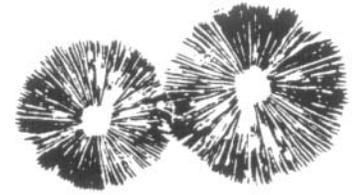


SPORE PRINTS



BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
Number 439 February 2008

PRESIDENT'S MESSAGE

Patrice Benson

Thanks to members Shana Greenlick and Scott Sexton for stepping forward to help with book sales. Cathy Lennebacker has also offered to help with ordering, and a couple of others have been volunteered by their spouses, so I will need to check with them before publishing their identity. This group will make the job easy and flexible but remain an important part of our service to members and a fund raiser for our club.

We still need a chair or co-chairs for the Annual Exhibit on October 11–12, 2008. There are plenty of capable chairs for the subcommittees who will make the event run smoothly with the help of volunteers. We need the point person(s) to coordinate these capable folks and to be on site for the setup and breakdown of the event. It is necessary that this person(s) have worked at least one of our exhibits. Call me to volunteer, (206) 722-0691.

Our Ben Woo Grant for 2008 goes to Noelle Machnicki to support her studies of reciprocal evolutionary change between interacting species and how this shapes the ecological dynamics of communities. Her inquiries focus on the plant/fungal co-evolution between chili peppers and *Fusarium* pathogens. She promises to report to us after the journey to Bolivia to finish up her project.

The board is pleased to have received such deserving applications and to present this grant in the name of Ben Woo, a founding father and our first president. Ben is slowly recovering in Seattle from a medical emergency which befell him while traveling in France. Our best wishes for swift recovery go out to Ben and his family.

We are having a very special Survivor's Banquet this year. The food is being coordinated and produced by Michael Blackwell. Chef Blackwell is an instructor in the South Seattle Community College culinary arts program. Our banquet is our annual meeting and the occasion on which we have chosen to honor the recipient of our Golden Mushroom Service Award. You must reserve your space by sending a check to Cynthia Nuzzi. See details elsewhere on this page.

Please validate our election process by mailing your ballot to the address specified on the printed form.

I am looking forward to time spent helping with Mushroom Maynia at the Burke. This event will raise awareness of mushrooms as an integral part of both the forest and urban ecosystems. Awareness of fungi as food, art, and science will ignite interest in the necessity of fungal taxonomy in the PNW. We are hoping that this will raise more support for our dedication to preserving the fungal herbarium and integrating its existence into the community of scientists, both professional and amateur. We have many displays and activities planned for this event on May 4, 2008. Stay tuned for more information about this. We will need volunteers to help with this 6-hour family-oriented occasion. You can sign up at the membership meetings or by e-mailing or phoning Patrice. patrice.benson@comcast.net, (206) 722-0691.

HINTS FOR HUNTING MUSHROOMS Nick Iadanza

MushRumors, Oregon Myco. Soc., Jan./Feb. 2008

Have you noticed that there are some mushroom hunters who always return with full baskets? Do you look at your meager pickings and wonder what they know that you don't? As you're using up your dried and frozen fungal edibles from last year, reflect on prior hunts and think about what you observed when you were successful.

Most people recognize that there are fungal/plant associations. Hunting the coast this fall, we noted that matsutakes were in sandy soil near shore pines. We found *Boletus edulis* in relatively open areas near shore pine (coast) and Douglas fir (Cascades). Lobster mushrooms seemed to be around vine maple and chanterelles were most plentiful in older second growth Douglas fir stands. Checking streamside alder groves for dead trees often produced oyster mushrooms.

Morel hunting in the spring turned up some interesting observations. In early spring we found morels along the Columbia River
cont. on page 8



SURVIVOR'S BANQUET - MARCH 7, 2008

This year our Survivor's Banquet will be at
South Seattle Community College.

PSMS member Chef Michael Blackwell will direct the kitchen for our mushroom-inspired feast!

Cost: \$ 35
BYOB



RESERVE YOUR PLACE!

Participation is by reservation only
Deadline is March 1st

Send a check payable to PSMS, with your name
(or names if you come with a guest)
and food preference, if vegetarian, to

Cynthia Nuzzi
9323 SE 43rd St.
Mercer Island, WA 98040

**We need donations of dried boletes and morels
and frozen matsutake.**

Please bring them to the February membership meeting.

