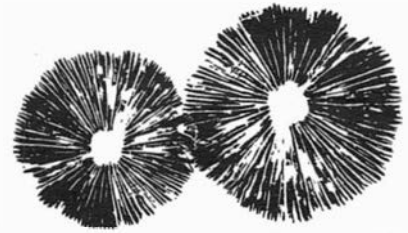


SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY

Number 256

November 1989



TYPES OF MUSHROOM POISONINGS Denis Benjamin

Everyone who eats wild mushrooms worries, or should worry, about making a mistake in identification and poisoning themselves. But misidentification isn't the only way mushrooms can make you sick. It's not even the most common one. So if you've just finished feasting on your latest find and suddenly don't feel so hot, consider the following possibilities.

Panic Reactions: You don't have to eat a poisonous mushroom to get ill; you only have to think you did. It's a very uncomfortable feeling, as I can testify from experience. I had been hunting 3 or 4 years, and I was following all the rules. I brought home some mushrooms and checked the identification in two local field guides. I was sure I knew exactly what they were. After dinner, I was leafing through another field guide, and I saw my mushroom and a description that said, "Be absolutely certain that you do not confuse this with mushroom X." I'd eaten all I had. I thought, "Oh, my God. Could it be mushroom X?" My pulse rate shot up to 180. I started sweating. I became flushed. It took all my will power not to drink the bottle of ipecac that we had in the kitchen for our children.

This happens frequently, and is something beginning mushroomers, especially, should be aware of.

Bacterial Poisoning: Rotten mushrooms are obviously a problem and can make you just as ill as any other food poisoning. The most serious bacterial poisoning I know of recently, however, occurred in Vancouver, B.C., a couple of years ago when a hotel prepared and canned, or pseudo-canned, their own chanterelles. They didn't process them appropriately, and a number of people were taken seriously ill with botulism.

Agricultural Sprays: About 5 years ago, I stopped by a well-known cemetery to check my *Agaricus campestris* patch. Sure enough, they were all fruiting, so I picked half a pound, went home, and made myself dinner. About 2 hours later, I could have died. I checked some mushrooms I had left in the kitchen. They were definitely meadow mushrooms. It was a patch I had picked for the last 5 years and never had any trouble with. I could not figure out what the problem was. The next day, I called the cemetery, to find they had sprayed the day before with herbicide. I learned a real lesson with that episode: Don't pick in places where insecticides, herbicides, and fungicides can be spread. That applies to railroad right-of-ways and underneath power lines.

Heavy Metals: In contrast to most insecticides and herbicides, which usually disappear in a couple of days, there is evidence that mushrooms actually concentrate heavy metals from the soil, the air, and the rain. As pollution in this area increases, cadmium, mercury, lead, arsenic--all these compounds are starting to increase significantly in mushrooms. Again, my recommendation is to avoid picking close to polluted areas, roadways, etc.

cont. on p. 4

TURNOUT HIGH FOR '89 EXHIBIT

Gilbert Austin



Attendance for the 1989 exhibition on October 21 and 22 exceeded that of the past several years by a considerable margin. Total turnout this year was 1608 compared with 1049 a year ago at St. Joseph's Church. Signup of new members (116) was also substantially higher than a year ago (67), in fact, higher than for several years. Interestingly, 55 persons joined on Saturday, a day of relatively good weather, and 61 on Sunday, a day of more or less continuous rain.



To what do we attribute this increase? All we have are guesses, but several factors almost certainly played a part: (1) The location. CUH is perhaps more accessible, and more widely known, than several of our recent exhibition locations. (2) Unusually good press coverage in advance of the exhibition -- most notably by the *Post Intelligencer* in mid-week and *The Seattle Times* on Saturday morning. (3) TV, especially KOMO and KING, and radio spots helped a lot, as did the advertisement in the *UW Daily* and widespread poster distribution.

One-hundred or more members earned our most sincere thanks for work in preparation for and during the exhibition. At least a few must be listed: Coleman Leuthy, Show Chairman, who persevered in his belief that the CUH site would prove workable and who has been proven correct. George Rafanelli and Russ Kurtz and member of their crews, who between them collected 54 boxes of specimens -- probably at least 50% of those used. More name listing would almost certainly result in the omission of some who shouldn't be omitted. The cooks in mycophagy, which continued to be highly popular, the construction/takedown crews, the identifiers and the tray preparation staffs -- to all of you and more, I want to say Thanks. You have our appreciation. And one last word: Please come back next year.



