

# Speaker for February 15 MSSF Meeting



**Carla Sundström Mueller**

## Enchanted Swedish Mushrooms

Our guest lecturer this month is an international expert on mushroom dyes, and a pioneer, along with longtime MSSF members Miriam Rice and Dorothy Beebee, in using natural pigments from fungi to dye fabric and wool.

Originally from Minnesota, Carla moved to San Francisco in 1957 and became a charter member of the Mycological Society of San Francisco. After moving to Sweden, she continued to use her mushroom hunting skills during the very short mushroom season in Lapland, which lasts only from July to August. Much to her surprise, she harvested

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# Myceana News

The Mycological Society of San Francisco February, 2005, vol 56:02

## MycoDigest: The Question is Blowing in the Wind

Else Vellinga

Like a cake covered in icing sugar, so powdery-white are the honey mushrooms and the ground around them. A typical one of these spores is only 1/3000 of an inch long. Every single mushroom in the clump sheds an estimated 15 billion of them but many don't go far. Is there a single one which makes it high enough into the air to get transported away from the parent?

For any spore trying to travel a long distance, survival is the first challenge because conditions in the atmosphere are downright hostile; it is cold, very dry, and there is strong UV-light to break down essential molecules. Spores with thin walls don't last long. Those with thick walls and a covering of pigment have the best chance of making it. But after its journey a spore faces other challenges. It has to land in a suitable place (sea or ice won't do); it has to germinate (desert areas are usually too dry), and then it has to find a mate (species that do not need a partner are at an advantage), and ally itself with a compatible substrate (an ectomycorrhizal partner of pine will not survive in a South American monkeypuzzle forest). Success only comes with escape from the parental 'home', survival of the journey and expansion into the new environment.

The wonder is that some species are very good at long distance dispersal and achieve wide distribution. Puffballs are notable examples and I have seen the same earthstar, *Myriostoma coliforme*, on the Big Island of Hawaii and in the Dutch dunes in Europe. The spores of these guys are not just thick-walled and well-pigmented, but they are hydrophobic and many have spines, both of which are excellent, additional adaptations to airborne transport. *Pleurotus djamor*, a close relative of the oyster mushroom, is widespread in the tropics, and yet, its spores have been detected as far north as Canada and Switzerland! But is this typical for most species? For only a few spore dispersal has been investigated, and here are highlights of what we have learned.

The Split-gill, *Schizophyllum commune*, is found all over the world, and is completely interfertile. In other words every *Schizophyllum* can mate with any other, regardless of its place of origin. In this way it is like humans, but just as with humans, there are regional differences due to geographical barriers such as seas, and high mountains. The South American Split-gill is different from the North American populations, so a natural question is: what happens in the Caribbean? Do both forms occur there and do spores from both groups get there? To find out, researchers set baits to trap the *Schizophyllum* spores. Each bait was a petri dish with mycelium from one spore of *S. commune*, on which other spores could land, and germinate. Subsequently the two different mycelia fuse and produce a third which can be

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**MycoDigest is a section of the Myceana News dedicated to the scientific review of recent Mycological Information.**

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mushrooms that she recognized from the U.S. Hunting mushrooms in northern Scandinavia put her in touch with the local Nature Preservation Society in Karlskoga where she met Erik Sundström, an amateur botanist who specialized in polypores. Together they researched the pigments in mushrooms and later collaborated with Dorothy Beebe and Miriam Rice to learn more about applying these pigments to fabric and fiber.

Carla has co-written two books on mushroom dyes: *Färga med Svampar*, written in 1981 with Erik Sundström; and *Skapa av svampfärgat garn*, written in 1984 with Miriam Rice and Erik Sundström.

*Färga med Svampar*, written in Swedish and translated to German and Finnish, has sold over 40,000 copies. When Carla's second book, *Skapa av Svampfärgat garn*, was published, the authors decided to invest a portion of their royalties from the book into the formation of a non-profit organization for educational purposes and the promotion of mushroom dyes—and jointly founded the International Mushroom Dye Institute. Carla and Erik have also produced a film explaining the fascinating chemistry and physics of dyeing with mushrooms.

