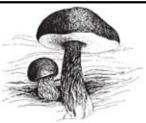
Mycena News



The Mycological Society of San Francisco May 2009, vol. 60:05

Speaker for the May 19 MSSF Meeting



David Campbell

Fungimental Mycophagy: A sophisticated discussion of the basics of eating wild mushrooms

David Campbell has been collecting, studying, eating, teaching and writing about wild mushrooms for 40 years. He has served on the council of the Mycological Society of San Francisco (MSSF) for the last 10 years, having just finished 2 years as 'immediate past president'. For many years, David has

Continued on page 7

Inside This Issue...

MycoDigest1
Speaker for May 19, 20091
President's Post2
Announcements2-3
What's Bookin3
Land's End Advocacy Update4
Where's The Fire?4
Cultivation Corner6
MSSF Summer Calendar8

MycoDigest: Ectomycorrhizal Invasions

Kabir Peay

In the age of globalization, things get moved around. Species are no exception. For fungi, however, patterns of global of transport and establishment are sketchily documented, with the possible exception of a few well-known pathogens. Lack of this basic information makes understanding (and ameliorating) the impact of these newcomers on native ecosystems difficult. For this reason, two recently published papers on ectomycorrhizal introductions represent an important scientific step forward. In the first paper, Else Vellinga and colleagues (2009) survey a large body of literature to assess our current state of knowledge on global ectomycorrhizal introductions. In the second, Anne Pringle and colleagues

(2009) use genetic techniques to document the time and tempo of the *Amanita phalloides* invasion in western North America.

Because ectomycorrhizal fungi are obligate biotrophs, the vast majority of known ectomycorrhizal introductions associated with establishment of exotic timber plantations. Thus, 84% of the documented introductions found Vellinga and colleagues (2009) are associated with establishment of plantations



Amanita phalloides
Photo courtesy of Else Vellinga

of Pine (*Pinaceae* = 57%) or Eucalpytus (*Myrtaceae* = 27%), many of these in the southern hemisphere (e.g. New Zealand). Our own Monterey pine (*Pinus radiata*), being one of the most extensively planted culprits in this process. For this reason, the most commonly introduced genera of fungi tend to be pine associates, the top three being *Suillus*, *Amanita*, and *Rhizopogon*. Other commonly introduced ectomycorrhizal fungi include *Scleroderma*, *Laccaria*, *Lactarius* and *Hydnagium*. While fungal spores can travel long-distances, it is

Continued on page 7

MycoDigest is a section of *Mycena News* dedicated to the scientific review of mycological information.

PRESIDENT'S POST

Well, my two-year term at your service as your president is nearly over. This is my last President's Post.

I want to thank everyone on the council for being such a great team. I could actually cut and paste most of my May 2008 PP here, but I won't to avoid being redundant or repeating myself. Suffice it to say all of those folks continue to be the backbone of a quality organization. There is no way that we could do all the terrific things we do without them.

I would, however, like to pick out a few people who have been particularly helpful to me during my tenure as prez. David Campbell showed me the ropes. His advice and solid support made the transition seamless and really helped me maintain sanity throughout these past couple of years. Dan Long has been nominated to be our next president and he has already stepped up to the plate. He has been involved with everything from the Mendocino Foray to San Jose Camp and everything in between. He is shaping up to be an excellent Commander in Chief. Jeffrey Fisher and, for most of the time, Cordelia Chadwick, Mycena News editors extraordinaire, oversaw the publishing of one of the best newsletters in the country, in my opinion. This edition is Jeffrey's final masterpiece, passing the flame to new editors. We all wish him the best and appreciate all he's done for us. Pat George and Ken Litchfield, our Culination and Cultivary Committee chairs (I'm always getting those mixed up) seem to step up to help out above and beyond on a regular basis. For example, Pat organized Cal Day for us this year and Ken did all the background work for the Know Your Mushrooms documentary shown at the Roxie last month as well as being our liaison for the Far West Fungi tours. One of the biggest jobs in the Society is Treasurer and both Lisa Bacon and Henry Shaw have been right on top of things. A load off my mind. I already did an homage to Bill Freedman in a previous PP but he belongs on this list as well. His support and advice are invaluable.

