Speaker for September MSSF Meeting Admir J. Giachini Molecular phylogenetics and ecological aspects of

Gomphus and related genera



Out of concern for the protection and management of the forests of the P a c i f i c Northwest, in 1994 a document was published which included a list of organisms considered to

be endangered. Admir Giachini started studying the aboveground fruiting genus *Gomphus*, which was included on the list as a "genus of concern" due to its apparent scarcity. No prior study had been done to verify the distribution status or occurrence of this organism. A general study, as stated by the Forest Management and Assessment Team Report, had to be developed for the species of *Gomphus* before any activity involving the forest use could be approved.

Admir will speak of other areas of research that he's concerned with. The Oregon State University mycology lab is currently trying to verify how and to what extent species of the orders *Gomphales* (represented by genera such as *Gomphus, Ramaria, and Clavariadelphus*) and *Phallales* (the stinkhorns, including the truffle-like genus *Hysterangium*) are phylogenetically related. To accomplish this goal current molecular and morphological techniques, such as DNA fingerprinting, have been employed. These new approaches and perspectives will be discussed.

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Mycena News

Mycological Society of San Francisco

August, 2001, vol 51:9

The Spectre of "Mucho Destructo"

By David Rust

It is July, and UC Berkeley plant pathologist Matteo Garbelotto leads a small group on a hike along the Pilot Knob Trail through the rolling foothills to the north of Mount Tamalpais. Lake Lagunitas sits just over a hill and a light breeze reminds us that the ocean is just to the west. Redwoods shade the picnic area, but as we ascend the first hill on a fire road, we see tanoak, coast live oak, madrone, and Douglas fir. Almost immediately, signs of *Phytophthora* appear - on young scrubby tanoaks at first, then larger trees - obviously dead or dying. One ecologically-minded participant winces each time Garbelotto plucks a leaf to inspect it, and complains that if everyone did that, the trees would soon be bald. Little does she realize what we are about to witness. Before long, we come to a place that shocks and saddens.

Garbelotto has dubbed the area "mucho destructo". Just off the trail, dead tanoaks have literally snapped off at eight to ten feet above the ground. Massive trunks, which held a ton of canopy, have turned into sawdust by a secondary invasion of bark beetles feeding on the defenseless trees. Garbelotto points to where a bleeding canker has formed on the trunk of a young, seemingly healthy tanoak. He carries an axe on the hike, and chops at the outer bark layer. At the margin of the canker, the wood is pink and healthy. Inside the zone of the canker, the wood is blackened and dead. Sap oozes from the canker; the damaged cambium cannot transport it beyond the damaged area. This tree is doomed. Kim Kiernan, Project Coordinator for the UC Marin Cooperative Extension, peels off a section of dead bark from the base of the tree, several feet below the canker. She and Garbelotto examine it together - already primordial mycelia of a wood-rotting fungus have formed on the inside of the bark - astonishing since the tree still has green leaves.

Once you've witnessed the devastation here - 90% of the tanoaks are dead - and realize the potential for the rest of the California coast, you need see no more. The combined range of all the affected trees and shrubs is daunting. When Garbelotto is called upon to look at a new species, people fear the worst and call him Dr. Death, because virtually every new plant species he examines is infected by *Phytophthora*. What he recently discovered has chilling implications. *Phytophthora* may have the capacity to spread well beyond California.

On August 10th, the new *Phytophthona* was found in tanoaks in the Brookings area in the southwesternmost corner of Oregon. Before that its presence had been verified only in eight California counties, from Mendocino County on the north to Monterey County on the south to Napa County on the east. The Oregon discovery was confirmed by the state departments of agriculture and forestry, the U.S. Forest Service, and the Bureau of Land Management. The new infestation was discovered by aerial survey in a remote part of the forest - researchers have no idea how it might have spread to this new location so far from known affected areas.

The killer has been given a name: *Phytophthora ramorum.* Likely an introduced species, this pathogen has been in the Bay Area for a while - perhaps as early as the 1980s. The phenomenon of Sudden Oak Death was first reported in Kentfield in 1994, but it was not until June 2000 that Garbelotto and UC Davis plant pathologist David Rizzo identified the pathogen. Since then, it has been found as far south as Big Sur in Monterey County and as far north as Boonville in Mendocino County. Last year, *Phytophthora* was known to affect only tanoaks, coast live oaks, and black oaks. It has now been isolated on a wide spectrum of hosts, and the list of affected trees and shrubs grows seemingly every day. Just a few weeks ago, it was found on native rhododendrons in Muir Woods. The California Buckeye (*Aesculus californica*), huckleberry (*Vaccinum ovatum*), California Bay Laurel (*Umbellularia californica*), and madrone (*Arbutus menziesii*) have also been identified as carrying the disease.

Scientists are only beginning to understand how the disease spreads within a mixed oak woodland. They have observed a pattern that a California Bay Laurel (or madrone) must be nearby before a tanoak is infected. *Phytophthora* was recently isolated from the leaves of tanoak; previously it had only been known to infect the inner bark and a small portion of the outer wood on stems and branches. Researchers believe that foliar infection on tanoak leaves, along with madrone, bay, huckleberry, rhododendron, and buckeye may allow for the rapid build-up of *Phytophthora* in the environment, and serve as a reservoir for inoculum, increasing the risk of infection to nearby susceptible oaks and tanoak. The host trees are not always killed, but act as a vector. Spores are dispersed over the canopy until the nearby victims succumb, espe-

President's Message

By David Rust

New Directions

Welcome to the 53rd mycological season of the MSSF! We are off to a good start with several exciting events and classes planned for the year. We have fantastic speakers lined up for general meetings. The fair returns to the Oakland Museum after a long absence (the Hall of Flowers is under construction). The Randall Museum is getting a facelift, although much of the work is to the exterior. Even NAMA has sent word that it is reinventing itself, and promises to be of better service to its affiliated clubs and individual members.

