2020 VIRTUAL WILD MUSHROOM SHOW

Derek Hevel

On October 17 and 18, PSMS held its first-ever virtual Wild Mushroom Show! Early in 2020 as COVID-19 hit, it became clear that the 2020 fall show would be very different. After PSMS canceled spring’s Mushroom Maynia, we wondered if this year’s fall show would suffer the same fate. All year we considered the possibilities, but finally decided to play it safe with an all-virtual show to satisfy members’ mycological cravings. Picking up on the successes of our Zoom-based monthly meetings, we knew that offering speakers remotely would be easy and popular, but we also took on a wide range of video production efforts to substitute for live activities like cooking, dyeing, and cultivation.

Our four lectures went splendidly, attracting between 100 and 200 guests each. On Saturday, Daniel Winkler spoke first with a talk called “Choice Edible Mushrooms of the Pacific Northwest,” followed by Alana McGee who spoke about truffles with “Growing and Harvesting Native and European Truffles in the Pacific Northwest.” On Sunday, Noah Siegel gave a talk titled “Exploring the Unknown: Cryptic Mushroom Diversity in your Back Yard,” followed by Danny Miller presenting “Families of Mushrooms in the Pacific Northwest: Solving Mysteries with DNA.” Aside from a few technical glitches, everything went great. Our usual in-person lecture spaces accommodate only about 100 guests, so we were happy that more people than usual got to sit in on these great talks.

Our video production team did something PSMS has never done before: It produced a set of fun, educational videos presented completely online. Not only did we try to cover a range of activities we would normally present at a live show, but we learned how to film, edit, and present all this material with varying amounts of technological and Internet know-how. I didn’t know what to expect, but I am so impressed by the effort and commitment so many people gave to expand our video archive. In all, we produced and hosted twenty-five videos! I heard back that some of the most-viewed ones were the cooking, dyeing, and safety videos, and I especially loved the “I’m a Mushroom” song at the end.

Unfortunately the lectures were not recorded, since the information is proprietary material, so the virtual show was your one chance to hear them. However, all of the show videos will continue to remain available to members for the foreseeable future! The emailed video links have been disabled, but the links in the “Videos” area of the member’s page (at the bottom right of the page) will take you to our new video archive.

While there were fewer volunteer needs this year, there are still so many people to thank for helping put on the show. Thanks to Daniel, Alana, Noah, and Danny for their terrific lectures. Milton Tam and Molly Swesey-Watts helped me co-chair the show. Marion Richards gave countless hours organizing and hosting the lectures and making and hosting videos. Marian Maxwell also put in countless hours handling registration and membership issues. Hugh Timmons managed our video links to the website. PSMS video presenters included Jamie Notman, Milton Tam, Wren Hudgins, Marion Richards, Paul Hill, and Larry Martin. Marcus Sarracino and Bridget Egan contributed tremendous technical and editing assistance. Short videos were produced and submitted by Daniel Winkler, Molly Swesey-Watts, Pei Pei Sung, and Gabriela D’Elia. Randy Richardson relayed important info here and there to tighten up some of the loose bows. Many members helped to publicize the show, but special thanks to Lisa Page Ramey for creating the digital show banners and Shannon Adams for promoting us on social media.

Thanks to everyone for joining the virtual show this fall and hanging in with PSMS this year. We are all looking forward to returning to a live show next year, so let’s all do our parts to stay safe and healthy to make that happen!
that information was posted on the PSMS website and that the links were functioning appropriately. After the show the videos were removed from public view. Some, as approved by presenters, will be made accessible for our members’ enjoyment.

There will be no live meetings at CUH through the end of this year. The usual Holiday Extravaganza has also fallen victim to COVID. Marion Richards is working to provide a speaker for the December meeting. More classes are in the works for early 2021.

