

Mycena News

Mycological Society of San Francisco

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Speaker for April
MSSF Meeting
Matthew Smith

Spatial Dynamics of
Armillaria mellea (Oak Root
Fungus) in San
Francisco's Golden Gate
Park



Matthew Smith will be speaking about his ongoing studies of *Armillaria mellea* (also known as Oak Root Fungus and Honey Mushroom) in Golden Gate Park. *Armillaria mellea* is a common root pathogen that is native to California and causes disease in hundreds of woody plants.

Besides killing California's Oaks and grapevines, *Armillaria* produces large bunches of tasty mushrooms for us to eat. Come hear what Matthew has to say about the interesting dynamics of this fungus right here in San Francisco!

Matthew is currently a doctoral student in Ecology at UC Davis. His research focuses on a range of fungal-plant interactions. In addition to his research on *Armillaria mellea* in Golden Gate Park, Matthew studies the mycorrhizal fungi of Northern California's Oak woodlands.

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Mycodygest

Mycodygest is a section of the Mycena News devoted to the scientific review of recent mycological information

Tracing the Roots of Mushroom Cultivation

By Kelly Ivors, keivors@nature.berkeley.edu

The consumption of mushrooms by man predates recorded history. Historical data indicates mushroom cultivation and consumption occurred in ancient civilizations of China, Rome, Greece, Egypt and Central America. In fact, Asian civilizations have been cultivating edible mushrooms for almost 1400 years, since the first mushroom, *Auricularia auricula* (wood ear), was cultivated in China around 600 A.D. Soon to follow were *Flammulina velutipes* (enokitake) around 800-900 A.D., *Lentinula edodes* (shiitake) around 1000-1100, *Agaricus bisporus* (button) around 1600, *Volvariella volvacea* (paddy straw) around 1700, *Tremella fuciformis* (white jelly) around 1800, and *Pleurotus ostreatus* (oyster) around 1900. Of the leading mushrooms today that were cultivated before 1900, *Agaricus* is the only one that was not first grown in China.

Wu San Kwung is known both by legend and historical account as the originator of shiitake mushroom cultivation. He was born during the Sung Dynasty (960-1127) in the Chekiang Providence of China. Legend states that Wu San Kwung stayed deep in the forests of the high mountains where he hunted and collected wild mushrooms for food. One day he discovered that certain broken trees, which had fallen to the ground, produced mushrooms. Later he used a knife to cut the logs and noticed "the more cuts, the more mushrooms. No cut, no mushrooms." Occasionally after cutting, no mushrooms appeared for years. When this happened, he became angry and beat the logs vigorously. Several days after the beating, mushrooms flushed from the log. This story is perhaps the possible origin of the practice of cutting and beating logs for shiitake production.

However, it wasn't until the 17th century in France that commercial mushroom growing began. By coincidence, farmers observed crops of *Agaricus* growing in melon beds fertilized with horse manure, and later confirmed that horse dung was closely associated with growth of the button mushroom. In 1630, the first attempt at indoor *Agaricus* cultivation occurred near Paris in Chambry, France in caves (limestone quarries) where they produced "champignons de Paris". Some accounts report that King Louis XIV (1643-1715) was among the original European mushroom growers. It wasn't until the 19th century that modern cultivation techniques were formed and then passed onto gardeners in England. *Agaricus* cultivation in caves spread quickly throughout Europe, reaching Belgium, Holland and Scotland (Fig. 1 and 2).



Fig. 1. Entrance to mushroom mine in Scotland (late 19th / early 20th century).

In the late 19th century (1880), mushroom production made its way across the Atlantic to the United States, where curious home gardeners near New York City and Long

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Tracing the Roots

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Island tried their luck at growing this new and unknown crop in caves and cellars. In 1891, William Falconer published the first book on mushroom cultivation entitled *Mushrooms: How to Grow Them; A Practical Treatise on Mushroom Culture for Profit and Pleasure* (available at <http://cdl.library.cornell.edu/cgi-bin/chla/chla-cgi?notisid=AAM1556>). Falconer suggested that mushroom growing was perfect for florists; since they grew flowers on benches, mushroom beds could be placed under bench tops and the 2 crops could be grown at once. Mushroom cultivation was also recommended to housewives as a source of additional income. In 1896, William Swayne of Kennett Square, PA built the first mushroom "house" used exclusively for commercial mushroom production. Houses were used to control precise environmental conditions required for cultivation.