I hope we can use this year to rededicate ourselves to the scientific and educational mission on which we were founded. In some cases, that may mean doing things in a totally new way. In other situations, it may require that we look back to the days when Harry Thiers single-handedly drove the society toward scientific endeavor. It has been proposed that the MSSF conduct a before/after study of *Phythophthora* in conjunction with the university researchers studying the disease. An effort of this magnitude is no small undertaking, and would require several years of intensive effort. Think what we could learn from any carefully designed long-term study of a productive fungal plot in an oak woodland!

We have a great team of elected officers and committee members to guide the society toward its goals. Mark Lockaby, our new vice president, has a number of years' field experience and has been involved with the fair. Sherry Carvajal, treasurer, and Jeanne Campbell, recording secretary, return to the positions they handled so well last year. Enrique Sanchez brings tremendous energy and ideas to the council as an at-large councilor. David Campbell, who has led forays for many years, one of the key members of the culinary group, who has given so much time and energy to the MSSF, joins the council for the very first time as the second at-large councilor. Ron Pastorino returns as at-large councilor.

David Bartolotta has been busy all summer adding and updating members to prepare for the roster mailing. Many thanks to Lorrie Gallagher and Rose Flaherty for taking the helm of the Mycena News, and to Tom Sasaki, who is a past president, for agreeing to act as Foray Chair. Ken Litchfield will return as cultivation chair. Tom Chester and Paul Koski, who have, in various years, run the Fungus Fair, have once again brought their combined energy and experience to that role. Debbie Viess promises to revitalize the Education Committee with some innovative new programs.

I am relatively new to the MSSF, having joined in 1997. One of the first things I learned this year, as president elect, is that there are some really tremendous people who have served the MSSF in some significant way in the past who work in the background for the best interests of the group. Mike Wood, our magnificent Webmaster, works tirelessly to promote the MSSF, and to keep everything working properly. In Mike's new role as chair of the new Systematics Committee, I truly expect great things. Mike Boom took on the Mycena News at the end of last year, and then created the roster without even being asked. John Lennie, another past president, has reclaimed the Library with a vengeance, and will work with the fair ID committee to make sure everything flows smoothly with the ID species database. Emmy Lou Miller, our historian, maintains the historical documents of the society, and has our thanks for performing that role. Mark Thomsen has been working in the background to schedule classes and programs for us. Other past presidents continue in key positions: Bill Freedman remains as toxicology chair; Fred Stevens and Bob Mackler will again help award educational scholarships; Norm Andresen will lead organized forays and hawk books at meetings, and surely our immediate past president, Terri Beausejour, will at least teach a class for us....

My goal this year is to provide educational opportunities to our membership, and to get more members involved in activities. At the August council meeting, we will have a brainstorming session about how to move the organization forward. Having reached the ripe old age of 53, it's time to transcend our past and move to the future - whatever that may bring.

Lepiota Workshop

Can you tell the shaggy Parasol, *Macrolepiota rachodes*, from its toxic look-alike *Chlorophyllum molybdites*, which was fruiting in Berkeley this summer? There are more *Lepiota* species than you may have realized - more than 20 of them were found in one small area before the Fungus Fair last year! Some species (though not *Chlorophyllum molybdites*) contain deadly amatoxins - do you know how to recognize them?. If these beautiful pink and brown, more or less scaly, mushrooms intrigue you, then come to the *Lepiota* workshop! We can't tell you - quickly, at any rate - how to recognize all the ones you may encounter, but in one evening you will get an overview of the genera in this group, a slide show of beautiful species from the Bay Area and beyond, an account of which are the important characters for identification, and information on how to recognize the toxic species.

Else C. Vellinga has specialized in this group of mushrooms and has published extensively on them.

Thursday, November 15, 7.30-9.30 pm Randall Museum, San Francisco Instructor Else C. Vellinga

Registration is not necessary; just mark your calendar now and turn up on 15 November for this free MSSF event!

Fungus Fair 2001

With the local mushroom season approaching it is time to start thinking about the Fungus Fair. There are some exciting changes for the fair this year. The most important one is that the MSSF is conducting the fair in collaboration with the Oakland Museum and will hold it in the museum.

The museum is in downtown Oakland, near the Lake Merritt BART Station. The fair will be Saturday and Sunday, December 8 and 9 in the museum's natural history exhibition area.

The first major planning meeting for the fair will be Thursday, September 27 at the museum. There will be more announcements about the meeting as the date gets nearer.

In the meantime, we are looking for people to work on the exhibits and to help coordinate various aspects of the fair. The collaboration with the Oakland Museum will attract a wider audience to the fair. Because of the changes, however, we particularly will need help from members and friends.

Right now, we are looking for people who would like to assist in planning exhibits and logistics. During the fair we will need help with staffing as always.

If you would like to help with the planning, contact either of the Fair Co-Chairs: Tom Chester: (415) 665-7520, Paul Koski: (415) 564-6518. You can reach either by e-mail at fungusfair@mssf.org. If you are interested

in volunteering at the fair itself, contact the Volunteer Coordinator, Lorrie Gallagher at, lorriegallagher@hotmail.com, 415-467-1868.



