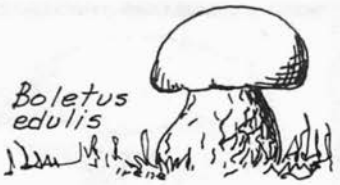
SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
2559 NE 96th, Seattle, Washington, 98115

May 1983 Number 192



FIELD TRIPS — Charlie Volz

Hosts are still needed for some of the field trips. Every member should feel obligated to contribute to the success of our field trips and volunteer. Call 363-5465 today!

May 7 & 8 Lake Wenatchee State Park; elevation 1,900'
Travel U.S. Route #2 east over Stevens Pass. 20 miles past the summit, turn left (north) on State Route #207 and go to the park. Lake Wenatchee State Park is in 2 seperate sections. The shelter is in the "day use" area, and this entrance is to the left, and prior to Road #209 to Plain. If you have crossed the river, you have gone too far.
Overnight camping is across the river and beyond the "Y" in the road.

May 14 & 15 Crystal Springs Forest Camp, elevation 2,400'
Travel Interstate 90 east over Snoqualmie Pass. 9 miles past the summit, take the Stampede Pass Exit (#62). Turn right at the stop sign, and take the right turn just before the bridge.

May 21 & 22 Tumwater Forest Camp, elevation 2,050'
Travel U.S. Route #2 east over Stevens Pass. The camp is about 23 miles past the summit, on your left. Watch for the sign.

Note: PSMS has to pay for the use of the shelter. We therefore will ask for a contribution of $1.00 from everybody who attends the field trip. The people camping in the area in front of the shelter will get reduced rates for camping.

May 28 - 30 Clear Lake Forest Camp, elevation 3,100
The camp is south-east of Mt. Rainier National Park on State Route #12. Use the well-marked turn-off about 7 miles east of the White Pass summit. Travel 4/10th mile and take the left fork which is Road #1312. Continue another half mile and turn right into the campground that is across the road from the Spring Forest Camp. There is no water available here.

PHOTOGRAPHY CLASS - MAY 9TH - 6:45 PM — Joy Spurr

Philip R. Woodhouse will share his expertise on what to look for when choosing your 35 mm camera, flash unit, tripod, and other photographic equipment.

Phil enjoys hiking, mountain climbing and photography, and works for a local camera store. He is author of the book: MONTE CHRISTO, a fascinating history of the search for gold and silver in the spectacular mountains of this area, and the construction of the unique Everett & Monte Christo Railroad.

Today, mushroom hunters search this beautiful mountain region for another kind of gold .... Chanterelles. So, come early (at 6:45 pm). This promises to be an enlightening and interesting program. Phil is an enthusiastic speaker.

CRYPTOPORUS VOLVATUS (Peck) Shear — Dick Sieger

Morel hunters in the Cascades are likely to encounter a curious fungus, Cryptoporus volvatus. The name means "covered porous chamber" and is pronounced cryp-TOP-or-us vul-VAY-tus. The fungus is often found on standing, dead pine trees and looks for all the world like a puffball. However, if a fruiting body is plucked from the bark, it is immediately apparent one isn't holding a puffball. A typical specimen is the size of a ping-pong ball, is whitish and has a tough polished shell. Cut in half, the fungus has a layer of tiny tubes at the top, a hollow space in the middle, and a shell at the bottom.

Cryptoporus volvatus is a polypore and the spores are formed in tubes, as they are in all the other polypores. The upper part even looks like a bracket fungus, but the shell that covers the bottom is unique. The fungus forms a little hole in the bottom of this shell. Falling spores collect in a pinkish heap on the floor of the hollow chamber. Few fall through the hole.

Other polypores, like the artist's fungus, Ganoderma applanatum, produce millions or even billions of spores that drop into the air and are carried away by the wind. Almost all are wasted because they don't reach places in which they can grow. Quite a few get no further than the top of the cap, taken there by air currents.

Cryptoporus volvatus lives on conifer sapwood and has a very special way to send spores to this inaccessible substrate. Bark beetles enter the fungus, are covered by spores, and carry the spores into bark. Other insects that enter are just looking for a hiding hole, perhaps to get out of the rain for a while. When these insects leave they too are covered by spores and carry them away to another hole. In this way, the spores are efficiently carried into bark where the fungus has the correct environment to grow.

