

2

<u>5</u> <u>11</u>

<u>12</u> 13

<u>14</u> 15

18

19

## The Mycological Society of San Francisco • Oct. 2015, vol. 67:02

Table of Contents

Mushroom of the Month *by K. Litchfield* President Post *by B. Wenck-Reilly* Culinary Corner *by C. Hellums* Mushroom Trips *by D. Hughes* Cadaver season *by K. Litchfield* Announcements / Events Gymnopilus *by M. Risch* Fungal Jumble & Gadget Obs *by W. So* Cultivation Quarters *by K. Litchfield* Mushroom Sightings Calendar

October 20 General Meeting Speaker @ Hall of Flowers not Randall Museum



Justin Reyes

"Mycopia Gourmet Mushrooms, Feeding the Burgeoning Global Population, and the coming MycoRevolution"

Justin grew up in Sonoma County and attended Sonoma State University, where he studied both International and Wine Business. He worked in the wine industry for a handful of years before becoming interested in foraging. He left wine for the fascinating world of fungi, where he joined the sales team at Gourmet Mushrooms in Sebastopol, CA. Justin has since taken the lead of the sales department and strives to spread awareness of the incredible and wide-ranging benefits and potential of the fungal kingdom. Dear Mycena News Readers,

You have been responding to our requests for contributions so this month we have almost 20 pages of mycological articles, reports, stories, and informative garnishes for your reading pleasure. We start out with the Big Gym Mushroom Profile by Ken Litchfield supplemented by an account from Monique Risch of her inadvertant neurotropic encounter with that mushroom. Don Hughes' reminiscences of his best mushroom forays over the years and how they fed his personal quest for enlightenment provides us with our Mushroom Forager of the Month. Besides our usual Speaker Profile, Presidential Post, Culinary Corner, Cultivation Quarters and Announcements of coming attractions, we have some new games and gadgets. Please consider making your own contributions of photos, recipes, anecdotes, artwork, articles, and suggestions for ideas. We hope you enjoy this months MN and look forward to your contributions. Hope to see you at Far West on the 25th.

Thanks from the Editors, Wendy, Liz, Pascal, and Ken

### Mushroom of the Month: Big Gym Gymnopilus spectabilis/junionus/ventricosus Ken Litchfield

In northern California, one of the first mushrooms to start blooming with the first soakings of the fall rainy season is also one of the most spectacular, the Big Gym. Huge clumps of humongous mushrooms conglomerate on conifer stumps like platter-sized IHOP pancakes propped on thick golden orange stipes. Radiating out

from the tops of the stipes are the rusty orange gills that pump out drifts of Cortinariaceacious rusty orange spores over the stipes, caps, and stump like spilt cinnamon powder.

Dye folks collect this mushroom in quantity to use fresh, or dry for later dyeing. It produces a range of yellows, oranges, browns, and greens depending upon temperature, pH, and type of mordant, fiber, and mushroom condition. Nowadays, no wintery mushroom event is complete without the special ambiance of a hot pot of yarn steeping in Big Gym dye.



Gymnopilus spectabilis © Don Hugues

### **PRESIDENT'S POST**

Hello Fellow Mycophiles!

The year has started off strong for the MSSF. We have already participated in a couple of tabling events, and there was even a bioblitz we were invited to participate in.

On September 12, Jackie Shay and Tyler Taunton hosted a table in conjunction with Super Science Saturday at the Mountain Lake Outdoor Classroom in the Presidio. The event was celebrating the release of western pond turtles into the Mountain Lake. On the same day, the Urban Ag Academy hosted a day of learning at the SF Botanical Gardens. Our Cultivation Chair, Ken Litchfield was on site to talk about and to demonstrate growing mushrooms in your own backyard.

Monday, September 14, was the first Culinary Dinner of the season. If you would like to learn more about the culinary group contact <u>culinary@mssf.org</u>. Typically the dinners are held on the first Monday of each month. This is a great way to meet other fungal cooks, and chefs.

On September 15th we had our first general meeting of the 2015-16 season. It was really great to get to see a lot of old faces and quite a few new faces. The room was literally packed and we ended up having to bring in a few more chairs to accommodate the crowd. Jackie's discussion of her travels in Madagascar was *amazing* to say the least. The next meeting will be on Tuesday, October 20, where Justin Reyes will be talking about mushroom cultivation.

The Bioblitz took place on September 26th in San Pedro Park, to look at the entire biodiversity of the watershed. I hope that many of you were able to go out and take part in this excellent opportunity to measure the diversity of our local watershed.

As for upcoming events, we are looking forward to Mendocino Camp on November 13th-15th. It filled up so fast, I heard from several people who wanted to go and didn't sign up in time. Every year we seem to get a fantastic amount of mushrooms along the foggy Mendocino coast... Let's pray for rain so this year will be just as bountiful as the last.

The Annual Fungus Fair will be a one-day fair this year, to be held on Sunday, December 6. That being said, there is much to be done on Saturday December 5th! There are several mushroom forays that will go out on Saturday as well as the entire setup of the fair. To sign up for any and all of these events please go to mssf.ivolunteer.com. Free admission to the fair is granted to any and all who sign up to work at least one shift/foray for the fair.

I hope to see all of you at the upcoming meeting on the 20th of October.

### Overheard in the September MSSF Meeting

"Sometimes you just have to know how to cook the mushroom to make it taste good. I didn't like the blewit until I learned from Larry Stickney that they are good in cream sauce."

"I want to expand my wild mushroom palate; I know the morels and porcinis. What else is out there?"

### QUOTES

On what people like best about mushroom foraging:

Amy BeberVanzo - "It makes me more aware and allows me to be present and pay attention to my environment."

Lisa Goodwin - "Learning about a whole new world previously unexplored by me, listening to my son recite the names of mushrooms by their formal Latin names, spending precious time with my family enjoying nature, finding inner peace in the forest, and last but not least, enjoying the harvest in a delicious meal.

### SEPTEMBER FUNGAL JUMBLE ANSWERS

#### THERALENCLE Т Е R Е L С н Α Ν Е L **UNACARESS** S С Е s U Ν А A R COINRIP 0 R С Ν UREFILLACOW F L С А U L 0 W Е R

TORSLEB

| LOBSTER |
|---------|
|---------|

Clue: What you need to clean a big pile of dirty mushrooms?



The Big Gym is a stump feeder and easy to grow in the garden. Years back when we had the Presidio NP mushroom garden and lab, one of the first mushrooms we captured was a native big gym on a Monterey cypress stump. We grew it out on agar and grain in the lab and then poured the grain spawn into one and a half inch core drilled holes into a Monterey pine log. The log was fresh cut from one of two large pines removed for historical restoration in the Presidio Community Garden. After they removed and chipped the first one we asked if we could have a ten foot section of the second tree trunk to use as a Maypole garden feature. Since it would save more cutting and chipping and would decay away anyway they readily agreed. We had a team of cultivation seminar folks assist in digging a three foot deep and wide hole and dragging and uprighting the log, Stonehenge technology style. To protect the Big Gym grain spawn that was poured into the holes, we rolled up narrow strips of burlap and dipped the rolls into beeswax and stoppered the holes by tapping them in place. The following fall and five more to come the Big Gym reliably fruited four feet up the side with big golden pups and pancakes before the log finally fell apart.

