

# SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY  
200 Second Avenue North, Seattle, Washington, 98109  
September 1977

Number 134



## THE PREZ SAYS

Jack Orth

It's that time of year again - the fall season is upon us. That means the Annual Exhibit is also approaching rapidly. For those of you who are new to PSMS it is a great opportunity to get to know other members and especially great if you work with them on one of the many committees set up to put on the Show. If you are an experienced member you already know how important it is to sign up for a committee of your choice at the September meeting. To maintain our reputation as the nation's top mycological society we must have every member's support at Exhibit time, October 15 and 16.

The Exhibit will be carried out as before but with some changes. The ticket booth will be in a different place and people can circulate in a reverse direction if they choose. The Science Theater has been converted into a work shop so the slide show will be in a location across the mall. The Arts and Crafts Exhibits will have individual stalls for their displays. And we hope to have some new ideas and displays. The new Director of the Pacific Science Center, Helmuth Naumer, has introduced many changes including the financial arrangements for the use of the Center. On August 2nd Milton Grout, the Hendricksons and I met with Mr. Naumer to discuss our new arrangement with the Science Center. Basically we arrived at an agreement of financial commitment about the same as before. However, the donation to the Science Center is to be replaced by a fixed fee for the use of the Eames Theater, board room, and class rooms. Officially, the new rate schedule of the Science Center for the Eames Theater is \$470 for 8 hours or \$282 for evenings.

We will again share the gate receipts for the Exhibit under the old system this year, and renegotiate after the Show. Our impression after the meeting was that Mr. Naumer is an astute, fair-minded business man who makes promises only if he intends to keep them. Also it is in the best interest of PSMS to keep its affiliation with the Science Center and share their prestige and gate receipts. It's a symbiotic relationship - like mushrooms and trees.

## HONORS TO DR. DANIEL E. STUNTZ

NAMA's highest and most prestigious award was given this year to Dr. Daniel E. Stuntz of the University of Washington and Scientific Adviser to PSMS for his contributions to Amateur Mycology. Accomplishments taken into account in making the award are helping amateur mycologists by such activities as organization, and leadership of local and regional societies, conducting workshops and courses, publications of articles and books, presenting lectures and the identification of specimens.

The award consists of a citatory plaque, a ceramic mushroom and an honorary life membership in NAMA.

## WELCOME TO THE FOLLOWING NEW MEMBERS

Ana J. Avery (784-72-41); Almeda & Arnold Bergstrom (Bellevue); Ian W. Duncan (Seattle); Patty Manley (322-4288); Sumner & Elizabeth Marcus (362-1844); Richard & Gisela Schultz (937-7752); Florence M. Windell (Poulsbo).

## CLASSES, CLASSES, CLASSES

Milton Grout

The popular fall class in mushroom study will again be held on Monday evenings from 7 - 9 pm in the Pacific Science Center lower RAIL Laboratory. Classes will be held beginning on September 19th and will run on consecutive Mondays through November 7th, except for regular Society meeting nights. The class will be taught by Milton Grout and George Rafanelli. All common genera will be covered and will be amply illustrated with slides from the PSMS collection. The class will be structured with the beginner in mind, but will be in sufficient depth to interest the intermediate groups as well as a good review for the more advanced.

Fresh specimens directly from the field will be identified and discussed. All participants in the class are requested to bring in specimens and the first half hour will be spent on identification.

A fee of \$6.00 per person will be charged to assist in our financial support of the Pacific Science Center as well as to cover the cost of the new PSMS Book of Instructional Materials. Registration for the class will be on Monday, September 19th, 7 pm. Classes this year will be held at a new location on the east side of the Science Center on the ground floor level. The room is 201 in Building #1.

## JENNIE SCHMITT'S CLASSES IN THE SOUTH END

Jennie will be holding classes in Renton and Auburn this year. The classes in Renton will be held Tuesdays, starting Sept. 27 from 7 - 9 pm in the Liberty Park Community Center, and will consist of 8 sessions. Registration is through the Renton Parks Department.

The classes in Auburn will be held Wednesdays, starting on September 28th, from 7 - 9 pm in the Senior Citizen Center. Register through the Auburn Parks and Recreation Department. The classes in Auburn also will run for eight weeks.

