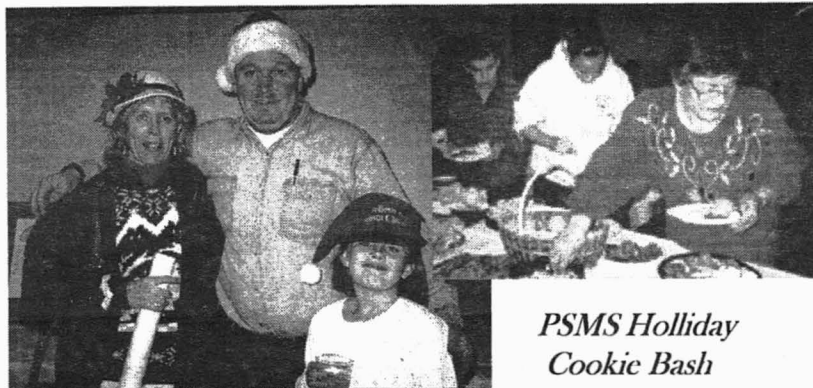
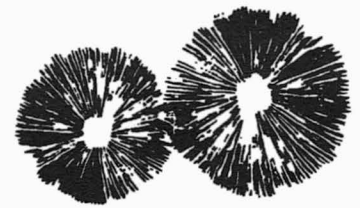


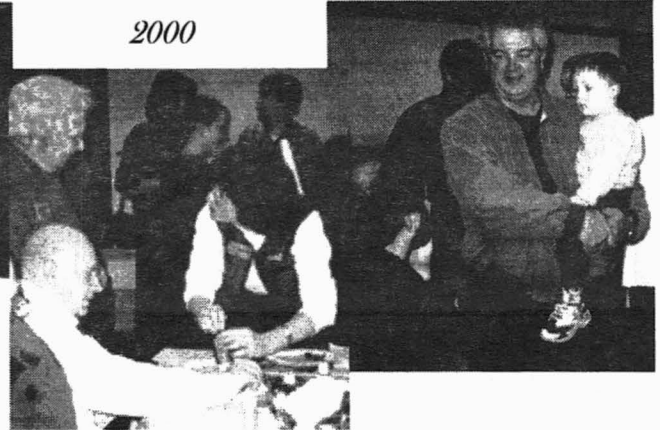
SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
Number 368 January 2001



*PSMS Holliday
Cookie Bash*

2000



MUSHROOM OBSESSION: THE FIRST 30 DAYS OF A NEW LIFE

Marsha Griggs Adiong,
Spores Afield, Colorado Myco. Soc., July 2000

Day 1: Grudgingly agree to substitute for spouse at beginning mushroom course. Complete mental list of spouse favor paybacks. Things look up: Instructor is knowledgeable and captivating. Taste wonderful mushroom in class (starts with "b"; second word sounds like "eats").

Day 6: have to get up too early. Class foray. Drink lots of coffee. Wonder where bathroom stops will be in mountains. Pick lots of yummy-looking, cherry-red mushrooms. Have a good time. Taste different, wonderful mushrooms. Find self listening carefully to where other mushroom hunters have been hunting. Chumps.

Day 8: Join mycological society and attend meeting. These people actually enjoy identifying mushrooms! Don't understand why they jump back from aging specimens.

Day 9: Spouse leaves several deteriorating specimens on kitchen counter. Find out why these people recoil from old mushrooms. Head creatures in direction of spouse's side of the bed.

Day 13: Have to get up too early. Our first Society foray. Immediately find huge bolete, leave adjacent one in haste to show spouse. Watch fellow member retrace my path to steal my other bolete. Reconsider personal position on gun control.

Day 14: Check out mushroom books, join Botanic Gardens. Weight training pays off—can take as many as I can carry. Our own first foray rapture.

Day 15: Exact promise from spouse that if I die from mushroom poisoning, not to tell my mycophobic parents. Spouse promises to personally tire-track body, withhold autopsy permission, and, most importantly, not tell Marilyn.

Day 16: Sick of seeing cut stipes everywhere. Send emergency contribution to Planned Parenthood.

