
Mycena News

Mycological Society of San Francisco

February, 2000, vol 50:2

Confessions of an Amanita Eater

Debbie Viess

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Membership and Subscription Information

To join the MSSF and receive this newsletter, send a \$20 check, payable to MSSF (\$12 for seniors 65 and over and full time students), to MSSF, c/o Wade Leschyn, 1609 Valley View Ave, Belmont CA 94002. Please include some contact information such as home and/or work phone numbers and email addresses. New and renewal memberships will be current through December of 2000. To change your mailing address, please notify Wade. 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 \$17 payable to NAMA. Send it to Wade at the same address. For further information email Wade at leschyn@rahul.net or call at 650.591.6616.

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I think of amanitas as the hawks of the mushroom world: beautiful, seductive and sometimes deadly. Before I even knew what an amanita was, I was captivated by the beauty of a tiny perfect Grisette alongside a trail in the East Bay hills. The sight of it dropped me to my knees. It was too perfect to pick, so I sketched it on a scrap of paper I had with me. I carried that scrap for years before I determined what kind of mushroom it was.

But it was lust for a Coccora, four years ago, the day before the MSSF Fungus Fair, that made me an amanita fanatic and even caused me to join the MSSF. By this time, I had purchased and studied both of the Arora field guides, so when I saw Amanita calyptata hatching forth from a hillside, I knew what I was seeing. And this time I didn't want to sketch it, I wanted to eat it! But this was an amanita, and I didn't get to be this old by being stupid. I knew the Fungus Fair was the next day. I would take my beautiful Coccora in for a positive ID by the experts and then, by God, I would eat it! But the fickle Fungus Gods decreed that it was not to be. The next morning my daughter was deathly ill with the flu, and I was going nowhere. I watched that beautiful Coccora melt into oblivion, and there was nothing I could do about it.

By the next fall, my husband David and I were new members of the MSSF. The first event we attended was David Campbell's Salt Point foray. Salt Pt. State Park was already a favorite camping location for us; the addition of a newly gained society of fellow mushroomers made it well nigh irresistible. As the mushrooms began pouring into camp at the end of the day my eyes grew wide to see a box of Coccora! Little droplets of drool appeared at the corners of my mouth. I was a woman possessed! I sidled up to Mr. Campbell and asked him my Coccora questions. He rejoined with the party line on eating amanitas (collect them for

Continued on page 4

Cultivated Chanterelles – A Scientific Summary

In May 1994, I published my doctoral thesis "Cantharellus cibarius: Mycorrhiza formation and Ecology." The same year I went to Department of Forest Science at Oregon State University for my post-doctoral research. Among other studies, I transferred pine seedlings with roots colonized by Cantharellus cibarius (i.e. mycorrhiza) from an aseptic environment to the greenhouse. The purpose was to compare Cantharellus mycorrhiza and alien mycorrhizal species. After five months, the seedlings were harvested and the degree of colonization was found to be larger than before outplanting. In other words, in this environment the C. cibarius strains were competitive.

After finishing molecular studies on Cantharellus taxonomy and populations, I returned to Sweden in autumn 1995. One third of the seedlings were left in Oregon in order to study long-term competitive growth of the mycorrhizae. On April 5th, my friend Francisco Camacho, a Ph.D. student who nursed the seedlings, discovered a fruit-body. Within three weeks I was back to investigate the occurrence.

The fruit-body was 3.5 cm tall with a normal spore producing hymenium. In another pot a

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President's Corner

At last the drought is over. An exaggeration perhaps but after 1 1/2 months of very little rain I'm itching for some fungal activity. It looks like there is a row of storms lined up to insure fungi at least into February.

The January council meeting was well attended. For the first 1/2 hour we approved the November minutes and reviewed some information regarding the MSSF annual scholarship. The rest of the council meeting was devoted to a Fungus Fair review and post mortem. Overall the fair was successful in terms of the number of people who attended, the energy that so many of the volunteers brought to the fair, the money that we made and the demonstrations, booths, and programs.

Total expenses for the Fair (to date) are \$6,655. Total income (to date) is \$13,224. This excludes t-shirt or book sales. This leaves us with a \$6,569 profit – again, not including t-shirts and book sales. The extra money from the fair will allow us to make some overdue investments in displays and equipment and to spend a bit more on various speakers and outreach programs.

