to identify mushrooms and other fungi. We usually gather for an orientation to go over collecting policies, practices and etiquette. We also point out nearby locations where fungi are likely to be found. After the orientation, we break out into smaller groups & hunt for fresh fungi for one to two hours. On returning, we display specimens collected and discuss their key identifying characters.

The next foray is planned for **Saturday, December 5**, at McLaren Park. We will meet in the parking lot for the Jerry Garcia Amphitheater on John Shelley Drive in McLaren Park at 9:30 a.m. Fungi that are collected on the December 5 foray will be brought to the San Francisco County Fair Building in Golden Gate Park for display at the Mycological Society of San Francisco's annual Fungus Fair on Sunday, December 6.

New MSSF members, families and guests, beginners or not, are welcome. Non-members of the MSSF are also welcome. It is hoped that the forays will provide information about local fungi and stir an interest to learn more.

Email Paul Koski at pkoski04@yahoo.com for details about these forays and to be put on the foray list.

Herbal Mead Making

7pm-10:30ish Every Wednesday Night
at Omni Labs
4799 Shattuck, Oakland

Contact litchfield.ken@gmail.com for more information

A new 501c non-profit called
the *Mycological Society of Marin County* is formed!

The first meeting will be held at the Mill Valley library on
December 16, 2015 at 6:30 PM.
For more information call Kevin Sadlier at 415-389-8333.

Volunteers Needed for MSSF Fungus Fair 2015

There are still volunteer spots left for the local fungi collection forays on December 5th and the day of the fair on December 6th. Please check the [mssf website](#) for details or contact Brennan Wenck (fungusfairVC@mssf.org)

Volunteering is a great way to spend some quality time at the fair, and your entry to the fair is free! Not to mention, you get a bonus meal from our delicious volunteer buffet.

Volunteers also get a special dinner on Sunday, February 7th, 2016 to thank everyone for participating with MSSF!

The Holiday Dinner Committee is looking for two volunteers to do the heavy lifting part of the set-up and take-down, plus some help in serving, for a free dinner.

If interested, e-mail Eric at mullew@comcast.net.

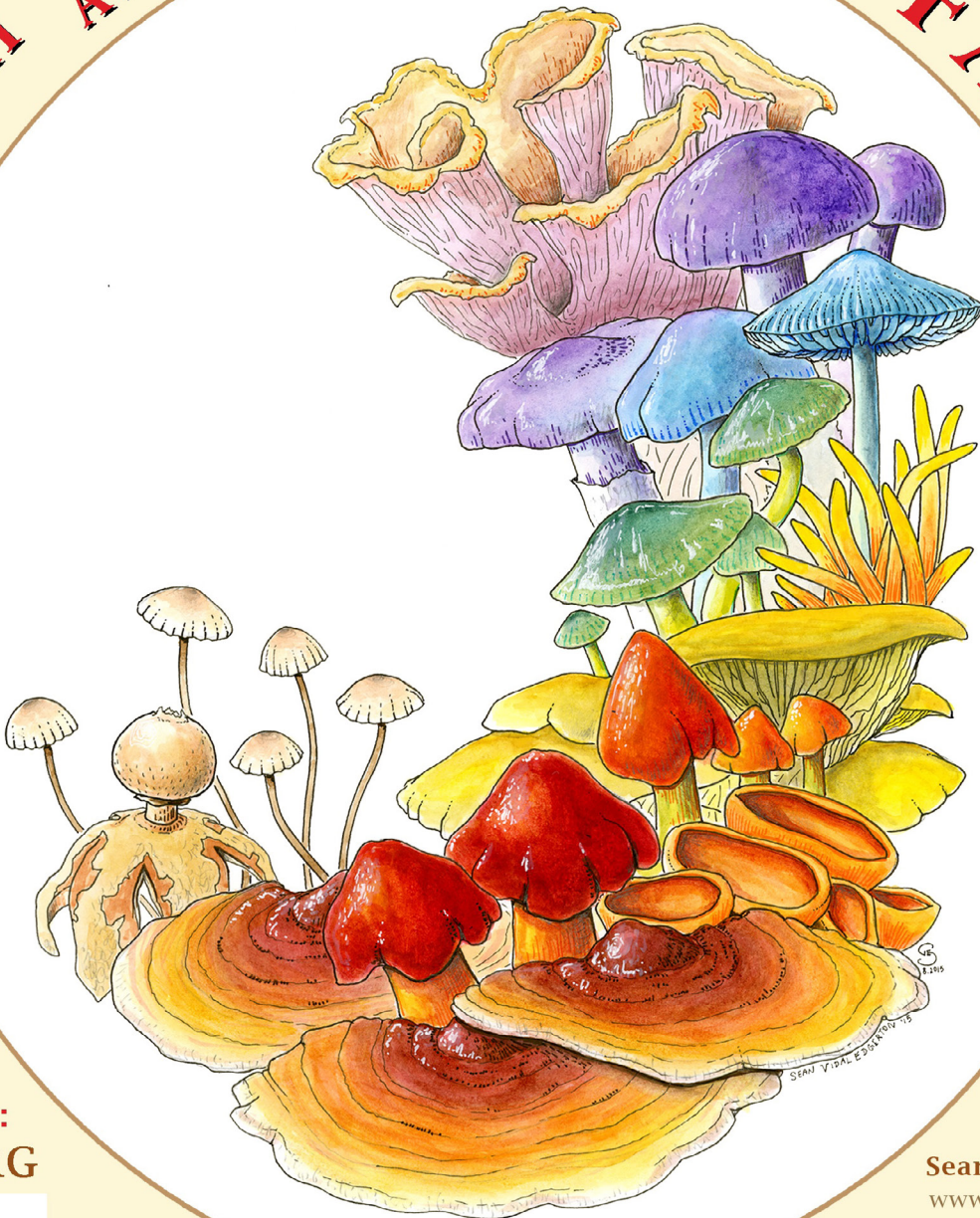
Winners of the Esther Colton Whited and Dr. Harry Thiers Scholarship Announced