Cryptoporus volvatus occurs on many kinds of conifer trees, usually ones that have recently died. The spheres grow from the mouth of beetle burrows and are scattered along the tree trunk. It can be found across northern North America and in Japan. Lincoff's Audubon Society Field Guide to North American Mushrooms has a color portrait, #528, and a sketch of the cross section on page 453. It isn't edible (only a beaver could chew one) but it may be useful. Fish hooks can be baited with "worms" found within the fungus. The Kwakiutl used a polypore in a handball game. We are not certain what species was used, but nothing else in our forests would be more suitable.

THE MUSHROOM TREATMENT — Coma News

A former executive of a company which had been taken over in a corporate merger gave this description of what had happened to his company's executive personnel:

"We got the mushroom treatment. Right after the acquisition we were kept in the dark. Then they covered us with manure. Then they cultivated us. After that they let us stew a while. Finally, they canned us."

P.S.M.S. Spore Prints

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SCIENTIFIC ADVISER: Dr. Joseph Ammirati

Calendar

May 7 & 8	Field Trip to Lake Wenatchee State Park
May 9	Monday, 6:45 pm Photography Class
	8:00 pm Membership Meeting
May 14 & 15	Field Trip to Crystal Springs Campground
May 16	Monday, Board Meeting, 7:30 pm
May 21 & 22	Field Trip to Tumwater Forest Camp
May 27	Deadline for Spore Print Material. Send to the Editor, 2559 NE 96th, Seattle, WA 98115
May 28 - 30	Field Trip to Clear Lake Campground
June 13	Monday, Beginners Class & Membership Meet

WELCOME TO THE FOLLOWING NEW MEMBERS

Priscilla Coe: 284-4138; R.K. & Katherine Fort: 629-2092; Barry Glick: 283-8119; Michael Green: 525-8399; D. Maubach: 525-7498; Peter McCormick: 888-3771; Leora & Clarence Seemer: 746-5623; John & Roberta Slusarenko:774-0440.

MEMBERSHIP ROSTERS FOR 1983 AVAILABLE AT MEETING

The 1983 PSMS Membership Rasters again will be available for pick-up at the May membership meeting. We urge as many members as possible to come, enjoy the good program, see the mushrooms brought in, learn about photography, and above all pick up your copy of the membership roster.

Membership Meeting

Monday, May 9, 1983, 8:00 pm in the auditorium of the MONROE CENTER located at 1810 N.W. 65th, Seattle.

Program: Our new scientific adviser, Dr. Joseph Ammirati, Associate Professor at the University of Washington, will present a slide-illustrated lecture titled: Spring Mushrooms, a very timely topic. Dr. Ammirati and co-editor Gary Laursen have recently published: Arctic & Alpine Mycology through the University of Washington Press, 570 pages, b&w photos, maps, diagrams. $45.00.

APRIL BOARD NEWS H.R.H.

The meeting opened traditionally, with the acceptance of the minutes of the previous Board meeting and the Treasurer's report.

President Grout read the thank you letter received from Lorraine Davis, the scholarship recipient. She is a doctoral student in mycology at the University of Washington, and the topic of her doctoral dissertation is the alpine flora of the Cascades. She will use the money for travel for field observations and studies.

A committee, chaired by Carl Hermanson, ond consisting of John Kunz, Margaret Dilly and Hildegard Hendrickson, is at work to set up the Daniel E. Stuntz Memorial Foundation, a non-profit, tax-exempt, organization whose purpose shall be the continuation of the mycological library started by Dr. Stuntz, support of a graduate student in mycology, and to support other mycological interests. Ben Woo and Doug Raff also ore assisting. It is not clear whether the donations to the foundation are tax deductible at this time. However, members might consider making pledges at this time, and make the payments when the tax-exempt status has been achieved. More on this later.

The members of the Banquet Committee and many of those who helped on the banquet, met and discussed the banquet we just enjoyed. There was an enthusiastic recommendation that the format of this year's banquet be repeated.

President Grout reported that he is working on the format and timing of the advanced educational classes and hopes that they can begin in the fall. Details will follow when they have been formalized.

MORE FORAYS

In addition to the many domestic and international forays that we listed last month, NAMA hos announced that its 1983 International Foray will be going to Czechoslovakia from September 1st to the 18th. You have to be a member of NAMA to go along. Cost from New York is $1983.00.

FUNGAL NEWS

Francois Picart (who gave a talk to PSMS in April 1982) has expanded his operations to Texas. He thinks the soil components in Texas are even more suited to the growing of truffles than California. Tuber texense, which is not the famous black truffle of France, has been found in Texas.

