

# SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY  
Number 606 November 2024



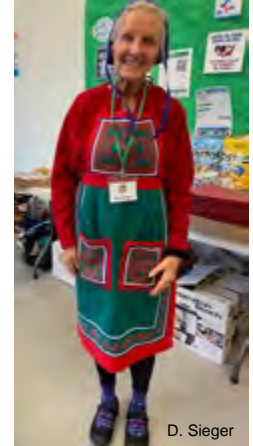
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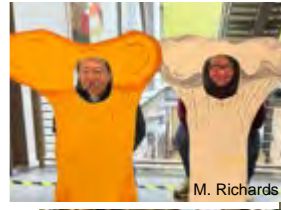
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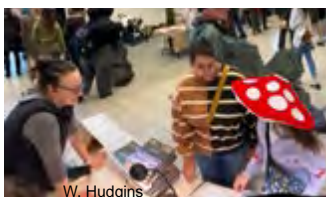
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W. Hudgins

*61st PSMS Annual  
Wild Mushroom Show  
Oct. 19 & 20th, 2024*



D. Sieger

# Spore Prints

is published monthly, September through June by the  
PUGET SOUND MYCOLOGICAL SOCIETY  
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## CALENDAR

- Nov. 3 NAMA Foray, Cispus, WA
- Nov. 12 Membership Meeting, 7:30 pm, CUH
- Nov. 18 Board meeting, 7:30 pm, CUH board room
- Nov. 26 *Spore Prints* deadline
- Dec. 10 Members' only holiday social, 7:30 pm, CUH. Registration required.

## BOARD NEWS

Caroline Kohler

At the board's meeting on October 14, Show Co-chairs Derek Hevel and Marion Richards and Volunteer Coordinator Peg Rutchik went over the last remaining details before our much-awaited **Annual Wild Mushroom Show**, which has been a huge success! We hope you all had a chance to attend and/or be a part of this fantastic event. Thank you all for making this a reality! PSMS has the best volunteers ever!

And looking ahead at our next events, Brenda Fong has been working on bringing back our legendary **potlucks**, which were put on pause a couple of years ago by the pandemic. This will likely involve a change of venue for our social gathering, and Brenda

brought some proposals, as well as ideas for an art competition and volunteer appreciation swag. We look forward to hearing more!

And talking about exciting changes, the board approved the purchase of shelving for the **new storage space** we are leasing close to the Shoreline Community College. Better organization, more space, closer to our show venue—we are *so* happy with this!

Next, the board addressed the long-standing question of whether our president has (or doesn't have) a vote in our discussions, a topic on which our bylaws have not been specific. However, the bylaws do indicate that the board procedures shall be guided by Robert's Rules of Order, and it was in accordance with these that it was decided to officially **make the board president a voting member**.

The **remaining agenda** covered several topics: potential gas-reimbursement options for volunteers, thoughts for a presidential discretionary budget, insurance issues, children's attendance at the Ben Woo Foray, and having a YouTube channel to share approved talks and presentations. Some of these issues will likely be part of discussions at future board meetings, and we will keep you posted.

Until then, have a wonderful mushroom-filled fall and a Happy Thanksgiving!

## MEMBERSHIP MEETING

Joseph Zapotosky

It's the peak of the mushroom season here in the Pacific Northwest. Yay. And it is turning out to be a good one. Fittingly, we are pleased to have Dr. Britt Bunyard as our guest speaker at this month's general meeting November 12.

Founder, publisher, and editor-in-chief of *FUN-GI Magazine*, Dr. Bunyard is also the author of several books on fungi, including *Amanitas of North America*, *The Lives of Fungi*, *The Beginners Guide to Fungi*, and an upcoming title *The Little Book of Fungi* (available for pre-order now).



Britt Bunyard.

Fungi are weird, fungi are cool, and fungi are beautiful. But how much do we really know about them? For starter, they do much more than just rot things. They control pretty much all life on our planet and are everywhere.

Dr. Bunyard's presentation is entitled "A Resilient Planet Needs Fungi NOW" and will feature fascinating stories and beautiful photos of amazing fungi featured in his latest book, *The Lives of Fungi, A Natural History of Our Planet's Decomposers*. Discover the crazy, wonderful life that goes on all around us, mostly hidden in plain sight. For general audiences, no knowledge of mycology is required, and all levels of mycological questions are encouraged for the Q&A session.

Please mark your calendar and plan on joining us for this special presentation on November 12 at the Center for Urban Horticulture, University of Washington. Doors open at 7:00 pm. The lecture starts approximately at 7:30. The meeting will be both in person and available for viewing via Zoom:

[https://zoom.us/j/93203317693?](https://zoom.us/j/93203317693?pwd=DEEkTLQ9yPvcaYp9m0qS3en55yGoQ11)  
[pwd=DEEkTLQ9yPvcaYp9m0qS3en55yGoQ11](https://zoom.us/j/93203317693?pwd=DEEkTLQ9yPvcaYp9m0qS3en55yGoQ11)

*Programing note:* December's meeting will be our members- only holiday social. Mark your calendars for this special event Tuesday, December 12th.