We had approximately 2094 people pay to visit the fair. Last year we had 1205.

I know it seems a bit early but if you have any ideas for next year's fair that you would like to make happen, please see me. We are already starting to get a committee in place and are reserving the hall for next December. I'll have a date for you by next month.

In last month's column I forgot to thank Irma Brandt for her help with the Fair publicity and Christine Shirley for spending the whole weekend at the wonderful information booth created by Len Coleman. Thanks to all again for the help at the Fair. Now that the rains are back I'll see you out in the woods.

— *Mark Thomsen*

February 15, MSSF General Meeting: Maggie Rogers

For the February 15th general meeting **Maggie Rogers** will be the guest speaker. Maggie is currently the Coordinating Editor of Mushroom, the Journal of Wild Mushrooming. She's got many credits to her name: 67 issues and still keeping up; mushroomer and naturalist (taught by Mother Nature and friends); NAMA volunteer scribe and program mailer in years past; fungal newsletter addict and Oregon Mycological Society librarian.

Maggie's presentation is titled: "Mushroom Moments: Who Taught Me That?"

The MSSF's general meetings are held on the third Tuesday of each month—September through May—at the Randall Museum on Museum Way (near Buena Vista Park) in San Francisco. Doors open at 7:00pm for mushroom identification and general conversation; the meeting proper begins at 8:00pm.

Sponsored by

The Mycological Society of San Francisco
Tour the Country's Largest National Marketer
of Fresh Mushrooms

More trips to Mushroom Farms

Professor Mo-mei Chen is organizing a trip to visit mushroom farms in China. Contact her in the fall if you are interested in joining. She may also organize a separate trip to mushroom farms in the Bay Area. Contact her if interested: Professor Mo-mei Chen, mmchen@nature.berkeley.edu, 510.215.4252

Calendar continued from last page

Saturday-Monday, February 19-21: Salt Point Camping Foray. We'll meet at the Woodside parking lot in Salt Point, Mendocino, at 10:00 am. on Saturday. We'll camp at Gerstle Cove campground. Bring food for group meals and pot luck. Be prepared for wet weather but hope for sunny skies. For more details, call the MSSF hotline or Norm Andresen at 510.278.8998.

Saturday, February 26: A Workshop on Cultivating Edible and Medicinal Mushrooms. Contact Mo-Mei Chen at 510.215.4252 or mmchen@nature.berkeley.edu for more information.

Sunday, February 27, 2000: Los Angeles Mushroom Fair. See inside this newsletter for full details.

Tuesday, February 29, 2000: S.F. Garden Show Planning Meeting. 7 p.m. at the Randall Museum in San Francisco. For details, contact Cultivation Committee Chair Terri Beauséjour at 510.278.5998 or russula@home.com

Saturday – Sunday, March 4 – 5: UC Davis Extension class on Mushroom Cultivation. See inside the Jan. 2000 newsletter or call 800.752.0881 for details. Cost is \$250.

Monday, March 6: Culinary Group's Monthly Dinner. For information or reservations, contact George Repinec at 415.731.5115 or Sherry Carvajal at 415.695.0466.

Wednesday March 15, 2000: Lichen Society Lecture – “Bryophytes by Mona Bourell.” 7:00 p.m., University Herbarium, 1001 Valley Life Sciences Bldg. U.C. Berkeley. There is no charge & refreshments will be served. Contact Judy Robertson, 707.584.8099 or jksrr@aol.com with questions.

Wednesday, March 15, 2000: S.F. Garden Show Setup. Help setup the “Mushrooms in the Garden” display from 10a.m.-5p.m. at the S.F. Cow Palace. For details, contact Cultivation Committee Chair Terri Beauséjour at 510.278.5998 or russula@home.com

Thursday – Sunday, March 16 -19, 2000: S.F. Flower and Garden Show “Mushrooms in the Garden” Display. S.F. Cow Palace, 9-6:30pm every day. For details, contact Cultivation Committee Chair Terri Beauséjour at 510.278.5998 or russula@home.com

Monday, March 20, 2000: S.F. Flower and Garden Show breakdown and cleanup. 10a.m.- 3p.m. S.F. Cow Palace. For details, contact Terri Beauséjour at 510.278.5998 or russula@home.com

Tuesday, March 21, 2000: MSSF General Meeting. Dr. Dennis Desjardins will be our guest speaker.

