

SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
2161 East Hamlin, Seattle, Wa. 98112

May 1981

Number 172

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FIELD TRIPS

Dick Sieger

Some willing people are needed to form a Field Trip Committee. We will meet a few times during the year to discuss improvements in hosting, car pooling, sites, and so on. Fresh ideas are needed so new members are welcome. Call Dick, 362-6860.

Hosts are needed for all of this month's trips. Call Dick.

Check for changes in trips as outlined in March Spore Prints.

May 16 & 17 Thunderbird Park

From Monroe, cross to the south side of the Skykomish River and immediately turn left onto Ben Howard Road. Continue for about five miles to Thunderbird Park, a private resort. Facilities include camp sites and hook-ups for R.V.'s. There is a fee for day use as well as for camping. Meet in the barn.

May 23, 24, 25 Clear Lake Forest Camp

The camp is southeast of Mt. Rainier 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 for another half mile and turn right into the campground that is across the road from Spring Forest Camp. The Oregon Mycological Society will be our guests.

May 30, 31 Tumwater Forest Camp

The camp is nine miles northwest of Leavenworth. Travel east on Highway #2 over Stevens Pass. About 23 miles past the summit, turn left into Tumwater Camp. We have reserved the shelter in the picnic area from 10:00 am Saturday until 10:00 am Sunday.

June 6 Chateau Ste. Michelle Winery

Saturday only. No pot luck. Tours start at noon. From I-405, take the Woodinville exit #23 and follow highway #522 into Woodinville. Follow signs to highway #202 and turn left (south) onto #202. Continue for 1-1/2 miles to the winery. You may come early with a picnic lunch and can look for mushrooms on the grounds. Wine and cheese can be purchased. Serious amateurs will observe the work of the Saccharomycetaceae that turn juice into wine and the rest of us will just have fun.

June 13 Trout Lake

Saturday only. No pot luck.

There are two routes, each about the same length. Travel south on I-5. Take exit #1A to route #14. Continue east along the Columbia River. Just before White Salmon, turn north onto route #141. Continue north to Trout Lake. Just after passing a service station and store, turn left to County Park. OR, travel east on I-90. Take exit #110 and continue south on I-82 through Yakima. Continue south on route #97 through Toppenish and Goldendale. Turn west on route #14 to White Salmon and continue as shown above. This is an Oregon Mycological Society field trip and we are their guests.

THE NAMING OF A MUSHROOM

H.R.H.

In order to be recognized as a "brand-new" - never named before - mushroom, the proposer has to follow certain, prescribed procedures. Since Bob Ramsey, a former president of PSMS and a member of the Northwest Key Council was given a puffball specimen to identify, and found that it did not conform to any description he could find, he set out to give this mushroom a name.

Below we present a reprint of his article in Mycotaxon. But I would also like to share with our members the Letter Bob sent me, when I asked his permission to print his article.

"Enclosed is a reprint on the Lycoperdon publication. You'll note that the Latin covers the whole first page.

As with any other literary effort, this one required the assistance of several people. Nettie Laycock, for whom it is named, found it and brought it to me at a Cispus Foray (1977). Joy Spurr did her usual superb camera work in catching just the right details. When it did not yield to the puffball key, I sent a sample and description to Dr. Alexander Smith. He was not able to name it. After letting it sit for awhile, I discussed it with Dr. Stuntz who encouraged me to publish it. He was responsible for taking my description and turning it into Latin. Mine is rather rudimentary.

Dr. Stuntz also provided me with a format for camera-ready submittal. I composed it to fit on the four pages and paid \$20 to change the colored slides to black and white, and for enlarging. Georgia typed the text 3 or 4 times, using black carbon ribbon on clay surfaced paper. The few corrections were made by cutting out errors and taping new words in place. Preliminary copies had been sent to Dr. Stuntz and Dr. Hosford at Central Washington for their perusal and criticism. One final re-write and I sent it off for publication, two and one-half years after discovery.

It crossed my mind that a novice like myself is rather presumptuous to engage in such a highly technical field. Dr. Stuntz pointed out that we had no information to indicate that this specimen was a described species and were therefore justified in proceeding with it." (The article appears on page 4; col. 1)



P. S. M. S. Spore Prints

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PUGET SOUND MYCOLOGICAL SOCIETY

% The Museum of History and Industry, 2161 East Hamlin
Seattle, Wa., 98112. Mail all material for Spore Prints
to Hildegard Hendrickson, 2559 NE 96, Seattle, 98115.