Fig. 2. Mushroom mine in Scotland (late 19th / early 20th century; It's uncertain how the pictured mushrooms growing in mines were lit; possibly by candlelight).

Growers had to depend on spawn imported from England, which by the time it reached the U.S. was of poor quality. In 1903, two scientists at the US Department of Agriculture were successful at producing pure-culture spawn of *Agaricus bisporus*. The first manufacturer of spawn was the American Spawn Company of St. Paul, Minnesota, headed by the French mycologist Louis Lambert. He began the production of brick spawn, advertised as "Lambert's Pure Culture Spawn", which later received a silver medal at the Universal Exposition in St. Louis in 1904. Ten years after this development,

at least 4 - 5 million pounds of *Agaricus* were grown annually in the U.S. Strains of this species were naturally brown in color; it wasn't until the mid 1900s that snow-white strains of the button mushroom were first observed and isolated from growing beds. At current, white button mushrooms dominate the industry, mainly for aesthetic reasons, as well as having a longer shelf life.

With the advancement of air conditioning and improvement of environmentally controlled mushroom houses (1930), cave cultivation almost disappeared. Today, only a handful of growers operate underground around the world, including the 'Moonlight Mushroom' farm in southwestern Pennsylvania, which consists of a 150-mile labyrinth of tunnels 300 feet underground (Fig. 3). Although *Agaricus bisporus* currently accounts for approximately 90% of the total mushroom production in the US, additional technological breakthroughs have encouraged the commercial cultivation of other types, including *Lentinula*, *Flammulina*, *Pleurotus*, *Hypsizygus*, *Hericium*, *Morchella*, and *Grifola*. Today, Pennsylvania leads the country in total annual production (>50%), with California a strong second. More than 20 other states now add significantly to total production. This means that mushrooms, which have limited shelf life and shipping range, are available everywhere!



Fig. 3. Button mushrooms growing in limestone caves at Moonlight Mushrooms farm.

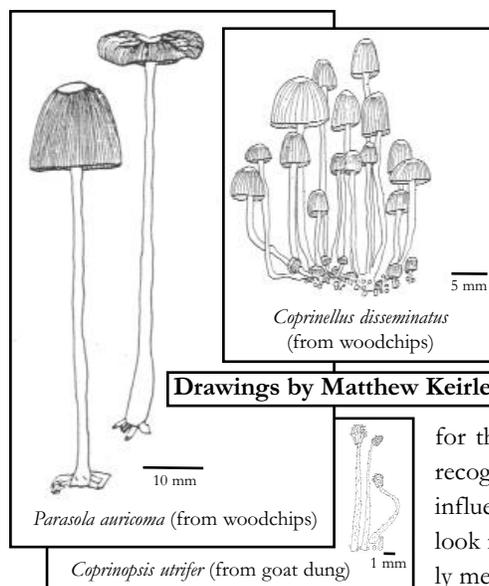
References

- Chang, S.T. and Miles, P.G. 1987. *Historical record of the early cultivation of Lentinus in China*. *Mush. J. Tropics* 7:31-37.
- Del Sordo, S.G. *First fifty years: A chronological history of the mushroom industry*.

Scholarship Recipient Appreciation

By Matthew Keirle, mkeirle@yahoo.com

I wish to express my appreciation to the Society for having selected me as a recipient of the 2003 Esther Colton Whited-Harry D. Thiers Scholarship. The additional funds will greatly assist me in completing my Masters research at San Francisco State University this semester. My research involves preparation of a monograph for the coprinoid mushrooms of the Hawaiian Islands. The project includes a morphological analysis of more than 150 specimens representing at least twenty-nine species belonging to the genera *Coprinus* and *Podaxis* (*Agaricaceae*) and *Coprinopsis*, *Coprinellus*, and *Parasola* (*Psathyrellaceae*). They constitute a polyphyletic assemblage of dark-spored, saprotrophic taxa traditionally recognized as belonging to the genus *Coprinus* and the



genus *Podaxis* which was thought to be a secotioid ally.

In addition to my monographic research, I am completing an analysis of molecular sequence data (ITS region) obtained from 22 Hawaiian collections and additional material from Europe representing the *Coprinus cordisporus/Coprinus cardiasporus* complex and related taxa.

I have been a member of the MSSF for several years and I have quite a fondness

for the Society. I feel privileged to have my work recognized by an organization that has been so influential in shaping my mycological interests. I look forward to presenting my research at a monthly meeting in the Fall of 2003.