Saturday – Sunday, April 8-9: MSSF Cultivation Course “Mushrooms in the Garden.” See inside this newsletter for full details. \$45. Contact Charmoon Richardson at charmoon@trr.metro.net or 707.887.1888 for reservations

Friday - Sunday, April 28-30, 2000: MSSF 50th Anniversary Foray. This special 3-day foray marks the MSSF's 50th anniversary, and will be filled with special guests, special events, and lots of good fun. Forays begin on Friday. The exact location is to be determined, but will most likely be in the Sierras. To volunteer contact Tom Sasaki at 415.776.0791.

California Lichen Society Spring Speaker Series

There is no cost for any of the evenings and refreshments will follow each. If you have questions, please contact Judy Robertson at 707.584.8099 or jksrr@aol.com

RARE AND ENDANGERED LICHENS by DAVID MAGNEY

Wednesday, February 16, 2000 7:00 p.m., University Herbarium, 1001 Valley Life Sciences Bldg. UC Berkeley

David Magney, chairman of the CALS Conservation Committee, will talk on the subject of rare and endangered lichens. Lichen conservation has lagged behind vascular plants because of the uncertainty about which lichens are rare and endangered. David is working with other members of CALS to put lichen conservation at the forefront. David was responsible for the effort to name *Ramalina menziessii* as the State Lichen.

BRYOPHYTES by MONA BOURELL

Wednesday, March 15, 2000 7:00 p.m., University Herbarium, 1001 Valley Life Sciences Bldg. U.C. Berkeley

We find many lichens growing on moss. Sometimes, we have to ask the question “Is it lichen or is it moss?” Only close examination gives an answer. Find out about this member of the plant family so often encountered in the field. Mona Bourell, a founding member of CALS, is Senior Curatorial Assistant in the Department of Botany, California Academy of Sciences, Golden Gate Park, San Francisco. She will give a slide presentation of Bryophytes. After this evening we will be able to put some names on those plants that are not lichens.

ALGAE by Dr. RICHARD MOE

Wednesday, April 19, 2000, 7:00 p.m., University Herbarium, 1001 Valley Life Sciences Bldg. UC Berkeley

Phycologist and CALS Managing Editor Dick Moe will take us into the realm of algae. We will learn about algae associated with fungi in lichens as well as free-living algae.

THE ECOLOGY AND PHYSIOLOGY OF THE USNEA-EATING SNUB-NOSE MONKEY by Dr. Nina Jablonsky

Wednesday, May 17, 2000, 7 p.m., California Academy of Sciences, University Herbarium, 1001 Valley Life Sciences Bldg. University of California, Berkeley

Dr. Jablonsky, Curator and Chair of the Department of Anthropology, distinguished author and editor of numerous books and papers, and current editor of the *Journal of Human Evolution*, has been studying the Snub-Nose Monkey for 14 years. We will learn how the Snub-Nose Monkey can exist on a diet of *Usnea* as Dr. Jablonsky explains the physiology and ecology of this high elevation mammal.

Amanita continued from page 1

years, don't rush to eat them, blah, blah, blah). As well he should. After all, who was this wild-eyed woman who was so eager to eat amanitas? After two days of badgering I finally got him to admit that if a mushroom had ALL of the characteristics of a Coccora then it was safe to eat. Now I just needed to find some!

Alas, the wily Coccora eluded my grasp for the next year. But in the interim, other edible amanitas presented themselves for my delectation. On a Joaquin Miller foray led by Norm Andresen, my daughter Sydney found an enormous hatchling Grisette (You go, girl!). Norm gave it a stamp of approval and we rushed it home to the frying pan, where it proved to be sweet and delicious. David and I were fortunate to find a patch of *Amanita velosa* close by our home. I dutifully drove each one over to Mike Wood's house that first year, where he pronounced them safe and good to eat. And better than good they were. Sautéed in butter and tossed with asparagus over pasta, they were a perfect celebration of spring.

