# **SPORE PRINTS**

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY

Number 491 April 2013



## NEW YORK'S GREEN ROOFS ARE CRAWLING WITH FUNGI John Metcalfe

theatlanticcities.com, Mar. 13, 2013

Demand for green roofs might plummet if they became known as "fungal roofs." But that is what they are, at least in New York—and contrary to what it may sound like, it's not a bad thing.

The world just became a little more aware of the hidden-but-

teeming biomass of green roofs thanks to the intrepid work of researchers from Barnard College, Columbia University, Fordham, and the University of Colorado. Recently, these guys found themselves wondering if the gardens in the sky might support different kinds of life than the stuff at dog-pee level. It's a realm into which few scientific minds have tread. While green roofs as heat-island dampeners and rainwater-runoff plugs have been widely discussed, the extent to which they serve as urban "biodiversity reservoirs" (in the researchers' words) is something of a mystery.



Green roofs, biodiversity reservoirs?

So in the summer of 2011, the team set out to test the soil composition of 10 green roofs stationed at recreation centers throughout the five boroughs.

Using soil corers, they hunted for fungi, because fungal communities play a key role in a roof garden's health and longevity. For comparison's sake, they also took samples from five city parks near some of the roofs, including Central Park and the High Line. A little magic from "[i]nductively coupled plasma atomic emission spectroscopy" at Alabama's Auburn University Soil Testing Laboratory, as well as a dollop of phospholipid fatty-acid extraction and Illumina-dye sequencing, and they had their results, which were published this month in the journal *PLOS ONE*.

So what were the conclusions? For one, these sun-kissed carpets of gray goldenrod and smooth blue aster are absolutely crawling with fungi. The researchers logged an average of 109 types of fungi per roof, such as *Glomus*, *Acaulospora*, *Rhizophagus*, and *Funneliformis*, suggesting that green roofs can indeed contribute to urban biodiversity. As they explained:

[W]e found that green roofs supported a diverse fungal community, with numerous taxa belonging to fungal groups capable of surviving in disturbed and polluted habitats. Across roofs, there was significant biogeographical clustering of fungal communities, indicating that community assembly of roof microbes across the greater New York City area is locally variable. Green roof fungal communities were compositionally distinct from city parks and only 54% of the green roof taxa were also found in the park soils.

In other words, the roofs are home to fungi not typically given to squelching around in normal parkland. They also seem to be better for growing stuff you might, you know, put in your mouth. While the soil in New York's parks showed a greater biomass of microbes, it also tested higher for heavy metals, a scourge of urban gardens that can be unhealthy if consumed in larger quantities.

This is hardly the first news of green roofs supporting life. The elevated gardens are routinely patrolled by insects and in some cases much larger fauna. In Australia, for instance, the Adelaide Zoo maintains several grassy roofs that are designed as homes for urban plants and wildlife, like reptiles, insects, and bats.

And an immense green roof in the U.K., mounted on a wastewater treatment facility near Brighton, attracts seagulls and crows that pluck at its quaking grass in search of food. To fight those hungry birds, the roof's overseers have released even more animals over the roof—ferocious goshawks, a golden eagle, and even a great horned owl.

### **BRIEF ENCOUNTER**

**Dick Sieger** 

Agnes and Dick slip through the campground hunting morels. Oh oh, they've been spotted.

A middle-aged camper and preteen girls approach Dick.

He tips his hat.

The camper asks him, "Did you lose something?"

"No."

"You have a brush. Are you painting something?"

"No."

Then what *are* you doing!"

Dick's expression becomes very solemn. "Looking for snakes. There are a lot of them here because of all the rats."

"Don't tell us that!"

"I've had a snake chase a rat up my pants leg."

The camper and girls flee. Agnes and Dick continue to slip through the campground hunting morels.

It may be safely said that there are two kinds of people: those who notice mushrooms and those who don't. Likewise, there are two kinds of noticers: the appreciative and the appalled. Retired East Bay Regional Park District naturalist Ron Russo sums up years of visitor reaction: "For the most part there's a general disdain. They have heard so many stories about poisonous mushrooms." A few find their very existence offensive: Charles Darwin's daughter Etty patrolled the grounds of her estate for suggestively shaped stinkhorns, burning them in her fireplace before her housemaids got a glimpse of them."