It has been a challenging couple of years, but it has been a rewarding couple of years, also. Thanks to the hard work of the afore-mentioned folks, the rest of the council, and all of you who have volunteered for the Society we have an organization to be proud of. Thank you all.

See you at the summer picnic! - J.R. Blair

ANNOUNCEMENTS

"Know Your Mushrooms" Movie Premiere

The Mycological Society of San Francisco is pleased to sponsor the San Francisco Bay Area and US theatrical premiere of the film documentary "Know Your Mushrooms" at the Roxie Theater in San Francisco. Opening night will be Friday, May 8th and it will run for at least one week.

Showings will be:

Friday May 8th - 7:00 & 8:40 pm

Saturday & Sunday May 9 & 10 - 3:45, 5:20, 7:00, & 8:40 pm Mon - Thurs May 11-14 - 7:00 & 8:40 pm.

Roxie Theater - 3117 16th St between Valencia and Guerrero, one block west of 16th St BART. Muni lines are 22, 53, 33, 14, & 49. Public Parking is available on Hoff St. off 16th between Valencia and Mission.

We are recruiting MSSF member volunteers to staff the MSSF promotions table, two folks per showing for free viewing of the movie, at any of those times (but especially Friday, Saturday, and Sunday) to talk to the public about mushrooms and promote the society and upcoming events and sell merchandise.

The official website for the movie is: http://www.sphinxproductions.com/films/mushrooms

For further info and to sign up to volunteer contact: Ken Litchfield - litchfield [dot] ken [at] gmail [dot] com

NEW MYCENA NEWS EDITOR STARTING IN THE FALL

I would like to introduce David Lubertozzi, the incoming editor of *Mycena News* for the 2009-2010 season. "Gastronomy before taxonomy," is how he recently characterized his relationship to mushrooms. In edition to his culinary exploits, David is an experienced journal editor and biochemical engineer.

Thank you to all those who have contributed to *Mycena News* during the last two and a half years. Without you there would not be a newsletter. Special thanks to Else Vellinga, David Campbell, J.R. Blair, and Cordelia Chadwick for their ongoing contribitions and support.

Happy Hunting! - Jeffrey Fisher, Editor

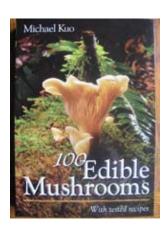
OTHER EVENTS

Colorado Porcini Foray Tour. Privately organized event. Food / lodging / guided high mountain forays. August 22-26. Contact David Campbell for more info: dc@mycoventures.com 415-457-7662

Wild About Mushrooms annual Spring Sierra Forays.

Morel/Porcini foray Memorial Day weekend (May 23-25) Porcini/ Morel foray Sat-Sun June 6/7. Contact Charmoon Richardson for details and cost. 707-829-2063 charmoon@sonic.net

What's Bookin?



For the last issue of the Mycena News for 2009 I am presenting another great book: "100 Edible Mushrooms", by Michael Kuo. It is published by the University of Michigan Press.

With a dash of humor and a dollop of science, Michael Kuo selects the top 100 mushrooms best suited for cooking. Like Kuo's very popular book *Morels*, *100 Edible Mushrooms* is written in the author's inimitable, engaging, and appealing style, taking the reader on the hunt through forest and kitchen in search of mycological pleasures and culinary delights.

Kuo describes in detail how to identify each species, where and when to find them, and how to cook them in creative and delicious recipes. The mushrooms presented in the book are the most often eaten varieties. All of the mushrooms have at least one full-color illustration and some several more to aid in identifying and distinguishing look-alike and non-edible species. This book contains over two hundred color photographs.

Michael Kuo, an Illinois English teacher, developed **MushroomExpert.com**, a popular online resource for mushroom identification and morel hunting.

This book will be available for sale for \$5.00 at the next MSSF general meeting. Don't forget to mention you are a MSSF member in good standing and receive your 10% discount.