Day 17: Start pretending not to read English, as in "PRIVATE." Practice saying, "No hablo Ingles." Decide I don't look convincingly Latin—switch to French.

Day 18: Decide two-wheel drive vehicles don't cut it. Acquire truck used to drive over Volvos in commercial. Camouflage paint it.

Day 19: Install dog door and automatic feeder/waterer. Decide house keeping chores are Sisyphean battles against cosmic entropy. Decide to go with the flow instead.

Day 20: Feel racks of mushroom add that '90s touch to the bedroom. Rename our basset hound, Brevipes.

Day 21: Cajole mailman, paper boy, passerby into admiring my Latin-labeled, baggie-packed freezer. Price walk-in models.

Day 22: Hit co-op to cop paper bags. Stop to jeer at *Agaricus bisporus* in the produce section. Ignore dirty looks over my one-can-to-a-bag technique.

Day 24: Decide lawn mowing is bourgeois hang-up neighbors should get over. Neighbors discover all their refrigerator, oven, and grill racks are missing.

Day 25: Price 1000x microscope. Assure chemist not to divulge source of Melzer's solution. Ponder long-term stability of Henry's reagent over four-wheel trails.

Day 26: Figure lack of sleep and eating only mushrooms will compensate for not exercising.

Day 27: Finalize reconnaissance helicopter arrangements. Landsat remote sensing data arrives.

Day 28: Refuse to tell spouse where I found boletes. Brush up on military interrogation resistance techniques.

Day 29: Load truck with satellite link-up, radar, heat-seeking missiles, arboreal and microbiological texts, soil analysis kit, microscope, altimeter, hygrometer, and freeze-dried chocolate doughnuts.

Day 30: Note added by law-enforcement officials: Earth-colored vehicle breaks land speed record on 1-70, westbound. Attempts to apprehend are unsuccessful.



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PUGET SOUND MYCOLOGICAL SOCIETY

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MEMBERSHIP MEETING

Tuesday, January 9, at 7:30 PM, Center for Urban Horticulture, 3501 N.E. 41st Street, Seattle

Judy Roger will speak about the Oregon Chanterelle Study. This pioneering study was begun in 1986 by the Oregon Mycological Society in response to the advent of commercial exploitation of mushrooms. At that time, virtually nothing was known about the resource.

Judy's interest in mushrooms was piqued when she studied them with Dr. Stuntz while she was a student at the University of Washington. She has been an active member of the mushroom community ever since. She joined PSMS in 1972, became a key member, and then continued her activities when she moved to Oregon. She is especially interested in education and may be best known to our members for her splendid microscopy workshops. Judy has been an editor of the OMS newsletter, *MushRumors*, and the North American Mycological Society's newsletter, *Mycophile*. She is a long-time member of the Pacific Northwest Key Council, working with *Conocybe*, *Galerina*, *Tubaria*, and *Armillaria* and has studied with mycologists including Roy Watling and Nancy Smith Weber. She and Dr. Weber worked on a project that attempted to increase the production of morels in clear cuts on Mt. Hood. Along the way, she trained her lead dog, Tamarack, to hunt truffles.



RUSSIAN MUSHROOM PICKERS THREATEN AIRCRAFT

Fungifama,

Southern Vancouver Island Myco. Soc., Nov. 2000
by Steve Rosenberg in Moscow,
from the Web via Larry Stickney and Michael Taylor

It may not be an Olympic sport just yet, but for most Russians, mushroom picking really is a national pastime. Come the autumn, everyone is hard at it, combing the fields and forests for fungi. But in the small town of Krasnoselkup, residents have been risking their lives for the pick of the crop. And all because the very best mushrooms—so they say in Krasnoselkup—grow on the runway of the local airport. Undaunted by rapidly approaching planes and helicopters, mushroom pickers have been flooding onto the airstrip with their baskets, often forcing aircraft to abort their landing.

