

SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
200 Second Avenue North, Seattle, Washington, 98109
June 1978

Number 143



CLEAR LAKE FIELDTRIP REPORT, MAY 27 -29 H.R.H.

Since this location is very popular with PSMS members, some had arrived at the site during midweek. Also, the fishing is supposedly pretty good here, that many people from Yakima are coming up, and by Friday afternoon, campsites were scarce in the vicinity of our camp, but by doubling up (and more) we were able to accommodate most members close by.

The weather on Saturday, May 27th, was more to the liking of the mushrooms than the hunters. It drizzled intermittently but Sunday and Monday were beautiful. Everybody who went out collecting found Morels. For the prime specimens one had to go a little higher in elevation, where quite a few white ones were found. The Boletus edulis were barely sticking through the duff, and it was more investigating 'humps' than seeing caps. Those found were prime. Quite a few puffballs, both Calbovista subsculpta and Calvatia sculpta were brought in. Altogether Jennie Schmitt identified 48 different species.

The hosts for this long trip were Joy and Lyle McKnight and Navarre and Jack Orth (who had just returned from a trip to the Grand Canyon) and Margaret Holzbauer and Bob Hanna. Thank you, to all of them.

For the Saturday potluck which was attended by 88 persons we were joined by the Tri-Cities Mycological Society which had a fieldtrip close by. A total of 98 persons signed the register. The Sunday potluck was enjoyed by 49.

CRYSTAL SPRINGS FIELDTRIP REPORT Rick White

On Saturday, May 20th, the weather cooperated beautifully, except for a few sprinkles in the afternoon. The mushrooms in the field were plentiful too. Charlie Volz identified altogether 39 species, including Verpa bohemica, Morchella esculenta, Boletus edulis, and numerous corals.

Most of the collecting was done in Lake Easton State Park, Cabin Creek, and Bullfrog Flats.

Seventy people shared the potluck which included an asparagus quiche and sautéed coral. As usual there was a lot of great food, and we ate it all.

A few of us visited Louise and Carl Rautenberg at their summer-home on Lake Cle Elum and were directed to lots of coral and Boletus. Louise also fixed the delighted mushroom hunters some of her special rhubarb sauce.

Lake Wenatchee Field Trip Report Dick Sieger

On May 6 & 7 the Lake Wenatchee area provided us with an abundance of species, but not an abundance of mushrooms for the pot. Near the last of the winter's snow we found Gyromitra gigas, Hygrophorus subalpinus, and H. camarophyllus. Morels, Verpa conica, V. bohemica, Calbovista subsculpta, and Gyromitra esculenta were among 33 species that were identified. For those who couldn't find morels, Evelyne Rentz and Mary Willemin put identification signs on a nice patch of them that were emerging along the road right across from our coffee table. Jennie Schmitt, recovering from her stay in the hospital, identified the mushrooms

for us. She wasn't able to spend much time hunting, but still found some nice morels. The Hendricksens came with guests who had purchased a mushroom hunting trip at the Blanchet High School fund raising auction. Ask about next year's auction if you want to find some of Monte's and Hildegard's choice spots.

There was plenty of sunshine and no wind, so we ate our potluck dinner in the open. Seventy people came to the fieldtrip, and about half of them participated in the potluck. The unfriendly reception we received from the state park personnel reminds us that we are fortunate to have so many fine forest camps in Washington. The generous and friendly help we receive from the Forest Service people contributes much to the success of our field trips.

BITS AND PIECES

Dick White reported that a mushroom he found in the Redmond area and took in to Dr. Stuntz, was identified as Discina magnaspora, a species seldom found here.

Upon receiving the new membership roster, Hildah Nolan thumbed through it, and marked the names and phone numbers of all the newcomers in her exchange, and then called them up, welcomed them, and offered her assistance. This is an example many of us should follow.

ERRATA SHEETS FOR MUSHROOM BOOKS H.R.H.

