

FUNGUS AMONG US FESTIVAL



photo by Kem Luther

Foray leaders pose for a group picture. Several SVIMS members make the trek to Whistler each year to help guide mushroom forays at the festival. **Bryce Kendrick, Andy MacKinnon, Adolf Ceska, Oluna Ceska, Kevin Trim, and Kem Luther** joined a group from the Vancouver Mycological Society for this year's event.

Kevin Trim's concrete art (centre) and a table of Asian medicinal mushrooms (table with black cloth on right). On the other tables are some of the more than 100 species of mushrooms found on the 2012 festival forays. Article and video at: <http://www.piquenewsmagazine.com/whistler/naturalists-seeking-fall-fungus-following-dry-summer/Content?oid=2331032>



photo by Kem Luther

VOLUME 15, ISSUE 4

IN THIS ISSUE:

For Gamers	p.2
New Members	p.2
Upcoming Events	p.3
Fungi and Fire	p.4-6
New Publication	p. 6
Mushroom's Maple Syrup Odor	p. 7-8

OCTOBER 2012

Mushroom Chow Mein	p.8-9
Fall—poem by Robert Hass	p. 9
A Mushroom Burial Suit?	p. 10
The Last Word	p. 10

WORTH QUOTING

“While most professional mushroom hunters seem to be men, a Mexican study found that women are actually more adept at mushroom hunting. The men in the study ‘climbed higher, travelled further, and used 70% more energy than women who made more stops but seemed to know where they were going.’”

from *Mycophilia* by Eugenia Bone





BEAT THE NO RAIN BLUES!

Mushroom War 1.0 (free) for your I-Phone!

Mushroom War is a new strategy game where players must defend the mushroom kingdom from evil infected mushrooms. Throughout the 60 playable levels users must find a strategy and use a combination of short and long distanced combatants to defend the castle. Players can also purchase upgrades for their units, which can improve weapons or increase the units defense.

<http://itunes.apple.com/us/app/mushroom-war/id490613027?mt=8>



FUNGIFAMA DEADLINE

Please submit your stories, announcements, and photos by **December 15th** for the next edition of the newsletter.

jillstanjs@hotmail.com

WELCOME TO OUR NEW MEMBERS!

Sue Baptista

Jeremy Spencer

Derek Jacoby

Donna Humphries

Elizabeth Skrzpczak

Shelia Norton

Shan Beley

Susie Jones

Wayne Jeffery

Vanessa Verbitsky

Katy Harding

Jake Kerr

UPCOMING

October 17-21, 2012

Mushrooms, Wild and Mysterious

Paul Stamets
Hollyhock Learning Centre
Cortes Island, BC

October 19-20, 2012

SHROOM:

The Sunshine Coast Mushroom Festival
with Daniel Winkler
<http://scshroom.org/2012.html>

October 19-21, 2012

SVIMS Annual Foray

Forestry Research Centre, Lake Cowichan
\$135+ tax, 2 nts accommodation, 4 meals,
forays

October 27, 2012

Galiano Island Foray

Kent Brothers at Kent@brothers.ca

October 28, 2012, 10-4pm

SVIMS Annual Mushroom Show

Swan Lake Nature Centre

November 1, 2012, 7pm

SVIMS meeting, Pacific Forestry Centre

Speaker: Dr. Britt Bunyard

Aflatoxins to Zombies: Weird, Weird, Weird Fungi

November 3, 2012

Galiano Island Mushroom Festival

galianonaturalists@gmail.com

November 11, 2012 10 am

VNHS Mushroom Foray

Royal Roads University

November 18, 2012 10 am

VNHS Mushroom Foray

John Dean Park, Carmanah Terrace

December 6, 2012, 7 pm

SVIMS meeting, Pacific Forestry Centre

Speaker: Dr. Bryce Kendrick

Fungi—now you see them, now you don't

FURTHER AFIELD

December 13-16, 2012

NAMA Annual Foray

Scotts Valley, CA. www.namyc.org

Jan. 18-21, 2013

3rd Annual Napa Truffle Festival

Napa, CA

info@napatrufflefestival.com, (888) 753-9378

Jan 25-27, 2013

Oregon Truffle Festival, Eugene, OR

info@oregontrufflefestival.com

Of Fire and Fungi

by Kem Luther

A haze hung in the air over Trout Lake, a hamlet near Mt. Adams. An east wind was wafting smoke from a late September blaze that was spreading across the mountain's southern slopes. Three dozen members of the Pacific Northwest Key Council, a collection of professional and amateur mycologists, had gathered at Trout Lake's only public hall, the Grange. A few people in the room were setting up lab equipment and computers. Others picked away at a late supper, watching the door for late-arriving friends. On everyone's mind was the fire. Would it affect their work? A small group moved to a corner of the room. Unfolding a variety of maps, they began to plan forays in the central areas of Gifford Pinchot National Forest, to the west of Trout Lake and away from the fire. They found a number of fire-free areas around the wilderness area known as Indian Heaven, but some of the roads leading to these areas, they worried, might have temporary closures.



