

SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
Number 526 November 2016



VICTORIA, B.C., BOY DIES AFTER EATING POISONOUS MUSHROOM Agnes Sieger various sources, October 2016

A three-year old Victoria boy has died after ingesting a poisonous mushroom October 3 while he was foraging for wild mushrooms with his family at an undisclosed location in downtown Victoria.

Mycological examination of specimens collected at the site suggests that in all probability he ingested *Amanita phalloides*, also known as the “Death Cap” mushroom. Tests to confirm the presence of *Amanita phalloides* toxins in his system are ongoing.

The patient wasn’t hospitalized until four days after ingestion, so liver damage was already extensive. He was initially treated at Victoria General Hospital and later airlifted to Stollery Children’s Hospital in Edmonton, Alberta, where he died Tuesday night, October 11.

This is the first death recorded from ingestion of a Death Cap found in B.C. According to Paul Kroeger, a B.C. mushroom expert from Vancouver who helps identify poisonous fungi, “We apparently had a fatality a couple years ago of a man who ate Death Caps while visiting California but had returned to Vancouver.”

Kroeger said there was also a previous poisoning around Victoria in 2003 where an adult male ate Death Cap buttons in mistake for Puffballs. In 2008 an adult female in the greater Vancouver suburb of Langley ate Death Caps in mistake apparently for Paddy Straw mushroom, an edible and popular mushroom that grows in Asia. But neither poisoning was fatal.

Death Caps are not native to British Columbia. According to Kroeger, they are believed to have been introduced to Victoria through imported hardwood trees planted from 1906 to 1925. The fungus lives in the roots of trees for up to 50 years before emerging.

Kroeger said Death Caps in Vancouver were introduced with imported hardwoods planted in the 1960s and 70s. *Amanita phalloides* was first sighted in Vancouver in 2008. Now there are over 75 documented locations there, up from just six in 2013.

“We would like to extend our deepest sympathies to the child’s family,” said Dr. Richard Stanwick, Island Health’s Chief Medical Health Officer.

“This tragedy reinforces how important it is for recreational mushroom hunters to know the difference between a poisonous and non-poisonous mushroom.”

Amanita phalloides has an ordinary appearance. It is mainly white, with a white or yellowish stem, and a cap that ranges from yellowish-green to light brown that is round when young and flattens with

age. It has a flaring white skirt around the stem below the cap. The stem itself has a bulbous base that may be buried in soil. At maturity, it can be fairly large, up to 15 cm across.

If people choose to forage, Dr. Stanwick urges them to familiarize themselves with wild mushrooms, focus on the ones that can be easily identified and are known to be safe and edible, and avoid the remainder, especially the Death Cap. Better yet, go harvesting with an expert in the field or even join your local mycological society. “If you aren’t sure, leave it in the ground.”

OVERVIEW: *AMANITA PHALLOIDES*, THE DEATH CAP Erik Blair Vancouver Seed Bank, Nov. 2013

We’ve all heard horror stories of people eating poisonous wild mushrooms with fatal results. The Death Cap Mushroom, or *Amanita phalloides*, is responsible for 90 percent of these tragic deaths, and is the number one killer mushroom worldwide. Originally from Europe, it has grown wide spread and can now be found all over the world, from Australia to North America and spreading. The species travels through its ectomycorrhizal relationship with trees such as Oaks, Beeches, Chestnuts, Horse Chestnuts, Birches, Pines, and many others. When these trees are imported and planted for ornamental purposes, they can bring with them a deadly (though beneficial to the tree) stowaway.

The Death Cap is a very beautiful and charismatic-looking mushroom to stumble upon. It can grow fairly large, and emerges from a thick, egg-like volva. It has a light olive brown cap and a white stalk with a white veil. The cap is usually rounded but flattens out with age to allow for easy escape of its white spores. In its primordial form, it can appear to be a small white egg in the ground, resembling the common Puffball mushroom, which is considered a worthy edible by some mushroom pickers.

Have caution when picking Puffballs to eat. Cutting them in half should reveal a soft, smooth, marshmallow-like interior. If when you cut it in half you see the obvious form of a young mushroom eager to hatch, drop it immediately and wash your hands before handling any other mushrooms you may be considering ingesting. The poison will not transfer through your skin, but may rub off onto other surfaces including your mouth and eyes. In some rare cases where the population of Death Cap mushrooms is very concentrated and the watering of lawns is done in excess, the mushroom toxins have actually seeped into neighborhood streams and accounted for the poisoning and deaths of several dogs.