The Big Gym is one of those classic well known mushrooms, like the Shaggy Parasol, that is undergoing shifts in its scientific nomenclature so that its identification by its common name may be more understandable by more folks than its technical appellation. While *Gymnopilus spectabilis* has been its name of renown for many years, more recent in-depth investigation has created room for mush in this mushroom's exact identification. Generally, some folks consider "spectabilis" to be a group or clade that may be cosmopolitan or semi so, with perhaps local differences substantial enough to justify species-level names. But the species names bandied about for our local specimens are from older foreign publications and may or may not be appropriate for local use. Generally, "spectabilis" or "junionus" or "ventricosus" are the names favored, with "spectabilis" likely going by the wayside.

Complicating these taxonomic considerations are special chemical characteristics and the attendant lore of certain forms of these mushrooms. In Japan, "spectabilis" is considered to be the "waraitake" or Laughing Gym or "o-waraitake" the Big Laughing Gym. Not to be too confused with the "maitake" or Dancing Mushroom, sometimes attached to Big Gym, but usually considered to be Grifola frondosa, the "dancing" referring to the flounciness of the picotee petticoat layers of the Hen-of-the-Woods Mushroom. Big Gym is also called the laughing or dancing mushroom because in Japan it is reputed, or possibly confirmed, to contain psilocybin. Some of the other known species in the genus Gymnopilus are known to stain blue or green and so are reputed to contain psilocybin, either by bluing characters or perhaps by laboratory analysis. Our local Big Gym has been implicated in hippy anecdotes for years as being hallucinogenic, even though it doesn't stain blue.

Years ago, a local professional group of criminology lab techs requested a wild mushroom foray from the MSSF down to Big Basin SP so they could have a field trip to learn about the living beings they usually only encountered dried and shriveled in the lab. Several of us shared our knowledge of the bounty of those pre-drought years (no urban Psilocybes found) and in gratitude they agreed to perform a lab test of 100 grams of dried, non-bluing Big Gym that we provided. They reported that no traces of psilocybin or psilocin or other felonious components were contained in the sample.

We do have a written account (elsewhere in this MN issue) by a reliable witness to an extraordinary psychoactive, if not outright hallucinogenic, experience from Mendo Camp a few years ago, by a dye person with sensitive skin who got mushy, non-bluestaining Big Gym tissue on her hands for a couple hours before washing it off and then sitting down to a Mendo mushroom dinner. It may well be that there are more than one local Big Gyms whose DNA shows them to be different or similar to foreign types in Europe or Japan or the Eastern US and some of which may have neurotropic effects differing from each other or the foreigners. Some of the non-psilocybin potentially neuroropic compounds in Big Gyms include gymnopilin, bis-noryangonin, hispidine, and oligoisoprenoids. Some of these are related to the alphapyrones in kava-kava. How they may interact with each other isn't known.

Because we have a number of well known tree stumps still fruiting annually with Big Gyms known not to be blue or green staining (and therefore lacking in felonious psilocybin), and these stumps are regularly collected from by dyers and collectors interested in neurotropic mushrooms, we could perform a study to determine whether these particular selections have DNA that matches or closely matches other samples in Genbank. We could also self test them to see any correlation between neurotropic activity and DNA makeup. If any parts of this sound like something you might be interested in participating, please do contact me with your interests and we may be able to have some seminars organized at the Omni lab and on forays.

No matter what the taxonomists may conclude about the proper scientific naming of the Big Gym I'll still be using "spectabilis" as my common name of choice as most folks will understand what I'm talking about. Just like I still use "rachodes" as the common name for both species of Macrolepiota that used to have that as its scientific species name.

Below are two free online references on the Big Gym with further bibliographies that you may find of interest:

"Japan's 'Laughing Mushrooms'" by James H. Sanford in Economic Botany Vol. 26, No 2 April-June 1972 pp174-181.

"A Worldwide Geographical Distribution of the Neurotropic Fungi, An Analysis and Discussion" by Gaston Guzman, John W. Allen, and Jochen Gartz in Annals of the Museum civ. Rovereto, Sez.: Arch., St., Sc. nat. Vol. 14 (1998) p189-280 2000

### CULINARY CORNER

Carol Hellums

Best potluck ever! Or do we say that every year? Anyway, our fine group of cooks came out in force for the first Culinary Dinner of the season, which is always a potluck.

It started out as a dim and drizzly night, made drearier when everyone who came early had to wait outside the Hall of Flowers until our room was available. But when were mushroomers discouraged by drizzle? It was an opportunity for hardy souls to search the jungle of plants around the courtyard ("They're irrigated, aren't they?") in hopes of a fungus or two, to reminisce about the time Paul and Virgilio found morels (in early December!) next to the Academy of Sciences, and to wonder whether the falling damp would be enough to bring out any fruitings of our favorite prey.

But finally the doors opened, and the serving table quickly filled up with a mouth-watering array of dishes, featuring a mouth-watering array of mushrooms, drought or no drought. It seemed as though almost all of the Culinary Group's best cooks were there, all working at the top of their form. Unfortunately, your correspondent was so stuffed with so much good food (not to mention a bit of wine) that she forgot to save the menu cards at the end of the evening. Rather than risk slighting anyone, I'm not even going to try listing everything.

As often happens, our generous gardeners also brought lovely fresh goodies to take home: baskets full of scary, spiny chayotes, and a smaller basket of padrón peppers. (The chayotes also featured in a casserole with morels – unusual and delicious.)

Next month's dinner (October 5) will be headed up by Tom Sasaki, assisted by Alvaro Carvajal. The theme is "Fruits of the Sea," with salmon being the main dish. Tom's Japanese dinners have always been wildly popular, so be sure to reserve a spot early, on MSSF. org. And the November dinner will be a whole beast of some sort, roasted in the caja china by Bill Hellums and (again) Al Carvajal.

So come and join us! Dues for the season are \$10, and there's a contribution of \$15 or so per dinner, to cover the cost of ingredients. Also, as a member, you're expected to participate in the preparation of at least one dinner each season, plus bringing an appetizer to the dinners when you don't cook.

Finally, a recipe for a dry month, using the much-maligned but really very tasty supermarket mushroom. (Although I used dried black chanterelles, reconstituted and sautéed in a little butter and oil, and they worked very well.)

#### Holy Basil Chicken with Mushrooms Ingredients:

Ingredients

- 3 tablespoons canola oil
- 1 tablespoon chopped garlic
- 1 tablespoon chopped Thai chile pepper (more if you like it hot)
- 1 1.5 lb. boneless, skinless chicken thighs
- 1 cup sliced white mushrooms (or rehydrated black trumpets)
- 1 1/2 tablespoons fish sauce
- 1 tablespoon oyster sauce
- 1/2 tablespoon sugar
- 1/2 tablespoon soy sauce
- 1/3 cup chicken stock (or mushroom soaking liquid instead)
- 1/2 cup sliced red bell pepper
- 1/2 cup Thai holy basil (ga-prao) (or regular Thai basil)
- Salt
- Steamed jasmine rice

#### Method:

Heat the oil in a large saucepan or wok. Stir in the chopped garlic and cook until it is golden brown. Add the Thai chile pepper and stir well.

