

SPORE PRINTS

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Number 564 September 2020



FOUR TERMINALLY ILL CANADIANS GAIN LEGAL RIGHT TO USE MAGIC MUSHROOMS FOR END-OF-LIFE DISTRESS

David E. Carpenter
Forbes, Aug. 8, 2020

Four Canadians facing incurable illnesses can now legally consume magic mushrooms to begin healing from the crushing anxiety brought on by end-of-life fears.



Peter Dejong/Associated Press

Psilocybin mushrooms.

Canada's Minister of Health, Patty Hajdu, this week granted the four individuals the right to use psilocybin therapy to treat end-of-life distress. The compassionate ruling is the first of its kind in Canada since 1974 when magic mushrooms—which contain the psychoactive substance psilocybin—were made illegal along with the creation of the Canadian Drugs and Substances Act.

According to Health Canada's website, currently possessing, producing, or selling anything including psilocybin is illegal unless authorized for clinical trials or research purposes.

The recent landmark decision by the Canadian Minister of Health is part of a larger movement across the world that's seeing psilocybin-assisted therapy used as an effective treatment for ailments like depression, addiction, and anxiety. Rigorous studies at Imperial College London and Johns Hopkins University in the U.S. are showing great promise with psychedelic-assisted therapy for emotional traumas—including with patients facing debilitating worries from terminal diagnoses.

The effort in Canada was led by Dr. Bruce Tobin, a psychotherapist and founder of TheraPsil, a nonprofit advocacy group working to help Canadians gain the right to psilocybin use. First advocating for psilocybin therapy for terminal patients in 2017, Tobin believes his initial attempts were then rejected by the Minister of Health due to the "hypothetical" nature of his request. Later pivoting to a strategy that included helping specific individuals with incurable or terminal diagnoses to submit their own personal exemptions made all the difference.

Thomas Hartle was one of those people. Diagnosed with incurable Stage 4 colon cancer, Hartle says the lack of available options for terminal patients facing end-of-life anxiety—options that treat more than just the symptoms—led him to the idea of magic mushrooms. He was looking for solace from the gnawing feeling of his impending death. "There really isn't anything available that treats existential dread," he says.

In a recent video, Hartle speaks of the necessity for legal psilocybin therapy and harkens back to the research done over 60 years

ago when psychedelic drugs were showing great efficacy treating a wide range of emotional traumas. Then came the 1970s and sweeping global drug laws that demolished any forward progress for such treatments. The 52-year-old likens his cancer to a house on fire—and suddenly fire trucks are made illegal.

Along with the bravery of those four patients willing to go public in their fight for psilocybin access, Dr. Tobin gives credit to the support and advocacy of the issue by elected officials, commending "their willingness to listen to patients who have not been heard and to shift focus and policy to accommodate their interests and protect their needs."

Patients also had the great support of the Canadian public behind them. Earlier this summer, TheraPsil commissioned a poll of 1,509 adults, which showed a majority of Canadians approved of psilocybin for end-of-life care. When informed by pollsters that recent clinical studies have shown that psilocybin helped treat end-of-life distress for terminally ill patients, Canadians strongly backed the currently illegal treatment with a 59 percent approval rating.

TheraPsil's continued advocacy will include working with the Canadian Ministry of Health to create regulations where psilocybin therapy is a decision made between a patient and their doctor—not between a patient and the government.

HOW TWO NEW FUNGUS SPECIES GOT NAMED AFTER THE COVID-19 PANDEMIC

Susan Milius

<https://www.sciencenews.org/>, Aug. 17, 2020

Never mind that they're not viruses. Catching the trend of cocktails called quarantinis and registered racehorse names like Wearamask, two fungal species now have pandemic-inspired monikers. In a nod to the new normal of science, both names grew out of the frustrations of trying to keep research alive in an upside-down world.

In the first case, tiny fungal leopard spots on saw palmetto leaves turned out to be new to science. Despite looks, they belong to the same family (Xylariaceae) as the black stubs that rise from the ground called dead man's fingers.

