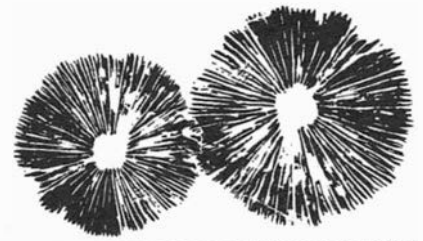


SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY

Number 285

October 1992



PRESIDENT'S MESSAGE

Dick Sieger

What have we been doing?

Our Annual Exhibit has risen from the ashes like a morel and is ready to fruit. Bruce DeLoria and his committees have done a 12-month job in 8 months, the rains have come, and we're ready to go. Please help. If you are new, we need your enthusiasm. If you are a member of long standing, we need your experience.

Our PSMS Spring Foray at the Cispus Environmental Center near Randall on May 14-16 will revive a PSMS tradition. Dennis Bowman and I are planning collecting trips, workshops, discussion sessions, and classes. Steve Trudell promised to conduct a mushroom photography session. All will have an opportunity to meet and work with our Foray Mycologist, Dr. Ammirati, and other experts. Most important, we'll all get to know one another better.

Our Daniel E. Stuntz NAMA Foray, chaired by Dennis Bowman, has a year's work behind it and a year's work to go. PSMS will host several hundred mushroomers from all parts of North America at Fort Worden on the Olympic Peninsula on October 15-17, 1993, with events before and after. "Mushroom Habitats" is the theme of the foray. Denis Benjamin has selected speakers and is working with them. Dennis and Denis have been refining the schedule of events since 1991. Kern Hendricks has volunteered to be Registrar and Master of Ceremonies. Elizabeth Hendricks will coordinate pre-foray sales and tourist services. She will also assemble a foray quilt from squares crafted by mushroomers all over the country. Dr. Ammirati, Foray Mycologist, is planning collecting sites and organizing the display. Steve Trudell has been working with the Pacific Northwest Key Council, who will give individual attention to mushroomers as they collect, identify, and display their finds. Marian Maxwell will supervise the arranging of trays, and Coleman Leuthy will supervise their placement. Michael Blackwell and Patrice Benson have offered to oversee food preparation. We're having lots of fun. Please join us.

Our Barlow Pass Study, just a few months old, is already giving Dr. Ammirati valuable information about the fungi in old growth forests. Preliminary findings may be published next summer. Carol Smith's crew visited the site every ten days in mid-summer and weekly starting in late summer. Dr. Ammirati is teaching us advanced taxonomy on Monday evenings as we identify the collections. Now that Denis Benjamin has bared his soul in *Mushroom, the Journal*, the line of dancers at the Barlow Pass outhouse is shorter. Most of us want to be first at a nearby *Boletus edulis* patch mentioned in the article. All are relieved!

Our Conservation Committee, led by Ron Post, worked hard to have mushrooms added to Washington's Special Forest Products Act. Now they are publicizing the law so people will obey it. To inform people about conserving mushrooms and forests, the committee is producing a pamphlet and Ron is making a video. Do you have advertising or public relations experience? Ron would like your guidance.

Our membership database has been augmented so we can identify members' interests and professions. Agnes Sieger transferred the information from the membership application cards. It is now being revised by Bruce Deloria so we can get better use from it. If your committee needs people with particular talents, we can help you find them.

What else can we do?

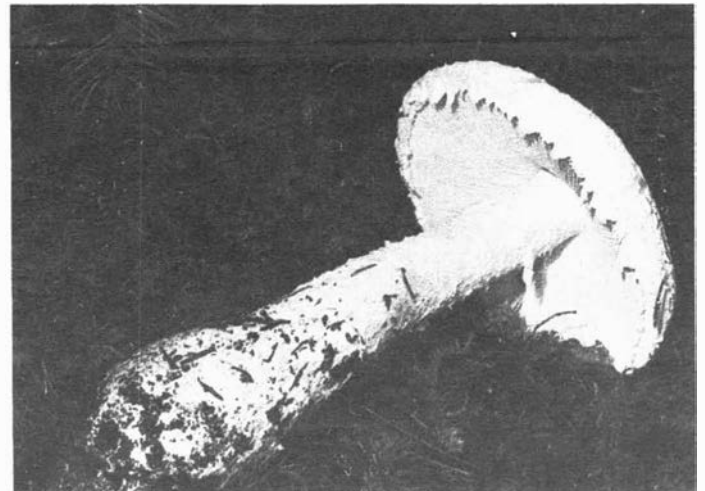
Start more special interest groups. If a project interests you, it probably interests others. Activities like art, crafts, and photography are shared by many people in PSMS.

Launch a study of mushroom cultivation in forests in cooperation with the DNR or USFS. Successful cultivation would add value to living trees and might provide jobs for unemployed forest workers. Bill Bridges and Denny Bowman are looking into this and would like to hear from you.

