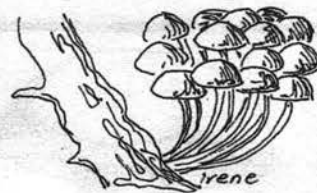


SPORE PRINTS

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

November 1984

Number 206



PRESIDENT'S MESSAGE

Margaret Dilly

The mushroom season is very short this year—first we had a very dry summer and autumn, and now just into late October it is turning cold, especially at higher elevations. However, we had a marvelous Annual Exhibit this year. The rain dances worked, and we got enough moisture to make a presentable show. Searching for fungi took some extra effort, and I want to say a big thank you to all members who brought in specimens. The extra care taken in gathering and transporting the mushrooms was really appreciated and contributed to an especially attractive display.

Our Exhibit Co-Chairpersons did a superb organizing job and were ably assisted by the chairs of the subcommittees. All of them deserve our thanks and applause for a job well done. Sometimes we run across an unsung hero, and this year a sweet little lady fits the bill. Her name is Anna Werschnack who came to the rescue in the kitchen when we were faced with a dilemma due to the illness of the Hospitality chair (who ended up in the hospital). Anna spent the better part of two full days seeing that the food was properly handled and available for all hungry help. A very special THANKS, Anna — take a bow.

The addition this year of the interesting commercial cultivation display drew a lot of interest. The expansion of the Video tape programs and the new educational posters were well received. All in all, I think we had a tremendous Exhibit and ALL involved give yourselves a big pat on the back -- sit back, enjoy the winter and be ready to repeat your performance next year.

As we move into the winter, mushroom hunting and Milt's classes come to an end, and it is time to start your own personal study of mushrooms. Our PSMS Library is a good place for this. We are going to make a few time changes. From now on, the library will be open from 6 - 9 pm on Tuesdays, and Thursdays 10 am to 2 pm.

One last note before I sign off for this month -- WELCOME to all you new members. I look forward to seeing you at the membership meetings.

CALLING ALL PSMS PHOTOGRAPHERS

Joy Spurr

The December meeting is our traditional social evening, "FEAST AND FOTO NIGHT" The program consists of color slides provided by PSMS members. After the program we feast on an unbelievable variety of fattening pastries and cookies which also are furnished by PSMS members.

Here is a chance to share your best color slides of a recent trip, a hobby, plants, animals, waterfalls, rainbows, or anything else you have focused your camera on. Yes, ---- even mushrooms. This is strictly a FUN evening --- not a contest. There will be a table available for those who wish to display color or black and white prints.

We need only 6 to 10 photos from each person, so come on, let's have participation by all the 35 mm camera fans. The more, the merrier.

We need to know in advance how many members will participate, so please sign up with Joy Spurr at the November meeting or phone her at 723-2759.

WANTED - DOOR PRIZES FOR BANQUET Betty Whalen

It always is fun to win a door-prize at our annual survivors' banquet. If a member has an item he/she would like to donate, please call me at 362-2656. Or, if you "run across" an item later on, pick it up, and contact me then.

REPORT ON THE 1984 EXHIBIT

Dennis Bowman

Michelle Green and I would like to express our thanks to each of you who contributed toward making the 1984 Exhibit the tremendous success that it was. From the earliest planning sessions, during the preparations and staging of the Exhibit, and through the counting of the number of species on display and cleanup, about 150 members actively participated and contributed their time and resources.

Through the efforts of various committees several new features were added to the Exhibit this year: the commercial exhibit displaying the growing of oyster mushrooms and Stropharia rugoso-annulata (the-garden giant); the expanded Video tape library featuring the cooking of wild mushrooms, and of course, our professional poster. (We are looking for the chairperson to head a committee that can better control the rain and bring it on at the right time. We welcome suggestions).

Exhibit 1985 is already in the planning stage, and I invite all members (including our new joiners) to become involved by calling me (525-8399) or Michelle (523-5975) or any of the Committee Chairs in 1984. We also welcome ideas and suggestions from everyone; please share them with us.

A few reminders: Please return the poster location sheets to Pacita Roberts ASAP. We ask the Committee Chairs to return the exhibit packets to Michelle.