It has become such a problem, in fact, that the local authorities have been forced to act. They have introduced heavy fines for anyone caught picking on the runway: the equivalent of \$1,000. For most people in Krasnoselkup that is nearly three years' wages. The money will be used to compensate airlines that have suffered disruption, as well as airport staff that have to deal with the offenders. On the telephone from Krasnoselkup, an air traffic controller called Nadezhda assured me the heavy fines were having an effect. "No one has dared go onto the runway since the fines came in," Nadezhda said. Like most towns in the Russian Far North, the climate in Krasnoselkup is not very kind to mushroom pickers. There are nine months of snow, and just a few weeks a year when you can fill your basket. That might explain people's willingness to throw caution to the wind. But for anyone brave enough to risk it and venture out onto the runway, these prize mushrooms could turn out to be the most expensive in Russia.

[Editor's note: Far-fetched as this story may seem, there is a town in northwestern, BC, that has similar difficulties because there is reputed to be a fine patch of pine mushrooms (*Tricholoma magnivelare*) at the local airport.]

CALENDAR

- Jan. 9 Membership meeting, 7:30 PM, CUH
Jan. 15 Board meeting, 7:30 PM, CUH Board Room
Jan. 26 *Spore Prints* deadline

FUNGUS HELPS LUNGWORMS PARASITIZE COWS

Natural History

via "From the Pages of the Journals," by Marshall
Deutsch, *Boston Myco. Club Bulletin*, Sept. 2000

Natural History describes how a fungus helps certain lungworms parasitize cows. The lungworm's problem is to get away from the cowpat in which it is deposited by one cow to a cleaner grassy area where it can be eaten by another cow. "They bide their time inside the pat of manure until morning light strikes them. Light is their signal to climb up through the manure until they reach the surface, where they begin to hunt around for a species of fungus that also parasitizes cows, a species that responds to light by growing little spring-loaded packages of spores. When one of the lungworms touches a spore package, it latches on and climbs up to the top. Soon the fungus catapults itself six feet into the air, soaring away from the manure like a puddle jumper, with the lungworm going along for the ride. If the lungworm lands on a patch of grass (and not on another cowpat), its odds of being eaten by a cow are much improved."

*Mr. Richy, why so bitchy,
How does your garden grow?
With slugs and bugs and fungal thugs
And dead corn all in a row.*

*The Mushroom Log,
Ohio Mushroom Soc., Sept-Oct 2000*

FUNGUS WILL BE USED TO FIGHT LOCUSTS

San Bernardino Sun, 10/23/00, via *The Spore Print*,
Journal of the L.A. Myco. Soc., November 2000
submitted by Ben Keeney

After thousands of years of burning them, burying them, poisoning them, and even eating them, biologists have come up with a sure, safe way to kill one of humanity's most frightening scourges: the swarming desert locust.

For about the same cost as pesticide, the totally organic weapon also could get rid of those pesky grasshoppers eating the backyard garden.

Developed by international scientists and marketed as Green Muscle, an otherwise harmless, even edible, naturally occurring fungus called *Metarhizium anisopliae* has already been used to kill millions of locusts and grasshoppers in Niger and is ready to take on the next African or global invasion, which some scientists believe may be at hand.

Biologists from the Nigeria-based International Institute of Tropical Agriculture planned to announce at a World Bank scientific conference today that the fungus is effective and can be developed for commercial uses.

The fungus has been in development for a decade. Its first application in commercial quantities came with a mass spraying of Niger farmland in August.

In recent months, unusually large numbers of grasshoppers or locusts have been invading parts of Africa, Argentina, Australia, China, Indonesia, Spain, Russia, Kazakstan, and the United States. Recent drought and heat in Texas have spawned one of the worst grasshopper invasions in the past 30 years.

The bio-pesticide application in Niger, financed by Luxembourg, provided "complete control" that lasted up to three times longer than current chemical insecticides, said a report from Future Harvest, an international research group on farming.