Begin a study of urban mushrooms. Which are good to eat? How can they be identified? Where do they grow? When? Patrice Benson and I like this idea. Do you?

WANTED: AMANITA SMITHIANA

PSMS Scientific Advisor Dr. Ammirati needs an abundance of fresh *Amanita smithiana* to assay its toxins. *Amanita smithiana* is the large, white, deeply rooted mushroom pictured here. Call Dr. Ammirati (543-1986) or Dick Sieger (362-6860) to arrange for delivery to Room 407A in UW's Hitchcock Hall, just west of the University Hospital complex.



*A couple of hyphae one day
Met, wandering through the clay.
Said one, "I'd love to relate,
And a roll in the clay would be great,
But it seems that we both are type A."*

—Harley Barnhart

Spore Prints

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PUGET SOUND MYCOLOGICAL SOCIETY
Center for Urban Horticulture, Mail Stop GF-15,
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CALENDAR

- Oct. 10,11 Joint Mountaineers/PSMS field trip
Oct. 11 Barlow Pass collecting
Oct. 12 Intermediate class, 7-9 p.m., Isaacson Hall, CUH
Advanced i.d., 5-7 p.m., Hitchcock Hall
(15th Ave. N.E. and N.E. Pacific Street)
Oct. 13 Membership meeting, 7:30 p.m., CUH
Oct. 17,18 **Annual Exhibit, CUH**
Oct. 19 Board meeting, 7:30 p.m., CUH
Barlow Pass collecting
Intermediate class, 7-9 p.m., Isaacson Hall
Advanced i.d., 5-7 p.m., Hitchcock Hall
Oct. 23 *Spore Prints* deadline
Oct. 24 Field trip, Twanoh State Park
Oct. 25 Barlow Pass collecting
Oct. 26 Intermediate class, 7-9 p.m., Isaacson Hall
Advanced i.d., 5-7 p.m., Hitchcock Hall
Nov. 2 Intermediate class, 7-9 p.m., Isaacson Hall
Barlow Pass collecting
Advanced i.d., 5-7 p.m., Hitchcock Hall
Nov. 6 Oregon Myco. Soc. Fall Foray
Nov. 8 Barlow Pass collecting
Nov. 9 Intermediate class, 7-9 p.m., Isaacson Hall
Advanced i.d., 5-7 p.m., Hitchcock Hall
Nov. 10 Membership meeting, 7:30 p.m., CUH

THANK YOU, Coleman Leuthy, for donating the desk in the PSMS office, and **Joanne Young**, for donating a lighted slide viewer.

Membership Meeting

Tuesday, October 13, 1992, at 7:30 p.m. at the Center for Urban Horticulture, 3501 N.E. 41st Street, Seattle

October's program is a panel on conservation. The speakers are Janice Friebaum from the Washington State Department of Natural Resources "Natural Areas" program, Bill Scott of The Mountaineers Timber Watch Committee, and PSMS President Dick Sieger, who will speak from a personal perspective. Dr. Joseph Ammirati, UW Professor of Botany and PSMS Scientific Advisor, will speak if he can get away from his classes. A question and answer period will follow the discussion.

Members with last names beginning with I-L are asked to bring a plate of refreshments for the social hour. The PSMS library will be open before the meeting. And don't forget to bring mushrooms for display.

MEET THE MYERS

Inga Wilcox



Picture a foray to an area after a big burn! Because the camp site burned, people meet and camp in a gravel pit. Everybody finds "hundreds" even "thousands" of morels. Morel garlands are immediately strung up, draped over trailers and tents, and left to dry over night. This was one of the early forays for Rod and Milly. They ate morels every night for six nights, dried the rest, and gave some away.

No wonder they joined PSMS at an exhibit in the Science Center back in the 1970's. Because of Rod's job as a salesman for Bests Pies, they did not have Saturdays free and dropped out. Returning in 1988, they have hosted forays, helped with the exhibit, and manned the table at the Enumclaw Fair.

Rod and Milly both are "native Washingtonians." Now retired, Rod continues to hunt with bow and arrow; he is a fly fisherman and ties his own flies. Milly accompanies him but does not fish. They both enjoy watching birds, grow their own vegetables and herbs, and are fighting to keep their 1.5 acre property free of blackberry brambles.

They also enjoy the challenges of growing their own mushrooms and participate in the Cultivation Group. They enjoy oyster mushrooms and *Stropharia*. *Lepista nuda*, however, is one of their most favored species.

Rod and Milly feel that everybody should host a foray once a year to truly participate in PSMS. Hosting is a great way to meet other members and make friends. They have taken their children and grandchildren to look for fungi and hope that there will be mushrooms for future generations to find and appreciate. Fish and razor clams are disappearing. We must practice conservation.

