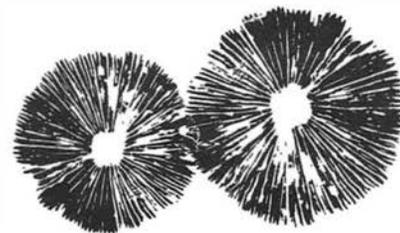


SPORE PRINTS



BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY

Number 261

April 1990

PRESIDENT'S MESSAGE

Kern Hendricks

This is written to our newer members. The rest of you can skip to the next article. In 1985 I joined the Society. I didn't know a soul then. I just liked finding mushrooms. I figured that, like life, you get out what you put in. So my goal was to get to know the seasoned members--those who knew where the mushrooms were. They taught me well once they saw that I was a "price payer" and simply wouldn't take their knowledge and disappear. They'll do the same for you, too. But you've got to meet them halfway--come to the meetings, go on a few field trips. Get known. Get your knees dirty. Become a "price payer."



Oh, the seasoned members think they're getting their revenge by electing me president. Ha! They haven't yet seen the woods I plan to drag them through. With your help, of course.

FOREST PRODUCTS CONFERENCE

Margaret Dilly

continued from March

Friday's session of the Specialized Forest Products Conference dealt with manufacturing, marketing, and regulatory considerations.

To begin, Ken Russell of the Department of Natural Resources gave a bit of history about the DNR, which began in 1965. Its purpose is to manage lands given in trust to the state of Washington from which to generate revenue to help fund the educational system. Of the approximately 17 million acres of forest land in Washington, 12% is under DNR management and 28% is national. He spoke of stewardship of our forests, focusing on mushrooms. He talked of the Mushroom Task Force and its findings (in which the recreationalist played a major role). He gave some statistics gathered by the U.S. Department of Agriculture (USDA) on last year's licensing and data collecting, which was not very impressive. He also reiterated Dr. Denison's statement about fungi being the largest industry based on theft. Ken assured everyone that the DNR would set some policy on commercial harvesting, either for lease or outright sale.

The next speaker talked of blueberry/huckleberry harvesting and prices. Out of 200 million pounds sold in North America, 100 million are wild.

A graduate student from WSU reported on an extensive study of forest product harvests, saying 564,000 lb of mushrooms were recorded last year. We also heard from two representatives of native plant societies, who spoke of gene pools and sustainability. They said the Federal Endangered Species Act lists three endangered species from Oregon and none from Washington.

Mid-morning after a cup of coffee, we broke into four main commodity groups--floral greens (with well over 100 attendees), fungi (70+), berries, and landscaping.

Paul Stamets led off with a general discussion of his concern about excessive harvest jeopardizing the gene pool. He was countered by opposing views from commercial interests. A concern was expressed over the economic needs for rural communities, and rivalry over harvest practices surfaced. Along with manner of harvest, forest manager policies, licenses, and more study were discussed.

We then broke into circles of 8 to 10 persons and were asked to identify the four main needs, problems, or issues connected with mushroom harvesting. We then outlined our findings, which we shared with all groups. Interestingly, we all seemed to agree that four things were needed:

1. Research--conduct plotting studies, determine foreign demand, and research world harvesting practices.
2. Education--teach responsibility, good harvest practices, and fungi's role in interaction of the ecosystem, starting with very young children.
3. Land ownership--recognize responsibility to land owners.
4. Public health--develop a certification system for identifying fungi for sale.

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BANQUET ROUNDUP

Agnes Sieger

Good food (even the vegetarians got enough this year), good companionship, good speaker. That about sums up the 26th annual PSMS Survivors' Banquet, held Friday, March 9, at the Sand Point Officer's Club.



And a pleasant time was had by all.

◀ **David Arora**



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Calendar

April 7	Field trip, Steelhead County Park
April 10	Membership meeting, 7:30 p.m., CUH
April 16	Board Meeting, 7:30 p.m., CUH
April 20	<i>Spore Prints</i> deadline
April 29	Cultivation Group, 11:00 a.m., 6518 Woodlawn Ave. N.
May 5	Field trip, 29 Pines Forest Camp

NOTES OF INTEREST

Mushroom missionary: Ben Woo was the speaker at the Kitsap Peninsula Mycological Society's banquet on March 15th.

Receptionists needed: CUH needs volunteer receptionists to work a few hours weekly or monthly. Workers earn discounts on center classes.

1990 USSR wild mushroom tour: The second annual Wild Mushroom Tour of the Soviet Union is tentatively scheduled for August 18 - September 2, 1990. Approximate cost is \$2800 (from Seattle), including all transportation, accommodations, and meals. There is a limit on group size. If interested, write Dennis Bowman at 520 N.E. 83rd Street, Seattle, WA 98115, or call (206) 525-8399 (FAX 206/523-0851) as soon as possible.

Poison oak sufferers: A pathologist at the forest products conference claims a new produce called Stokeward acts as a barrier against poison oak effects.