It seems that in basic mushroom books the coordination of keys and text is difficult and causes a lot of problems. This matter is the reason for the recent recall of the first printing of Mushrooms of North America by Orson Miller, Jr. about which we reported in the last issue.

Dick Sieger had trouble with the keys in the book How to Identify Mushrooms to Genus IV by Daniel E. Stuntz, and edited by David L. Largent and Roy Watling, and sent the following letter to Mad River Press: .. There seem to be errors in the Key on pages 43 and 44. Step 2 should probably lead to step 9, rather than step 11. Nothing refers one to step 12. Can you send me corrections?.....

The publisher's response was that there are no other corrections in any of the four books, except for the errata sheet that we received with Volume III and a sheet enclosed which had the following information on it:

- Key to Families -- page 43 - 44
2. Hymenophoral trama bilateral or divergent 3.
 2. Hymenophoral trama convergent (inverse) or regular to irregular 9.
 10. Spores angular in both lateral and polar view. surface of the spore not ornamented Entolomataceae
 10. Spores angular in polar view only; surface of the spore warted or spinulose or longitudinally striate 11.
 10. Spores smooth; if ornamented, not angular and/or pink in mass 13.

Dick adds: "However, I still don't understand the key on page 44 of Volume IV. Nothing in the key leads to step 12."



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Calendar

June 12 Monday, Membership Meeting, 8:00 pm

CLOSED JULY & AUGUST

August 21 Monday Board Meeting, 8:00 pm

August 25 Actual Deadline for Spore Print Material. Send
all art work, articles, and photos to the Editor,
2559 NE 96th, Seattle, WA 98115.

September 11 Monday, Membership Meeting, 8:00 pm

October 14 & 15 The 15th Annual Mushroom Exhibit

HAVE A NICE SUMMER !

MUSHROOM EXHIBIT AT THE PUYALLUP FAIR

Lom Nee March (phone 885-0375) is coordinating PSMS par-
ticipation in a mushroom exhibit at the Puyallup Fair. She
still needs additional volunteers, so please call her, if you
are able to help. The Tacoma Mushroom Club is co-operat-
ing in this endeavor.

WELCOME TO THE FOLLOWING NEW MEMBERS

Harland & June Butt, phone 778 - 0765; Don and Jane
Erickson, 334 - 4392;

The new phone number for Pete & Mary Schneider is 725 -
7423; and for Helen Kirkpatrick 487 - 2643.

Membership Meeting

Monday, June 12, 1978, 8:00 pm., Eames Theater,
The Pacific Science Center.

Program: Paul Stamets will present slides taken with the
scanning electron microscope. The featured species will be
Stropharia. Mr. Stamets is presently working at the Ever-
green State College in Olympia.

BOARD MINUTES

Sally Ann Hansen

The regular Board meeting of the Puget Sound Mycological
Society was called to order at 8:05 pm. The minutes of the
previous minutes were accepted as presented.

Rick White suggested that a notice be put in Spore Prints
listing the committees for the coming Exhibit, asking mem-
bers to be thinking of area to which they will devote time
and interest.

Rick also reported that our speaker for the June membership
meeting asked that his lecture remuneration be a two-year
paid membership in PSMS. The board approved the request.
Jennie received a letter from Dr. Frans Tjallingii of The
Netherlands. He and his wife will be spending a three-months
vacationing trip in our area, starting in June. He asked for
help in getting connections with knowledgeable mycologists,
books, dates of field trips, microscopes, etc. Dick Sieger
volunteered some seldom used books.

Lom Nee March reports that she has about 10 volunteers for
the Puyallup Fair booth. She will contact Nettie Laycock
and co-ordinate with her.

Jennie was called by Dr. Russell Kurtz, asking for some
Poison Pamphlets at half price for the graduating class of
Veterinarians in Spokane. They will be made available.
Ken Chaplin brought to our attention the defolians being
used around, and stressed our alertness to same.

Sally Ann Hansen suggested having a non-commercial arts
& crafts showing at some time for a membership meeting,
when things are slow.