Fungus Fair 2000 Volunteer Party

David Rust

The Spectre of "Mucho Destructo"

Continued from page 1

cially the highly susceptible tanoak.

It is now confirmed that *Phytophthora*, which is not a true fungus, but rather an oomycete, is spread both through the air and soil. Previously, the sporangia, a lemon-shaped sac that carries numerous destructive twin-tailed flagella, were found to be aerial. The cyst-like chlamydospore, a large resting stage of the reproductive cycle spread through the soil in other destructive species of *Phytophthora*, has been isolated on the leaves of some affected trees. Formerly though to form only on affected bark, researchers have now found that chlamy-dospores are also formed on leaves, drop to the soil when the leaf falls, and are activated by fogdrip or rain during the following wet season.

While the long-term outlook is not good, there is some encouraging evidence that not all affected coast live oaks have been killed by *Phytophthora* - natural resistance may keep some oaks alive. Garbelotto cautions that Sudden Oak Death has been studied for only a short time and it is too early to know if this phenomenon is resistance, or if the trees will eventually be killed. He believes that if all the tanoaks are lost, Douglas firs may move into their niche. The forest will change from the mix of trees we see today, but perhaps this is only a natural progression - hastened by man's introduction of the disease.

During this dry period of the summer, the disease is fairly inactive, except when fueled by an intermittent foggy afternoon. There is little hikers and bikers can do to prevent spreading the pathogen, except to wash boots and tires. Given the aerial component of dispersal, even this action may prove futile.



University researchers are aware of the mycorrhizal relationships with these trees, yet they are too involved in crisis mode to study what is taking place in the soil. The Mycological Society of San Francisco is considering a scientific before/after study to measure the change over time in the local fungal population.

It is very sobering to walk through mucho destructo, the zone of worst devastation. Once majestic trees stand dead, killed so rapidly that their brown leaves remain to rattle in the breeze off the nearby ocean. Other healthy-looking trees tower overhead, already doomed by the infectious agent in their midst. *Phytophthora* ramorum

is in our forest. Only time will show its course.

To find out more about Sudden Oak Death, visit the California Oak Mortality Task Force website: www.suddenoakdeath.org.

The California Native Plant Society is having a free presentation on "Sudden Oak Death" with speaker **Matteo Garbelotto** on Thursday, September 6th at 7:30 pm in the Randall Theater. For more info call Ann-Marie at 415-554-9604.

This is an early notice to let you all know that the annual SOMA Winter

Mushroom Camp, hosted by the Sonoma County Mycological

Association, will take place again this season. It will be held, as usual, on

Martin Luther King birthday weekend, January 19 - 21 (Saturday -

Monday). There will be mushroom forays, classes, workshops, specimen

tables, slideshow, and great mushroom feasting. A price for the Camp has not yet been established, as we are awaiting developments about pos-

Society Officers

President: David Rust	(510) 430-9353
Vice Pres: Mark Lockaby	(510) 412-9964
Secretary: Jeanne Campbell	(415) 457-7662
Treasurer: Sherry Carvajal	
	. ,

Select Committees

Forays: Tom Sasaki	(415) 776-0791
Book Sales: Norm Andresen	(510) 278-8998
Membership: David Bartolotta	(415) 621-3166

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, 2750 Market St., Suite 103, San Francisco, CA 94114-1987, Attn: David Bartolotta. Please include contact information: home and/or work phone numbers and email address. New and renewal memberships will be current through December of 2002. To change your mailing address, please notify David. 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 David at the same address. For further information, email David at david@bartolotta.com or call at (415) 621-3166.

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Editor: Lorrie Gallagher Layout: Rose Flaherty Printing/Mailing: Mother Lode Printing Jackson, CA

MSSF Treasurer's Report 2000/2001

	Budget	Income	Expense	Actual	Budget Diff.	
INCOME						
Events	4,300	12,953	(12,700)	253	(4,047)	
Forays	1,800	15,388	(11,623)	3,765	1,965	
Membership	14,500	10,906	(100)	10,806	(3,694)	
Sales	1,400	4,779	(3,888)	891	(509)	
Subtotal	22,000	44,026	(28,311)	15,715	(6,285)	
OPERATING EXPENSES						
Committees	(1,305)	0	(1,283)	(1,283)	22	
Gnrl Exp	(16,495)	984	(11,549)	(10,565)	5,930	
General Mtgs	(2,600)	0	(2,784)	(2,784)	(184)	
Officers	(600)	0	(272)	(272)	328	
Scholarships	(1,000)	1,796	(1,565)	231	1,231	
Subtotal	(22,000)	2,780	(17,453)	(14,673)	7,327	
TOTALS	0	46,806	(45,764)	1,042	1,042	

SOMA Camp Coming Up!

sibly moving the Camp to a new location.

Until such time as the final arrangements will be known, you can reserve your space by contacting Linda Morris, the SOMA Camp registrar, at 707-773-1011, or lamorr@pacbell.net. More information will be posted in next month's newsletter. Updates will also be available at the SOMA website, at: www.SOMAmushrooms.org.

The Forager's Report

By Patrick Hamilton

"Gosh darn it, I KNEW there was some other varmit collecting my *A. arvenis* and *A. augustus* from the Sunset. . . ," the usually calmly informed Dr. Jack suddenly sputtered, outburst style, through his computer's keys and sent it out for all to see.