OFFICERS Carl Hermanson, President, 1982 (1)
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ALTERNATES: Marian Maxwell; Charlotte Turner - Zila; Dave Jansen.

IMMEDIATE PAST PRESIDENT: Jennie Schmitt

SCIENTIFIC ADVISER: Dr. Daniel E. Stuntz

Calendar

- May 11 Monday, Beginners' Class, 6:45 pm
Membership Meeting, 8:00 pm
- May 16 & 17 Fieldtrip to Thunderbird Park
- May 18 Monday, Board Meeting, 8:00 pm
- May 22 Deadline for Spore Print Material. Send all articles, photos, etc. to the Editor, 2559 NE 96th, Seattle, WA, 98115
- May 23 - 25 (Memorial Day) Fieldtrip to Clear Lake Camp
- May 30 & 31 Fieldtrip to the Tumwater Forest Camp
- June 6 - Saturday afternoon only - Chateau St. Michelle Winery
- June 13 - Saturday only - Trout Lake - no potluck

THE 1981 MEMBERSHIP ROSTERS AGAIN WILL BE AVAILABLE FOR PICKUP AT THE MAY MEETING

Also, any errors and omissions, etc., or changes of address should be reported to the new membership chairman, Aino Kunz, 12552 - 19th Ave., NE., Seattle, Wa., 98125. - Phone: 362 - 7402.

RECOVERING - It was good to see former president, Jennie Schmitt at the Board Meeting. She is making a good recovery from surgery. The same can be said for Dorothy Nendza. Also, Dr. Patricia Winter had to miss the last membership meeting, but is recovering from a recent stroke.

Membership Meeting

Monday, May 11, 1981, 8:00 pm in the McCurdy Room of the Museum of History and Industry.

Program: Mitch McGuinness, a PSMS member, and a M.S. in Botany candidate at the University of Washington, will give a slide- and film-illustrated lecture titled: Introduction To Slime Mold Biology and Classification. It should be very interesting, and covers an area of mycology we see, but know very little about. Mitch comes by his interest in mycology by being the nephew of Charlie Volz, second president of PSMS.

BOARD NEWS

H.R.H.

After acceptance of the prior month's minutes, President Hermanson referred to the excellent write-up of the coming NAMA Foray in Mycophile, the regular publication of NAMA. President Hermanson also thanked Earl Harrison for conducting the April membership meeting.

Bob Hanna reported that all activities connected with the annual exhibit that have to be done in April are accomplished. A chairman for the clean-up committee is still needed. In the June issue of Spore Prints a list of all committee heads will be printed for the membership's benefit, so they may call the chairman and sign up for a committee.

Treasurer Earl Harrison is preparing the check for the Museum to pay our "rent". This is usually done during the banquet, but since no one from the Museum attended the banquet, it is done now.

Due to the recent increase in postage, the subject of non-profit mailing came up. After several Board members cited very dissatisfactory experiences with non-profit mailing of other organizations they are associated with, the PSMS Board voted to continue sending the bulletin via first-class mail.

Past-President Jennie Schmitt recommended that the long-delayed revision of the Society's poison pamphlet be undertaken.

The Board voted to allocate \$200 to purchase additions to the PSMS library holdings, which are housed at Ben Woo's office.

The Board discussed all the subjects that are listed under ACTION COLUMN and asks for your feedback.

ACTION COLUMN

Somebody in the Society wants some members, after they have read this column, to do something:

APPEAL FOR GOURMET COOKS - As an idea for a membership meeting in the fall (= prime mushroom season) our new program chairman, John Kunz, asks that our many gourmet cooks volunteer and give us a cooking demonstration. At every field trip, many new members ask for cooking instructions, and such a program could also give experienced mushroom cooks new ideas. Please call John at 362 - 7402.

SUCCESS (FAILURE) WITH SHITAKE LOGS?

Margo Harrison (for the Board of Trustees) will take letters or phone calls (932 - 1612) from members who want to share the experience - success and/or failure - with shitake logs, and other mushroom kits, which are available in stores. We will then give a report to the membership.

ACTION COLUMN (continued)

CHAIRMAN FOR CLEAN-UP COMMITTEE NEEDED

We still need a person to head the clean-up committee at the annual exhibit in October. Usually, everybody helps and we have never had trouble finding workers, but we do need someone to head up the operation. Please call Don Schultz (226 - 2217) or Bob Hanna (767 - 6381).