If you need to drop your mushroom donation off another time, or if you have frozen mushrooms to donate, call (206) 722-0691 or e-mail Patrice Benson (patrice.benson@comcast.net).



Spore Prints

is published monthly, September through June by the

PUGET SOUND MYCOLOGICAL SOCIETY

Center for Urban Horticulture, Box 354115
University of Washington, Seattle, Washington 98195
(206) 522-6031 <http://www.psms.org>

User name: Password:

- OFFICERS: Patrice Benson, President
Milton Tam, Vice President
John Goldman, Treasurer
Dennis Oliver, Secretary
- TRUSTEES: Molly Bernstein, Kevin Bernstein,
Colleen Compton, Marilyn Droege,
Brenda Fong, Jamie Notman,
Cynthia Nuzzi, Lynn Phillips,
Kim Traverse, Doug Ward
Ron Post (Immed. Past Pres.)
- ALTERNATE:
- SCI. ADVISOR: Dr. Joseph F. Ammirati
- EDITOR: Agnes A. Sieger, 271 Harmony Lane,
Port Angeles, WA 98362
sieger@att.net

Annual dues \$25; full-time students \$15

MEMBERSHIP MEETING

Tuesday, February 12, 2008, at 7:30 PM at the Center for Urban Horticulture, 3501 NE 41st Street, Seattle.

Dr. Dean Glawe will speak to us this month on "Fungal Diversity—Mushrooms and Beyond." He will explore the diversity of fungi in terms of their numbers and kinds of ecological interactions and their involvement in natural processes and human affairs.



Dr. Glawe is a plant pathologist with Washington State University. He is co-chair of the Mycology Committee of the American Phytopathological Society, and as co-founder of the Pacific Northwest Fungi Project, he has led the effort to develop collaborations among fungal biologists working to catalog the fungi of the region. He is editor-in-chief of the on-line journal *Pacific Northwest Fungi* (www.pnwfungi.org) and project leader and editor of the Pacific Northwest Fungi Database (www.pnwfungi.wsu.edu), the leading source of information on the region's fungi, based in large part on past research of scientists at WSU. His research focuses on the systematics (classification and biology) of the powdery mildew fungi (Ascomycetes in the order Erysiphales), which are some of the most common and destructive plant pathogens but not well studied in North America.

Would members with last names beginning with the letters A–K, please bring a plate of refreshments for the meeting.

CALENDAR

- Feb. 12 Membership Meeting, CUH, 7:30 PM
Feb. 18 Board Meeting, CUH, 7:30 PM
Feb. 19 *Spore Prints* deadline
Mar. 7 Annual Meeting and Survivor's Banquet, SSCM,
Attitude Adjustment Hour, 6:30 PM, Dinner, 7:30 PM

BOARD NEWS

Dennis Oliver

Even in the cold of winter the work of the PSMS board continues. The board approved a \$2000 Ben Woo grant to Noelle Machnicki, a graduate student at the University of Washington, for field research on *Fusarium* and chili peppers in Bolivia. Mushroom Maynia is in the early stages of organization, but ideas and enthusiasm for the event are very strong. There will be an initial organizing meeting on January 18. Kevin Bernstein presented a proposal for a new Web hosting site that would "cost less, get more." Brenda Fong will look into the reasons for the late arrivals of the last couple of issues of *Spore Prints*. Last but not least planning continues for this year's annual meeting and Survivor's Banquet; be sure to send your reservation to Cynthia Nuzzi (see announcement on page 1).

*I once knew a hunter named Sven
He only picked now and then
He would pick without thinking
Then think without picking
His approach was totally Zen*

—Charmoon Richardson
SOMA News, Sonoma Co. Myco. Assoc.

FIELD TRIP TO OSTROM'S

Milton Tam

PSMS has scheduled a field trip to visit Ostrom's Mushrooms, located near Olympia, Washington, at 10:00 AM on Sunday, April 6, 2008. Ostrom's has operated in the Northwest since 1928, and now produces over 13 million pounds of mushrooms a year (see: <http://www.ostrommushrooms.com>).



