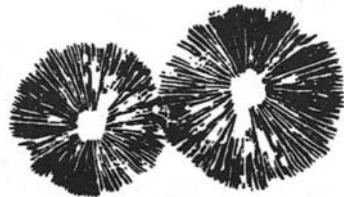


SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY

Number 318

January 1996



PRESIDENT'S MESSAGE

Patrice Benson

May you all have a Happy New Year full of mushrooms and kept resolutions. Because of the windstorm warning, the Christmas cookie bash was scantly attended, but those who made it had plenty of food and a jolly good time, as reported by cookie-bash coordinator Bernice Velategui.

Welcome to all of our new members; we hope that you find what you're looking for! A new membership roster will be mailed to all members this week by bulk mail (could be slow since it is the Holiday rush). Errors need to be reported to Membership Chair Bernice Velategui, preferably in writing, at 2929 76th Ave. SE #504, Mercer Island, WA 98040. If you signed up after the show, your entry will appear in the next roster. (Thank you, Bernice, for smoothly handling all of those new memberships—more than 218!)

In mid-March, we will have our annual Survivors Banquet, which is being organized by Vice-President Marshall Palmer. In January, at the membership meeting, we will be honoring PSMS author Dr. Denis Benjamin, whose recently published book, *Mushrooms: Poisons and Panaceas*, has been favorably received on an international basis. So after all of the hustle bustle of the holidays, join us at our next meeting.

Help Wanted: I need help from someone who is experienced with ACCESS database-management program ver. 2.0; phone Patrice at 722-0691. We are also still looking for a *Mushroom Class coordinator*. Again, phone 722-0691. Both of these jobs can be filled with new members; working with the organization is an excellent way to meet experienced members and have a heck of a good time.

Will the new members who volunteered to chair the Northwest Flower Show and the meeting setup please phone me at 722-0691 as I've misplaced that scrap of paper upon which your phone numbers were written.

ASIAN POACHED OYSTERS WITH WILD GREENS AND SHIITAKE Shoalwater Inn, Long Beach, WA

16 small oysters, shucked	2 oz ginger root, peeled &
1 C white wine	julienned
1 TBs soy sauce	½ lb shiitake, julienned
1 tsp roasted sesame oil	Wild greens for four salads:
8 oz bamboo shoots, drained & julienned	sorrel, mustard greens, watercress, miner's cabbage, etc.

Poach oysters lightly in wine, soy sauce, and sesame oil. Remove oysters and keep them warm. Add bamboo shoots, ginger, and shiitake mushrooms to poaching liquid and reduce to about ½ C. Arrange the oysters on the wild greens and pour the hot liquid over them. Serve immediately.

This dish may also be served chilled. Chill oysters and poaching liquid separately. When ready to serve, arrange oysters on the bed of greens and pour the chilled sauce over them. Serves 4.

MUSHROOMING IN RUSSIA

Lee Hockstader

[Washington Post Foreign Service]

ANUFRIEVO, Russia—Mushroom gathering, as millions of Russians know, is one of life's simple pleasures—provided you know a thing or two.

Like how to survive it.

Here in the cool, pristine forests of the Russian north, where the mushroom season has been at its peak for the last few weeks, an eagle-eyed gatherer such as Ludmilla Gromova is happy to dispense critical advice that might keep a novice alive and healthy.

"No, no, not those, those are death caps," she said, squinting at a cluster of brilliant red-and-white-speckled fungi, absolutely lethal if eaten, prettily arrayed along a stream bank. The chastened novice recoiled in terror.

"Look at that one—that's a coral milky cap. That one's fine," Gromova said, stooping to snip her own quarry—a beefy white mushroom, the noblest fungus of them all.

Poets and peasants, travelers and philosophers—all have raved about the abundance of mushrooms in the woods here and the timeless joy that Russians take in gathering them. Beloved by rank amateurs and seasoned pros alike, mushroom gathering may be Russia's baseball: a stately, slow, serene ritual that peaks as summer fades into fall, not just a pastime but a passion.

From grandparents and parents, Russians as young as toddlers absorb the ABCs of mushrooming. They learn mushrooms should be cut off at the stem with a knife, never pulled from the ground (it destroys the roots). They learn to distinguish the "noble" mushrooms: the regal white; the milk mushroom, delicious when dried and salted; the orange-capped boletus, known in Russian as "under-the-aspens," which is so plentiful in parts of Siberia that people just snip the caps and leave the stems; and the saffron milk cap, with its downy umbrella top and dreamy aroma.

And they learn how to avoid bad mushrooms, which can poison and even kill.

