Speaker for January 20th MSSF Meeting

Gary Lincoff

Gary Lincoff is the author of *The National Audubon Society Field Guide to North American Mushrooms;* co-author (with D.H. Mitchell) of *Toxic and Hallucinogenic Mushroom Poisoning*; and editor of *Simon & Schuster's Guide to Mushrooms*; *Mushrooms of Telluride*; *Eyewitness Guide to Mushrooms* and *DK's The Mushroom Book*. He has led mushroom study tours to more than 30 countries and is the past president of the North American Mycological Association. He teaches botany and mycology at The New York Botanical Garden.

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Mycena News

The Mycological Society of San Francisco ***January, 2004, vol 55:01***

MycoDigest

MycoDigest is a section of the Mycena News dedicated to the scientific review of recent Mycological Information

Fungal Jubilation in the Death of a Pine

by Else C. Vellinga (vellinga@uclink.berkeley.edu)

The big, old Monterey pine at the corner of our street has slowly died this year. The first signs of upcoming death were clearly visible in March, when the central crown showed signs of a beetle infestation and started to brown; a brownness which spread through all the branches and needles over the summer. By September, when the beetles had killed the tree, the main stem and the bigger branches became covered with small yellowish bumps: *Cryptoporus volvatus*, the pouch fungus or veiled polypore. There were as many as 50 fruitbodies per linear foot on the trunk and branches. On the entire tree there must have been several thousand. Now, in mid-December, the ephemeral fruitbodies have already disappeared from the trunk, but linger on some of the branches. Last year, there were no indications of impending doom, and I don't know why the tree was vulnerable to the beetles' attack. Fire weakened trees are notorious for bursting out in this mycological rash, the fire having made them beetle-prone. But, fortunately there has not been a fire on our block!

Arora's comments on *Cryptoporus* in *Mushrooms Demystified* are a beautiful example of his writing:

> This bizarre evolutionary anomaly looks like a cross between a confused puffball and a bemused oak gall. The smooth, warmly tanned exterior is quite attractive (often reminding me of a small loaf of bread) and gives no hint of the tube layer within. Slicing it open, however, reveals a hollow interior with a "ceiling" of tubes. The "floor" eventually ruptures and tiny bark-boring beetles enter the "trap door" in search of tasty tube tissue and spores. After feasting they depart to construct brood tunnels in old or dying conifers, and the spores they carry with them gain entry to a new host. Later, fruiting bodies may emerge through the very holes bored by the beetles!

One of the questions I had, when seeing an entire tree covered with fruitbodies, was whether they arose from just one fungal individual which had entered the tree somewhere and then raced its hyphae through the inside of the bark, emerging in multiple places with many fruitbodies, or whether every fruitbody belonged to a separate individual, meaning that lots of spores had germinated all over the tree. I also wondered, how do the spores move from one dead tree to another, are the spores carried around by beetles, and if so, are those the same species of beetles that kill the

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Presidents message

We had our 34th Fungus Fair on December 6-7 and I would like to thank all of the members and others who turned up to make it a great success. We had over 150 volunteers help out over the weekend and in the months preceding the fair. If you helped at the fair this year I would like to say a big THANK YOU from everyone in the society.

I would also like to thank a few people who assumed key positions at the fair this year. First of all, I would like thank Dan Long for stepping up to the plate to co-chair the fair. I promised Dan that it would just be a matter of delegating tasks to the volunteers. But when no one stepped forward to handle two of the key positions, Dan went ahead and took care of them himself. Dan, I know how much you worked on this and it is greatly appreciated by all of the members. Thank you so much. Next I would like to thank Ken Litchfield for co-chairing the fair this year. Ken worked with Dan to organize all of the meetings that were held at the Oakland Museum and also worked on the big display and the Cultivation table. Thanks Ken for all of your hard work.

Mark Thomsen was in charge of the cooking demonstrations. They were well attended and a big hit with the visitors. Alvaro and Sherry Carvajal along with Bill and Carol Hellums prepared all of the food for the volunteers on Saturday and Sunday. Alvaro Carvajal also arranged for all of the speakers this year. Jane Wardzinska prepared the food for the volunteers on Friday night. Shawn Johnson was in charge of vendors. Norman Andresen handled Book sales. George and Jane Collier took care of the membership duties. Beth Sampson was in charge of T-shirt sales. Larry Stickney manned the information desk both Saturday and Sunday. David Eichorn was in charge of soup sales. (The soup sold out on both days.) Thank you very much for stepping into and taking care of these key positions.

A big thank you to the Oakland Museum staff for printing the posters, making up all of the professional signage, handling all of the publicity, paying the speaker fees, and for all of the other small things they do for us each year.

We had rain just in time and thank you to all of those who led or attended collection forays. We had plenty of mushrooms to go around. One of the hardest parts of the fair is sorting and identifying all of the mushrooms. Thanks to all who helped with this process: Dr. Dennis Desjardin, Mike Wood, Fred Stevens, John Lennie, Dr. Else Vellinga and students, Bob Mackler, JR. Blair and students, Norman Andresen, Darvin Deshazer, and many more.

According to the museum staff, they had 1,200 paying visitors on Saturday and 1,400 on Sunday. I'm sure with this good turnout we were able to earn a few dollars for the society from our various sales.

Once again I would like to thank everyone involved with making this years fair a great success.

Thanks
Mark Lockaby

This poem was publicly presented on November 24, 2001, as part of a mushroom contest at David Arora's annual Thanksgiving foray at the Albion field station. The author - decked out in knee-high Amanita muscaria boots and a revealing dress – salaciously strolled through the crowd reciting her poem, and played with man-sized boletes strategically placed on men in the room by her partner in crime, Alan Mohr.