In Praise of Honeys

By Meredith Sabini

Go to a fancy restaurant or MycoSoc dinner and the menu will boast of morels, chanterelles, porcini, shiitaki. These are the Cadillac species. Honey mushrooms will not be on the list. Poor *Armillaria mellea*, perpetually the lesser sister never invited to the party! It is abundant, easy to identify, sturdy to cook, and Arora rates it “eminently edible.” Why, then, is it so neglected? In this tribute to the common Honey, I will offer some speculations, tips about preparation, and some cautions.

Having been an amateur mycologist thirty years or more, I think it’s time I came out of the closet and admitted that I find morels, chanterelles, and blewitts overrated, and would gladly trade my portion of any find for Honeys (or Goat’s foot!), whose rich flavor and meaty texture have a lot to recommend them. There’s no need to trade, of course, as Honeys can be found on practically any block in town once it rains.

Armillaria mellea was one of my first discoveries at the cabin on forested land in northern CA where I live part-time. These classic-looking ‘shrooms were growing at the base of a feeble Doug fir. A small sprout of a tree-it gave little to feed on, and the next season, the mycelium had migrated to better feeding grounds a few yards away where a huge stump was waiting to be composted. When I arrived mid-November, I came upon the biggest fruiting of the decade, 250 caps (I counted)! I called my neighbor, an Italian vintner who loves wild mushrooms, and told him to get the pans ready for a big delivery.

I came to expect Honeys for Thanksgiving, so regular are they. This year the dry November delayed their fruiting ‘til early December, a rare event. Each year, the root system has spread steadily outward in visible steps so that its radius is now about 30’ from the original spot. Now, they come up in clusters all over a hillside, naturalizing like springs bulbs. Even though I am sure who they are, I nevertheless get a spore print (white) from each picking, adhering to the promise I made myself long ago not to eat anything I was not 150% sure of.

Honey mushrooms are widely found, and one of my hunches about their lack of popularity is that their very abundance makes them less desirable. What adventure is there in walking a block and trimming a few caps from some dead stump? How interesting could such a specimen be, growing right nearby in broad daylight? And Honeys don’t do anything weird or fascinating like deliquesce or turn blue when cut or ooze peppery orange juice. It’s like with potatoes - when you could buy red fingerlings or purple Peruvians, who cares much for plain old russets? (I do.)

My second hunch is that Honeys are shunned, perhaps unconsciously, because of their obvious parasitic activity. An arborist whose services I use speaks indignantly about “oak root fungus,” Honey’s other common name, destroying not only oak and other trees but roses as well. *Armillaria mellea* is badly behaved; it doesn’t wait until a tree is dead, but gets a head start by initiating the recycling process while it’s still alive. Who would want to ingest such a ruthless parasite? (I would.) Perhaps this species is akin to certain mistletoes that haven’t evolved long enough to know not to kill their host. The term “toadstool,” as meaningless as “weed” or “stress,” is applied to such species that evoke fear or disgust.

There is one more reason I believe Honeys may be avoided, the only good reason: they make some people sick. I learned this first-hand when I delivered that bunch to my Italian neighbor. His wife tried some with dinner and got royally ill, up all night vomiting. She told me later that she hadn’t been able to even look at another mushroom for a full year; so intense was the reaction her gut had. I felt truly awful. How could I have made someone sick? Had I misidentified them? Had they been growing on buckeye perhaps? No on both counts. No one else who ate them — my brother, my guests, others during the week — had any adverse reactions. My guess is that she had the type of allergic response that leads some to vomit up peanuts or shrimp while the rest of us merrily consume them. Or it could have been a particular combination of the ‘shrooms and wine she had with dinner.

So, if you are going to eat Honeys or share them with others, please submit to the “taste test”: eat only a small bite the first day, preferably in the morning with nothing else and within driving distance to a hospital. This covers all your liability bases and eliminates the false positives that can emerge when fear itself results in digestive upsets re novel species. I once paid for a small bunch of Honeys from a new locale to take a taxi ride across town to an expert mycologist when I myself had an upset stomach; he proclaimed them Honeys for sure, as I thought, and my malady the regular flu bug of the season.

Now, for the fun part — cooking. Akin to shiitaki in hearty flavor and to porcini for variety in how to serve, Honeys are a superb choice for omelets, curries, stews, stir-frys, stuffing, soups. Here are some suggestions for freezing, drying, and sautéing. Cook within 3 days of picking.