Picart recently held a Seminar for 70 guests who paid $40 ea. to sample the rare Tuber melanosporum. For the occasion 5 lbs. of Truffles were flown in from France and prepared by La Bonne Cuisine School of Austin.

ROCKPORT FIELD TRIP REPORT H.R.H.

When we left Seattle very early on Saturday, April 9th it was overcast; by the time we reached Everett it was drizzling; when we turned off Interstate 5 at Burlington it was pouring, and as we approached Rockport, the road was dry. This gave us an indication that things won't be as expected.

The fruiting of spring mushrooms is unpredictable, just as the weather at this time of year. Yet, we have to set the dates of the field trips at press time for Spore Prints. And so, we found out that the Verpas in the Rockport area were gone, and only people going higher (to about 1,000' and above) were lucky enough to find a few prime specimens. Nevertheless, there were mushrooms fruiting. Brian Luther identified some 30+ different species, including Clitocybe smaragdina (rare); Collybia maculata, and Plectania milleri(a black cup fungus)

71 members and guests signed the register, and 52 stayed to enjoy the delicious potluck dinner which was held in the enclosed shelter.

It was good to see Jennie Schmitt healthy and collecting with her "old" enthusiasm. Maybe it was just as well that the Verpas weren't fruiting at the fish hatchery, since someone there had stolen 6 prime, spawning steelhead the day before and they did not want too many additional visitors around.

Judi Boa and Hildegard Hendrickson were hosts on Saturday.

FIELD TRIP TO THE BECKLER RIVER CAMP H.R.H.

Again the weather was cloudy as we took off on Saturday, April 23rd for the one-day field trip. The ranger had not allowed the campground to be opened, so we set up camp in a gravel pit, located just across the entrance to the camp.

It was a joy to see new members find their first morels (even though they were rather sparse). Again, the few Verpas found had seen better days. Charlie Volz hosted this trip and also identified some 20 mushrooms (at least to genus).

With the weather just so-so, and the mushrooms not very plentiful, there was no potluck held.

FUNGAL NEWS

The authorities have moved in on mushrooms in British Columbia; Canada's Supreme Court has ruled that "magic mushrooms" come under the Food and Drug Act and are therefore outlawed. The Supreme Court heard the case as an appeal by the state against the acquittol of mushroomer Barry Wayne Dunn, who sold a pound of mushrooms to undercover policemen for $ 3,000. He now stands convicted.

An enterprising Frenchman, owner of the "Maison de la Truffe" in Paris, has created the ultimate in comestibles -- Truffle Ice Cream (sherbet actually, "designed to be eaten mid-meal, perhaps just after the pate de foie gras.") It retails for $45 a quart, but don't look for it a Baskin - Robbins just yet!

The New York Times reported that Sparassis and "Pied de mouton" (Hydnum?) were available at Dean & deLuca in New York City last fall, at $9.95 a pound.

Fomes fomentarius (true tinder fungus) is the earliest fungus known to have been used by man. A woody perennial, it was discovered in an excavation in a Mesolithic camp in Yorkshire as early as 8000 BC. Found on birches, it has been used for tinder, as a styptic for wounds & formerly as a drying agent for tooth cavities before filling. (Conservationist '81)

BOOK REVIEWS Moselio Schaechter, Boston Mycological Club

FUNGI-FOLKLORE, FICTION, & FACT

by W.P.K. Findlay. 112 pages; 13 B&W figures, softbound. Mad River Press, Rt. 2, Box 151-B, Eureka, CA 95501. 1982. Price: $ 9.95

This little book contains judicious compilations of historical and folkloristic interactions between men and mushrooms. It is well balanced and well written. It covers some expected material - such as what Romans and medieval Europeans thought of various mushrooms - as well as some that is more recondite. There is no attempt at being encyclopedic, but rather to give a general taste of the subject. The range is wide, from the uses of fungi for food and inebriation to the damage they did to the timbers of the British Navy. Interspersed are chapters on fairy rings, on "Fungi and Sex" (on the un-salacious side), and on the fly agaric. A remarkable photograph of a 20 kg (44 lbs) bolete from Australia is included for the doubters.

This book has much to recommend itself for those who would like a glimpse of what people thought of mushrooms and did with them at different times and in different cultures.