And you might be asking, "What's up, doc, with that?"

Well, for those of you with little idea before you know now that the local mushroom wars have once again begun and all we can do is just hope that civility and good-naturedness return as soon as this season is over. No gunfire has yet been reported, but it is early.

In fact, so fresh that your reporter hasn't even gotten the bothersome and actually somewhat disfiguring Sierra Fall bolete twitch which, with the accompanying uncontrollable drooling at the thought of our coastal boletes, makes that time of year kind of difficult. But heck, right now we can look at what is happening and not worry about the next now.

Mike Boom reports that his proprietarily farmed *M. oreades* (fairy ring mushroom) patch continues to produce for him in spite of efforts of other farmers to seek and to plow through those fields. *A. arevensis* and the *A. xanthodermus* were also fruiting in his private places.

Kathy Faircloth saw some more *Agaricus ssp.*, too old for a good i.d., under cypress up near Sea Ranch recently.

That coastal area is a good one for fog drip fruitings. Great tasting *A. lilaceps* and the more well known *C. cibarius* (golden chanterelle) can be picked during the summer along the northern Sonoma coast in Salt Point State Park and further north--if you can access the private property there...

Near Sante Fe, New Mexico, at the 9500' to 11,000' foot levels, the wonderful red-capped *B. edulis* have begun to fruit (in late July and will throughout August).

Herman Brown has seen few mushrooms yet by his home near Lake Almanor but did find an *A. augustus*, some *L. ponderosus* and a half ring of *M. oreades*.

Great grey morels (*M. atromentosa*) are being sent, hundreds of pounds at a time, from a last year fire zone in the Bitterroot Range, to Connie Green's wholesale restaurant distribution company. These are pretty fine tasting mushrooms and a joy to stuff.

Fred Stevens, Debbie Viess, and Mike Wood took a stroll amongst the dead in Colma and with the living along Sunset Blvd.(not the one in the

movie) and found these fungi, fog induced and sprinkled wetted: Agaricus arvensis, A. augustus, A. bernardii, A. californicus, A. fuscovelatus, A. xanthodermus, Amanita pantherina, A. phalloides, Bovista pila, Clathrus ruber, Clitocybe nuda, Conocybe filaris, Gymnopus subpruinosus, Hebeloma mesophaeum, Hypholoma aurantiaca, Inocybe sororia, Lactarius deliciosus, Laetiporus gilbertsonii, Lycoperdon pyriforme, Macrocystidia cucumis, Marasmius oreades, Mycena capillaripes, M. purpureofusca, Panaeolus foenisecii, Peziza sp., Phaeolus schweinitzii, Psathyrella candolleana, P. gracilis, Psilocybe cyanescens, Russula amoenolens, R. sanguinea, R. sp.#1, R. sp.#2, Scleroderma cepa, Suillus fuscotomentosus, S. pungens, Tricholoma fracticum, and Vascellum pratense.

That fine list represents parts of the amazing extremes of the mushroom world. A few examples: Several are known for fine tasting--*A. arvensis* (horse mushroom), *A. augustus* (the prince), *A. bernardii* (salt-loving agaricus), *C. nuda* (blewit) and *M. oreades* (fairy ring mushroom); some for tummy tossing--*A. californicus* and *A. xanthodermus*; some are more poisonous--*C. filaris*, maybe *H. mesaphaeum*; one is absolutely potentially fatal--*A. phalloides*; some are weird looking--*B. pila*, *V. pratense*, *C. rubar* (whoa!); and one is best known for making things look weird--*P. cyanescens*.

Fred Stevens reminds us to also look towards Land's End for more fascinating and fun finds, like *M. rachodes* and *B. edulis*.

Another of his favorite spots is at Skyline college in San Bruno. Around Monterey cypress, Monterey pine and wood chips he found *A. bisporus* and *augustus*, *Clavulina cristata*, *Clavulinopsis laeticolor*, *C. nuda*, *Conocybe filaris*, *Geastrum fornicatum*, *Gymnopilus villosipes*, *Hygrophoropsis aurantaica*, *Hygrophorus gliocyclus*, *L. deliciosus*, *Marasmiellus candidus*, *Psathyrella candolleana*, *and R. sanguinea*.

Next month might bring the introduction of sort of parallel column, written by another member, that will publish all the collections lists from group forays, organized walks, etc. That will help make The Foragers' Report fit onto one page--the apparent perfect size for it.

Keep those calls coming in (707.795.7353) and the emails too (mycochef@aol.com) so that this column will contain more than just what is already available for computered folks at mssf@yahoogroups.com. See you next month!

Divisadero Fell - TO G.G. PARK PANHANDLE Oak Haight Masonic BUENA Ashbury VISTA Frederick 14th St. 14th St. Roosevelt ORONA IEIGHTS PARK Castio Cole Clayton RANDALL MUSEUM 17th St. 17th St. Morkel 18th Street

Directions to the Randall Museum

From the East: West on Market St.; at Castro, veer to the right up 17th to Roosevelt Way; turn right and follow Roosevelt (keep bearing right) about 5 blocks to Museum Way and the Randall (signs are posted along the way).

From the North: South on Divisadero to 14th; right on 14th to Roosevelt (1st possible left) and follow Roosevelt about three blocks to Museum Way.

From the West: Portola, continuing down as it becomes Market; look for sign pointing to Randall on left (Clayton St.) and follow signs to Randall.