During her presentation to the MSSF, Carla will expose some of the secrets about the durability of mushroom pigments. She will also cover the fascinating topic of ownership laws for Swedish forests and everyone's right to pick berries, mushrooms and camp on anyone's property! She will explain why there are no "NO TRESPASSING" signs and how Swedish children learn to use this privilege properly. She will also discuss how Swedes handle mushroom poisoning as well as the University courses required to educate mushroom consultants and the key role these consultants play in assisting the public.

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Editor: William Karpowicz

Layout: Ruth Erznoznik

Printing/Mailing: Mother Lode Printing, Jackson, CA

### Society Officers

President: Mark Lockaby	(510) 412-9964
Vice Pres: David Campbell	(415) 457-7662
Secretary: Mark Thomsen	(510) 540-1288
Treasurer: Shawn Johnson	(925) 377-7727

### Select Committees

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### Mushroom Events at the Randall Museum

The Randall Museum and MSSF will be having a "Saturdays Are Special" emphasis on mushrooms with a display of wild mushrooms and two slide shows on Intro to Mushrooms at 11-12 and Mushroom Gardening at 1-2. We'll set up the display on Friday afternoon and evening so please bring in your collected mushrooms and help ID them and set them up. Also please come in on Saturday to help talk to the public and ID their mushrooms. To volunteer or for more info please contact Ken Litchfield at [klitchfield@randallmuseum.org](mailto:klitchfield@randallmuseum.org) or 415-863-7618.

## MSSF Discussion Group on Yahoo Groups

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

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

To sign up, go to:

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

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

# The Foragers' Report

## February 2005

Patrick Hamilton

Your Foragers' Report reporter has been suffering in computer Hell these past 10 days and was not able to write a column for this month. I humbly submit this piece from times past (Mushroom the Journal) instead of new stuff (I have been told that it was a favorite article of some folks). But—blacks will be fruiting nicely “by the time you read this” as will yellow foots and hedgehogs.

SOMA had an outstanding camp this year with Tom Volk, Jim Trappe, Gary Lincoff, and Paul Stamets. Also present to help were Mike Wood, David Rust, Debbie Viess, David and Jeanie Campbell and your guy here, writing. Great talks, fine food, outstanding people—a good time was had by all. I say to come up next year.

### Yet Another Way to Find Wild Mushrooms

We knew that we needed some fine mushrooms for a Sunday brunch but here it was April in Marin County, Ca. and way too deep into the season to hope for much. David Campbell, one of the best and truly the only mushroom buddy I know that will go almost anytime, anywhere, for anything good, had called and suggested a few spots near my home in Inverness.

We met off a coastal road that bisects a great stand of California Live Oak and immediately checked for chanterelles (we have a variety of oak types but the *Quercus agrifolia* is the only one under which this mushroom grows here). First thing you notice when looking late in our local mushroom year for the *Cantharellus cibarius* veins of yellow gold is the comely lushness of the darn poison oak. Those beautiful shiney new waxy leaves just glistening there in groups of threes, hoping to get in under our pants and all the way up to behind our knees. Jeez. Actually we're lucky because it rarely bothers us. But not finding chanterelles does and we found none there.

So we drove into the burn area of last Fall's Mt. Vision fire and then hiked through varying environments looking for morels. David spotted two red brown beauties under mixed Doug-fir/bishop pine habitat and we continued to search; but that was it.

We headed back down the road towards Highway One where we know an area for *Macrolepiota rachodes*. Through the fence, along the lovely stream and past the big white horse, through the next barbed wire gate by the other horses and into the place where the cattle usually gather earlier in the

year. Hmmm, poison hemlock, *Conium maculatum*, was everywhere in the spot we intended to look; and a recently fallen branch of a bay tree, *Umbellularia californica*, covered the little hillock we were searching for.