The operations we will observe include composting, casing, spawn inoculation of trays, and harvesting. Please allow approximately 2 hours for the tour. If the weather cooperates and if there is enough interest, we can have a potluck picnic lunch afterward. I will pass along the directions and some footwear and clothing considerations to those who sign up. Please note that children must be over 9 years of age to take the tour. The maximum number of persons for this tour is 40. Sign-up is open immediately on a "first-come, first-served" basis, so please call Milton Tam (206 525-9556) or send him e-mail (miltontam@aol.com) with the number of places you would like to reserve and a contact phone number. Thanks.

ODE TO A MUSHROOM

Thomas J. Morgan

The Providence Journal, January 23, 2008

The glossy, chestnut-hued mushrooms sprouted from a dead tree on the edge of downtown Providence, all but unnoticed by passersby who might not have expected to encounter edible wild fungi in the dead of winter.

But there they were, a species known by the vaguely stripperesque name of *Flammulina velutipes*, a winter oddity that shows up from fall to spring during a thaw, and especially after precipitation, of which the first two weeks of January had plenty. In fact, the

nonconformist choice of growing season has given the fungus its nickname: the winter mushroom.

Flammulina velutipes picks dead or dying hardwoods, but also will set up shop where limbs on healthy trees have been broken off by storms. For an experienced collector it is not hard to identify. Its cap, which has gills, is gummy to slippery when wet. It grows in clusters, and its stem, which must be discarded before cooking because of its rubbery texture, lacks a ring and is furry and brown to black, especially toward the base. For those who know how to perform a simple spore print, its print is white. Those who don't know how to do a spore print shouldn't take a chance on this one, for the deadly poisonous *Galerina autumnalis* is a tricky look-alike.

The mushroom is cultivated in Asia, where it is grown in the dark, causing it to adopt a white pallor. Its stem becomes elongated, and its cap remains tiny. This form is known as enoki.

Bruce Tillinghast, chef/owner of New Rivers restaurant, 7 Steeple St., Providence, where wild mushrooms of several species are commonly on the menu, set aside his afternoon food-prep duties to take up the challenge of a new critter that had been sliced from its tree less than a half hour before on a rainy day.

While other kitchen staff used a hacksaw to cut short ribs into serving-size portions, Tillinghast took a small paring knife and painstakingly removed the stems.

"The mushrooms were much smaller than I expected," he said. "I was intrigued by their growth habit—clusters that were a sort of 'piggy back' system with stems and caps instead of the clusters like the hen-of-the-woods."

He did a quick sauté, describing his method as "fast and simple—it was just a dash of this or that."

The mushrooms, he said, "were very flavorful, and exuded juices during cooking that quickly bound the simple sauce. You did mention that because of the rain they had a 'tacky' surface, which makes sense in the way they reacted in the pan."

All in all, the new mushrooms intrigued him.

"It is disappointing that these special treats are not in greater abundance," he said. "But perhaps that helps make them even more special and desirable."



wild



cultivated (enoki)

Flammulina velutipes

DERIVATION OF FUNGUS NAMES

Spores Afield, Colorado Mycological Society

Agaric: From Latin "Agaricum" and the Greek "Agarikon," called after Agaria, a town in Sarmatia where it grew abundantly.

Fungus: From the Latin "fungus," a cognate or derivative of the Greek "sphoggos" (sponge). The Romans used the term for certain varieties only, not for fungi as a whole.

Morel: From a Teutonic word represented by Old High German "morhila," from which the modern German "morchel" is derived.

Mushroom: Various hypotheses as to its derivation. (1) From French "mousseron," generally considered to be from "mousse" (moss) because the species grows in moss or short grass, or is soft. (2) From a combination of the Welsh/Old British "maes" (a field) and "rhum" (a thing that bulges out). (3) From the French "mouche" (from the Latin "musca"), a fly.

Puffball: a corruption of "puck" or "pouk" ball; "puck" is of Celtic origin and means elf, hobgoblin, or demon.

Toadstool: Various hypotheses. (1) Toad and stool. From the animal. Toads were regarded as poisonous. From the Anglo Saxon. Stool from its shape. (2) From the Icelandic "tad" (dung). This is Webster's derivation. (3) From the Norse "tutna" (to swell or be blown up). (4) From Saxon "tod," meaning bunch, cluster, or bush.

FUNGI HUNTER'S "FIND OF A LIFETIME"

Gill Jenkins

Dorset Record, Jan. 4, 2008

An amateur mushroom hunter has discovered an exceptional specimen growing in the West Dorset countryside. The fungus, *Battarraea phalloides*, is extremely rare in England but can sometimes be found in areas around London and East Anglia.