Amanita phalloides, the Death Cap.

cont. on page 6

Spore Prints

is published monthly, September through June by the
PUGET SOUND MYCOLOGICAL SOCIETY
Center for Urban Horticulture, Box 354115
University of Washington, Seattle, Washington 98195
(206) 522-6031 <http://www.psms.org>

OFFICERS: Kim Traverse, President²⁰¹⁵⁻²⁰¹⁷
president@psms.org (206) 380-3222
Daniel Winkler, Vice President²⁰¹⁶⁻²⁰¹⁸
me@danielwinkler.com (425)-822-5080
John Goldman, Treasurer²⁰¹⁶⁻²⁰¹⁸
treasurer@psms.org (206) 933-0838
Luise Asif, Secretary²⁰¹⁵⁻²⁰¹⁷
asiff.luise@yahoo.com (206) 364-6741

TRUSTEES: 2016-2017:
Sweta Agrawal, Paul Hill,
Donna Naruo, James Nowak,
Alyssa Panning
2015-2017:
James Ardena, Carlos Cruz,
Brady Raymond, Erin Raymond,
Milton Tam

ALTERNATES: Shannon Adams, Anne Tarver
IM. PAST PRES: Marian Maxwell
SCI. ADVISOR: Dr. Steve Trudell
EDITOR: Agnes A. Sieger, 271 Harmony Lane,
Port Angeles, WA 98362
sieger@att.net

MEMBERSHIP MEETING

Tuesday, November 15, 2016, at 7:30 pm at the Center for Urban Horticulture, 3501 NE 41st St, Seattle

Our presentation for November will be given by someone well known in PSMS, Marian Maxwell, who will share with us her vast experience on “Hunting Mushrooms in the Pacific Northwest.” Learn how to explore the outdoors by foraging for our favorite northwest resource—mushrooms! Learn the basics, including seasons for mushroom hunting, permits required, types of mushrooms to look for, cooking, dangers, and where to hunt.

Marian Maxwell studied mycology under the renowned Dr. Daniel Stuntz, co-founder of PSMS, and received a Bachelor of Science degree from the University of Washington. Besides serving as president of PSMS from 2010–2015 and chairing the display of mushrooms for the annual exhibit, she has served as an identifier and educator for over 20 years. She is passionate about sharing and educating people about the role of fungi in the environment.

PRESIDENT’S MESSAGE

Kim Traverse

Ah, PSMS field trips! Good morel hunting this spring after a night in a campground so dark that the *only* light was from the Milky Way. A productive fall day leading a group of 12 and finding Yellow Chanterelles, Gypsies, and Honeys—it rained all day, but the harder it rained the more mushrooms we found!

PSMS field trips are fabulous collaborative events, with Brian Luther and Wren Hudgins wielding most of the two halves that add up to the whole but with almost everyone else helping to make them run smoothly. Any field trip you go on has already had at least a year’s worth of thoughtful planning by Brian, who probably was the first to arrive and usually had the welcoming fire already blazing. Likewise, Wren had contacted guides, distributed walkie-talkies, and done a safety-in-the-woods talk, and both have usually aided hosts for the day. Ahead of time, they answered countless email inquiries from members—often courteously answering the same questions over and over! For a couple of years now, field trip guides have been helping break in the novice hunters, and our hosts always make sure that when people start to arrive, there are already treats waiting. Families and lone hunters dump their finds to be identified, people trade and share their edibles or dye mushrooms, and the potlucks never fail to fill our bellies and warm our hearts. The 2016 field trips are over, but don’t miss out next year!

NEW CENOZOIC FUNGUS Nadia P Morales-Lizcano

Mycelium, Myco. Soc. Toronto, Oct.–Dec. 2016

Scientists researching Baltic amber discovered a new gilled mushroom, *Gerontomyces lepidotus*. The fungus was found in the Samland Peninsula in the Kalinin District of Russian. The amber was in a group of marine sediments known as the “blue earth” layers and estimated to be 45 to 55 million years old. The specimen was small (1.8 mm total length) and had a complete cap. It represents a new piece of the puzzle to understand gilled mushrooms in the Cenozoic.