EXHIBIT FIGURES

Total paid attendance	1,833
Total members (not working on show)	286
Total Attendance	2,119


The survey taken and returned by about 20% of visitors indicated that 68% were first-time visitors, and 23% had visited the Exhibit before.

How did the first-time visitors hear about the Exhibit:

newspaper	46%
Poster	26%
friend	12%
radio	8%
T.V.	6%
Other	3%

We are happy to get this kind of feedback which helps us in the planning for next year. It lifts the spirits of all who help on the Show if we have a good attendance.

More articles about the Annual Exhibit are on page 4



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Spore
Prints

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OFFICERS Margaret Dilly, President, 1986 (1)
John Kunz, Vice President, 1985 (2)
Ferris Anderson, Treasurer, 1986 (2)
Betty Hamilton, Secretary, 1985 (1)

TRUSTEES Term expires March 1985: Ernie Boa (1) Judi
Boa (1); Hildegard Hendrickson (2); Monte
Hendrickson (2); Charlotte Turner Zila (1).
Term expires March 1986: Gilbert Austin (1)
Ed Bush (1); Sally Ann Hansen (1); Betty
Okura (1); Ron Skoor (1).

ALTERNATES: Dennis Bowman; Alice Austin; Edith Godar
IMMEDIATE PAST PRESIDENT: Milton Grout
SCIENTIFIC ADVISER: Dr. Joseph Ammirati

Calendar

- Nov. 12 Monday, 6:45 - 7:30 Beginners' Class
8:00 pm Membership Meeting
- Nov. 19 Monday, Board Meeting, 7:30 pm
- Nov. 23 Deadline for Spore Prints Material. Send all material to 2559 NE 96th, Seattle, WA 98115
- Dec. 10 Monday, 6:45 - 7:30 Beginners' Class
8:00 pm Membership Meeting

ORIENTATION SESSIONS FOR BEGINNERS M. Hendrickson

Again this year we will have classes for the many beginners who joined the Society during the Annual Exhibit. For your convenience the sessions have been scheduled at 6:45 pm on the Monday of the Society's regular monthly membership meeting. The first class will be held on Monday, Nov. 12th. It will last till 7:30 pm, so we can examine the specimens on the table (if there are any fruiting this year), until the regular membership meeting starts at 8:00 pm.

The beginners' classes will continue through June and prepare the new members for the spring season. The topics of the sessions are: (1) Orientation for absolute beginners into the working of our Society. (2) Cooking and preservation of wild mushrooms. (3) Basic fundamentals of mushroom identification. (4) Review of the spring mushrooms. The series includes a learning field trip for spring mushrooms.

All interested members are welcome. There will be no charge.

Membership Meeting

Monday, November 12, 1984, 8:00 pm in the auditorium of the MONROE CENTER, 1810 N.W. 65th Street, Seattle.

Program: Dr. Ken Russell, forest pathologist with the Department of Natural Resources in Olympia, will give a slide - illustrated lecture titled: The Other Side of the Mushroom. He will discuss and show the effects fungi have on trees, and his talk could also have been called: What happens inside a tree. This should be an informative and enlightening subject that we know very little about, yet, many mushrooms need trees for their existence. Don't miss this meeting.

BOARD NEWS

H.R.H.

Tired trustees showed up for the October Board Meeting which was held the day after the Annual Exhibit.

Monte Hendrickson reported about his visit to the new Center for Urban Horticulture, a department of the University of Washington, which was just opened. The facilities are adequate for PSMS use, if the Monroe Center at some time in the future will be converted back to school use (a rumor that periodically surfaces). The Center is encouraging garden clubs, etc. including PSMS to consider using the facilities for meetings, etc. The Center is located in the Union Bay area (approx. N.E 45th and 45th Ave. N.E.)

Dr. Ammirati sends out a last call for input on the revision of the Savory Wild Mushroom. Even though the revision is started now, the new edition is not expected for at least a couple of years. (Judi Boa has been able to get the last 15 copies of the book from the publisher, and has them available for sale.)

Edith Godar is chairing the Social part of the December membership meeting and will be assisted by Betty Okura. Members should remember to bring goodies to the December membership meeting.

Betty Okura, Banquet Chairman, reported that in 1985 (on March 15th) the Survivors Banquet will be held at Quinn's Restaurant at Shilshole and will feature prime rib. Wild mushrooms will be included. Details later.