ECTOMYCORRHIZAE OF MAINE

1. A Listing of Bolataceae with the Associated Hosts. Bulletin 735, 21 pages, 1977, Price: $1.00 by R.L. Homola and P.S. Mistretta.
2. A Listing of Lactarius with the Associated Host. Bulletin 779, 19 pages, 1981, Price: $ 2.00 by R.L. Homola & M.J. Czapowskyj. Published by the Life Sciences and Agricultural Experiment Station, University of Maine at Orono. Can be ordered from the Department of Botany and Plant Pathology, Deering Hall, University of Maine, Orono, ME 04469.

These two thin pamphlets will be exceedingly useful for those who attempt field identification of boletes and lactarii in this part of the world. Besides their intended purpose to provide information on mycorrhizal relationships with various species of trees, they contain color pictures (37 of boletes, 39 of lactarii) that are very handy in identification. In print, as well as in person, Dr. Homola continues to be extraordinarily helpful to the amateurs of New England. We can only hope that he will continue to publish such excellent and accessible material.

POISONING REQUIRES LIVER TRANSPLANT

A three-year old girl in California who had eaten poisonous mushrooms underwent a liver transplant surgery in a desperate attempt to save her life. Her brother is also critically ill, while her mother is in serious condition, but improving. The family had eaten Amanita phalloides they had picked while on a picnic.

Amanita phalloides poisoning usually results in death since the mushroom toxin kills liver cells. The liver stops functioning and cannot clear other toxins from the body, resulting in damage to organs and death.

At this time we know of only two sightings of A. phalloides in Washington state, one in the Vancouver area, and one in a garden in Seattle.

Since there were several deaths in California this season caused by mushroom poisoning, the newspapers wrote: "Buy mushrooms at the grocery store - they're a lot safer.

The following article from McIlvainea, Volume 5, #1; 1981 is reprinted with permission of the Editor.

WHERE HAVE ALL THE COLLYBIAS GONE?

Because of chemistry there are more Boletales than there used to be, but *Collybia* has been shrinking since the old books were written.

by Roy E. Halling
Farlow Herbarium, Harvard University
20 Divinity Avenue
Cambridge, Massachusetts 02138

At the time this question was first put to me, there was still some snow on the ground in New England, and the answer seemed obvious: true collybias don't fruit during a New England winter. Then it occurred to me that the author of the question had something else in mind. That is, "If *Collybia platyphylla* is not a *Collybia*, and *C. radicata* and *C. velutipes* are not collybias either, then what are they? Where did they go?" Perhaps more importantly, why are they not in *Collybia* any more? These questions are quite valid considering the current state of flux in agaric taxonomy. Anyone making a serious effort to learn agaric names might well wonder what the name juggling is all about. My purpose here is to explain briefly how and why taxonomy does not remain conveniently frozen, using *Collybia* for illustration.

Beforehand though, I should point out that the purpose of taxonomy is to provide an arrangement of organisms according to natural relationships. By giving names to organisms, a convenient handle is afforded for reference to them. Eventually, the continued use of a name results in the development of a connotation or a concept which that name represents.

As originally conceived by Elias Fries in 1821, gilled mushrooms belonged to *Agaricus*, a genus that he subdivided into tribes. *Collybia* was one of those tribes. Although it is not pertinent here to describe Fries' original concept of tribe Collybia, it is important to note that his concept changed radically over the years. As a matter of fact, he later moved nearly all of his original collybias to a separate genus. *Marasmius*, and even went so far as to create a tribe Collybia for them! In his later work, the bulk of tribe Collybia of *Agaricus* was composed of species that he initially placed in tribe Clitocybe. Even though we cannot know precisely why Fries changed his mind, we might speculate that he proposed his original classification based on the information he had at that time. As additional information became available to him, certain realignments and revisions were necessary to reflect the relationships in light of that new information. As it turns out, his later works contain the basic framework for the classification that is in current use for *Collybia*.

In the mid-1800's, Friesian tribes were beginning to be recognized as separate genera. For *Collybia*, this typified not so much a change in *Collybia* itself, but rather a change in the basic idea of what a genus (as a taxonomic unit) was supposed to represent. Despite this breakthrough, the classification schemes used were based on macroscopic features and consequently reflected Friesian concepts.