Boletus Coitus

Now that the rains are here
I look for you every morning
your shiny head
hard, ready, poking out
from earthy covers
shrouded in moist greening hair

How I want you
virile king
mycelial talons unbuckling my dreams
sliding off each night
slippery, wet feet
diving into hunt

I carry my box
open, ready, a crevasse
for your long white flesh

the many faces of you
invite, coax with scent
thread me through naked blue and fallen golds
past deer bones, deserted beer cans
teasing with jacks and agarics
every sexy spotted red nub
making me want you more

there, right there
here
jutting like a bull pine
ripe, thick, ready
you dance me to you
I squeal, you wait
a fixed flower
microscopic pulses
patient as I coo
pull you into my world
lips moist
fire hot
ready

By Blake More

Blake More is a writer and performance artist who combines poetry and yogic dance. She has created dozens of one-woman shows and performed in clubs and theaters in California and around the world. Her freelance writings have appeared in Yoga Journal, Utne Reader, Alternative Medicine Digest, Tokyo Time Out and Intuition Magazine. She has written two non-fiction books, one fiction book, a book of poetry and two poetry chapbooks.

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The Foragers' Report

January 2004 By Patrick Hamilton
email: mycochef@aol.com

Whew!—we did have a good bolete season after all. After all the anticipation after the first rains, after all the second rains and after that too. It was even after all the food was eaten on Thanksgiving that the north coast erupted with porcini pop ups. Seems like the edulis did not want to be on the same stage as other seasonal goodies.

Cartoon sized mushrooms sprouted in the coastal pine and madrone forests the day after that holiday and all was well in our world. Stuffed bellies and stuffed baskets—things could be worse.

But did you notice how few other fungi were present then? The *Amanita muscaria* took another 10 days or so to appear and the spy mushrooms were not playing their expected espionage game. In other years I have counted on *Clitopilus prunulus* to expose the exact same habitat as *Boletus edulis* but this year they were fruiting even later than their tardy targets. However, when I went back to spots where porcini had been picked a week or so earlier the fungus, also known as sweetbread or miller's mushroom, was right where it should have been.

I was wondering how many boletes are pulled out of Salt Point State Park each year. Three tons? More? On one Wednesday I saw over 30 vehicles parked along the sides of Hwy 1 (probably more were in the campgrounds). Let's do some simple arithmetic. It was obvious that many bags were packed with porcini—close to the 5# limit and that there were at least two people per vehicle. So that is approximately 300 pounds right there, on that one mid-week day, during a season of at least 15 days. 300 times 15 equal 2 tons and we all know that many folks picked and hid them and then picked some more. Four, five tons… Whatever, that's a whole lot of mighty fine mushrooms—and they are free.

Well, free until Those In Charge Of Our Fun figure out that charging for permits in this, "their" State Park would probably be allowed by our new governor and could probably straighten out the state budget.

When we did a cooking demo at the fair, people asked where to find chanterelles in the East Bay. I informed them of those lovely mushrooms rotting in the verboten East Bay parks and couldn't help but think of all those cows plodding and plopping on the patches and a stench cloud formed over my opinion, once again, of Those In Charge Of Our Fun. Stinky.

The ever foraging SOMA folks found the following in Salt Point SP, actually before Thanksgiving (they have better eyes that this forager): It will help if you breath in and out while reading this— *Amanita flavoconia*, *Amanita gemmata*, *Amanita pachycolea*, *Armillaria mellea*, *Armillaria ostoyae*, *Boletus edulis*, *Boletus zelleri*, *Cantharellus formosus*, *Chalciporus piperatus*, *Clitopilus prunulus*, *Crepidotus mollis*, *Cryptoporus volvatus*, *Fomitopsis pinicola*, *Fuligo septica*, *Geastrum saccatum*, *Gomphus floccosus*, *Gymnopilus* sp., *Gymnopilus spectabilis*, *Hygrophoropsis aurantiaca*, *Hypholoma fasciculare*, *Laetiporus conifericola*, *Lepiota cristata*, *Lepiota flammeatincta*, *Lycoperdon foetidum*, *Marasmiellus candidus*, *Mycena alcalina*, *Osteina obducta*, *Phaeolus schweinitzii*, *Pleurotus ostreatus*, *Psathyrella* sp., *Pseudohydnum gelatinosum*, *Ramaria botrytis*, *Rhizopogon* sp., *Russula brevipes*, *Russula brunneola*, *Russula crassotunicata*, *Russula nigricans*, *Russula xerampelina*, *Stereum hirsutum*, *Strobilurus trullisatus*, *Suillus brevipes*, *Trichaptum abietinum*, *Trichaptum fuscoviolaceum*, *Tricholomopsis rutilans*, *Tyromyces chioneus*, and – always near the end – *Xeromphalina cauticinalis*.

Reports of "pristine" chanterelles in Marin, chanterelle buttons in Berkeley and the Oakland hills, shaggy manes along roadsides and other places in Woodside, San Mateo county, and in the East Bay are starting to appear on our Yahoo groups list.

I believe that it was Larry Stickney who told me of a great way with shaggy manes—puree whole mushrooms in a blender, pour into a saucepan, add some butter, S & P, and heat and eat. I like to add a little sage to that simple recipe.

A report from Santa Cruz listed *B. edulis* fruiting on Nov. 24—seemed early for there.

An older Italian guy once told me that instead of the spy mushroom the only sign he used for finding porcini down on the Monterey peninsula was the Goodyear blimp. "Whoa!" I did interject, "How could that be?" The, at that time, Crosby Pro-Am golf tournament at Pebble Beach (now the AT & T) utilized a blimp to help televise the activities and the event almost always was held right when his beloved ceps shrumped. So a zeppelin in the air can mean Steinpilz. Who knew?

The most magical time in our forests, to many, is coming soon. The January and February northern California woods are awesome. I about never use that word but there really is some awe here. The redwoods, tan oaks, madrones, and Doug-firs provide far different fungi than the coastal pine forests do earlier in the season. It doesn't get much better than seeing yellow-orange hedgehogs and bright white matsutakes, black chanterelles and yellow foot complemented by the colors of the fallen leaves and the mosses and lichens—especially when a blast of sunlight comes screaming in from the west late during an afternoon of wet walking in a horizontal rain.

