

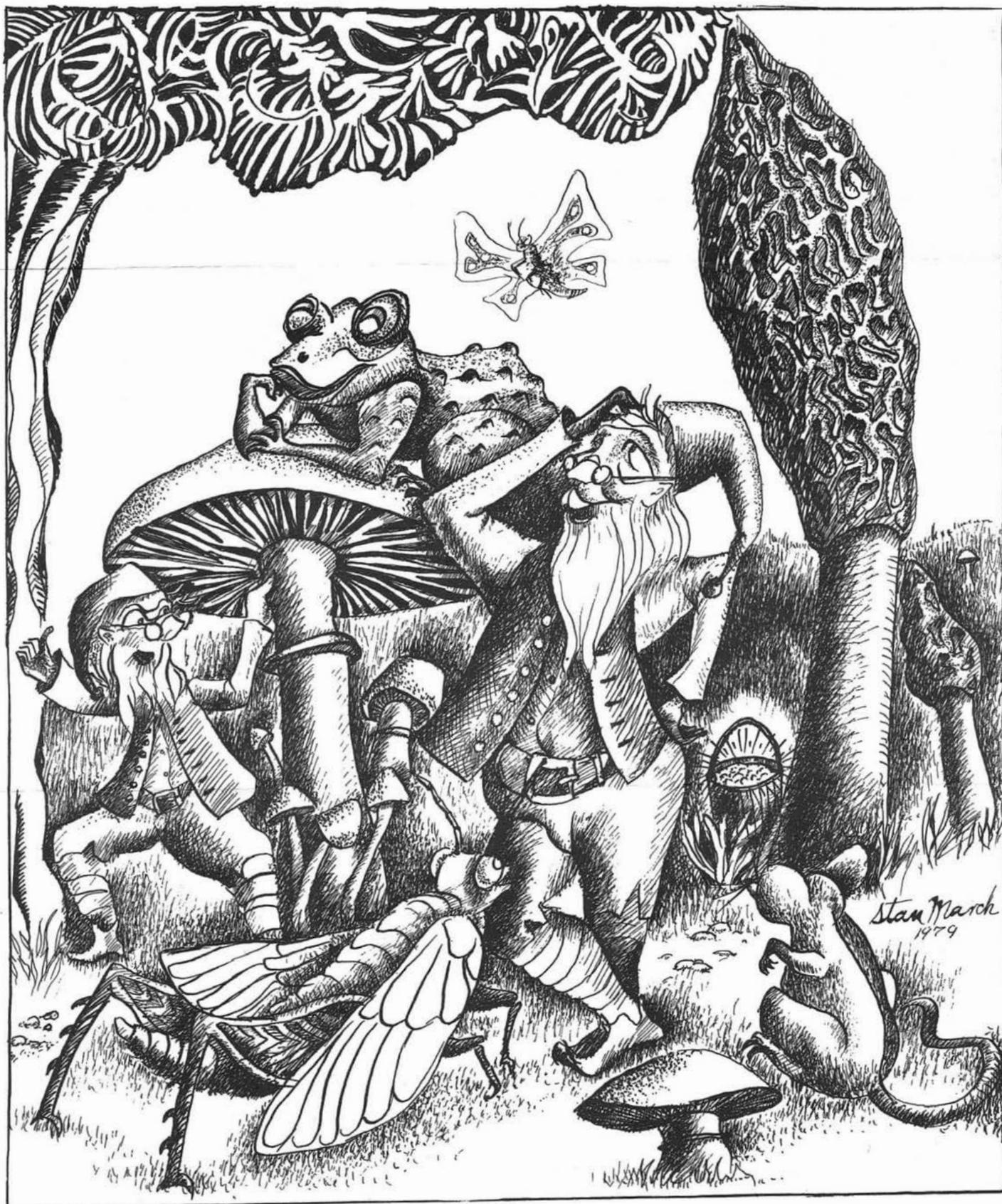
SPORE PRINTS

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

Number 149



THINK SURVIVORS' BANQUET





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Spore
Prints

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c/o The Pacific Science Center, 200 - 2nd Avenue No.
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Calendar

Feb. 12 Monday, Membership Meeting, 8:00 pm

Feb. 16 Friday - deadline for Spore Print material. This is
earlier than usual, because the March issue serves
as our election issue. Send all articles, art work,
and photos, to the Editor, 2559 NE 96th, Seattle
Wa., 98115 - or bring the material to the member-
ship meeting.