The leopard spots are not just a new species but represent a whole new genus, mycologist Pedro Crous and colleagues announced in the July 2020 *Persoonia*. As the pandemic raced across Europe, Crous—working mostly from home instead of in his lab at Westerdijk Fungal Biodiversity Institute in Utrecht, the Netherlands—named the genus "*Diabolocovidia*," or "devilish COVID."

Finding the new species wasn't that hard, says forest pathologist Jason Smith. He'd had some spotty leaves lying around his lab at the University of Florida in Gainesville when another coauthor visited in search of novelties. "This speaks to something a little

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MEMBERSHIP MEETING

Tuesday, June 9, 2020, at 7:30 pm.*

This month’s speaker is Jeff Stallman. He will be offering a virtual meeting through Zoom. Folks that are interested will be able to access the meeting through our webpage www.psms.org. The virtual meeting will be September 8, 2020, at 7:30 pm PST. We will open the meeting 30 minutes prior to our speaker to allow for people to say hi and “mingle” before Jeff begins!



His topic is “What’s going on with mycology in the Hawaiian Islands?” After six years of studying fungi in Hawai‘i, Jeff will share what he has learned by providing an introduction to Hawaiian natural history and fungi and addressing some common questions: What are the best mushrooms in Hawai‘i for the table? Where are the best places and times of year to find mushrooms? How many total species occur, and how many are endemic to Hawai‘i?

Jeff Stallman has been a PSMS member for ten years, living on Hawai‘i Island for the past six. He received his M.S. in Tropical Conservation Biology and Environmental Science from the University of Hawai‘i at Hilo studying *Lepiota* and related mushrooms in Hawai‘i from 2016–2019, and received a Ben Woo grant from PSMS in support of this work. While working field-based restoration and research jobs, Jeff is constantly on the lookout for fungi, and spends his free time studying Hawaiian natural history and mushrooms, which he will present to PSMS. He will be joining the Aime lab at Purdue University to pursue a PhD in the fall of 2020.

***Note:** As in May and June, this will be a virtual meeting conducted on Zoom. Members will need to register ahead of time. A link and a password to the meeting will be sent to the email address given in your registration within an hour before the meeting.

CALENDAR

Sept. 8 Membership meeting, 7:30 pm via Zoom
Sept. 21 Board meeting, 7:00 pm via Zoom
Sept. 22 *Spore Prints* deadline

BOARD NEWS

Luise Asif

Welcome to the new 2020 fall season! Because of COVID-19 and not being able to reserve group camps, there will be no fall field trips. We hope you will still go out in family groups. The University has cancelled in-person meetings for September, so the PSMS membership meeting will again be via Zoom. ID clinics, usually held Mondays at CUH, are also cancelled due to the University restrictions. However, take advantage of the PSMS identifiers available on ID@psms.org. Be sure your picture includes the cap, stalk, base, and gills/pores.

Fall Show Chairs Milt Tam, Derek Hevel, and Molly Swesey-Watts are working hard to produce an exciting virtual alternative to our usual live show. Speakers are already scheduled, and plans are for a number of short programs to be broadcast Saturday and Sunday. The board is also looking ahead to 2021 and working on programs and lectures.

Stay well, stay safe and in good spirits.

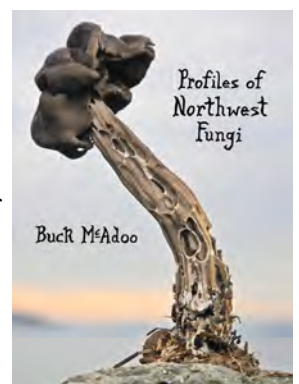
BOOK REVIEW

Lee Whitford

Profiles of Northwest Fungi
Buck McAdoo
GL Design, 2020

576 pages,
646 colored images
\$54.95 from GL Design

The cover of Buck McAdoo’s new book with a photo of a gnarly, weathered *Helvella vespertina* clues us in that this is not our traditional mushroom guide. In this hefty volume Buck provides an in-depth look into over 90 fungal species, with hundreds of photos and an entertaining scientific approach to each one. But most importantly, we get a peek at Buck’s enthusiastic interactions with those who found the fungi, the mycologists he consulted, and the resources he used to get the full story.