-Curt Haney MSSF Book Chairperson

CORRECTIONS TO THE APRIL 2009 MYCENA NEWS

The author of "MycoDigest: Nuclei—The Core Values in a Mushroom's Life," was Else Vellinga. My apologies to Else for omitting this credit.

The last line of the article, "An Adventure in Novice Mushroom Hunting," was also omitted. That line should read, "Once the rice is finished, add the seasonings: cheese, cream, butter, herbs, salt and pepper. Fold the sautéed mushrooms in last so as to keep their beautiful shape intact. Serve the dish hot." The complete article and recipe can be seen online at www.mssf.org -Eds.

Deadline for the September 2009 issue of *Mycena News* is August 15.

Please send your articles, calendar items, and other information to: mycenanews@mssf.org



May 2009, vol. 60:05 Contributors:

Lisa Bacon, J.R. Blair, David Campbell, Monique Carment, Alvaro Carvajal, Jeffrey Fisher, Pat George, Curt Haney, Ken Litchfield, Dave Lubertozzi, Eric Multhaup, Kabir Peay, Brian Perry and Else Vellinga.

Editing and Layout:

Jeffrey Fisher and Dave Lubertozzi

Mycena News is the member's newsletter of the Mycological Society of San Francisco, and is published monthly from September through May.

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

To subscribe, renew, or make address changes, please contact Alvaro Carvajal: alvaro.carvajal@sbcglobal.net or (415) 695-0466.

Past issues of *Mycena News* can be read on-line at www.mssf.org.

MSSF Officers 2008-2009

President: J.R. Blair (650) 728-9405 jrblair@mssf.org

Vice President: Dan Long (925) 945-6477 danlong@astound.net

Secretary: Phil Brown (510) 526-4325 towltek2000@msn.com

Treasurer: Henry Shaw 925-551-8243 hfshaw@yahoo.com

Where's The Fire? - Fire Information Resources

Dave Lubertozzi

ne of the few habitats the wily morel more-or-less reliably fruits in each year is forest that was burned the previous season. There were a lot of fires in northern California in 2008, and luckily various public agencies utilize our tax dollars not only to fight fires, but to collect and share fire data. On the facing page is a section of a map of the all the fires recorded by the US Forest Service, assembled from NASA satellite imagery data (MODIS - Moderate Resolution Imaging Spectroradiometer; http://modis.gsfc.nasa.gov for more info).

The maps, updated thrice daily during fire season for various regions, are available online at http://activefiremaps.fs.fed.us (the full version of facing map is also on the MSSF website in the files section). While this gives an overview of the whole state, it's unfortunately not very high-resolution; but there are other online resources as well; www.inciweb.org provides more detailed maps and information for most of the larger fires.

Several other state, local and regional agencies also have good data, for example YubaNet.com, Wildlandfire.com, the Western Institute for Study of the Environment (WISE) at http://westinstenv.org, the California Department of Forestry and Fire Protection (Cal Fire) at http://www.fire.ca.gov and the National Interagency Coordination Center (NICC) at http://www.nifc.gov/nicc.

A recent thread on the MSSF mailing list discussed the concept of "how burned is too burned?" for good morel hunting. Norm Andresen said he has found morels in all degrees of burn, from toast to ash, but said that some remaining cover should provide a moisture retention layer and hopefully better fruiting conditions. David Arora suggested that "You can take a hint

from commercial pickers - when they are scouting burns by plane or helicopter and paying dearly for every minute they focus their attention almost exclusively on the 'singe zones' as described by Mary", a previous poster who said her best luck was in areas where there is still some tree canopy and a brown needle layer on the ground. Whether this can be distinguished from space or not I leave to you and Google Earth.

Still, the best source of information may be to call or visit a ranger station in the particular National Forest you want to visit, since they can not only tell you about wildfire zones, but perhaps also where logging and controlled burns took place, and perhaps more importantly the condition of the roads in the area when you're planning your visit. Find the local ranger stations by starting at http://www.fs.fed.us/r5/forests.shtml.