Shradel

The Culinary Corner

By Al Carvajal

The Culinary Group of the San Francisco Mycological Society is a group of people who enjoy cooking and eating mushrooms. Like the rest of the society, our season extends from September to May. During the season, we meet once a month to share cooking ideas and to partake in the monthly dinner. This season, the meetings will be held on the first Tuesday of the month, except for January when it will be held on the 2nd Tuesday. Membership to the Culinary Group is open to all members of the MSSF, but the Culinary Group assesses additional membership dues. You must be a member of the MSSF to join the Culinary Group.

In September and January, we have potluck dinners, with the other months being planned dinners served buffet style. Each culinary group member is expected to be part of preparing team of a dinner at least once during the season. At our first meeting, there will be a sign-up sheet for members to team up and plan menus. Mushrooms should always play a role on the menu. Those not participating in the preparation of the main dinner are expected to bring an appetizer, preferably a MUSHROOM appetizer, or, even better, a WILD MUSHROOM appetizer. All attendees are expected to bring their own china, table settings and beverage.

At the May dinner meeting, the Chair, the Co-Chair and the Treasurer are elected by the culinary group members. This is an important meeting to attend since failure to show up may get you voted into office, as our departing Chair can attest. This year, the Chair is Alvaro Carvajal (alvaro.carvajal@att.net) and the Co-Chair is David Campbell (yogidog@earthlink.net), both of whom actually showed up at the May meeting. Sherry Carvajal is the treasurer for both the Culinary Group and the MSSF.

Space at the dinner meetings will be limited to 60 people. Reservations are required. Zoe Caldwell kindly volunteered for the job of Reservations Coordinator. Each culinary member is limited to two guests. If you have special circumstances, (such as out of town guests, etc.), we will try to accommodate you; however, you must clear the extra guests with the Reservations Coordinator.

The Hall of Flowers at the Golden Gate Park, our regular meeting place, is not available this season because long overdue repairs are taking place. We will be meeting at the Slavonic Cultural Center, located at 60 Onondaga Avenue in San Francisco. This is a large and modern facility with easy access to the freeway. The new facility will cost us more than twice as much as the Hall of Flowers, so we are increasing the regular membership dues to \$15.00, and senior memberships to \$6.00. The dinners themselves remain at \$12.00 per person. Money spent on appetizers will not be reimbursed unless prior arrangements have been made with the Culinary Chair or Co-Chair. The September potluck is free to all members of the MSSF. The January potluck will remain free to members of the Culinary Group; guests must pay \$5.00.



www.mssf.org

Treasurer's Report, 2000-2001 SeasonINCOME EXPENSESNETBALANCEChecking account balance as of July 1, 20002,222.34

	INCOME			DILLING			
Checking account balance	2,222.34						
Outstanding from Previous Year 238.82			(238.82)	1,983.52			
Dues/Administrative Exp.	422.00	255.90	166.10	2,149.62			
September Potluck	12.00	121.62	(109.62)	2,040.00			
October Dinner	348.00	470.10	(122.10)	1,917.90			
November Dinner	792.00	387.61	404.39	2,322.29			
January Potluck		143.87	(143.87)	2,178.42			
February Dinner	624.00	347.40	276.60	2,455.02			
March Dinner	830.00	818.38	11.62	2,466.64			
April Dinner	552.00	546.99	5.01	2,471.65			
May Dinner	657.00	569.34	87.66	2,559.31			
Checking account balance as of June 30, 2001							
TOTALS	4,237.00	3,900.03	336.97				
The administrative expenses break down as follows:							
Refunds of duplicated membership dues			17.00				
Portion of MSSF dues sent in with culinary dues			25.00				
Expenses related to Checking Account			34.75				
Postage and mailing of monthly Flyer			179.15				
C C							

Culinary Group of the MSSF

If you are interested in any additional detail, please contact Sherry Carvajal at (415) 695-0466 or e-mail her at sherry.carvajal@att.net.

What is the Point of a Species List?

I enjoy seeing species lists in the Mycena News because sometimes they can turn a difficult fill-in-the-blank question into an easier multiple choice question. If you are trying to identify a fungus, it often helps to consult a list compiled in a similar area, at the same time of year. The list is never decisive, but it gives you some good ideas about what to check.

I have volunteered to compile and lightly edit species lists for future issues of the Mycena News. If you have a list, please send it to me, along with the crucial facts: where, when, habitat, and conditions. If you have a few comments about an interesting find, by all means include them also. I will try to present these in a readable and efficient way.

I am very far from an expert. The deal is, <u>you</u> identify the mushrooms, and I will list them! And if you have something that is not mentioned in Arora, or whose name has changed, please give me a reference if you can, and I'll try to double check the spelling.

Thanks in advance to all you dauntless identifiers!

SOMA Events Schedule

The Wild About Mushrooms Co. of Sonoma County has just released the new Fall/Winter 2001 Events Schedule, listing classes, forays, camps, food & wine events, and more. If interested, you may obtain a free copy of the schedule by calling 707-887-1888, or e-mailing to: charmoon@sonic.net. You may also view the schedule (and much more) at the new Wild About Mushrooms Co. website at: www.wildaboutmushrooms.net. Happy hunting!