—Joe Eaton, baynature.org/articles/planet-fungi/, Sept. 27, 2012

### **Spore Prints**

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### **CALENDAR**

April 6 Early Field Trip (see website)
April 9 Membership Meeting, 7:30 pm, CUH
April 15 Board Meeting, 7:30 pm, CUH Board Room
April 16 Spore Prints deadline

April 16 Spore Prints deadline April 27 Field Trip (see website) May 11 Field Trip (see website)

### **BOARD NEWS**

### **Denise Banaszewski**

Teddy Basladynski, Reba Tam, Andrea Rose, and Luise Asif were re-elected as Trustees, Jon Hall was elected as a trustee, and Brady Raymond was elected as the alternate, for two-year terms. Milton Tam was re-elected as Vice President for a one-year term, and Denise Banaszewski was re-elected as Secretary for a two-year term. Now, our officer elections will follow the recently revised bylaws and we will not elect the President and Treasurer in the same year. The NAMA 2014 committee will meet in April. The Olympic National Park says they will not issue permits to collect in the Park for NAMA 2014. We will continue to pursue this. We are seriously considering offering a less expensive membership option, in which the member would receive *Spore Prints* in electronic format only. We have cleared the waiting list for an ID class except for those for whom the class dates offered did not work. We had 300 people in the classes! We have had great feedback on the classes and have tweaked the curriculum each time in an effort to perfect it. Although 150 people signed up for the Survivors' Banquet, 120 attended. A good time was had by all who came.

#### **MEMBERSHIP MEETING**

Tuesday, April 9, 2013, at 7:30 pm at the Center for Urban Horticulture. 3501 NE 40th Street. Seattle.

Our speaker tonight is Aaron David, currently a Ph.D. candidate in the Ecology, Evolution, and Behavior program at the University of Minnesota and a Ben Woo scholarship recipient. The title of his presentation is "Discovering the Diversity of Endophytic Fungi in Pacific Northwest Dune Grasses." Aaron received his B.A. in



Environmental Studies from Washington University in St. Louis. He is broadly interested in community assembly of microbial symbionts, and his doctoral dissertation work focuses on how communities of diverse fungal endophytes—fungi living asymptomatically within plant tissue—form within host grasses of the Pacific Northwest dunes. He conducts his research primarily in dunes of Northern Oregon and Southern Washington.

Would people with last names beginning with the letter A–K please bring a plate of refreshments to share after the meeting.

### FIRST FUNGI PHOTOGRAPHY WALK FINDS HYGROPHORACEA AND FRIENDS Paul Hill

Photography Committee Chair

Our first photography walk was a great success even though Saturday, March 16, turned out cool and overcast with a chance of rain. When only half the folks who registered showed up, I was concerned that I had left lots of folks lost, looking for me somewhere else other than shelter #3 at Seward Park. This put the number of participants at just about 16 people. The coffee was provided free by Debbie at Repast, my neighborhood pastry and coffee shop. If you're up on top of the ridge above the I-90 tunnel, stop in for fantastic pastries and great coffee and tell her thanks for the donation to PSMS.

After some socializing, we handed out a couple of articles I had found on the web that introduced some basic ideas of shutter speed, aperture, and film (sensor) sensitivity. We talked about the challenges of taking photos of mushrooms in often cloudy forests on overcast days. We also discussed various camera features that can be important to consider when taking pictures in the woods. Before anyone got too cold sitting around in a damp picnic shelter on the overcast March morning, Danny Miller encouraged me get us all walking in the woods.

With 16 sets of eyes on the ground we soon spotted some lovely Waxcaps (or Waxy Caps; family Hygrophoraceae). It didn't take long before many folks were stooping, kneeling, and even lying around in the woods experimenting with settings to capture the yellow flesh of something close to *Hygrocybe flavescens*, the Yellow Waxcap. Meanwhile, Jacob, who had driven in with



his mom from Wenatchee for the weekend to attend both the photo walk and the annual banquet, spotted a good sized *Mycena alcalina* contrasting nicely with moss. This resulted in several good

Mycena alcalina



Laurel and Jessie getting photos.

photos. Meanwhile, Danny and Zach tried the upside-down camera trick to throw flash up onto the gills of a not-so-waxy squat white *Hygrophorus pratensis*.