## Would YOU Help??

With the coming fall season surfaces one of the recurring problems of our Society, namely securing hosts for the fieldtrips. And again we want to reiterate, the hosts on the fieldtrips provide a social function, they do not need to know how to identify mushrooms. (There always is an expert identifier on the fieldtrip). The hosts greet the arriving mushroomers, have some hot coffee and cookies (provided by the Society) on hand, and tell them what kind, if any, fungi have been found, and where. And on Saturday evenings the hosts organize the potluck (to which all fieldtrip participants provide a dish). Ideally, we should have at least 2 couples or 4 individuals hosting a given trip. This would mean that any one would stay in camp at most one-half day - and this is certainly not an enormous sacrifice. What has happened too often is that two persons did it all, and did not get to go after mushrooms at all, or worse, our fieldtrip chairman also had to function as host, in addition to all his other duties. Therefore, we urge you to phone Dick Sieger today (362-6860) and volunteer as host on one of the coming fall fieldtrips.



# P. S. M. S. Spore Prints

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gard Hendrickson, Editor, 4029 E. Madison, Seattle, 98102

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ALTERNATES Carl Hermanson (723-5127); Paul Jones  
(772-5024); Paul Anson (282-2238).

SCIENTIFIC ADVISER Dr. Daniel E. Stuntz

## Calendar

- Sept. 10 & 11 Fieldtrip to Driftwood Acres (Olympic Pen-  
insula)
- Sept. 12 Monday, Membership Meeting, 8:00 pm
- Sept. 17 & 18 Fieldtrip to the Masonic Park
- Sept. 19 Board Meeting, 8:00 pm
- Sept. 23 Deadline for Spore Print Material. Send all articles,  
art work, and recent photos to the editor, at  
4029 E. Madison, Seattle, Wa., 98102
- Sept. 24 & 25 Soda Springs Forest Camp Fieldtrip
- Oct. 1 & 2 Crystal Springs Forest Camp Fieldtrip
- Oct. 8 & 9 Fieldtrip to the Silver Springs Forest Camp  
(NOTE: The Dalles Campground will be closed for  
construction of new facilities this fall.)
- Oct. 10 Monday, Membership Meeting, 8:00 pm
- Oct. 15 & 16 The 14th Annual Exhibit
- Oct. 21 - 23 Cispus III Educational Foray
- Oct. 29 & 30 Fieldtrip to Oak Patch

**REMINDER:** if you have not volunteered to work on a  
committee to put on the Annual Exhibit  
**DO IT RIGHT NOW** by picking up your phone and calling  
Winston Hufford, Chairman of the Exhibit, at 486-4784

## Membership Meeting

Monday, September 12, 1977, 8:00 pm., Eames Theater  
The Pacific Science Center

**Program:** An interesting and informative program has been  
scheduled for us: Grace Jones, our fellow PSMS member,  
will talk on the USE OF THE COMPASS while out in the  
woods; a very important and timely topic considering the  
coming mushroom season.

Milt Grout, past president of PSMS, will discuss  
FALL MUSHROOMS - GOOD AND BAD. All of us can use  
a refresher before we start out again this year.

### BOARD NEWS

H.R.H.

After approving the minutes of the last (May) meeting, Presi-  
dent Orth informed the Board that the new director of the  
Science Center, Helmut Naumer, at the request of his trust-  
ees, has set us a new fee schedule for the Center. Mr. Nau-  
mer requested a meeting with PSMS which Milt Grout, the  
Hendricksons, and President Orth attended. At first PSMS  
was told that the fees for the use of the Eames Theater were  
\$470 for 8 hours, and \$282 for an evening, but that regular  
users would get a discount. After some discussion Mr. Nau-  
mer agreed to an offer by PSMS of \$1,500 per year for the  
regular use of the Eames Theater (9 times); a class room for  
the fall classes (8 times) and a meeting room for the Board  
(10 times per year). In the past PSMS' donations to the Sci-  
ence Center have varied between \$1,000 and \$1,250.

Mr. Naumer seems to be an astute and reliable businessman  
and we feel he will keep his side of the promise, i.e. that  
we will regularly meet in the Eames Theater.

The financial and physical arrangements for the 1977 Show  
remain as in the past and will be renegotiated later in 1977.  
The Education Committee has finished the revision of the  
Educational Pamphlet and the completely retyped manuscript  
is at the printer at the time you read this. Thanks go to the  
Education Committee. The remaining copies of the old edi-  
tion of this Pamphlet will be available for \$1 while the new  
edition will be considerably higher.