CALENDAR

- Nov. 14 PSMS Board Meeting, 7:30 pm, CUH Board room
- Nov. 15 Membership Meeting, 7:30 pm, CUH (3rd Tues.)
- Nov. 15 *Spore Prints* deadline (early)

BOARD NEWS

Luise Asif

October was a very busy month, what with preparing for and producing the Ben Woo Memorial Foray the weekend of October 22 and then the Annual Exhibit the weekend of October 29. A huge thank-you to all of the wonderful volunteers who worked to ensure they were a success. Shannon Adams will continue to have Hildegard Hendrickson memorabilia available for a silent auction at the November membership meeting. Thank you, Shannon, for organizing this. Marian Maxwell, Shannon Adams, and Brady and Erin Raymond continue to update and improve the PSMS Facebook and Blog. The Bridle Trails Study needs more committed volunteers, and plans are under way to ensure its success.



FIELD TRIP REPORT, SEPT. 24 **Brian S. Luther**

Imagine a warm, calm, sunny fall day out in the woods looking for mushrooms. It doesn't get much better than that, and that is the kind of day we had.

I arrived at the gate about 6:50 am, but Luise Asif had gotten there earlier. As soon as the gate was opened at 7:00 am, I bolted up to the shelter (about a mile away) to get a fire going in the big woodstove, then went back to help at the gate. Check-in time was 8:00 to 9:30 am. Check-in officials included Wren Hudgins, Jared Grummer, Luise Asif, Merly Pacaba, Kim Traverse, and myself.

Marian and Scott Maxwell brought the hosting supplies and helped hosts Megan Hodde and Diana Carey get set up at the shelter. The breakfast coffee and snacks were appreciated and disappeared quickly. Thank you, Megan, Diana, Marian, and Scott.

We had a 10:00 am meeting discussing the usual subjects, then groups formed and dispersed into the woods. Wren, Julia Benson, Jared, Dave Weber, and Merly were our field trip guides, taking groups out for a few hours. Some of the groups came back briefly to display what they'd found, then went back out again. Thanks, field trip guides!

Concerning edibles, chanterelles and boletes were not abundant, but most people found at least some. Several members were lucky to stumble on nice fruitings of *Sparassis radicata* (the Cauliflower mushroom), and one collection of several *Suillus luteus* (Slippery Jack) was brought in.

Marian assisted me with identification, and altogether 87 species were displayed. Rare or interesting fungi found included *Cantharellula umbonata*, *Ramaria abietina*, a species of *Arrhenia*, *Lepiota atrodisca*, *Pycnoporellus fulgens*, *Hypomyces aurantius* (a parasite on the pores of *Polyporus badius*), and *Oligoporus caesius*, a diminutive polypore with an unusual baby blue spore print. (I briefly discussed the species of *Hypomyces* found on polypores in an earlier article.*)

Many in the original group left in the early afternoon, but about 25 stayed for an excellent potluck at 3:30 pm. Then we cleaned up the shelter and were all out the gate by around 5:00 pm. Everybody was cheerful, eager to get into the woods, and had a good time. It was a great start to the fall field trips.



Potluck, Sept. 24 field trip.

*Luther, Brian S. 2015. *Hypomyces aurantius*—A beautiful parasite on polypores. *Spore Prints 516* (Nov.), p. 5. Online and in color at www.psms.org.

FIELD TRIP REPORT, OCT. 1 **Brian S. Luther**

The day started out cloudy and rapidly deteriorated into a wet drenching rainfall. Fortunately, rain rarely deters avid mycophiles, as was the case on this field trip. There was no fire pit close to the shelter, but there was a large raised open metal BBQ which served nicely as a fire hearth, keeping us warm most of the day.

Our hosts were David and Wuqi Weber, who were pretty well set up in the shelter by the time we got there at about 7:50 am. Thanks, Wuqi and Dave, for fueling us up with your delicious hot coffee, muffins, fruit, and juice for the cool rainy day ahead.

Sixty-two members signed in, and all seemed well prepared with rain gear—an essential on this day! Under the direction of Wren Hudgins, we had four field trip guides—Dan Paull, Randy Bjorkland, Dave Weber, and Wren—who took out ten members each.