Drying: Honeys dry very nicely and, given their abundance, they make an excellent ‘shroom to have on hand for winter stews and curries.

Slice them up and lay them out on a wire rack. Put them in the oven at a low temp (175-200°F) until they are dried, checking on them often to make sure they aren’t drying too fast. You can also dry them easily on top of a wood stove as it is winding down for the night.

Caution: I once dried a huge quantity in a gas oven with just the pilot light for heat; by morning we had a fine crop of larva, as the oven had functioned as an incubator. Higher heat will do them in.

Freezing: Honeys also freeze well and keep for about 6 months. Sauté them over a relatively high heat in a nonstick pan until they are about 3/4 cooked. Let them cool and pack them in airtight containers.

Cooking for eating: I suggest using ghee for sautéing all mushrooms; it lacks the milk solids that tend to burn but keeps the buttery flavor. You can make or buy it readily today. Cut up your Honeys in chunks of any size, small or large. Using a nonstick pan, sauté them over a medium high flame, turning them with a spatula. Because they are so meaty, they do take a while to cook. Add a little salt to encourage them to shed extra water. They are wonderful added to omelets, grain dishes, hearty soups with potatoes or barley, stews of mixed mushrooms, and curries. Their flavor is definite and holds up well when blended with other strong ingredients. Arora claims that their common name comes from their color not their flavor, but I detect a noticeable sweetness in this marvelous, neglected specimen.

The Foragers' Report

By Patrick Hamilton, MYCOCHEF@aol.com

The slow part of the California mushroomers year is approaching but before that dreaded period begins, we get to go and try to find some morels. Already several folks didn't have to travel far. There were sightings of a few in San Francisco and quite a few were found in the Costco landscaped parking areas in Rohnert Park. (Any place where fresh true — Red or White — fir chips have been spread offers hope of maybe finding some after spring rains.) Morels were picked again in old apple orchards around Sonoma County. You can drive to the mountains and scope out the controlled burns of last spring, find a forest fire locale (rare that there were no major ones last summer in the Sierra), or check logged areas. I suspect that this year will be one of few monster morel hauls.

Tracking down burns on the Internet has become a late winter endeavor for serious morel activists. Find the various National Forest fire web sites vis a vis Yahoo or Ask Jeeves, etc. Another good way is to call the ranger stations and talk to the people who know where they did controlled burns last year. The Star and Darby fires that produced for many MSSF members last spring will have been logged a lot by now and should produce at least some morels. Look in the skid tracks of heavy vehicles and any other place where water might have gathered enough to wet the soil.

For those of you either new to morel hunting and/or new members of the society presented below are excerpts of an article written by me several years ago for *Mushroom the Journal of Wild Mushrooming*.

"I spotted a stream coming down through a valley right at a place to pull over and park but it appeared, of course, that others before us might too have seen this to be possibly good. What — d'ya think they would have gotten 'em all? I don't think so and besides, we all know that if you don't go you won't know.

"We noticed very few footprints and those were just at the beginning of the valley. None were further up the deer trail where we were walking. But morels were and on this day they began to appear only one at a time at first. So slowly that we almost returned to the vehicle to drive some miles north and a few hundred feet higher to a different burn thinking that where we were it was too warm, too many folks had been here, too dry, too blah, blah, blah. But too many times we had left too much before truly looking enough and this was not going to be one of those times.

"Another morel, then a group of a couple way in close to the base of a multiple stalked blackened willow. "Look over here, a cluster of fifteen." "No, check this. Come here and see these next ones by the. . ."

"We filled up two brown grocery bags and a 5 gallon bucket in about an hour and a half then decided to climb down the mountain. . . and after snacks there was enough time to go back foraging and we decided that a little further up the hill from where we had stopped picking might be very good.

"If I was a preaching man perhaps I could say, "I have been to the top of the mountain and I have seen The Glory." Or maybe, "God

was looking down and smiling on us that day." Others might insist that I must of sold my soul to the devil because of what we were about to stumble upon.

"Hiking past where we had quit earlier I crested a little mound in the hill belly well below a peak. I started to spot some morels. A few here, some more here, some more over there, more here, some up there, there, there, there and there. Damn. I felt like my mother was comforting me. "There, there now Patrick."

"I actually had to sit down and take stock of this situation. Connie was too far down across the hill to see or even hear me. I began to count the mushrooms there as a way to organize stuff — accomplish some simple task in order that the greater job at hand might not seem so daunting. When I rounded two hundred and was heading toward three, I called out for her.

