

SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
200 Second Avenue North, Seattle, Washington, 98109
June 1979

Number 153



CRYSTAL SPRINGS FIELD TRIP REPORT

H.R.H.

The weather was beautiful on May 19 & 20 for the outing at Crystal Springs. However, both the mushroom hunters as well as the mushrooms were scarce. The gasoline shortage may have discouraged the hunters, and the weather has not been "right" for mushrooms this spring.

Jennie Schmitt identified a dozen or so different varieties of fungi brought in. Sigrun Budnik was hostess for the trip on Saturday.

Even if the mushrooming was anything but exciting, other events prevented the field trip from being dull. Sigrun and her husband Chuck (at their nearby cabin) rendered first aid to my son who had a mishap with a trail bike. And during potluck, which was attended by a mere 26 or so, Lyle McKnight was bitten on both hands by a small dog whom he tried to rescue from three bigger dogs.

CLEAR LAKE FIELD TRIP REPORT

H.R.H.

Reading about a spring field trip does not make interesting news in the fall, so we include an incomplete report about the field trip to Clear Lake, held over the three-day Memorial Day weekend, since yours truly had to return home on Sunday in order to get this issue of Spore Prints to the printer on time.

The weather on Friday afternoon was beautiful and hot east of the mountains. But the mushroom picture was the same as it has been all spring. The few morels found at the elevation of the camp were old and dry. Some morels found at higher elevations were still nice and fresh. Only a few corals were showing, and the Boletus edulis found were mostly prized buttons, hard to find, since only bumps were showing. Jennie Schmitt identified about a dozen, plus or minus, species.

On Saturday, PSMS was joined by some members from the Tri-Cities (Richland) Mushroom Club. It was nice to see Joan and Howard Gillen again, who now reside in Richland.

Mid-afternoon on Saturday it rained on and off, threatening to spoil the potluck, since Clear Lake is the only field trip site without a shelter. But luckily, about 5 o'clock the last shower stopped, and it stayed dry, though cool, through the potluck (attended by nearly 50 people) and the following camp fire. Lyle and Joy McKnight, and Paul and Grace Jones were hosts on this outing.

While driving home over White and Cayuse Passes mid-afternoon on Sunday, we encountered a snow storm, but we hope that the weather remained reasonable at Clear Lake.

MUSHROOM EXHIBIT AT THE PUYALLUP FAIR

This year Jennie Schmitt (1-876-3177) is coordinating PSMS participation in a mushroom exhibit at the Puyallup Fair. We are told that the success of last year's exhibit was so great, that the booth will be larger this year. Again do we appeal to our members to volunteer to be host(s) at the booth for a couple of hours (you get a free pass to the Fair).

GET READY FOR THE FALL EXHIBIT

This year the Annual Exhibit will be held one week earlier than customary, October 6 & 7th. A lot of work has to be done to get it all together, that it is not too early to let the various chairmen know that you are willing to help. General Exhibit Chairman for this year is Rick White (day phone 442-1226) who is assisted by Tom McKnight (phone 486-2118).

Our appeal for help goes to the "old-timers" as well as to the "newcomers". It is a very rewarding experience to work on the Show as well as a lot of fun. No particular prior experience is necessary since all the chairmen know what has to be done. But they do need additional help to get their tasks accomplished. The following committees are set up, and all need help: Book Sales; Clean Up; Commercial; Construction; Freeze-Dry; Greenery Collection; Hospitality; Hosts and Hostesses; Identification; Labeling; Membership; Mushroom Collecting; Photo and Slide Show; Preservation; Publicity; Security; Sorting Boxes and Layout; Tray Arrangement.


MUSHROOM LORE IN EAST GERMANY

(The following article appeared in the Jan.-Feb. 1979 issue of The Mycophile, the official publication of NAMA.)

Mycological education in the German Democratic Republic (East Germany) is under the direction of the Minister of Health. Every district has its own professional mycologist that is employed by the District Institute of Hygiene. Experts are authorized to receive mycological training and are not paid a salary but are reimbursed for their expenses. The mycological training is free to those selected. The sale of fresh mushrooms by collectors to the public or to food processors and distributors is regulated by a new law passed on December 10, 1978. A total of 55 fungal species are authorized for sale as fresh mushrooms and an additional 14 species may be sold dry. Only collectors who possess the "Red Card" indicating their knowledge of mushrooms and their training (listed on the card) are permitted to sell mushrooms. Mushroom poisonings must be reported. The attending physician informs the Institute of Hygiene and an authorized expert identifies the poisonous mushroom. The public is educated through lectures, slide shows, and forays. The daily press reports the writings of the experts and both radio and TV help with the general mycological education. The professional mycologists of the districts are responsible for the continuing education of the experts. The professionals from each district meet together with a representative of the ministry twice per year to report and form new regulations. . . . How different from the USA!