Brown the chicken. Reduce the heat to medium and add the mushrooms, fish sauce, oyster sauce, sugar, soy sauce, and chicken stock. Mix well.

When all the ingredients are cooked, add the red bell pepper and the Thai holy basil. Mix well and season to taste with salt. Serve over steamed jasmine rice.



**Black Trumpets** 

#### My Most Memorable Mushroom Trips By Don Hughes

It was suggested to me that I submit a contribution to Mycena News. At first I thought, what can I contribute? Then I thought after foraging for 25 or so years and being a member of MSSF for 13 years there must be at least a few things I could contribute. So here I go. I am going to take a stab at sharing my most memorable mushroom trip. I will take myself back 25 years and work forward.

There was that first trip, 25 years ago, when my Italian friend Dominic Giampaoli took me to Angwin on Mount Howe. It was fun but all we really saw that first trip was what Dom called Slippery Jacks, and they were all full of worms. So no, that can't be my favorite.

After that first trip I made many more, sometimes with Dom, sometimes with a wife, and sometimes with Charlie my dog. I started seeing more and more mushrooms and even bought books trying to identify them. Even when I was 99% sure I had found a good edible, I never took the chance of eating it. There were other times when I would go with Dom, his family and our friend Giovanni. I started seeing more and more mushrooms and would ask Dom about them. I would ask "Is that an edible?" Dom would usually say: "I don't know, I think grandpa ate them, but I don't know." There were really just 4 mushrooms Dom and his family foraged. There was Manzanita Bolete, which they called Manzanita Bolete. There were Queen Boletes, which they called "the French". When we found a porcini they often called it "the Italian." The only other one I saw them pick was the Coccora, which seemed to be the Giampaoli family favorite.

Later on Mount Howe I found and learned to identify oysters, white and golden chanterelles, flat topped club coral, and several others. One year, by myself in Angwin, I walked into a tan-oak forest and the whole forest smelled of cinnamon and old socks, as I would hear Ken Litchfield describe it in one of his classes. I started looking around and in 40 minutes I had more Matsutakes than I could possibly carry. While all the trips to Angwin and Mount Howe were great, I can't say any were my most memorable.

The mushrooms below are from Angwin and a couple of my earliest mushroom photos.



It was 1990 when I first went to Mount Howe with Dominic. Moving fast forward to 2002. I was on Lake Shore, in Oakland, walking to breakfast when I saw a flier in a window. The flier had pictures of mushrooms and information about the upcoming Fungus Fair at the Oakland Museum in December. I convinced my wife to go with me and check it out. When we went, both of us were amazed to see how many people were into mushrooms. We were also impressed with all of the different varieties people had collected. I was so impressed I joined MSSF that day.

While some might not consider this a mushroom trip because there was no foraging going on in the building, I

certainly felt it was a mushroom trip. There are a few memories from that day. One was joining MSSF. Another was all the different mushrooms I saw for the first time. Still another was the mushrooms soup which we purchased. The last two memories were at the cooking demonstrations. Of these, the first was a chanterelle and pear dessert. The second was a matsutake sake a person had made. Again while this was a memorable day I can't say it is my most memorable mushroom trip.

I remember another thing I did because of my experience there. A friend of mine owns a local bar walking distance from my house. I told her about the matsutake sake and how I had done it with vodka. She said the next time you get matsutake bring some in so I did. She sliced up the matsutake and put the slices into a half gallon bottle of vodka after pouring some of the vodka into another bottle. After letting the bottle set for a month we had our first taste, which we both enjoyed. For about the next year, any time I went there to have a Jack and Coke we would also have a shot of matsutake vodka on the house.

Moving forward again, I don't remember the first forage I did with MSSF. It might have been a trip to a park in the Santa Cruz Mountains. If that was the first trip, there are 2 things I remember: one was a lot of non-edible Russulas, the other was the leader of the group finding one Black Trumpet Mushroom not too far from where we parked. Since that was the only one which was found, I wondered if he had planted it there to show us a Trumpet.

A first with MSSF that I do remember is my first Morel Camping Trip. It was to Cherry Lake Campsite where there had been a fire close by. I arrived before anyone else and wandered outside camp a little. I found 4 little morels after working really hard. I thought "well, probably won't find a lot of morels this trip."

That evening, after a nice camp fire was going, David & Jeanne Campbell rolled in butter some morels they had collected and then placed them in what looked to be something you could pop popcorn in over the fire. Sure enough, they placed the morels over the fire and let them slowly cook, maybe 20 minutes or so. When they were done David took the morels off the fire and put them on a plate. As soon as they were on the plate, he walked around and let the few people, maybe 10, who were there that night, sample them. Right there I was hooked. I now knew what my favorite mushroom was. And I had learned this without having learned to stuff them yet.

The next morning, I got up, sautéed my 4 tiny morels in butter, and scrambled myself some eggs. After breakfast it was time for everyone to head out for our foraging. Everyone car pooled to the other side of the lake where we split into 2 groups. One group, with the most people, was being led by David. The other group was to go with Norm Andresen. I decided to go with Norm.

Ten minutes after heading out with Norm and about 4 other people we heard David call on the radio "come over here, we are into them." We had not seen any mushrooms with Norm yet. Even after a half hour we had not seen any mushrooms. That was OK for me because I was hanging close to Norm and he was sharing all kinds of knowledge about how to forage morels. He said things like, if it is dry you can look on the downside of fallen trees. He also shared if you start to find morels work sideways they will normally be popping at the same elevation. It was real dry where we were walking and so he said look for where the last run off ran down the mountain; look for moisture. And still we hiked down the mountain only finding a few morels under fallen trees as he had suggested.

After about an hour and a half of hiking down the mountain and thinking maybe I went with the wrong group, the mountain flattened out and there was a lot of water everywhere. Not only was there a lot of water there were also morels everywhere we looked. In about 45 minutes my basket was nearly full. Then Norm said it was time to head back. It was hard for me to leave because there were still morels everywhere I looked. Of course, knowing I could not find my way back on my own, I followed Norm.

When we got back to camp, one of the guys who went with us asked if I wanted to go back there tomorrow with him. Then he handed me a card which said A Wire Guy with his name Paul Lee on the bottom. On the top he had written Pauly Porcini. I don't know why but I decided not to go with him the next day. Instead I got up early, packed and headed home contently with my basket of morels. When I got home I threw his card in a drawer and it has been there ever since. Some years later I would see the name Pauly Porcini mentioned in "The Omnivore's Dilemma".

Again while this was a very memorable trip, yet I still cannot say it was my most memorable.

Page 6

Over the next several years, in the fall, winter and spring I would do a lot more foraging. I started to attend more events. I did a couple San Jose camps. I tried to hit every Mendocino camp and at least 1 morel camping trip



every year. I really enjoyed these camps when I could take more family members or friends for their first time. In the last few years I have also tried to make SOMA

Page 7



Camp which, as we know has fantastic cheese, food, and wine. Every camp over the years has held its own special memory for me. Yet, I still have to admit they are not my most memorable trips.