"She got up to where I was and we both gawked. Ever honestly gawked? It makes your mouth form into gaping-like hole and your eyebrows sort of lift up a little and thrust out too. Neither of us had ever seen so many good-sized-in-perfect-shape morels.

"You can talk about "carpets of mushrooms" and "forest roads paved with them." But these were "burns" and, to me, the best of the best. This was morel heaven, the summum bonum of fungal heavens and we got down and picked Kama Sutra style. (Minors may leave this column for a few sentences now).

"What I mean is we postured ourselves every different way just to explore every sensuous sentient detail of this morel majesty. On my back with arms extended beyond my head I "back-picked" myself. Lying on my side propped up by an elbow I picked with Roman forum form.

"It probably would have been difficult for others to witness but for those who do like to watch this should have been videoed, and perhaps us arrested."

The mushroom of the month has been already talked about.

That's all for now folks.

Bylaws Changes Coming Soon

By David Rust, MSSF President, incredulis@yahoo.com

The MSSF needs your help. The bylaws of an organization are important because they tell us the rules under which we operate, and we haven't changed ours since 1980. For the past few years, we have been using a version of the bylaws that, unfortunately, was never voted on. An ad hoc committee has been formed to amend the 1980 bylaws. Their recommendations will be brought to the Council in April. There's a hitch, and this is why we're coming to you: the bylaws have a restriction that amendments cannot be made without approval from two-thirds of the MSSF membership. As you might guess, the most important proposed change will be to allow the Council, the organization that conducts the business of the MSSF, to amend the bylaws.

In conjunction with the annual meeting in May when we elect new officers for the coming year, the Council will mail a copy of the proposed changes to the bylaws and a ballot card to all members. Please be sure to look for this mailing and return the ballot by June 15th.

Where to Buy Wild (and Some Cultivated) Mushrooms in the Bay Area

By Mark Thomsen, runbikeswim@hotmail.com

Chain Stores

Andronico's with 11 Bay Area locations almost always has some wild mushrooms on the shelf. Prices are generally very high. Quality varies greatly from low to high by location and by how long the mushrooms have been left on the shelf.

Costco carries large bags of dried porcini and shiitake at excellent prices.

Molly Stone's Market with locations in San Francisco, Sausalito, Palo Alto and San Rafael sells wild mushrooms that are usually of good quality but quite expensive.

Ranch 99 is a large Asian grocery chain with locations in Richmond, Daly City, Fremont, Cupertino, Milpitas and San Jose. It is a very good place to buy dried Asian varieties of mushrooms as well as fresh shiitake.

Chinatown in Oakland and San Francisco. There are many stores that sell bulk dried shiitake, wood ears and stinkhorns at very low prices.

San Francisco

Farmer's Markets on Sunday and Wednesday at the **Civic Center**, the Saturday **Ferry Plaza** market and the Saturday **Aleman Market**. **Hazel Dell Mushrooms of Moss Landing Farm** carries a wide variety of organic cultivated and local wild mushrooms in season at the farmer's markets.

Tower Market on Portola carries the standard fresh wild mushrooms. They also carry some unusual ones at times including *Sparassis* and pig ears. The price and condition vary.

East Bay

Berkeley: Berkeley Bowl. This probably the best place to buy wild mushrooms in the Bay Area. Prices are low, quality is usually high and the selection is diverse. You can often find unusual varieties such as candy caps and cauliflower mushrooms there. During the season you can get many varieties for less than \$15 per lb.

Berkeley: Monterey Market. The Monterey Market is in close competition with the Berkeley bowl as the best place to buy wild mushrooms in the Bay Area. The mushrooms are usually fresh, prices are low and the selection is large. They carry Oregon and Chinese truffles in season. They are also the only place that I've seen that sells dried candy caps. They generally have a large selection of dried wild mushrooms. The Monterey market does not refrigerate their wild mushrooms so they go bad faster than those at the Berkeley Bowl.

Oakland/Rockridge: Market Hall. The pasta shop carries white and black truffles in season. They also have a large selection of truffle oils.

North Bay

Cotati: Oliver's Market always has wild mushrooms and exotic cultivated ones. They are usually in good shape.

Kentfield: The Woodland Market sometimes carries chanterelles, morels, hedgehogs and truffles.

Mill Valley: Mill Valley Market carries wild mushrooms from local hunters and wholesalers.