Note that mushrooming regulations vary widely in the different National Forest jurisdictions, so you should also inquire about the rules. Many of them require permits, some distinguishing between personal and commercial use, some not; some available for free, some for a nominal or not-so-nominal fee; some with limits by weight or volume; most with a hefty fine for violators! Some areas may be subject to temporary or seasonal closures due to environmental concerns.

Besides the NFS rangers, you can also try Cal Fire, with offices all over the state, and of course in the various State Parks you'll want to inquire about their regulations also; another patchwork quilt, unfortunately most of which seem to be total prohibition (see http://www.parks.ca.gov to find your local park office).

Let's use this information to plan trips to new places!

Land's End and Beyond - Advocacy Report by Eric Multhaup

The GGNRA closed mushroom picking at Land's End in July, 2008, as many of you know from the list communications over the past several months.

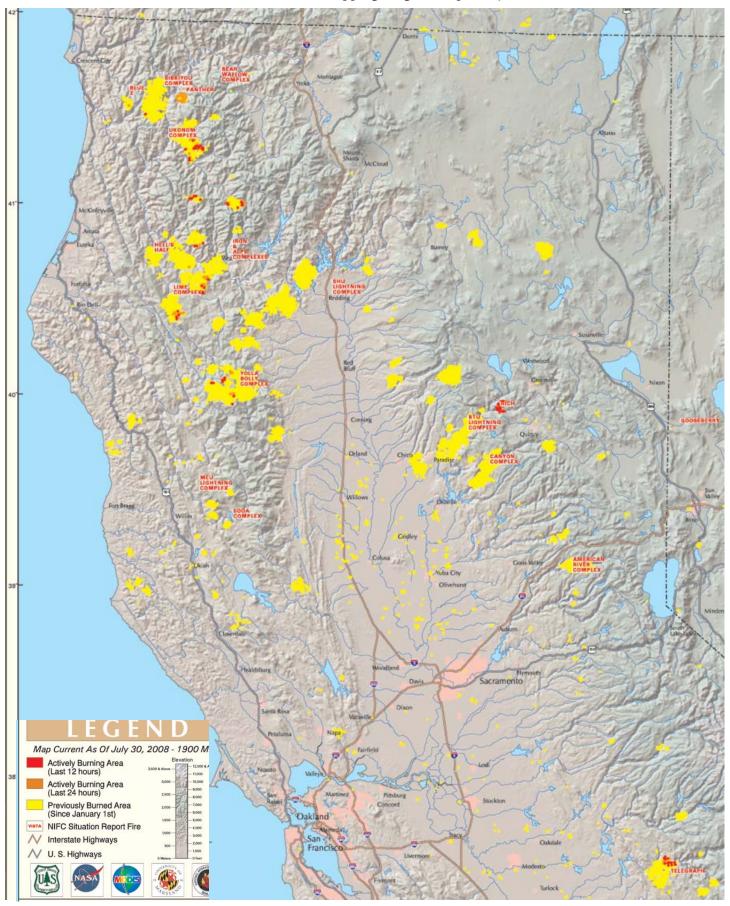
We are working to turn this around for Land's End and with an eye toward opening other public lands for picking. For many years, Land's End had been the only spot in the GGNRA open to picking. In 2006, the National Park Service published a new set of Management Policies that precludes harvesting of any park resource (animal, mineral, vegetable, or other) unless and until the local park authorities have conducted a monitoring study and concluded that a particular level of harvesting would not adversely impact either the harvested resource or any other park resource that is part of the harvested resource food chain. In short, this appeared to be a Great Leap Forward on the part of the NPS from no-information-based regulation to science-and-ecology-based regulation. However, the NPS provided no resources for the local parks to conduct the monitoring studies. Hence, the Land's End ban.