Strybing Display A Big Hit with the Public

Debbie Viess

On August 4th, in the heart of our long dry summer, the MSSF created a mushroom display that was both eye-catching and educational. The occasion was the 2nd Annual Garden Fair, put on by the Strybing Arboretum at Golden Gate Park. For sheer visual appeal, the flower people had nothing on us! Our tables were elegantly dressed with a bolt of David Bartolotta's beautiful black mushroom fabric. David Arora's newest mushroom posters (of both edible and poisonous mushrooms) formed a striking backdrop to a naturalistic display of fresh wild fungi, including red russulas, purple blewits, *Lactarius deliciousus* and puffballs.

Beautifully framed posters of former Fungus Fairs were attractively placed throughout the exhibit. Len Coleman contributed popular educational materials (we ran out of the Mushroom ID brochure!). There was an enormous basket of *Agaricus augustus* strategically placed at the entrance to catch people's eyes, as well as a fine and frightful basket of *Amanita phalloides*, complete with a skull and crossbones ribbon. Even our basket stinkhorn egg cooperated by hatching the day of the Fair, and was soon animated with flies. A number of people remarked on having seen this fungus in the Arboretum itself; I can count myself amongst them.

Sherry Carvajal created an attractive platter of edible mushrooms purchased at Monterey Market in Berkeley. Against a white background were showcased morels (both blond and gray), tiny chanterelles, a lobster mushroom and various cultivated *Agaricus*. These delectable fungi were delicately framed with culinary herbs. There was a display basket of 5 species of *Agaricus*, both edible (I ate arvensis for the very first time that morning) and poisonous. Two prettily potted cultivars were provided by Ken Litchfield. Cookbooks and more scholarly mushroom books covered part of one table, an invitation to browse. A computer (thanks to the Randall Museum) with a fresh Mykoweb CD, courtesy of Web Master Mike Wood, was also available for use.

We attracted much attention and positive feedback from the Fairgoing public; grimacing fungiphobes were few and far between. Al and Sherry Carvajal, Norm Andresen, Mark Lockaby and myself chatted with folks on a variety of mushroom matters. I spoke with several former MSSF members who were interested in rejoining the society, and I passed out membership brochures to many likely new candidates.

All in all, it was big fungal fun for both the volunteers and the many attendees of the Fair. Sherry Carvajal coordinated an outstanding effort. The Strybing would definitely like us to be back with another display next year, perhaps with a cooking component. Extra special thanks to Fred Stevens, who took me to his summertime mushroom spots, and allowed the MSSF to provide a bounty of beautiful wild fungi with which to tantalize the masses. Ain't nothin' like the real thing, baby...

MSSF Scholarship

The Mycological Society of San Francisco offers scholarships to full time graduate students majoring in mycology, attending colleges and universities in northern California. These scholarships vary in amount from \$500 to \$1,500 and are given in the name of Esther Colton Whited and Dr. Harry Thiers All research proposals are welcomed, but special consideration is given to taxonomic studies of the higher fungi of the Pacific States. Requirements include two letters of recommendation, one from a professional mycologist, a brief statement describing the research project, and agreement to present the results at a general membership meeting of the MSSF. Send inquiries/materials to Robert Mackler at 157 Mesa Ct. Hercules CA 94547. Deadline for applications is December 10,2001.

Cultivation Corner

By Ken Litchfield

The mushroom garden at the Randall has been fruiting all summer. We've had a few red whiffle balls, dismembered brown ears, scattered rose, gold, and brown oysters, numerous shaggy parasols, and multitudes of garden giants. There have been as many as 30 of the King Stropharia up at one time, a one pounder a while back, and eight are up right now, two of them 7 inchers.

For huitlacoche this season, besides a number of volunteer yellow corn plants, we have three special patches of corn: Giant, Parched, and Baby. The giant is over 7 feet tall, now tasseling and earing and is supposed to have as many as 4 or more ears per plant. The parched corn is a special variety of regular yellow corn good for corn popping as opposed to popping corn. The baby corn is a Chinese strain that has multiple stalks per plant with about 45 ears per plant. Picked young it is the baby corn of stir fry and pickling and should be particularly interesting with huitlacoche. Allowed to mature it makes a mini-popcorn similar to strawberry popcorn. The parched and baby are about 3 feet tall now and too early for tasseling.

Last year we spread a lot of huitlacoche spores around the garden and on the plants but marauding raccoons cut the experiment short. Maybe last year's spores will infect this year's corn. If anyone has any ripe black-spored smut we could scatter it in the garden. If you have fresh white fungus and can spare some from eating we'll try inoculating the growing corn and see if the mycelium will infect the living corn plant and ears. If you want to try this in your own corn patch, whip the black smut in water in a blender with or without a dollop of molasses for nutrients and stickiness, dilute the liquid in a gallon or two of water in a watering can, and sprinkle it over the corn and the surrounding ground and mulch areas. The black spores grow into a rust that produces another kind of spore that will infect the corn plant. Whether this can happen quickly in one season or happens over a longer term is unclear.

If you want to experiment with trying to get this season's corn to produce fungus on the ears, whip the fresh young white huitlacoche fungus in the blender with a dollop of molasses and dilute with more water in a watering can. Sprinkle the mycelial mix on the plants and ears. If you make some small abrasions or injuries on the plants and ears it will provide entry points for the mycelial cells. This can be done by throwing handfuls of sand at the stems of the plants before sprinkling. Peeling open young ears a little is also a good way to expose them to the fungus mix.