So far this year, about 500 Russians reportedly have become seriously ill from eating mushrooms, and 55 of them died. Some of them were novices, others more experienced mushroom gatherers tricked by toxic fungi masquerading as edible ones. (Mushrooms can change their appearance in very dry or wet weather.)

Still, almost no one would stop hunting for mushrooms. Most simply stick to a few varieties they know well.

"You have to know what kinds of mushrooms grow under which trees," said Gromova, 55, a farmer whose village of Anufriev, 500 miles north of Moscow, is surrounded by lovely rolling fields and forests. She first went hunting for mushrooms as a girl in summer camp, and goes about it with deft efficiency, unbothered by the forest cobwebs that drape her head and face, oblivious to the prickles that sting her fingers, her hands gradually stained pink from mushroom juices.

(continued on page 3)

Spore Prints

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MEMBERSHIP MEETING

Tuesday, January 9, 1996, at 7:30 PM in the Center for Urban Horticulture, 3501 NE 41st Street



Our January meeting features Maggie Rogers, co-editor of *Mushroom the Magazine*, Secretary of the North American Mycological Association, recipient of the 1990 NAMA award for Contributions to Amateur Mycology, member of the Pacific Northwest Key Council, and retired librarian, who will discuss how to begin mushrooming and premiere the NAMA slide tape on the same subject that she and Steve Trudell recently revised. Plan to attend what is sure to be a delightful evening.

The nominating committee will present its slate and will accept nominations from the floor for the last time. (All candidates will be profiled in the February newsletter.) We will be electing a president, a treasurer, five board members, and three alternates.

Would people with last names beginning with U-Z please bring a plate of refreshments for the social hour?

MEET CHRISTINE DOTSON

Inga Wilcox

Although Christine did not join PSMS until 1993, her interest in fungi goes back many years. A native of Seattle, she remembers going to the Pacific Science Center with her father who, at the time, was Director of Education there. Walking through buildings, he opened one door and they entered a room full of tables and tables of mushrooms. Nicely displayed and bedded in "real" dirt and moss, the mushrooms showed off their colors, shapes, sizes, and incredible variety. To Christine, it was like entering Fantasyland.



While traveling, she always has an eye out for fungi. Looking for fungi in the outskirts of Copenhagen brings memories mainly of mosquitoes but no mushrooms. A beautiful *Amanita muscaria* presented itself in England. A hiking trip in Alaska on the Kenai Peninsula made her marvel at the size and abundance of fungi; there were so many *Leccinum aurantiacum* that she and her friends could be very, very selective. She especially enjoys *Agaricus augustus*. Christine was almost shocked when she found *Boletus edulis* growing right in the city of Anchorage!

Christine participated in a foray through The Mountaineers which was led by Marshall Palmer. She took the Basic and Intermediate ID classes and truly enjoys learning more and more about mushrooms. She also loves to cook them and picks *Coprinus micaceus* on her parents' property, sharing her finds with friends.

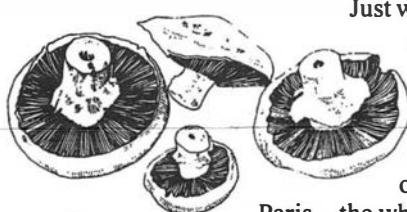
Her hobbies include hiking: she has climbed Mt. Rainier, Mt. St. Helens twice, and The Brothers. Theater and opera are also on her list.

She finds that as a newcomer it is best to go out often and to go out with people who know their fungi, but also to include newcomers to share the enjoyment of the hunt. Christine now hopes to visit Italy and look for porcini and to visit France and maybe find truffles! She might take a thermos of her favored coffee along; it is "Sulawesi," which she says has a tang of fungi, it is woodsy and creamy. Have fun, Christine, and good luck.

CALENDAR

- Jan. 1 Happy New Year!
Jan. 9 Membership meeting, 7:30 PM, CUH
Jan. 15 Board meeting, 7:30 PM, CUH
Jan. 26 Spore Prints deadline

PORTOBELLO Mycolog. Humboldt Bay Myco. Soc., via *MushRumors*, Oregon Myco. Soc., May/June 1995



Just what is a "Portobello" mushroom? This is our friend *Agaricus brunnescens* (aka *A. bisporus*) var. *bisporus*. Yes, the new "wild" taste treat is, in fact, the same old common champignon de

Paris—the white button mushroom we all know. Here's what happened. Growers figured out that they can use a brown variety of the mushroom and let them "overmature" until they open, flatten, and the spores mature. The costs of production are much lower since picking costs go way down. The price can be doubled.

On the positive side, most people feel that mature mushrooms are much more flavorful than the closed buttons Americans normally eat. I feel the need to have a super-white button is part of the white-bread syndrome. No flavor, but it looks nice.