A change in the enrollment process was approved by the board. For eight years, a box of Twinkies sat in Colin Purrington’s basement until last week when he finally opened them. Varying levels of mold had developed on the snack cakes, and he eventually sent them to two West Virginia University scientists to study the kind of fungus growing on them. For four years, a box of Twinkies sat in Colin Purrington’s basement until last week when he finally opened them. Varying levels of mold had developed on the snack cakes, and he eventually sent them to two West Virginia University scientists to study the kind of fungus growing on them. Purrington said that some of the cakes in the box appeared untouched, one had clearly aged and appeared to have sucked in air from its packaging, and another had a brownish spot that looked like mold. Purrington said that he was sending the snack cakes off to a scientific lab for closer analysis.

That analysis process was detailed in a long thread written by Matt Kasson, Ph.D., an associate professor of forest pathology at West Virginia University in Morgantown. Kasson’s research focuses on various types of fungi. The thread started with a sample of the worst-looking cake. Kasson said that cake, which was gnarled and gray and barely resembled a Twinkie at all, was “challenging” to work with, but he and Brian Lovett, who also studies fungi at West Virginia University, were able to use a bone marrow biopsy tool to take a sample. A second Twinkie, this one with just a slight growth on it, was “challenging” to work with, but he and Brian Lovett, who also studies fungi at West Virginia University, were able to use a bone marrow biopsy tool to take a sample. A second Twinkie, this one with just a slight growth on it, was “challenging” to work with, but he and Brian Lovett, who also studies fungi at West Virginia University, were able to use a bone marrow biopsy tool to take a sample.

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A 8-Year-Old Twinkie, cont. from page 3

close-up photos on Twitter. In one picture, it appeared that the
cake snack still had a slightly soft center.

In a video, Lovett and Kasson cut into the less-damaged Twinkie
and found that the creamy interior was perfectly preserved.

Today Food reached out to Hostess for a comment about the
phenomenon, but has not received a response.

LOST FORKS MUSHROOM PICKER FOUND


FORKS - A Forks woman who became lost in the woods near
the Calawah River was rescued after her calls for help were reported
to law enforcement.

The woman, whom Clallam County Sheriff’s Office personnel
decided to donate due to potential embarrassment, got lost while
picking mushrooms Saturday evening north of Forks and didn’t
have a light or other survival supplies, said Sgt. John Keegan of
the Clallam County Sheriff’s Office.

“She had gone out earlier in the day, got stuck, wandered around,
and found the river,” Keegan said. “From the river, she could see
lights from houses and she started to yell to try and get somebody
to hear her.”

The strategy worked. The woman was rescued early Sunday
morning after the Sheriff’s Office received a 9:30 pm Saturday
call from a Riviera Drive residence reporting calls for help coming
from the opposite side of the river.

A multi-agency response followed as a Forks Police Department
officer staked a position near the woman’s location on the south
side of the river, and a search team made up of members of the
Puget Police Department, the Sheriff’s Office, and the Clallam
County Volunteer Search and Rescue Team began to clear a path
to the woman.

A river-crossing rescue was ruled out due to darkness and river
conditions after heavy rains.

“We tried to mitigate all the circumstances that would make the
situation go from bad to worse, and it was easier to go into the
woods to find her than to introduce water into the rescue. The
Forks police officer on the other side could see and hear her at all
times if conditions changed.”

Due to the dense forest, the search team had to use machetes to
clear a 1-mile-long trail to the woman. The search team made
verbal contact with the woman around 2:10 am and located her
about 10 minutes later.

After being provided with warm clothes, a blanket, and some warm
liquids, the woman was transported to her vehicle parked near the
3000 block of Sitka-Sol Duc Road.

Keegan said the incident was a good reminder to be more cautious
when recreating in the wilderness.