Marin: Farmer's Market. Mushroom stand run by Sunnie regularly sells wild mushrooms bought from local hunters and wholesalers.

Napa: Vallergas Markets in North, South and East Napa carry a fall and spring selection of the standard chanterelles, porcini, morels, matsutake, yellowfoot chanterelles and lobster mushrooms.

St. Helena: Big Paw Grub @ (707) 967-9718 has brought unusual varieties to market such as *Lactarius deliciosus* and *Amanita lanei*.

San Anselmo: United Market occasionally carries chanterelles and black trumpets.

Peninsula

Draeger's in San Mateo, Menlo Park and Los Altos generally always has wild mushrooms in season. Prices are high and the quality ranges from low to very good. They also carry fresh truffles in season.

Palo Alto: Piazza's on Middlefield usually has wild mushrooms including chanterelles and morels even when they are out of season locally. Prices are high and quality is OK to good.

San Mateo: Piazza's at Hillsdale exit off of 92 has chanterelles and morels in season.

South Bay/Santa Cruz

San Jose: Cosentino's Market with 2 locations in San Jose and 1 in Santa Clara sells the standard wild varieties as well as blewits and candy caps on occasion. They also sell dried morels and porcini. Prices are medium to high.

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Wild About Mushrooms

The Wild About Mushrooms Co. is pleased to announce its 2003 Spring/Summer events schedule. A copy of the schedule can be obtained from Charmoon Richardson at 707-887-1888, or charmooon@sonic.net. The schedule can also be viewed online at: www.wildaboutmushrooms.net.

Culinary Corner

By David Campbell, yogidog@attbi.com

M is for March and Mardi Gras and mmm mmm good gris gris grub. On Monday the third, the MSSF Culinary Group garnered all the Cajun and Creole gustatory resource we could muster, and produced yet another outstanding meal, a Louisiana Cajun feast. Attendees were given the opportunity to demonstrate their lofty human position on top of the food chain by devouring significant quantities of flesh from some serious fellow top-of-the-heap food chain critters, dear fellows who would be only too happy to gobble us first. Alligator, that is. And the gator's fresh water kin, the snapping turtle, who may not eat us whole, but is known to nosh a finger or two. (By the way, it is the sea turtle that is endangered; not the Mississippi snapping breed!)

A meal like this does not come easily. I could smell the danger right through the telephone when Peter Werner, our Louisiana Turtle Soup man, called the morning of the feast to tell me he couldn't finish the soup. Seems he had suffered a serious laceration to his finger the night before, allegedly from a foolish pass of a very sharp knife, but I instinctively knew better. Poor guy, he's proud, probably didn't want to admit the snapper got the better of him. But then I remembered he was handling alligator, too! Sacre bleu! He's lucky he didn't lose his whole arm!

Peter hung tough and showed up not too, too late at the Hall of Flowers kitchen with his partially concocted turtle/alligator soup, in numerous containers and packages ("uh, the broth is ready..."), wearing a bandage the size of a small loaf of bread on his finger. An emergency culinary response team quickly gelled in the kitchen, and the soup with teeth was eventually delivered to the serving line, not too, too late. And it was good.

Not that anyone was exactly starving. A vast array of appetizers, mostly with mushrooms, had earlier sprawled across the serving tables, and had promptly been reduced to a wasteland of recently ravaged serving plates. The thirsty lips of the munching throng were coolly slaked by Leon Ilnicki's bracing juju punch.

The dinner cauldrons finally rolled out. The soup was served in tandem with Tom Sasaki, Sue Wingerson, and Liz Crumley's incredible everything-but-the-kitchen-sink Jambalaya. The classic Louisiana rice-based extravaganza had virtually everything a ragin' Cajun could ask for: prawns and crayfish, ham and sausage, chicken...now that I think of it, though, I don't recall chewing on any frog eyes or rooster combs. Oh well.

Fred Kron's buddy, Chef Eddie from Creola Restaurant in San Carlos was our supplier for the exotic meats. He, Fred, and protégé John showed up to produce a very special dish for us: pounded alligator loin, breaded and sautéed, in a float of piccata sauce with capers, garnished with red pepper and green onion. Yow! Now I understand why people wrestle alligators. The dish was the consensus highlight in an otherwise nothing but highlights' dinner.

Ann Arancio provided some welcomed balance to our extreme cuisine with a lovely green bean and artichoke casserole.