**61ST ANNUAL FALL MUSHROOM SHOW:  
A Delicious Success** **Marcus Sarracino,  
Co-chair of the Mycophagy Committee**

The 61st Annual Fall Mushroom Show was an absolute whirlwind of excitement, learning, and—of course—delicious wild mushrooms! Held Oct. 10 & 20, this year’s show exceeded expectations and delivered a memorable experience to all who attended. Our cooking demonstration area was bustling with talented volunteers who worked tirelessly to share the beauty and flavors of Washington’s fungi with the public.



*Marcus Sarracino, sautéing some exotic Hawk’s Wings for our dedicated volunteers to sample while Aydin Mofran takes mental notes at the mycophagy area of the show.*

We proudly served over 5,000 samples of delectable mushroom dishes! Attendees enjoyed a myriad of sautéed chanterelles, Chicken

of the Woods lemon cream sauce, hearty soups from the PSMS cookbook, authentic Italian risotto, savory Matsutake-infused broth and rice, rich stroganoff, and a mouth-watering Porcini compound butter. A big thanks to Foraged and Found for their donation of 20 pounds of chanterelles and to PSMS field trip guide Sego Jackson for another 10 pounds of gorgeous foraged oyster mushrooms and a Lion’s Mane!

Throughout the event, our cooking station was constantly busy, with a line that never quit. We inspired countless attendees to try cooking with wild mushrooms, and even learned a few new tips ourselves. The weekend was filled with hard work—from prep and setup to cooking and cleanup—and we couldn’t have done it without our amazing talented volunteers.

A huge shout-out to everyone who helped make this event a success, especially those who stepped in on the fly. Your dedication is what makes this show a triumph, year after year! Here’s to another successful event celebrating the wonders of Washington’s fungi. See you next year!



*Cooking area with Michael Hintz and Gianluca D’Alessandro cooking a chanterelle soup and chanterelle risotto, while Chris Yee serves up samples and Leslie Otto keeps us going with clean dishes*

**FIELD TRIP REPORT: Sept. 28, 2024 Brian S. Luther**

Conditions were ideal for this, our first fall field trip, in terms of both the weather and the mushrooms. Ninety-three members signed in, with 35 being on their first PSMS field trip. I can honestly say that I’ve never seen chanterelles so abundant, no matter where you went in the woods, so everyone came away with a lot.

Our morning hosts were Debbie Johnson & Jessica Breznau, who provided us with coffee and morning snacks. Thanks for starting our day out right!

Ten field trip guides volunteered to take out members. A special thank-you to all who contributed.

Concerning good edible mushrooms, Yellow Chanterelles (*Cantharellus formosus*) were by far the most abundant species found, with some folks also finding White Chanterelles (*C. subalbidus*), along with a big Cauliflower Mushroom (*Sparassis radicata*), several Woodland Russulas (*R. olympiana*, previously *R. xerampelina*), Lobster Mushrooms (*Hypomyces lactifluorum*), and small collections of Angel Wings (*Pleurocybella porrigens*). In all, 70 different species were found and displayed on the picnic tables.

The prettiest fungus was a small collection of *Ramaria stuntzii*, a brilliant red coral fungus named after Dr. Daniel E. Stuntz, who, along with Ben Woo, started PSMS in 1964 and was also our first Scientific Advisor, as well as a former UW professor. He passed away in 1983.



Brian S. Luther

*Ramaria stuntzii,*



Dave Weber

*Some of the chanterelles found by Dave & Wuqi Weber.*

The collecting was so good that some members went out again in the afternoon, after collecting all morning, and came back with just as much or even more. Tom Rutchik made an amusing comment saying “I didn’t find a *single* chanterelle”—no, he didn’t; he found hundreds of them!! Dave Weber called this field trip “chanterelle heaven.” So, I guess that Pam and I chose wisely on this location for a field trip.

Bernie, our Mason Co. campground host, supplied us with extra chairs, along with firewood and an electric chainsaw, allowing us to keep a small fire going. Thanks as always for your wonderful hospitality, Bernie.

Bernie, our Mason Co. campground host, supplied us with extra chairs, along with firewood and an electric chainsaw, allowing us to keep a small fire going. Thanks as always for your wonderful hospitality, Bernie.

About 20 members stayed for a very fine potluck at 3:30. In particular, Debbie Johnson made a delicious hearty vegan soup in a crockpot with beans and sweet potatoes, etc., and Wuqi Weber a very tasty taro dish. So, those who stayed for the meal were rewarded with very satisfying food, as always.

This was a great start to our fall field trips with everybody having a delightful time. And we have four more field trips to go.