The woods were not as productive as we would have expected, most likely because of the significant late spring/early summer rains, which sped the season up considerably. (I was finding beautiful white and yellow chanterelles on the 4th of July this year, the season was so early.)

Several members found nice specimens of the Cauliflower Mushroom (*Sparassis radicata*). Some chanterelles and Angel Wings (*Pleurocybella porrigens*) came in, although not in abundance, but only a smattering of other edibles. I counted 71 species on display. Interesting fungi found included a massive button of *Catathelasma ventricosum*, *Strobilurus occidentalis* on a Sitka Spruce cone, and *Agaricus semotus*, a woodland species with a faintly purplish-brown disc.

Catathelasma ventricosum button, eight inches tall.



Brian S. Luther



Brian S. Luther

Catathelasma ventricosum button cut in half.

The wet conditions discouraged many from staying for the potluck, but we still had about 20 at a very satisfying meal. After this, everybody pitched in to get the shelter cleaned up, and we were out by about ten to five. I appreciated the positive comments I received from members about this new location I discovered, and we'll be back.



Brian S. Luther

Potluck and specimen tables, Oct. 1 field trip.

**FUNGUS-ILLUSTRATED POSTAGE STAMPS
FROM HONDURAS**

Brian S. Luther

I've previously discussed some Latin American mushroom stamps from Mexico (Luther, 2013a), Nicaragua (Luther, 2013b), Uruguay (Luther, 2013c), and Peru (Luther, 2015). This article reviews three sets of mushroom stamps from Honduras.

Honduras got its independence in 1838 and is the second largest Central American country, after Nicaragua. Like five of the seven countries in this region, it borders both the Pacific Ocean and the Atlantic Ocean. The highest peak in Honduras is Cerro Las Minas, at 9,420 ft.

The stamps discussed below are perhaps most notable not for their illustrations but for their errors. The 1995 set, especially, is one of the most inaccurate set of stamps I've ever seen (refer to Luther, 2013b, for a discussion of some other inaccurate stamps). Most are either misidentified or misspelled. Note that

Scott C951r is both misidentified and misspelled (it should read *C. pistillaris*).

The three sets of stamps are shown in Table I. All catalog numbers are from the Scott Postage Stamp Catalogues; s/s=souvenir sheet; stamp values are in Honduras lempira (L). Scientific names in quotes in the fourth column are misidentified and/or misspelled on the stamps; my corrections (and best guesses without actually seeing the mushrooms) are noted in the last column.

Comments

1995 Set

The 30 stamps in the 1995 set are photo images and are arranged in a very unusual way on the sheet: five blocks of six stamps each with the same value that are not in a uniform sequence from left to right and top to bottom, as is conventional, but rather in groupings. Also, the photos on the last two rows of the sheet are turned 90° counterclockwise, unlike the others.

Table I. Mushroom Stamps from Honduras.

A=Aereo (airmail)