Congratulations to Laura Bogar from Stanford University and Miko Nadel from San Francisco State University for being awarded the scholarship offered by the Mycological Society of San Francisco. Laura is studying the mutualistic relationship between plants and fungi, called mycorrhizae. Miko is creating a monograph of a genus of lichen from the Atlantic islands of São Tomé and Príncipe. They will receive \$1000 each, to be used to help them achieve their advanced degree. Both students will present their work to the Society at a later time.

MSSF FUNGUS FAIR 2015 POSTER

MYCOLOGICAL SOCIETY OF SAN FRANCISCO PRESENTS

46TH ANNUAL FUNGUS FAIR



FOR INFO
& TICKETS:
MSSF.ORG

illustration by
Sean Vidal Edgerton
www.theillustration.co



SF County Fair Building, 9th & Lincoln
Sunday December 6th, 2015

10AM - 5PM

Tickets available
at the door

ADULT (\$10) SENIOR & STUDENT (\$8) CHILDREN 6-12 (\$5)

MSSF FUNGUS FAIR 2015 SPECIAL GUESTS TALKS



“Mushrooms Demythified” by David Arora, an American mycologist and author.

David Arora has written several books and articles, the best known of which are “Mushrooms Demythified” and “All That the Rain Promises, and More.” Most recently he was a major contributor to special ethnomycological issue of *Economic Botany*, a journal published by the New York Botanical Garden. David founded the Santa Cruz Fungus Fair in 1975. His interests range from mushroom harvest and usage around the world to mushroom ecology, taxonomy, cuisine, foraging culture and storytelling. All of these subjects are likely to be touched upon during the talk.

“The Gardener’s Guide to Mushroom Cultivation” by Ken Litchfield

Ken Litchfield began his career as a botanist, biological illustrator, and instructor as a student in the art and biology departments at Texas State University. Ken is currently a naturalist with a professional background working and teaching in science, writing, technical illustration, computer graphics, photography, lapidary, and human health and fitness. He consults, instructs, and trains at various organizations, institutions, and homesteads. For over 15 years he has been the Cultivation Chair for the Mycological Society of San Francisco, and incorporates the fermentation arts into his activities and teachings at Counter Culture Labs on Wednesdays. At community college level Ken has taught Mushroom Cultivation, Beneficial Beasts in the Garden and Landscape, and Growing and Using Healthful Herbs, basic “applied biology” utilizing the Mushroom, Animal, and Plant Kingdoms and their interrelationships in the garden and landscape.



“Mycopsychedelia: The Magic Mushrooms” by Britt Bunyard, PhD

Britt Bunyard is the founder, Publisher, and Editor-in-Chief of the mycology journal *Fungi* which has the largest circulation of any mycological publication in North America. He also has worked as a full-time Biology professor in Ohio and Wisconsin, teaching a broad range of undergraduate and graduate courses in Evolution, Microbiology, Mycology, Invertebrate Zoology, Biochemistry, and Environmental Science. This talk is for general audiences with no need for advanced mycological education. The presentation will discuss the science and lore, with lots of pretty images, of psychedelic mushrooms...their discovery, their chemistry, their legal / illegal status, and where they occur worldwide. A particular emphasis will be on the genus *Psilocybe* as this group is the most well-known for their psychotropic properties and most recently have gotten a great deal of attention for potential as a powerful therapeutic.