My buddy found a wonderfully huge cluster of mature shaggy parasols hiding in that pretty and poisonous stuff, under that broken bough. There were great big open caps and even some tight little buttons, perfect and plenty for tomorrow's meal.

To cook this meaty and full flavored mushroom chop small then simply sauté, with olive oil, a little onion, maybe a red wine reduction and salt and pepper. If there are enough to preserve by drying look forward to the incredible soup and stock these will make. I try to keep them for at least a year before using because their flavor and aroma will intensify (just like Boletes). They become so strong in fact that Louise Freedman, in her *Wild About Mushrooms* (written for the Mycological Society of San Francisco and my favorite mushroom cookbook) even suggests somewhat discretionary use.

I stashed those Leppies in a brown bag in the crotch of an oak tree. Next we were going up and over the hills to try again for golden chanterelles. Gosh, there were beautiful views from there of the Coastal Range and the lush green Springtime hillsides of West Marin. Everything was in place—the clouds, the sky, the distant tree line, the wildflowers and even a hollering Holstein. . . .

So of course being vocal I answered in my best moo. Whatever I said, when translated into the particular local bovine colloquial, must of made that lady real mad—she attacked us. Now I am a sort of country boy who used to raise hogs, horses, sheep, etc. but I just don't know from cows. And as good as he is at hunting mushrooms David was about as worthless here.

We stood mesmerized, waiting for the other man to take charge, in the very middle of a very large meadow with a very large, sharply horned, howling female range critter charging us. Ever seen two fairly big guys trying to get behind each other quickly? Think about it.

Well, you can actually cover ground that way, but not very fast, of course. Yet the cow was and she was big and probably assuredly had Mad Cow Disease. Hell, she was mad enough at us. Jeez, is this mushroom hunting? Do the folks back home know what we do to gather for the table?

The tree line stayed very far away but the furious cow got very close and was really bellowing now. To defend us I

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**Mycodigest****Continued from page 1**

distinguished from the original mycelium. What the researchers found was that spores could indeed migrate over long distances. There were many spores a mile out at sea, and not all of them came from the closest land. Yes, they did find South American spores in the Caribbean, but not further north. On the other hand, North American spores failed to turn up in the Caribbean. It was estimated that every hour around 18 spores land on every square meter of surface. This research suggests that seas do pose a spatial barrier, but one that is not absolute; with wind in the right direction and at the right time, spores may be transported over wide expanses of water.

A second study had a rather different emphasis and investigated not only how far spores can travel, but also how viable they are. Here the setting is Sweden, and the species in question are the old-growth forest dwellers, *Fomitopsis rosea* and *Phlebia centrifuga*. These species do not grow in areas where the forests have been chopped down, and are rare in places with small relicts of forest. Where the regions of forest are more extensive, in the north of the country, the two are more common. The question the study addressed was: how large do the forests need to be to sustain viable populations of these species? The same approach was used as in the *Schizophyllum* study, with the difference that wood discs were used to grow the mycelium, to better mimic the natural conditions. Baits were put out in seven locations in widely separated latitudes. Many more spores were found on the northern baits than on the southern ones (where scarcely any were found.) Significantly, the spores from the small, stressed populations tended to have more problems germinating than the ones from the large, healthy populations. It appears that the size of the population and the presence of old-growth forest both play a role in sustaining the fungi.

No one has investigated this kind of effect in California and it would be interesting to see whether there is direct contact between populations of, let's say, *Amanita lanei* (formerly *Amanita calyptroderma*) in the coastal oak forests and in the Sierra foothills. Do spores travel through the air over the Central Valley between those populations, or is there only more local spore transport? Will the Sierra populations still be viable when all the coastal live oak has succumbed to sudden oak death?