Not only was I attending more camps I was doing a lot more foraging by myself or with friends at Salt Point and in the Oakland Hills. Over the years I have found, and shared, my favorite spots with friends. I can't think of too many things I

enjoy more than being in the woods foraging. I guess I work the forest fairly hard and even started to get a reputation that I find a lot of mushrooms. I like to think I keep moving until they call and find me. Again I have many many fond memories of these mushroom outings yet my most memorable are still a little ways out.

It is now 2008 I have been a member of MSSF for 6 years and between member forays, meetings at Randall Museum, and taking Ken Litchfield's Mushroom Cultivation Class a few times, I felt I had learned quite a bit. I had advanced from the 4 types of mushrooms I used to pick with Dominic to 40 plus mushrooms I felt comfortable to forage and eat. I want to emphasize in here that each of Ken's Classes was a learning experience and sometimes it was learning more about mushrooms than it was learning about Ken; either way it was always a treat. Especially the time we rescued a beehive at a house in the Oakland hills. I was stung 5 times and I believe Ken around 10.

It was also in 2008 I had one of my most memorable mushroom trips. I would say it was number 3 of my top 3. A week before this trip I had gone to the Fraser Flats Fire for one of Norm's and David's Spring Morel Camping trips. It was still cold out and there was snow around the campsite. What I remember most about this trip is I had my dog, Tilo, with me and I think I almost let him freeze. Tilo slept inside the tent with me on a sleeping bag I had brought for him. When I woke up he was still on the sleeping bag shivering like I had never seen a dog shiver before. I felt so bad and thought he could have died. Next, I opened my sleeping bag and had him lay next to me. I also covered us with the other sleeping bag. I think it was 40 minutes before he stopped shivering. Not my favorite memory but still a memory of that weekend. I think I also foraged about 15 pounds of morels that weekend.

It is now the following weekend and Wendy So, who I had met at one of the Randall Museum meetings and became friends with, decided we would take a day trip to the Fraser Flats fire. We had done a couple Salt Point forages and a few Oakland Hills forages but this was to be our first Morel forage together.

Wendy met me at my house early around 5:00 AM and we drove the familiar red Jeep to the fire. When we first arrived I stopped at a place I thought looked good. The place was just OK and after an hour and a half I think between the 2 of us we had about 3 pounds. Since we were not hitting any areas with a lot of morels I suggested to Wendy we move to a spot I had seen some tiny morels just starting to pop the week before.

So we moved on to this next spot and started to find quite a few more morels. Now instead of finding 1 here and there we were finding clusters of 10 or 20. If I remember correctly we were working from east to west covering about 100' spread up and down the mountain. At one point I was working several hundred feet west of where Wendy was working. While I was still finding mushrooms where I was at, I looked out ahead and saw a few large morels. I decided to go check them out. When I got there I looked up and down the slope and there were morels everywhere. Continued on page 8

I called out to Wendy to come join me. She called back saying she was still finding them where she was. I called back and said Wendy you really need to come join me, which she did. When she caught up with me and saw what I saw, we both just laughed. I don't know if it was me or if it was Wendy who called it out, but we decided she would work down from the top and I would work up from the bottom. And off to work we went.

I think I had foraged for less than an hour when both my backpack and basket were overflowing. Still there were hundreds of morels I was seeing. I knew I did not want to leave them but for a second I had no idea how to carry them. Then the thought came to me: take off your Levi's and tie knots at the bottom of the legs. That is exactly what I did and now I had a 3rd basket larger than the other 2 together. I don't remember how long it took me working up the hill until I saw Wendy working down. I don't think she saw my Levi's full at first and kind of looked at disbelief to see me running around in the forest in my boxers. Could have been worse;I could have been a guy into thongs. :-)

When she saw how full my pants were, of morels, she laughed and then we decided to take a photo. It was a fantastic, fun, rewarding day. I had never before, and never since foraged so many morels in one day.

While there were still morels to be found we decided we had enough. Besides we had no more baskets and I was not about to ask Wendy if she would sacrifice her Levis also; not that I had not thought about it. :-) I have to admit my own pants have never been filled out as well as they were with the morels.

When we got back to the Jeep I sat down, had a beer, and then emptied an ice chest I had in the car. I then emptied my Levi's into the ice chest. I think I should have shaken out my Levies a little better. On the drive back to Oakland I kept feeling those little black bugs that morels get, crawling around in my pants.

It was 5:00 PM when we got back to my place in Oakland. I weighed the morels and it was 50 pounds we had foraged; 25 lbs for me and 25 lbs for Wendy. Not a bad day's work; if one can call having one of the times of your life work...

Yes, that was a day I will never forget, and, as I said, it is in the top 3 of my all-time favorite mushroom trips. Time is still moving forward and it is now August 2009. As we decide to go our separate ways, number 3 asks if



we could still forage together. I say "no" and add, "you can now identify our own mushrooms." And added: "I suggest you do it without your glasses; your eyes are just fine."

Shortly after we separated my friend, Siw (Seeve) Hermanstad, in Norway called me. When I told her Jeannie and I had divided up our mushroom spots, Siw had a couple of suggestions for me. Her first was: Don you always wanted to go to Tibet, now is the perfect time. Her second suggestion was: Or you can visit a friend in Norway. Since I did not know anyone in Tibet I went with Siw's second suggestion. When I told the people at work I was going to Norway, one of the first questions from many people was: Will you find mushrooms in Norway? I replied if there are mushrooms in Norway they will find me. All my coworkers knew my passion for foraging mushrooms.

After about 14 hours and 2 planes my friend Siw picked me up at a small airport in the first town we were to stay at. After we got to the house, and almost instantly after I sat down Siw said: I know you have been sitting for a long time how about we walk down to the bay. Sounded great to me. Siw saw me looking at the puddles along the path we were taking. She looked at me and said: I apologize for all the mud, we had 8 inches of rain 10 days ago. Hearing that Continued on page 9

I started looking around. Within a minute I spotted a Birch Bolete, then another and another. Next I saw a porcini and then more birch boletes. I was also seeing mushrooms I didn't know.

After our walk we went back to the house which sat in the middle of freshly harvested wheat fields, spotted with red and white farm houses here and there. While we were settling down for the evening Siw asked me if I wanted to check out the forest behind the house in the morning. I said of course.

The next day after a hearty Norwegian breakfast we headed for the long walk to the forest. We took the long way and it took us 8 minutes. Right before we entered the forest I found beautiful spiked puff balls. As soon as we entered the forest I started seeing birch boletes, muscaria and porcinis everywhere. We only picked the freshest porcini and Birch boletes. In no time our basket was full. Still we kept walking. As we walked I started seeing hawk wings and parasol mushrooms. As we walked more we stumbled across, and in some cases smelled, stink horns. On we keep walking. I make it sound like we walked a long ways but I bet we have not walked 2,000 feet yet. There was just so much to see there was no reason to hurry.

I was seeing a few mushrooms here and there which I did not know. There was a fuzzy purplish russula. I also found a couple mushrooms shaped just like our prince and had a stronger almond smell than our prince but it was all white. Later that evening I looked in a Norwegian mushroom book and found this mushroom. I asked Siw's mother to translate and she said it is called the King. Turns out our Prince is probably related to their King.