Ronna Randall Brown, membership chairman, has resigned  
this position, since her professional commitments require her  
time next year (she will be teaching at the UW).  
The rest of the meeting was devoted discussing the plans for  
the Show. Winston Hufford (General Chairman) reported that  
all committees are chaired, except construction (since Ron  
& Pat Richardson are moving to Alaska in September). A few  
suggestions for changing and improving the Show were recei-  
ved (and more should be made by members): Have more room  
between the tables; survey visitors - ask them what they like,  
what they don't like, what else they would like to see; Serve  
mushrooms; have a microscopy section; have less arts and  
crafts exhibits; .....

The slide show will be in the Longhouse (in another building)  
since the Science Theater has been converted into a labora-  
tory. Also the balcony has been re-arranged providing for  
a better layout.

### NEEDED : A SPORE PRINT OF HERICIMUM ERINACEUS

If anyone finds Hericum erinaceus this year, make a spore  
print on white paper and mail it to Harold Burdsall, Forest  
Products Laboratory, Center for Forest Mycological Research  
P. O. Box 5130, Madison, Wisconsin, 53705.

It would be advisable to also dry the mushroom and send the  
dried material with the spore print, so there is no question  
of identification.

Sept. 10 & 11 Olympic Peninsula - Driftwood Acres

Follow I - 5 south to Olympia and take "Ocean Beaches" Route through Aberdeen to Hoquiam. Take Route 109 and go through Copalis and across the bridge. 200 feet past the bridge, turn left into "Driftwood Acres". Hook-ups \$4 and \$5. Shelter is available for the pot luck. It is about a 2-1/2 hour drive from Seattle. Mushrooms are now coming up in the area, and the rain forest is an hour's drive away.

Sept. 17 & 18 Masonic Park - 4 miles east of Granite Falls.

Go to Snohomish, then follow State Highway #9 (north) to the turn-off (east) for State Highway #92. Follow #92 (east) to Granite Falls and continue east (toward Verlot) for about 4 more miles. Then watch for the signs to the Masonic Park \* you turn left.

There will be a \$2 per day charge for overnight campers and trailers, and a 50¢ day-use fee. Non-Masons (that means most of our PSMS members) are welcome at the park Friday-Saturday-Sunday only.

NOTE: There will be absolutely no admittance or leaving the park after 9 pm. Also there will be no mushroom identification after 1 pm on Sunday.

Sept. 24 & 25 Soda Springs Forest Camp (elevation 3,100')

Drive State Highway #410 east over Chinook Pass to the Bumping Lake Road (Road #174) and follow this road about 5 miles south of the American River resort. The camp is on your left.

Oct. 1 & 2 Crystal Springs Forest Camp (elevation 2,400')

Drive east on Interstate 90. Take the Stampede Pass exit (which is about 10 miles east of Snoqualmie Summit). Turn to the right and follow the mushroom sign.

Oct. 8 & 9 Silver Springs Forest Camp (elevation 2,650')

Drive east on State Highway #410 to about 30 miles S.E. of Enumclaw. The camp is on your right, just before the Mount Rainier National Park border.

CLEAR LAKE FIELDTRIP JUNE 4 - 5, 1977

Estella & Martin Hanssen

Clear Lake was anything but clear on Saturday, although the rain stopped in time for potluck.

Those mushroomers who thought summer was here were startled to find they had left at home either rubber boots or rain jackets. (The former applied to your editor who sloshed in her hiking boots all day, but was dry above. But since this had not happened in several years, how did we know it would rain there?)

After a drenching day in the woods most everyone came in with a few or a lot of morels. The Boletus edulis were scarce and small.

We put up a plastic shelter between two trees and built a roaring fire to dry out the clouds. Forty-seven species of mushrooms were brought in for identification. About 64 members and guests stayed for one of our famous potlucks.

On Sunday, a beautiful day, Reynaldine Sandahl showed us an osprey nest which she had discovered some years before and had been checking yearly. It was atop a 90-foot snag located at the edge of the lake, so that the eagle could dive down to secure fish for the family. It is the only diving eagle.

Tales of the historic Entiat fire of 1971 which produced literally tons of morels, lured 102 members to the Memorial Weekend Fieldtrip (May 28 - 30) at the Silver Falls campground in the Entiat Valley. This year the morels were few and far between. In fact, mushrooms of any kind were so scarce that one member began greeting newcomers to the first annual PSMS PICNIC.