Do yourself and your friends a great favor and together greet the weekend after New Year's deep into one of our winter wonderments. We have Jackson State Forest, Salt Point, Pt. Reyes, GGNRA and Mt. Tam, the water district lakes above Fairfax, all those parks down on The Peninsula, even the forbidden East Bay parks. You can't pick fungi in all of these woods but looking can be good (and a fine discipline too).

That's all for now folks.

MycoDigest **Continued from page 1**

trees? And of course, I wondered what the fungus was doing to the tree, and how extensive its mycelium was.

As always, it is easier to ask questions than to answer them. Here are some attempts.

Already in 1892, it was suggested that insects play a role in the life history of the pouch fungus, as lots of species were observed nesting and crawling around in the annual, leathery fruitbodies. But for successful transport, these insects should be within the fungus during sporulation, leave the fungus as winged adults (in other words, nesting insects don't qualify), fly far to infect new trees, and be associated with trees attacked by bark beetles. That rules out most species; in a study in British Columbia, the only one left was a predator of the bark beetles. However, an elegant study in the late '70s revealed a second dispersal mechanism. This study looked at the number of spores released through the ruptured hole in the pouch, and found that, just as in all polypores, masses of spores were released – on average 4.5 billion spores per fruitbody! – and all these billions were left free to wander with the air currents. However, spores were also isolated from flying and tunneling Douglas-fir beetles, which do not live in *Cryptoporus* and were free of fungal spores prior to flight. Furthermore, the fruitbodies appeared through the holes the beetles made in the target trees: entrance, exit, or ventilating holes were all exploited. Whether the spores arrive internally or externally doesn't seem to matter so long as their host penetrates the bark. It is rather unlikely that an ambient spore can penetrate the bark on its own.

In any case, Arora's "floor" serves more as a way to keep the sporulating surface moist, than to keep the insects in the pouch until the spores are ripe. It is rather surprising that the fruitbodies appear in the summer when moisture is often scarce.

The evidence points to one conclusion: many spores landing on one tree, and producing many small individuals, rather than a single big one. Circumstantial evidence from a study of another early colonizer of dead wood, *Trichaptum abietinum*, bears this out. On one tree stump lots of individuals were found, but there was no genetic structuring of the local population, indicating that dispersal over great distances is the rule. The wind is in this case the most obvious vector; those Douglas-fir beetles did not carry *Trichaptum* spores because this species sporulates much later in the year than the beetles take wing. *Trichaptum abietinum* is found all over the Northern Hemisphere, but oceans impose barriers since the populations on the different continents cannot interbreed when put together on a petri dish. *Cryptoporus volvatus* is less widespread, it occurs in North America and east Asia , but has not been found in Europe.

Back to my last question – what is the fungus doing to the tree? Trees slowly and carefully build up a beautiful strong woody trunk, and successfully resist most organisms that threaten this structure. But as soon as the tree dies, its active resistance ceases and the wood is fair game. Wood is still wood though, and its structure is not easy to attack. There is lots of carbon, but it is sequestered in complicated and not easily available compounds like lignin and cellulose, and there are adverse conditions with little nitrogen, low oxygen levels, and nasty resins and other compounds. Nevertheless, many fungal species are adapted to the task of decomposition and there are specialists for different parts of the wood. *Cryptoporus volvatus* only attacks and breaks down the cellulose and hemicellulose of cell walls in the outer few centimeters of the trunk, in the so-called sapwood; this leaves the lignin intact, as well as the inner part of the branches and trunk (the heartwood). As soon as the tree falls, other species get to work.

The extremely common red-belted polypore, *Fomitopsis pinicola*, is often an early colonizer in the process, but again it cannot do anything to the lignin. The Red-belted polypore, just like *Trichaptum abietinum,* is an outcrosser, and populations that are far apart can be quite similar, genetically speaking. Wind is its main vector for dispersal, and again the spores have been found on flying bark beetles and in their tunnels. It causes the remains of the tree to crumble into brown, cubical chunks of lignin shell and specialized lignin decomposers have to finish them off.

What will be next on the neighbor's pine depends on many things; the place where it will end up, how big the pieces are, and of course which fungi arrive there first. But in the end, nothing visible will remain, and the tree's components will have served many different organisms and communities, and eventually, somewhere, a new tree will use them to start the cycle anew.

FURTHER READING:

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Note: Deadline for the February 2004 issue of Mycena News is January 15. Please send your articles, calendar items and other information to: mycena-news@mssf.org

MSSF Discussion Group on Yahoo Groups

The MSSF email discussion group facilitated through Yahoo Groups is a great way to keep in contact with other members and is one of the primary ways in which members keep up on news about the Society. The list features often-intriguing discussion of fungal-related topics, tips about current fungal activity, and up-to-the-minute news about MSSF functions.

The list is available in both individual-message and digest formats. Additionally, you can also subscribe to the group in "Special Notices" mode. That means that if you wish to receive only official announcements from the society and not email traffic from other members, you can subscribe using this method. (Subscribers to the list in regular and digest formats also, of course, receive official announcements in addition to posts from other members.)

To sign up, go to:

http://groups.yahoo.com/group/mssf/

Follow the link that says "Join This Group". (You will need to sign up for a free Yahoo Groups membership if you do not have one already.)

MSSF and *Phytophthora ramorum*

Now that the mushroom hunting season is upon us, MSSF members need to be reminded of the presence of *Phytophthora ramorum* — otherwise known as Sudden Oak Death — in Northern California. *P. ramorum* will have dramatic and long-lasting effects on the ecology and diversity of mixed oak woodlands.

All users of public lands should learn the signs of *Phytophthora* and methods to prevent its spread. At this time, it is highly recommended that leaves, soil and firewood should not be removed as they carry the highest number of spores.