But we still hadn't found any Coccora. Finally, David brought a few beauties home from the hills. I called Larry Stickney for a good recipe and we ended up broiling the caps with a cheese topping. It was terrible! (Grisettes prepared in the same way were delicious). This was disappointing, to say the least. Must be the preparation, I thought, so I got a new recipe from an old Italian man at the Fungus Fair, where I was volunteering at the amanita table. It was for a salad composed of thinly-sliced Coccora and fennel bulb, dressed with olive oil and lemon juice. Sounded great. Still terrible, with the added gag factor (for me) of raw mushrooms. OK, OK, I really want to like this mushroom. Let's try it in a spaghetti sauce... hmmm, not bad, once you pick out all the mushrooms. So, sadly, I must say that despite their captivating beauty and my years of fungal lust, I don't care for Coccora. I must admit that John Pisto did a delicious preparation of the Coccora/fennel salad. And Yutaka Wada made a scrumptious stir-fry with them (although Yutaka could probably cook up an old shoe and have you begging for seconds). Maybe eating Coccora will forever be my White Whale...out of my reach even when within my hands. But if you happen to have a good Coccora recipe that you would be willing to share, my e-mail address is: amanitarita@yahoo.com.

— Debbie Viess

BEFORE EATING ANY EDIBLE AMANITA:

1. Be absolutely certain of your ID.
2. Check your ID with an expert.
3. Collect many before you eat any.
4. Only eat type specimens. (that is, classic specimens that meet every distinguishing characteristic)

Foray or Forage?

A correspondent recently asked me whether Foray or Forage was the proper verb to describe what mushroomers do. His dictionary left much to be desired — so will yours. Below is my reply.

“Your dictionary is thoroughly correct in its description of what a foray is. The word comes from Norse origins. It describes what Norsemen did for a living - hit by sea and run with the tide. And while I would not confess to such activity during the hunt for fungi, at least not publicly, because it would be politically incorrect, It IS what we do. I suppose the shunning of the word forage separates our joy and enthusiasm from the mundane business of collecting mere food. We do more than search for sustenance — we search for science and beauty. What we really find is remarkable friends, and we

become missionaries for mycology as we organize to further our interest in each other and our joint interest in the outdoors. One studies birds, another fauna, another flowers, another trees, another lichen, another the stars: together we form a grand whole which lies there for the tapping at every outing, especially the overnight ones. Often there is an answer to almost any query right at hand.

“Furthermore, from our unique position, we are discovering how basic to life on the planet fungi really are. Our close association with this basic life form, so different from the rest of the world around us, and yet actually biologically closer to fungi than plants, puts us in on the ground floor of the coming revolution that the use of fungi is opening. The rare work that people like Paul Stamets, David Arora, even Taylor Lockwood, are engaged in is just the tip of the amateurs' contributions to our understanding of the fungal world. The often abstruse work which professional mycologists follow is yet to be appreciated by most of our citizenry, but anyone can appreciate the meaning of the efforts of Paul, David, and Taylor. Bless both disciplines.

“Across the country Foray is The Honorable Word - use it proudly.”

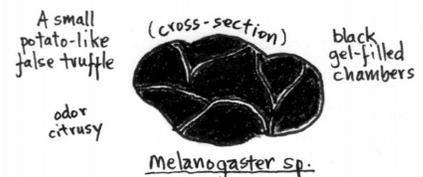
— Larry Stickney

MUSHROOMS

Rain, and then
the cool pursed
lips of the wind
draw them
out of the ground—
red and yellow skulls
pummeling upward
through leaves,
through grasses,
through sand; astonishing
in their suddenness,
their quietude,
their wetness, they appear
on fall mornings, some
balancing in the earth
on one hoof
packed with poison,
others billowing
chunkily, and delicious—
those who know
walk out to gather, choosing
the benign from flocks
of glitterers, sorcerers,
russulas,
panther caps,
shark-white death angels
in their torn veils
looking as innocent as sugar
but full of paralysis:
to eat
is to stagger down
fast as mushrooms themselves
when they are done being perfect
and overnight
slide back under the shining
fields of rain.