**FIELD TRIP REPORT: Oct. 5, 2024 Brian S. Luther**

For our second field trip this fall, we had good weather but the local conditions were very dry. Fifty-seven members signed in, with 30 being on their first field trip. At this location we also always have nonmembers attending, all of whom had registered ahead with the organization that hosts us. We're blessed to have the use of this fantastic facility.

Vern Hodgson & Reiko Takahashi were our morning hosts, supplying us with very welcome hot coffee and breakfast snacks. Thank you, Reiko & Vern!

We had eight field trip guides for this outing, allowing all to go out in a group who wanted to. Extra special thanks to those of you who volunteered for doing this!

Wren Hudgins and I spent half a day on the Thursday before scouting the area and found that the conditions all around the lake were very dry. We suggested that people go to much higher elevations, and they did have success as a result. I counted approximately 140 species collected. I was kept very busy IDing once folks returned.

Edible species included some White Chanterelles (*Cantharellus subalbidus*), along with a few large *Leccinum* sp. (Red cap boletes), Matsutake (*Tricholoma murrillianum*), *Suillus ampliporus* (previously *S. cavipes*), *Suillus clintonianus* (previously *S. grevillei*), some Gypsy Mushrooms (*Cortinarius caperatus*) and a couple of nice collections of Bear's Head (*Hericium abietis*) as well as some Lobster Mushrooms (*Hypomyces lactiflorum*).

Interesting species found included several *Russula* specimens infected with *Hypomyces luteovirens*, transforming the gills into a bright green mass caused by the parasite. There was also a large interesting species of *Cortinarius* in the glaucopus group, which I sent photos of to Dr. Joe Ammirati, and will be taking him the specimens. The prettiest fungi



*Hypomyces luteovirens* parasitizing *Russula* sp.

Brian S. Luther



*Hygrophorus speciosus*.

Brian S. Luther

found were the brilliant red-orange *Hygrophorus speciosus*, mycorrhizal only with Western Larch and *Suillus ochraceoroseus* (previously in the genus *Fuscoboletinus*) with a bright pinkish-red cap, also only found with larch. I was able to do some macro-chemical tests on some selected

specimens, with colorful reactions, which is always interesting for educational purposes.

Twenty folks stayed for the end-of-day potluck, and all the food was, as usual, very tasty. This ended an excellent field trip.

**FIELD TRIP REPORT: Oct. 11–13, 2024 Brian S. Luther**

This remote group camp in the woods has always been a special weekend-long field trip and getaway. Fifty-one members came to this location for mushroom hunting, socializing and two nights of camping, with nine of them being on their very first PSMS field trip.

Special thanks go to our morning hosts Dave & Wuqi Weber, who put out a great selection of snacks and very welcome hot coffee on Saturday and made us all coffee on Sunday as well—wow! This is a nonelectric site, and the Webers brought their portable generator so they could heat water and make coffee for everybody. Special thanks, Wuqi & Dave—an “above & beyond” job well done!

Dave Dowd along with Kai Carpenter, Ashley Laabs, Paolo Asandri, Julia Benson, Alina & Ashur Warner, and Karen & Clay Dawson volunteered as field trip guides. Thank you all!

Ben Moore and I both brought chainsaws, and I worked with Ben, Vern Hodgson, and Julia Benson on all three days getting firewood cut and split for the big fire pit. We kept it going all weekend, and we went through a lot of wood! I normally stay for the day, but decided to car camp both nights (with a heavy memory foam mattress), and it was delightful. I got to bed early each night, but was up in the dark around 5:00 am starting the campfire again for everybody each morning.

We had clear weather, but conditions were very dry in the woods and edible fungi were not abundant. Nevertheless, many members found at least some White Chanterelles (*Cantharellus subalbidus*), as well as some Matsutake (*Tricholoma murrillianum*), Bear's Head (*Hericium abietis*), and single specimens of *Suillus luteus* and a few others in that genus, Pig's Ears (*Gomphus clavatus*), and *Pleurotus dryinus* (a species of Oyster mushroom). I counted 50 different species on the picnic table. Interesting.

Fungi collected included several clumps of *Hemipholiota populnea* (formerly *Pholiota destruens*) growing on downed Cottonwood, and a single *Cyclocybe erebia* (formerly *Agrocybe erebia*), which I had not seen in many years.

For members who had not tasted Matsutake, I thinly sliced and sautéed some in olive oil in an iron skillet over the fire Saturday evening and all who tried it raved about it.

Our Saturday potluck at 5:00 pm was wonderful, with many delicious dishes, as well as fresh fruit and some desserts. After that, we all sat around the campfire having wine and beer and good conversation well into the night.



*Leucopaxillus albissimus* fluorescing blue.

Brian S. Luther

Chris Stringari had a little UV flashlight, and Saturday night he demonstrated to members how *Hypholoma fasciculare* reacts to black light. He also discovered that *Leucopaxillus albissimus* fluoresces blue and that *Tricholoma pardinum* fluoresces green under black light. An unidentified *Russula* sp. was also fluorescent.