The most obvious actions people can take are to avoid going to areas where the disease is present, consult with local resources, respect state and county quarantines and trail closures, and use disinfectants to remove spores when leaving infected woodlands.

It is especially important that MSSF members who collect and study mushrooms for personal use take special care not to cause *P. ramorum* to be transported into uninfected areas by taking the following steps:

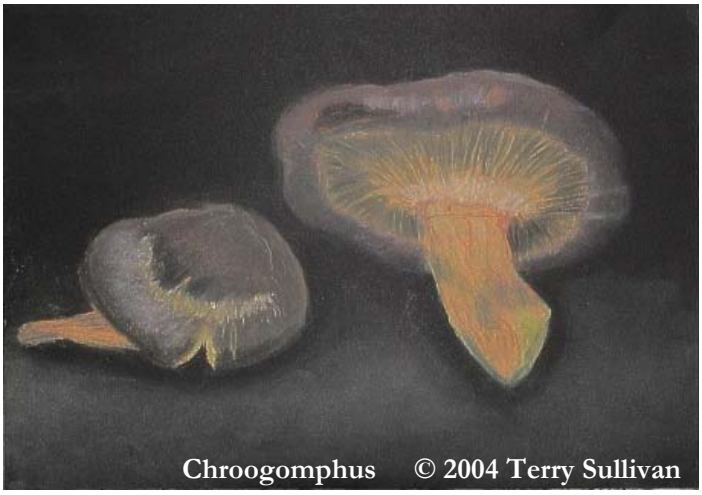
If you visit a woodland with symptoms of *P. ramorum*, knock off any loose soil or mud while still in the area. Where practical, use a disinfectant spray or dilute bleach solution to kill any remaining spores and rinse off your hiking boots and vehicle tires with water.

When visiting areas with no visible symptoms of the disease, wear a set of "clean" clothing and boots to avoid inadvertently introducing the disease to a new area.

Further information about *Phytophthora ramorum* can be found at www.suddenoakdeath.org

Stories Wanted

In the past few months, a number of mushroom hunters have been questioned and/or cited by Park Rangers. If you're one of these hunters (or you know one) we'd like to hear from you for an upcoming article in the Mycena News. Send a description of the encounter and your contact information to: bill@curven.com.



Chroogomphus © 2004 Terry Sullivan

Gary Lincoff to be at SOMA Camp Wild Mushroom Retreat

The Sonoma County Mycological Association (SOMA) invites you to the 7th annual SOMA Camp Wild Mushroom Retreat. The Camp will be held on Martin Luther King weekend, January 17-19, 2004. This year, SOMA is very pleased to have Gary Lincoff, well known author of the "Audubon Field Guide to North American Mushrooms", with us as our keynote presenter for the three day weekend.

SOMA is also very pleased to announce that we are moving the Camp to a beautiful new facility, located near Occidental, Sonoma County, about one hour north of San Francisco. The spacious, modern buildings are set amongst 225 acres of oak, madrone, tan oak, redwood, and Doug-fir. The newly-built cabins are bright, clean, and airy, with hardwood floors and stylish bunks. There's plenty of room for all the workshops and classes, there's a great specimen room, and it's all surrounded by great habitat!

The Camp, a benefit for SOMA, is full of mushroom forays, specimen tables, slide shows, and speakers, as well as classes & workshops on mushroom dyeing, paper-making, cooking, medicine making, photography, cultivation, truffle hunting, and more, and of course, great wild mushroom cuisine from the SOMA culinary group. Fees: $195. Registration closes on Wednesday, January 7. Fee includes lodging, meals, and all activities. Special Sunday only fee: $90, includes lunch, dinner feast, and all the day's activities.

To obtain a registration form, you may visit the SOMA website at www.SOMAmushrooms.org, where you can also view photos and info from past SOMA Camps. Information and registration forms may also be obtained from Linda Morris, the Camp registrar, 707-773-1011 (lamorr@pacbell.net), or the Camp coordinator, Charmoon Richardson, 707-887-1888(charmoon@sonic.net).

Special note for food and wine fans - before and after the Retreat, we encourage you to explore the scenic back roads and numerous wineries, restaurants, and artisan food producers in the area. Within a short drive of the Camp are the well-known appellations of the Russian River Valley, Dry Creek, and Sonoma Valley, with the Alexander Valley, Carneros region, and the Napa Valley not much further away. In addition, the beauties of the Pacific Ocean are also nearby.

We hope to see you at the Camp!

Edible and Medicinal Mushrooms:

Cultures and Techniques
February 7 - 8, 2004
Location: UC Berkeley with a field trip to Santa Cruz County

This special two day "hands on" mushroom workshop will introduce participants to the necessary skills, techniques, and equipment required to develop their own mushroom farm and produce an edible crop within a short time. Lecture topics will include: a discussion of mushrooms that occur in the San Francisco Bay Area, mushrooms that occur worldwide, new information on their many uses, nutritional and medicinal value, and the environmental conditions needed to grow them. In the laboratory portion of the course, strains of edible and medicinal fungi and special techniques and instruments will be introduced. While working with your own culture, an overview of spawning and cultivation will be conducted. On the second day of the course, participants will have the opportunity to visit mushroom farms in Santa Cruz County. During the field trip several techniques of preparation and cultivation of fungi will be further discussed including the environmental factors of light, temperature, humidity, and air exchange. In addition there will be demonstrations of the equipment needed for the production of fruiting mushrooms. Lastly, participants will be given five culture strains that grow well in California. The cultures have been developed from worldwide collections. These strains include the anti-cancer medicinal fungus ling zhi, a wide temperature range shitake, a high-yield and short-growing-cycle oyster mushroom, the American morel, and the delicious and medicinal fungus maitake. Additionally, we will introduce two new strains of edible mushrooms: tea tree mushroom and bei ling gu.