IN APPRECIATION

A big Thank You goes to Stan March for the beautiful picture of the Chanterelles which are on the cover of the 1979 Membership Roster. Stan also drew the covers for our Christmas and Banquet issue. He is a hardworking artist. In addition, he has agreed to chair the Publicity Committee for the coming Exhibit. Both Stan and his wife LomNee, serve on the Board. That's what I call dedicated members of our Society.



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Spore
Prints**

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c/o The Pacific Science Center, 200 - 2nd Avenue No.
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Hildegard Hendrickson, 2559 NE 96th, Seattle, 98115.

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(522-4640); Rudy Karzmar (632-7321).

SCIENTIFIC ADVISER Dr. Daniel E. Stuntz

Calendar

June 11 Monday, Membership Meeting, 8:00 pm

Note: The membership meeting again will be held in the basement meeting room of the Sacred Heart School, located across the street of the Pacific Science Center on John Street.

NO MEMBERSHIP MEETINGS IN JULY AND AUGUST

Aug. 20 Monday, Board Meeting, 8:00 pm

Aug. 24 Deadline for Spore Print material. Send all articles art, photos, etc. to the Editor, 2559 NE 96th, Seattle, WA 98115.

Sept. 10 Monday, Membership Meeting, 8:00 pm,

Sept. 17 Monday, Board Meeting, 8:00 pm

Oct. 1 Monday, Membership Meeting, (one week earlier)

Oct. 6 & 7 The 16th Annual Exhibit

Have a Nice Summer!

WELCOME TO THE FOLLOWING NEW MEMBERS

Lena Berg (527-0555); Fred & Beverly Carbonatto (825-9764)
Molly Carbonatto (772-2037); Joby Fairchild (Redmond);
Patrick & Sally Harmon (486-7779). Please note that our
immediate past president, Jack & Navarre Orth, have moved
to Camano Island, and the new phone number is 1-387-7792.

Membership Meeting

Monday, June 11, 1979, 8:00 pm in the Meeting Room in the basement of the Sacred Heart School, located across the street from the Pacific Science Center. Enter from John Street

Program: Dr. W. Scott Chilton, Professor of Chemistry at the University of Washington, and a past vice president of PSMS will give a talk on Amanitas. Scott's main interest has been to study the chemical compounds contained in Amanitas and their effects.

BOARD NEWS

H.R.H.

President Jennie Schmitt (and Dave) came to the Board Meeting from the Crystal Springs Forest Camp where they had stayed over from the field trip.

On correspondence, Jennie reported that Dick Sieger has sent a letter to the Skagit County Parks Department praising the ranger at the Steelhead County Park in Rockport for getting the shelter ready in record time for our field trip there, when the ranger had been given the wrong date for our trip.

PSMS received a letter from the Friends of the Conservatory at Volunteer Park offering PSMS (and other groups) the use of a meeting room (presently free, later a fee may be charged). The room can accommodate approx. 35 persons.

Rudy Karzmar reported that the Library Committee plans to have all the books back on the shelves at Ben Woo's new office by fall.

Vice President Rick White who has taken over the general chairmanship of the 1979 Exhibit (and is assisted by Tom McKnight) brought the plans of the new area in the Pacific Science Center, where our fall Exhibit will be held. Rick said the square footage is larger than we had in the past, and there is car access from the same floor, which should make the transporting and carrying of the props easier. Rick said he will contact the chairpersons of all the necessary committees, and they will go and review the new space, make the necessary changes to the props, and get organized. Rick will ask Ben Woo to advise on the layout. The slide show will be held in Room 200 (that is the room where our fall classes have been held).

It was learned that Joy Spurr is putting mushroom photographs on display in the Pacific Science Center for one and one-half months, and it is hoped they would be available for the Show. Margaret Dilly stated that new educational posters are needed for the Exhibit. Grace Jones reported that kitchen space at the Science Center is now very limited and the oven in the stove still does not work, that the hospitality arrangements of the past few years may not be feasible this year. Rick White has not yet checked the storage space which the Science Center has promised for PSMS Show material.