Feb. 19 Monday, Board Meeting, 8:00 pm

March 17 Saturday, The 15th Annual Survivors' Banquet
No meeting at the Pacific Science Center in March

April 9 Monday, Membership Meeting, 8:00 pm

IN MISTY EUROPEAN FORESTS, NOT JUST MUSHROOMS ARE WILD

Alice Siegert

An article with the above title appeared in the Dec. 4, 1978
Chicago Tribune which was sent in by our devoted members
Bill and Irene O'Connor, Amanda Park. Irene added that
she hoped we will not ever face such conditions here. Be-
low we are presenting excerpts of the article.

.. In fact, the mushroom craze has taken on such proportions
that authorities in some regions of West Germany, Switzer-
land, and Italy enforced restrictions on picking. In the Can-
ton Graubunden, the woods are off limits to mushroom hun-
ters Monday, Wednesday, Friday, (cont'd page 3, col.2)

Membership Meeting

Monday, February 12, 1979, 8:00 pm, Eames Theater
The Pacific Science Center.

Program: Ben Woo (founder-president of PSMS) will give a
slide-lecture on the genus *Hygrophorus*. We all know that
Ben's presentations are knowledgeable, interesting, as well
as witty. So don't miss this one.

BOARD NEWS

H.R.H.

The director of the Science Center, Mr. Helmut Naumer and
Mr. Paul Rapp, a Science Center Trustee (as well as a PSMS
member) met with the Board. Mr. Naumer explained that he
took PSMS' concerns to his Trustees, and they wanted to let
PSMS board members know that the Science Center has appre-
ciated the long tradition with PSMS, and very definitely
wants to continue it. The Science Center Board asked the di-
rector for a break-even operation, but that does not mean
crowding out organizations like PSMS.

Mr. Naumer then brought the PSMS Board up to date on the
future plans of the Science Center. (1) At its February meet-
ing the Science Center Board will decide whether the Eames
Theater will be converted into an I-Max Theater. If the de-
cision is yes, then the Eames Theater will after remodelling,
be suitable and available only for the monthly membership
meetings, but not for the annual exhibit. Actually, the re-
modelling will begin immediately and will last until summer,
that another meeting place will have to be found for the April
May and June 1979 membership meetings. (2) Also, the re-
modelled Astro Space Building will not be available for the
1979 Exhibit. However, Mr. Naumer suggested using a suit-
able area in the Life Science Building of the Science Center
(near the Indian Longhouse). PSMS Show Chairman will make
an on-site inspection to assess. The area is comparable in
size to the Eames Theater and Balcony. It has outside access
which should facilitate the delivery of the needed show props
and fungi. Mr. Naumer also offered the help of the Science
Center illustrator for designing the poster for the Show, as
well as the services of the designer of small exhibits, who
could give us new ideas. Mr. Naumer indicated it was in our
mutual interest to have an Exhibit of the highest quality.
Mr. Naumer offered to permanently store PSMS show material
in the Science Center, for a reasonable fee. (3) Due to heavy
bookings, the Science Center in the future, will need to get
PSMS desired meeting and show dates at least one year in
advance. Mr. Naumer and Mr. Rapp left the meeting.
The PSMS Board agreed to immediately secure another meet-
ing place for the April, May, and June membership meetings
if the Science Center goes ahead with the plans for the
Eames Theater.

Margo Harrison, Banquet Chairman, reported that the Ban-
quet plans are well under way, and a related article can be
found on page 3.