PSMS will purchase a complete set of KEYS from the Pacific Northwest Key Council for our library. The keys are intended to aid in the macroscopic identification of fungi.

President Dilly thanked the Show Co-Chairs, Dennis Bowman and Michelle Green, who attended the Board Meeting, for the fine job they did organizing this year's Exhibit. The paid attendance was 1,833. 122 new members joined PSMS. Dennis and Michelle are winding up the work on this year's Show and begin preparations for next year.

ATTENTION: The names and phone numbers of our new members are included in this mailing of Spore Prints. Please, check your number and let the Society know if there is an error in the spelling of your name or in your phone number.

CONGRATULATIONS ON THE GOLDEN ANNIVERSARY

Irene & Bill O'Connor, longtime PSMS members, who live in Amanda Park on the Olympic Peninsula, will celebrate their Golden Wedding Anniversary on November 3rd with a reception in Aberdeen. Our best wishes go to this lovely couple. They have sold their business and are retiring. We hope to see them at more PSMS functions in the future.

It was a beautiful fall weekend on September 29th & 30th. Thirteen trailers, etc. made it over Chinook Pass on Friday, the most we can remember on a field trip in recent years. Lack of rain caused a shortage of the elusive toadstools, and not too many of the pot kind were found.

Hildegard and Monte brought along a reporter from the Seattle Times (Delores Tarzan) and she found the only Matsutake I saw. It seems Judi and Ernie Boa asked Joy & Lyle McKnight where to hunt. They followed Lyle's directions (he didn't) and they found 12 Matsutake. Joy & Lyle were skunked. It pays to follow your own hunches.

Joy Spurr set up identifying early Saturday morning. Later in the day she had help from Nettie Laycock and Brian Luther. Over ninety species were identified.

We had a total registration of 75, and 70 stayed for a delicious potluck. There was lots of everything. A very good time was had by all.

LAKE WENATCHEE STATE PARK FIELD TRIP REPORT

Clarence & Lee Seemer

There were 44 sign-ins for the October 6 field trip, and 37 stayed for the excellent potluck dinner. There were 85 specimens identified, among them white chanterelles, honey mushrooms, and a few matsutake.

Mr. John Hahn from the Seattle P.I. attended, asked many questions, took notes, and went out hunting with Monte & Hildegard. They made sure he found plenty of mushrooms and had more than enough material for his article (which appeared in the paper on Wednesday, Oct. 10th and provided nice publicity for Annual Exhibit).

Many thanks to Dick Sieger and Joy Spurr for identifying what was collected, and to Gilbert & Alice Austin for their timely advice and help to the hosts. (P.S. The Seemers are rather new members and took over the entire hosting duties for this field trip. Thank you for a good job. This should be encouragement for other "newer" members to come forward and volunteer for hosting duties.)

P.S. ed. John Hahn so much enjoyed the fall colors in the area that he took his family back over Stevens Pass the next day and they purchased apples in Wenatchee, and he wrote another article on the fall colors.

CRYSTAL SPRINGS FIELD TRIP REPORT

Gilbert Austin

Low temperatures made this a unique field trip. Monte Hendrickson for one, noted that temperatures were lower than for any of his previous trips. Some mushrooms were frozen - the chanterelles in particular. However, a good number of chanterelles were found, also many Leccinum aurantiacum, Rozites caperata, Armillaria ponderosa, and many, many others. Altogether more than 100 specimens were identified by Brian Luther, George Rafanelli, and Coleman Leuthy. Since the day was bright, but cold, the shelter area, and coffee was more popular than is sometimes the case. Principal hosts Florence & George Metcalf and Charlotte & Bill Zila had brought hot cider and spiced tea, which was very welcome. Henry & Corinne Cato very helpfully got to the shelter shortly after daybreak and had the fireplace in action before other members arrived. Eighty members (several newly joined) signed the register and 39 remained for the evening potluck. It was unfortunate that the unseasonably early freeze affected this popular and prolific mushroom area and ended the season before it actually had begun.

Be sure to put a few PSMS POSTERS on your Christmas shopping list. Our professional quality Exhibit Posters will also be on sale at local graphics and poster stores for about \$8 - \$10. Membership prices are \$5 per poster at our membership meetings. So don't forget to purchase some at our November and December membership meetings!