OPINION ABOUT COMMERCIAL CHANTERELLE PICKING

In the December 1980 issue of Spore Prints (page 4) we reported that between 2,000 and 5,000 lbs. of chanterelles were purchased daily in the Hoquiam area, for shipment to Europe. This commercial picking of chanterelles puts a tremendous pressure on the recreational collectors.

Several mycological societies in Washington are concerned about this development, since we are sure this was not a one year phenomenon. There are several implications:

- (1) overpicking could lead to diminished growth in the future.
- (2) presently there is no inspection of wild mushrooms being sold, therefore, some collectors, who are not experts in identification could pick the "wrong" kind.
- (3) presently only chanterelles and matsutake are commercially picked, but which one is next?

Give your opinions in writing or by phone (839-2454) to Dennis Krabbenhoft, who is handling this item for the Board.

GARAGE NEEDED

Ever since the first annual exhibit, PSMS has commercially stored the props for the show. Just like everything else, storage fees are going up all the time. We are therefore asking whether one of our members might have an unused garage which would be suitable to store the partitions, etc. If you do, call Monte Hendrickson (523 - 2892) who is handling this matter for the Board.

MUSHROOM RECIPES WANTED

If you have, or run across a recipe using wild or store-bought mushrooms, that is especially delicious, different, etc. please send a copy to Charlotte Turner-Zila, who will collect them for the Board. These recipes will be printed in Spore Prints from time to time, and will be filed for future use, if and when, the Society's cookbook will be updated. Specifically, Charlotte will file the recipes by the mushroom species that is used.

MUSHROOMS, A SEPARATE KINGDOM

A Book Review Jennie Schmitt
Text is by David T. Jenkins, illustrations & calligraphy by Loni Parker. Published in 1979 by Oxmoor House, Inc., P.O. Box 2463, Birmingham, AL 35201. Cost: \$16.95.

This is a sumptuous, beautiful book, full of watercolor illustrations, accurately painted. The text is anecdotal, discussing the myths and facts in a pleasant, chatty manner. What is most interesting and valuable about the book are the illustrations. They are based on close observations, deftly translated into believable color. On the whole, the book succeeds. For information, identification and classification of mushrooms I'd find another book.

ROCKPORT FIELDTRIP REPORT APR. 4 & 5, 1980 H.R.H.

Driving through the colorful tulip fields on Saturday morning seemed to promise a good day ahead. However, as soon as we arrived at Steelhead County Park things did not go the right way. Some members of PSMS had been to the park the previous weekend, and after not finding many mushrooms,

hinted to the ranger, that the fieldtrip may get cancelled, and the ranger took this as fact. I had brought two thermos bottles filled with coffee, which kept us warm until the ranger opened the shelter about 9:40 AM and we got set up. Around 10 o'clock Monte took out the first group of new members. They returned at noon with just enough specimens of Verpa bohemica that the newcomers saw what they were after. By mid-afternoon, however, Charlie Volz had identified over 30 specimens, brought in by the eager collectors. Some experienced collectors found a fair number of Verpas at Barnaby Slough.

The trip was "successful" for one family, who had set out for Rockport on Friday. While visiting a restaurant on the way, they sold their camper, which they had tried to sell for some time in Seattle. It is not clear to me, how they returned to Seattle, but shortly after noon on Saturday, they arrived at Steelhead County Park in a brand-new Subaru stationwagon. 41 members and guests signed the register, and 25 participated in the potluck supper. Monte and yours truly were the hosts for this trip. Since we went home Saturday evening, Myrtle Fick (on an injured leg) and Charlie Volz warmed the coffee on Sunday morning. Thank you.

SQUIRE CREEK FIELDTRIP REPORT Jack & Navarre Orth

When we set out for this trip, we remembered the strings of morels which June Perkins had drying around their trailer on a fieldtrip to this location several years ago. On this Saturday, April 11, 1981 the following words characterize this trip: dismal and dismay. An unexpected, late snowfall, left the snowline just a few feet above the elevation of the camp. In a nearby slashburn we found 3 morels. A total of 13 members came, since it had stopped raining in Seattle and they were optimistic. Jack and Monte tried to get a fire going in the camp stove so people could warm up. Monte squandered three cookies on a wayward Lab pup which roamed around the shelter.

We combined a late lunch into an impromptu potluck in mid-afternoon. Most people left around 4:30 pm, and on the way home, between Oso and Arlington, were caught in a hailstorm, which dumped up to one inch of kernels on the road, making it very slippery. And we were on a mushroom outing? But even here, there was a silver lining. One of our members, Wayne Jones, from Arlington, has enjoyed Pleurotus ostreatus on a stump near his home all winter long. He brought some specimens for some of the newcomers who had gone home empty-handed, to the membership meeting the following Monday. Thank you.