It was discovered by Heather Starkings of Corscombe at a secret location. The find was confirmed by John Wright, author of the *River Cottage Mushroom Book*.

"*Battarraea phalloides*, also known as the Sandy Stiltball, is very rare, and this is the first record of it in Dorset," Wright said. "It is one of only four species specifically protected under Schedule 8 of the Wildlife and Countryside Act 1981—it is illegal to pick it or disturb its habitat. It is also a Red Data Book species and the subject of biodiversity action plans."

Wright explained that the fungus, which is about 20 cm tall and usually grows in sandy areas, was found under a cypress tree by the side of the road. "It was in peaty soil with no sign of sand nearby at all. Fungi don't read books and often refuse to live up to their names."

Mrs. Starkings has been an avid fungi hunter for a few years and has been on several of Mr. Wright's day courses at Kingcombe nature reserve.

He said: "I told Heather that this was the find of a lifetime—like finding the first county record of the Lady Slipper Orchid or something—I am very jealous."



The fungus has a tough shaggy stem and a small cap-like structure covered in brown spores. Like the Stinkhorn it grows out of a gelatinous sac in the ground.

"I have collected some spores which, along with a photo, I will send to Kew Gardens," Wright said.

Battarraea phalloides found by Heather Starkings

SELF-FERTILITY IN FUNGI: THE SECRETS OF “DIY REPRODUCTION”

University of Nottingham,

ScienceDaily 17 August 2007; 22 January 2008

<http://www.sciencedaily.com/releases/2007/08/070816102519.htm>.

Research from The University of Nottingham sheds new light on a fascinating phenomenon of the natural world—the ability of some species to reproduce sexually without a partner. Scientists have been trying to determine how individuals of a key fungus, *Aspergillus nidulans*, are able to have sex without the need for a partner.

In new findings published in the journal *Current Biology* on August 2, they reveal that the fungus has evolved to incorporate the two different sexes into the same individual. This means that when sex occurs the fungus activates its internal sexual machinery and in essence “mates with itself” to produce new offspring, rather than bypassing the sexual act.

This is a significant discovery as it helps scientists to understand how fungi reproduce in general. Fungi can cause health problems in humans and other serious animal and plant diseases, but are also useful as sources of pharmaceuticals and food products.

The long-term aim of the research is to be able to manipulate fungal sex to our own advantage, to prevent disease, and to help produce better strains for use in the food and biotech industries.

Dr. Paul Dyer, of the School of Biology, was lead author of the study. He said: “When we think of sex in the animal world we normally associate it with males and females attracting each other and then coming together for the sexual act.

“But things are different in the fungal and plant kingdoms, where a lot of species are ‘self fertile’. This means that they are able to have sex to produce spores and seeds without the need for a compatible partner. Our findings show that *Aspergillus nidulans* provides a true example of ‘DIY sex’.”

Self-fertilization is thought to have developed in some plant and fungal species as a response to a scarcity of compatible mating partners. It also allows species to maintain a combination of genes—called a genotype—that is well adapted to surviving in a certain environment.

Aspergillus nidulans is often used as a model organism for scientists studying a wide range of subjects including basic genetic problems that are also applicable to humans, such as recombination, DNA repair, and cell metabolism.

The work was supported by a grant from the Biotechnology and Biological Sciences Research Council and also involved researchers at Northern Illinois University in the U.S. and the Centre National de la Recherche Scientifique in France.

DUES ARE PAST DUE!

Last chance to renew memberships in PSMS. *Unless you obtained or renewed your membership at or after the Annual Exhibit in October, it officially ended December 31, 2007.*

To renew your membership, send your dues *now* to

Bernice Velategui, PSMS Membership Chair
2929 76th Ave. SE, #504
Mercer Island, WA 98040

Annual dues are \$25 for single or family memberships or \$15 for full-time students.

PORTLAND COPS BUST MUSHROOM GROWING OPERATIONS

The Oregonian January 7, 2008

Portland police raided a home at 4511 N.E. Alberta St., Monday at 7 a.m. and discovered about 300 jars in the basement used to grow psychedelic mushrooms.