<i>Date of Issue</i>	<i>Scott Cat. No.</i>	<i>Value</i>	<i>Species Name on Stamp</i>	<i>Correct Species Name</i>
April 7, 1995	C951a	L. 1.00 A	" <i>Marasmius cohaerens</i> "	Unknown agaric
"	C951b	" A	" <i>Lepista nuda</i> "	<i>Lactarius indigo</i>
"	C951c	" A	" <i>Polyporus pargamenus</i> "	<i>Stereum</i> sp.
"	C951d	" A	" <i>Fomes</i> sp."	Possibly a polypore, but not <i>Fomes</i>
"	C951e	" A	" <i>Panaeolus sphinctrinus</i> "	Should read <i>Panaeolus sphinctrinus</i>
"	C951f	" A	" <i>Hygrophorus aurantiaca</i> "	<i>Cantharellus cibarius</i>
"	C951g	L. 1.50	" <i>Amanita rubescens</i> "	<i>Amanita flavoconia</i>
"	C951h	"	" <i>Boletus frostii</i> "	Possibly a <i>Boletus</i> , but not <i>B. frostii</i>
"	C951i	"	<i>Fomes annosus</i>	Identification possibly correct?
"	C951j	"	" <i>Psathyrella</i> sp."	<i>Leucocoprinus birnbaumii</i>
"	C951k	"	" <i>Boletellus russelli</i> "	<i>Boletus</i> sp., correct spelling is <i>Boletellus russelli</i>
"	C951l	"	" <i>Marasmius spegazzinii</i> "	<i>Hygrocybe</i> sp.
"	C951m	L. 2.00	<i>Amanita</i> sp.	ID correct, <i>A. vaginata</i> complex
"	C951n	"	<i>Psilocybe cubensis</i>	ID correct
"	C951o	"	" <i>Boletus regius</i> "	Unknown, can't see hymenophore
"	C951p	"	<i>Craterellus cornucopiodes</i>	ID correct
"	C951q	"	" <i>Auricularia delicata</i> "	Pleurotoid agaric, not a jelly fungus
"	C951r	"	" <i>Clavariadelphus pistillaris</i> "	<i>Dacryopinax spathularia</i> , a jelly fungus
"	C951s	L. 2.50 A	" <i>Scleroderma aurantium</i> "	<i>Lycoperdon</i> sp.
"	C951t	" A	" <i>Amanita praegraveolens</i> "	<i>Leucocoprinus cepaestipes</i>
"	C951u	" A	<i>Cantharellus cibarius</i>	ID appears to be correct
"	C951v	" A	<i>Geastrum triplex</i>	Genus correct, species uncertain
"	C951w	" A	<i>Russula emetica</i>	Possibly correct
"	C951x	" A	" <i>Boletus pinicola</i> "	A bolete, but not as labeled
"	C951y	L. 3.00 A	" <i>Fomes versicolor</i> "	<i>Trametes versicolor</i> ? - can't be sure
"	C951z	" A	" <i>Cantharellus purpurascens</i> "?	Unknown, but not as labeled
"	C951aa	" A	" <i>Lyophyllum decastes</i> "	Unknown, but not as labeled
"	C951ab	" A	<i>Pleurotus ostreatus</i>	Possibly correct
"	C951ac	" A	" <i>Boletus ananus</i> "	<i>Boletellus ananas</i>
"	C951ad	" A	" <i>Amanita caesarea</i> "	<i>A. jacksonii</i> or <i>A. basii</i> , not <i>A. caesarea</i>
Oct.18, 2005	C1219a	L. 20.00 A	" <i>Hygrophorus marzuolus</i> "	<i>Morchella</i> sp.
"	C1219b	L. 25.00 A	<i>Lactarius deliciosus</i>	ID correct
"	C1219c	L. 30.00 A	" <i>Boletus pinophilus</i> "	<i>Boletus</i> sp.
"	C1219d	L. 50.00 A	" <i>Gyromitra esculenta</i> "	<i>Lepista</i> sp., possibly <i>L. nuda</i>
June 6, 2014	C1310	L. 8.00 A	" <i>Amanita caestrea</i> "	<i>Amanita jacksonii</i> or <i>A. basii</i>

The 2005 set of four mushroom stamps is titled “Hongos Comestibles en Peligro de Extinción” (Edible Mushrooms in Danger of Extinction). All four are on a s/s. As you can see Scott C1219a is labeled *Hygrophorus marzuolus*, but you’ll notice that it’s actually a morel (i.e., *Morchella* sp.)—wow, not even close! Scott C1219d shows a pale mauve gilled mushroom yet is labeled *Gyromitra esculenta*. None of these stamps illustrate a *Gyromitra*. The table shows other corrections.

All four mushroom species are common and widespread. Why the Honduran postal authority categorized them as “endangered” is a mystery. I’m also truly astonished that they were again so careless (after all the errors on the 1995 sheet) and clearly didn’t have a

mycologist review the identifications on the stamps for accuracy prior to printing and issuing this official postage.

2014 Stamp

The 2014 stamp is part of a set of eight airmail stamps emphasizing “Conservacion de la Vida Silvestre” (Wildlife Conservation). This stamp is labeled “*Amanita caestrea*.” They put a capital “T” in where it should be lower case and, under magnification, the fifth letter in the species name is blurred but looks like a “t”; in any case, it’s not an “a” as it should be. Moreover, *Amanita caesarea* is a European fungus. What’s shown is either *Amanita jacksonii* or *A. basii*, which are the related species from North America and also shown in the 1995 set.