Humans are very good at transporting all kinds of organisms, both inadvertently and deliberately. With their help, mushroom species have jumped, again and again, to new territory in modern times. The Octopus stinkhorn, *Clathrus archeri*, is a good example. It arrived in Europe from Australia at the end of the First World War, probably with military equipment or in bales of wool. It settled in the northeastern part of France and from there, helped by the local flies, it spread like ripples in a pond, until it is found in virtually every country in western Europe. Recently it has also appeared in California,

undoubtedly with human help, though we do not know whether it came directly from Australia or via Europe. We should all keep our eyes and noses open to record its progress here.

However, the story of *Armillaria mellea* in South Africa shows that not all transplants are that successful. Dutch settlers in the 17th century planted a garden in Cape Town, to provide fresh provisions for the seafarers making the long voyages between Europe and the far east. With the roots of grape or citrus, or perhaps some other European plant, came the honey mushroom. Even now the original garden still harbours the very same honey mushrooms, all genetically identical. But the species has not made the jump into nature and has affected only the plants within the original garden.

Unraveling those stories, and determining what makes a species a successful long-distance flier or a perfect invader will keep amateur and professional mycologists busy for years to come.

Some good stories for further reading:

- Brown, J.K.M. & M.S. Hovmøller, 2002. Aerial dispersal of pathogens on the global and continental scales and its impact on plant disease. *Science* 297: 537-541.
- Gonthier, P., R. Warner, G. Nicolotti, A. Mazzaglia & M.M. Garbelotto, 2004. Pathogen introduction as a collateral effect of military activity. *Mycological Research* 108: 468-470.
- Vilgalys, R. & B.L. Sun, 1994. Assessment of species distributions in *Pleurotus* based on trapping of airborne basidiospores. *Mycologia* 86: 270-274.

**Foragers' Report****Continued from page 2**

picked up a stick that turned out to be a withered stalk of last year's anise or mullein or whatever. I swooshed it like a mighty sword (think "Braveheart" here, after all we were *Campbell* and *Hamilton*) and the damn thing goes limp, and so do we.

Fortunately she made a tactical error. Drunk perhaps on her apparent power and thinking that she would spear us two obviously shaken but not stirred fellows (like some martini olives) she veered off to flank and filet us, but by now we were close enough to the oaks to sprint into them.

This was not a retreat—we were running forward, kinda. We are manly men, we. A little Monty Python lumberjack type music here, please. Thank you. Plus there were chanterelles right where we entered that oak and bay woodland. We also found a large *A. velosa* to add to our collection. Not a bad day: Morels; a springtime *Amanita*; golden chanterelles and shaggy parasols, a mad cow, wow.

The *A. velosais* are best sautéed in butter. The browning butter compliments the nutty flavor of this great tasting

mushroom. Obviously be very careful in its identification! If you are lucky enough to have this species in your area you are among the fortunate few who have an opportunity to enjoy perhaps one of the very best of all wild mushrooms. (At least this is my and David Arora's opinion).

I was asked to make an egg dish for brunch so this recipe was created. It is adapted from a basic oven omelette dish like "Dutch Babies" and can be remodified easily.

### **Sunny Super Sunday Oven Omelet**

Servings—8

This is a good looking and great tasting egg dish that will rise, literally, for any occasion.

#### Filling:

2# mushrooms (can be any mixture of good edibles), finely chopped  
 2 tbsp. shallots, minced  
 1 1/3 tbsp. olive oil  
 1 1/3 tbsp. flour, all-purpose  
 1/3 cup heavy cream  
 salt and pepper to taste

#### Egg and cheese mixture:

2/3 cup flour, all-purpose  
 22 oz. milk  
 1/4 cup butter, unsalted, cut into 1/2" pieces  
 1/2 tsp. gray sea salt  
 dash pepper and nutmeg  
 12 eggs, slightly beaten  
 12 oz. Gruyere cheese (can use Swiss and Jack mix, Fontina, etc.), coarsely grated

#### The filling:

1. Sauté the mushrooms and shallots in the oil for 10 minutes. If using dried mushrooms, add the soaking liquid and reduce totally.
2. Reduce heat and sprinkle in the flour. Cook and stir over medium heat for 2 minutes. Add the cream—cook and stir until it thickens. Add salt and pepper. Set aside.
3. Set oven at 400 degrees F.