TOPICS OF INTEREST

Pacific Northwest magazine (Vol. 14:9, Dec. 1980) stated that Dr. David Hosford, of Central Washington University, who is studying the red zone around Mount St. Helens, has found a small, blackish mushroom, Anthracobia melaloma, growing in the blast zone.

Ron Ower, a member of the San Francisco Mycological Society, has successfully cultivated morels in a controlled environment. A culture, which began to bud a week before Christmas, produced a 5" mature specimen that was collected January 10. A subsequent cultivation was successfully induced to fruit in early February, establishing a repeatable process. Ower is writing a paper on the ontogeny of the morel form.

Lycoperdon NETTYANA, A NEW PUFFBALL
FROM WESTERN WASHINGTON STATE

By

ROBERT W. RAMSEY

10511 Interlaaken Drive, SW
Tacoma, Washington 98498

DESCRIPTION

Lycoperdon nettyana sp. nov.

Gasterocarpia 2-3 cm lata, 3-4 cm alta, stipitato-subcapitata, ad apicem rotundata, mediobrunnea, pannos granulosos granulis Lycoperdantis pyriformis similibus sed parvioribus et regulatioribus praebens, quos color brunneo apicis modificationem dilute griseibrunneam donant. Exoperidium e granulis, prominentias breves et conicas, vel globuliformes constans; prominentiae per radandum sed haud terendum effractae, cicatrices rotundatas depressas facientes. Exoperidium in maturitate ad apicem gasterocarpium irregulariter findens et exutum, endoperidium nitentem, laevem, persistentem exhibens; post iacturam exoperidii porus apicalis circularis facitur. Stipes basem versus angustatus, ad substratum per rhizomorphas albas colligatus, pallidus, prominentiis granulisque ad aspectu glandularum reductis, a stipitem pallidum fuscatis videntur.

Gleba omnis pluricellulosa in parte basali sterili et parte apicali fertili divisa. Pars basalis e cellulis minus quam 1 mm diam constans quae inter partes basales et apicales dissepimentum e cellulis complanatis faciunt; dissepimentum in partem fertilem 2 mm ad modum tholi extensum, area fuscata infra tholum ostendens. Gleba fertili griseibrunnea vel mediobrunnea, e cellulis parvibus et irregularibus, ante aperturam pori apicalis pseudocolumellam praebens, quam e fasciculum verticalem tubulorum angustorum constat. Sporae globosae, apedicellatae, verruculosae, 4-5 m diam. Capillitium 6 m diam, pariete 1.2 m crasso, foveas circulares parietis et ramulos latiangulos interdum praebens.

Gasterocarpia dispersa vel caespitosa in solo pratulorum sylvarum. Holotypus L-XI ad castram Iron Springs dictam prope Cispus comitatus Lewis pagi Washingtonis 22 Oct 77 a Nettie Laycock lectus, in herbario Universitatis Washingtonis conservatus.

Gasterocarp 2 to 3 cm broad, 3 to 4 cm high, stipitate-subcapitate with upper portion hemispherical, medium brown, covered with small, (more or less) regular granular patches that impart light grayish brown color (60, see Kelly, 1965); granular exoperidium interspersed with short conical spines and rounded buttons about 2 mm apart. Exoperidium at maturity splitting irregularly across the apex and peeling or flaking away. Endoperidium, when exposed, lustrous, smooth, light grayish yellowish brown (79), persistent; apical pore soon forming, circular, less than 1 cm diam. Pseudostipe tapering to base, attached to substrate by white rhizomorphs; surface pallid with scattered dark granules and reduced gland-like projections.

Subgleba whitish, pigmented in uppermost 5 mm, with empty loculae less than 1 mm across; distinctly separated from gleba by a thin layer of collapsed loculae which is centrally elevated about 2 mm at the base of the pseudocolumella. Gleba grayish brown (61) to moderate brown (58) near or at maturity, with a distinct pseudocolumella (see photo) rising to near the apex. Spores globose, apedicellate, verruculose, 4-4.5 um in diam. Capillitium 6 um in diam., walls up to 1.2 um thick with occasional circular pitting, few wide angle branches.