*Tricholoma pardinum* fluorescing green.

Brian S. Luther

It was truly a fantastic field trip, enjoyed by all.



Group Camp.

Dave Weber

## 11 IN AMISH FAMILY, INCLUDING 1-YEAR-OLD, HOSPITALIZED AFTER EATING TOXIC MUSHROOMS

Jordan D. Brown & Nic F. Anderson

<https://www.cnn.com/>, Oct. 12, 2024

Eleven members of an Amish family—including a 1-year-old—were hospitalized in Pennsylvania Friday night, October 11, after ingesting wild, “toxic mushrooms,” local authorities said.



Delta-Cardiff Volunteer Fire Company Station

*Emergency crews respond to toxic mushroom ingestion in Pennsylvania's Peach Bottom Township.*

A member of the family in southeastern Pennsylvania's Peach Bottom Township told authorities they became sick after eating wild mushrooms that one of them “found in the woods... and brought home for dinner,” said Gregory Fantom, spokesperson for the Delta-Cardiff Volunteer Fire Company.

The family member who reported the illnesses walked about a half-mile to a telephone booth to call 911, as the family is Amish and does not have a telephone, Fantom said Saturday.

The 11 were a man, a woman, and nine of their children, Fantom said. They ranged in age from 1 to 39.

“It was wild mushrooms, but the hospital would have to confirm the type,” Southern York County emergency medical services Chief Laura Taylor told CNN.

The fire department and EMS units went to the family Friday night after being told the 11 had “ingested toxic mushrooms and were all ill,” the fire department said in a post on Facebook.

The family was transported to WellSpan York Hospital, Taylor told CNN. All 11 patients were treated and released overnight, CNN affiliate WHP reported.

CNN has sought comment from the hospital but has not heard back. The Pennsylvania State Police and York County Sheriff's Office did not immediately respond for comment.

Peach Bottom Township is near the Pennsylvania-Maryland state line, about 60 miles south of Harrisburg.

About 6,000 toxic mushroom ingestions happen each year in the United States, more than half in children under 6 years old, according to the National Library of Medicine, which said misidentification of species is among the top reasons for mushroom poisonings.

## A SIMPLE EXPERIMENT REVEALED THE COMPLEX “THOUGHTS” OF FUNGI

Andrew Paul

<https://www.popsci.com/>, Oct. 11, 2024

Fungi are fascinating lifeforms that defy conventional notions of animal intelligence. They don't have brains, yet display clear signs of decision making and communication. But just how complex are these organisms and what can they tell us about other forms of awareness? To begin investigating these mysteries, researchers at Japan's Tohoku University and Nagaoka College conducted a straightforward test to observe the decision-making prowess of a cord-forming fungus known as *Phanerochaete velutina*. Accord-

ing to the team's study published in *Fungal Ecology*, their findings indicate fungi can “recognize” different spatial arrangements of wood and adapt accordingly to make the most of their world.

Although many people only recognize fungi by their aboveground mushrooms, those formations are just the outermost display of an often vast network of underground threads called mycelium. These interconnected webs are capable of relaying environmental information throughout an entire system that can stretch for miles. But mycelium's growth doesn't necessarily extend in every direction at random—it appears to be a calculated effort.

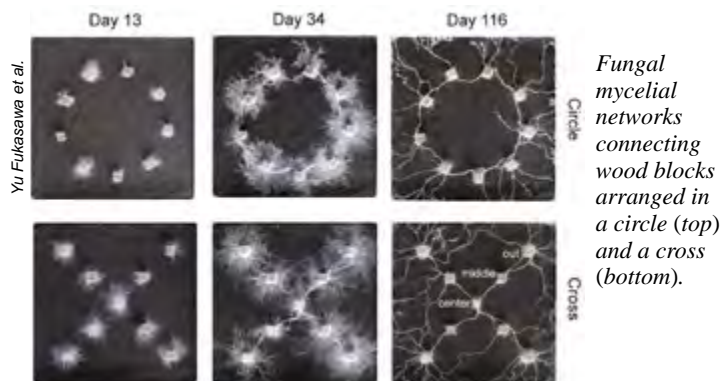
To demonstrate this ability, researchers set up two 24-cm-wide (9.44-in-wide) square dirt environments and soaked decaying wood blocks for 42 days in a solution containing *P. velutina* spores. They then placed the blocks in either a circular or cross-shaped arrangement inside the box, and let the fungus go about its business for 116 days. If the *P. velutina* grew at random, then it would indicate a lack of basal cognition decision-making—but that's not what happened at all.

At first, the mycelia grew outward around each block for 13 days without connecting to each other. About a month later, however, both arrangements displayed extremely tangled fungi webs stretching between every wood sample. But then, something striking occurred—by day 116, each fungal network had organized itself along much more deliberate, clearly defined pathways. In the circle setting, *P. velutina* displayed uniform connectivity growing outward, but barely grew into the ring's interior. Meanwhile, in the cross, the fungus extended much further from its four outermost blocks.