The meeting was adjourned at 8:45 pm.



FIFTH ANNUAL ASPEN MUSHROOM CONFERENCE

will be held August 13 - 18, 1978 at Snowmass Village, ten
miles from Aspen. Each year the conference is attended by
people from various states. The program is structured for the
beginner as well as for the advanced student, offering inde-
pendent teaching sessions for each group.

There are no campsites in the immediate area, but there
are some within a few miles.

Courses offered are: Basic Mushroom Identification by George
Grimes; Advanced Mushroom Identification by Dr. Harry D.
Thiers; Microscopic Mushroom Identification by Linnea S.
Gillman; Hallucinogenic Mushrooms by Dr. Andrew Weil;
Mushroom Toxicology by Drs. Ken Lampe and George Hat-
field; Lichens by Dr. Sam Shushan; Mushroom Photography
by Lee Gillman.

Daily mushroom forays under the leadership of Art Zanon and
Mike Schomaker are a feature of the conference. Dr. Alex-
ander Smith and Dr. Harry Thiers will be available for per-
sonal attention after each foray.

Detailed information may be obtained from the Aspen Mush-
room Conference, Beth Israel Hospital, 1601 Lowell Blvd.
Denver, CO 80204. Phone: 825-2190, Extension 350.

LITTLE PIG'S EAR. (DISCINA PERLATA) Joy Spurr

Discina perlata is a common mushroom that is related to the false morels. In fact, the early-bird, spring pothunter often finds it at the same time the Verpa bohemica fruits in the lowland cottonwood groves. In the higher elevations it fruits alongside Gyromitra gigas in the vicinity of melting snow-banks.

Although it may be mistaken for Peziza species, Paxina acetabulum, and even Auricularia auricula, the little pig's ears (its common name) has a distinctive fruiting body that is rounded or oblong and attached to the ground by a very short, stalklike base. The upper surface of the cap, that is the spore-producing layer, is convoluted, wrinkled and often veined and is bright cinnamon to dark brown. The undersurface is paler in color. Care must be taken in picking the small, saucer-shaped fungus, only 4 to 10 cm in diameter, as the flesh is brittle and breaks easily.

Discina perlata appeared in my garden two consecutive springs when three to four fruiting bodies grew out of rich humus in the shade of a crabapple tree and a ponderosa pine. The dainty saucers were at first shiny, cinnamon brown. They became more contorted and wrinkled in age and finally, the caps were covered with a white powder from the ripening spores.

Miller lists this species as edible and good. However, Smith states in his book, "The Non-Gilled Fleshy Fungi" that the species is not recommended. So, take your own chances! If anyone has feasted on D. perlata and is still around, we would like to hear your opinion as to its edibility.



NORTH AMERICAN WILD MUSHROOM WATCH H.R.H.

The North American Mycological Association last fall started a new program, called the North American Wild Mushroom Watch. Volunteers, when hunting mushrooms are willing to fill out an Official Report Form listing the species they found; they describe the species and note any discrepancies from published descriptions; they take photographs, showing as many details as possible; they make a spore print; and finally they dry some specimens, for future study.

The ultimate product of the North American Wild Mushroom Watch is seen as an annual set of word pictures of the mushroom scene for every region, as it has revealed itself to the nature-watcher.

These pictures would be drawn by the Region Coordinators. The Region Coordinators are professional mycologists, and they would identify the once-in-a-lifetime specimens. The

volunteers are just asked to collect and describe, etc. as listed above. Any volunteer, whose Coordinator has accepted 50 mushroom taxa for listing, will win an emblem and ID card identifying him/her as a "Certified Observer" for NAMA.

The North American Wild Mushroom Watch was instituted because presently there are no distribution charts and maps available for mushrooms as there are for wildflowers, trees and even weeds. Does Amanita muscaria fruit universally or is it missing in some areas?