1995 Set



Brian S. Luther

2005 Set

2014 Stamp - block of four.



Brian S. Luther



Brian S. Luther

References

Luther, Brian S. 2013a. Mycophilately in Mexico. *Spore Prints* 489 (February), pp. 4–5. Online and in color at www.psms.org.
 Luther, Brian S. 2013b. Misidentifications on mushroom stamps. *Spore Prints* 495 (October), p. 4. Online and in color at www.psms.org.
 Luther, Brian S. 2013c. Uruguay mushrosStamps show a *Dermatophyte*. *Spore Prints* 497 (December), p. 4. Online and in color at www.psms.org.
 Luther, Brian S. 2015. Mushroom stamps from Peru. *Spore Prints* 508 (January), pp. 7–8. Online and in color at www.psms.org.

This was a brand new location for a field trip, and I'm pleased to report that all members thought it was excellent. Thanks to Wren Hudgins, we had a large supply of firewood for the day, and it was appreciated.

Isabelle Phan and her husband, Eric, were our hosts, and everything they put out was rapidly consumed by the 72 members who signed in. Thank you, Isabelle and Eric!

I was surprised by the great turnout, considering that 100% rain was forecast for the day—and rain it did! As with the prior Saturday's field trip, the shelter with its warm comforting fireplace made a very welcome refuge.

After our usual brief morning meeting, PSMS President Kim Traverse put in a pitch for the Annual Exhibit. We had four field trip guides: Wren, Kim, Jamie Ardena, and Randy Bjorkland, who led out groups of ten with priority given to brand new members. Others formed loose groups, and all dispersed to see what the woods had to offer.

Some nice collections of chanterelles came in, but not everyone found them. A few members found fine specimens of the King Bolete (*Boletus edulis*), Zeller's Bolete (*B. zelleri*, now with the newer name *Xerocomellus zelleri*), Admirable Bolete (*B. mirabilis*), and Bear's Head (*Hericium abietis*). There were quite a few collections of Angel Wings (*Pleurocybella porrigens*); a few Gypsy Mushrooms (*Cortinarius caperatus*, formerly *Rozites caperata*) were also brought in.

I counted 150 species displayed around the outside ledge of the shelter. Interesting fungi found included the very small and easily overlooked *Pleurotopsis longinqua*, **Psilocybe silvatica*, *Clavariadelphus occidentalis*, *Lepiota aspera*, and *Lentinellus ursinus*. This last-mentioned species is pleurotoid, has jagged gill edges, a hot peppery taste, distinctive bristle-like hairs at the point of attachment to the woody substrate, and very small basidiospores (I measured them at $3\text{--}3.5 \times 2.5\text{--}3 \mu\text{m}$), which are smaller than all the related species in the genus. The award for the stinkiest mushroom goes to *Tricholoma inamoenum*, with the pungent aroma of fresh asphalt or coal tar.

It was a good potluck, with about 25 members. Dory Maubach was a great help. She stayed with me and Pam for quite a while after everyone else had left so we could finish cleaning the shelter; then she disposed all the mushroom specimens back into the woods. Thanks, Dory.



Brian S. Luther

Morning meeting, October 8 field trip.

*For additional information on this fungus, see Luther, Brian S. 2015. Some winter mycology. *Spore Prints 510* (March), p. 6. Online and in color at www.psms.org.

The Death Cap contains many different and potentially harmful chemicals. The one most likely responsible for the destruction of the liver, kidneys, and red blood cells is called alpha-Amanitin. It usually takes between 10 and 24 hours for the first poisoning symptoms (diarrhea and cramps) to start, long after the stomach would have digested the mushroom completely. Typically these first symptoms will pass, often making the victim to feel their health is improving. Usually by the 4th or 5th day the liver and kidneys are severely affected, and death follows usually at approximately 1 week after ingestion. If caught soon enough, and depending on the amount ingested, Death Cap poisoning can be treated at a hospital by using various drugs. In larger quantities however, usually a liver and/or kidney transplant(s) is the last resort for survival.



Amanita phalloides, above and below ground.