Researchers theorized that, in the circular environment, the mycelial network determined there was little benefit to expend excess energy into a region it already occupied. In the case of the cross scenario, the team thinks that the four exterior post's growth areas served as “outposts” for foraging missions. Taken together, the two tests strongly suggest networks of brainless organisms communicated between each other through the mycelial networks to grow according to the environmental situations.

“You'd be surprised at just how much fungi are capable of. They have memories, they learn, and they can make decisions,” Yu Fukasawa, a study co-author at Tohoku University, said in the paper's announcement on October 8th. “Quite frankly, the differences in how they solve problems compared to humans is mind-blowing.”

While much remains to be understood about these often overlooked organisms, researchers believe continued experimentation and analysis may lead to a better understanding of the broader evolutionary history of consciousness, and even chart a path towards advanced bio-based computers.



*Fungal mycelial networks connecting wood blocks arranged in a circle (top) and a cross (bottom).*

## GENETICALLY, *MYCENA* IS A SUPER GENUS

Elina Melteig

<https://www.titan.uio.no/>, Oct. 17, 2024

Carrying more than you need is not advantageous, and this applies to genetics as well. Hence, genes and DNA that are not vital tend to disappear over time. When researchers examined fungi in the genus *Mycena*, they found much more DNA compared to other fungi. Some species have four to five times more DNA. Why? “These fungi are like a mountain climber carrying a PlayStation. The best mountain climber is usually not the one with the biggest backpack,” says Christoffer Bugge Harder from the University of Copenhagen. You carry what you require, but nothing more. That’s why it’s so peculiar that this fungus has kept all these genes. At the same time, it turns out that this fungus can thrive in many different environments. It seems that the genetic baggage equips them for various lifestyles.

### The Researchers Found *Mycena* Fungi in Unexpected Places

It all began when Professor Håvard Kausrud from the Department of Biosciences at the University of Oslo, along with his colleagues, set out to investigate the symbiosis of plants and fungi in Svalbard. They discovered something they initially thought was a mistake: They found DNA from *Mycena* fungi in plant roots. *Mycena* fungi are known for being decomposers. The researchers did not believe that *Mycena* formed symbiotic relationships, known as mycorrhiza, with plants. When they found traces of *Mycena* in many root samples, they realized they had stumbled upon something intriguing. Perhaps *Mycena* fungi had a secret life among plant roots?

Together with Bugge Harder, a postdoctoral researcher at the University of Oslo, Kausrud wanted to investigate what the *Mycena* fungi were up to. This would result in several surprises.

“We did not expect *Mycena* to have such enormously large genomes. We had assumed that the genomes would reflect their lifestyle as decomposers, but we didn’t see this in the DNA,” says Bugge Harder.

In a study led by Ella Thoen, they also observed that nutrients could be transferred between *Mycena* and plants, somewhat like mycorrhizal fungi.

### Record-Breaking Amount of DNA for a Fungus

To better understand the *Mycena* fungi, researchers examined the genetic material of 24 different species in the *Mycena* genus. They discovered that *Mycena* fungi have an unusually large amount of DNA for fungi. On average, they had double the DNA of other fungi. The species with the most DNA had four to five times more than the average for other fungi. The investigation also revealed a record: The largest fungal genome found in this group of fungi so far. This record was held by the fungus *Mycena olivaceomarginata*, which has 501 million base pairs.

*Mycena olivaceomarginata*, the fungus with the largest fungal genome found to date. The fruiting body itself is 2 to 8 cm tall.



Arne Aronsen.

“This could seemingly be an advantage for them if living conditions were to suddenly change,” says Bugge Harder.

### The Large Genome Suggests a Secret Life of the Fungi

A large portion of the DNA appeared to have no function, which was a huge surprise.

“They have long, repeating sequences without any known function. In some of the fungi, 40 to 50 percent of the genetic material consisted of such sequences,” explains Bugge Harder.

“Many of the fungi are also equipped with genes for almost everything, along with genes that seem to have no known function—a duplicate of a functioning gene. Theoretically, this means they are equipped to live in various ways. This is quite unusual among fungi. They usually don’t have all possible adaptations,” says Bugge Harder.

Therefore, he believes that *Mycena* fungi might have a secret life about which researchers know very little.

“We can see how some of them invade plants and become parasites, even though they’re not supposed to, since they are primarily decomposers,” he says. “Fungi that live symbiotically with plants typically don’t have genes for breaking down plant material because they don’t need them. However, we see that these fungi, which are decomposers, have genes for both lifestyles.

### This Fungus has Used All the Tricks in the Genetic Toolbox

To acquire all these genes, the *Mycena* have used all the strategies known to researchers.

“These fungi have used all the tricks in the genetic toolbox,” says Bugge Harder. They have employed what’s called horizontal gene transfer, most commonly known among bacteria. They possess mobile DNA elements and have duplicated some of their genes, possibly even their entire genome.