Walking on I find a few strawberries and cream mushrooms. Still moving forward we find a patch of small chanterelles. I say small because I am used to our mudpuppy chanterelles. I was told that evening the ones we found were about as big as they get. I was also told by Siw's mother this is the only mushroom she knows and forages.

Certainly what we have already found would be enough for anyone's most memorable mushroom day yet we were still walking and still discovering. The next mushrooms we started to find were hedgehog mushrooms. These were the larger hedgehogs not the smaller bellybutton ones. I believe the hedgehogs were the last edible mushrooms we spotted that morning. If ever I felt I was in a fairytale forest, this was the one. I kept my eye out for trolls but never spotted any; I imagine they spotted me. And I felt it was like I had told my coworkers; if there are mushrooms in Norway they will find me.

If it were just the mushrooms and my friend, I would say this was the most memorable mushroom trip ever. Never before or since have I been in a forest with so many select edibles all a popping at the same time. Still, I have to say, this is my second most memorable mushroom trip. And this time when we started out it was cool, so when our little basket was full I took off my coat and used it for a basket. Note to self, carry extra bags...

My last day in Norway I went back into the forest by myself. I thought I was in the forest for about an hour and a half. When I returned back to the house Siw told me her mother had worried I was lost. Siw told her don't worry Don's not lost. I was not lost, I think I was in heaven where time is different. Had I not taken so many pictures, I might believe that forest had just been a dream...

I move forward 1 year and it is July 2011. Remember my friend Siw had mentioned either going to Tibet or visiting a friend in Norway. As I stated since I did not know anyone in Tibet I went to Norway. While I still did not



Continued on page 10

know anyone in Tibet I did meet someone who leads tours to Tibet. I believe I met Daniel Winkler at Soma Camp for the first time at Soma Camp in January 2015. Six months later I would be meeting him, and others, in Chengdu China to start our Journey to Tibet.

This trip would turn out to be my most memorable mushroom trip. Not so much for the mushrooms as it was just going to Tibet itself. If it was just mushrooms, I would have to say Norway was the most memorable. Even



though my friend Siw showed me so many beautiful areas of Norway, it did not have the spiritual meaning for me as Tibet. Daniel billed his trip as Mushrooms, Orchids, and Temples in Tibet, and it was that and more for me.

Having practiced Buddhism, and mainly Tibetan Vajrayana Buddhism for over 30 years, by this time Tibet was something I had dreamed of for years. Turned out Daniel was the one karma meant to help this dream come true.

There is no way in a few words how I could share all the great things we saw and did in our time in Tibet. Yes there were many orchids, many mushrooms, temples and my favorite was a tantric temple and mushrooms on the same grounds.

I will share just a portion of 1 day in Tibet. We were heading to a Tantric Buddhist Temple and on the way we stopped to pick this orange colored tasty berry and look for mushrooms. While on this stop one lady and I were standing in a clearing admiring a Tibetan Yak. Apparently, he did not admire us and started to charge us. I think I was hiding behind a tree 2 seconds before she joined me.

An hour later we were on the temple grounds and finding a wide variety of mushrooms. I spotted beautiful copper bronze colored amanita I had never seen before. It looked like what I had seen in "All That the Rain Promises and More" by David Arora, called Southwestern Caesar's Amanita. Of course we were in Tibet not the Southwest of the US, so I had no clue.

Besides finding the Amanita, my favorite find was a bolete growing between 2 rocks at one of the Buddhist Shrines on the temple grounds.

After an hour and a half of exploring the temple grounds we went inside and explored the temple. Each temple had its own feel and this one felt most like my own practice so I really enjoyed walking through it feeling its energy.

I experienced my most memorable experience that day not too long after we had toured the temple. I decided to walk around and take a few more photos. As I walked I spotted this huge monkey sitting on a fence. I took a couple photos and then went and told Daniel what I had spotted. He said he would like to get a photo also. So I showed Daniel where I had seen the monkey crawl through an opening in the fence. Daniel went to one side and I stayed by the hole in the fence. A moment later I saw the monkey walking back towards the opening. I thought when he walks through the fence I can get a good photo.

As the monkey walked through the fence I snapped a photo. As I did, my camera made a clicking sound. Apparently, this annoyed the monkey and a second later it was climbing up my chest with its mouth open wider than my dog Tilo (Tilopa) can open his mouth. When its chest was about equal with mine I thought I had 1 chance. I pulled my hands up to my chest facing outward. I then took every bit of fear-built-up-strength and flung my hands forward. The force was enough to throw the monkey about 15 feet in front of me. The force caused me to fall forward and as I was falling the thought came I hope it runs and does not come back for more. I was very fortunate and it turned and Continued on page 11

Page 10

ran. Since I was not hurt it actually turned out to be one of my many fond memories of Tibet.

While to date Tibet is my most memorable mushroom trip, I plan on building more great memories. I know the guy who leads tours to Colombia and I even read he is leading one in the Alps next year. So, karma willing, I will be taking another trip with Daniel next year.

Now, back at home, I plan on building many more mushroom memories right here in Northern California. I saw an email from Curt Haney the other day stating registration for Mendocino Camp will be coming up soon.



Mendocino Camp is one of my favorite places to gather with family and friends.

Hope to meet you on a mountain,

Don Hughes, or as the trolls, dakinis, and mushrooms know me Dony Hia

#### It's Cadaver Popping Up Season - Check Your Patches by Ken Litchfield

October is Halloween, the hottest driest season and longest since the end of the last life in the rainy season. Are things ever dead now. What better time to be on the lookout for skeletons, dead bodies, zombies, and various other eructations trying to escape from being buried in the ground.

Now's the time for Pisolithus tinctorius, better known as "Foot Rock to Dye For" or "Dead Man's Foot." to creep out from below ground. It really does look like something a dead man might stick up out of the ground if he was trying to get out and about at Halloween season. Then he got tired of struggling and forgot to pull back under.

And not to be gender restricted, it actually might look more like a "Dead Woman's Elbow," or "Dead Witch's

Hagwart," or "Dead Girl Shopped-Til-She-Dropped," or "Dead Babe's Whatevers." It does look like an emurgent appendage of a dead person but without the fragrance. Some folks confuse it with dog poo but that only make sense if it was a constipated Great Dane/St Bernard mix. Should you come across any cadaver parts this month please do collect them to barter with dye folks for tender edibles they may collect during the rain season. But also be sure to get some pictures of your most outrageous specimens and send them in to MN and we'll publish them with your favorite caption or we'll have our own caption contest. Happy Halloween and Abracadaver!