Dick Sieger, Fieldtrip Chairman, stated that if the weather
cooperates, the spring field trips will get under way at the
end of March, with at least one spring field trip planned as
an educational foray.

Bob Hanna, Publications Chairman, has obtained bids for
printing 500 copies of the current bylaws, and he received
Board approval to proceed with the printing.

Lyle McKnight, Election Chairman, said that there are some
candidates for the coming elections, but more are desired
and needed. (See related article on page three.)

Then the Board discussed various pieces of correspondence.

Are you listening? Specific details about our 15th Annual Survivors' Banquet are now ready for you. First, the location is changed. Our banquet will be held, Saturday, March 17, at Pier 91, courtesy of Carl and Louise Rautenberg, who so willingly are sponsoring our Society for the third consecutive year. We do appreciate it.

It is important that you follow these driving directions, since access to Pier 91 is different than when we had our banquet there. Travel north or south on 15th Avenue West (the street that leads to and over the Ballard Bridge) to the Dravus Street Exit. Proceed westerly on Dravus Street to 20th Avenue West. Make your "Stop", then turn left and proceed southerly on 20th Avenue West for 1-1/2 blocks. Then angle to the right up Thorndyke Avenue for one block. It is important that you DO NOT take the first left at a sign marked: Pier 91 Trucks! The correct left turn has a white sign, marked: Officers Club. Take this one, proceed down on 21st Avenue West, one block to the stop sign. Turn right, following a curving road which has automobile storage on your left, and a bicycle path on your right. Continue at 15 mph to the stop sign. Make a hard right, then a hard left into the Officers Club. There is no longer a "guard gate". Ample free parking is adjacent to the Club.

Tickets are priced at \$8.50 each for a prime rib dinner. You are welcome to bring guests. Cocktails will be available at \$1.00 per drink during the cocktail hour which will start at 6:00 pm, as well as throughout the evening. We are not allowed to bring our own liquor into the Club. Dinner will be served at 7:00 pm. It will be followed by a program and an excellent speaker. Dancing will begin at 9:00 pm on the superb dance floor. May I suggest that you who don't dance, stay to enjoy the music, get acquainted and converse with your fellow PSMS members, or plan a bridge-foursome.

Tickets will be available at the February membership meeting OR you may send your reservations, accompanied by a check and a self-addressed, stamped envelope to Margaret Holzbauer at 703 S. Cloverdale Street, Seattle, 98108. Note that the tickets are marked "no refunds." We must call Pier 91 with the number of reservations by March 6th, so don't delay in buying your Banquet tickets.

Our Survivors' Banquet is the premier social event of the year and we want all Spore Print readers - - - all PSMS members and their guests to enjoy the fine evening that is being planned for you.

ELECTIONS FOR 1979 ARE APPROACHING

H.R.H.

The nominating committee chaired by Lyle McKnight (772 - 5567) also includes Dick Sieger (362 - 6860) and Sally Ann Hansen (1 - 297 - 3626). They are accepting nominations for the offices of vice-president and secretary, as well as 5 members of the board. We urge every PSMS member to seriously consider running for one of these positions. It is your organization and you should be interested in how it is managed. This appeal is also directed at new(er) members. Get involved. Usually you get much more out of an organization if you participate more actively! You also may nominate a member, but you must get the member's permission. Serving in an office will give you satisfaction, a sense of accomplishment, and new friendships. It is YOUR efforts that make YOUR society what it is. Pick up the phone today and nominate YOURSELF!

A few months ago a patient came to the University of Washington Dental Clinic complaining of dryness of her mouth. The personnel of the Clinic confirmed that she had a saliva flow rate well below the average. After observation for several weeks they were able to correlate periods of low saliva flow with eating store-bought Agaricus bisporus.