THINK EXHIBIT

The 15th Annual Exhibit will be held October 14 & 15th and again is chaired by Winston Hufford. To make Winston's job easier, it would be very nice if every member picked up the phone now, and called him at 486-4784 and volunteered for one of the many jobs that have to be performed. And this goes for newcomers too. Working on the exhibit, in addition to being a very rewarding experience, is also a lot of fun. The following committees, listed in alphabetical order, 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.

Right now it seems as if October is a long ways off, but some work has to be started soon, and the sooner the better....

LUMPERS N'SPLITTERS Dick Grimm, Ohio Mushroom Club

If you don't already know, a lumper is a mycologist, amateur or otherwise, who is perfectly satisfied with the taxonomy of mushrooms. If it was good enough for Elias Fries, it's good enough for him. His identification of mushrooms is from field characteristics for the most part and to hell with modern techniques.

The splitter, on the other hand, is the complete opposite. He simply cannot leave things as they stand. He makes a life time occupation of shuttling mushrooms from this genus to that, and from this species to that, by employing modern techniques and reasoning. He keeps things in a constant uproar and thrives on confusing the obvious.

The splitters main tools of occupation are the microscope (including the electron scanner) and a solution used for staining, called Melzers Solution. This dye is composed mostly of iodine. Much of the recent 'splitting' has come about by adding Melzers Solution to a microscope slide covered with hyaline (clear or white) spores. If these spores turn or stain a rich purple-blue color, the action is termed 'amyloid'. Mushrooms with such a reaction get shuttled around all over the place. They either get switched from genus to genus or species to species, or a favorite trick (if in bounds with the international code of nomenclature) is starting a whole new genus. Along with this favorite trick are several more, all designed to 'split' things up into different categories. The presence or absence of cystidia; presence of clamp connections; trama direction and other microscopic observations .. all aimed at confusion. (When in the presence of 'splitters' I never mention the fact that my right little toe is 1.5 cm shorter than my left little toe. The reason is obvious; I would get my name changed most assuredly. Being who I am for so long this would cause many problems for me and I dread to think of the impact it would have on my friends.)

This is all 'tongue in cheek' so if you are a 'splitter' don't get

— continued on page four —

LUMPERS N'SPLITTERS (continued from page three)

peevd at me. I realize all this is probably necessary but it's sure confusing for a lazy 'lumper' like myself. I gotta buy new books, learn new names, and just when I was beginning to get familiar with the old ones. I think I'm gonna pitch my microscope and Melzer's solution, burn all my books but Kauffman, Hard and Atkinson, and just relax.

Below are a few changes I have kept track of recently, perhaps they will help you find some mushrooms in the newer literature.

<u>Old Name</u>	<u>New Name</u>	<u>Reason for change</u>
Lentinus	Lentinellus	amyloid reaction
Lepiota molybdites	Chlorophyllum molybdites	green spores
Lepiota	Cystoderma	attached gills
Tricholoma	Tricholomopsis	growing solely on wood
Tricholoma & Clitocybe	Lepista	dirty pinkish spore: color
Tricholoma & Clitocybe	Leucopaxillus	amyloid reticulate spores
Tricholoma	Melanoleuca	amyloid reticulate spores
Armillaria	Catathelasma	amyloid spores - double veil
Volvariella	Volvariella	violation intern.code
Gomphidius	Chroogomphus	flesh turns blue in Melzer's.

These are but a few of the changes. . . and perhaps these are already old. In most cases above, certain species of the new genera have been extracted from the genera listed under "old name" because of the reasons listed at the extreme right. Species not subject to these "reasons", of course, remained in the original genus. If you can't figure this out just remain a 'lumper' like me, and the whole will be neutralized.

MUSHROOM NAME CHANGES

H.R.H.

As the above article indicates, the changes in mushroom names plague the amateur as well as the professional. A name may be used for many years, and suddenly it is replaced by a new one. There are definite reasons for name changes, even though not all mycologists are always in agreement about a proposed change. When Elias Fries set up his classification, he relied on macroscopic observations, and the use of the microscope has produced microscopic differences which warrant reclassification.