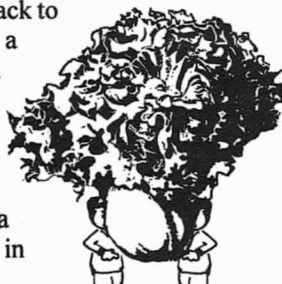
"This new product is environmentally sound. It kills grasshoppers and locusts and nothing else," said Jurgen Langewald, a German biologist who leads the program that developed Green Muscle from the fungus *Metarhizium anisopliae*. For more information, visit <http://www.cgiar.org/iita/research/lubilosa>.



RECORD-BREAKING SPARASSIS CRISPA

The Spore Print, Journal of the L.A. Myco. Soc., Nov. 2000

The *Los Angeles Times* reported that a record-breaking mushroom was found in southeast France by three amateur mushroom specialists. The *Sparassis crispa* weighed in at 63.4 pounds, breaking the previous record of 29.8 pounds. The mycologists had to use a jacket to lug the massive mushroom back to their car before transporting it to a specialist's shop. The fungus has been entrusted to the care of a company that says it will not allow it to be eaten, but rather plans to have it frozen and displayed around the country at mushroom fairs. *Sparassis crispa* is a parasitic forest mushroom also found in the U.S. Pacific Northwest.



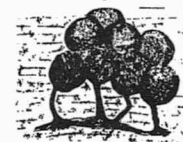
A WILLAMETTE VALLEY ORIGINAL Glenn Walthall *MushRumors*, Oregon Myco. Soc., Nov.-Dec. 2000

The year was 1932. A doctor from Lake Oswego was hiking with his son in what is now Tryon Creek State Park. Dr. Gilbert was knowledgeable enough in natural history that he knew he'd spotted something new for the Willamette Valley, after having seen an article in the April 1926 *National Geographic* on "The Marvels of Mycetoza," by William Crowder. What he'd found was a slime mold that was new to the Pacific Northwest.

The *Mycetoza* are a group of organisms that dwell in a borderland between the plant and the animal kingdoms.

Cribraria oregana is a unique organism called a Myxomycete, or slime mold. Slime molds are not really molds, in the literal sense, in that they are not saprophytic or parasitic. That is, they don't use dead organic material for their nutrition. They are what biologists call "holozoic," which means they have a creeping, flowing stage called a "plasmodium" that can capture spores of mosses or liverworts or soil protozoans, bacteria, tiny invertebrates, algae, or ovules of grasses, rushes, and sedges.

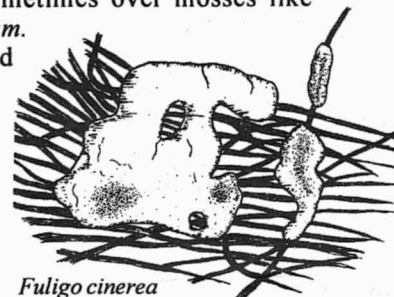
This "creeping" stage (with the aid of a microscope, you can see amoebas doing this) can be beautifully colored in brilliant yellows, white, pink, red, orange, and even purple or black. They also have a sporophyte stage which, viewed with a hand lens, can look like a miniature mushroom, where spores will be produced that are no more than 6-9 microns in diameter. (That's 6 to 9/125,000 of an inch!)



Cribraria argillacea

They also have a sclerotium, a crust-like stage that confuses the identification even more, because all three stages can, and usually do, show a different color and shape. At least six species have been identified for the Nature Park in Beaverton to date. *Fuligo*, bright yellow, is the most common, often appearing on old stumps, cut ends of logs, and sometimes over mosses like *Brachythecium* or *Hypnum*.

Lycogala is pink and found on burnt ground or fire-scarred stumps. *Arceria*, red, is often found on old wood where bacteria are in good supply. *Cribraria*, however, is orange and is partial to old fir or oak branches that are in a good stage of decay by bacteria or with fungal mycelia and protozoa.



Fuligo cinerea

Most commonly with grasses you might see a white mass of *Brefeldia*, or on the bark of an alder you might see a silvery mass of *Reticularia*.

Yes, they are a curious group. But with a hand lens you can enhance your experience with nature by examining one of the most remarkable entities in the entire nature panorama appearing as you walk within the Nature Park. They may never be as popular as wild flowers or birds, or as the "red leg frog" (*Rana aurora*) or the "Pacific tree frog" (*Hyla regilla*) that both sing in the forest as our temperatures move up into the low 50s.