On the negative side for growers, however, is the greatly increased risk of their crop getting a disease called "La France virus." This is totally harmless to humans but can wipe out a mushroom farm.

Portobellos are called "opens" or "flats" in England and Australia, where they have been a staple of the market for decades. In these countries, you can get a nice flat fried with egg or breaded for breakfast. It is great!

Mushrooming in Russia (cont. from page 1)

"If you find a white mushroom [*Boletus edulis*], don't hurry, look around. There may be more nearby," she said. "White mushrooms are the best—they're the most valuable ones. You can trade them for bread or oil or meat. They're thick and concentrated, delicious. The problem is that the worms like them too and eat them first."

"The air is good," she said, warming to her subject. "You can relax in the woods, forget about work and just search for mushrooms. You can rest your soul and just take it easy."

For generations Russians have set off into the forests with their mushroom baskets, not only to breathe the clean air but to make sure they had enough protein to make it through the harsh winter. Dried and salted or marinated in jars, mushrooms would last a Russian peasant right through February and March, when supplies of vegetables and meat had run low.

"Mushrooms are so plentiful as to form an essential part of the peasant's provisions," wrote William Coxe, a British adventurer who published his "Travels" in 1792. "I have seldom entered a cottage without seeing an abundance of them, and in passing through markets, I was often astounded at the prodigious quantity for sale; their variety was no less remarkable than their numbers."

To this day they are popular staples in Russian homes and restaurants, fried with butter and sour cream or potatoes, made into a soup with milk or baked in a folded pie. Many Russians swear that nothing goes better with vodka than a good jar of pickled mushrooms.

There is, however, one thing Russians never do with mushrooms: eat them raw, as an American might in a salad.

"I think it's disgusting," said Irinia Makarova, 40, a teacher and translator. "Not exactly disgusting, but it's not in our tradition. There's not a single recipe in Russian cuisine that calls for raw mushrooms—even champignons. And champignons [the small, white, button-capped mushrooms found in American supermarkets] are not considered as good as many Russian varieties."

Mushrooms figure as regularly in Russia's folk wisdom and fairy tales as they do in its pantries and recipes.

"Not every mushroom goes in the basket," a Russian might say knowingly, meaning that every rule has its exception.

And in *Farmer's Almanac* style, a Russian might predict that "late winter snow means late summer mushrooms."

Lidia Garabova is a biologist and mycologist, a mushroom expert, at Moscow State University who has compiled mushroom lore and literature for an upcoming book. From a children's tale called "The War of the Mushrooms" to dozens of lyrical odes to fungi, the collection speaks to Russia's love affair with the mushroom.

"People gather mushrooms to commune with nature," Garabova, 60, said. "They're drawn by the beauty in nature, by the spiritual and emotional renewal. People go mushroom gathering not just for sustenance but for sport, like hunting or fishing."

"To be a good mushroomer, you need the same things a good sportsman or hunter needs: knowledge, intuition and luck."

*A crowd of mushrooms
Like tiny umbrellas
Wait for the light to change*

—Jane Chapman,
BMC Bulletin, 9/94

Mushrooming in Cyberspace

Mycena News
Mycological Society of San Francisco, 9/95

For Net surfers, here are some interesting Web and Gopher addresses dealing with mycology:

<http://www.halcyon.com/mycomed/fppage.html>

Fungi Perfecti. It has a full Fungi Perfecti catalog along with photos and some cultivation information.

<http://www.igc.apc.org/igc/www.myco.html>

EcoNet. Mycological resources, including newsletters of the Los Angeles Mycological Society (*Spore Print*), the Colorado Mycological Society (*Spores Afield*), and *MycoInfo*, edited by Brian McNett.

<http://www.eskimo.com/~igor>

Newsletter of the Snohomish County Mycological Society.

<http://www.mtjeff.com/fungi>

Fungus. A weekly e-mail newsletter dedicated to specialty mushroom cultivation, created and edited by Ralph Arnold. This is also a home page, with links to other mycological resources.

<http://www.econet.apc.org/mushroom/welco.html>

Mycelium. Guide to mycological resources on the Internet.

<http://muse.bio.cornell.edu/taxonomy/fungi.html>

Mycological resources on the Internet for professional mycologists.

<http://www.well.com/user/cmtf/farm/mp.html>

Mail order supply firm for specialty mushroom growers. They offer spawn for Maitake, Enoki, oyster mushrooms, *Hericium*, morels, and Reishi, instructional videos for sale and rent by mail, and more than 300 book titles.