If you do ever find yourself in a situation where you have ingested a Death Cap, seek immediate medical attention. Penicillin and hyperbaric oxygen are usually quite effective as treatment and increase ones chances for survival. There is also a herb called Milk Thistle (*Silybum adans*) [*S. marianum*] which when administered within the first 48 hours after ingestion of said mushroom, increases not only the likelihood of survival, but can actually prevent severe liver damage from ever occurring. If Milk Thistle extract is administered within 10 minutes of ingestion, animal studies have shown that it is possible to completely counteract the toxic effects of the mushroom, and sustain no liver damage.

That being said, there are some easy precautions a person can take to avoid death-by-mushroom. First of all it is better to avoid all Amanitas until you are a master at identifying them. Amanitas are typically recognized by their egg-like volva at the very base of their stem and their white spores. The Death Cap has an olive brown cap, which to the trained eye, can be spotted a great distance away. If you are brand new to identifying mushrooms always remember to spore print every wild species of mushroom as well as pick and identify a species a minimum of two times before ever considering eating it. Death Caps can also be recognized by their foul smell in age; when the mushroom is young, however, it may smell mild or even pleasant.

The Death Cap Mushroom is one of the most infamous and well respected mushrooms worldwide. It terrifies and inspires, with a

charisma that only the world's most lethal mushroom could possess. Let not its unrivaled beauty lure you to taste its deadly fruit. For if you do, it may be the most beautiful, delicious, and last meal you ever eat. Like the Icarus moth flying toward euphoria before she busts into the very flame which only seconds earlier she coveted completely.



A. phalloides features.

Safe Picking!

SCOTLAND RANGER FINDS MAMMOTH PUFFBALL

<http://stv.tv/ne>, Oct. 19, 2016

Fiona Wishart, a ranger with the Falkirk Council in Scotland, found the 10.6 kg (23.3 lb) mushroom as she did her rounds at a site near Polmont on Monday.

The fungus measured 1.5 m (59 in.) across and was so heavy she needed help from a colleague to carry it back to the office.

After taking photos, they cut the mushroom up and shared it out between 15 people, who took it home to cook.

Wishart said: "It was really exciting as it's probably the biggest puffball I've ever found in my life.

"It tasted lovely. When you cut it up it has a texture like marshmallow. The best way to cook it is to dip it in egg and fry it up but some people dipped it in Parmesan.

"It was lucky we found it when we did as it was in perfect condition."

Ranger Fiona Wishart shows off her 23 lb puffball.



PSMS IS PART OF FOOD EXHIBIT AT MOHAI

John Goldman

Be sure to check out an exhibit at the Museum of History and Industry in Seattle entitled "Edible City: a Delicious Journey." PSMS loaned photos and articles about mushrooming for the exhibit. It is about food in Seattle. "...from raw ingredients to polished plates. It serves up the story of how Seattleites eat in their city and how urban palates have developed over the years. Discover the secret history of Seattle's favorite foods and devour the stories that helped the city grow into one of America's best places to eat."

PSMS member Shannon Adams gave us the connection to James Beard Award winner Rebekah Denn, who is the exhibit curator. The Museum of History and Industry is located at the south end of Lake Union at 860 Terry Avenue N, Seattle, WA 98109. The exhibit runs from November 19, 2016, to September 10, 2017. MOHAI has other permanent exhibits that are fascinating. If you only remember MOHAI when it was adjacent to the 520 Bridge in Montlake, this new location is 1000% better.

SANTA CRUZ MUSHROOM FORAY **Noah Siegel**

Want to extend the wild mushroom season? Come to the Santa Cruz Mycoflora Foray, December 8-11, in the midst of the Santa Cruz Mountains' Redwood forests just over 60 miles from both San Francisco and Oakland airports. All for under \$300.

For information or to sign up, visit

www.brownpapertickets.com/event/2558312 or
www.redwoodcoastmushrooms.org/scmycoflora-foray-2016/

STALKING THE WILD CHANTERELLE **Pat Neal**

patnealwildlife.net

Peninsula Daily News, Oct. 19, 2016

Now that the rains have come, it's the best time to stalk the wild chanterelle mushroom probably one of the most popular ways there are to get lost in the woods.



Perhaps you are driving down a road through a forest of second-growth Douglas fir and spot a flash of color in the woods.