I've asked in the farmers markets but no one has any huitlacoche, yet, even under the table. Most people with vegetable gardens in San Francisco don't grow corn because they think it's too cold and foggy, so huitlacoche isn't likely to jump from agricultural areas to the museum garden or vice versa.

Due to activities at the Randall, especially the upcoming renovation, our ability to present cultivation classes has been somewhat crimped so we are working with several locations to expand our resources. We have been making satellite mushroom gardens in various places and now have several in peoples' yards and one at SLUG's Garden for the Environment at 7th and Lawton. Be sure to check your Mycena News for announcements about cultivation classes and other special activities that we are currently setting up. If all goes as planned very soon we should have a greatly expanded program for mushroom cultivation in a number of new venues.

And if you have cultivation questions be sure to send them in to me and I'll answer them in this space.

Ken Litchfield, 199 Museum Way, SF CA 94114 klitchfield@randall.mus.ca.us, 415-863-7618,

Getting An Early Start

By Fred Stevens

Here's a tip. You can find mushrooms in September, and not just at Safeway or in Oregon. Less than a day's drive from the Bay Area lies the Sierra, where mushrooms fruit well in advance of their coastal cousins. The secret to finding these mushrooms is knowing where to look. Most occur along the edges of streams or in seepage areas, but summer thunderstorms are also important, especially in the southern and eastern part of the range.

Fruitings usually peak in September, coincidentally one of the best times to be in the Sierra. The weather is usually mild, mosquitos are on the wane, and campgrounds are largely vacant. The only thing marring this picture is the opening of deer season in parts of California. Chances are, however, you won't become a hunter's trophy as long as you wear bright clothing.

If you've never collected in the Sierra in the fall, Echo Summit on Highway 50 is a good starting point. Porcini seekers have been coming here for years, looking along seasonal drainages and around moist meadows. Two Septembers ago I found 25 species of mushrooms near the summit in only an hour and a half of collecting. *Boletus edulis* admittedly wasn't abundant, but there were other members of the bolete group: *Boletus zelleri, Boletus calopus* (a porcini look-alike), *Suillus brevipes, S. umbonatus*, and the vinaceousscaled *Suillus tomentosus*. Other fungi included bright yellow clusters of *Pholiota aurivella* on Red Fir logs, and varnished, marooncolored conks of *Ganoderma oregonense. Tricholoma saponaceum* was plentiful as were several *Russula species*, and *Hypholoma fasiculare*, the Sulphur Tuft, on downed conifer wood.

Further south from Echo Summit is Tuolumne Meadows in Yosemite National Park. It's another traditional porcini location, but since collecting is prohibited, I spend just enough time here to get a sense of what might be fruiting elsewhere. My two favorite collecting areas are Virginia Lakes, south of Bridgeport and Rock Creek Canyon, south of the town of Mammoth Lakes. At Virginia Lakes you are at an elevation of about 9,000 feet in a Lodgepole pine forest. You can pitch a tent at a nearby campground, or if available, stay in cabins at the Virginia Lake resort. The latter usually stays open until the end of September. The best collecting is at the upper end of Little Virginia Lake where the inlet stream has built a delta, now overgrown with lodgepoles and willow. The common boletes are Suillus species, but Boletus edulis can also be found along with lactarii, russulas, hygrophori, inocybes and cortinarius species. Many of these will be "mushrumps," or partially hidden under grasses and corn lilies, so a bring a walking stick for probing.

Rock Creek Lake, at 9,600 feet, is one of the highest points in the Sierra that you can drive to. Flowing out of the lake is a picturesque trout stream lined with Lodgepole pine in its upper reaches, Jeffrey pine at middle elevations, and Pinyon pine at its lowest point near highway 395. The mushrooms follow a familiar pattern, mostly along the shaded stream banks. Expect to see boletes, russulas, lactarii, hygrophori, etc. Very little collecting occurs in this part of the Sierra so it is not unusual to find specimens of *Boletus edulis* standing like sentinels in heavily used campgrounds. Mushrooms, of course, are just one aspect of a fall Sierra outing. The fishing is usually good, and you'll want to bring a camera to capture the aspen groves that turn brilliant yellow to pinkish-orange in October. If you're into exploring historical sites, drop by Bode State Park, an old mining town. Fall is brief in the Sierra so don't wait too long to plan a trip...like the Donner party.

The Libraray

John Lennie, Librarian

You may not realize it but the Society has a library with almost 600 items. There are books, articles, magazines, tapes (audio and video) and CDs - though books certainly form the greatest part of the collection. The library is a resource to be used and almost all its items may be borrowed. It is kept at the Randall Museum where it is accessible at the monthly meetings, from 7:30 until the start of the meeting and for up to 15 minutes afterwards, time permitting. When you come to a meeting, first look for the librarian's table in the lobby; there you can browse in the catalog and learn how to find the library itself, which is housed in the basement.

There is something for everyone, whatever your interest and whatever your experience. To orient you, there are catalogs in the following categories; culinary interest (41), cultivation interest (46), general interest (40), taxonomic interest (89), professional mycology (64), student texts (10), foreign titles (36) and guide books (136). The numbers tell you how many books fall in each category but there are over 70 others that don't fit comfortably in any of them. New catalogs have been prepared and the September meeting will be the first opportunity to see them. The last ones were made 8 years ago and the new ones include almost 100 recent acquisitions.