Police took a man and woman into custody for questioning. Police arrested Joshua Bortnick, 36, on accusations of first-degree manufacturing, possession, and distribution of a controlled substance, and the same charges related to doing so within 1,000 feet of a school. He was also found in violation of a restraining order, including strangulation involving domestic violence, that is unrelated to the mushroom bust. The name of the woman and any accusations pending against her were not available.

Beat cops answering an apparently mis-dialed 9-1-1 call a week earlier became suspicious when they responded to the address and spotted large quantities of bird seed and vermiculite, said Sgt. Stephanie Lourenco. The address had no prior calls for service, she said.

A mushroom growing operation is unusual for Portland police, she said, and officers spoke with other agencies, surfed the web for more information, and then obtained a search warrant.

No fully grown mushrooms were found in the home, she said, but many jars contained growth from spores that would eventually turn into a familiar mushroom configuration.



Jar of mushroom spawn confiscated in Portland raid.

SCHOOL PLANS HELD UP BY FUNGI Eryl Crump

Daily Post, January 18, 2008

Wales - Gwynedd Council had drawn up plans to replace the 225-pupil school Ysgol Cae Top in Bangor with a brand new building on a site at Brewery Fields in Penrhosgarnedd. However, the discovery of the fungus *Ramariopsis crocea*, a rare species confirmed by experts at Kew as new to Wales, may lead to the site being earmarked as a Site of Special Scientific Interest (SSSI) and prevent the school being built.

School staff are angry that their plans to move from their dilapidated building might be blocked. Environmental campaigners claim there are alternative sites for the school planned on the field where the rare fungi have been discovered.

Meredudd ap Rheinallt from the Friends of Eithinog and Brewery Fields claimed it was not true to say the fungi were preventing the school being built. He said: “What has happened here is that this site could be of worldwide importance and Gwynedd council could look at other sites for the school.

“Why can’t we have both the SSSI and a school, to do it in a positive way for Bangor? We are aware that the option of siting the replacement Cae Top school on an alternative location in Penrhosgarnedd, combining more than one city primary school on one site, was considered very recently, and the plan presented to Cae Top parents in a meeting.”

This year we are voting for a President, a Treasurer, and five Trustees. Please read the following profiles carefully and mark your choice on the enclosed ballot. Return your ballot to "PSMS Election Committee," 6518 Woodlawn Ave. N, Seattle WA 98103. A ballot box will also be available at the February meeting. Each family membership is entitled to two votes, and each individual membership to one vote. Ballots received after March 6 will not be counted.

Officers



President Patrice Benson

I would be honored to continue as PSMS President. A lot has happened these past two years. We are in the midst of putting together Mushroom Maynia at the Burke Museum, and we have initiated a new endowment at the UW to help provide education support for the future. I wish to continue working with the board, officers, committee chairs, and volunteers to facilitate mushroom happiness and knowledge.

Treasurer John Goldman

I would like to be re-elected as Treasurer for another 2-year term. The position requires someone to keep their eye on the financial ball so that we can fulfill our mission of education about mushrooms and mushrooming. I get a lot from PSMS and this is a way to give back by helping to ensure that.



Trustees

Jamie Notman

I love hunting for edible mushrooms and I also collect specimens for and help out at the annual exhibit as much as I can, as well as at all the other functions sponsored by the board. I'm happy to serve another term as a PSMS trustee.



Cathy & Don Lennebacker

Thanks to all of you, mushrooming has been a real fun experience for the both of us. It has given us the opportunity to combine our favorite activities, camping, hiking, treasure hunting, learning, and making new friends.



In turn, we have both served twice on the board, hosted countless field trips, and helped out wherever needed. Between us we have served as field trip chair (Cathy), as construction chair of the annual exhibit (Don), co-chaired the Quinault Foray (Don), and organized dyeing with mushroom sessions (Cathy).



Now we would like a chance to again serve on the board. Because we live in Mukilteo, we would prefer to serve together.

Kevin Bernstein

It would be great to serve again on the PSMS board of trustees. I have been a member since 2003 and enjoy going on field trips with my wife, Molly. I also enjoy helping with the PSMS Web site and the annual exhibit.



no candidate



HAIR MATS AND MUSHROOMS MAY BE THE ANSWER TO OIL-SPILL WOES

Alastair Bland

bohemia.com, January 9, 2008

You are what you eat—unless you're an oyster mushroom.