When we first inquired of the GGNRA whether they were

conducting a monitoring study and when we could expect Land's End to be re-opened, we received a communication stating that the GGNRA had neither the expertise nor the resources to conduct such a study, and that Land's End would be closed to picking for the indefinite future. We replied that MSSF had ample expertise and volunteer resources, and offered our assistance. This overture elicited an invitation to submit a research proposal to conduct the monitoring, accompanied by an offer to work with us to actually make it happen. At the April 14 meeting, the Executive Committee agreed to proceed with a proposal. This will likely result in a need for numerous volunteers to participate in the project next fall, taking photographs and identifying mushrooms over the course of the fruiting season. The potential pay-offs are (1) that Land's End gets re-opened in the near term; and (2) that the MSSF establishes itself as a reliable monitor of park resources with a GGNRA stamp of approval, which we can take to the administrators of state and county parks that are currently closed to all picking, and propose to conduct a similar monitoring study that would enable them to make ecology-based decisions about mushroom picking.

Northern California Fires in 2008

USFS MODIS Active Fire Mapping Program - 3pm July 31st, 2008



Cultivation Corner - Collecting Morels for MSSF Cultivation Experiments

Ken Litchfield

The Cultivation Committee of the Mycological Society of San Francisco is sponsoring some morel cultivation experiments that you can participate in. Whether you are going to San Jose Camp the first weekend of May, or one of the other MSSF sponsored morel forays coming up, there are some things you can do to enhance your collecting experience for both culinary and cultivation purposes with a few simple preparations.

Let's just assume that the weather is right and this spring at least some of the many fire sites from last summer will be lucrative for mass picking. Though it isn't the usual occurrence, occasionally you will encounter one of those sites that will have you and your collecting colleagues giggling on the ground in awe of the abundance of bumpy Gumby Christmas trees carpeting the charred forest floor as far as the eye can see. You and your cohorts will be taunting each other in mock possessiveness with the mushroom miner's motto - "Mine, Mine, Mine!"

If you aren't accustomed to recognizing those little cinder mimics, it will take only a moment or two to get your "morel eyes" onto all that abundance. Put on your "sea" legs, squat a little, sway back and forth laterally, and you will be able to discern the multitudes of morels hovering in camouflage against the burned background. Once you get the hang of your "see" legs, you can do it more subtle, like an owl parallaxing for prey, Egyptian head dance style.

One characteristic of a good picking site is a uniform cover of dropped pine or fir needles from the charred trees. This needle mulch prevents splash up of grit and dirt onto the morels. Morels from this kind of terrain deserve their own separate bags to keep them in pristine picking condition.

If you think you're going to find yourself in one of these lucrative situations, you may want to be prepared to pack a lot of morels out of a relatively remote site. That can get strenuous so bring along some added paraphernalia. You'll need at least a dozen pairs of doubled paper grocery bags, two shoulder strap duffle bags, and a couple or more of those cloth strap grocery bags you provide yourself at the grocery store so you don't use theirs, some plastic grocery bags with straps, and a roll of brightly colored florescent tape. All this goes into a backpack with your liquid refreshment bottle and some high energy snacks. No point in carrying much food with you as you will be feasting that evening from all the appetite you worked up that day.

As you pick you'll place your morels to eat into a doubled grocery bag. It is best to clean them as you go as any dirt on any morel will get grit in all the morels. When you pluck up a mo-

rel pull it up with the basal foot or "roots" that include a little mycelium and a clump of soil. Break off the basal part of the stem with the dirt and place that part into a strapped plastic grocery bag for later cultivation projects. To this cultivation bag you can also put in any morel not in condition to eat. The straps of the cultivation bag can be attached to a loop or ring on your backpack strap so it is easy to gain access to drop in the bases yet keep your hands free for picking.

If the eatable part of the morel has splash grit on it then it helps to blow as much off as possible or rattle it around in the palm of your hand against the "cage" of your fingers. Big ones may require rattling in two hands.

As you fill a grocery bag with morels to eat, it can get hefty. It may hold fifteen to twenty pounds of morels but those on the bottom will be getting crushed at that weight. It is better to fill only to one third to one half and then place it into one of the duffle bags for ease of carrying. As you fill the duffle bag with grocery bags you can rearrange them so that the duffle bag can hold four to five grocery bags. The grocery bags are folded over and then turned up on their edge so all the bottoms of the grocery bags face toward one end of the duffle bag. Not as much crushing of the morels occurs this way. When you have one duffle bag full you'll get lopsided from the weight. If you have one duffle bag over each shoulder you'll be more balanced if each contains the same number of grocery bags until they get full with three to five each. In practical picking you'll be putting down grocery bags and duffle bags so you don't have to carry them. Be sure you leave them near or on a landmark you can find again and tie on some of your florescent ribbons.