“Mushrooms from Sierra Nevada” by J.R. Blair

J.R. Blair is a lecturer in biology at San Francisco State University and the director of the SFSU Sierra Nevada Field Campus near Yuba Pass. He obtained his Masters degree in 1999 studying under the MSSF Science Advisor, Dr. Dennis Desjardin. His thesis was *Fungi Associated with Arctostaphylos* in Central California. He has been a member of the Mycological Society of San Francisco since 1983. He was the president of the MSSF 2007-2009 and was the Fungus Fair chairperson for five fairs at all three of the recent venues: Oakland Museum of California, Lawrence Hall of Science and San Francisco County Fair Building. He has been teaching mushroom identification workshops for MSSF for about five years. Currently he is a lecturer of biology at SFSU and is the director of the University’s Sierra Nevada Field Campus.



MSSF FUNGUS FAIR 2015 PROGRAM



Last year, our naturalistic woodland display and tables featured more than 300 identified species of locally collected fungi.



Come and participate in the hands-on activities including:

- Mushroom crafts
- Mushroom dyes
- Do-it-yourself mushroom growing kits
- Bring your mushrooms to the identification table to find out what you found
- Visit our educational tables and learn all about mushrooms:
- Medicinal mushrooms
- Myco-remediation
- Mushroom cultivation
- Ecology of mushrooms
- Lichens
- Psychedelic fungi
- Mushroom Toxicology



Mushroom identification using microscope and spore prints



Enjoy cooking demonstrations from culinary experts and savor delicious wild mushroom soups!



Check out our mushroom- and nature-themed vendors:

- Angela Mele Art
- Barefoot Naturalist Press
- Far West Fungi
- Friendly Fungus Photographer
- FUNGI Magazine
- Gayle Lee Still Fiber Arts
- Julie Himes Science Illustration
- Just Mushroom Stuff
- King of Mushrooms
- Maclean Custom Screen Printing
- Mushroom Adventures
- San Francisco Glass Guild
- The Illustration Company
- Wine Forest Wild Foods



Fungus Fair program is subject to change. Please check MSSF.org website for the latest schedule and program.

Fungal Jumble

Wendy So

Stocking Stuffer ideas

by Gadget Gal

Instructions: Unscramble the first five clues themed on the title. The orange highlighted letters will give you an anagram for the answer to the question on the bottom.

COASTAL MUSHROOM MECCAS IN CALIFORNIA

INPLATTOS



MIONNOCED



ESPORINTYE



TOMENYER



GRISUB



What you might say after tasting this mushroom?



Are you looking for gifts for your colorful fellow mycophiles? Here are a few hot stocking stuffer options for different types of mushroom hunters.

For the stylish huntress, the perfect holiday gift is a Kate Spade Amanita muscaria clutch (<https://www.katespade.com/products/blaze-a-trail-mushroom-clutch/PXRU6101.html>). Don't underestimate this fancy purse with a hefty price tag. It's a must for picking small mushrooms like the candy cap in high heels and a frilly dress. If one forgets the candy caps in the clutch, you will have a maple syrup-scented bag for life. I once created a candy cap-flavored Chap Stick when I accidentally left candy caps in my backpack for over a month.

For the sweet mushroom hunter, a MarioBros one-up mushroom tin filled with miniature mushroom-shaped candies will be a handy treat on the trek. [insert pic] Isn't this cute? Once all the candy is consumed, you can refill the tin or reuse it for your redwood cone collection, or as a jewelry case.

For some of us, mushroom hunting can be stressful when there aren't any mushrooms to be found; especially after hours of driving, followed by a seemingly long hike. You know that 'shiitake feeling'? Worry not because there is an ease-your-stress mushroom to the rescue (<http://www.fire-box.com/product/6711/Stress-Mushrooms>). You can squeeze and stretch these mushrooms to your heart's delight and they pop right back into their original shape.

When you are done with it, you can bury it in the wood for the next mushroom hunter to use. There are 4 different kinds of stress mushrooms to choose from: fly agaric, matsutake, king trumpet or enoki. Perfect stocking stuffer for that special someone you know who may need one or two of these.