Then agaricologists started using microscopes for studying the cellular detail of agaric fruit bodies. Eventually this study of microscopic detail yielded new information that has become extremely useful to the agaric taxonomist. For example, the orientation, shape, and nature of the cells in the surface of the cap of *Collybia velutipes* are not similar to typical collybias such as *C. butyracea, C. confluens,* and *C. dryophila*. This discrepancy supports Peter Karsten's proposal (back in 1891) that *C. velutipes* belonged in a new genus, *Flammulina*. Analogous observations by Dr. R. Singer led him to place *C. radicata* in *Oudemansiella* and *C. platyphylla* in *Tricholomopsis*. I might point out that *F. velutipes, O. radicata,* and *T. platyphylla* are fairly well-known species, and they haven't changed a bit since exclusion from *Collybia*. By including several species together in one genus, *Collybia*, we are recognizing that those species are closely related. What we are trying to indicate by the placement of *F. velutipes, O. radicata,* and *T. platyphylla* in other genera, is that they are not closely related to *Collybia*. That is to say, they do not share the features that bind *C. butyracea, C. confluens,* and *C. dryophila* together in *Collybia*. Thus, we are coming to the realization that not everything Fries put into the tribe Collybia was related. So, in trying to establish a uniform concept for *Collybia* (and other agaric genera), we have tried to weed outthe obviously disparate elements. The more thoroughly known the species of a genus become, the clearer the limits of that genus. In this way, a name comes to represent a concept or connotation.

Over the years, the assessment and intercalation of new information has substantiated the erection and maintenance of many genera and species. At other times, this information has justified the melding of concepts or the discard of others. The goal in either case is the same: to establish a classification that reflects the natural relationships. In reaching that goal, all valid information with taxonomic potential should be accurately evaluated and used. Even taxonomy is subject to the basic tenets of the scientific method, a fact sometimes forgotten, but accurately expressed by Professor F. Verdoorn, "A newly described species is an hypothesis which in the course of time may become a probability."

PICK UP YOUR 1983 MEMBERSHIP ROSTER

In addition to the May Membership Meeting, you may pick up your 1983 Roster at all field trips which will be held prior to June. Please make every effort! It saves time and money!

MILLIONS IN MORELS? Discovery Magazine, April 1983

When Ronald Ower reported in 1981 in Mycologia that he had succeeded in cultivating morels, the morel fanciers were elated, and his colleagues thought that his achievement was merely a fluke.

But in February a group of scientists at Michigan State University - to whom Ower had confided his secret - confirmed that they, too, had grown morels. The MSU mycologists reported that they had raised not only the strain Ower had worked with, but several others as well. Ower and the MSU group have contracted to keep the process secret and to try to develop it to the point where morels can be grown commercially. Success could make them all rich. Ower and his collaborators hint that their secret is basically simple - so simple that others continually overlook it. They say only that other researchers have been led astray by giving too much attention to nutrients in their culture dishes and too little to conditions in the wild - temperature and moisture, plant and animal neighbors, and whatever gives the species an edge in competing for territory at a given time of year.

Says Ower, "Eventually an image builds up, a complex system, but one that yields to rationalization." Just one more clue, please? Something that happens only in spring," he says.

Thanks go to Bernice Velategui for sending us the article.

CANNED MORELS - A WARNING

The Mycophile reports that the U.S. Food and Drug Administration has warned that one should be especially careful of various imported canned morels, particularly those of Cie Franco of France and of Lankor International of Switzerland. These companies labelled the cans as morels, when in fact, they contained Gyromitra esculenta. The March 1981 issue of the FDA Consumer reports two alerts: "in 1977 four people in New York City became ill after eating these mushrooms in a dish called Veal Morel;" then in 1980 the Denver district (FDA) collected other imports which were analyzed and found to contain G. esculenta. In fact, one brand was sold as Wyco-Round Morels Extra Gyromitras au Morels. Thus clearly indicating that Gyromitras were also included.... Be sure of your product when buying canned morels!

THANK YOUS GO TO THE FOLLOWING

Margaret Dilly, on behalf of the committee that organized the Memorial Service for Dr. Stuntz, wants to thank all who helped in any way (i.e. bring cookies, help set up, etc.) to make the occasion festive and memorable.

The very good photograph of Dr. Stuntz which was featured on the front page of last month's Spore Prints was provided by Joy Spurr (on very, very short notice). Thank you, Joy.

We heard many comments praising the slide-illustrated lecture presented by Coleman Leuthy, at the April membership meeting, which covered such a wide variety of fungi. It was a very good review for the knowledgable members and showed the newcomers how much they can learn.

George Rafanelli reported on the recent poisoning of Fort Lewis soldiers, since he was called in for identifying the fungi. The soldiers concocted a brew in anticipation of a certain reaction. They did not expect to land in the hospital. The mushrooms involved were Amanita pantherina.
(P.S. George's name was left of the list of people who donated mushrooms for the Survivors Banquet. Our thank you comes late.)