Once you have filled all available space you'll have a duffle bag over each shoulder with three to five grocery bags in each, a back pack with two to three bags in it and possibly another cloth strapped bag in each hand. Depending upon how you arrange things you could well be carrying fifty to seventy or more pounds of morels this way. That doesn't meant that they are necessarily "your" morels as you might be the "packhorse" for several people that tradeoff the carrying. Some folks not appreciative of nature may object to the quantities you choose to pick from a site like this but you will see little evidence that there are any other animals engaging in spore dispersal besides you and your other human colleagues. And you will make a small dent in the overall multitude.

To do your proper spore dispersal follow up, you'll be sharing your morels that evening in all kinds of dishes in combinations with savory delicacies, cheeses, seafoods, seasonings, stuffing

MycoDigest continued

nearly certain that the vast majority of these introductions are the direct result of human transport of roots and soil and not aerial dispersal. For example, Monterey pine in the southern hemisphere is associated with European species, such as *Suillus luteus*, rather than north American natives like *Suillus pungens*, reflecting the origins of the plantation stock in European nurseries.

In total, Vellinga and colleagues document the introduction of 200 species of ectomycorrhizal fungi. However, this is certainly an underestimate, as many introductions likely go unobserved. As the authors show in their study, the number of introductions in a particular region is strongly correlated with the number of publications from that region. Thus, we know little or nothing about introductions in poorly studied regions. In addition, given the cryptic nature of fungal fruiting habits and our poor knowledge of most mycofloras, proving a species is introduced takes a great deal of work for all but the simplest cases (for example, an ectomycorrhizal species in a country that previously had no ectomycorrhizal plants). Who would notice a European species of *Inocybe* or *Cortinarius* in a California foray? In this respect, the case of *Amanita phalloides* and the research by Anne Pringle and her colleagues is an exemplar.

First, Pringle set the historical record straight by sequencing DNA from herbarium collections attributed as A. phalloides in California going back to 1911. They found that the earliest records were misidentifications of A. ocreata and A. pantherina. The first molecularly verified records of A. phalloides come from the Del Monte Hotel grounds in Monterey (1938) and UC Berkeley campus (1945), both sites with extensive collections of exotic plants. Second, they developed molecular markers to analyze the genetic diversity of A. phalloides fruit bodies collected from Europe, eastern North America, and western North America. Genetic diversity in A. phalloides populations from western North America was much lower than in Europe and appeared to represent a subset of the alleles present in Europe. This is the pattern one might expect if populations in western North America were recently derived from one or a few individuals from Europe - i.e. an introduction. In addition, while most of the genetic markers showed affinity with European populations from mainland France, alleles from Norway and Corsica were also present within single sites in California. This pattern suggests multiple introductions of A. phalloides to California, and also that populations genetically isolated in Europe may be mixing in California.

Vellinga and colleagues point out that most ectomycorrhizal introductions do not lead to invasions - that is the introduced fungi do not associate with native trees or spread within native ecosystems. *A. phalloides* is one of the few cases where a true invasion is known to be happening. Using historical records

of fruit body collections, Pringle and colleagues estimate that A. *phalloides* has spread from its original introduction point through native California forests at a rate of about 10 km per year. A. *phalloides* is a high profile mushroom and if we know anything about it, it is because the price of this invasion can be measured in human lives. However, we still know next to nothing about what the invasion of A. *phalloides* means for local ectomycorrhizal communities, let alone the effects of less obvious ectomycorrhizal invaders. Hopefully these two studies will pave the way for greater exploration in this important topic.

Pringle A, Adams RI, Cross HB, Bruns TD. 2009. The ectomycorrhizal fungus amanita phalloides was introduced and is expanding its range on the west coast of north america. *Molecular Ecology* **18**: 817-833.