Mo-Mei Chen, trained at Beijing Agricultural University, is a Professor of Plant Pathology and Mycology at the Chinese Academy of Forestry, China. She taught Forest Mycology and conducted research for Tottri Mycological Institute, Japan, on Shiitake production. She is affiliated with the College of Natural Resources, UC Berkeley, and the UC Forest Product Laboratory and is a Research Associate at the University and Jepson Herbaria. She has been teaching in Berkeley for 12 years and is an expert on medicinal and edible fungi of the American Mushroom Institute and author of international Crop Protection Compendium 2003.

Course fee ($225/$250) includes lunches for both days, transportation for the Mushroom Farm field trip, and five strains participants can grow at home. To register, visit http://ucjeps.berkeley.edu/regform_04.html or call (510)643-7008.

Culinary Corner

by George Collier and Carol Hellums

It's the Soup, Dummy!

The Mayas in the highlands of southern Mexico recognize the Earth Lord as the source of rain and of treasure. This year in northern California we have had a bountiful supply of gentle rain and mushroom treasure.

Why so?

The Maya Earth Lord likes to be fed by those who seek his treasure. Supplicants will burn candles at the entrances to his domain – caves and ravines. The candles may be rendered more palatable by smoking them with incense – which is like seasoning the food that mortals eat. As the Earth Lord "eats" the candles, they burn down. The Earth Lord does not mind if supplicants eat a good meal during their visit – in this way the Earth Lord eats by empathy. Perhaps, if the meal is good enough, the candles can be dispensed with.

And a well-fed Earth Lord rewards us with treasure.

I must say, we have been eating well this autumn. We had fabulous food at the Mendocino Foray. And Lo! By the time of the Salt Point Foray, one week later, we were rewarded with the season's very first boletes. The Salt Point dinner didn't hurt things, did it? Gentle rains ensued – not like the angry storm of last year's Fungus Fair.

At the Fungus Fair this year, we served up soup – to over 300 customers at the soup table organized by David Eichorn and various Culinary Group volunteers. And for that, we earned some monetary treasure, as well as another good rain.

So the boletes were popping up at Sea Ranch and elsewhere in the days before our Holiday Dinner. And that dinner was another feast! We had some 150 guests, delicious food, and welcome revenues to bring to the MSSF coffers. I am sure that the boletes collected by David and Jeanne Campbell for the dinner had something to do with it.
And I believe that we are in for a bountiful fungal winter.
Why so? It's the soup, dummy! And the Earth Lord is grateful!

The Holiday Dinner

The annual MSSF holiday dinner, on December 15, must indeed have made the Earth Lord happy. For the setup crew, there was a spectacular sunset that, from the Snow Building in the Oakland hills, engulfed the whole Bay Area in brilliant color. As dark settled in, the lights came on, the stars came out, and – so did the appetizers, provided by members of the MSSF Culinary Group and other generous souls.

The culinary offerings to delight the Earth Lord were delicious and abundant. There's a list of appetizers at the end of the story, credited where possible, and a special bonus of recipe or two. And behold the menu: We began with Wood Nymph Soup (creamed morels with golden beets, truffles, and sherry, and nutmeg) and garden salad with porcini bits. The main courses were roast tenderloin of beef with porcini sauce and wild mushroom strudel (for the vegetarians), accompanied by scalloped potatoes with black and gold chanterelles, and carrots and peas with shallots. Dessert was cranberry-pecan bread pudding with candy-cap sauce.

If the Earth Lord appreciates music with his meals, he could hardly have failed to take delight in the string quartet that accompanied the dinner. The musicians were Brian Lee and Barbara Riccardi, violin; Paul Ehrlich, viola; and Victor Fierro, cello. All play with San Francisco Ballet and San Francisco Opera Orchestras. They were gracious enough to come to the dinner and play on their only day off in a couple of weeks (think *Nutcracker*). It was most appreciated, and their artistry was enjoyed by all.

Many thanks to all who participated. To slide into film terminology, the dinner was "produced" by the MSSF Culinary Group, and directed by David and Jeanne Campbell, who planned the menu, gathered many of the mushrooms served, and assisted in the kitchen. Stars were Chef Michael Giacomini, in charge of the main menu, and co-star Sherry Carvajal, who made a fabulous dessert for 150. Sherry and Al Carvajal, our "assistant directors," sadly had to leave for Colombia two days before the dinner, because of a death in Al's family.

The supporting cast included Dulcie Heiman and Ken Litchfield in the kitchen; George and Jane Collier and Bill and Carol Hellums doing setup and cleanup of the dining room as well as miscellaneous fetching, carrying, and organizational tasks, with assistance from Chris Olsen; and George Collier handling reservations and taking care of money matters (no, on second thought, George should be upgraded to a star!). David Bartolotta organized the music. Many thanks to all! If the Earth Lord is as generous as his mushroom-loving subjects were on Monday night, it should be a very good year.

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Cultivation Corner

By Ken Litchfield © 2003
klitchfield@randallmuseum.org

Now that it is the post-holiday season and the rainy half of the year is fully onset, it is time to start some mushrooms in your garden if you don't already have them.

Did you receive a mushroom kit at the Fungus Fair or as a gift during the holidays? After harvesting one or two flushes of fruitings, it should have enough life-force left in it to grow out into an appropriate substrate in the garden. If it is a compost feeder like *Agaricus*, you can break up the kit block a little and put it in your compost bin or pile at the soil/compost interface. Or you could scatter the crumbled block around a wild and weedy lawn with a thick thatch. Do this during a heavy rain or water it well to take the mycelium down to the thatch level.

Flushed shitake, maitake, or oyster blocks can be broken up into wood chip piles or mulch. If the chips are hardwood like oak or maple that is better, but the typical tree trimmer wood chips of pine-cypress-eucalyptus can work, especially if they have been allowed to age for a while so some of the natural oils have leached out. *Hericeum* or lion's-mane comes in two species kits: *H. erinaceus* that likes hardwood and *H. abietis* that prefers conifers.