But I guarantee they will get you down on your knees for a humbler view of one of nature's marvels—a "Jekyll and Hyde" of natural history, an amorphous mass of slowly creeping, colorful protoplasm.

Years ago, one of my students called this group a UGO—a group of "unidentified growing objects." It's "The Thing" of science fiction. They now even have, their own Kingdom, Mycetaceae.

SHRIMP AND CHICKEN COCONUT LEMON SOUP

Renata Outerbridge, *Fungifama*, Southern Vancouver Island
Myco. Soc., Sept. 2000

I more or less combined my two favorite Thai soups: coconut chicken & lemon shrimp.

Ingredients:

4 cups of chicken stock (with salt, to taste)
2 Tbsp of lemon or lime juice
2 pieces of dried galanga root (type of ginger)
A few tender stems of lemon grass, chopped
Fresh, dried, or pickled hot peppers, to taste (I use 1 tsp fresh)
1 Tbs of oyster or fish sauce (available in Asian stores)

1. Combine and bring the above to boil.
2. Add 1/2 pound of cubed boneless and skinless chicken.
3. Add 1/2 cup of enoki, or canned straw mushrooms.
4. Add 1/2 pound of fresh peeled prawns.
5. Simmer for 5 minutes.
6. Take the pot off the heat.
7. Mix in, while stirring, 1 cup of coconut milk.
8. Add generous amount of chopped fresh coriander.
9. Serve hot (in coconut shells?), over a small amount of your favorite kind of pasta (I use broken up spaghetti).

The soup should taste slightly salty, but mostly "coconuty"—sour, then surprise you with the heat of the peppers. If the soup curdles when you add the coconut milk, reduce the amount of lemon juice.

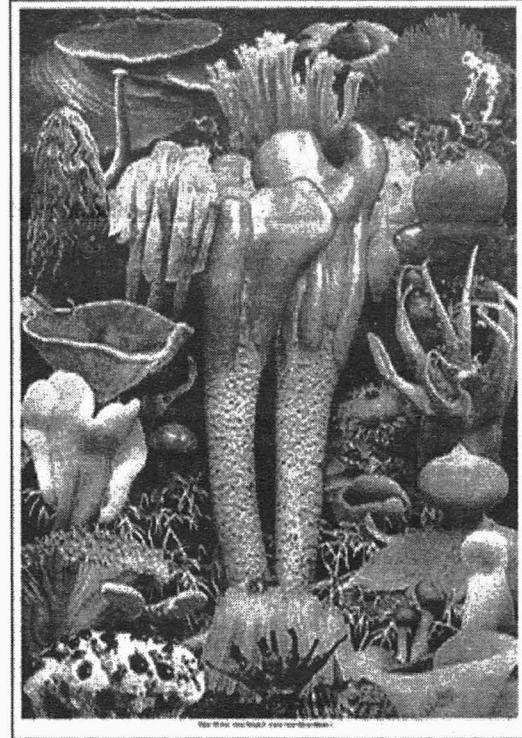
DUES ARE DUE

PSMS memberships were officially up the end December, so unless you joined at or after the Annual Exhibit, it's time to renew. Fill out and send in the enclosed renewal forms ASAP.

TAYLOR LOCKWOOD POSTER

Taylor F. Lockwood, that mushroom photographer extraordinaire, has now put out a poster, "The Wild, the Weird, and the Wonderful". It is 18" x 24" and comes with an identification sheet. For a preview go to <http://www.fungiphoto.com/WWnW/WWnW.html>. You can buy one for \$12, including shipping and handling. To order, e-mail Taylor before he leaves for Australia in February.

Taylor F. Lockwood, P.O. Box 1412, Mendocino, CA 95460 Phone (707) 937-2004 - Home e-mail: tfl@mcn.org - Travelling e-mail: mycogypsy@yahoo.com - Web site: <http://www.fungiphoto.com>.



Happy New Year!

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