Vellinga EC, Wolfe BE, Pringle A. 2009. Global patterns of ectomycorrhizal introductions. *New Phytologist* **181**: 960-973.

Speaker continued

served the San Francisco Poison Control Center for mushroom poisoning incident response in Marin County and the greater Bay Area. With a primary focus on edible and poisonous mushrooms, he has led innumerable fungal forays for MSSF and the Sonoma Mycological Association (SOMA). David was employed as foray leader and event facilitator for several years at author David Arora's annual mycological field seminars. As an expert mycophagist (one who safely eats a wide variety of wild mushrooms) and experienced outdoor group foray leader, David is currently 'Foray Director' for Wild About Mushrooms Company, guiding organized wild mushroom adventures, locally and afar. He recently formed his own company, MycoVentures, Inc., expanding his horizons to include the rest of the planet, for events such as Porcini hunts in the Colorado Rockies and off-the-beaten-path truffle forays in Italy...

Cultivation continued

the morels that stuff the pickers. Later, be sure to pay another visit to the woods to complete the spore dispersal cycle and recycle your nutrients for the forest.

As for those plastic cultivation bags of morel bases and noneatable morels, we'll have a morel cultivation seminar at the San Jose camp and you can be a part of some experiments we're conducting in morel cultivation. We'll see how to use them to spread the morels through special cultivation practices. So come prepared with your paraphernalia and picking practices. Mycological Society of San Francisco c/o The Randall Museum 199 Museum Way San Francisco, CA 94114 First Class Mail U.S. Postage PAID Oakland, CA Permit No. 1451



May 2009, vol. 60:05

MSSF Calendar - May 2009

Monday, May 4, 7pm. - Culinary Group Dinner Hall of Flowers, Golden Gate Park, SF. \$14.

Our last dinner until September. Reservations are required and must made be no later than Friday, May 1. Contact Pat George at (510) 204-9130 or plgeorge33@yahoo.com to make your reservation. Bring your own tableware, beverage, and an appetizer to share. Dinners resume on September 14 (second Monday because of Labor Day). The other fall 2009 dates October 5, and November 27.

Friday, May 8 – Sunday, May 10 - Car CampingNorth Fork campground, off hwy 80 Tahoe National Forest.

Friday, May 8 – Friday, May 15th or longer Documentary Movie San Francisco premiere

The Mycological Society is pleased to sponsor the San Francisco Bay Area premiere of the film documentary "Know Your Mushrooms" at the Roxie Theater in San Francisco. See full details in the annoucement section.

Tue. May 19 - MSSF General Meeting. Randall Museum. 7pm, mushroom identification and refreshments provided by the Hospitality Committee. 8pm, David Campbell will discuss *Fungimental Mycophagy*.

Saturday, May 16 – Sunday, May 17 - Mystery Foray Location to be announced as season progresses. Contact Norm Andresen for info: n.andresen@comcast.net

May 19 – 20 - Morel Car Camping Event. Basset Fire Area. Camping at the Chapman Creek Campground, eight miles east of Sierra City on Highway 49 near Yuba Pass. Saturday potlock dinner and camp fire. On fairly steep slopes with a large elevation range and some tree-covered creeks, this area is a known habitat for morels! Cost is campground charge only. Contact: Norm Andresen (n.andresen@comcast.net).

MSSF Summer Picnic - Sunday July 19, 2009 - 12 noon

Redwood Glen Picnic Area, Joaquin Miller Park, Oakland Join us for a potluck picnic and barbecue. Directions: From CA 24 or 580, exit CA 13 south (exit 5). Follow 13 to the Joaquin/Miller/Lincoln Ave Exit. Drive south on CA 13 about 3 miles, then exit Lincoln/Joaquin Miller Road (exit 2). At the base of the exit ramp, turn left, cross over the highway, then bear right onto Joaquin Miller Road. Take Joaquin Miller up into the hills to the crest and then turn left onto Skyline Blvd. Drive 1.2 miles and look for parked cars and MSSF signs.

Note: Please do not leave anything of value in your car. We have had unfortunate break-ins in years past. See you then & have a great summer!