Do you have a mushroom-theme game or puzzle you would like to share? Please send them to mycenanews@mssf.org



Photo by Christian Schwarz

Answers in the January 2016 issue

CULTIVATION QUARTERS

Ken Litchfield

The last few MN issues we have been talking about the different lifestyles of mushrooms for cultivation purposes. Just to review, these are:

- Saprobic – those mushrooms that live on dead stuff like raw cellulose in the dead heartwood of tree trunks, wood chips, wood shavings, sawdust, straw, or cardboard or broken down cellulose like duff, compost, or manure. Examples of the first would be oysters, crabalone, reishi, chicken- and hen-of the woods, garden giant, and stink horns, and the second would be shaggy parasol, shaggy mane, and button mushrooms.
- Mycorrhizal – those mushrooms that need a tree host symbiont for mutual nutritional benefit like the oak or the pine. Examples of the fruit of the oak would be chanterelles, candy caps, amethystinas, and death caps. Examples of the fruit of the pine would be porcinis, Santas, and slippery Jacks.
- Parasitic – those mushrooms that take their nutrition from a living host such as a plant, animal, or another fungus. Examples of these would be huitlacoche on maize, Cordyceps on caterpillars, and pine spikes on slippery jacks.
- Opportunistic – Those mushrooms that may have more than one form of nutritional sustenance in the same stage of its life cycle like the honey mushroom or the morel. This doesn't include huitlacoche which is parasitic on maize in one stage of its life cycle and saprobic on soil humus in the other stage.

We have been discussing saprobic mushrooms mostly up to this point but this month we'll focus on mycorrhizal mushrooms due to our special holiday season botanical gifts that happen to be perfect for mycorrhizal mushroom cultivation. Just after the end of the gift giving holiday when most everything surplus is on severe markdown to a more realistic price, you may find in the nursery section of hardware stores, drugstores, or big box chains those leftover holiday trees that are no longer in demand for display purposes. Primarily you'll find Italian stone pine, a type of nut pine that can produce edible pignolias. You might also find other pine species or perhaps young Deodar cedars or other ornamental conifers that can act as the host for fruit of the root of the pine type mushrooms.

You can also often find wintergreen plants that have evergreen leaves, white flowers, and red berries, all of which have the wintergreen flavor in them. Wintergreen is a member of the Ericaceae, the blueberry family, which includes azaleas, rhododendrons, madrones, and manzanitas many of which have their own mycorrhizal mushrooms and which might adopt the wintergreen.

Whatever trees you might get at this time of year, on discount or intentionally buying special selections at a nursery or transplanting from elsewhere, you have two main options for growing them in your garden - in the ground and in containers.

Both ways you could inoculate them with the slurries of spores and mushroom flesh of the mycorrhizal mushrooms you want. If you plant them in the ground you can keep them relatively small and attractive by careful aesthetic pruning or by growing in containers like bonsai. Either way you can have your own pygmy forest that can produce mycorrhizal mushrooms. Whether in the ground or in a container you can plant several species of conifers and hardwoods together to simulate the conditions of a mixed forest. With more species of trees intertwining their roots there is a greater likelihood that the mushrooms that you inoculate the trees with can find a niche to adopt.

To simulate the forest duff conditions and enhance the likelihood of getting slurries of mushrooms to "take," you should maintain a thick mulch of wood chips, leaves, pine needles, oak leaves, and other aesthetically uniform organic materials. With six inches to one foot of mulch the trees roots are more likely to grow up into the lower layers of decaying mulch. Periodically during the rainy season mushroom harvest you will have old mushrooms, and damaged parts of prime mushrooms that you want to have growing in your garden. These mushrooms and parts you put into a blender of water and blend briefly to grind up the flesh and make a spore and flesh slurry. Rake the mulch away from under the canopy of the trees to a depth that stirs up and gently damages the tree roots to better expose them to the fungal materials in the slurry. The slurry is sprinkled and sloshed around under the canopy of the trees and then watered into the mulchy soil. The raked mulch is then replaced and also watered to settle it into place.

The spores and mushroom flesh both could potentially find a root to interact with. The mushroom flesh is cloned from the mushroom genetics of the mycorrhizal mushrooms used in the slurry and could potentially jump directly to the roots.

The spores will be mixed new genetics each of which would sprout and grow into a haploid mycelium seeking another haploid mate. When they find each other and mate they will then grow into a new diploid mycelium that can interact with the roots of the tree host. While haploid they are likely saprobic on the dead organic matter in the mulch or parasitic on little organisms in the mulch. The new diploid mycelium that is produced from the haploid mating is likely parasitic on the haploid parents until it finds the mycorrhizal host tree root that it can interact with symbiotically.