Effects of the drought were more in evidence in the valley than in other areas visited this year. In spite of a good rain just prior to the trip, the forest was powder dry. Mildred and Emory Bronner were the lucky ones - they found a patch of huge morels only a few feet from their trailer. Others found a few scattered here and there, and many found none. As far as we know, only three morels were found in the Crum Canyon fire area by Bill Brown. Of course, Monte and Hildegard were up to par. They took a couple of new members out and found them some morels despite being there for only one day. In all, 24 species of mushrooms were identified. Howard and Fay Melsen tried out their new Honda, and she did not prove as trustworthy as their old "Mildred" and bucked off Fay when Howard tried to avoid hitting a chipmunk. Co-hosts Del and Ruth Miller and Pat and Ron Richardson helped guide 97 members and guests through the potluck line Saturday evening. Since it had rained intermittently all day, food tables were crowded into the shelter which had been wrapped on all sides with plastic to keep out wind and rain. However, the skies cleared in time for the meal, and the weather continued to improve. As darkness began settling in, many crossed the small bridge to gather around the evening campfire. Ron Richardson's sister Cherie, a guest from nearby Lake Chelan played the guitar for a singalong. The kids were entertained by a clown and roasted marshmallows and made smores (graham crackers, chocolate, and marshmallow sandwiches).

Mushroomers who stayed for the next two days enjoyed the warm sunshine that has been contributing to the area's extreme dryness. Fieldtrip Chairman Dick Sieger and Chuck and Virginia Kessner helped with hosting duties on Sunday and about 40 people put together another potluck dinner. Hostess Ruth Miller lost a stainless steel berry spoon with a Paul Revere pattern. If anyone has found it, please call her at 454-6121. By noon Monday most PSMSers had pulled up stakes and were heading home.

ANYONE FOR A FAR-OUT FIELDTRIP?

PSMS has been approached to hold a fieldtrip on the Nooksack River which is located to the north, just south of the Canadian border. The trip would consist of running the Nooksack River in rafts. Periodic stops for picking mushrooms on the edge would be made. Our fieldtrip chairman is getting more information and will report about it at the September meeting. Be prepared to indicate whether you are interested in such a trip, and probably even sign up at that time.

MUSHROOM SYMPOSIUM - NOV. 4 - 7, 1977

A symposium entitled, Mushrooms and Man; An Interdisciplinary Approach to Mycology will be held at Linn - Benton Community College on November 4 - 7, 1977. The registration fee is \$25. For additional information and all the details contact Mr. Anthony B. Walters, Symposium Chairman/Coordinator, Linn - Benton Community College, 6500 S.W. Pacific Blvd., Albany, Oregon, 97321.

The third CISPUS Foray will be held on October 21, 22 & 23, 1977 at the Cispus Environmental Learning Center, south of Randle, Washington (South of Highway #12 - White Pass Highway).

A program of educational lectures on mushrooms by professional mycologists is planned, as well as smaller group sessions on beginning mushroom identification, beginning microscopy in mushroom taxonomy, advanced microscopy, photographic equipment and techniques, and mushroom cultivation.

Professional mycologists who will be present include Prof. Daniel Stuntz, University of Washington, Prof. Harry Thiers, San Francisco State University, and Prof. Gaston Guzman, Polytechnic Institute of Mexico. Others will be invited.

For the eager collector the Cispus Center will be open to attendees at 9 am, Friday, October 21. Lunch and dinner will be available at the Cispus Center for those who register for it.

CISPUS - Registrar, Jennie Schmitt, is accepting reservations from PSMS members now at \$8.00 per person. Send your checks made out to Jennie Schmitt - CISPUS III to her at 2100 Lake Washington Blvd., #70, Renton, WA. 98055.

You may pay for your meals (and cot space for your sleeping bag) now, or when you arrive. The price for meals (and lodging) is \$18 if you take meals Friday, Saturday and Sunday, or \$12 if you take meals Saturday and Sunday only.

Limit: 175 registrants; First-come, first-served.