A little bit down the trail we found a very large log covered in a hundred or more of another mushroom in the Hygrophoraceae family, *Lichenomphalia umbellifera*, which one reference translates as Brown Belly Button. The challenges of these gilled mushrooms were to get an interesting group picture or capture the details of the decurrent gills, undulating cap margin, and translucent-striate cap showing the lines of the gills beneath. From what I saw several folks succeeded.

Others soon came upon an area with several other species of Waxcaps including a *Hygrocybe* with yellow flesh and orange surface, possibly *H. miniata* which has the common name Vermillion Waxcap. In the same area we spotted the all-red *Hygrophorous coccinea*, with the apt common name Scarlet Waxcap.

Soon Danny was pushing his camera to catch the details of a resupinate tooth fungus, *Steecherinum ochraceum* (don't expect a common name for a crust!), and a *Phellinus pini*, a polypore with a maze-like pore surface. Meanwhile others were getting interesting pictures of the ever so common *Trametes versicolor*, the Turkey Tail. Danny put the total species at about 15.

Right on time just before noon, a very light Seattle spring drizzle encouraged us back to the shelter. We enjoyed some lunch while we viewed several bold volunteers' photos on one laptop screen. Special thanks to Jacob, Pascal, Danny, Laurel, and Zach who flipped through their photos discussing their successes and failures (apologies if I left anyone out or put the wrong name with the person who showed his or her photos). Soon everyone was either taking off on their own or heading home. I think everyone enjoyed and got something out of the class. Certainly lots of folks were trying their cameras and taking lots of pictures and that is what digital photography is all about. I'm looking forward to many photo walks to come.

### STARBUCKS BUYS COFFEE FARM, WILL RESEARCH DEVASTATING LEAF RUST

Reuters, Mar. 19, 2013

Starbucks Corp., the world's biggest coffee chain, said on Tuesday that it bought its first coffee farm, where it will research the leaf rust that is devastating Central American crops as well as harvest its own beans. Starbucks, known for its trendy coffee shops around the world, has purchased an active farm on roughly 600 acres in Costa Rica, which it will convert to a global agronomy research and development center.

### SAVE THE DATE: MAY 11, MUSHROOM MAYNIA Pacita Roberts

The 6th Annual Mushroom Maynia is Saturday, May 11, at the Burke Museum

This is a fun, one-day event to raise awareness of the roles of fungi in our lives and the world. This year, the event will tie in to the Burke's exhibit "Plastics Unwrapped," so the focus will lean toward the role of fungi in our environment.

Mushroom Maynia needs volunteers to help with displays and activities. These include family-oriented cultivation workshops, art activities, books, tasting, microscopes, and a variety of displays to introduce the public to the kingdom of fungi. Volunteers with all levels of mushroom expertise are needed, including beginners. Admission to the museum for Mushroom Maynia will be free to PSMS volunteers who sign up ahead of time. **To volunteer at this event, phone Pacita Roberts** at 206–362–2713 or email pacitaroberts@gmail.com.

Mushroom Maynia is a collaboration between the Daniel E. Stuntz Memorial Foundation, PSMS, and the Burke Museum of Natural History and Culture. Mycology is intimately connected to the studies of forestry, botany, ecology, medicine, and the culinary arts. It is the goal of The Daniel E. Stuntz Memorial Foundation and PSMS to keep these connections alive by supporting the study of fungal systematics and the natural science of fungi.

### LECTURES IN THE BARN AT EAGLE CREEK Brian Luther

This year at the Eagle Creek field trip I'm planning color slide lectures upstairs in the barn during some of the evenings. I've actually been considering this for several years, to make the event even more interesting. These would be scheduled for around 7:00 to 9:00 pm—after the potluck or dinner and before the big evening communal bonfire.