In that case, you can indulge in some of the most toxic, noxious petroleum products available and turn them into delicious, photogenic morsels that go wonderfully in white wine cream sauces and Japanese stir-fries with not a carcinogen remaining. Called mycoremediation, this impressive skill of the oyster mushroom has gained substantial press in the wake of the Nov. 7 *Cosco Busan* oil spill in the San Francisco Bay, and many environmental activists believe that, if pursued by biotechnology developers, mycoremediation could completely rewrite how to handle the aftermath of future spills.

Mycologists have been speculating for years on the possibility of someday employing oyster mushrooms, *Pleurotus ostreatus*, in toxic-waste cleanup projects, and when the freighter *Cosco Busan* scraped the Bay Bridge and spilled 58,000 gallons of sludgy bunker fuel, mushroom biologists from Monterey to Seattle quickly mobilized. They partnered with the San Francisco nonprofit Matter of Trust, secured a small plot of federal land in the Presidio near the Golden Gate Bridge, and proceeded to spearhead a historic experiment of oil-hungry mushrooms that has attracted nationwide media scrutiny.

“Nature has all the solutions. We just haven't been paying attention,” says Matter of Trust executive director Lisa Gautier, who has been laboring tirelessly since the day of the spill, becoming somewhat of an authority on the arcane subjects of ship fuel and fungi in the process. “In nature, there really isn't any waste. All materials get dealt with, and it's just a matter of harnessing the technology.”

Harnessing the powers of oyster mushrooms is exactly what Gautier and a team of mycologists have done. Two months have passed since the oil spill, and there now grows a healthy colony of large and vigorous hand-sized oyster mushrooms at the Presidio project site. Scientists, who plan to run chemical analyses of the substrate beneath the mushrooms and the mushrooms themselves, expect to find few to no hydrocarbons or other trace elements common to petroleum products remaining.

The mushrooms are sprouting from eight experimental 5-by-5-foot cubicles partitioned from each other with bales of hay and rubber pond liners each filled with varying mixtures of straw, sawdust, grain, oil, and oyster-mushroom mycelium, the vinous, underground rootlike matter that constitutes the greater mushroom organism. Two control blocks, which were not implanted with any mushroom spores, have shown no notable activity. The experiment demonstrates how simple it could be to implement a brand-new procedure for detoxifying contaminated soil and turning it into harmless compost.

Securing oil from the water or beach and transporting it to a controlled environment was among the greater obstacles in the Presidio mycoremediation process, but mats made of human hair have served as a superbly effective material for conducting this task. A barber from Huntsville, Ala., named Phil McCrory conceived of this product with a bit of experimentation in the years following the 1989 *Exxon Valdez* oil spill in Alaska. Since 2002, McCrory and his garden supplies company SmartGrow has commercially marketed dense pads of human hair as commercial and household horticulture aids. The mats insulate soil, help retain groundwater, discourage weed growth, and release essential nutrients into the

soil, but in November these hair mats served for the first time ever in a large-scale oil spill cleanup effort.

Lisa Gautier happily holds oyster mushrooms that have grown out of toxic oil, themselves now containing no toxins.



Alastair Bland

CALIFORNIA STUDENTS HELP OIL SPILL CLEANUP VIA HAIR CUTS

<http://sfist.com/>

2008/01/16/marin_students.php, January 16, 2008

Students from Larkspur Primary and Middle School in Marin County, California, have willingly lopped off locks of hair, then donated said hair to Eco-Cuts, a program designed by Marin Primary to help in the cleanup effort triggered by the *Cosco Busan* oil spill disaster on Nov. 7. Their cutoff hair will then go to Matter of Trust, a San Francisco-based environmental nonprofit that weaves the hair into mats to soak up oil.

Human hair is extremely efficient at gathering grease and oil from the air, skin, or water officials noted.



The hair is woven into 2-foot-square mats that are used like towels to mop up oil on beaches and in the water.

Not only do the mats pick up the oil, they're bio-degradable: Matter of Trust puts mushroom spores on the oil-covered mats, and as the mushrooms grow, they eat the oil and hair. The mushrooms are then turned into compost and mulch and used for gardening.