Now, we haven't had a mushroom since appetizer time. We are beginning to feel faint from fungal deprivation. No problem. Time for dessert! David Weitzman stood forth with his Candy Cap-laced bread pudding with bourbon sauce and vanilla ice cream. David was last seen with a number of suddenly Southern belles clamoring after him, ostensibly for his recipe.

A cup of Remo Arancio's coffee capped the evening's cuisine, a

marvelous romp through the unique tastes and textures of N'awlins cookin', MSSF style.

In April, we'll roast some lamb in a more or less Greek/Easter inspired meal. We'll find a way to work some mushrooms into the menu.

Oh yeah, and M is also for May and Morels.



Photos by
Dave Bell



Annual San Jose Family Camp Foray

By Tom Sasaki, sasakitom@aol.com

This is an invitation to all you morel lovers (and maybe spring bolete lovers, too). Come to our Annual San Jose Family Camp Foray, located near Yosemite National Park, on May 2-4, Friday thru Sunday, for a fun and carefree weekend. The lodging and meals will be provided by the camp staff.

You will have two nights of lodging in tent cabins with electric lights and wash and shower facilities with hot water in separated bathrooms. Your six meals will start with Friday dinner and end with Sunday lunch. On Saturday night, you will be served prime rib dinner and usually some people will volunteer to provide and cook mushrooms found during the day to be sampled and enjoyed by all. And sometimes in the same evening, someone will even volunteer to provide a slide show or some other entertainment.

But best of all, enjoy hunting morel in its natural environment in the beautiful woods near (not in) Yosemite National Park. Spring boletes too have been found in the past. To assist you, Mark Lockaby and Tina and Thomas Keller have volunteered to lead groups to their special hunting spots.

The fee for the weekend is \$85 for members and \$105 for non-members. Reserve your spot early, by making out a check to MSSF and sending it to Tom Sasaki, Foray Coordinator, at 1506 Lyon St., San Francisco, CA 94115. He will send you a map showing the location of your lodging and directions to get there from San Francisco. For further information, he may be contacted by phone at 415-776-0791, or by email at sasakitom@aol.com.

Cultivation Corner

By Ken Litchfield, © 2003, klitchfield@randallmuseum.org

On February 23rd we had another lab seminar at the Presidio lab. The main purpose of this lab was to make a bunch of agar tubes for collecting fungal cultures since our stock of fresh uncultured agar tubes was getting low. We also cooked up a few jars of grain spawn for growing out some cultures. We started around 9:00 in the morning with coffee and pastries to wake everybody up. About 20 people showed up and went to work teaming up on various duties extemporaneously. We pulled out the stocks of clean empty tubes we had and matched them up with the proper lids. Also we went through the culture library and pulled out all the contaminated or dried out or otherwise tubes gone bad and put them in a bucket of water to heat up and melt the agar to get it out of the tubes. Norm Andresen cranked up Big Bertha, his custom welded squirrel fan turbo charged cooker, to speed up the process. Then we cleaned those and some of the emptied mason jars that we had grown out earlier and opened to distribute to other jars or outdoors in the garden.

We pulled out the various agar ingredients we had in stock to see what recipe we could compose for our batch of agar. After much debate and brainstorming we made a modified malt extract yeast instant potato agar that would probably be good for most of our purposes. We cooked it up and put into test tubes and sterilized them in pressure cookers along with some more birdseed mason jars to grow out a few cultures, in particular some morels and beef steak mushroom.

During the cool down period we had lunch with various pot luck items folks brought in and mushrooms that we cooked up for sampling. We had some popular delectables like yellow feet and black trumpets but also cooked up a batch of elfin saddles, *Helvella lacunosa*. They have very tender stems and chewy tops that would add a nice wild look and flavor to rice if chopped fine. We made sure to cook them long enough to evaporate the hydrazine rocket fuel. While still fresh we could see the clouds of spores coming of the top like smoke.

We also went over to the mushroom garden where we checked on the hay bales that we pasteurized and inoculated with pink oysters, *Hypsizygus*, and *Coprinus comatus*. The Hypzi and the pinks seem to have finally given out after fruiting all fall and winter. The shaggy mane bale that didn't appear to have taken before is now finally fruiting.

While at the garden we dug up a couple of pits to try a couple morel experiments. Into one, we put a bunch of wetted, unwaxed cardboard sheets layered with soil until it was full and then buried some morel spawn that we grew in the lab into a little pit next to the large pit. This should cause the morels to go into the cardboard pit, feed, and then fruit out of the little pit...maybe. Into the other we put the morel spawn into the layered cardboard and soil where it should feed and fruit out the top of the pit...or not. We'll see how these experiments go.