Any PSMS member who is interested in giving a presentation will be considered, based on how long the lectures are and how many potential lecturers respond. If I get a large response, then I'll have to be selective and the choice will be based on who contacted me first. The presentations can be short or up to a half hour long, at most, and need to relate to mycology, mycophagy, native plants, or similar subjects that our members would find interesting. I'll be giving the first lecture on Saturday night.

If you'd like to contribute, then please send me (1) a brief description of your lecture, (2) whether it will be a traditional slide presentation or using PowerPoint, (3) how long it will be, and (4) what night you would prefer giving it, knowing that this field trip goes for four days. I would prefer that all lectures be accompanied by color photos. For PowerPoint presentations please bring your lecture on a flash/thumb drive. We'll have a laptop and appropriate projectors for both slides and PowerPoint.

Assuming I get enough speakers to make these lectures worthwhile, the schedule will be posted on the Members page on the PSMS website (www.psms.org) as well as handed out when you arrive at Eagle Creek.

One handful of dry mushroom = ½ oz.

One ounce of dry mushrooms = 8 oz. reconstituted in water, cream, or sherry.

#### MALAYSIAN MUSHROOM STAMPS Brian Luther

Malaysia has issued one set of mushroom stamps with fungi as the main illustration, and these are the only stamps treated in the current mycophilatelic catalogs for this country (McKenzie, 1997; Gimeno, 1999–2000). However, I've also found four other obscure sets of stamps from Malaysia that have fungi in the background or border and even illustrate a stamp on stamp.

The country of Malaysia is half on the Malay Peninsula and half on the island of Borneo. The northern portion of Borneo actually contains three countries: the Malaysian states of Sarawak and Sabah along with the small country of Brunei. The bulk of the island, however, belongs to Indonesia.

Cat. #	Date	Value	Туре	Comments
534	1/18/95	20¢	M	Microporus xanthopus
535	"	30¢	"	Cookeina tricholoma
536	"	50¢	"	Dictyophora phalloidea
537	"	RM1	"	Ramaria sp.
604f	12/7/96	RM2	MID	Pycnoporus sanguineus on wood at bottom
645a- d(e)	9/9/97	50¢	MID	Stamp on stamp and s/s border—see text
824a–b	1/22/01	RM2	MID	Fungi on border of s/s only, not on stamps
1232	1/21/09	30¢	MID	Polypore covering wood underneath bird
1234	"	50¢	MID	Five red agarics on the ground under birds

M = mushrooms or fungi as the main illustration; MID = mushrooms or fungi in the design of the illustration; s/s = souvenir sheet.

All catalog numbers are from the Scott postage stamp catalogues.

#### **Comments**

Scott set 534–537 shows four fungi typical of tropical forests. The illustration on Scott 537 is identified only to genus, as a *Ramaria*. I consulted my former professor Dr. Ronald H. Petersen (Univ. of Tennessee, Knoxville) to get his opinion. *Ramaria polypus* is one possibility. According to Corner (1967), it's a common lignicolous species in Malaysia, and the colors shown on the stamp are within his description. However, it also could be an aberrant form of something else (Ron Petersen, personal communication). We'll never know for sure.

Scott 604f is one of six wildlife stamps on a beautiful souvenir sheet. This stamp features a Banded Palm Civet on a tree branch with a fungus growing below it on the same branch. The fungus is most likely the polypore mentioned in the table, but this is not certain. Most of the conks are on the stamp, but one extends over the perforations into the border below.



Scott 604f

Scott 645a–d is a souvenir sheet commemorating the 50th anniversary of philately in Malaysia. It contains four stamps, one of which (645c) shows Scott 604a—an illustration of a stamp on a stamp. This s/s also comes overprinted in the margin as Indepex '97, and listed as Scott 645e (not shown here). Directly over stamp 645c showing 604f is a magnifying glass enlarging the stamp along with the MID illustration beneath it. Also, the bottom of this sheet shows Scott 535 (*Cookeina tricholoma*), but it's not actually on one of the stamps. It's nice that Malaysia happened to include two myco stamps in this commemorative set.

Scott s/s 824 features two native pheasants on separate stamps. Below the stamps, on the lower border, are seven orange conks (possibly *Pycnoporus sanguineus*) on a fallen tree branch as well as six gilled mushrooms (not identifiable with certainty).