If you have freshly-cut tree stumps or large trunk branches with hollowed holes anywhere in the heartwood these could be stuffed with a spent kit of these wood-eaters.

If you have any dowel plugs and a tree that you want to get rid of, drill through the outside bark and several inches into the heartwood in a few different locations. Shove several dowels into each hole in series till it almost full, and then seal it with wax. The tree will get eaten from the inside until it is hollowed out to the outside living layer.

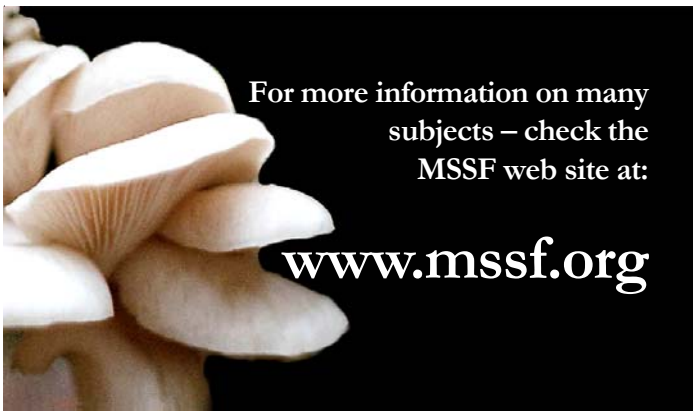
Fresh oyster mushrooms can often dedifferentiate and send mycelial fuzz out from the gills if laid on damp (not wet) wood in a cool dark place. Laying the mushroom body on a fresh damp log where part of the bark has been removed allows the mycelium to infiltrate crevices at the wood/bark interface.

Other saprobes like garden giants and blewitts can be propagated relatively easily by pulling up the mushroom by its "roots", cutting off the top half of the stem and cap to eat, and transplanting the base to a new area with the appropriate substrate. Blewitts particularly like oak leaves and garden giant likes raw stuff like wood chips or straw. Another "rooted" mushroom, that many people don't realize is very tasty, is the red

whiffle-ball or Lattice Stinkhorn. In the egg stage it is quite delectable sliced and sautéed. Though not poisonous, the thought of eating a full blown lattice could be an upchucker. It loves tree trimmer wood chips in thick mulch. Shaggy manes and shaggy parasols prefer well-broken down compost, such as what is left after the garden giant or whiffle-ball has finished eating, but with some added nitrogen. Decomposed horse manure or grass clippings work well and the patch can be maintained easily by simply adding more fresh clippings or manure to the top of the pile to decompose and feed the patch as it gets to the bottom.

When you are cleaning your chanterelles and porcini, keep the trimmings and any past prime specimens to scatter in the duff under more convenient pines for porcini and oaks for chanterelles. People who do this on a regular basis have reported that the new areas start to fruit after as little as two to three seasons and continue then for many years. Thick duff with lots of organic matter under the trees probably helps, as the spores most likely form saprobic mycelia before they mate, and mycorrhizal threads seeking out the tree roots afterward.

I'd like to thank everyone who helped Dan and I put on a great Fungus Fair at the Oakland Museum and I look forward to working with you at the much more laid back Mushroom Day at the Randall Museum on February 7th. I hope everyone has had a great holiday and is having a Happy New Year.



Grandkids at the Fair

by Bob & Barbara Sommer

Wow! A snake! And there is a tiny mouse under the rock ledge. Three year-old Kenny was enraptured, his nose an inch from the eye-level display in the glass cases at the Oakland Museum. He and brother Bobby, age 6, were having a fine time. Clearly the museum folk understand the needs of small children and have creatively developed display cases that appeal to all ages.

The same care showed up at the MSSF Fungus Fair. That section had table levels appropriate for the 6 year-old, and fortunately, a bit out of reach for the 3 year-old as the displays were not behind glass. The kids loved it. For 6-year old Bobby, the hands-on aspect made it even better than the displays in the glass cases, where Kenny kept asking his dad "Are they alive?" There were no such questions at the Fungus Fair tables, although the fungi probably seemed alive in the minds of the children. The boys sniffed and handled the mushroom and puffed the puffballs. We winced a bit when Bob Mackey, in his very informative lecture, mentioned that it was best not to inhale spores.

Bobby was ready for the amazing world of fungi. In the enthusiasm of childhood, he is Sponge Bob in acquiring information and everything he saw dripped with significance. He sat intently through a 30-minute illustrated lecture, at one point, borrowing a pad and pencil to sketch mushrooms shown on the screen, successfully capturing their distinctive features. He even tasted the excellent mushroom soup in the café, while Kenny deconstructed his slice of pound cake, more going on the floor than into his stomach. At Bobby's request, we marched through the displays one more time before heading home.

For us grownups, it was wonderful seeing the regulars, like *A. muscaria* and *B. edulis* on exhibit, *L.stickney* at the Registration desk, *F. stevens* doing ID, *M. rice* and her dyed wool, and *B. freedman* explaining toxicology. Yet it was the little people, the next generation of fungiphile elves, who imbued our visit with magic, providing continuity and promise that traditions will be carried forward. They have energy. We have experience and wisdom. Bringing a child to the Fungus Fair let us see things through fresh eyes, and gives them some focus and content. The next day, we received and e-mail message the boy's mother — "What are you doing to my children? They woke up from a dead sleep to check spore prints from mushrooms Bobby brought to show-and-tell. Actually it is a great hobby for them."

She's thinking in terms of her kids' knowledge and development. We, however, have something else in mind. With their fine eyesight and short stature, kids are unbeatable for finding fungi. Bring a youngster to the next foray and collect more mushrooms!

This is Your Last Issue of the Mycena News

Unless you renew for 2004

Many members have already renewed, so be sure to check the mailing label on this issue to see if you are one of them. If the label gives your membership as paid through December 2004, you do not need to do anything. Thank you for renewing early.