BOARD NEWS

Agnes Sieger

Dennis Bowman and Bill Bridges are looking into seeding mushrooms in clearcuts. The Barlow Pass Study has already produced 20% more species than previously listed for that area. Bill Hess and Kathreen Otwell are writing a chapter in a cultivation book. We sold \$709 worth of books at the September meeting. Ron Post has drafted a brochure on conservation and has some bids on designing/printing.

CULTIVATION GROUP

Milly Myers

Fifteen members were present September 13 for our regular meeting. The main object was to plan our portion of the annual exhibit and next year's activities.

Before the meeting, we had a guest, Carla Emery, author of the *Old Fashioned Recipe Book, An Encyclopedia of Country Living*, a book on how to grow anything edible. Carla asked for our help in writing a section on mushroom cultivation for her new edition. Mike Hess and Kathreen Otwell will work on this.

Mike also brought a *Ganoderma lucidum* he had grown from the workshop he attended in British Columbia. Lynn Phillips brought oyster mushrooms from the cultivation workshop she attended at this year's NAMA convention. Sue and Pat Murosako showed pictures of a commercial shiitake farm they visited in Japan. Mike shared a large bag of "Fastbreak" with the group. This is a supplement for protein-poor media like straw.

A new roster of Cultivation Group members will be made up and mailed to the group, together with a copy of the tentative program for next year.

There will be no meeting in October because of the exhibit. Our next meeting will be on November 8th at Harry Stander's place near Clearview where he has some logs that we will plug with shiitake spawn. Check the November *Spore Prints* for the time and address.

The cultivation portion of this year's exhibit will be essentially the same as last year's. All members are asked to bring any mushrooms they have growing. Please let Rod Myers know what display equipment or mushrooms you will be bringing so he can have labels made up. Rod's phone number is 486-1513.

See you at the exhibit.

ADVANCED STUDY GROUP

Carol Smith

The Barlow Pass Study provides a multitude of mushrooms which must be identified and recorded. Those interested in advanced identification are urged to join us each Monday at 5 p.m. in Room 244 or 246 in Hitchcock Hall at the University of Washington, when we will examine and identify the mushrooms from the previous day's collection. Please bring *Mushrooms Demystified* by David Aurora and any other reliable keys that may help you in identification. Phone Patrice Benson at 722-0691 for further information.

SEMINARS, CLASSES, FORAYS

Cultivation Class: Paul Stamets has two cultivation workshops coming up, one November 14 & 15 and one December 12 & 13. The classes cost \$300 and feature in-depth discussion of the cultivation of 20 or more gourmet mushrooms. For information, write Paul at Fungi Perfecti, P.O. Box 7634, Olympia, WA 98507.

Paul also has a new book scheduled to be released this fall-winter—*Growing Gourmet & Medicinal Mushrooms*.

Mushroom Study Tour of Morocco: Gary Lincoff, author of the *Audubon Field Guide to North American Mushrooms*, and Emanuel Salzman, co-editor of *Mushroom Poisoning*, will lead a mushroom study tour of Morocco on December 1-15, 1992. For information, write Fungophile, P.O. Box 480503, Denver, CO 80248-0503 or call (303) 296-9359.

MUSHROOM MISSIONARIES

Mary Lynch led a mushroom i.d. hike for the Issaquah Alps Trails Club on June 14th. **Ben Woo** gave a talk on "Russulas Revisited" to the Oregon Mycological Society August 24. On September 15th, **Patrice Benson** taught a mushroom class for the 5th graders of St. Brendan's at their week-long environmental studies camp. Immediately after the talk, a kid found, and correctly identified, *Hericium coralloides*.

Patrice will teach a three-session mushroom class for parents and children at the Mount Baker Community School October 27th, November 3rd, and November 10th. **Dick Sieger**, using Patrice's prepared slide tray, will speak about the beauty and conservation of mushrooms at the luncheon meeting of the Isaac Walton League on October 8th.

GENETIC ENGINEERING VS CHESTNUT FUNGUS

Boyce Rensberger, WP

Genetic engineers say they have a plan to rescue the American chestnut, the huge spreading tree species that once dominated the landscapes of eastern North America but which was virtually exterminated in the first half of this century by an imported fungus that kills the above-ground part of the tree.

Botanists have called the virtual disappearance of the chestnut one of the greatest ecological disasters of the century because it radically altered forest communities of plants and animals from Maine to Alabama and west to the Mississippi. Besides supporting a complex wild ecosystem with its heavy nut crop, the tree produced a rot-resistant wood prized for construction and fencing.

The plan is to make a synthetic virus to infect the fungus that causes chestnut blight, converting the fungus, *Cryphonectria (Endothia) parasitica*, to a benign form that does not kill the tree. Moreover, scientists say that because fungi naturally exchange copies of their genes with one another, the benign fungi should transfer their new genes to harmful relatives in the wild.