#### The egg/cheese mixture:

1. Place the flour in a large pan—whisk in the milk. Heat at high temperature and stir constantly until the mixture boils and thickens.
2. Remove from the heat—beat in the butter, seasonings and eggs. Stir in the cheese.
3. Spread 1/2 the mixture into the bottom of a buttered casserole dish. Spoon the filling into this. Cover with the remaining cheese mixture.
4. Bake for 30-45 minutes—until puffy golden brown. Serve immediately.

That's all for now folks!

## **Cultivation Corner**

Ken Litchfield



Now that the organic gardening and farming concept has become pretty much mainstream after being officially certified about 10 years ago, there are a number of gardening philosophies that have emerged in popularity to diversify the methodology. Whether you follow Biodynamic, Biointensive, Permaculture or several other lesser known garden culture movements, each of these methodologies utilizes various techniques and concepts that are well adapted for mushroom cultivation even if they don't have that much emphasis on intentional fungal exploitation themselves.

One of the main concepts that provides opportunities for mushroom cultivation is composting. This may involve decomposable materials from garden remains or intentionally grown cover crops or materials like wood chips, manure, straw, etc. brought in from outside to add nutrients and body to the gardening area. There are two main methods of composting: slow and fast.

Fast composting involves a greater investment of materials, labor, and knowledge for successful creation of rich, black humus in as little as two weeks. There are several ingredients to the basic recipe for quick composting:

1. At least one third of the pile should be nitrogen rich material like grass clippings, leguminous cover crops such as snow peas, clover, or alfalfa hay, or herbivore manure such as cow, horse or sheep. These are all in the realm of one to three percent nitrogen and also have a good mass and texture for the finished compost. If you use high nitrogen stuff such as bat or chicken manure or blood meal considerably less proportion is necessary. Or if you have a larger proportion of cellulosic material like wood chips then a greater proportion of nitrogenous material may be necessary.
2. Add a mix of materials rich in various nutrients like ground rock phosphate, bone meal, and ashes for phosphorus and other minerals to make a more enhanced finished mix. The quick composting process unbinds many of the nutrients to make them available for microorganism reproduction and metabolism, which then become available to garden plants and fungi at the end of the composting process. Also if you are going to go through the added efforts of quick composting, you want to make a richer finished product anyway.
3. Shred all materials finely to increase their surface area exposure to decomposition organisms so the materials break down faster. If you are using landscaper wood chips it helps to put them through the shredder a few more times to make their particles finer or sift them through a chicken wire mesh, then a bird wire mesh, then a quarter inch mesh to diminish their internal mass. Kitchen waste like squash and other wet vegetables

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**Cultivation Corner****Continued from page 5**

should be shredded so that they don't retain their integrity and become a soggy blob in the pile.

4. Moisten all materials to break their surface tension resistance to organism penetration. If you are using wood chips it helps to submerge them in a container of water for a few minutes for small animal bedding chips to overnight or longer for larger landscaper wood chips. They should be drained before adding to the rest of the compost pile. If you are using a lot of wet kitchen garbage take that into consideration when moistening the materials. The materials in the pile are better on the damp side than soggy as you don't want to drown the microorganisms and turn the pile into an anaerobic smelly mass.

5. Aerate the pile by turning it as often as twice a day or at least once every two days. Also leave a hole down the center of the pile like a volcano. If it seems to be drying out a bit it could be sprinkled a little during the turning process.

If all goes well the pile will heat up to 140 - 160 degrees in a day or so after building so it steams on a cool day. It could feel almost too hot to handle with the bare hands. In a week to ten days the pile will start cooling down and by the end of two weeks if the pile was plenty hot then it will be rich black humus ready for use. A few more days or weeks could pass for ripening but the pile should be covered from rain with a tarp to keep its nutrients from leaching out and to keep it from getting too wet and turning anaerobic. Fast composting is great for *Agaricus* cultivation depending upon the ingredients used and the species to be grown. The finished compost can be sterilized for inoculation or used directly in the garden for cultures already established.