But, if your subscription expired as of December 2003, you need to renew NOW to continue receiving the Mycena News and to enjoy continued access to the "members only" section of the website.

Renewing is easy. Cut this column out of your newsletter. Fill out the required information on the reverse side. Write a check for the appropriate amount, made out to "MSSF Membership." Then mail your check and form to MSSF Membership; c/o The Randall Museum, 199 Museum Way, San Francisco, CA 94114.

To save postage, you can give the envelope with the filled out form and check to Jane Collier at the January 5 culinary dinner, or at the January 20 General Meeting.

You may also renew online by using the PayPal option on the MSSF website. If you use this option, please send Jane Collier a personal email (at jcollier@stanford.edu) giving the information requested on the reverse of this column. Paypal provides only the name, mailing address, and email of those who enroll or renew. It does not give the name of a secondary member, telephone numbers, an alternate email address, or any indication of interests.

The regular, adult/family membership fee is $25.00. For seniors over 65 and for full-time students, it is $20.00. For e-members, who do not receive the Mycena News and other publications by mail, but must download them for themselves from the website, the fee is $15.00.

The MSSF treats membership information as private, but it does VERY occasionally release its membership list for mailings by mycological businesses. If you do not want your name included in such a mailing list, either contact the membership chair or indicate on your renewal that you do not want to receive commercial mailings.

If you have questions about membership, please contact Jane Collier, preferably by email at jcollier@stanford.edu. You may also telephone her at (415-641-6068).

MYCOLOGICAL SOCIETY OF SAN FRANCISCO – Membership and Membership Renewal Application

New Members please fill out as much information as you can. Members who are renewing need to fill out only the blanks for which information has changed within the last year. Please check the current *Roster* to see if any of your address, phone, and email need updating!

Name 1:_____ **Home Phone:** _____

Name 2:_____ **Business Phone:** _____

Street/Apt#/PO:_____ **Cell Phone:** _____

City:_____ **Email 1:**_____

State:_____ **Email 2:**_____

Zip Code:_____ **Interests:**_____

New Membership?____**Renewal?**____

Membership type: ____**Adult/Family ($25)** ____**Senior/Students ($20)** ____**Electronic ($15)**

Please mail this form and a check made out to "MSSF membership"to:

MSSF Membership, c/o The Randall Junior Museum, 199 Museum Way, San Francisco, CA 94114

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The next Culinary Group meeting will be on Monday, January 5, at the Hall of Flowers in Golden Gate Park.

And here, in no particular order, is a partial list of the appetizers, credited where credit is available -—

- Eggnog (Fred Kron)
- Yellowfoot cream cheese with smoked salmon (Dan Long)
- Craterellus and spinach in puff pastry (David Bartolotta)
- Mushroom-leek pie with three kinds of mushrooms, including wild oysters (Kathleen Madsen)
- Salmon salad canapés (Roman Kendzior)
- Wild oyster mushroom pizzas (George Collier)
- Asian shiitake pickles (Peggy Ozol)
- Chanterelle turnovers (Ken Bradley)
- Morels with cream cheese, red and green peppers, wrapped in wheat tortillas (Larry Stickney). Larry also brought Trader Joe's oyster mushroom chips.
- Abalone sausage-stuffed button mushrooms (Carol Reed and Curt Haney)
- Mushroom-Parmesan-garlic gallette (Michele and Maria Packman)
- Chanterelle spring rolls (Phil Brown)
- Mushroom caviar with oysters, shiitake, and agaricus (Marshall Krause)
- Turkey rollups with mushroom pate and provolone (Bill Hellums)
- Chanterelles with caramelized onions and tarragon on crostini (Debbie Viess and David Rust)
- Artichoke dip (Beth and Jim Dunn)
- Agaricus and mincemeat triangles in filo pastry (Jon Massey)
- Sun-dried tomato sausage with crimini and dried boletes
- Bowtie macaroni in tomato and mushroom sauce
- Various dishes of olives, cheeses, pates, quiche, hummus, and relishes, mostly involving mushrooms

And recipes! —

Peggy Ozol's Asian Shiitake Pickles

3 lbs. fresh shiitake or other mushrooms, chopped or sliced
Marinade:
3 T water
6 T rice wine vinegar
4 T ponzu sauce (or substitute 50% soy, 50% vinegar mix)
3 T mirin or sake
6 thin slices fresh ginger
1 bulb lemongrass
3 peeled garlic cloves, chopped in half
5 fresh thai chilies chopped fine
1/2 cup finely-sliced green onion

Bring broth ingredients to a boil. Add the mushrooms . Stir rapidly for 5 minutes or until semi-limp. Add salt and pepper to taste. Place in glass bowl or jar in the refrigerator. These pickles make an excellent filling for sushi rolls.