— by Mary Oliver

From *American Primitive*,
published by Little, Brown and
Company. Recommended by Tom
Chester



Debbie Viess

S.F. Flower & Garden Show 2000

MSSF Calendar of Events

The MSSF is planning a special display at the SF Flower and Garden Show. We welcome your participation and need volunteer assistance. Here's the schedule of events:

February 29: S.F. Garden Show Planning Meeting 7p.m.-
In the **Randall Museum**

March 15: S.F. Garden Show Setup 10a.m.- 5p.m.
"Mushrooms in the Garden" Display - **S.F. Cow Palace**

March 16 - 19: S.F. Flower and Garden Show
"Mushrooms in the Garden" Display - **S.F. Cow Palace**

March 20: S.F. Flower and Garden Show 10a.m.- 3p.m.
Breakdown Garden Display - **S.F. Cow Palace**

For more information and signup, contact: Terri Beauséjour
510.278.5998 or russula@home.com

Salt Point Camping Foray

Saturday-Monday, February 19-21: **Salt Point Camping Foray.** We'll meet at the Woodside parking lot in Salt Point, Mendocino, at 10:00 am. on Saturday. We'll camp at Gerstle Cove campground. Bring food for group meals and pot luck. Be prepared for wet weather but hope for sunny skies. For more details, call the MSSF hotline at 415.759.0495 or Norm Andresen at 510.278.8998.

Los Angeles Wild Mushroom Fair

February 27, 2000

With the arrival of the rainy season, wild mushrooms have begun to appear in fields and forests in and around Los Angeles. To celebrate this bounty, the Los Angeles Mycological Society will be staging the Wild Mushroom Fair at the Arboretum of Los Angeles County, 301 North Baldwin Avenue, Arcadia, California on Sunday, February 27, 2000 from 10:00 a.m. to 4:30 p.m. The Wild Mushroom Fair is free with paid admission to the Arboretum (adults: \$5.00, seniors: \$3.00, children 5-12: \$1.00, children under 5: free).

The Fair will feature identified species of Wild Mushrooms displayed in natural habitat settings. Visitors will be delighted by the variety of colors and forms of the Wild Mushrooms of Southern California. Mushroom experts will be on hand to answer all your questions about Wild Mushrooms, and the public is invited to bring in Wild Mushrooms for identification. A variety of Mushroom books and posters will be offered for sale.

Dr. States is one such expert. He is widely known for his expertise on the fungal ecology of the southwest, and has written three books and numerous articles for scientific journals in his field.

Royce Harvey, an experienced wild mushroom grower and a member of the Los Angeles Mycological Society, will present a hands-on seminar on Mushroom Cultivation. Visitors will assemble their own complimentary mushroom-growing kits.

Jeffrey Kramer, Chef/Culinary Advisor of the Los Angeles Mycological Society, will give a presentation with recipes on many delicious ways to serve both wild and cultivated mushrooms. Jeff has worked at the Border Grill Restaurant in Santa Monica and with Wolfgang Puck.

On Saturday, February 20, there'll be three Mushroom forays to collect mushrooms for display at the Fair. One foray will be in the Santa Monica Mountains, another in San Dimas, the third in the Cleveland National Forest. The public is invited to these forays free of charge. Call the Los Angeles Mycological Society at 323.292.1900 for up to date information on the Mushroom forays and the Wild Mushroom Fair.

A Weekend Workshop on

EDIBLE & MEDICINAL MUSHROOMS

Cultivation Techniques with Professor Mo-Mei Chen

February 26, Saturday - 9:00 a.m. - 5:00 p.m. Forest Products Laboratory - University of California, Richmond Research Station. Cost \$50 for MSSF members, \$80 non-members.

Join internationally known mycologist Mo-Mei Chen for a fun, informative all-day workshop on cultivating and selling mushrooms. You'll participate in preparing media and inoculate your own mushroom spawn, which you'll get to take home. Plus, you will receive five wonderful strains to start your own mushroom farm. For reservations or more information contact Mo-Mei Chen at 510.215.4252 or mmchen@nature.berkeley.edu.



Mushrooms, like some economies, experience cycles of boom and bust. Sometimes the cycles spin out over a period of years: a weed-common species one year is conspicuous in its absence for the next few years, then shows up in abundance another year. At other times, like this season, boom and bust plays out within a single

year. Fall's warm and fruitful rains turned into a December that was warmer and drier than some Bay Area summers, anathema for mycelia struggling to put up fruiting bodies.

Not that they didn't try here in the East Bay. Operating on just a memory of abundant moisture, amanitas unfurled their elegant caps in late December over the dessicated remains of the boletes that preceded them. Under pines, slippery jacks became crackly jacks with a baked-on sheen, *Boletus edulis* sported cracked caps, scrawny stipes, and too often had no need of a home dehydrator. Back under oak, *Boletus amygdalinus*, *Boletus regius*, and *Boletus appendiculatus* suffered the same fate, and the early fruiting *Amanita calyprata* turned from statuesque beauty into brown, flaccid pancakes.