Grant opening: Visitors are welcome at the Roadside Lichen Carnival and Research Center opening April 1st in the mysterious Smyrna-Ruff-Gloyd triangle of Grant County, Washington. Administrator Fardels Bear says the county's name is attracting mycological researchers "like flies to Phallales."

Membership Meeting

Tuesday, April 10, at 7:30 p.m. in the Center for Urban Horticulture, 3501 N.E. 41st Street, Seattle.

Morels! Morels! Morels! A panel of local experts will show slides and talk about where and how to find these crafty little devils. A must meeting for our newer members.



BEGINNERS' TIP

Dick Sieger

People collect mushrooms for two main reasons, to eat or to study--and the best way to collect for one is not the best way to collect for the other.

Identifiers need to see whole fruiting bodies in good condition. How do you do that?

First, be nice to your prizes. Keep species separate. Handle them gently so you don't destroy fragile features like scales and rings. Don't cut the stalk! Discard most of the debris but leave "roots," cups, and a few scraps of whatever the mushroom was attached to. If you grab nature's handle, you may stain it, so hold the mushroom at the bottom of the stalk and on top of the cap between spread finger and thumb put it into a waxed paper sandwich bag or box.



Try to include both young and mature mushrooms. Ascomycetes (morels, cup fungi, etc.), which are plentiful in the spring, are frequently slow to mature, so for those try to include some over-the-hill samples.

Tree associations may be important, so slip in a sample leaf, cone, or branch from nearby plants. Slide in a note with your name, phone number, collection date, and county where the collection was made. That will help the identifier gather information about unusual finds.

Identifiers can't work with verbal descriptions or with frozen or rotten mushrooms, so deliver them fresh. Don't expect names for everything. Some mushrooms take hours to name. Others can't be named at all.

Finally, remember that people become identifiers because they like mushrooms and the folks who gather them. So feel free to ask for help--for example, by calling the people whose names are marked with a star in the PSMS membership roster.

SPRING FIELD TRIPS

Lynn Phillips

I hope all of you new members have been to at least one of the first two field trips, so that you know the hows and wheres of hunting verpas. And when verpas come, morels are not too far behind. But they are not too close, either, so we will take a break in our organized field trips to wait for warmer weather to bring out the morels and boletes and other spring edibles. Our next field trip will be to 29 Pines on May 5. Then we'll have field trips every weekend while the mushrooms are fruiting.

Let me remind you that even though field trips are only listed for Saturdays, they take place in public campgrounds, unless otherwise noted. You are encouraged to come Friday or stay over to hunt on Sunday, particularly at the more distant destinations. And don't forget to add insect repellent to your list of essentials, especially as the spring progresses. Call the PSMS recording in the week before each trip for any updates or changes. Call me if you would like to host. Please call me; we need hosts for every field trip!

Twenty-Nine Pines Forest Camp **May 5**
(102 miles east of Seattle, elevation 2500 ft)

Take I-90 over Snoqualmie Pass to exit #85. Follow Route 10 east of Cle Elum for 2½ miles. Turn left on Route 970 and go 4½ miles. Turn left onto Teanaway River Road. Continue about 6 miles to the Bible Rock Children's Camp. Bear right on the Teanaway North Fork Road and continue to Twenty-Nine Pines on the left, just past Jack Creek Road.



ASPARAGUS SALAD

Dick Sieger

- | | |
|--|----------------------|
| 10 <i>Verpa bohemica</i> or <i>Agaricus bisporus</i> buttons | |
| 1 lb asparagus | 1/2 Tbs sesame oil |
| 12 pitted black olives | 1/2 Tbs lemon juice |
| 2 plum tomatoes | 1/2 tsp MSG |
| 1/8 cup water | 1/2 tsp salt |
| 1/8 tsp salt | 1/8 tsp white pepper |

Cut *Verpa bohemica* into cap-size pieces or unscrew the stalks from *Agaricus bisporus* and quarter the caps. Crowd the mushrooms in the bottom of a heavy pot with the 1/8 cup of water and 1/8 tsp salt. Boil over high heat until the liquid is gone and the mushrooms begin to stick to the pot.

Trim the asparagus conscientiously to remove all fibrous parts. Cut into 2 inch logs. Put the pieces in a large pot of water that is boiling over high heat. Cook for 4 minutes. The asparagus should be crisp and bright green. Chill in cold water.

Mix together oil, lemon juice, MSG, pepper and 1/2 tsp salt. Combine with the asparagus, mushrooms, and olives. Cover and roll gently to coat vegetables with dressing. Refrigerate for several hours.



Cut the tomatoes into pieces the size of the olives and add to the salad just before serving.

All taxonomists should be cultivators. Then they would realize just how variable fungi are.
—Paul Stamets

MUSHROOM LEGISLATION

Margaret Dilly

Amended Mushroom Bill: We now have the revisions requested to our existing mushroom law. The revised law should close the loopholes that provided "buyers" an excuse not to be licensed or collect data.