The horizontal gene transfer, or “theft,” of genes from other fungi is particularly surprising. It’s common among bacteria but not as prevalent among organisms with a cell nucleus, such as fungi.

“One of the fungal groups they have taken genes from is Ascomycota, a sac fungi. They are as distantly related to *Mycena* fungi as humans are to insects or echinoderms. It’s as if we were to acquire genes from a butterfly or a sea star,” says Bugge Harder.

Bugge Harder explains that it’s not yet known exactly how the genetic transfer can occur between these fungal species.

### How do You Know the Genes are from Other Species?

“When we examine the DNA and compare it with DNA from other species, the software recognizes the structures. When you suddenly find genes in *Mycena* fungi that do not exist in their closer relatives but are instead identical to genes found in entirely different parts of the tree of life with which they are not closely related, it most likely comes from there,” he explains.

### The Large Genomes Equip Them for All Conditions

*Mycena* are found everywhere, on all continents, including Antarctica. They live in forests, grasslands, meadows, the tropics, and the tundra, but not all species live everywhere.

“Some *Mycena* are very specialized, while others seem to be highly adaptable,” says Bugge Harder. The five to six most adaptable species can be found in many different locations. Several of them are also among those with the largest genomes.

Two of these fungi are *Mycena galopus* and *Mycena leptcephala*. They are decomposers but appear to be opportunists capable of invading plant roots.

### Arctic *Mycena* Have Exceptionally Large Genomes

The researchers found the largest genomes among *Mycena* fungi in the Arctic.

“The *Mycena* from Svalbard have nearly 100,000 genes and 4–500 million base pairs. In comparison, most fungi have a genome of about 30–60 million base pairs,” says Bugge Harder.

It is already known that plants living in Arctic regions also have large genomes. Researchers believe this makes them more robust against extreme and demanding conditions.

“We believe the *Mycena* in Svalbard invade plant roots and go dormant while waiting for food to be provided, meaning for the plant to die,” explains Bugge Harder. “They have a little growth but let the plant live. If they don’t need to compete with others for food, they can afford this. The large genetic backpack prevents them from being fast. In return, they have genetic preparedness, giving them a greater chance of survival. In other places with more competition, it’s about being the fastest.”

The downside of the large genome is every time a cell divides, it must copy the entire genetic material. This takes time and resources, making cell division slower than in fungi with smaller genomes.

One possible explanation for why the fungi have retained the large genome, despite its drawbacks, is how the conditions in the Arctic make it useful to experiment a bit, suggests Bugge Harder.

“If you have only one copy of a gene, you’ll run into problems if it doesn’t work or gets altered. If you have multiple copies, you can experiment without facing vital issues.

Genetic experimentation can give rise to new adaptations and functions.

“We also see that some genes seem to ‘hitch a ride’ with the repeating sequences. Maybe it’s a method that causes certain genes to be copied more than others?” wonders Bugge Harder.

### Globally, Many Fungal Species are Threatened

“Some fungi grow only on old logs of dead wood,” explains Bugge Harder. “Other fungi grow exclusively in symbiosis with rare plants. The more specialized they are, the more threatened such fungi become.”

Although many fungi are endangered, Bugge Harder notes that the Red List of endangered species does not include any *Mycena*.

“On the contrary, we see that clear-cut forests have plenty of *Mycena*. They lie and wait within living plants and emerge to become dominant, like vultures, after logging. They seem to fare well in disturbed areas,” he says. “In relation to evolutionary history, humans have introduced significant changes in a short period. Perhaps this is an advantage for these fungi,” he concludes.

## MILLIONS OF POUNDS OF COCAINE FOUND HIDDEN IN SLICED MUSHROOMS

<https://www.itv.com/>, Oct. 21, 2024

Three men have been jailed for their part in a drugs gang that smuggled millions of pounds worth of cocaine into the U.K. hidden in sliced mushrooms.

The National Crime Agency [NCA] dismantled the group, which used Scunthorpe haulage company Merc Trans Ltd as a front, after a lorry was stopped at the port of Killingholme in Lincolnshire. Officers found 290 kg of cocaine during a search of the vehicle, which had travelled across from Holland by ferry.

The driver, Darryl Sellars, 35, was jailed for 13-and-a-half years last June after pleading guilty to importing class A drugs. Ryan Dobb-Clarke and Peter Crunkhurn, both 30, who also worked for the company, were jailed for drugs offences on October 21. Dobb-Clarke was jailed for 18 years after pleading guilty to conspiracy to import and conspiracy to supply class A drugs. Crunkhurn was sentenced to 12 years after he was found guilty of conspiracy to supply class A drugs.

Sellars and Crunkhurn made seven other lorry trips to the Netherlands and back in the weeks before the seizure, all orchestrated by Dobb-Clarke who was the company’s Operations Manager.



National Crime Agency

Confiscated cocaine hidden in sliced mushrooms.