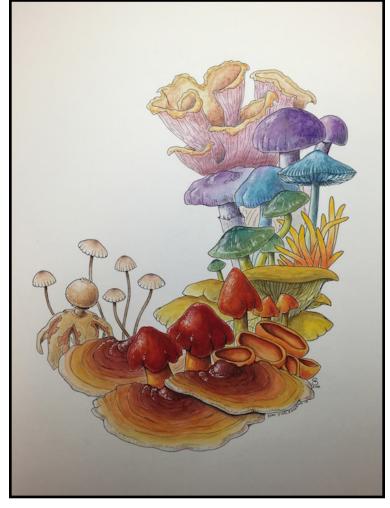
(Photo: © Boleslaw Kuznik)

## **ANNOUNCEMENTS / EVENTS**

### MSSF Fungus Fair 2015 Save the Date!

Sunday, December 6, 2015, 10 am - 5 pm SF Fair Building/Hall of Flowers in Golden Gate Park.

Transit and Parking info: http://www.sfbotanicalgarden.org/visit/directions.html Check the <u>MSSF website</u> for info updates



This year's artist [for the poster] is Sean Edgerton, a graduate student at San Francisco State and scientific illustrator at Cal Academy. http://www.theillustration.co/

Volunteer sign-ups: http://mssf.ivolunteer.com/ff46 Tickets: http://fungusfair-2015-mssf.eventbrite.com/



### Herbal Mead Making

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

Contact <u>litchfield.ken@gmail.com</u> for more information

### David Arora's Annual Thanksgiving Weekend Wild Mushroom Workshop

Friday, November 27 to Sunday, November 29 Near Gualala

Join mycologist and author David Arora and special guests for lectures, mushroom hunts, cooking demos, and fungal fun near Gualala on the Mendocino coast. This year's event will be held in a rustic log house with fireplaces and is limited to 20 people. All levels of experience welcome.

To register, or for more information, go to the events page at <u>davidarora.com</u> or email him at: <u>maxfun@cruzio.com</u>

### **MSSF Holiday Dinner**

Monday, December 14, 7:00 - 9:30pm at the Hall of Flowers.

New chef, great food!

Members who bring appetizers with be entered in special prize lottery.

### Dermatological Contact of Gymnopilus spectabilis

Monique Risch

The following is an account from Mendo camp in November 2010 by mushroom artist Monique Risch, who often teaches with the mushroom art contingent at SOMA camp in January. It is possible that the psychoactivity described here may be a combination of the mushroom and microbial activity. If you have any similar experience, or know someone who has, we would be interested in receiving more accounts, especially if you have samples, or know where to find the stump, so DNA analysis can be performed.

### Dermatological Contact of Gymnopilus spectabilis (November 13, 2010)

*Physical description:* 52, 5'5", Female, no recreational drug use, low alcohol use, non-smoker, unsuccessful vegetarian, medium metabolism, highly affected by even small doses of either over-the-counter or prescription drugs. Freckled, red-headed complexion.

Location: Mendocino Woodlands. A wonderful day long foray lead by Norm Andresen where we found hedgehogs, Boletus edulis, white and golden chanterelles, Gymnopilus spectabilis, and 15lbs of Pisolithus tinctorius.

*Exposure:* 3:00pm. Growing out of a stump were 3 lbs. of soggy Gymnopilus and, because of the rains on the previous day, the stems were beginning to rot. Having left my gloves in my other backpack, I harvested all of them with my bare hands and placed them in a bag given to me by Norm. I noticed that both my hands and insides of my arms were completely covered by a deep golden orange paste from the Gymnopilus. I tried to wipe as much of the paste off but the color stained my hands quickly and deeply. The hike back out to the car was 90 minutes, then another 30 minutes to get back to camp and wash what was left of the paste off of my hands and arms. 5:00pm.

*Effects:* 7:00pm. Dinner was served in the dining room of the main lodge at the Mendocino Woodlands Campground. It was a cold day so it was nice to have the fire roaring in the fireplace and every seat was taken for a wonderful meal. After a week of sitting behind a computer, a day of hiking would've left me contented and tired from all the fresh air and activity, but I began to pace about the room unable to sit still for more than a few minutes. I could feel my heart beating evenly and with strength as I watched my pulse in my veins at my wrist. The room was getting louder and it was hard to believe that a small room could hold so many noisy people. At this point, I was not aware of the effects of Gymnopilus exposure or, much less, that that was what was happening to me. As the meal progressed, I noticed that I had eaten something that did not agree with my stomach.

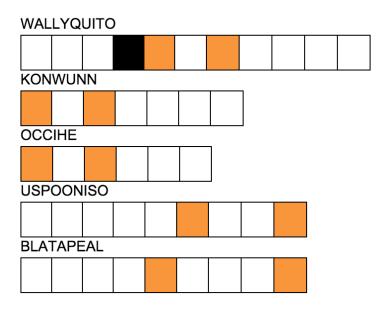
My long walk back with my friend to the camp bathrooms was done in the moonless night with only the light of our small flashlights to guide us. Once I reached the fierce bright lights of the bathroom I immediately noticed that the walls were moving as if they were in a lava lamp. Small flames, like in the fireplace in the lodge dining room, began to lick the bottom of the walls, eventually consuming the entire women's bathroom. At this point I recognized that this was a large psychedelic visual display, so I could relax and enjoy the show. I asked the other women in the bathroom if they ate the vegetarian meal considering that the chefs in the kitchen had been very creative with the "mushroom wild rice medley" served in a miniature pumpkin. One of them said they did have the pumpkin dinner but were feeling ok.

My friend and I went back to the cabin, lit a fire in the fireplace, and crawled in the sleeping bags to get warm, for it was going to be a long, cold night. As the fire burned through the night, I could not sleep and continued to get up and pace around the room and fuss with the fire, making the flames leap in short bursts, content to watch the wood turn to red coals. As the room began to warm, I climbed back into my sleeping bag and tried to get to sleep around 2:00 in the morning. When I finally did fall asleep I woke up a little bit later and heard a dog cry at the door of the cabin. Its sad cry was an impatient plea to be let in and get warm by the fire. Not only was I surprised that there was a dog here, I was worried that it was lost. When I got up to let the dog in, I noticed that the cabin door was wide open and no dog was at the door. This did freak me out and I shut the door quickly and jumped back into my sleeping bag. As the dog continued to whimper and whine throughout the night I looked at my cabin mate and noticed that he was snoring just like the whimpering of the dog outside the cabin. He never snores like that. The auditory hallucinations were not as fun as the visual ones.

Next morning, after I told my adventures to others around the camp breakfast table, we concluded that the Gymnopilus paste on my arms and hands could have caused the auditory and visual psychedelic experience.

*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.

### **Mushrooms Edibility Ratings**





© All Rights Reserved by treddout

Hunting for mushrooms here?

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

Answers in the November 2015 issue

Gadget Observer

by Gadget Gal

Treasure Scoop™ Location: San Francisco, California, USA Observation created: September 14, 2015

It's always fascinating to learn about ingenious tools mushroom hunters discover as they dive into the passion of foraging. Whether you want to hunt efficiently, limit dirt on your hands, compete with the young and limber hunters, or radiate the coolness aura, this month's gadget observed can serve these uses and more. A new mushroom hunter clued me in on the brand new rock hunting tool he bought from eBay to prepare him for the mushroom season to come. Weighing a little more than one pound, this gadget is an all-in-one walking stick, multipurpose mushroomer's tool. You can dig for truffles, protect yourself against predators like snakes and mountain lions, do some light gardening or cook a luau. Matsutake hunters have also repurposed the tool

(see YouTube <u>https://www.youtube.com/watch?v=VZBn7ZosgLc</u>). From far away, the gadget looks like a golf club and it does come in two lengths for normal or tall hunters (36 or 42 inches). If you are hunting in the golf course, you will fit right as long as you wear khaki pants and a polo shirt.