Collected on soil in woodland clearings, scattered to caespitose, autumn. Holotype, L-XI, collected by Nettie Laycock at Iron Springs Campground 5 miles from Cispus Environmental Learning Center, Lewis Co., Washington, 22 Oct 1977. Stored in University of Washington Herbarium.

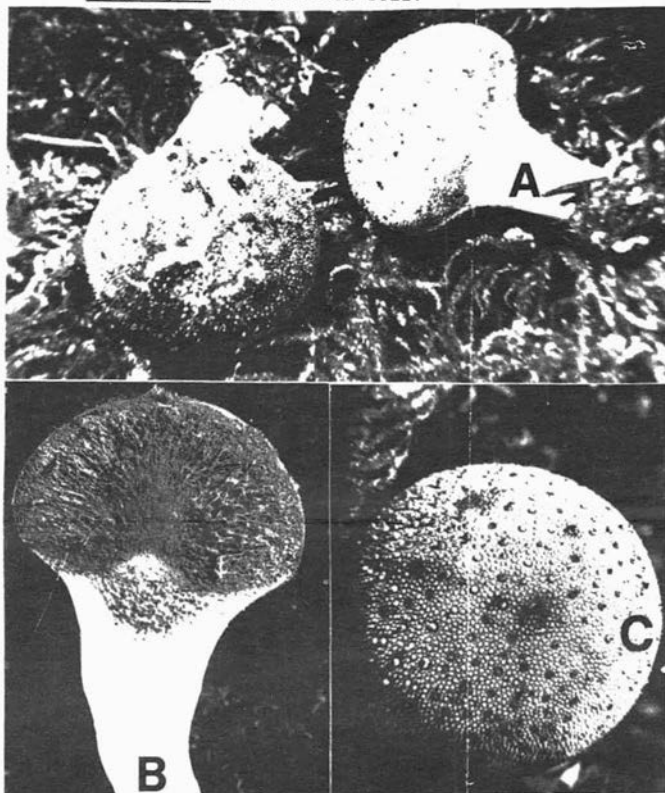
DISCUSSION

During the production of a trial key for the Lycoperdales reported for the Pacific Northwest, this puffball was brought to me by Nettie Laycock at the Cispus III Foray. I was not able to match it with any of the reported Northwest species nor with the publications by Dr. Alexander Smith. I sent a sample to Dr. Smith for his opinion and he reported to me that Vincent DeMoulin of Liege, Belgium, has classified it as a western variant of Lycoperdon pyriforme Schaeff per Pers. However, this specimen has significant differences from L. pyriforme which indicate that it should be accorded full rank as a species. These differences are:

1. L. nettyana is covered with granular patches similar to but smaller and more regular in size than L. pyriforme.
2. L. pyriforme does not slough away the exoperidium.

The scales and granules dry on the surface of the endoperidium to produce a sandpaper texture.

3. L. pyriforme is always found on wood or wood debris. L. nettyana was found on soil.



Photos by Joy Spurr

Figure A, left sporocarp with splitting exoperidium.

Figure B, longitudinal section showing discolored area of sterile base and pseudocolumella. Note pore formation at apex.

Figure C, typical exoperidial texture showing spines and buttons. Missing ones were scraped to remove.

4. L. pyriforme does not exhibit a distinct pseudocolumella, nor a sharp division between sterile and fertile tissues, nor a discolored zone below the division.
5. L. pyriforme has spores 2.8 to 3.5 microns while L. nettyana has spores from 4 to 4.5 microns in diam.
6. L. pyriforme forms an irregular pore slowly while L. nettyana forms a circular pore soon after loss of the exoperidium.

Some of these differences could be ascribed to individual variations or climatic and geographic influences, but the second, fourth and fifth points seem unassailable.

There is a superficial resemblance of the exoperidium to Lycoperdon perlatum Pers. but the spines and buttons must be scraped to loosen. Of some two dozen Lycoperdon species described in the U.S., only three others appear to lose the exoperidium by peeling or flaking. L. curtissi Berk. lacks a sterile base. L. rimulatum Peck has a smooth exoperidium. L. marginatum Vitt (L. candidum Pers per Pers.) is not stipitate and its sterile base has much larger loculae. Taken together, all these points lead to the conclusion that Lycoperdon nettyana has heretofore been undescribed.

ACKNOWLEDGMENTS

The author wishes to thank Dr. Daniel Stuntz of the Botany Department of the University of Washington and Dr. David Hosford of Central Washington University for their assistance and criticisms. Also Nettie Laycock for her interest in my area of mycology while engaged in her own study of other genera.

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