In the end the fire proved no impediment. For the next three days the Key Council continued its 35-year career of building identification keys for the major taxa of BC/Pacific Northwest mushrooms. Members of the Council have developed keys for almost all major groups of macrofungi. The keys, archived and illustrated on the SVIMS web site (<http://www.svims.ca/council/>), are available to anyone interested in local fungi.

The Council currently meets twice yearly in some area of the U.S. Pacific Northwest or BC. Members are mostly Oregon and Washington mycologists, but several BC mushroom experts play important roles.

SVIMS's own **Adolf and Oluna Ceska**, **Bryce Kendrick**, **Christine Roberts** (now living in Bellingham, Washington), and **Ian Gibson** are part of the Council, as are **Kent Brothers**, **Sharmin Gamiet**, **Paul Kroeger**, **Anne Leathem**, and **Brian Didier** from the Vancouver Mycological Society. **Pam and Harvey Janszen** (Saturna Island) and **Jim Ginns** (Penticton) are also on the Council.

I was invited to be a fly on the wall at this year's Key Council events. Daytimes were given over to forays. Small groups of researchers scattered to a variety of locations, some groups focusing on lakes and bogs, others on mountain slopes. In the late afternoons Council members reconvened to hear reports on current projects. This year they heard slide presentations on work with *Laccaria*, *Volvariella*, and Ascomycete keys. In the evenings several members of the Council gave updates on their research. Evening topics included fungi and radioactivity, hypogeous fungi (truffles and false truffles), and the ongoing research at Victoria's Observatory Hill. Between talks members wandered into an adjoining room where those returning from forays were laying out and labeling their finds. Key Council directors had worried that the spell of dry weather that had brought the fires might also have prevented the mushrooms from sprouting. Many mushrooms, it seems, overlooked the unusual weather: searchers brought in samples of over 150 species.



photo by Kem Luther

photo by Kem Luther

The groups I forayed with found two rare mushrooms. One was *Polyozellus multiplex*, the Blue Chanterelle, a mushroom I had seen only one other time (at Whistler, BC). Veteran mycologists crowded in to photograph the small fungus. Several admitted that this was the first time they had seen it in the wild. Despite its resemblance to the white and gold chanterelles, the blue mushroom is not, I was told, a particularly good edible.

Another group I was with came across a large *Laricifomes (Fomitopsis) officinalis*, the Quinine Conk. This hoof-shaped polypore has a preference for old growth forests. Loss of habitat, together with harvest of the

conk for medicinal purposes has reduced the mushroom's presence in the Pacific Northwest. The conk has an extremely bitter taste. I put a piece of its chalky upper surface in my mouth and had to spit it out at once.

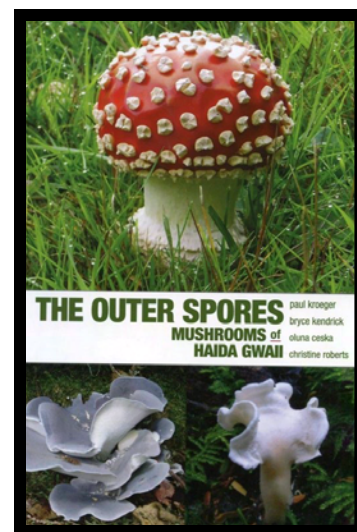


NEW PUBLICATION

THE OUTER SPORES: MUSHROOMS OF HAIDA GWAI

Kroeger, P., B. Kendrick, O. Ceska, & C. Roberts. 2012.

Mycologue Publications, Sidney, BC & Haida Gwaii Museum,
Skidegate, BC. 189 p. ISBN 978-0-9692237-3-3 [softcover]
Price: CND\$ 25.00



Mycologue Publications and the Haida Gwaii Museum are happy to announce the publication of *The Outer Spores - Mushrooms of Haida Gwaii*, a new book about the fungi of Haida Gwaii (formerly known as the Queen Charlotte Islands). The authors visited this archipelago off the north west coast of British Columbia many times over a 5-year period, and collected on many of its islands in order to compile a database of its macrofungi (and some microfungi). They collected over 600 species, and these are carefully documented in text and almost 300 sparkling colour photographs in the book. Special emphasis has been placed on the nature of fungi, their nutritional and ecological groups (mycorrhizal, saprobic, parasitic, dune-inhabiting, carcass-exploiting), and their cultural aspects, including edible, poisonous and hallucinogenic species. A number of rare, and in some cases possibly undescribed, fungi are documented, as is our progress in accumulating taxa over the five years.

Andy MacKinnon (author of *Plants of Coastal British Columbia*) says about *The Outer Spores*: "This is a terrific book, lavishly illustrated and deliciously idiosyncratic. It's not a field guide to mushroom identification per se, though it will assist those looking to become sated or stoned. *The Outer Spores* is eminently readable and, as a bonus, the title is an excellent pun."