Profiles of Northwest Fungi is the revised compilation of the "mushroom of the month" column from the newsletter of Bell-

ingham’s NW Mushroomers Association. Buck began writing “Mushroom of the Month” for his local mycological society’s newsletter in 1989. Before personal computers were common, he had color photos printed of that month’s mushroom that were then taped into each newsletter. Over the years he produced a wealth of articles that tell the story of how the mushroom was found, a technical description of its features, edibility, look-alikes, and the fascinating, often complicated, history of its nomenclature.

The book features an expanse of genera from the familiar edibles to bizarre, rarely seen finds. Buck sprinkles drawings, recipes, medicinal uses, and wry insights throughout the book. For those who appreciate having fun with a sometimes dry subject reading, there is a small collection of his April Fools Mushroom of the Months at the back of the book.

Profiles of Northwest Fungi will provide hours of educational and entertaining reading for those familiar with basic mushroom identification. You will learn about Louie Bird’s wife who let a large polypore encompass her gladiolas for 5 years, the arrival of Death Caps in Bellingham, WA, and the fungus that threatened Buck’s beloved wooden boat.

Buck is a talented writer and exceptional amateur mycologist. He presents a one-of-a-kind hybrid of mycological field guides and natural history writings that inspire our own adventures into the world of mycology.

Fungi Named After COVID-19, cont. from page 1

P. Crous et al/Perisoonia 2020



Named during the pandemic, this new fungal species got a COVID-19-inspired name. *Diabolocovida claustris* (asexual spores, bottom right) grow on leaves of Florida’s saw palmettos (left) causing spots (top right).

broader,” Smith says. Even everyday places hold new fungal species because, unlike birds and mammals, most fungi are unnamed.

In the second case, Purdue University biologist Danny Haelewaters was supposed to be on six-nation field trip from Panama

to eastern Russia. Instead, he was grounded in West Lafayette, Ind., socially distant from his coauthor André De Kesel, a mycologist at Belgium’s Miese Botanic Garden.

Another new fungus species with a pandemic-themed name, *Laboulbenia quarantena*, is known only as microscopic sexually reproducing hairlike tufts on one species of ground beetle. Unlike most fungi, this one doesn’t form the classic cobwebby filaments of mycelium.



Many unknowns don’t get the love they deserve because they’re parasites, Haelewaters laments. Yet “parasites are so incredibly diverse” and influence a host species so much they can essentially “run ecosystems,” he says.

In hopes of raising interest in these overlooked wonders, he chose the epithet *quarantena* for a new species of microscopic *Laboulbenia* fungus described July 30 in *MycKeys*. Found twice so far in the botanic garden on a kind of ground beetle, *L. quarantena* fungi look like tiny, warped bananas with antlers. The new species reproduces only via sex, which is weirdly simple for a fungal lifestyle.

Citations

P.W. Crous et al. Fungal Planet description sheets: 1042–1111. *Perisoonia*. Vol. 44, July 2020, p. 301. doi: <https://doi.org/10.3767/perisoonia.2020.44.11>.

D. Haelewaters and A. De Kesel. Checklist of thallus-forming Laboulbeniomycetes from Belgium and the Netherlands, including *Hesperomyces halyziae* and *Laboulbenia quarantena* spp. nov. *MycKeys*. Vol. 71, July 30, 2020, p. 23. doi:

PORT ANGELES MUSHROOM HUNTERS FOUND AFTER GETTING LOST
Paul Gottlieb

Peninsula Daily News, Aug. 20, 2020



PORT ANGELES — Two Port Angeles residents who were reported overdue from picking mushrooms were found early Wednesday morning by a search-and-rescue team after the women spent the night in a densely forested area west of Port Angeles, according to the Clallam County Sheriff’s Office.

Michelle Clayton, 42, and Darlene Wilcox, 65, were scheduled to return home at 7 pm. They were found at 5:30 Wednesday morning, Sgt. John Keegan said Wednesday.

Clayton and Wilcox were wearing jeans, T-shirts, and sweatshirts in temperatures that were in the upper 60s, Keegan said in an interview. The women did not have food, water, or shelter, and their cellphone battery died when they called family members for help, he said.