THOSE FUNNY CHEESE SMELLS ALLOW MICROBES TO “TALK” TO AND FEED EACH OTHER

https://www.eurekalert.org/, Oct. 16, 2020

Mediterranean SOMERVILLE, Mass. - Researchers at Tufts
University have found that those distinctively funky smells from cheese
are one way that fungi communicate with bacteria, and what they
are saying has a lot to do with the delicious variety of flavors that
cheese has to offer. The research team found that common bacteria
essential to ripening cheese can sense and respond to compounds
produced by fungi in the

The researchers found that the VOCs altered the expression of
many genes in the bacteria, including genes that affect the way
they metabolize nutrients. One metabolic mechanism that was
enhanced, called the glyoxylate shunt, allows the bacteria to
utilize more simple compounds as “food” when more complex
sources such as glucose are unavailable. In effect, they enabled
the bacteria to better “see” some of the VOCs and use them as
sources for energy and growth.

“The bacteria are able to actually eat what we perceive as
smells,” said Casey Cossetta, post-doctoral scholar in the
department of biology at Tufts University and first author of the study. “That’s
important because the cheese itself provides little in the way of
easily metabolized sugars such as glucose. With VOCs, the fungi
are really providing a useful assist to the bacteria to help them thrive.”

There are direct implications of this research for cheese producers
around the world. When you walk into a cheese cave there are
many VOCs released into the air as the cheeses age. These VOCs
may impact how neighboring cheeses develop by promoting or
inhibiting the growth of specific microbes, or by changing how the
bacteria produce other biological products that add to the flavor. A
better understanding of this process could enable cheese producers
to manipulate the VOC environment to improve the quality and
variety of flavors.

The implications of the research can even extend much further.

“Now that we know that airborne chemicals can control the
composition of microorganisms, we can start to think about how to
control the composition of other microorganisms, for example in agriculture to
improve soil quality and crop production and in medicine to help
manage diseases affected by the hundreds of species of bacteria
in the body,” said Wolfe.

A PUDELPOINTER AND MUSHROOMS: A DIFFERENT PATH TO EARNING MUSHROOM OF THE WEEK


Bodo, a mushroom-hunting Pudelpointer, helped Sean Porter to
earn Sun-Times “Mushroom of the Week” honors. “He loves a
good bike in the woods,” Porter mused.

That’s something a little different. The American Kennel Club
describes Pudelpointers, a cross between a poodle and a pointer, as
“a calm, self-controlled

usual scent gun dog with a
distinctive, unflamboyant look.

Normally, Mushroom
of the Week, the celebration of
mushrooms around Chicago outdoors, runs in the
second to two-page out-
section in the Sun
Times Sports Saturday. But
so many interesting

opportunities for Dogs
and Feng experiments are
coming this fall that I add
ed a special Wednesday
edition, at least for this
week or so.

PLANT ROOTS GROW TOWARD SOIL FUNGI

https://www.miragenews.com/, Oct. 16, 2020

Roots were “given the choice” to
grow toward or away from odors
of different soil fungi.

Wagenstein University & Research (WUR) demonstrate that this is
the case. It appears that plants perceive the odor produced by
soil fungi and react to them before they come into contact with
the fungi.

To demonstrate this, the researchers developed a unique test
set-up in which they grew turnip raps (Brassica rapa) seedlings
in soil and the roots were “given a choice” to grow toward or
away from odors of four different soil fungi. The results showed
that the roots ignored the odors emitted by certain fungi but
were attracted to the odors emitted by other fungi. Interestingly,
plants appeared to be particularly attracted to odors emitted by
a harmful fungus.

Oppotunities For Plant Protection And Growth Promotion

Exposure of plant roots to these fungal odors influenced plant
interactions with leaf-eating caterpillars and root-feeding insects
and nematodes (little worms), sometimes making plants less suitable
food to these attackers.