It was a surprise to me, then, that the newly fruiting *Amanitas* did as well as they did. Although they bleached a little orange in the sun, the *Amanita muscaria* looked relatively healthy, accompanied by some truly large *A. pantherina* and *A. aspera*. I also found the wonderfully warty *A. magniverrucata* in the same place it came up last year, noticeably smaller this year, and a bright yellow *A. muscaria* that stood in bright contrast to the standard red varieties coming up around it. It's unusual to see yellow *muscaria* here—they're typically limited to points east: orangish-yellow varieties in the summer Sierras and full yellow varieties on the east coast. One other nice *Amanita* surprise: a fruiting of ten graceful *A. pachycolea* (grisettes) coming up on the side of a seemingly bone-dry trail in the Oakland hills.

Of course it's impossible to discuss *Amanitas* this time of year without discussing *A. phalloides*. It seems like every year I see a TV report about death caps, where they'll often interview someone like the MSSF's toxicology chair, Bill Freedman. Bill skillfully describes death caps, their toxicity, and might give a general tour of mushrooms. The TV reporter then goes on to pronounce that "this year poses a special risk because death caps are coming up in more profusion than ever before." I've often just written this off as television hyperbole—death caps go through booms and busts as well as other mushrooms, and in many years this dire warning isn't accompanied by any evidence in the field. This year, however, is a different case. *A. phalloides* is under oak trees everywhere. On a short hike in Oakland yesterday, I saw enough fruiting bodies to make a Last Supper for 100. (The Candied Death Cap Surprise recipe gets 'em every time...)

Russulas have also made a game attempt to be prolific, but they've suffered from the hot dry winds more than the amanitas. I saw large clusters of rapidly drying brown *R. amoenolens*, a few scattered red *R. sanguinea*, and—under oak—a few acrid-tasting *Lactarius alnicola* here and there. Dried russulas seem to be very popular with squir-

rels and their ilk this year. A short walk through pine needles reveals hundreds of tiny holes dug into the ground, the snapped-off base of a russula at the bottom of each. The next time you go to a favorite mushroom spot and are *sure* someone's been there before you picking all the mushrooms, consider the fact that the someone might have a bushy tail.

Another group of mushrooms that have done well with the warm dry weather are wood rotters. It surprised me to find large clusters of orange-yellow *Gymnopolis spectabilis* coming up on a stump on a very dry and windy ridge. I've also found quite a few *Pleurotus ostreatus* (oyster mushrooms) fanned out from dead trees, some in good condition even if they did sport thriving maggot communities. Honey mushrooms are also doing well, popping out in clusters in the ground, typically growing on subterranean wood sources. Although we've always called these mushrooms *Armillaria mellea*, Tom Volk's new keys have convinced Mike Wood that much of what we see here in the Bay Area is *A. ostoyae* and possibly other species of *Armillaria*.

The fact that wood rotters do so well in dry weather (including *Laetiporus sulfureus* fruiting well before the fall rains) leads me to wonder if wood rotters sometimes take advantage of a dead tree's remaining vascular root system to draw water from deep in the ground. If so, it would be quite a feat because water transport in live plants is primarily the result of transpiration in the leaves, evaporation that pulls water up the stele in the interior of the plant. A dead tree has no leaves, so a wood rotter's mycelium would have to provide an alternate means of water transport. It might make an interesting research project.

One noticeably scarce mushroom this year is the yellow chanterelle, *Cantherellus cibarius* here in the Bay Area. This mushroom, like other mid-season mushrooms, bides its time and waits for multiple drenchings and colder weather. It has a slow-growing fruiting body that may persist over month, a time span that this year included a warm, dry interruption. I've stumbled across a few specimens here in the East Bay, but I suspect that many of the mycelia had hardly begun to fruit when the dry weather intervened. Now that it looks like we'll get some substantial rain (in mid-January), I'm curious to see if it will revive chanterelle fruiting and if other mid-season mushrooms like *Lactarius rubidus* (candy caps) will come up in decent numbers. Hard to say.