The container plants are potentially easier to inoculate with slurries as the roots are captive within the container and often exposed where they meet the edges of the container especially if they get potbound. You only need to lift the root ball from the container dip it into the spore/flesh slurry to have germinating spores and flesh coming into contact with the exposed roots, and slip it back into the container.

Some folks recommend adding molasses to the slurry water and adding an aquarium air bubbler to aerate the slurry for several days so the spores and the mycelium germinate and grow for several days before inoculation. This is unlikely to do anything but add a bloom of yeasts and bacteria to the slurry. Holding and aerating the slurry for any length of time is only likely to produce a collection of organisms adapted to an aerated liquid culture and not to the duff under the trees. It would be better to pour the freshly made slurry directly into the ground at the exposed roots, rather than have an unnatural incubation period.

MUSHROOM SIGHTINGS



Armillaria mellea (Oakland Hills)



Pleurotus ostreatus (Oakland Hills)



Coprinus comatus (San Francisco)



Boletus edulis (San Francisco)

MSSF Calendar December 2015

Saturday, December 5, 9:30 a.m. - noon- Quick Start Foray
Local San Francisco foray in McLaren Park. Meet in Jerry Garcia Amphitheater Parking Lot on John Shelley Drive.
Advance registration required at mssf.org.

Sunday, December 6, 10:00 a.m. - 5 p.m. - MSSF Fungus Fair
Hall of Flowers, County Fair Building
Golden Gate Pk., 9th & Lincoln, S.F.

Monday, December 14, 7:00pm - 9:30 pm - Holiday Dinner
Hall of Flowers, County Fair Building
Golden Gate Pk., 9th & Lincoln, S.F.
New chef, great food! Members who bring appetizers will be entered in special prize lottery.

Monday, January 4, 7:00 p.m. - Culinary Group Dinner
Hall of Flowers, County Fair Building
Golden Gate Pk., 9th & Lincoln, S.F.
Advance registration required at mssf.org.
Email culinary@mssf.org to volunteer.

Check the MSSF online calendar at:
<http://www.mssf.org/calendar/index.php>
for full details, latest updates
and schedule changes.

MSSF Volunteer Opportunities

Join the Council leadership, learn the inner workings of the MSSF and help make decisions that shape the future of the society. Do your part by contributing your time to this 100% volunteer organization!

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.

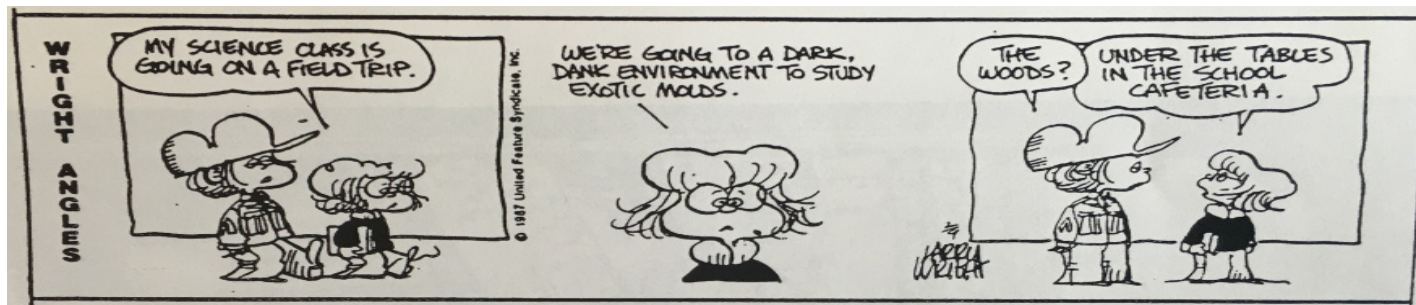
Volunteers Wanted Now:

- Fungus Fair 2015 (visit mssf.ivolunteer.com)
- Librarian
- *Mycena News* layout assistant. Familiarity with Adobe InDesign a plus.

Contact president@mssf.org for details.

Councilors for the 2015-2016 term

Councilors: (1 year term) Julia Cabral and Joe Soeller
(2 year term) Tyler Taunton and Madhu Kottalam



Mycena News

December 2015, vol. 67:4

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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
Zachary Mayes:
Membership@MSSF.org

Past issues of *Mycena News* can be read online at www.mssf.org

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

Submit to *Mycena News*. The submission deadline for the January 2016 issue is December 15th. Send all articles, calendar items and other information to: mycenanews@mssf.org

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