They had left their vehicle at the state Department of Natural Resources gate on state Highway 112 across from Dempsey Road, Keegan said in a press release.

The search-and-rescue team was called out after a deputy could hear the women but could not find them because of the heavily forested terrain. The team located the women after about 20 minutes of making voice contact, Keegan said.

He cautioned anyone hiking or mushrooming in the wilderness to bring extra clothes, a knife, flashlight, first-aid kit, map, compass, something that can be used as a shelter and a signal device, such as a whistle.



ACCORDING TO A CHEF TURNED MUSHROOM SCIENTIST, WE'VE BEEN COOKING MUSHROOMS WRONG ALL THIS TIME

Broadsheet.com.au., June 2020
via *The Spore Print*, L.A. Myco. Soc., June 2020

Mycologist Jim Fuller—co-founder of Fable, a new company making mock meat out of shiitake mushrooms—reckons you can extract loads of meaty flavor from most fungi by turning a longstanding French technique on its head.

Don't wash your mushrooms or get them wet. Use lots of oil or butter. High, high heat. Don't overcrowd the pan. Cook in batches. No salt until the very end.



These are the cardinal rules we've heard time and again when it comes to cooking mushrooms and keeping them from turning into a sad, soggy mess. But mycologist Jim Fuller has been studying the spongy morsels and the best ways to cook them for years, and he says conventional culinary wisdom doesn't align with the science.

"[The current method] comes from French classical technique: because mushrooms are full of water, the idea is to get rid of as much water as possible," he says. "But those techniques were designed when our understanding of fungi and their cellular structures was too young—not necessarily flawed, but they weren't well understood."

Prior to co-founding Fable Food Co, a company that makes mushroom-based meat alternatives, Fuller studied chemical engineering in San Antonio, Texas, and also worked as a chef.

According to him, the trick isn't to keep the mushrooms dry and remove as much moisture as possible. Instead, you can use all that water to your advantage and boil the mushrooms before frying them.

Start with your mushrooms in a cold pan, add some tap water (enough to cover them), and turn the heat up high. Or you can boil some water and drop the mushrooms in.

"Adding just an extra bit of moisture into the pan will encourage the mushrooms to release all of their own," Fuller says.

When the mushrooms are tender, let the water evaporate until the pan is pretty much dry. By the time the water has evaporated, the mushrooms will have released as much moisture as they can bleed out. This is when you add your fats (butter, oil) and aromats (thyme, garlic) and sear off the 'shrooms.

"If we put them straight into a pan with fat, the water coming out of the mushrooms would buffer the temperature of the oil and keep it low, so you won't get that Maillard reaction," Fuller says.

"This method allows you to get a silky texture without adding much fat at all. There's a fattiness and texture there due to the polysaccharides that mushrooms have ... so they have their own inherent silky creaminess," he says.

The technique suits most mushrooms, from the buttons and caps you can get at supermarkets to wild-foraged varieties such as pine or slippery jack. One exception is enoki mushrooms, which Fuller says would be better dropped into soups at the last second or stir-fried for a short period.



STUDY REVEALS HOW LICHENS STAYED TOGETHER, SPLIT UP, SWAPPED PARTNERS, AND CHANGED FORM OVER 250 MILLION YEARS

Field Museum
<https://phys.org/>, Aug. 11, 2020

Lichens may be the most easily overlooked life forms in nature. If you spend much time outside, you probably see some every day, although you might not know it—most people are likely to think they're moss. However, lichens aren't plants (which mosses are), but rather fungi that team up with algae and/or cyanobacteria to form a



Jason Hollinger

Fruticose lichen Letharia vulpina.

kind of composite organism. Although they rank relatively low on the biological charisma scale, lichens play important roles in ecological communities, from carbon uptake to food for a variety of animals, and they're the quintessential example of symbiosis—a partnership between two separate organisms—and were even the subject of research that first proposed the concept of symbiosis in the late 1800s.