Spore Prints

is published monthly, September through June, by the
PUGET SOUND MYCOLOGICAL SOCIETY
Center for Urban Horticulture, Mail Stop GF-15,
University of Washington, Seattle, Washington 98195
(206) 522-6031

OFFICERS:	Gilbert Austin, President Kem Hendricks, Vice President Edith M. Godar, Treasurer Mari J. Bull, Secretary
TRUSTEES:	Ralph Burbridge, Kris Fulsaa, Mark Jarand, Ingeborg McGuire, Gregg Miller, Lynn Phillips, Harold Schnarre, Agnes Sieger, Inga Wilcox, Michele Willis
ALTERNATES:	Bill Bridges, Bob Innes
IMMED. PAST PRESIDENT	Coleman Leuthy
SCI. ADVISOR:	Dr. Joseph F. Ammirati
EDITOR:	Agnes A. Sieger, 15555 14th N.E., Seattle, WA 98155

Calendar

Nov. 11	Twanoh State Park field trip
Nov. 13	Beginners' class, 7:00 p.m., CUH
Nov. 14	Beginners' orientation, 6:40 p.m., CUH Membership meeting, 7:30 p.m., CUH
Nov. 18	Field trip at a surprise location
Nov. 20	Beginners' class, 7:00 p.m., CUH Board meeting, 7:30, CUH
Nov. 21	Conservation & Ecology, 7:30 p.m., CUH
Nov. 24	<i>Spore Prints</i> deadline

ORIENTATION FOR NEW MEMBERS H. Hendrickson

Welcome to all new PSMS members. So that you may become acquainted with the Society as soon as possible, we are holding orientation sessions for new members before the general membership meetings on the second Tuesday of the month. The orientation sessions will be held in the PSMS board room, located in Isaacson Hall kitty-cornered across the courtyard from the general meeting room. The time is 6:40-7:15 p.m. Mark your calendars. The orientation sessions will be held in November, December, January, and February and end with a learning field trip in March.

COOKING TIP

Shea Moss
[Duff, the Fungus Federation of Santa Cruz]

To bring out the flavor of aromatic mushrooms, add a bit of the dominant scent when cooking, for example, a dried apricot (reconstituted) and a teaspoon of honey with chanterelles, a quarter teaspoon of almond extract and three anise seeds with *Agaricus agustus*, or a tiny dash of cinnamon and a couple of cloves with matsutake.

Membership Meeting

Tuesday, November 14, at 7:30 p.m. in the Center for Urban Horticulture, 3501 N.E. 41st Street, Seattle

Our topic for November is "Adventures of American mushroom hunters in the Soviet Union" as related by our own incomparable Dennis Bowman. Visit with mushroom lovers in Leningrad, search out fungal delicacies in the Moscow market, enjoy a cookout in the Siberian woods around Novosibirsk. Curious about Soviet mushrooms or culture? Ask Dennis and his new family, wife Irina and stepdaughter Kristina from Leningrad. The social hour after the meeting features Russian mushroom recipes contributed by Irina. Don't miss this exciting, informative, fun-filled evening.



BOARD NEWS

Agnes Sieger

Coleman Leuthy reported that preparations for the exhibit were proceeding well. The Nominating Committee was appointed for next March's election. It consists of Inga Wilcox, Harold Schnarre, and Kris Fulsaa. Hildegard Hendrickson and Howard Nelson have agreed to help teach the beginner's classes. PSMS membership fees are now tax exempt, except for about \$0.50 that is being used for lobbying. Doug Raff is looking into the possibility of reduced mailing fees as a tax exempt organization. The 1990 Survivors' Banquet will be Friday, March 9.

OF THIS AND THAT

Show Chair Coleman Leuthy and the committee heads extend a hearty thanks to **all PSMS members**, old and new, who worked to make this year's show a huge success. There are too many to list, but you know who you are. You put up posters, collected and arranged mushrooms, showed up to help fill the audience for the Seattle Today show, manned the booths, fed the workers, and stood out in the rain to direct traffic. Congratulations on a job well done.

For all of you who asked about **Charlie Volz** at the annual exhibit, he has been incapacitated by undiagnosed problems following a stay at the hospital last August. Send him a note and let him know you missed him. When you're feeling down, it's nice to know someone cares.

Best wishes to **Dennis Bowman** and his new family, wife **Irina** and step-daughter **Kristina**.

Congratulations to PSMS identifier **Brian Luther** and his wife, **Pam**, on the birth of a daughter, **Arnica Malinda**, October 13th.