Slow composting could involve using the materials either by themselves or in various combinations in a long term composting pile or as mulches layered in the garden. Long term compost piles are usually in an out of the way location in the garden where trimmings, grass clipping, weeded remains, and other garden refuse can be tossed on top to gradually break down with little input of labor to shred the material or aerate the pile. The top stuff gradually breaks down into the bottom stuff which is where *Agaricus*, Shaggy Parasols (*Macrolepiota rachodes*), and Shaggy Manes (*Coprinus comatus*) like to grow.

If the slow composting materials are relatively uniform, like wood chips, straw, or cocoa hulls, they can be spread on the garden area itself as an aesthetic blanketing mulch to decompose on the spot providing nutrition and texture that also smothers weeds, stabilizes soil temperature, and retains moisture. Many folks are rather skimpy in their mulch distribution; it should be generously deep to perform all those duties and provide an environment for mulch mushroom cultivation. Six to twelve inches or more of mulch allows the mushroom mycelial mat to hover at its preferred level depending upon moisture and temperature. The mulch can be spread

thick with no plan of inoculation and some wild mushroom will come in to partake of the buffet. Or the fresh mulch could be inoculated with a fungal colony of one of several species for each garden bed so they won't compete with each other. The best edible species for mulch cultivation in the Bay area are the Garden Giant (*Stropharia rugoso-annulata*), Oyster (*Pleurotus ostreatus*), Elm Oyster (*Hypsizygus ulmarius*), Basket Stinkhorn and Octopus Stinkhorn (*Clathrus ruber* and *archeri*), and Blewitts (*Clitocybe nuda*).

These species should be added in proportion of 10 to 50% of mycelium inoculate to the new mulch area. If your inoculate isn't large enough to cover the full garden area to be mulched then a smaller section can be started as a nursery bed to grow out the culture and then use pieces of it to colonize larger areas of fresh mulch. Once the mulch in the garden bed is fully infiltrated more mulch can be added periodically in a layer one to two inches deep on top. Then stab the mulch bed with a spading fork just to the depth of the mulch without disturbing the soil underneath and twist the fork while pulling it out. Do this over the whole surface to expose the old mulch to the new. Within one or two weeks the mycelium will regrow to fill the mycelial mat into the new layer. If you have a healthy mycelial mat you will be able to lift out contiguous hunks of 1-3 square feet or more in size to inoculate other freshly mulched areas.

To fruit fully infiltrated mulch, wet it several times per day for several days to break the mat's surface tension and allow the mat to soak up water like a sponge. Wet it just enough to moisten the mulch but not enough to go through and soak the soil underneath. Once the mat is full of moisture and there is either a humidity cover of vegetable foliage or a few foggy days, the mat will sprout primordia that swell into harvestable mushrooms within a few days, especially with the Garden Giants and the Oysters. The *Clathrus* often make clutches of eggs rather constantly at the surface of the mulch which then wait, perhaps for weeks, for enough water to swell and crack open. So when the eggs get big enough they should be harvested just before or at cracking when they have a rich cheesy taste, but not starting to ooze out their innards, which then begin to waft undetectably. If you water enough to soak their mycelial mat, it is necessary to check them very regularly to catch them at maximum size just before or at beginning to crack.

We'll continue this discussion next time. In the meantime, if you would like to participate in the MSSF's "Beneficial Mushrooms in Your Garden" exhibit on the floor of the main arena at the Cow Palace this year, it will be March 15 -20. We will need mossy logs, turkey tail or other polypore logs, and wild mushrooms, assistance in the construction and takedown of the exhibit, and staffing the exhibit during the show. For more information or to sign up to help, please contact me at [klitchfield@randallmuseum.org](mailto:klitchfield@randallmuseum.org) or 415-863-7618.

Unless you renew your membership for 2005, you will no longer receive the *Mycena News* or have access to the "members only" section of the MSSF website. You will miss out on forays and other fun events. So, please renew today if you have not already done so.