Back at the lab the cultures we made on the birdseed jars and agar tubes have been growing slowly in the cold building. Except for one of the beefsteak jars which is loaded with fine white hairy fuzz. It would be great if we can grow this one out. The beefsteak mush-

room, *Fistulina hepatica*, looks and tastes like raw meat when uncooked or raw liver as its name would indicate.

We'll have a review of this month's garden show activities next time and perhaps have a schedule of upcoming cultivation seminars for the summertime off-season.

Oaxaca Mushroom Cooking Class

By Mark Thomsen, mark.thomsen@sun.com

I went to Oaxaca in Southern Mexico for Christmas and while I was there I took a course at a very popular cooking school run by Susanna Trilling. We spent 1/2 the day in the local markets and the other 1/2 cooking and then eating our way through chicken mole, pork with pineapple, salted cod with peppers and other local specialties. Oaxaca is well known for food, indigenous cultures, ancient ruins and interesting colonial architecture.

Susanna's school is called "Seasons of My Heart" and is located on her ranch a few miles from downtown Oaxaca. She is planning a special 5 day course during the mushroom season in September (Sept 9-14). Total cost for room, board and local transportation is \$950. If anyone is interested you can contact her through her website at <http://www.seasonsofmyheart.com> or at seasons@persaoaxaca.com.mx or you can call her at 011 52 (951) 518 77 26. I'm going to go to this because it sounds like a blast and the food will be very, very good.

Please note that this class is not affiliated with the MSSF.

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Membership and Subscription Information

To join the MSSF and receive this newsletter, send a \$25 check, payable to MSSF (\$20 for seniors 65 and over and full time students), to MSSF Membership, Attn: Jane Collier, c/o The Randall Museum, 199 Museum Way, San Francisco, CA 94114. Please include contact information: home and/or work phone numbers and e-mail address. New and renewal memberships will be current through December of 2003. To change your mailing address, please notify Jane. MSSF members may also join or renew membership in the North American Mycological Association at a reduced rate by including with their MSSF check a separate check for \$32 payable to NAMA. Send it to Jane at the same address. For further information, e-mail Jane at jcollier@stanford.edu or call (415) 641-6068.

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MSSF Calendar, April, 2003

Monday, April 7, Culinary Group's Monthly Dinner: 7:00 p.m. Come and join us for the monthly culinary group meeting and dinner at the Hall of Flowers, Golden Gate Park in San Francisco. We will be having a Leg of Lamb Roast. For reservations or information, please contact Alvaro Carvajal at (415) 695-0466 or at alvaro.carvajal@att.net

Tuesday, April 15, MSSF General Meeting: Randall Museum, doors open at 7 p.m., lecture starts at 8. The speaker will be Matthew Smith, who is a doctoral student in Ecology at UC Davis. He will discuss his research on *Armillaria mellea* in Golden Gate Park specifically, as well as the mycorrhizal fungi of Northern California's Oak woodlands.

Saturday and Sunday, April 19-20, Exploratory Morel Foray: No large burn area nearby has been located in Northern California as in past years so determining the location of an early morel foray will depend on conditions as they develop. For location of forest and meeting time and place, contact leaders one week before foray date. Leaders Norm Andresen (510-278-8998, n.andresen@attbi.com), and Jeanne and David Campbell (415-457-7662, yogidog@attbi.com)

Friday - Sunday, May 2-4, Annual San Jose Family Camp Foray: See article in newsletter for more details. Fee for the weekend is \$85 for members and \$105 for nonmembers. Leaders are Mark Lockaby and Tina and Thomas Keller. For reservations, send a check made out to the MSSF, Tom Sasaki, Foray Coordinator, 1506 Lyon St., San Francisco, CA 94115, (415) 776-0791, sasakitom@aol.com.

Monday, May 5, Culinary Group's Monthly Dinner: 7:00 p.m. Come and join us for the monthly culinary group meeting and dinner at the Hall of Flowers Library, Golden Gate Park in San Francisco. We will be having a Cinco de Mayo Fiesta. For reservations or information, please contact Alvaro at (415) 695-0466 or at alvaro.carvajal@att.net

For the most current
Calendar information, call the
MSSF hotline at 415-759-0495 or
check the MSSF web site at:

www.mssf.org