BOOKS - BOOKS - MUSHROOM BOOKS

Judi Boa

Books also make excellent Christmas presents. As usual, Judi will have mushroom books for sale at the November and December membership meetings. It seems that one always wants another book to help in identifying fungi.

Some of our members have been ordering more advanced mycological books, and Judi urges members to put in their orders. Discounts can then be enjoyed. Some of the titles that are being ordered are:

North American Species of Clitocybe, Volume I, by H.E. Bigelow, 1982.

The North American Species of Pholiota, by A.H. Smith & L.R. Hesler, 1968.

Keys to Agarics and Boleti (in English) by Meinhard Moser, 1983.

700 Pilze in Farbfotos by R.M. Daehncke & S.M. Daehncke, 1980.

The last two books mentioned make a "nice package" in that the Moser book contains comprehensive "keys" for identifying mushrooms, while the Daehncke book (which is indexed with the Moser book) contains exquisite color photographs and very limited text.

The Mushroom Cultivator by P. Stamets & J.S. Chilton, 1983 is an excellent guide if you want to grow your own fungi.

Fungi of Switzerland. Volume 1: Ascomycetes by J. Breitenbach & F. Kraenzlin, 1984, with beautiful photos covers a group of fungi that are not treated extensively in a common guide. The same goes for the next book, available only in German:

Pilze die an Holz wachsen (Mushrooms that grow on wood) by H. Jahn, 1970.

(in preparation) The Agaricales in Modern Taxonomy, 4th edition, by Rolf Singer.

(in preparation) is a reprint of Mycological Guide Book Committee, Mycol. Soc. of America, Russell Stevens, ed., Mycological Guide Book, 736 pp., approx. \$40

Arctic and Alpine Mycology, J. Ammirati & G. Laursen, ed. published by U.W. Press, approx. \$50

FLASH: The Savory Wild Mushroom is now out of print. Only stock on hand is still available. The new edition is some two years away.

DID YOU KNOW ...

One pound of fresh mushrooms equals 6 to 8 ounces of canned or 3 ounces of dried fungi.

Finely grated ginger root, in a small amount, enhances the flavor of most mushrooms.

According to Dr. Harry Thiers, adviser to the Mycol. Society of San Francisco, there are some 41 variations of B. edulis.

There is a polypore in the genus Irpex which lives symbiotically with tree-nesting birds. The bird makes a cavity in the tree where the wood has been softened by the fungus, then the warmth of the bird stimulates super-rapid fungus growth which in turn releases heat which helps keep the birds warm.

RESULTS OF THE SILENT AUCTION OF POSTER ORIGINALS

Of the six original water color pictures used for the poster, the artist retained one, four were sold through a silent auction, and the fifth will be available through a raffle. Raffle tickets will be available at membership meetings between now and the survivors banquet.

The successful bidders for the original water color pictures are

Cortinatius violaceus Debra Marrs
Albatrellus flettii Brian Luther
Cantharellus cibarius Brian Luther
Aleuria aurantia C. Burt Dudley
Russula aeruginea . . . is still available = will be raffled off

MUSHROOM STATISTICS Helena Kirkwood

This year 292 species of mushrooms were exhibited. This compares to 336 species in 1983 and 321 in 1982. Considering the dry summer and early fall we had in the Pacific Northwest, we did very well. 1979 also was a very dry year, and then only 257 species were shown.

The tabulation below shows those genera with more than 10 species on display:

Agaricaceae		Boletaceae	18
Amanita	10	Cantharellaceae	25
Cortinarius	14	Polyporaceae	23
Hygrophorus	10		
Lactarius	17		
Mycena	12		
Russula	14		

FOODS BASED ON FUNGAL PROTEIN TO BE SOLD IN UNITED KINGDOM

An article in the Sept. 10, 1984 issue of Chemical & Engineering News (p.44) tells of a non-meat protein to be marketed in the U.K. by New Era Foods. The protein, which has a fibrous structure and can be made to be almost indistinguishable from chicken or beef, is derived from Fusarium graminearum. This particular fungus was chosen because it has a fibrous structure which allows it to be made into a product with a texture resembling that of various meats. A special combing device yields strips similar to chicken meat.