The catalogs are important because the collection is not arranged by category. New books are added to the last shelf and labeled by number, e.g. at the moment the latest book is labeled 565 so the next will be 566. (However, for shelving convenience, large format books, tapes, CDs and magazines do form separate categories.) This system makes it easy to find the latest additions but means that related books, even multiple copies of the same book, are seldom adjacent. The catalogs provide the missing organization and the complete collection is listed three times, by title, by author and by shelf number. The title catalog is especially useful when you don't know exactly what you want. Sometimes titles are augmented with words or phrases in square brackets to make them more meaningful; for example, field guides are fleshed out with an explanation of the area they cover. A set of keywords is carefully chosen and each occurrence of a keyword in a title gives rise to a separate catalog entry by rotating the title to bring the keyword to the front. Thus, in "Some Common Auckland [New Zealand] Fungi" "New Zealand" augments the title and is also used as a keyword to generate a second version of the title, viz "[New Zealand] Fungi / Some Common Auckland". When these titles are sorted alphabetically, this brings together all books concerned with New Zealand fungi (yes, there is one other one.) Likewise, it brings together the seven books relating to Michigan fungi and all titles sharing a keyword.

To borrow an item you need to be a current member and agree to accept the terms of the lending policy. Can we sign you up? Up to 4 items may be borrowed at one time and can be kept for 2 months.

In coming months the Mycena News will carry a series of surveys of what the library has to offer using some of the categories listed above in the second paragraph. Are you happy to learn more about the library? Do you think this puts too much emphasis on it? Would you like to use the library but are unable to do so? Please send comments on these and other library issues to me at gerrae@home.com or via the roster.

In order to give the library has to receive! The library does have a budget to acquire new books but it always welcomes donations and provides tax-deductible valuations.

Mycological Society of San Francisco c/o The Randall Museum 199 Museum Way San Francisco, CA 94114



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MSSF CALENDAR, SEPTEMBER 2001

Tuesday, September 4: Culinary Group's Potluck Dinner: At the Slavonic Cultural Center, located at 60 Onondaga Avenue in San Francisco. For information or reservations, please contact Zoe Caldwell at (510) 569-1554.

Tuesday, September 18: MSSF General Meeting, Randall Museum, doors open at 7 p.m., lecture starts at 8 p.m. Speaker Admir J. Giachini. See page 1 for details.

Thursday September 27: Planning Meeting for 2001 Mushroom Fair. To be held at the Oakland Museum, see page 3 for details.

Schedule Available: Wild About Mushrooms, Fall/Winter 2001, Events Schedule listing classes, forays, camps, food & wine events. If interested, you may obtain a free copy of the schedule by calling 707-887-1888, or e-mailing to: charmoon@sonic.net. You may also view the schedule at the new Wild About Mushrooms Co. website at: www.wildaboutmushrooms.net

Tuesday, October 2: Culinary Group's Monthly Dinner: At the Slavonic Cultural Center, located at 60 Onondaga Avenue in San Francisco. For information or reservations, please contact Zoe Caldwell at (510) 569-1554.

Sierra Foray in October: To be arranged, further information will be announced at the September General Meeting.

Saturday-Sunday, October 13-14: Yuba Pass Foray Meet at 9:00 a.m. Saturday at Chapman Creek Campground on hwy 49 near Bassetts. Best way: take hwy 80 to Truckee, take hwy 89 north, turn west on hwy 49, follow to campground. Bring car camping gear, usually nice weather but be prepared for possible cold nights. Foray Leader: Norm Andresen, (510) 533-6541.

Sunday, October 21: Beginners Mushroom Walk, 10:00 a.m., at Lands End, San Francisco. Meet at the parking lot just up the hill from the Cliff House on Point Lobos Ave. at the west end of Geary Blvd. Foray Leader: Mark Lockaby, (510) 412-9964 or pozer900ss@aol.com.

Tuesday, November 6, Culinary Group's Monthly Dinner: At the Slavonic Cultural Center, located at 60 Onondaga Avenue in San Francisco. For

information or reservations, please contact Zoe Caldwell at (510) 569-1554.

Saturday, November 10: Salt Point Foray, Meet at Woodside Campground at 10 a.m. This is "just show up" event. Participants are responsible for own campsite/lodging. Note that Woodside's campsites are on "first come, first served" basis. Potluck feast Saturday night on edibles picked. Foray Leaders: David and Jeanne Campbell, (415) 457-7662.

Thursday, November 15: Lepiota Workshop, 7:30-9:30, Randall Museum, Else C. Vellinga has specialized in this group of mushrooms and has published extensively on them. Registration is not necessary; just mark your calendar now and turn up on 15 November for this free MSSF event!

Friday-Sunday, November 16-18: Mendocino Woodlands Foray, This is an advance notice, additional information to be announced at General Meeting and next newsletter. Cost is yet to be determined (estimated to be about \$100 per person). No reservations until cost is determined. Foray Leader: Tom Sasaki, (415) 776-0791.

Saturday-Sunday, December 8-9: Fungus Fair 2001 at Oakland Museum See newsletter for details.

December 10: deadline for application for MSSF Scholarship, See newsletter for details.

Saturday-Monday, January 19-21: SOMA Winter Mushroom Camp. Annual event hosted by the Sonoma County Mycological Association, held on Martin Luther King birthday weekend. Mushroom forays, classes, work-shops, specimen tables, slideshow, and great mushroom feasting. Cost not yet established, due to possibly moving the Camp to a new location. Until final arrangements are known, reserve your space by contacting Linda Morris, the SOMA Camp registrar, at 707-773-1011, or lamorr@pacbell.net

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