Symbioses are known across the natural world, and despite the key roles they play in structuring ecosystems, their origins, persistence, and impact over evolutionary timescales is still not well understood by scientists. In a new study out this week in *Proceedings of the Natural Academy of Sciences*, a team of researchers has advanced our understanding of the evolution of symbiosis by assembling the largest family tree of lichens to date, covering more than 3,300 species. They used this data to figure out how and when lichen fungi traded algae partners, and shifted between crusty and leafy/tufted growth forms over the past 250 million years, shedding new light on the ebb and flow of symbioses over evolutionary time-scales. "These data allow us to better understand which symbiotic associations stick together or break apart and how their ecological contributions have shifted through time," says lead author Matthew Nelsen, a researcher at Chicago's Field Museum.

The researchers, from the Field Museum, Stanford University, and the Botanical Garden and Museum in Berlin, drew on a massive set of DNA sequence data to reconstruct an enormous family tree of the largest group of lichenized fungi—a group that exceeds birds in its total diversity. For each fungal species, they recorded which alga group it associates with and what it looks like (crusty, or leafy/tufted). They then used a technique called ancestral state reconstruction to infer which alga partner each ancestor was most likely to have associated with and which growth form it likely produced. They also used the tree to calculate the rates at which new species arose and disappeared over time. "Since the record of fossils for lichens and fungi is very sparse, it is difficult to reconstruct their evolution from fossil evidence," says Robert Lücking of the Berlin Botanical Garden and Museum. "This type of quantitative study based on DNA sequence data attempts to replace this gap by attempting to reconstruct the past from the present."

Their findings revealed some turbulence early in the history of this group of fungi. It's well-known that some fungi lost the ability to form lichens in the past and switched to become decomposers or plant parasites, consistent with observations in many other

symbioses. “What was unexpected,” Nelsen says, “was how deep in the family tree this occurred—roughly 200 million years ago. Some of these descendants have continued to persist in a non-lichenized state, while others picked up another alga partner, in some cases at roughly the same time as other groups of non-lichenized fungi were evolving lichen associations with that same group of algae.” This broader trend coincided with the evolution of habitats favorable for these algae, such as wet tropical rainforests dominated by flowering plants. Lücking says, “As a specialist in tropical lichens, for me it is particularly fascinating to see how some chiefly tropical lineages switched from being lichenized and became decomposers and even parasitic fungi, and then in some cases eventually returned to a lichen habit.”

The scientists also wanted to see how these results related to other types of fungi. They compared their findings to a recent study focused on a diverse and well-known group of mushrooms, which are largely decomposer and root-symbiotic fungi. Co-author Kevin Boyce of Stanford says, “Lichens are often thought of as primeval, but our comparisons reveal that diversification booms in the lichens came surprisingly late. Mushrooms diversified rapidly during the Jurassic, while the lichens experienced a gradual increase in speciation and extinction from the mid-Cretaceous to the present, corresponding to a world increasingly dominated by flowering plants. Determining these conflicting patterns of evolution is the first step in understanding the broader environmental and evolutionary context.”

Lücking says that the huge set of DNA data “provides a fascinating window into what lichen communities might have looked like in the distant past, how they evolved over time along with dinosaurs, and how they achieved their present diversity with the evolution of modern ecosystems.” Indeed, the evolutionary dynamics that played out with these fungi and partners in the deep past form the foundation of the symbioses we know today. “Symbiotic associations are everywhere, and they’re

a fundamental force in evolution and in our environment,” Nelsen says. “Since lichens are a classic model of symbiosis, understanding the ways they changed partners, shifted physical forms, and diversified over millions of years has broader insights for the deep processes of symbiosis itself.”



Vitaly Chamy

Foliose lichen Parmotrema perforatum.

2020 WILD MUSHROOM SHOW

Derek Hevel

We are so excited to announce the 2020 PSMS Wild Mushroom Show—and this year will see our first ever virtual show! This is our opportunity to share with the general public our knowledge of and enthusiasm for the fungal kingdom. We have decided that, because of the COVID-19 pandemic, an in-person show is not possible, so mushroom displays, identification, book sales, and other activities where people would gather will not take place this year. However, we still have plenty of opportunities to share enjoyment of mushrooms virtually, as we host lectures and activity videos online. Our show dates this year will be October 17 and 18. Stay tuned for more information.