President Schmitt thanked Joy McKnight for all the work on the new membership roster, and Stan March for the beautiful Chanterelles featured on the cover.

LomNee March, PSMS Historian, is working on the Scrapbook.

It was brought to the attention of the Board that on account of a dogfight on a field trip (because the dogs involved were not on a leash) Lyle McKnight was bitten on both hands. The Board moved and passed the following motion: PSMS requires that our members have their dogs on leashes on field-trips at all times. (Someone added that camp (park) rules require the same.) It was also suggested that a sheet about

fieldtrip rules and practices be written and distributed to all members.

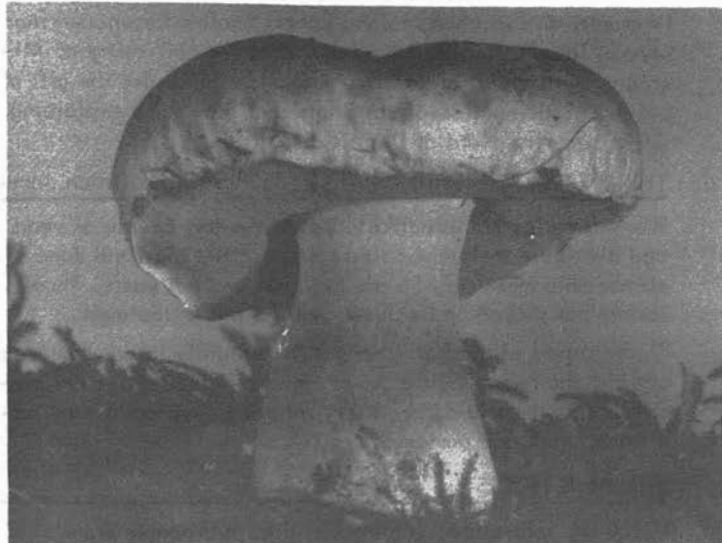
Jennie reported that PSMS again will participate with the Tacoma Society in operating a booth during the last week of the Puyallup Fair (September 16 - 23). This year the booth will be U-shaped and larger. Jennie will coordinate PSMS efforts.

Rick White reported that the Enological Society reduced the number of its dinners to two per year, so a joint dinner with PSMS (like last November) is not very likely going to be held. However, the organizing members offered to advise and help PSMS if we are interested in doing one.

The meeting adjourned around 9 pm since Dave and Jennie had to return to their trailer at Crystal Springs.

KING BOLETUS, STEINPILZ, BOLETUS EDULIS Ed Cantelon

If not the King, it surely is one of the nobles of the fungi world. This fine mushroom appears in both the spring and in the fall. It is more often found on the eastern slopes of the Cascades than in the Puget Sound area. It also fruits near the ocean beaches north of the Columbia River. Look for it in the spring, from the middle of May, through June and up until the fourth of July.



It favors conifer forest areas, but also is found near vine maple and other deciduous trees. It is preferable to find it in the button stage, because it is less likely at this time of development, to be infested with larvae. King Boletes are often difficult to locate; often only a slight disturbance of the soil will indicate that a mushroom lies under the surface. The top may look much like a stone, thus the German name, Steinpilz, meaning "stone mushroom". The cap is dark tan, the tubes of young specimens are creamy white; the upper part of the stem has a distinct reticulation that is easily recognized. The flesh is firm and white.

Cooked when fresh, the Boletus edulis has a slippery quality, much the same as fresh okra. Many people find this unpleasant. When this mushroom is dried and then reconstituted, this unpleasant quality no longer exists. The dried pieces may be added to vegetable or meat dishes directly, where there is ample liquid to allow them to reconstitute while cooking. Often small packages of dried mushroom will be found in the grocery store; these often are this species. The per pound price of these small packages will be very expensive. If you wish to try drying them yourself, any of the food de-hydrators that are available, will do a good job.

BOOK REVIEW

Jennie Schmitt

The Mushroom Trailguide, a new mushroom book just published in March. It looks like a good book for the amateur mushroomer and/or hiker. Authored and illustrated by Phyllis Johnson Glick, who is a member of NAMA and the Colorado Mycological Society. One-hundred-and-five genera and 401 species are illustrated and described.