ON BEING MISQUOTED BY THE MEDIA

David Pilz

I do not envy the person who earns a living by researching and writing articles for media outlets. My impression is that it is a cutthroat business that requires short time frames and frequent submissions to earn a living wage. That process, I presume, involves verbal interviews rather than reading source material, not spending much time checking sources, writing about unfamiliar topics, and not putting inordinate effort into a review process. Also, for a writer to sell an article, they must have a “hook,” that is, a new or unique angle on a topic, one that has not been reported previously. In extreme cases, this involves sensationalism, but even for most ethical reporters, they must meld a succinct summary of a complex topic with something that is interesting to the largely ignorant lay reader. This often involves selling points that entail some exaggeration. Once published, such articles (at least about mushrooms) are frequently copied in the newsletters of mycological societies and disinformation can be perpetuated.

During the 14 years that I studied whether the commercial harvesting of wild edible mushrooms from the forest of the Pacific Northwest was sustainable and how to manage forests for their

continued production, perhaps two-dozen writers for newspaper and journal articles interviewed me about my work.

All were pleasant and sincere. But most knew very little about fungi and less about mycorrhizae or forest ecology. My research was supported by taxpayer dollars, so I was very careful about what I said and then I sent them supporting publications that were even more carefully worded. Given the results, I doubt much of this material was actually read before the articles were written and submitted.

I say that because I always offered to review the article and asked that the reporter send me a copy of what they wrote. Perhaps 2 in 10 took me up on the offer to review the article, and 3 in 10 followed up by sending me a copy of what they wrote or told me how to obtain it. Nonetheless, I managed to find and read about 5 in 10 of such articles. None quoted me verbatim, and often my comments were out of context. Typically I was paraphrased as a quote, and I would have edited virtually all of those paraphrased “quotes” for accuracy and clarity if I had had the opportunity.

I worked with about 3 writers who did let me review their drafts, and in every such case I made only a few minor adjustments that greatly improved the accuracy of the article without lengthening it.

As only one case in point, I offer the example of an article in the May 2007 issue of *Spore Prints* by the Puget Sound Mycological Society. It was reprinted from the Los Angeles Mycological Society newsletter (April 2007), which originally reproduced it from an article in the *San Francisco Chronicle* that was authored by Glen Martin. Glen interviewed me for his article for about an hour on the phone in mid-March and afterwards I e-mailed him five articles that I had written on the topics we discussed.

The underlying gist of Glenn’s article was accurate. I do feel that threats to edible mushroom populations in the Pacific Northwest, to the extent that they ever existed, have declined with global competition. I have also come to believe that economic opportunities from commercial harvesting of wild edible mushrooms in the US have diminished and shifted to value-added products. That said, some of my paraphrased “quotes” are inaccurate. For example:

“But the two most valuable fungi—matsutake and truffles—can be severely harmed by harvesters, Pilz said. That’s because the mycelia that produce them do not fruit above ground. Truffles are wholly subterranean, and prime matsutakes barely poke through the dirt. In North America, harvesters find them by raking likely spots, damaging the mycelial mats.

“‘The damage can be significant,’ said Pilz. ‘We’re trying to encourage the use of trained dogs to sniff out matsutake and truffles, as is done in Europe. That way they can be found and harvested with little or no damage.’”

If I had had the opportunity to edit these two paragraphs, I would have altered “severely harmed” to “temporarily harmed”; older matsutake do, of course, fruit above ground; they are not harvested by dogs in Europe; and no one is suggesting that matsutake be sought out by dogs, but merely that matsutake patches not be raked for young button mushrooms.

Minor distinctions? I spent 14 years of my professional career navigating the shoals of the contentious issues surrounding commercial mushroom harvesting and have my word and reputation at stake. For the most part, I simply ignore such misquotes. For the interest of the general public, this misinformation is likely very minor, but for those in the know, I imagine readers wondering what got into me to say such things.

What are my take home lessons?

1. Be very careful what you say to the media. Understand their needs and offer accurate bottom line stories.
2. You will rarely be quoted verbatim unless you offer a juicy sound bite.
3. When you read popular press articles quoting experts, expect inaccuracies and don’t fault the expert unless you double-check what they actually said.
4. Understand that most reporters do the best they can in the context of their business. They are not trying to misrepresent you, but need to sell a story.
5. Value the efforts of reporters who put in the extra effort to have their work reviewed.
6. Even with minor inaccuracies, the press plays an important role in popularizing topics that are unfamiliar to the general reading public.
7. If you want the straight scoop, go to the original, peer-reviewed, published articles for your information. Of course even science is open to interpretation, but at least, the process of peer-review keeps sensationalism to a minimum.
8. We are all in this together, and most of us are doing the best we can, given our circumstances. Be courteous and carry a big grain of salt.