Mushroom pickers can become so excited they slam on the brakes in the middle of the road, fling open the door, and hit the brush in the excitement of the mushroom hunt.

With your eyes focused on the ground, you walk through the woods, scurrying from one mushroom to the other like a kid on a big Easter egg hunt until you find the treasure trove, a golden carpet of mushrooms that covers the forest floor.

You don't rip the tree out of the ground to pick the apples, and you don't rip the mushrooms out of the ground to pick the mushroom.

It is very important to cut chanterelles to avoid disturbing the mycelium from which they grow.

You want a sharp knife that has been specially adapted for harvesting chanterelles by taping a small paintbrush to the handle.

That's so you can brush off the inevitable dirt and fir needles that adhere to the mushrooms.

This will save hours of cleaning when and if you do eventually get home.

None of that matters now as you see more and bigger mushrooms just over the hill and down the little gully where you cannot believe your eyes.

You had no idea there could be this many mushrooms left on Earth, what with all the people out picking them.

Good thing you didn't tell anyone where you were going on your mushroom hunt, or you're liable to have someone horning in on your prize.

The mushroom fever has you in its grip by now.

You race through the woods with visions in your head of smoked salmon and chanterelle marinara sauce, chicken-fried grouse with chanterelle gravy, and chanterelles with venison medallions.

At some point, it occurs to you that you are hopelessly lost.

You try to retrace your steps, but the forest looks the same in every direction.

As darkness descends, you walk faster in what you are sure is the wrong direction.

People say you shouldn't panic when you are lost, but these are the same people who say you shouldn't panic when attacked by a cougar or the Internal Revenue Service.

Fortunately, at that very moment, I heard a car horn honking.

I walked toward the horn to discover the cause.

My truck was blocking the road.

That's when I figured there's only one way to avoid getting lost in the woods while picking mushrooms: Don't go.

BOOK REVIEW

Ron Post

The Bog Maiden

David Pilz and George McAdams

ebook, pilzwald.com and other outlets, 2016

Just about halfway through *The Bog Maiden* an ancient shaman quietly drops the hint to his nephew that he will live to immortality by transferring his long-held knowledge—and his soul—to the nephew, the method being a magic mushroom potion. This promise is overheard by a young visitor from another tribe who wonders if love can be immortal, as well.

These are two of the many interwoven story lines in this demi-urgic novel, recently published and available in many formats at pilzwald.com. Like other fine fantasies, the thematic threads are woven into a solid plot, complete with small-town romances, and the writing hovers in the reader's mind like an early Tom Robbins creation. The story sizzles with humor dripping from the mouths of an array of humorous hambones and luminaries, free spirits, and bit players, any of whom you are likely to find in small Oregon coastal byways.

This community has it all, and readers can laugh and chuckle while also hearing a first-person account of a young Native American's vision quest, and watching a small town face the familiar, serious dilemma of preserving rare plant life or allowing development to destroy the countryside.

Exotic characters such as Ole and Maybelle appear and reappear, at Misty Pages bookshop coffee klatches or awaiting gas in the

long lines at Don's Chevron or at one of the berry festivals in and around little Danemark, Oregon. They've all known each other for ages, and the book lets us get to know them, too, as if we've spent a month or so vacationing there.

The mysterious bog maiden and some ancient tribal elders also appear and reappear, in a setting that I hope will reappear in a sequel or a similar novel from one or both of these inventive, first-time Northwest novelists.

Disclosure: I copy-edited the book and have still found copy-editing errors in the published copy!

IRISH MUSHROOM MARKET IN TURMOIL

Jane O'Sullivan

The Business Post, Oct. 19, 2016

The collapse in the price of sterling against the euro has left the mushroom industry in turmoil and resulted in the loss of €7 million worth of exports and 130 jobs since the Brexit vote. Irish growers currently produce around 70,000 tons of mushrooms, of which 80 percent is marketed to Britain. According to estimates, mushroom exports are worth around €120 million at farm gate prices, double the value of potatoes.

But contracts were negotiated in sterling, which has fallen sharply since Brexit, meaning Irish producers are now being forced to accept prices well below what is sustainable. The industry is calling for measures to be taken to support mushroom growers in Ireland until they are in a position to renegotiate prices next year.

page 8

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

RETURN SERVICE REQUESTED

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