Brian Luther and
Arnica Malinda

UPCOMING FIELD TRIPS

Lynn Phillips

As the days grow shorter and chillier, another mushroom season is winding to a close. It's time to store the boat, bike, hiking gear, etc., and hot wax the skis. But don't put away your mushrooming basket quite yet. I'm hoping to have one last field trip on Saturday, November 18, just in time to pick a few mushrooms for Thanksgiving dinner. We'll meet at 9:00 a.m. as usual, but I'm going to keep you in suspense regarding the location. Actually, I'm waiting until the last minute to determine the best area. I'll announce the site at the November meeting. For those of you who won't be there, call the PSMS office recording (522-6031) next day for directions. If you could host this trip, please call me at 524-2950.



There were no shows by 9:30, and I was beginning to wonder if I had erred on the site. I was relieved when the first two couples arrived. It was a clear, brisk morning, and all enjoyed the hot drinks and the warm fire.

The area was extremely dry, and most of the mushrooms were found in the White River and Soda Springs area. Larry Baxter and Sarah Clark identified 60 species. Twenty-five percent were edible, including several nice matsutake.

Twenty-three members signed in, and 11 remained for the delicious potluck dinner. We were then treated to chemical-free fruit graciously furnished by the Baxters from an organic farm in the Wenatchee Valley. Several people left early to visit the Autumn Leaf Festival in Leavenworth.

P.S. The park manager was not around on my arrival, and I chanced putting up PSMS signs from the main entrance on in. Don't put up signs in this park, as the ranger takes them down. I managed to get them back before we returned home.



Nov. 11 **Twanoh State Park**
(elev. sea level, 35 miles east of Seattle)
Take the downtown Seattle ferry to Bremerton. Travel southwest on State Highway #3 through Belfair. Continue on State Highway #106 for a few miles to the park.

Nov. 18 **Surprise location**
The location will be announced at the November membership meeting and will then be put on the society's answering machine, 522-6031.

FIELD TRIP REPORTS

Crystal Springs **Peggy Burbridge**
Saturday was warm and sunny; brilliant shades of red, yellow, and orange mingled with the green of the firs and hemlocks. Over 50 eager hunters enjoyed nature's colorful display while bringing in more than a hundred species.

Our identification experts were Brian Luther, Margaret Dilly, Sara Clark and Larry Baxter. Among the more unusual and rare mushrooms were *Truncocolumella citrina*, *Hydnum subincarnatum*, *Leccinum incarnatum*, and *Ramaria aurantissiccenscens*.

Pot hunters were unable to find many chanterelles, but *Leccinum aurantiacum* were in abundance. Because the bridge was out leading to Stampede Pass, the best matsutake hunting areas were closed off.

Twenty-five people enjoyed our usual gourmet potluck.

Soda Springs **Joe Hillis, Rod & Milly Myers**
It was a long drive to the campground, but the 38 people attending were rewarded with very nice weather. Even though it apparently had been quite dry in the area, over 100 species of mushrooms were brought in. Four matsutake were found, but for the most part pot hunters were disappointed that there were not a lot of edibles to take home. Twenty-one stayed to enjoy a delicious potluck although seating was scarce as there was only one picnic table per shelter. Our thanks to Larry Baxter and Margaret Dilly, our identifiers.

Lake Wenatchee **Don & Florence Clark**
Arriving at the park at 8:00 a.m., we soon had coffee, hot water, and a warm fire ready for any who braved the foggy early morning trip from Seattle.

The Dalles Forest Campground **Ron Post**
Thirty-five people signed in on a somewhat cloudy day on the opening of hunting season. George Rafanelli, the identifier, was kept busy by people heading away from the gunshots. He identified 73 species of mushrooms, although not that many were edible. Most of the edibles found were around the campground, primarily angel wings and bear's heads; however, a beginner in the Society found a prize matsutake on his first mushroom hunt ever. About 15 people stayed for the potluck. Many thanks to hosts Ed and Patricia Nessl-Bush for keeping a roaring fire going all day in the cold weather.

BEGINNER'S TIP

Dick Sieger

Start cleaning mushrooms in the field when harvesting for the table. Otherwise, dirt and duff in your basket will find its way into hard to clean gills and crevices. Field cleaning slows you down, but it's surprising how many hidden mushrooms you may see if you look around at ground level while brushing, scraping, and trimming. Conservation is promoted, too, because you're less likely to take poor material. Remember to keep an undamaged specimen for later identification.