Scott 1232 & 1234 are again bird stamps. The set consists of stamps 1232–1234, but stamp 1233 (Milky Stork) does not have any fungi on it. The polypore shown on Scott 1232 (Malayan Peacock-Pheasant) covers the fallen tree branch that the bird is stepping on. It cannot be identified positively, as there are several possibilities. The five red mushrooms on Scott 1234 (Malaysian Whistling Thrush) have red caps with white umbonate discs. Close inspection of the stamp under a dissecting microscope reveals that the white on the caps is remnant universal veil tissue, and one of the mushrooms appears to have an intact partial veil; another shows a ring, and yet another shows a split volva at the base of the stem. These characteristics clearly indicate a species of *Amanita*, similar





Above: Scott s/s 645a-d

Sang Setuk Flimba
Arborophila charitone RM 2 Mapparang
Arborophila charitone RM 2 Malaysia

Malaysia Malaysia

Puyuh dan Sang Seruk • Quails and Partridges

Left: Scott s/s 824a-b

to *A. caesarea*. For MIDs, sometimes the artist has actually drawn from nature and is illustrating a real fungus, whereas at other times the fungus may be stylized or just an artist's rendition of a real or imaginary fungus.

Please refer to Luther (2012) for a discussion of fungus-illustrated postage stamps from Christmas Island, an Australian Territory close to the equator off of the Indonesian island of Java with a habitat very similar to that of Malaysia.

Special thanks to Emeritus Professor Dr. Ron Petersen for his input and views.

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Scott 1232 & 1234

#### **FUNGI FELL BAGPIPER**

Donald G. McNeil, Jr.

The New York Times, Mar. 18, 2013

A prominent Scottish bagpiping school has warned pipers around to world to clean their instruments regularly after one of its longtime members nearly died of a lung infection caused by fungi growing inside his bag.

John Shone, 77, a Glaswegian, spent a month in the hospital with pneumonia and lost 21 pounds. After antibacterial treatment failed, a doctor told him he was dying, and then asked about his hobbies.

When his son brought in his bagpipes, two types of fungi—*Rhodotorula* and *Fusarium* species—were cultured.

Shone acknowledged in a telephone interview that he had not cleaned his bag since being invited 18 months ago to play for a master piper, Donald MacPherson. "It was very remiss of me," he said. "But pipes have a habit of going badly or going well, and mine were going very well."



Clean your pipes!

### TAKE, LEAVE, AND RETURN: THE TAO OF MUSHROOM COLLECTING

Fungal Jungle, West. Mont. Myco. Assoc., 2012

When we *Take* from the forest, we must admit what it is we do. We do not Harvest, for we have not planted. We may take scientific collections, we may take mushrooms for our food, or we may take mushrooms to sell. But all of these should be viewed together, because in all these instances we take from a source we have no idea how to replenish. I have seen diligent, careful, nurturing commercial mushroom pickers, and I have seen scientific collecting abandoned in the face of a massive fruiting of *Cantharellus* or *Boletus* as otherwise restrained individuals indulged in an orgy of picking. In some cases, every mushroom, right down to the primordia, were picked. In other cases, very young and overripe specimens were left standing.

We must all adopt and internalize an ethic of taking, rather than attacking others who share our love of mushrooms. The enemy of the mushroom picker is not the other mushroom picker; it is the loss of habitat to logging, development, and other means. I'm among the recreational variety of mushroom picker, meaning I probably pick more than I need for dinner tonight. I feel my collecting is not excessive, and yet perhaps I have wiped out a subspecies of edible mushroom from the Missoula valley. Taking is relative to both the habitat and the weather, and can seem very insignificant when it is your own and quite outrageous when it is somebody else's. It is easy to be hypocritical in this debate, and beat "those other" mushroom pickers with our halos, isn't it? Is the pride one feels in gathering a basketful of chanterelles somehow diminished by finding "stumps" indicating another picker was there first? How often do you leave the mushrooms that are too old to eat? Do you believe that a mushroom can be too young to collect?