## BOOKS

## NAMA

The Genus *Leptonia* by Dr. David Largent will be published by J. Cramer. The text contains 286 pages and 94 black and white photographs. The genus is one of those often consigned by amateurs to the catch-all designation of LBM (little brown mushroom). The several genera once lumped loosely in the Rhodophylls have received little attention. This monograph will therefore fill a welcome place in the literature. Copies can be ordered from Lubrecht and Cramer, 152 Mountainside Drive, Randolph, New Jersey, 07801. Price: \$32.00

Mycological Flora by Marcel V. Loquin is a most ambitious series of publications that is to contain about 3,000 species from the temperate zones of the world. Many famous and rare color plates from famous mycologists are reproduced from water colors and used to illustrate each species. Each species also has a black and white print to illustrate it. The text included the original latin diagnosis of Fries plus a concise description in English and French. The first two volumes are devoted to the *Cortinarii* and *Boleti*. It is hoped that two volumes can be published each year. This series could indeed make up an entire mycological library when complete. For more information write to Marcel Loquin, Le Village, St. Clement, 89100 Sens, France.

Toxic and Hallucinogenic Mushroom Poisoning by D. H. Mitchel and Gary Linoff. Published by Van Nostrand Reinhold Company of New York. It will contain about 200 pages, 30 color photographs and about 100 line drawings. The book is subtitled *A Handbook for Physicians and Mushroom Hunters*. The book is designed to appeal to amateur mycologists, pot-hunters, and physicians. It contains sections on the major kinds of mushroom poisoning in North America, case histories, toxic compounds, descriptions of some 60 species, notes on habitat, season, distribution, and a special section for physicians and hospital emergency room personnel. This work has been needed for decades and may well become a classic in the literature.

Again we will try and arrange for carpooling for fieldtrips. But this is a new season and we start from scratch. The rules are as follows: Those members who plan to attend the fall fieldtrips should call Monte Hendrickson (phone 523-2892) and let him know if they can (1) provide rides, or (2) need rides. During the week preceding a fieldtrip the two categories will be "matched up". Of course, we hope there are more PSMS members who are willing to provide rides than we need so that every members who wants to, can come on a fieldtrip.

## MUSHROOMING BUSINESS

Forbes Magazine in its July 15, 1977 issue reports that commercial mushroom production is up to 340 million pounds a year. Canned imports are thought to exceed 100 million. Several large companies are getting into the mushroom business and this will then provide fresh mushrooms in stores all over the U.S. Not too long ago fresh mushrooms were available only in the mid-Atlantic states, parts of the Midwest and on the West Coast, and were scarce or nonexistent elsewhere. They just didn't travel well.

It is believed that U.S. mushroom growing had its beginnings in Pennsylvania among Quaker farmers around the turn of the century. Later it was dominated by Italian families who settled around Kennett Square, near Philadelphia. They handed down their old-country mushroom lore, father to son, often without understanding why their techniques and formulas worked with their temperamental product.

Even at the simplest level, cultivation is a complex process. The "seeds" are microscopic spores that must be collected and started on grain. But that's only the start.

The growing is done on compost made from horse manure, hay and corncobs. It takes place in dank, cramped, windowless buildings where humidity must be kept high, the temperature held between 56 degrees and 60 degrees, and the interior maintained in strict darkness as the mushrooms emerge because light discolors them. Foot-high trays stacked floor to ceiling allow just enough space between to work in. When a lacy network of hair-like roots spreads throughout the compost, a casing of soil is added, which usually, but not always, produces clusters of white mushrooms. The mushrooms must be picked daily as they emerge from the soil over a period of 40 days or so, and packed and shipped immediately.

Today, the big companies have mushroom-growing reduced to a highly mechanized science that calls for movable trays that can be handled on an assembly-line basis. A 10-million pound capacity is considered an optimally sized mushroom farm. But the giant companies have a healthy respect for the 200 or so growers in and around Kennett Square with their homespun but low-overhead operations. The big companies also don't want to get too close to the biggest in the business (though it won't be for much longer) - Butler Company Mushroom Farm, Inc., located outside Pittsburgh. A huge former limestone mine gives Butler ideal growing conditions year round at low cost. It produced 42 million pounds last year. The newcomers are Ralston Purina and Castle & Cooke Cos. But they feel there is a market for all producers since at the present time the per-capita consumption is only about one and one-half pounds per year, while it is five to seven pounds per year in European countries. So, with some advertising, the firms believe a billion-pound market is not out of reach in the U.S.

Since Forbes is a financial publication, they also included that growers average a 9.7% return on sales, with return on investment above average (with 20% being what large companies aim for).