MUSHROOM MISSIONARIES

On October 19, Dennis Bowman gave a talk to the Kitsap Peninsula Mycological Society on mushroom cooking techniques he learned in Russia.

MEMBERSHIP FEE TAX EXEMPT (mostly) G. Austin

Because PSMS has a tax exempt status with the IRS, individual membership fees (minus lobbying expenses) may be listed as a tax-deductible contribution on annual income tax returns. Tax exempt claims for family memberships should be limited to \$14.50, single claims to \$9.50, and student claims to \$7.50.

*Seen in one of Seattle's better stores:
A clear plastic package of six fresh shiitake
and a happy, happy slug.*

Mushroom season again brings up the subject of commercial harvest of mushrooms. I have discussed this with professional mycologists, and their worry seems to be mostly the disappearance of the forests through logging. So I guess we need to continue our pressure on legislators to curb the timber harvest.

The weather again has been uncooperative in producing great abundances of chanterelles or matsutake. However, two processors have registered and been licensed with the Department of Agriculture. Only three buyers have complied with the mushroom law that went into effect this year because of some misunderstandings about to whom it applies. Many buyers "claim" to sell only to restaurants and farmers markets, exempting them from licensing. After discussions with the Department of Agriculture and letters to them from certain legislators, it has been agreed that the "intent" of the law was to license all those dealing in commercial harvesting of mushrooms. We hope this can be resolved without more legislation, but if not--back to Olympia we go.

We probably will be back again year anyway as we are still having difficulty getting the Department of Natural Resources to comply with our request to either charge or forbid commercial harvest on their lands. They put out a press release but have not posted their lands or made any visible effort to stop the harvest on them.

Only a few of our members have reported buying stations, so I can only assume there weren't many or people weren't interested in reporting them. In either case, the Department of Agriculture can act only in response to information supplied by us.

There are other conservation and ecology issues that need our attention, so I have set up a meeting of the Conservation and Ecology Committee at 7:30 p.m. on Tuesday, November 21, at CUH in the board room at Isaacson Hall. I welcome all who can attend, so do come out and be a part of this important group.

Types of Poisonings, *cont. from p. 1*

Allergic Reactions: The same way that people have individual sensitivities to shellfish and a variety of other products, people have individual sensitivities to mushrooms. With the NAMA registry of mushroom poisonings, it's now clear that many mushrooms that we regard as perfectly edible produce allergic reactions or sensitivities that we do not understand. A pathologist who works in the lab with me says that she's begun having incredible reactions to chanterelles. I know that in the last year, I have not been able to eat shaggy manes. My wife will not eat *Armillaria mellea*. That's a very common allergen, by the way; probably 10% of people who eat it develop a significant gastro-intestinal upset.

Alcohol Related: There are a number of mushrooms that are not poisonous by themselves but cause problems when mixed with other substances, specifically, alcohol. The most well known is *Coprinus atramentarius*, which contains the same chemical as Anabuse, the antialcohol drug.

Actual Mushroom Poisonings: As of April 1988, over 700 cases of mushroom poisoning had been reported to the North American Mycological Association poison registry. In the vast majority, the mushroom(s) were never identified. In 63 cases, they were mixed species. The most frequent culprit was *Agaricus molybdites*, which fortunately is not a significant problem here in the Pacific Northwest. Other species included *Gyromitra*, *Laetiporus*, and *Amanita*. The *Amanita* statistics are probably accurate, as they are so dramatic they tend to get reported to a registry like this--especially *A. phalloides* and the *A. verna/virosa* group. However, there are many more cases of *A. pantherina* and *A. muscaria* poisoning.

*Don't tell the clerk that ceps are porcini.
He is of the opinion that ceps are not porcini.
If he ends up thinking they're porcini,
he might raise the price.*

—New York Myco. Soc. Newsletter



REMINDER! PUGET SOUND MYCOLOGICAL SOCIETY 1990 DUES RENEWAL

(If you joined after October 1, 1989; are a lifetime member or have already paid your dues, ignore this notice.)

Please mail this form and your check, payable to F.S.M.S., to:
Bernice Velategui, 2455 74th S.E., Mercer Island, WA 98040

Enclosed is _____ \$15.00 family membership
10.00 single membership
8.00 full-time student

NAME _____

STREET ADDRESS _____

CITY, STATE, ZIP _____ PHONE _____

Your stamped, self-addressed envelope will be appreciated!