MUSHROOM STAMP QUIZ

Brian S. Luther

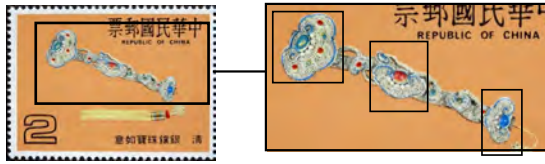
Can you find the mushrooms on these postage stamps? International postage stamps with fungi as the main illustration are very obvious, but there are many where the fungi shown are quite obscure and not noticeable at first, or even at second glance. Look carefully. This might be a fun activity for children to do also. The answers are shown in the blowups on page 6.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 

These are just a few examples of a large number of postage stamps with obscure fungi illustrated on them. All of these fit into the mycophilatelic category I call MIDs (= mushrooms or fungi in the design of the illustration, but not the main stamp illustration). I’ve discovered many MIDs by carefully studying stamps under magnification over the years.

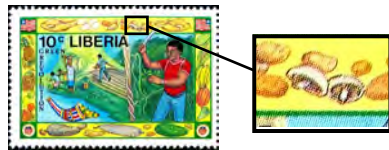
Mushroom Stamp Quiz Answers

1. Bulgaria - Scott 2710, 9/1/1980. Three small stylized *Amanita muscaria* mushrooms are on the central right-hand side.



2. Taiwan (Republic of China) - Scott 2582, 5/7/1987. This is an ancient scepter adorned with several stylized representations of Lingzhi or Reishi, which is the fruiting body, or conk, of *Ganoderma lucidum* and has been highly prized in Chinese medicine for thousands of years (Luther 2012).

3. Liberia - Scott 1077, 4/4/1988. Two *Agaricus* mushrooms can be seen at the top, along with other foods.

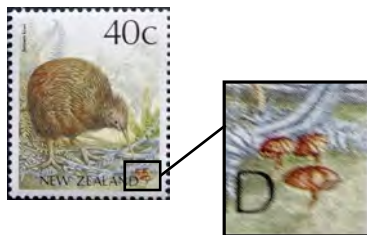


4. Czechoslovakia - Scott 2743b, 4/21/1989. A single large bolete button can be seen on the ground in the lower right-hand corner of the stamp.



5. Soviet Union - Scott 3811, 12/31/1970. Just below the middle on the far left you can see the outline of a cap and partial stem of a bolete mushroom amongst the berries, a poppy pod, and animals that are also shown.

6. New Zealand - Scott 935A, 4/17/1991. The stamp features a Brown Kiwi, the national bird of New Zealand. Three unidentifiable little brown mushrooms can be seen in the lower right-hand corner.



7. Congo Republic - Scott 608, 10/16/1981. Two green *Amanita* mushrooms are on the left middle. It's curious that they would put these mushrooms on a stamp commemorating World Food Day. People from the Congo do eat many species of edible wild mushrooms, but many in the genus *Amanita* are poisonous.



8. Luxembourg - Scott B247, 12/6/1965. Two conjoined green mushrooms are visible in the lower left corner.



9. France - Scott 3117, 5/8/2005. The "T" of the title *Gastronomie* on this stamp is a single *Cep*, or *Boletus edulis*.

Reference

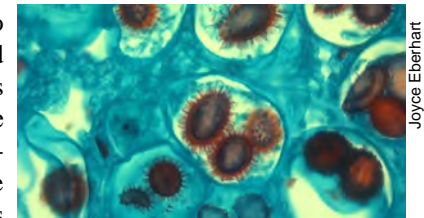
Luther, Brian S. 2012. "The earliest postage stamps with fungi." *Spore Prints* 483 (June), pp. 4–6. Online and in color at www.psms.org.

A NEW TRUFFLE SPECIES IS IDENTIFIED FOUR DECADES AFTER ITS DISCOVERY

<https://www.technologynetworks.com/>, Aug. 10, 2020

As a first-year graduate student studying truffle ecology at Oregon State University, Dan Luoma attended a scientific meeting in 1981 on Orcas Island in Washington. Having recently learned how to search for truffles, he went out one day of the meeting looking for the prized fungi and found a collection.