The key factor in this year's legislative efforts was the undying effort of Ralph and Bonnie Hayford. The Hayfords reside in Olympia and are members of the Puget Sound, Tacoma, and South Sound mycological societies as well as Citizens for Environmental Planning. Not only does Ralph know his way around Olympia, but he is also an avid and expert letter writer and has bombarded our legislators and forest managers with correspondence. He personally has cornered, cajoled, and convinced them of the importance of the mushroom issue. Thanks to the Hayfords, I did not have to go to Olympia this session. They attended all hearings and followed the progress of the bill right to the governor's desk, keeping me informed each step of the way and providing me with copies of the new bills. On behalf of PSMS and myself, I would like to say publicly, "Thanks so much!"



Mushroom season is about to start, and again your cooperation is needed to back up this bill. You need to

1. Report buying stations or signs advertising them to me or to the Department of Agriculture, whose address can be found on the "Recreational Pickers - Wild Mushroom Report" sheet.
2. Record your own harvests on these sheets, which are available at meetings, field trips, and the office/library.

Department of Natural Resources: I have spoken with Ken Russell of the DNR and urged some action from their department. He has assured me they will take some measures to charge for commercial harvesting and work with the Department of Agriculture on licensing.

We shall continue our efforts with the private and national forests as well.

CULTIVATION GROUP

Lynn Phillips



The next Cultivation Group meeting is Sunday, April 29, at 11:00 a.m. at my house, 6518 Woodlawn Ave. N. I recently acquired a pressure cooker large enough to cook small children in (any volunteers?), so I thought it would be a good opportunity to do some serious, large-scale media preparation. We'll be getting down to basics--Cultivation 101, so to speak. We will discuss and make various recipes of both agar and grain media, including soy sauce agar, reputedly essential to flavorful shiitakes! So if you don't have a pressure cooker or just haven't gotten around to making media yet, don't miss this gathering. And if you do know all about it, please come and share your expertise with the rest of us. And bring anything useful that you have: jars and bottles, agar, grain, filter discs, scissors, food (no, not to sterilize, to eat!). If you don't know what you have that we might need, call me at 524-2950. Also call if you need directions or any other information.



Forest Conference, cont. from page 1

The afternoon was spearheaded by Mary Jo Lavin, Deputy Regional Forester, USDA Forest Service, who called the conference the first up-beat experience in public land management. She stressed we all need to work together to build up a knowledge base, and then follow it up to fill in missing gaps. Working with communities, including tribal governments, is imperative. It is also important not to make sweeping decisions, but rather to find the most efficient use of the land.

Owners of large private forests claim salal is their only profitable resource because of administrative costs and liability; small foresters (the Non-Industrial Forest Land Owners organization has 15,000 members) want more information on interim income because they are suffering from the withdrawal of capital gains relief and from regulations dealing with stream rights.

A soil scientist with the USDA Forest Service spoke on the forests' dependence on fungi and their ability to deal with nitrogen, pathogens, and toxicity. He stressed the interrelation between trees, plants, and fungi, including animal spore dispersal. He said we must buffer the system against environmental change; over the long term, this will be the key to production and prevent soil erosion. There is no quick fix!

Next, an independent commercial harvester took us through his gathering from March to November, which included such things as pitch, cones, mushrooms, and boughs. His biggest concern was nonpayment and lack of enforcement of restrictions and regulations.

A buyer/wholesaler from a forest farm said that the harvest is not always reported because of competition. His farm has difficulties with availability of workers, with seasonal workers being less industrious; pilferage is also a problem. He felt that long-term stewardship programs working with regulatory agencies are needed.

Maggie Rogers from the Oregon Mycological Society, who by the way played a major role in pulling this conference together, then spoke on behalf of the recreationalists.

Our last speaker of the day was a county sheriff, who urged us to get to know our law enforcement officers and work with them.

Saturday's breakfast speaker told of new crop development and its role in the U.S. (information is available in our office) The rest of the morning was devoted to a recapitulation of the conference, with specific input from each interest group. It boiled down to more people, wanting more, from less land. However, they all shared an interest in a sustainable future and agreed that only an openness in communication will lead to a healthy economy and environment.

Before being dismissed, everyone was asked to make a silent commitment to do something as a result of all they had learned. Mine was to inform you of what went on and urge your involvement and cooperation in making it all work. I felt a strong unity among the participants and was honored to be a part. Thank you for sending me.

MEDICAL TEST OF *GANODERMA*

Paul Stamets

[from a talk to LAMS reported in *The Spore Print*]

Ganoderma lucidum, a wood-inhabiting fungus, is being tested as a cancer treatment. These and other wood-growing fungi produce polysaccharides, large-molecule carbohydrates that stimulate the production of interferon, an antiviral protein, in humans. Two lignicolous fungi that are grown commercially for table use also produce polysaccharides. These are *Lentinus edodes* (shiitake) and *Flammulina velutipes* (enokitake).

In a Japanese study involving about 100 patients with lung cancer, almost all who received no special treatment were dead after 5 years. About half who had chemotherapy were still alive, and over 90% of those who received both chemotherapy and *Ganoderma* extract were still alive.

Malcom Forbes on the TV program Wall Street Week said he expected the marketing of fungi that stimulate the immune system to be a star industry of the 1990s.



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