The brief, illustrated key at the beginning of the book sets you on the right track to start with. The line drawings of the 105 genera and 401 species are well done, clear and concise, as are the descriptions that go along with them. The book has good continuity, and you don't have to search for what you want.

Some of the look-alikes are called out and described. Others have look-alikes which are not included in the book, although they may be mentioned. Nonetheless, I recommend this as a very good book to add to your library. (We sincerely thank the publishers for the copy we now have in our club library.)

It is light (13 ounces, as quoted on the cover) to carry, easy to read and understand, of a compact size (designed to fit your hip pocket), and with the "usual precautions," safe to use at all stages of mycology. The recipes quoted all through the book sound real good, and the ones I had time and the mushrooms to try, proved to be as I expected. I will in time try all of them, time and mushrooms willing.

"Buy it, You'll Like It!" It is published by Holt, Rinehart & Winston, 383 Madison Ave., New York, N.Y., 10017. At the price of books nowadays, The Mushroom Trailguide is a good investment at \$5.95 in paperback, or \$9.95 in cloth. (I understand, Helen Wasson has this book on order for our members.)

SIXTH ANNUAL ASPEN MUSHROOM CONFERENCE

An outstanding group of visiting and Colorado mycologists and physicians will serve as faculty for the conference to be held at Wildwood Inn, Snowmass-at-Aspen, Colorado, July 29 to August 3, 1979. The conference is sponsored by the Colorado Mountain College of Glenwood Springs, Beth Israel Hospital, and Rocky Mountain Poison Center, Denver. For further information contact Aspen Mushroom Conference, % Beth Israel Hospital, 1601 Lowell Blvd., Denver, CO 80204, or phone 1-303-825-2190, Extension 350.

PHOTOGRAPHY NEWS

Ed Cantelon

PSMS has acquired the late Bill Pollard's project. Bill spent a lot of his time and money to collect a color slide of each mushroom listed in the revised edition of the Savory Wild Mushroom. Bill was also concerned with the proper (accepted?) pronunciation of the names of all these mushrooms, so he produced cassette tapes to be played in conjunction with the showing of the slides. There are 156 slides in two carousel Kodak magazines. Any member of our Society may borrow these slides and the tape.

We would also like to remind you again, our Society has over 2,000 slides of mushrooms in its regular collection; any member may borrow these also. Just call the Photography Chairman, Ed Cantelon, phone 242-6115, and let him know when you wish to come to select the slides you would like to borrow.

Charlie and Mary Volz (gas permitting) will be attending the Mushroom Conference in Aspen, Colorado, in late July.

The following article appeared in the February 1977 Bulletin of the Boston Mycological Club.

Mushroom lovers know that there is more to fungi than meets the eye. Good examples are the sclerotia, hard masses of mycelial threads produced by a variety of ascomycetes and basidiomycetes. Round, oblong, or irregular in shape, sclerotia can be as small as a grain of sand or as large as a human head. Perhaps the best known among them is ergot, the sclerotium produced by the ascomycete Claviceps purpurea. Ergot consists of small, dark, very hard, banana-shaped bodies interspersed among the kernels of the rye plant. Sclerotia of this type withstand drying and other unfavorable environment influences, thus playing a role in survival of the species. Sclerotia are often formed underground and go undetected by the surface-scanning collector. This is a pity, since subterranean sclerotia are interesting not only for taxonomic purposes but also for other human affairs. Two examples, from different parts of the globe and involving different cultures, are Tuckahoe and Pietra fungaia.

Tuckahoe, or Indian Bread, is the sclerotium of the polypore, Poria cocos, and has been an important food source among the Indians of the Southeastern United States. Our knowledge of this interesting piece of American mushroom lore is somewhat fragmentary and not without complications. The term tuckahoe and variants (e.g. tockawhough) was used generically to denote several edible bulbous tubers, such as the wake robin (trillium). The fungal origin of tuckahoe was suspected as early as 1762, by Clayton. The definitive identification of the species of fungus had to wait until 1922, when Wolf found characteristics resupinate fruiting bodies of P. cocos arising directly from tuckahoes kept moist in the laboratory. Wolf clinched the argument by demonstrating that bits of tissue from the center of these sclerotia gave rise, in culture, to typical fructifications (Wolf, F.A., J.Elisha Mitchell Sci.Soc. 38:127, 1922).