In the search for sustainable agricultural practices, odor from soil
microbes are therefore promising candidates for plant protection
and promotion. The findings also raise new follow-up questions
about whether plants can actively “decide” what direction they
grow in based on what microbial-organisms they interact with,
whether it is actually the fungus that attracts roots for its
own benefit.
Plant Roots Grow Toward Fungi, cont. from page 5

New Research Method
Moreover, the design of the research is a proof-of-concept that roots do respond to microbial odors. “The research has provided a new method for studying the chemical interaction between roots and soil fungi, and its influence on root growth. This innovative set-up can also be used by other laboratories to further investigate these interactions,” says Moisan’s promoter Prof. Marcel Dicke.

THAI MUSHROOM HUNTER LOSES LEG IN LANDMINE EXPLOSION

Bangkok Post, Oct. 18, 2020
SI SA KET - A villager lost his right leg in a landmine explosion on the border with Cambodia in Kantharalak district on Sunday while foraging for mushrooms, a military source said.

The incident occurred at about 10 am while Thanat Khamphitchu, 25, from Moo 5 village in tambon Khamun and his relatives were picking mushrooms in a forest near the Thai-Cambodian border in tambon Sao Thong Chai.

Thanat accidently stepped on a landmine, and the blast severed the lower part of his right leg.

Soldiers from the 12th Infantry Battalion of the Suranaree Force and rangers from the 23rd Ranger Regiment rushed to the spot on hearing the loud explosion.

They performed first aid treatment on Thanat to stop the bleeding before taking him to Kantharalak Hospital in an ambulance.

People living along the Thai-Cambodian border, particularly in an area near the Khao Phra Viharn ruins, have been warned by authorities to be extremely careful to avoid landmines missed by earlier mine-clearing operations. Warning signs have been erected in areas where previous explosions have taken place.

The areas bordering Thailand and Cambodia were battlefields between warring Khmer factions in the 1990s, when thousands were killed.

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INFECTED BY A VIRUS, A KILLER FUNGUS TURNS

Cordyceps militaris

In this study, a synthetic form of cordycepin was evaluated to see if it could be curative for something else: jet lag.

The results were positive. In mice, scientists found that synthetic cordycepin drastically helped the animals adjust to time change. Normally when mice are exposed to an 8 hour time change, imagine flying from New York to Abu Dhabi—it would take them 10 days to adjust. The mice on cordycepin took only four days.

Erquan Zhang, the study’s senior author and an assistant investigator at The National Institute of Sciences Beijing, tells Inverse that these results suggest that cordycepin can help reset our circadian rhythm. That’s the cycle of hormone release that governs our sleep and wake cycles as well as other processes. It’s also known as the biological clock and the body clock.

“We want to let people know that drastic and quick changes for our body clock are possible,” Zhang says.

The study was published Wednesday in Science Translational Medicine.
CRAB FLORENTINE  Wren Hudgins

*Recipe on page 166 says and, not or. PSMS Cookbook owners, please make the correction.

**Ingredients**

4 TBs butter
4 TBs flour
1 cup milk
1/3 cup dry white wine or white vermouth
1 to 2 cloves garlic, minced
Paprika
1 cup Gruyère cheese, grated
3 to 4 oz spinach or arugula
6 oz hedgehog, chanterelle, cauliflower, or porcini* mushrooms, sliced
2 shallots, chopped
4 TBs butter
6 oz Dungeness crab meat
1 lemon or lime

**Instructions**

1. To make the cheese sauce, melt the butter in a saucepan, add the flour, and then stir to make a roux. Add the milk and heat while stirring until thick. Add the white wine or vermouth, continuing to stir until mixed and hot. Stir in the garlic and paprika. Remove from heat and stir in the cheese.

2. Wilt the spinach or arugula in a glass bowl in a microwave, 1 minute per ounce. Divide in half and place in the bottom of two gratin dishes.

3. Sauté the mushrooms and shallots in the butter. Spoon evenly over the spinach or arugula.

4. Mound the crab over the mushrooms. Top with the cheese sauce and sprinkle with more paprika.

5. Bake in a 425°F oven until bubbling and lightly browned, perhaps 20 minutes.


*Serves 2