## CHOCOLATE BRICKS FILLED WITH MAGIC MUSHROOMS SEIZED AT PEACE BRIDGE WAREHOUSE

Codi Wilson

<https://toronto.ctvnews.ca/>, Oct. 11, 2024

Members of U.S. Customs and Border Protection said they are continuing to investigate after several shipments of chocolate bricks filled with magic mushrooms were found at the Peace Bridge warehouse at the Port of Buffalo, New York. The shipments were coming from Canada to the U.S.

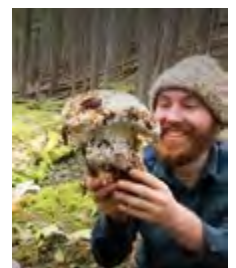
According to the release, there were a total of 15 seizures with a weight of about 10 kilograms in the last 30 days. The estimated street value of the drugs, officers said, is believed to be US\$165,000.

## B.C. MUSHROOM PICKER FINDS MASSIVE MATSUTAKE

<https://www.cbc.ca/>, Oct. 16, 2024

Imagine foraging for mushrooms in B.C.’s Interior and finding one that’s almost as big as your head. That’s what happened to Jordan Siemens, a professional mushroom hunter from Lumby, when he unearthed what could be one of the biggest matsutake mushrooms ever discovered.

Jordan Siemens with find.



## THE 2024 WILD MUSHROOM SHOW



Wren Hudgins

For our 61st annual Wild Mushroom Show on October 19th & 20th, we were back at Shoreline Community College for the third time. Show Co-chairs Milton Tam, Marion Richards, and Derek Hevel are so happy about how it went! First off, we were very busy, welcoming 3,500+ guests. Some highlights included robust mycophagy offerings, a more streamlined sorting and tray arranging process for our mushroom display, a full complement of vendors, and added “welcome” vibes for guests. Some big changes included FINALLY opening up a much larger lecture venue in the campus theater, and relocating all of our show items into a storage unit in Shoreline on the Monday after the show. Both of these efforts were challenging to pull off on top of regular show responsibilities, but our volunteers rose to the occasion and we accomplished great things. We all feel that we put on another amazing show.

The show set new record for species, 443 (thanks to *Cortinarius* probably). The previous record was last year when Noah Siegel was here from California and got us to 385. Before that it was 349.

Thank you to the mushroom collectors, who did an extraordinary job searching for all those great specimens. Our fruiting this year was somewhere between a 6 and a 8 out of 10, but the specimen “haul” was excellent, which shows how dedicated our collectors are. Please know that you are appreciated and YOU made the whole show happen.

Thanks to the leaders of the display activities—Wren Hudgins, Joe Zapotosky, Denise Banaszewski, Shannon Adams, Danny Miller, Colin Meyer, and Dennis Oliver. Thanks to Noah Siegel, who helped us streamline the sorting effort and identify species. Thanks to Mike Li at admissions and our new volunteer coordinator Peg Rutchik at volunteer/vendor check-in, two huge roles that they met with huge amounts of skill and patience. Thank you to our membership chair Pacita Roberts, who couldn’t attend this year, but who pre-loaded all the membership shifts with experienced folks to cover the weekend. Thanks to our great speakers—Daniel Winkler, Noah Siegel, Shannon Adams, Wren Hudgins, Dr. Steve Trudell, and Alana McGee. Thanks to Milton Tam for getting our

lecturers on board. Bravo to Marcus Sarracino and Molly Watts for leading the cooking demos and tastings. Milton Tam again led at the cultivation table, where a record number of oyster kits were made and sold out by noon on Sunday! Thanks to IDers Brian Luther, Wren Hudgins, Noah Siegel, Shannon Adams, and Colin Meyer for your time and expertise. Thanks to Marion Richards for expanding the arts & crafts presence, with not only dyeing but also rug-hooking, flat bag weaving, knitting, spinning, and needle felting. Thanks to Paolo Assandri at books and merchandise sales, Dory Maubach at the microscopes and touch & feel tables, Kate Turner at the fluorescent “haunted house,” Brenda Fong for leading hospitality, Paul Hill for the photo show, and Wren Hudgins for the ASK ME program. Thanks again to Daniel, Colin, Wren, and Paul for giving tray tours, which are always a favorite with the public. Thank you to the lichen table leads Dr. Katherine Glew and Dennis Oliver. As our new treasurer, Cindy Brewster (and assistant Megan B.) did a great job accounting for all the financials at the show. Thanks to Milt and Marion for organizing the vendors. HUGE thanks to Kelsey Hudson and Tea McMillan for driving and navigating the rental truck, especially considering the added stop to the new storage unit. Thanks to Milton, Colin, and Cindy for getting the SCC contract wrapped up. This year’s graphic design for the poster, post cards, yard signs, and digital media was done by Pei Pei Sung and distributed by Marion and Shannon. Thank you again, Marian Maxwell, for helping to set up the volunteer shifts online and helping with so many communications leading up to the show.