He brought them back to Oregon State and showed them to his mentor James Trappe, who confirmed the collection was of an undescribed species. Trappe added it to the university's collection. Then it sat there.



Joyce Eberhart

Almost four decades later, with the help of new scientific technologies, Trappe

Microscopic image of spores of Tuber luomae, a truffle species recently described by Oregon State University researchers.

and several other scientists confirmed that the truffle is unique. They recently published their findings in the journal *Fungal Systematics and Evolution* recognizing it as a new species. Fittingly, it's named *Tuber luomae* after Luoma, who retired this year after 40 years at Oregon State.

"This truffle in 1981 was among the first truffles I ever found," Luoma said. "To have it named in my honor the year I retired completes the circle for me. It's a wonderful way to celebrate retirement."

Some truffle species are highly prized for culinary purposes because of their distinct flavor. These species, which are black, white, or brown, are hard to find and exist in limited geographic areas, meaning they command high prices.

Oregon and the Pacific Northwest are home to several of those prized species, making the region one of the world's hot spots for truffle hunting. The species discovered by Luoma, though, is a red truffle, which doesn't have the distinct flavor sought by chefs and cooks.

While the culinary use of truffles and the thrill of searching for them gets a lot of attention, they and other fungi are important

All stamp photos are by Brian S. Luther.

for the health of forests. They provide nutrients to plants and can also help plants withstand drought.

Luoma studied the ecology of truffles and fungi while earning his doctorate from Oregon State in 1988 and until earlier this year worked as a researcher at the university.

Several graduate students who worked with him during his early years planned to name the truffle species he found on Orcas Island in honor of Luoma, but they graduated before doing so.

Then about 10 years ago Trappe, now Luoma's colleague, searched the Oregon State truffle collections, the largest in the world with about 50,000 collections, looking for truffles similar to the one Luoma found on Orcas Island. Trappe found three.

Joyce Eberhart, a truffle researcher at Oregon State and Luoma's wife, and Greg Bonito, an assistant professor at Michigan State University, studied the DNA of those three and determined they were the same species as the Orcas Island truffle.

Those three were all found in Oregon—one each in Benton (found in 1962), Clackamas (1995) and Jackson (2012) counties. While the Benton County specimen was found before Luoma dug up the Orcas Island one, it was never fully described until Trappe noticed the similarities between the two. Now the known distribution of the new species extends from southwestern Oregon to northwestern Washington.

Carolina Piña Páez, a doctoral student at Oregon State who also does truffle research, provided the final piece by documenting the microscopic structures inside the truffle with photos, confirming that the spores and outer layers were that of a unique species.

Trappe, who has studied truffles for more than 60 years and has discovered 230 new truffle species, still gets excited about a new species, such as this one named after Luoma.

WARDENS FIND LOST FORAGER IN STRATTON WOODS

Manchester Journal, Aug. 14, 2020

STRATTON - A mushroom hunter who found herself lost in the woods on Stratton Mountain called 911, and a Vermont Fish & Wildlife game warden and tracking dog were able to quickly locate her and get her out of the woods safely.

The search began just after noon Monday when a call was made by Claudine Michaud, 74, who went foraging for mushrooms at the end of Shepardson Road. Michaud's husband, who uses a wheelchair, waited in their vehicle.

Michaud lost her bearings, felt lost, and contacted 911, launching a joint search by the Vermont Warden Service, Vermont State Police, and the Winhall Police Department.

Realizing that the conditions at the site were favorable for scent tracking, the search party deployed a game warden tracking dog, K9 Officer Ramsey, to assist in locating the missing woman.

Ramsey and his handler identified several circling tracks believed to be Michaud's irregular path while picking mushrooms.



Tracking dog Ramsey.