We all must strive to contain our own greedy urges, and try to take just what we will use. Mushrooms wasted in your fridge are like fish that rot, uncleaned. Mushrooms standing in the field rotting are contributing to the ecosystem. Which leads us to *Leaving*.

What you leave is often more important than what you take. If we take without leaving, soon nothing is left. Why take that which

you do not need? Leave a wormy matsutake in the field? Leave the older "flags?" Some pickers have a saying for morels "Rule of Thumb: if it is smaller than your thumb, leave it." I do not feel that being a commercial picker is an indication of mindless greed anymore than being a "recreational" picker is a guarantee of ethical righteousness.

A time-honored tradition exists in many mushroom cultures, that is the secrecy of the "patch" For knowing either the identity of a fungus or its location is insufficient; you must know both. Wise gatherers are understandably cautious about to whom they reveal such information, and in many cases attach conditions to sharing such knowledge. Which, I believe, is how it should be. The value of this tradition was to deny access to people that did not respect the resource, and the goal is the continued vitality of the patch and the species.

What you leave should be proportional to what you take. It makes less sense to try to chase down every last mushroom than it does to seriously thin out a few extravagant fruitings. I tend to leave large, sparsely mushroom-populated areas untouched, and seek out the maximum habitat.

The mushrooms left to spore out provide the next generation of mushrooms. Sometimes this happens all at once, like salmon spawning, and other times it happens repeatedly over the course of the fungus' perennial existence. Oyster mushrooms are an example of a mushroom with a "determinate" or "life cycle" approach to sexual reproduction. Natural morels are an example of a fungus that exhibits an "indeterminate" approach, fruiting each spring of its life for decades or more. Yet each future fruiting depends on the ones before it. We should be careful, in our collecting, not to snip this thread that runs from the past to the future.

And Leaving means more. It is perhaps enough to leave a mushroom or three from an abundant fruiting, but when you are out
examining likely habitat, why not disperse a few spores? You
may put pieces of lobster on *Russula brevipes*, fold old oyster
mushrooms into the crook of a likely snag, or bury chanterelle
tailings under your pet Douglas fir. I often bring mushroom scraps
from here to there, hoping to compensate for the fragmentation of
habitat that has occurred in the last few years. This breaking up of
suitable habitat has restricted the exchange of genetic information
that contributes to species vitality, and by putting our mushroom
scraps where they belong, we can help to complete the cycle that
our mushroom gathering interrupts.

It's at this point that Leaving becomes *Returning*. We all speak of returning things to the soil, but we actually return very little. A wild animal leaves its scat around the forest, thus dispersing seeds and spores. A human that takes from the forest doesn't usually return these seeds and scats to the woods; rather they are destroyed in septic tanks and sewage treatment plants. So I habitually return my mushroom scraps to the forest, rather than just tossing them in the compost.

I also think of returning in the sense of coming back to the same place, year after year. Forming a relationship with the piece of land that makes the chanterelles you eat, seeing the effects of "management treatments" on your favorite patches, and seeing the variation in mushroom productivity from season to season may not help fill your basket, but it will increase your appreciation of the delicacy and resilience of the fungal jungle.

Its also nice to return in order to see the greater cycles at work. How long does a patch last? What are its cycles over its lifetime? I go up to the same patch of *Stropharia kauffmanii* every year.

First I found a dozen biggish mushrooms, then for 4 years there were immense fruitings of ten pounds or more. Two years ago the patch produced just a dozen mushrooms. This year I did not find a one. I wonder what next year will bring. (Note: this is not an edible species; I didn't collect more than the occasional mushroom for microscopic study).

And Returning is more complicated nowadays, for it involves not just our personal relationship with nature but our social contracts. As a society, we decimate crucial habitats simply by the way we use newspaper and toilet paper. I feel the need to return some of my personal gain, taken at the expense of biological processes near or far, to maintain and restore those ecosystems which are still intact, and learn how to do things like increase the complexity of an ecosystem, establish symbiotic partnerships, and maintain sustainable productivity. But that is another story.