The nomenclature of mushrooms is governed by the International Code of Botanical Nomenclature as adopted by the International Botanical Congress, and the two main rules of nomenclature are: (1) The nomenclature of a taxonomic group is based upon priority of publication. Names must be validly published. (2) Each taxonomic group can bear only one correct name, the earliest that is in accordance with the rules. The book: "An Index of the Common Fungi of North America" by Orson K. Miller, Jr. and David F. Farr, contains all of the details necessary to bring about a name change in a mushroom. And these details are quite complex, so you can be assured that most name changes are really not whimsical.

DENVER SANDWICH AU CHANTERELLE Nima Newsletter

Saute in well greased skillet: 1/4 cup onion, chopped; 1/4 cup green pepper, chopped; 1/2 cup Chanterelles, chopped. When green pepper is almost done whip 4 eggs with 1/4 cup milk or cream and pour over vegetables and mushroom.

oms. Cover -- peek occasionally and tip pan to distribute uncooked portion. Season after omelet is firm (adding salt too soon will cause omelet to fall). Place omelet on two slices buttered toast and top each with another slice of buttered toast. Makes two generous servings.

NEW BOOKS

Answers to your Mushroom Questions and Recipes by Donna Myer, published by The Mushroom Cave, P.O. Box 894, Battle Creek, Michigan, 49016 contains 80 pages and sells for \$3.95 (less for bulk orders). This is a book for the novice. There are several pages of recipes, some borrowed from our own Cook Book.

The Genus Tilletia by Ruben Duran and George W. Fischer is aimed at the plant pathologist and student of smuts. Reprinted from a 1961 text, published in hard cover by Washington State University, Pullman.

MORE BITS AND PIECES

H.R.H.

The following quotes are excerpts from the Dover Publications Inc., book, The Romance of the Fungus World by R.T. Rolfe and F.W. Rolfe.

Fairy rings (caused by the spreading of certain mushrooms in a radial pattern)... sheep will not eat the grass within them . . . the Celtic countries regarded them as places where the fairies had danced. . . . the Germanics believed that a dragon had breathed there . . .

Witches butter - Exidia glandulosa . . . a mushy yellow fungus . . . in Scandinavian folklore witches milk the cows and scatter the butter in the meadows where it arises as Exidia. . . Mushrooms have played an important part in literature . . . H.G. Wells and Jules Verne speculated on forests of giant mushrooms in respectively the Moon and the interior of the Earth . . . Dickens and Thackeray wrote in praise of them . . . Ernest Bramah and Dorothy Sayers have based mystery stories on poisonous mushrooms . . .

The Romans, on the 25th of April, sacrificed a sheep and a dog, with offerings of wine, to prevent their grain from being attacked with fungus rust . . .

Two funguses that changed world history . . . the Plasmopara viticola, which almost ruined the French wine industry in the 1870's . . . the Phytophthora infestans, the Blight, destroyed the potato crop in Ireland in the 1840's and 50's, resulting in tens of thousands of deaths, mass upheavals, migration of millions of people . . .

Primitive medicine . . . sprains, aches and pains removed by cauterization with burning puffballs. . . . the moksa, rival to acupuncture in the Orient, where small burning mushrooms are applied to selected parts of the body . . . does it work?

Fungi essential parts of living . . . the fungi for making beer, wines, ciders . . . the fungi for making bread . . . the fungi for making cheese. . .

The training of a truffle hound . . . normally a poodle - it is subjected to an intensive course of training, beginning, while it is a puppy, with chopped truffles always being mixed with its food, to develop an association . . . then truffles are buried at progressive depths, and the dog is gradually led up to full proficiency. . .

Curiosities of fungi . . . a mushroom that grows at the rate of a pound a day . . . luminous mushrooms. . . fungi responsible for 'rains of blood' . . .

Poisonous mushrooms . . . died of mushroom poisoning, the Emperor Claudius, the Emperor Jovian, King Charles VI of France, Pope Clement VII. . .