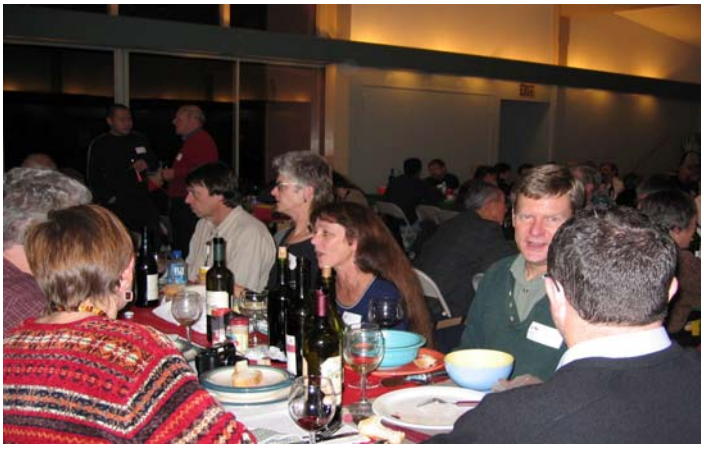
Bill Hellums' Mushroom Pate

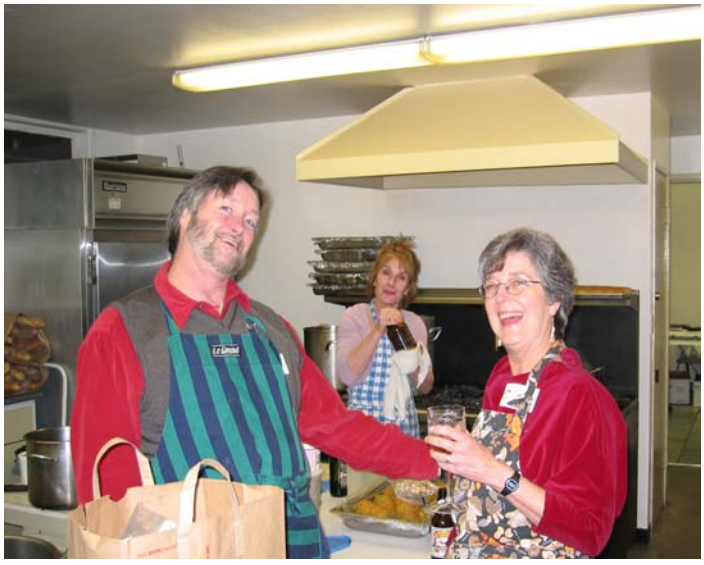
1 lb. mushrooms
4 T. butter
1 large onion
2 hard-cooked eggs
1 t. salt
1/8 t. pepper
lemon, preferably Meyer, to taste

Process mushrooms and onion in food processor, or chop fine. Sauté the mixture in butter for about 5 minutes, stirring from time to time. (You may want to do half the mixture at a time.) Chop the eggs and add to the mixture. Season to taste with salt, pepper, and lemon juice. Mix well and chill.

This was used as filling for the turkey rollups, along with a strip of provolone cheese.

And a good time was had by all!





(left to right) David Campbell, Jeanne Campbell and Carol Hellums prove that too many good cooks *don't* spoil the broth.

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amanitas will be provided. Please bring to class any fresh amanitas that you encounter. Free to MSSF members. Oakland Museum 7:30 pm (www.museumca.org or 510-238-2200)

Monday, February 2, Culinary Group's Monthly Dinner: 7:00 pm. Meeting and dinner at Hall of Flowers in Golden Gate Park in San Francisco. For reservations or information, please contact Alvaro Carvajal (415-695-0466 or email at alvaro.carvajal@sbcglobal.net).

Saturday, February 7, Mushroom Day at the Randall Museum: 10:00 am - 3:00 pm. Free. A great event for kids and adults, with MSSF displays, identification table, books, T-shirts, mushroom modeling for kids, and great homemade soups available for purchase for lunch. The Randall Museum is located at 199 Museum Way, San Francisco on the edge of the Corona Heights Park. For Museum information, contact 415-554-9600 or visit www.randallmuseum.org on the web.

Saturday-Sunday, February 7-8, Edible and Medicinal Mushrooms: Cultures and Techniques: Two-day hand-on workshop will introduce participants to the skills and techniques required to develop their own mushroom farm. $225 includes lunch both days. To register, visit http://ucjeps.berkeley.edu/regform_04.html or call (510)643-7008.

Mycological Society of San Francisco
c/o The Randall Museum
199 Museum Way
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MSSF Calendar, January, 2004

Monday, January 5, Culinary Group's Monthly Dinner: 7:00 pm. Meeting and dinner at Hall of Flowers in Golden Gate Park in San Francisco. For reservations or information, please contact Alvaro Carvajal at (415-695-0466 or email, alvaro.carvajal@sbcglobal.net).

Saturday, January 10, Beginners Foray at Point Reyes National Seashore: Meet at 10:00 pm at the Bear Valley parking lot. Rain will cancel. Limited to 20 people and by reservations only. Leader: Bob Mackler (510-799-6756 or email, Rdmackler@aol.com).

Saturday, January 10, Annual Mills Canyon Park Educational Foray (not for collecting): Meet at 10:00 am for a walk with Fred Stevens and Bill Freedman to last until noon or later. Foray is by reservation only and limited to 25 persons. Dress for light rain. Heavy rain cancels. Wear substantial shoes, the trails will be wet. Park perpendicular at the Adeline entrance, just south of Trousdale Ave, off Route 280. Please call Bill Freedman at (650-344-7774 or e-mail loufreed@aol.com for reservations).

Sunday, January 11, Mushroom illustration class: with Jack Laws. Learn how to draw and paint mushrooms with a professional naturalist/illustrator. Jack is a regular contributor to Bay Nature, and designed this year's Fair poster and T shirt. Free to MSSF members, but you MUST pre-register with the Oakland Museum. For information, contact Dorris Welch at welch@museumca.org or 510-238-6641

Saturday, January 17, Tomales Bay State Park foray: Meet at 10:00 am at Bear Valley parking lot in Point Reyes National Seashore. We will then carpool to Tomales Bay State Park. Call Peter Werner (415-289-0168 or email: pgwerner@sfsu.edu).

Sunday, January 18, Beginner's Foray (not for collecting) at SF Watershed: Meet at 10:00 am at the Phleger entrance to the SF Watershed where the end of Edgewood Road joins Ca–ada Road. To get there; take Highway 280 to the Edgewood turnoff just north of the city of Woodside. Will finish about noon. Heavy rain cancels. Children not preferred at this function. Foray limited to 25 persons. Call Bill Freedman at (650-344-7774 or e-mail loufreed@aol.com for reservations).

Tuesday, January 20, MSSF General Meeting: Doors and fungus ID at 7:00 pm. Guest Speaker Gary Lincoff at 8:00 pm.

Thursday, January 22, Amanitas of California: slide show and lecture by Debbie Viess. Learn to ID California amanitas through their macroscopic features. A key to West Coast

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