The approach also could be applied to combating Dutch elm disease, *Ceratocystis ulmi*, and fungal diseases of humans, according to Gil Choi and Donald Nuss of the Roche Institute of Molecular Biology in Nutley, New Jersey, who describe the plan in the current *Science*.

The researchers started with a naturally occurring virus that infects the fungus, turning it benign. The virus has not spread rapidly, despite human efforts over a number of years to introduce it to diseased chestnuts. Prime targets of that effort have been chestnut roots, which resist the fungus and still live in many areas, sending up shoots doomed to become infected and die within a few years.

Choi and Nuss have engineered a synthetic form of the virus and used it to infect the fungus in the laboratory, producing not only a benign strain but one that they believe will spread quickly if released into the wild. Their plan is to farm the engineered fungi in the laboratory, harvest the spores, and then spray them on fungus-infected trees. The researchers believe the benign fungus outcompetes the pathogenic form and will eventually take over its ecological niche.

The institute is seeking approval from the U.S. Department of Agriculture to test the plan in greenhouses and in the field. If approved, Roche officials say, those tests should take three to five years.

FIELD TRIP TIPS

Agnes Sieger

For those who join at the Annual Exhibit in October, I thought it might be nice to review some basic mushrooming tips.

Apparel: The Pacific Northwest is wet. Wear warm clothing, preferably in layers, and waterproof shoes or boots and bring your rain gear. The general deer-hunting season starts the middle of October. The fashionable mushroom-hunting colors are international orange, fluorescent pink, and canary yellow. Pacific Northwest vegetation is usually thick, and the sky is frequently overcast. Bring a compass and whistle and a map of the area — and remember to use them.

Mushrooming gear: You will need a wide-bottomed container for your mushrooms. This can be a basket or bucket. Do not use plastic sacks; they tend to condense moisture and turn mushrooms into slime. You will need a sturdy knife suitable for cutting and prying and perhaps a soft brush to clean up the edibles; some people even bring a small garden trowel for digging. To protect individual specimens for identification, take some wax paper sandwich bags or aluminum foil.

Collecting tips: If you know you have a good edible, cut off the stem cleanly and brush off as much soil and debris as possible. Store like species in a rigid container where they won't get crushed or pick up more dirt. Try to keep the mushrooms cool and dry, and process them as soon as possible.

If you can't identify it, don't pick a bushel basket full. Collect a few representative samples (if possible, young, old, and in between). Include the whole mushroom. (Don't cut off the stalk!). Handle gently by the top and bottom and put in a separate container such as a small box or waxed paper bag or wrap in aluminum foil. Discard most of the debris but leave "roots," cups, and a few scraps of whatever the mushroom was attached to. Since tree association may be important for identification, slip in a sample leaf, cone, or branch from nearby plants.

Field trip format: PSMS field trips are planned for Saturdays, since this is the most convenient time for many people. It is possible to come early on Friday and stay over to Sunday. The campgrounds, unless otherwise specified, have camping facilities. Almost all field trips have hosts, who set up by 9:00 a.m. on Saturday with hot coffee and snacks. The hosts greet and sign in members, relay general tips on what is up and where to find it, and introduce newcomers to more experienced members. They also have a map of the area. After signing in, participants gather their gear and head for their favorite hunting grounds. In the afternoon, they come back to the campsite to identify their finds, compare notes, and prepare for the potluck.

Potluck. The potluck starts at 4:00 p.m. You need to bring your own eating utensils and beverage and a dish to contribute to the table. This can be an appetizer, salad, main dish, or dessert. The food is usually delicious, and it is a great time to swap tales, collect recipes, and share mushroom information with friends old and new.

FALL FIELD TRIPS

Mary Lynch

If the weather holds, we will run a field trip in November. Watch for details in the November *Spore Prints*.

October 24

Twanoh State Park

(elev. low, 20 miles SW of Seattle by ferry)

Take the downtown Seattle-Bremerton ferry. From Bremerton, drive south on State Highway 304 to Highway 3. Continue south on Highway 3 past Belfair, then bear left onto Highway 106 and continue another 7 miles to the park. Alternate routes involve driving south on I-5 to Tacoma and crossing the Narrows Bridge or driving farther south through Olympia and Shelton. This will add 60 or 80 miles to the drive. Twanoh State Park is located on the south side of Hood Canal between Belfair and Union.

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Puget Sound Mycological Society
Center for Urban Horticulture
GF-15, University of Washington
Seattle, Washington 98195



SIEGER, Dick & Agnes
15555 14th Ave NE
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ANNUAL EXHIBIT: Saturday, Oct. 17, noon-8:00 p.m.
Sunday, Oct. 18, 10 a.m.-6 p.m.