So what else have people been finding? Not much. It's pretty quiet out there. Bob Gorman, a former writer of this column, found a beautiful and locally rare fruiting of *Pholiota squarrosa* on madrone in Salt Point State Park. Mike Wood, who's been in the East Bay oaks more than I have, reported in late December lots of *A. phalloides* along with the poisonous *Boletus amygdalinus* (this seems to be a boom year for them), *B. subtomentosus*, *B. regius*, *Amanita calyprata*, *Hebeloma crustuliniforme* (poison pie), *Tricholoma dryophilum*, and *Paxillus involutus* (poison pax). He also found a very interesting red-pored bolete that might be an undescribed species. It doesn't match any of the standard six California red-pored bolete species.

David Rust also reported from the Oakland hills in late December, where he found, in addition to what Mike found, *Lactarius alnicola*, *Suillus pungens*, *Russula basifurcata*, *Entoloma rhodopolium*, and (he mentioned as an afterthought) *Cantherellus cibarius*.

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Over in Marin county, reports mentioned the same fungal suspects: *A. calyptrata*, *A. phalloides*, and so on. Ron Pastorino also reported both yellow and white chanterelles (*Cantharellus subalbidus*), *Amanita pachycolea* (grisettes), and some scaly dark-brown capped *Cortinarius* with a bulbous base all accompanied by hosts of sun-bleached and in-situ air-dried russulas and suillus.

Bob Mackler took a early January hike at the Audubon Canyon Ranch and found good fruiting—possibly helped by its proximity to the ocean and subsequent moisture. He found the following: *Amanita phalloides*, *A. gemmata*, *A. novinupta* (very early!), *Armillariella mellea*, *Ganoderma applanatum*, *Boletus chrysenteron*, *Suillus caeruleus*, *Gomphidius glutinosus*, *Hygrophorus agathosmus*, *H. psittacinus*, *H. coccineus*, *Pluteus cervinus*, *Entoloma bloxami*, *Coprinus plicatilis*, *Coriolus versicolor*, *Schizophyllum commune*, *Tyromyces albellus*, *Russula silvicola* and *Polyporus elegans*. He also found unIDed species of *Cortinarius*, *Russula*, *Hygrophorus*, *Agrocybe*, and *Lactarius*.

In mid-January, Bob tackled Tomales Bay State Park and found *Amanita phalloides* in profusion, *A. fanchetii*, *A. vaginata*, *Armillaria mellea* (in many color forms), *Russula silvicola*, *R. amoelens*, *R. nigricans*, *R. sanguinea*, *Lactarius rubidus* (hundreds), *L. xanthogalactus*, *Pleurotus ostreatus*, *Coprinus plicatilis*, *Clitocybe nebularis*, *Gymnopilus spectabilis*, *Inocybe sororia*, *Boletus subtomentosus*, *B. aereus*, *B. chrysenteron*, *Phaeolus schweinitzii*, *Galerina autumnalis*, *Cortinarius phoeniceus* var. *occidentalis*, *Hypholoma fasciculare*, *Leccinum manzanitae*, *Clitopilus prunulus*, *Leucopaxillus gentianeus*, *Sparassis radicata*, *Psathyrella longipes*, *Cryptoporus volvatus*, *Suillus pungens*, *Ganoderma applanatum*, *Trametes versicolor*, and *Tricholoma dryophylla*. Whew! Pretty good for a bust season—guess you just need to know where to look.

The few reports I have from the peninsula sound a bit grim. Bill Freedman, in a pre-foray walk at Mill Canyon, found only 22 species of fungi, of which only 15 were fleshy fungi. Hilary Somers, in early January, did find a number of candy caps on the peninsula.

As I sit here in my office in mid January, I look out at very gray skies with forecasts of heavy rain. Let's hope so. As you might suspect of somebody with my name, I much prefer boom to bust.

- Mike Boom

Mushroom Drawing Class

A mushroom drawing class will be held for MSSF members on **Sunday, February 6**, from 10am-1pm on the Peninsula. Drawing mushrooms offers a great opportunity to observe and study mushrooms in detail. It allows us to record the structure and beauty of this wonderful life form we all prize.

You do not need to be artistically talented to attend this class, but need to have a willingness to take the time to study the mushroom in front you.

Class size is limited to 15. Call Louise Freedman for directions and reservations at 650.344.7774. The cost is \$10.