Do any of you use this tool or have a gadget observer post to share? Please send to <u>mycenanews@mssf.org</u>. John's cool tool

### CULTIVATION QUARTERS Ken Litchfield

This month on October 25th we have our 23rd semiannual Far West Fungi Farm Field Trip Potluck BBQ at MSSF members John and Toby Garrone's mushroom farm down near Watsonville. We'll be meeting at the farm that Sunday to tour the farm's operations from the beginning of sawdust pile fermentation to mixing and bagging the sawdust substrate to autoclaving it, to inoculating, growing out, and fruiting of thousands of bags per day of 12 different kinds of organically grown gourmet mushrooms. After the tours, the Garrones and their sons and extended families will have their big BBQ out to grill up fresh farm mushrooms along with the slabs of stuff you bring with your potlucks. And after the potluck BBQ we'll go forage on the massive recycle pile for freshly tossed, once harvested, mycelium impregnated sawdust loaves of shiitakes, white, brown, grey, pink, gold, and trumpet oysters, lion's mane, pioppino, nameko, and reishi mushrooms that can continue fruiting all winter in your home, school, or community garden. We'll show you how to prep your own plot.with as many mushroom loaves as you can carry back with you in your vehicles. Be sure to bring cardboard boxes, plastic bins and cans, and big garbage bags to sort your finds. MSSF member invites with details will go out by email about a week before the event. This event has grown over the years and lately there are over 150 folks attending each time. This is the MSSF's kickoff event for the fall mushroom season and a great place to socialize with like-minded folks in mycology, gardening, permaculture, rare fruit growing, and culinary appreciation. You may bring your family and friends and carpool. Price of admission for each person is a potluck item.

### Omni Counter Culture Labs Fermentation Station and BAAM Mushroom Lab

The Omni labs are up and running if you would like to join us for herbal mead making on Wednesday nights 7 to 10:30ish at the Fermentation Station. The last several weeks we also have been learning the fermentation basics by making apple cider, kombucha, berry jelly wine, perry, yerba mate soda, onion wine, and garlic wine. Coming up we'll be exploring how to make jack fruit vinegar, more apple cider, perry, ice cream, and other seasonal fruit ferments with our three Champion juicers. We'll have shredding parties for root veggies and kimchi sauerkrauts. And we'll have sprouting grains for beers and breads galore. Plus we'll start some formal batches of herbal mead. If you would like to help out with donations, we can make use of any clear glass one gallon loop handled jugs, air locks and stoppers, bags of sugar or jars of honey or jelly hanging around unused in the pantry, and probably other things you may have. For more info on what to donate contact me at <u>litchfield.ken@gmail.com</u>. For the mead making class schedule, sign up for the Fermentation Station meetup as part of Counter Culture Labs meetups at meetup.com. Bay Area Applied Mycology (BAAM) will be scheduling all kinds of mycological activities with the coming rainy season. For the BAAM lab activities at Omni contact BAAM prez Joe Soeller at jsoeller@gmail.com.

### Saprobic Mushroom Lifestyles - Compost, Manure, and Broken Down Raw Dead Tree Trunk Heartwood Feeders

Last month we looked at the biology of mushroom cultivation lifestyles in general and specifically at saprobic mushrooms, those that live on dead raw tree trunk heartwood, or raw cellulose. The heartwood cell walls are made up of not just cellulose but also of lignin and a few other things like pectin and hemicellulose. Though cellulose is common to all plant cells and composes 35-50% of the cell wall, lignin is mostly found in the xylem or woody tissue of Gymnosperms and Angiosperms and specifically mostly in the "softwood" conifers and "hardwood" dicots where it composes about 10-25% of the wood.

There aren't as many mushrooms that will break down lignins as will decay the much more common cellulose. Lignin decay fungi are called white rot fungi because they leave the lighter colored cellulose "white rot" Continued on page 16

alone, while the "brown rot" cellulose feeders leave the brown lignin behind. Because the lignin isn't as readily broken down as the cellulose it provides "bulk" or spongy tilth to the soil organic matter, a good thing. For practical mushroom cultivation purposes it isn't necessary to be concerned about ligin eating mushrooms; just feed all your wood source materials to your raw cellulose feeders. Because cellulose is the much more common component for most raw saprobic fungi to eat I usually refer to them as "raw cellulose feeders" as compared to the mushrooms that like broken down cellulose or "compost feeders."

So last month we looked at the tree trunk heartwood or raw cellulose feeders. Those that feed on the raw heartwood can also feed on cellulose rich ag or forest product materials that can be bagged or mulched for commercial growing of saprobic mushrooms. Straw, wood chips, cardboard, etc that will metabolically "burn" faster than the slow burning dense heartwood will produce a quicker crop of mushrooms for harvest. The recycle pile at Far West Farm is loaded with plenty of undecayed sawdust loaves that will still produce more mushrooms but there is also plenty of broken down sawdust or "mushroom compost" for the taking. Far West is even considering using it in a button mushroom growing operation.

Once the raw cellulose is decayed or spent by the raw cellulose feeders, the remaining decomposed cellulose or compost can be fed to plants or compost feeding mushrooms. Compost feeding mushrooms are those like Shaggy Parasol, Shaggy Mane, and the Agaricus genus of Button Mushrooms. Shaggies and Buttons will eat the leftovers from raw cellulose feeders but often like a richer compost or manure mix that you can make at home.

To make a rich compost for compost feeding mushrooms and/or your regular garden plants, there are several methods. The simplest is maintaining a thick mulch of chippy wood chips throughout the garden, but especially in the pathways. The wood chips decay from microorganisms, fungi, and worms into rich compost over 2-4 years. The thick mulch can be inoculated with mushroom mycelial spawn of Garden Giant or Stinky Whiffle Ball, two of the easiest edible mulch mushrooms to grow in your fresh mulched garden. Masses of mycelium can be produced on chippy wood chip mulch this way that can be used as mother spawn beds to inoculate other areas of the garden. The compost produced in the pathways can be dug out and put into the garden beds and replaced with more chips to generate more compost. Burying kitchen scraps, garden waste, tree leaves, and other organic matter under thick garden mulches is a quick and simple method for producing compost where you need it. A passive slow decay compost bin that regularly takes kitchen scraps and miscellaneous organic material is a simple easy place to transplant bases of wild or garden collected compost feeding mushrooms or the spore rich slurries of the mushroom tops mushed up in a bucket of water.