Tuckahoes are brown, tuberous structures with scaly barklike covering. In size and appearance they can resemble an oblong coconut. The relationship of such large structures below ground to the paltry fruiting bodies arising from them is an extreme example of a mycological tip-of-the-iceberg relationship. Within, tuckahoes are whitish, with a texture that resembles that of pressed cottage cheese, and, according to some authors, possess a "mushroom odor" (whatever that may be). They are eaten cooked and were described as having a mild taste, although the literature is surprisingly thin on this. Tuckahoes are invariably associated with tree roots. The most common association is with pines growing in sandy soil, but P. cocos is a parasite of many other trees, such as orange, magnolia, eucalyptus, as well as oak and maple. This once valuable food source is restricted to a region south of Delaware and east of the lower Mississippi valley. Sclerotia of this type but formed by other species were consumed in western Canada and in several Asian countries. The sclerotium of Polyporus Mylittae was known as the "native bread" of Australian aborigines. A comprehensive and highly readable article on the tuckahoe was written by S.F. Weber (Mycologia, 21:113, 1929).

In Europe, sclerotia were also used for food, but in an entirely different manner. In southern Italy, the sclerotium of Polyporus tuberaster was eagerly sought in beech forests. It could not be consumed directly, being full of bits of wood, earth, pebbles and having a stone-like consistency. Rather, this "pietra fungaia" or "mushroom stone" was buried in a

flower pot or other suitable container and watered twice a day with lukewarm water. After about four days, the characteristic stipitate fruiting body appeared, often in delightful profusion. Cutting it down yielded repeated harvests. By adding or withholding water, the crop of "instant mushrooms" could be regulated. The importance of this singularly convenient food source has diminished due to extensive deforestation.

"Pietra fungaia" has been known since Roman times and is well discussed by classical authors, some of whom were properly mystified by this intriguing phenomenon. Possibly a similar phenomenon was described by Topsell in 1607:

"Hermalous also writeth this of the lycurium, that it groweth in a certain stone, and that it is a kind of mushroom, or padstoole, which is cut off yearly, and that another groweth in the room of it, a parte of the roote or foot being left in the stone, groweth as hard as a flint, and thus doth the stone encrease with a natural fecundity; which admirable thing (saith he) I could never be brought to beleewe, untill I did eate thereof in myne owne house."

(Quoted by Rolfe and Rolfe, The Romance of the Fungus World) May we then conclude that, below ground, not all that glitters is truffles?

The author is indebted to Dr. Margaret Barr-Bigelow for a bibliography on tuckahoe, to Dr. Robert Shaffer for uncovering several large sclerotia during a visit to the University of Michigan Herbarium, and to Dr. Alexander Smith for the gift of a 6 lb. earth-encrusted sclerotium that took some explaining to the security guard at Detroit airport.

THE 1979 MEMBERSHIP ROSTERS ARE READY Grace Jones

We will follow the practice adopted the last couple of years and distribute the membership rosters at the May and June membership meetings. So please come and get yours. Those rosters not picked up by June, will be put in the mail.

Please report all address changes immediately to our new membership chairman, Grace Jones, phone 772-5024, so our records are kept up to date. Every returned envelope means additional work and postage.

BITS AND PIECES

If you are interested, you may send for a brochure from MUSHROOMpeople, P. O. Box 607, Inverness, California, 94937. Here's what they sell: Supplies - spores (for psilocybe!) edible mushroom cultures, Culture & compost supplies. Books - on mushroom cultivation, hunting, identification, cooking and fiction.

A newsletter is published 16 times a year. It's a beautiful brochure, and you just might find something in it you'll like.

DER PILZ is a permanent exhibition and specialty shop in Hamburg, Germany. All sorts of mycological and mycophagical material is displayed, and also for sale. There are canned and dried mushrooms, truffles, spawn, etc. for the mycophagist. There are books, stamps and paintings as well. Out of print, old and rare books are also available. Foreign orders will be filled promptly. If there is something you have looked for and could not find, DER PILZ may have it. Write DER PILZ, Mittelweg 21, 2000 Hamburg 13, West Germany.

Hearty congratulations on his promotion to full professor at the University of Washington, go to Scott Chilton, who has served PSMS as vice president, and chairman of the education committee, and in many other capacities.