Finally, thanks to all the volunteers who found a couple of hours or devoted their entire weekend to make the show successful. We again enjoyed working with you and we could not have done it without your hard work. A huge thank you to the loaders and unloaders of the truck, and those who set up and took down the show. Gold stars to Peg and Tom Rutchik for incredible dedication, for the third year in a row. And so everyone is clear what it takes to put on a mushroom show, here’s a list of all the volunteers not already mentioned above (with apologies for anyone we missed):



Jessica Adkison	Jacquelyn Bonjean	Jenny Cunningham	JoAnna Forwell	Jennifer Hsiao	Elizabeth Lind
Christie Aesquivel	Paul Bonjean	Gianluca D'Alessandro	Amy Foster	Suzi Ibach	Katherine Littman
Debra Aker	Adam Borkoski	Clay Dawson	Emily Franco	Cindy Ide	Kitty Loceff
Jo Alex	Igor Braginskiy	Karen Dawson	Sharon Fuller	Sego Jackson	Daniel Lopez
Mahta Ansari	Tatiana Browning	Erika Degens	Maria Gerace	Katie Jendrey	Dennis Lovelett
Nick Anthony	Diane Bruckner	Sebastian Degens	Lance Gerasimenko	Austin Johnson	Erin Lowe
Jamie Ardena	Bruce Busby	Dave Dowd	Eleanor Goodall	Debra Johnson	Sue Lynette
Matt Babcock	Chigako Butler	Courtney Duhaime	Patty Hawley	Kristy Johnson	Amelia Magin
Debora Baily	William Butler	Tom Eng	Rebecca Hawley	Maile Jones	Frieda Magin
Reeve Baily	Cath Carine	Steve Eriksen	William Hawley	Julie Keister	Michelle Marineau
Aarav Balsu	Patrice Carroll	Ksenia Ershova	Mandi Headrick	Eve Keller	Jo Masaki
Donna Barnett	Molly Case	Shelly Evans	Gwendolyn Heib	Jennifer Kim	Marco Mazzoni
Julia Barnett	Judith Cederblom	Bob Ewen	Kaisee Herres	Peter Klein	Kate McPeck
Chris Behrens	Becky Chan	Oryx Fairbanks	Michael Hintze	Felicia Kloewer	Izumi Mitsuoki
Jennifer Bennett	PC Chan	Laura Feinstein	Kit Ho	Matthew Koons	Aydin Mofrad
Courtney Biggs	Joan Chen	Jane Ann Feldman	Vern Hodgson	Susan Lammers	Alison Moon
Sunida Bintasan	Fengling Cheng	Kenneth Feldman	Matthew Horton	Gail Landress	Ben Moore
Rae Boccamazzo	Sarah Clark	Leah Figueroa	Catherine Houston	Larry Lee	Gabe Mousa
Victoria Bona	Collene Collins	Michon Fontenelle		Linda Li	Dan Dunphy
	Stephanie Coloma			Mei-shiou Lin	Donna Naruo

Nicole Nava	Virginia Pinkers	Andrea Schommer	Anne Tarver	Ryan Wheeler
Carolina Nurik	Steven Pollak	Robert Schommer	Tracy Thompson	Jossilynn Widdis
Erin O'Dell	Cindy Ponko	Maddy Scott	Aenea Towns-von	Brandon Wilhite
Aiden Oh	Stefan Ponko	Karen Semyan	Stauber	Jill Williams
Sewoong Oh	Ron Post	Scott Semyan	Ann Touza	Richard Williams
Leslie Otto	Drew Powers	Kathy Slattengren	Peter Truog	Silviarose Wilson
Rich Pakker	Ken Renner	Nataliya Slyusarchuk	Tony Tschanz	Jamie Wise
Pamela Pakker-Kozicki	Peter Ricci	Oleg Slyusarchuk	Joshua Vanveldhuizen	Rachel Woods-Robinson
Dan Paquette	Sarah Richards	Mat Stankiewicz	Kiwi Villines	Elizabeth Wright
Jung Park	Randy Richardson	Kristin Stemke	Debra Wang	Laurie Wu
Edward Patton	Eric Rosko	Shannon Stevens	Jenny Wang	Christopher Yee
Andrei Pavlichenko	Sandra Ruffner	Rachel Su	Mary Watson	Joanna Young
Benjamin Perodeau	Yoshimi Sakura	Andrew Sudangnoi	Dave Weber	Hai Zhang
Nguyen Pham	Harrison Salton	Reiko Takahashi	Wuqi Weber	April Zhao
Lynn Phillips	Elaine Schmidt	Reba Tam	Stewart Wechsler	
	Gwynne Schnaittacher	Narumol Tan	Lily Werner	

Great work, everyone!  
Only 11 months until we get to do it again next year!

### 2024 Show Co-Chairs



Milton Tam

Marion  
Richards

Derek Hevel