However, the coolest composting method is hot composting in 14 days, though it is more labor intensive than other methods. This simple method was originated, or at least promulgated for decades, back in the 60s and 70s by the Rodales in Organic Gardening magazine. There is another method, sometimes called the 18 day method, claimed to be originated at UC Berkeley, more commonly known and promulgated by folks trained in the more current urban ag and permaculture movements. It overemphasizes the proper 30:1 proportions of carbon and nitrogen and dry and green materials and how to calculate that based upon complex compositional analyses of multitudes of ingredients. And then after belaboring how to do the calculations it usually recommends resorting to a simplification that emulates the original Rodale method anyway. I have compared methods several times with C:N proponents and not seen any advantages to the C:N method. It is overly complicated to explain for its own proponents and has too many recommendations for how to correct the formula when it isn't working. You can look up the C:N method online if you want to use that but I'll describe the simpler and more effective Rodale method here, since it is apparently not so well known anymore.

For rich black compost in 14 days you only need to remember 4 components.

- 1) Maximize particle surface area Shred all the ingredients.
- 2) N Provide high Nitrogen ingredients to compose at least 1/3 of the pile
- 3) H2O Keep all the ingredients uniformly damp and mixed.
- 4) O2 Turn the pile daily to aerate it.

Page 16

1) The raw ingredients will compost down much faster if their chunkiness is broken down to an ideal size range of little fingernail size to thumbnail size. Some could be bigger and some smaller but that range is ideal for microbial digestion, aeration, drainage, and turnability during the composting process, and the friable texture of the final usable compost. If the particle size is too small, like, say, sawdust, then the compost will too easily cake and clump and not mix well. If it is too chunky like, say, thumb sized wood chips, then the internal volume of the chunks doesn't get broken down as quickly as the rest of the materials. Caked sawdust, chunky wood chips, and long stringy grass or twigs are difficult to turn and often their fibers are still too long and tangly for friable finished compost texture.

2) Rather than the complicated calculations of the C:N method needed to figure out how much of each Nitrogen rich material to add in comparison to each Carbon rich material, you only need to remember to use 1/3 of the mass of the pile as high N materials. High N materials might be green grass clippings or horse, cow, or sheep manure at 1-2% N. Richer N materials like goat, rabbit, or chicken manure or blood or cottonseed meal can be used as supplemental high N enrichments to stimulate full metabolic heat production in the pile. You can find the N and C analyses of lists of compostable materials online.

3) Like all living organisms, microbes need water to live and carry on their metabolic processes. If the compost ingredients used to build a new pile are dry they need to be wetted to break their surface tension and soak water into the material so the microbes can devour them. When the compost pile heats up the materials will dry out faster and the moisture needs to be replenished regularly. Some folks express concern about the pile getting too wet but, since it should be resting on open ground, if there is "too much" water it will simply drain away by gravity. Because the pile will be turned daily, the turning will aerate any pockets of "too wet" material and prevent it from going stagnant.

4) Like all aerobic organisms composting microbes need oxygen to carry on their metabolic processes. Turning the pile daily gets any wet soggy spots broken up, drained, and aerated and any dry spots remixed with the the rest of the moist pile materials. It also feeds oxygen back into the pile preventing carbon dioxide and other metabolic waste products from building up in pockets.

Building the compost pile entails mounding all the well mixed ingredients into an easy to turn human labor-convenient pile about 5' x 5' and 4-5' high. This is plenty large enough to heat up and small enough so the average person can turn it in 5-10 minutes. The pile should be built on one half of a 5' x 10' area so the pile can be turned easily from one half of the rectangle to the other half and back again daily. It should not be enclosed in a bin or boxed in area whether with a container or with wooden pallets. Containing the pile prevents quick easy turning and makes it more difficult to get full access to all parts of the pile. For aesthetic purposes the composting area can be located behind a vine covered pallet wall or wire or string fence while still giving full accessibility to all parts of the pile.

For folks with larger gardening or farming territories that need and can use more compost and also generate more composting materials, you can build your composting area in the back 40 somewhere on a 5' x 70' row. This allows 14 compost piles to be built side by side, one for each day of the two week process. To start the process, the first pile is built on the first day in the first 5' end position. Then the next day that pile is turned to the second adjacent 5' position and another pile is built on the first position. The third day the first pile is moved from the second position to the third position, the second pile is moved from the first position to the second position. This progression is repeated each day until all 14 positions in the 70' row are filled and the first pile that has reached the end of the line is carted away for use, then all the rest of the piles are turned in series, and another new pile is built at the beginning. In a setup like this it helps to arrange the composting area on parallel contour with the highest elevation of the garden or farming area so that finished materials are easier to cart downhill and any runoff from the composting process is slowed and captured by thick woodchip mulches and the rich water feeds the downhill garden area. Uphill road access to the beginning of the compost area allows easy dumping of raw materials like free delivery of tree trimmer wood chips and neighbors' stable manure.

### **Mushroom Sightings**

### On the way to Baskin Robbins in Burlingame...

On the way to MSSF September Meeting...



Seen on September 6th, 2015 while driving on Skyline Bld, Oakland...



An electro-luminescent in my bath-room...



## MSSF Calendar October 2015

Monday, October 5, 7:00 p.m. - Culinary Group Dinner Hall of Flowers, County Fair Building Golden Gate Pk., 9th & Lincoln, S.F. Advance registration required at <u>mssf.org</u>. See calendar section at <u>www.mssf.org</u>. Email <u>culinary@mssf.org</u> to volunteer.

**Tuesday, October 20, 7:00 p.m. - MSSF General Meeting** Hall of Flowers, County Fair Building Golden Gate Pk., 9th & Lincoln, S.F. 7 p.m. - Mushroom identification and refreshments. 8 p.m. - Speaker: Justin Reyes

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.

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

#### Councilors for the 2015-2016 term

**Councilors:** (1 year term) Julia Cabral and Joe Soeller (2 year term) Liz Sandiford and Tyler Taunton

# **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: <u>www.mssf.org</u> members-only area, file archives, council member position descriptions. Or email <u>president@mssf.org</u>.

#### Volunteers Wanted Now:

- Librarian

- Merchandising Chair

- Mycena News layout assistant. Familiarity with Adobe InDesign a plus.

Contact president@mssf.org for details.

The Fungus Fair Committee is already planning for the December 6th event.

We urgently need help right away from someone with advertising & outreach experience to help publicize our largest annual event.

Please contact <u>FungusFair@MSSF.org</u> if you have that kind of experience and would like to help.

We will have lots of volunteer opportunities closer to the fair, stay tuned for information.



### October 2015, vol. 67:2

*Mycena News* is the members' newsletter of the Mycological Society of San Francisco, published monthly from September to June.

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

To subscribe, renew, or make address changes, please contact Zachary Mayes: <u>Membership@MSSF.org</u>

Past issues of *Mycena News* can be read online at <u>www.mssf.org</u>

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

Submit to *Mycena News*! The submission deadline for the November 2015 issue is October 15th. Send all articles, calendar items and other information to: <u>mycenanews@mssf.org</u>

#### **Contributors:**

Don Hughes Carol Hellums Wendy So Monique Risch Ken Litchfield Brennan Wenck-Reilly

### Editing and Layout:

Ken Litchfield Wendy So Pascal Pelous

#### MSSF Officers 2015-2016

President: Brennan Wenck President@MSSF.org

Vice-President: Jackie Shay VicePresident@MSSF.org

Secretary: Eric Multhaup Secretary@MSSF.org

Treasurer: Henry Shaw Treasurer@MSSF.org