### PRESIDENT'S MESSAGE

**Marian Maxwell** 

### Survivors' Banquet

THANK YOU to all who helped with our Survivors' Banquet on Saturday! Luise Asif, Reba and Milton Tam, Ed Sakai, Hildegard Hendrickson, and Andrea and John Goldman all helped to set the banquet up and check people in. Brenda Fong delivered supplies and helped set up even though she had a prior commitment that evening *and* she had a soft cast on her foot from an injury! Thank you, Brenda! We had a great time! As usual the food that people brought in was scrumptious!

We had a productive silent auction, organized and run by Milton Tam with some of Patrice Benson's, Millie Kleinman's, Ed Sakai's, Steve Trudell's, and other members' generously donated items! All the proceeds of \$725 will go into the Ben Woo Scholarship Fund. The lucky winner of the Machel Spence photograph was Aurora Santiago. I also want to thank everyone who helped with the cleanup. I will have to thank you collectively, my apologies, since I don't know many of your names. Many hands made light work! A big thank-you to Sara Nelson for bringing a keg of incredible IPA from Fremont Brewing! It was thoroughly enjoyed by many PSMS members.

And last, a thank-you to all of the PSMS members who were kind enough to donate wild mushrooms out of their personal stash for Reba's great mushroom soups! The soups were a hit and went very fast! The polka dot balloons at the banquet were in memory of Patrice Benson, who was the recipient of the 2013 Golden Mushroom Award.

#### **Election**

Andrea Rose, Reba Tam, Luise Asif, and Teddy Basladynski were elected to a second term on the Board. Jon Hall was elected to his first term on the Board. Brady Raymond is our alternate board member and will replace a board member if for some reason, he or she must step down. Milton Tam was re-elected to a one-year term as Vice-President and Denise Banazewski was re-elected to a two-year term as Secretary. Thank you all for your commitment to PSMS and for serving on the Board of Trustees. I look forward to serving with all of you!

I would like to thank Randy Richardson for his past 4 years of service on the PSMS Board and to also thank him, Brenda Fong, and Debra Lehrberger for serving on the Nominating Committee for this past election.

Next year we will be voting on-line on our website; that will save some time for the nominating committee in that the counting is done automatically. We will mail ballots only to those who do not use a computer or those who do not have an email address listed with PSMS.

#### **VOLUNTEERS NEEDED**

Marian Maxwell



Mushroom Maynia is on Saturday, May 11, this year. We will be looking for volunteers to help with this event at the Burke Museum. You can register on-line for volunteer opportunities under "Event Registration" on our website. Please email

Debra Lehrberger at host@psms.org if you are interested.

We also need volunteers to host or help with hosting at any of the upcoming field trips in late April, May, or June.

Please check our list of 2013 committees in the file Archive section of the member's section for contact information on the various committees. You will note that we have added some committees recently. New committees are listed in green. Photography, Culinary, Programs, Finance, Ecology and Sustainability, Arts & Crafts, Volunteer Co-ordination, and Development for PSMS are all new committees.

We have elected to retire the Conservation, Picnic, Web Design, and Roster committees.

We are looking for active chairs for Ecology & Sustainability and Mycophagy. The chairs will be asked to set a preliminary budget and plan for their committee and report to the board once a year regarding their needs and plans.

Our annual show is also in need of a chair. Most of the committees for the show are managed by long-time volunteers, which makes the work for the show chair much lighter. The chair for the show oversees the committees, keeps them on track, and ensures that things go smoothly on the days of our exhibit. This particular chair will work closely with our PSMS board.

Remember, we can't run this society without volunteer help.

Please volunteer; you will meet new people and forge stronger bonds in our group. If you have any questions regarding the committees please contact me at president@psms.org or 425-235-8557.

### GENERICALLY MODIFIED FUNGUS ESCAPES UNIVERSITY LAB

ONE News, TVNZ, Mar. 19, 2013

An investigation has been launched into how a genetically modified fungus escaped containment facilities at Lincoln University [New Zealand].



The Ministry of Primary Industries launched an investigation after the fungus was found outside of the glass houses and laboratories where it is kept.

MPI says all samples and plant materials known to contain the modified fungus have been secured.



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ВЕТИВИ SERVICE REQUESTED