E-members: Remember, you must renew your membership for 2005 AND have your current email address in the MSSF membership database if you are to receive notice of the password change.

Members who are uncertain if they have renewed, or if their correct email address is in the database, should email the membership chair, Polly Shaw, at sfwaterbug@yahoo.com or call 415-665-3293, for information.

You can renew by using the PayPal option on the MSSF website, or by filling out the form on this page and mailing it, accompanied by credit card information or by a check made out to "MSSF Membership," to MSSF Membership, c/o The Randall Museum, 199 Museum Way, San Francisco, CA 94114.

Membership rates are:

**Regular** members receive the yearly *Roster* of members and the *Mycena News* by mail.

**Multiple year membership rates approved by MSSF Council for renewals beginning Jan. 1, 2005:**

	1-yr	2-yr	3-yr	5-yr	20 x 1-yr Lifetime
<b>Regular</b>	\$25	\$50	\$71.25	112.50	500.00
<b>Senior</b>	\$20	\$40	\$57.00	90.00	400.00
<b>Student</b>	\$20	\$40	\$57.00	90.00	n/a
<b>Electronic</b>	\$15	\$30	\$42.75	67.50	300.00

**Senior** members must be over 65 and enjoy all the privileges of regular membership.

**Student** membership is for full-time students who receive both the membership *Roster* and the *Mycena News* by mail.

**Electronic** members must download the yearly *Roster* of members and the *Mycena News* for themselves from the MSSF website.

To those who have already renewed for 2005: Thank you!



**MYCOLOGICAL SOCIETY OF SAN FRANCISCO - Membership and Membership Renewal Application**

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

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 State: \_\_\_\_\_ Email 2: \_\_\_\_\_  
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 Membership type: \_\_\_\_\_ Adult/Family (\$25) \_\_\_\_\_ Senior/Students (\$20) \_\_\_\_\_ Electronic (\$15)

**If sending a check, please make it out to "MSSF membership" and mail it, with this form to: MSSF Membership, c/o The Randall Junior Museum, 199 Museum Way, San Francisco, CA 94114**

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## **MSSF Calendar, February, 2005**

**Saturday, February 5: 10a.m.–3p.m. Mushroom Events at the Randall Museum.** Wild Mushroom Display, Slide Shows: 11-12 Intro to Mushrooms, 1-2 Mushroom Gardening. To volunteer or for more info contact Ken Litchfield at [klitchfield@randallmuseum.org](mailto:klitchfield@randallmuseum.org) or 415-863-7618.

**Monday, February 7: Culinary Group's Monthly Dinner: 7:00 pm.** Meeting and dinner at the Library of the Hall of Flowers in Golden Gate Park in San Francisco. For information, contact Phil Brown at 510-526-4325 or at [towltek2000@msn.com](mailto:towltek2000@msn.com). Future culinary group dinners: March 7, April 4, May 2, June 6.

**Tuesday, February 15: MSSF General Meeting.** Randall Museum, doors open at 7:00 pm. Carla Sundström Mueller will speak on mushroom pigments and the Swedish mushroom culture.

**Tuesday, February 15: Photo slide program on NAMA's "Introduction to the Major Groups of Mushrooms"** to be shown at 6:45 pm prior to start of the general meeting in the Randall Museum auditorium. Primarily for beginners but all are welcome. A general overview of mushroom identification with music background. In March we will plan to show "The Gilled Fungi: The Friesian Method of Classification." Look for announcement in March *Mycena News*.

**Saturday, February 26: 1 to 4 p.m. Mushroom Gardening at the Presidio Community Garden.** For more info and registration go to: [www.crissyfield.org/center/winter.html](http://www.crissyfield.org/center/winter.html)

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**Note: Deadline for the March 2005 issue of Mycena News is February 18.**  
**Please send your articles, calendar items and other information to:**  
**[mycenanews@mssf.org](mailto:mycenanews@mssf.org)**