The saliva flow rate is measured very simply by having the patient spit uninterruptedly into a container for 15 minutes, and then measuring the volume of saliva collected. Dr. Joel Epstein of the UW Dental School finds that quite reproducible results can be obtained in this way. The woman has a normal saliva flow rate of 6-7 milliliters (1/4 fl.oz.) in 15 minutes. About 1 - 2 hours after eating A. bisporus her saliva flow rate falls to about half the normal rate. The reduced flow was measured several times after she had eaten A. bisporus (over a period of five weeks). A dose related effect was noted in that consumption of mushrooms for several days produced a greater decrease in saliva flow and a longer duration of lowered flow rate.

This appears to be the first report of dry mouth following eating Agaricus bisporus. Anyone knowing of a similar case either from the literature or from personal experience is invited to contact Dr. Joel Epstein, School of Dentistry, Dept. of Oral Diagnosis, SC-63, University of Washington, Seattle, WA 98195.

MISTY EUROPEAN FORESTS

(cont'd from page 2)

and Sunday. The remaining three days of the week a person may take home no more than two kilos (4.4 lbs.) a day. Bad news also comes from Italy; in certain regions of South Tyrol tourists who want to look for wild fungi must first get a license. In the southern Black Forest, mushroom hunting was forbidden altogether, after busloads of hunters crossed the border from Switzerland, when mushroom collecting was restricted in Switzerland. In Bavaria, where mushroom hunting is a constitutional right, no restrictions are planned despite bitter complaints from villagers about the invasion from the cities.

Even newspaper accounts of fatal mushroom poisoning have had no restraining effect on the ever growing number of enthusiasts. Yet, mushrooms have broken up marriages. How can a person put up with a spouse who spends every free hour in the woods, returns dirty and worked up, after dark, uses the night sorting and inspecting, and then phones fellow hunters at day-break to argue about difficult cases.

The authorities say that it still has to be proven that fungi are becoming extinct, though the classical varieties have been decimated, because too many are collecting them. The people in the cities have plenty of leisure time, and they have cars, and they have the urge to get out in the woods, where they don't meet a soul. The next thing they do is collect fungi. One of the mushroom paradises left in Europe is Poland. In the vast pine-carpeted forests of western Poland they grow in such profusion that people can afford to be choosy. They first cut off a small piece from the cap, to make sure the fungus is not wormy, and leave it standing there unless it is flawless. In fact, the fresh mushrooms offered in markets in Germany (at caviar prices) were collected in Poland. In Munich mushroom identification centers have been set up. To discourage random collection of mushrooms, some of the experts at the centers have been resorting to a trick. They pick out one good mushroom and tell the person, "you can eat that one, the others are inedible."

This is the last instalment of the article which was serialized in the October 1978, December 1978 and January 1979 issues of Spore Prints.

IV. FUNGI AS INSECT SYMBIONTS

A number of fungi have symbiotic relationships with insects and may be harbored either within the insect or occur externally. These endosymbionts are analogous to the intestinal flora of man, and they include numerous bacteria and some yeasts which occur regularly in the gut or other internal organs. They are especially common in those insects which live on restricted diets, such as wood, grains, or humus. These are rich in cellulose but poor in nitrogen content, and deficient in vitamins. The endosymbionts may be harbored in specialized pouches in the insect's gut or in modified cells, and are passed to offspring in a number of ways. The young may suck or lick endosymbiont-containing droplets from the mother's body, or the eggs are smeared with material containing the bacteria or yeast in their passage through the ovipositor and fragments of the eggshell are eaten by the newly hatched young. Another way is for the endosymbiont to be included in the egg and hence also within the developing embryo. Endosymbionts are richly supplied with nutrients, and produce vitamins which are needed by the host to properly develop and in some cases to remain alive.

Species of *Septobasidium* are unable to grow independently of an insect host, and the amount of fungus growth that occurs is directly contingent upon the number of parasitized insects. In addition, the fungus depends on this relationship for spore production.