Chanterelles, continued from page 1

new fruit-body was found. It was, however, aborted when it was only 0.5 cm, probably due to ruptured supporting mycelia when the pot was opened. A third fruitbody of the same size as the first one was discovered on June 22 by Jamie Platt, a Ph.D. student at OSU. A large number of hyphal knots resembling primordia were also found, but the mycorrhizal seedlings were replanted in May in order to increase plant and fungal biomass. A second flush began in November 1996, involving new pots and more fruit-bodies. The latest fruit-body was harvested in spring 1997 when the experiment was terminated.

This event immediately gave us several crucial facts about the biology of *C. cibarius*. It is possible to grow *C. cibarius* in the greenhouse. In this greenhouse environment, the vegetative *C. cibarius* mycelium does not need to be older than about one year old in order to form fruit-bodies. In the same environment, 16 month old seedlings are capable of supporting a fruit-body forming *C. cibarius* mycelium.

By contrast, in Swedish forests, most host trees are at least 30 years old. A possible explanation for this difference is that the low production and viability of *C. cibarius* spores makes it rare in young plantations. A vegetative *C. cibarius* mycelium which has been kept in laboratory environment for eight years is still capable of forming both mycorrhiza and fruit bodies.

References: Danell, E., and F. Camacho. 1997 Successful cultivation of the golden chanterelle. *Nature* 385: 303.

— Eric Danell, Department of Forest Mycology and Pathology, Swedish University of Agricultural Sciences, Uppsala, Sweden.

Details: <http://www.mykopat.slu.se/mycorrhiza/kantarellfiler/texter/home.htm> - Reprinted from Fungifama, the newsletter of the South Vancouver Island Mycological Society, January 2000.

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50 YEARS!

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Calendar

Sunday, January 30: Land's End Foray, Golden Gate Park. Spend your Sunday morning walking with mushroomers through Golden Gate Park. Meet at 10am at the Palace of the Legion of Honor for this 2 hour walk.

Sunday, January 30: Mushroom Madness in Marin. Contact Loraine Berry at 415.454.0914 for reservations.

Saturday, February 5: Joaquin Miller mushroom walk, Oakland. Meet at 10am in the Sequoia arena area of Joaquin Miller Park. To get there, take the Joaquin Miller Road exit off Highway 13. Follow Joaquin Miller Road up hill, turn left at Skyline. Continue 1.5 miles to Sequoia area on the left. Meet near the bathrooms.

Sunday, February 6: Mushroom Drawing Class with Louise Freedman. 10am-1pm, Cost is \$10 per person. Please call Louise Freedman for additional information. Cost covers paper and colored pencils. Class size is limited to 15. 650.344.7774.

Sunday, February 6: Land's End Foray, Golden Gate Park. Spend your Sunday morning walking with mushroomers through Golden Gate Park. Meet at 10am at the Palace of the Legion of Honor for this 2 hour walk.

Monday, February 7: Culinary Group's Monthly Dinner. For information or reservations, contact George Repinec at 415.731.5115 or Sherry Carvajal at 415.695.0466.

Sunday, February 13: Land's End Foray, Golden Gate Park. Spend your Sunday morning walking with mushroomers through Golden Gate Park. Meet at 10am at the Palace of the Legion of Honor for this 2 hour walk.

Tuesday, February 15: MSSF General Meeting: Randall Junior Museum, S.F. **Maggie Rogers** will be the guest speaker. Maggie is currently the Coordinating Editor of Mushroom, the Journal of Wild Mushrooming. Doors open at 7pm for mushroom identification, book sales, cultivation tables, and various displays. See inside for details.

Wednesday February 16, 2000: Lichen Society Lecture – "Rare and Endangered Lichens by David Magney." 7:00 p.m. University Herbarium, 1001 Valley Life Sciences Bldg. UC Berkeley. There is no cost for the evening and refreshments will follow. If you have questions, please call Judy Robertson at 707.584.8099 or jksrr@aol.com

Sunday, February 19: Monterey Mushroom Farm Morgan Hill Tour. See inside this newsletter for full details, or contact dsarasua@pacbell.net or 408.227.3749.

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For the most current Calendar information, call the MSSF hotline at 415.759.0495 or check the MSSF web site at: <http://www.mssf.org>