I know that you believe you understand what you think I said, but I’m not sure you realize that what you heard is not what I meant.

—Robert McCloskey

David invites anyone to contact him regarding this article:

David Pilz
Consultant and Writer
PilzWald - Forestry Applications of Mycology
P.O. Box 2238
Corvallis, OR 97339-2238 USA
+1.541.753.6209
pilzwald@peak.org
<http://www.peak.org/~pilzwald/>

COMMON LATIN PREFIXES **NATS Current News**

North American Truffling Society

A	away from or without (Greek)
AD	toward, to
CO	with
DE	downward, outward, from
ECTO	on the outside
ENDO	on the inside
EXTRA	outside
HYPER	above, over
HYP0	below, under
INTRA	within
SUB	below, almost.



WILD MUSHROOM RAGOUT

Michael Blackwell

This stew makes an excellent entrée when served over polenta; also delicious served alongside roast pork or any number of vegetable soufflés; great accompanied by thick slices of crusty bread.



- ½ cup hot water, for soaking dried mushrooms
- ½ ounce dried mushrooms, boletes, morels, or shiitake
- 3 Tbsp butter
- 2 Tbsp extra virgin olive oil
- 1 cup coarsely chopped onions
- 2 pounds fresh mushrooms, preferably local wild mushrooms, quartered or sliced
- 2 Tbs minced garlic
- 1 tsp dried thyme, crushed
- 1 tsp minced fresh rosemary
- ¼ cup dry sherry
- 1 cup heavy cream
- 2 Tbs brandy
- 2 Tbs fresh lemon juice
- ½–1 tsp salt
- 1/8 tsp freshly ground black pepper
- 1/8 tsp ground nutmeg

Place dried mushrooms in small bowl, cover with hot water, and let soak for 15–20 minutes to soften. When soft, finely chop mushrooms and reserve soaking liquid.

In large, heavy pot, heat butter and oil over medium-high heat and sauté onions until browned. Add mushrooms and garlic and sauté until tender, about 3–4 minutes. Add, soaked, dried mushrooms, soaking liquid, herbs, sherry, and cream. Cook about 8 minutes or until reduced and lightly thickened. Add brandy and lemon juice and cook another 2 minutes. Season with salt, pepper, and nutmeg to taste.

Serves 6

Hints for Hunting Mushrooms, *cont. from page 1*

near large cottonwoods. Although morels on the east side of the Cascades are reported to grow in association with *Ceanothus*, we've looked under many bushes and have yet to find one there. Recently burned areas (if the fire wasn't too hot) are a no-brainer for morels.

Some non-plant relationships we discovered were interesting. Have you ever picked morels within a few feet of your vehicle, then found nothing as you ventured into the woods? This past year, we parked on a little-used road bisecting a north-facing slope. We scoured the downhill side and found nothing. As we returned, we picked a few morels near the car. We then went upslope, and found no morels. Returning to the car, we found a few more—right near the road. At that point, we had a “duh” moment, walked along the road, and filled our baskets. Obviously, the bare road retained enough heat on this relatively cool north slope to create a microclimate effect that promoted fruiting.

Maybe one of the more bizarre associations is morels and snakes. There's a flood-influenced area we visit in the early spring where the landscape features consist of small sandy mounds with young cottonwoods growing on them. Generally, whenever we see a garter snake sunning itself, we find morels. The snakes are likely seeking the warmest spot and the warm soil must induce fruiting.

Think back on what you've seen and start taking notes while in the field; soon you'll be one of those mushroom pickers whom others envy.

CALLING ALL MYCOPHAGISTS Michael Blackwell

We are in urgent need of dried or frozen wild mushrooms for the Survivor's Banquet. We especially need frozen matsutake. To donate mushrooms, please contact Patrice Benson, (206) 722-0691, or Michael Blackwell, (425) 776-2996. I will be happy to pick them up from you if need be. Thank you.

page 8



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

RETURN SERVICE REQUESTED

Non-Profit Org.
U.S. POSTAGE
PAID
SEATTLE, WA
PERMIT NO. 6545

If your mailing label has an asterisk on it, you have not renewed, and this will be your last newsletter.