Vermont Fish & Wildlife Department

FUNGI ARE HIGH FASHION

Whitney Bauck

<https://fashionista.com/>, Aug. 4, 2020

The spring 2021 collection of the Eden Power Corp, a sustainability-centric brand, is called "Mycelium." Among other things, it features fungi motifs and graphic-free clothing in a range of mushroom-y hues. But perhaps the most remarkable item is the Amadou hat made of a single mushroom. The hat pulls from brand co-founder Isaac Larose's own history as a milliner and required a partnership with a Transylvanian artisan to create.



Eden Power Corp

Amadou hat made from a single mushroom.

"Very few families still do Amadou hats in Transylvania. It's a complex and long process," Larose explains. "They first need to forage the tinder mushroom (*Fomes fomentarius*) in the wild. [The mushroom] needs to be at least two or three years old. Then they boil it and cut it in slices following the mushroom's natural layers using a sickle. They stretch it by hand and then shape it to the desired hat form."

The final product, he says, has a "mild mushroom smell and a spongy, suede-like feeling," and was inspired by the hat favored by world-famous mycologist Paul Stamets (who you might recognize from the 2019 documentary "Fantastic Fungi").

NAKED, MUDDY, AND BLOODY BURGLARY SUSPECT SAYS HE TOOK MUSHROOMS WITH JESUS

Mike Stunson

Lexington Herald Leader, July 16, 2020

A Kentucky man was arrested early Thursday morning after he was accused of burglarizing a home while he was naked, according to the Daviess County Sheriff's Office.

The sheriff's office was initially dispatched to an area in Owensboro after a report of a naked man trying to hit vehicles with his hand, deputies said. While they were on their way, they learned of a burglary in progress in the area, police said.

Deputies found 41-year-old John Stefanopoulos of Owensboro outside a home naked and covered in blood and mud, deputies said. Stefanopoulos ran toward one of the responding deputies, and the deputy deployed his Taser, striking him in the abdomen, an arrest citation states. He was then put in handcuffs before trying to run at the deputy again, according to the citation.

After being read his rights, Stefanopoulos said he took "mushrooms with Jesus and that they were playing a virtual reality game together," the deputy said. He said the deputies were not real and were a part of the game, according to the citation.

The owners of the home told deputies they had never seen Stefanopoulos, the citation says. They found Stefanopoulos in their home "vandalizing items in their hallway," deputies said.

Deputies found the front door of the home was broken, a hole in the drywall, and blood smeared on walls in multiple rooms, on windows, and on floors, according to the sheriff's office.

Stefanopoulos was charged with first-degree indecent exposure, second-degree burglary, first-degree criminal mischief, and public intoxication of a controlled substance.

CHANTERELLE PIE

Dick Sieger

(adapted from TastesOfHome.com;
shell adapted from *Joy of Cooking*)



Shell

6 oz (1½ cups) all-purpose
FLOUR

¾ oz (½ cup) LARD

½ tsp SALT

¼ tsp BLACK PEPPER,
coarsely ground



Shell

Combine the flour, salt, and pepper. Work in the lard. Add water, a tablespoon at a time, until the dough pulls together. Pat the dough into a 9-in. pie pan. Bake 12–15 minutes at 425° F. (For vegetarians, use vegetable shortening.)

Filling & Custard

12 oz (3½ cups)
CHANTERELLES,
coarsely chopped

1 MEDIUM LEEK,
halved & sliced

½ oz + 1 oz (1 TBs + 2 TBs)
BUTTER

8 oz (2½ cups) shredded
SHARP CHEDDAR,

½ tsp SALT

¼ tsp BLACK PEPPER

4 LARGE EGGS

½ oz (3 TBs) CREAM

Filling & Custard

In a pan or wok over medium heat, cook the leeks in ½ oz of the butter for a few minutes until softened. Reserve. Add the remaining butter and cook the chanterelles over medium heat for a few minutes until they are somewhat tender and any liquid has evaporated. Remove from the heat, add the leeks, salt, and pepper and let cool slightly. Put half of the cheddar on the pie crust, add the filling, and top with the remaining cheddar. Beat the eggs with the cream and pour into the pie shell. Bake 30–35 minutes at 375° F until a tester comes out clean. Cool somewhat before serving.



R. E. Sieger



Happy Hunting to All, and Stay Safe Out There!

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