The product, called Myca-Protein, has been subjected to many nutrition and toxicity tests, and is served regularly to over 5000 customers at the company's canteens and restaurants. On a dry weight basis, the product typically contains 44% protein, 19% carbohydrates, 18% fiber, 14% lipids, 3% ash, and 1% ribonucleic acid. The product not only resembles natural meats very closely, but is just as nutritious, and has a low fat content and is free of cholesterol. The U. K. Ministry of Agriculture, Fisheries & Food has approved it for human consumption, and the U.S. Food & Drug Administration is now evaluating it.

The Fusarium graminearum is grown on a nutritive broth of glucose syrup based on food-grade starch, and it doubles in weight every five hours. Varying the growth time affects the length of the fibers and the texture of the Myco-Protein. The biomass from the fermenter is heated at 64°C for 20 minutes to reduce the RNA content and then filtered. Flavors, colorants, and egg albumin binder are added, and the product is flash-chilled or spray-dried to a powder for addition to flour and dry soups as a protein supplement.

(from the newsletter of the Tri-Cities Mycol. Society).

CONDOLENCES TO LYLE MCKNIGHT

On Oct. 11th, late in the evening Lyle received word that his mother had been killed in an automobile accident in Arizona. Lyle & Joy had planned to leave for Arizona the week after our Show to be there to celebrate his mother's 92nd birthday later this month. Instead they had to take the first plane on October 12th for the funeral. Our sympathy to Lyle and Joy.

CULTIVATED MUSHROOMS

The cultivated oyster mushrooms and Stropharia rugoso-annulata at the Annual Exhibit were produced by a company called Full Moon Mushrooms, P.O. Box 6138, Olympia, WA 98502. Phone (206)866-3775 or 866-9362. The firm sells the mushroom kits at the Seattle Pike Place Market on Saturdays from April 15 to December 22. Orders placed by mail may be picked up at the market without additional shipping or handling costs. Oyster mushroom kits sell for \$7 and the Stropharia for \$10. In Washington add \$4 for shipping.

BLEWIT ASPIC Larry Stickney

Sauté one pound of Blewits in four tablespoons of chicken fat for 20 minutes in a deep pan. After ten minutes add a teaspoon of lemon juice, a touch of salt and pepper, 1/2teaspoon of freshly ground nutmeg. Dissolve two packages of gelatin in cold water and add to a quart of clear chicken stock, and start to heat it while you blend the blewits into a smooth pulp in any blender. Add the blewits to the heating chicken stock and bring to a boil. After cooling the mixture well below the hot stage, thoroughly whisk in a cup of sour cream, and correct color, if desired, with blue food coloring. Pour into your choice of mold, previously treated with Pam spray for easier removal from form, and chill until firm or until ready to serve. Lay out aspic on your favorite salad greens, and top with a dollop of sour cream.

DIETARY CARCINOGENS AND ANTICARCINOGENS; OXYGEN RADICALS AND DEGENERATIVE DISEASES

So you've spent your life powdering your eggs, meat and vegetables with pepper? According to Ames, plants in nature synthesize toxic chemicals for various reasons, resulting in natural mutagens, teratogens (which cause malformations) and carcinogens (which cause cancer). Black pepper is one of the culprits. Studies show that mice develop tumors from pepper dosages which many humans exceed for most of their lives.

Hydrazines in large amounts are present in a number of wild mushrooms, two of which are well known: Gyromitra esculenta (which is not recommended for the table, especially in the eastern U.S.) and Agaricus bisporus (the common supermarket mushroom). The details of the studies are listed in the article listed below.

The implications are that we take in many more substances than we realize, and that dietary practice may contribute to the development of cancer. Biochemical reactions still are a bit of a mystery to some of us; Ames brings us up to date on recent studies, especially those related to the role of oxygen radicals and their inhibitors in the fat-cancer relationship, in anticarcinogenesis, and in aging.

Original article appeared in Science, author: Bruce N. Ames Sept. 23, 1983, p.1256.

It was reviewed in Mushroom, The Journal of Wild Mushrooming, Vol.2, Number 3, Summer 1984.

Subscriptions to MUSHROOM are \$12/yr; \$28/3yrs. It is published four times a year; address is Box 3145 University Station Moscow, ID 83843.