<http://kumchtp.mc.ukams.edu/research/fgsc/main.html>

Fungal Genetics Stock Center (FGSC). Databases on the genetics of *Aspergillus*, *Fusarium*, *Neurospora*, *Sordaria*, and other fungi as well as archives of the *Fungal Genetics Newsletter*.

<http://www.kumc.edu/research/fgsc/main.html>

FGSC. Describes methods presented at the "Workshop on Isolation of Pathogenicity and Avirulence Genes" at Asilomar. Examples include REMI, differential display, differential cDNA screening, chromosome disruption, bulk-segregant analysis, and Achilles' cleavage. These methods are described for a variety of fungi and will be of interest to workers in a number of labs.

Gopher Sites:

gopher://gopher.adp.wisc.edu:2070/11.image.bot/fungi_332
Fungi Resources at the University of Wisconsin. Collection of fungi photographs assembled by Tom Volk.

<gopher://nmnhgoph.si.edu/11.botany.myco/inoculum>

Inoculum. Newsletter published by the Mycological Society of America six times per year.

PSMS DUES ARE DUE

Unless you joined PSMS after October 1, 1995, your membership expires as of this month. To renew, please send a check for \$10 (student) or \$20 (single or family) and a self-addressed, stamped envelope to Membership Chair Bernice Velategui, 2929 76th Ave. SE, #504, Mercer Island, WA 98040 right now.

LICHEN TAXONOMY REVISED

Susan Milius
UPI, 6/8/95

WASHINGTON—Those ultimate good neighbors—algae and fungi partnered for life as organisms called lichens—got a bold, new family tree as scientists proposed a variety of close relatives. DNA analysis suggests that lichen partnerships arose independently at least five times, said Andrea Gargas, now at the Institut für Botanik in Graz, Austria, and that the fungal partners are related to different branches of the fungal family. Gargas, P.T. DePriest from the Smithsonian in Washington, D.C., M. Grube (also from the Institut für Botanik in Graz), and A. Tehler from Stockholm University published their findings in the June 9, 1995, edition of the journal *Science*.

Gargas has long resented the way the fungi in lichen partnerships get shoved into an out-of-the-way corner of fungal taxonomy. "Mycologists would never propose that all fungi pathogenic to plants, or all fungi that form mycorrhizae, are separate cohesive units," the *Science* article states. "However, fungi that form lichens have been studied and classified in isolation from other fungi, even very recently."

In 1988, she began comparing sequences of DNA to figure out how the fungi in lichen partnerships fit into the evolution of fungi. Now she and colleagues have broken the lichens out of their single group and arranged the fungal partners like Christmas ornaments on various branches of the fungal family tree.

Many of the lichen-forming fungi were put into the group with the gourmet morel mushrooms and baking yeasts. Another set joined the fungi that cause plant diseases like Dutch elm disease. Three other kinds, said Gargas, are relatives of the button mushrooms for sale in supermarkets. *Omphalina*, which forms a little white mushroom but has algae at its base so it gets classified as a lichen, went onto the family tree near the organism that causes AIDS-related pneumonia.

It is no dream!
Matsutake are growing
On the belly of the mountain.
—Shigetaka



Puget Sound Mycological Society
Center for Urban Horticulture
Box 354115, University of Washington
Seattle, Washington 98195

December 2, 1995

To: Agnes Sieger
From: Joy Spurr

Enjoyed reading about the mushroom found in amber, which is a fossil resin of vegetable origin, probably a tree resin in this case.

There is a fossilized Coprinus species at the Burke Museum. It was found in volcanic ash and lava in southern Idaho and documents the existence of mushrooms in that part of the world over 60 millions years ago. I have a photo of it in my slide show "Introduction to Mushrooms."

60 million years go back to the time when the Rocky Mountains were forming, and possibly the Cascades were just starting to form.

This is a fairly well-preserved specimen that easily shows it belongs to the Coprinus group.

Maybe our members would like to know about this. I don't know if the specimen is on display. Most likely it is still in one of the basement storage cabinets.

FIT FOR A PRINCE

UPI, 8/5/95

ROME—Faced with a visiting prince, what do you feed him? If you're Italian, you naturally feed him *Boletus edulis*, the "King" bolete.

On Saturday, during a private visit to Italy, Britain's Prince Charles discussed the intricacies of mushrooms with the mayor of Caprarola, between Rome and Florence, which produces them, and then sat down to a lavish lunch featuring a ravioli-type dish garnished with rare porcini mushrooms.

During a meal the previous night, one of the waiters fell into a vast fountain and had to be pulled to safety by guests. "Lucky it didn't happen to me," the prince said after insisting upon meeting the unlucky victim.

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Rafanelli, Georg & Jennie
1776 S. Columbian Way
Seattle Wa
98108

Dues are due now. Send yours to Bernice today.