V. FUNGI AS BIOLOGICAL CONTROL AGENTS

Many fungus diseases of insects are known, and several have been mentioned above. Some of these appear in epidemic forms at times and may destroy their hosts in great quantities. Yet, when these parasitic fungi have been grown in the laboratory and then sprayed on control insects, the percentage of kill seldom increases over what occurred naturally, and in no case has an insect pest been entirely eliminated by this means.

Much research is continuing in all phases of biological control and, while progress has been made, the high reproductive capacity of insects makes significant advancement difficult. You can wipe out 90% of an insect population and within a year the remaining 10% may build up to the original number.

VI. ADDENDUM

I hope that the necessarily brief notes and comments herein have served to alert the reader to some of the more interesting facts concerning the relationship between the insects and the fungi. It should be obvious that we still need to learn a great deal more about these relationships, despite the many years of mushroom cultivation and substantially large volume of literature on the subject matter.

IN MEMORIAM - BERNARD C. SWAFFIELD

On Thursday, January 18, 1979 our long-time member Bernie Swaffield died from injuries received in a car accident. Our sympathy goes to his wife Isabelle and sons.

Following is the recipe for the fabulous mushroom dish which was served as the first course at the joint dinner November 15th with the Enological Society. The recipe had its beginning in the French village of Sancerre. A group of Enological Society members toured France last summer, and by chance, while dining one Sunday at a country inn, they were served a mushroom dish unlike any, they had tasted before. Upon returning, the Enological Society cooks (with some advice from Francois Kissel) began experimenting, testing, and remembering the taste, consistency, and contents of that lovely concoction. Finally, they agreed that they came as close as possible to the original, due to the availability of marvelous wild mushrooms, donated by PSMS members.

The Enological Society published the recipe in its January 1979 Newsletter, and gave us permission to reprint it. In addition, I had received a slightly different version of the recipe. I have tried them both, and at the end of the recipe will tell you which I prefer.

Mushroom Ramekin for 12 People Enological Society

3 pounds of mushrooms, coarsely cut into segments about 1/2 to 3/4 inches in size. We used chanterelles, boletes and matsutakes, although if enough of these aren't available you might substitute domestic mushrooms for part of them. 1/4 to 1/2 pound of butter. Saute mushrooms at high heat for about four minutes. Do not overcook or they will toughen. Salt and pepper to taste. The mushrooms can be done in advance and frozen.

The next step is an enriched sauce: 1/4 cup of butter, 1/4 cup of flour, salt and pepper to season. Melt butter, add flour and cook one minute. Add 2 cups rich chicken stock, cook until smooth and creamy, about 3 or 4 minutes. Then mix 2 egg yolks with 1 cup heavy cream, and add a bit of the chicken mixture. The next step is to combine the two and heat carefully, not allowing it to come to a boil. Remove from heat and add mushrooms. Divide among 12 ramekins (= individual serving dishes), sprinkle with grated Swiss cheese. These can be refrigerated for several hours. Ten minutes before serving, place ramekins in a 400° oven and cook until bubbling.

The second version of "my" recipe adds 1/3 cup sliced, sauted shallots, 2 tsp lemon juice, 1/8 cup of white, dry wine and one cup of grated Swiss cheese into the cream mixture, as well as using 1/2 cup of butter and 1/2 cup of flour (instead of 1/4 cup as stated above). Adding more cheese made the sauce even more 'creamy'. I usually use equal parts of chanterelles and boletes, and only a small amount of matsutake. We like the second version better.

THANK YOU

Ann Levanavich

I would like to thank our PSMS members for their presence at my husband's Funeral Service, and for all the condolence cards sent to me. Their kindness and sympathy was and is deeply appreciated.

THANK YOU - STAN MARCH

The beautiful cover of this issue, drawn to symbolize the theme of this year's banquet (to be held on Saint Patrick's Day) was contributed by Stan March. He also is designing the cover for the Banquet program. We thank him for sharing his artistic talent with us. Members like the Marchs, his wife LomNee serves as a Trustee, who get involved in their Society, usually reap benefits that far outweigh their contributions.