This 200-page book is a unique exploration of a unique habitat, and belongs on every mycologist's bookshelf.



STUDENT QUESTION ABOUT MUSHROOM'S MAPLE SYRUP ODOR TAKES 27 YEARS TO ANSWER

May 04, 2012, Humboldt State University

When it comes to long-running student questions, Darvin DeShazer's ('72, Biology, '86, Education) might take the cake.

DeShazer was a graduate student in 1985 when he became interested in the odor-causing chemical of the candy cap mushroom. Frequently used in cookies, cakes and ice cream, the mushroom is odorless when fresh but smells like butterscotch or maple syrup when dried.

So he asked Chemistry Professor William Wood, a specialist in chemical ecology. Wood didn't know the answer, so he encouraged DeShazer to help him find an explanation. Their research finally ended last month when Wood identified the chemical as "quabalactone III," using a relatively new technique called solid-phase micro extraction.

He published the findings in a recent issue of *Biosystematics and Ecology*. "It was a question that was bothering me for about 25 years," Wood says. Interestingly enough, the question didn't pique Wood's curiosity initially, DeShazer recalls: "It wasn't on his radar." But as the years went on—and DeShazer's question remained unanswered—Wood's fascination grew. After DeShazer graduated, Wood assigned a succession of four students over several years to pick up where DeShazer's research had left off. They and DeShazer are listed as co-authors on the paper.

Although each student reached the same dead end as DeShazer, their findings contributed to the final breakthrough, Wood says. That came earlier this year when Wood decided to try a new technique to identify the chemical called solid-phase micro extraction. During previous attempts, students had dissolved the mushroom in a solvent before using a gas chromatograph-gas spectrometer, a machine that separates, weighs and fragments molecules to identify unknown compounds. But that technique sullied the sample with impurities.

With the new method, Wood was able to isolate the gas molecules responsible for the scent. He determined that "quabalactone III" likely forms from free amino acids after the mushroom dries.

The chemical is also found in the flowers of the Rosita de Cacao tree, native to South America. Aztecs once used the flowers as perfume and to flavor chocolate drinks. The dry candy cap fragrance is so strong—and long lasting—that Wood still uses the sample he picked in the woods 25 years ago. Today, an eight-ounce package sells for about \$150 online.

Wood says the paper was a group effort because each student's research brought him closer to the answer. The other alumni authors are Jay Brandes, Brian Foy, Christopher Morgan and Thierry D. Mann.

DeShazer, now a high school biology teacher in Petaluma, Ca. and science advisor for a local mushroom club, says he was amazed to hear Wood had made headway. “I was a little surprised that he was actually still working on it,” says DeShazer. “But it was definitely satisfying.” He now uses the story as a teachable moment in class.

“High school kids are incredibly impatient so the fact that it carried on for a quarter of a century and finally yielded results was kind of a big deal,” DeShazer says.

Not long after the research was published, someone asked him to bake a cake for a school fundraiser.

“Of course I put the mushrooms in it,” DeShazer says. “It took the highest bid.”



CHINESE VEGETARIAN/TOFU CHOW MEIN

contributed by Wilmar Blizzard

Ingredients:

Mushroom: Chinese dried (or shitake), King Oyster, Enokitake etc., sliced into thin strips

Cabbage or Sui Choy: sliced thin

Celery: tough outer skin peeled, and sliced thin into 2 inch lengths

Carrot: peeled and sliced into 2 inch length strips

Optional Vegetables: Red/Green Peppers sliced thin similar to celery

Snow peas – remove tip and slice thin

Bamboo shoots

Tofu: marinated tofu – slice each square into half horizontally and then into thin strips vertically

Chinese Fresh Noodles: follow instructions on package

Green onions – slice into 2 inch lengths

Fresh ginger: peeled, 3-4 thin slices

Vegetable oil

Light soya sauce

Sesame oil

Directions:

Heat up frying pan, add 1-2 tbsp. of oil, and add ginger and green onions. Then add the dried Chinese mushrooms for a few minutes and turn heat to medium.

Add cabbage and cook for a few minutes.

Add celery, carrots, and other vegetables. Cook only a minute or two. Do not overcook vegetables.

Add mushrooms except for Enokitake (which should be added at the very end).

Add tofu and heat through. Add some soya sauce and pepper according to taste. Remove vegetables to dish.

Meanwhile cook noodles according to package and make sure not to overcook. Drain well. Put noodles on paper towel before next step.

Heat up a clean pan/wok. Add few tbsp. oil. Add noodles in thin layer. Do not put too many noodles if you want the noodles to be 'crispy'. Turn heat to medium. Let noodles get crisp but not burned. Do not move the noodles too much. Flip to the other side when crisp. Continue doing the rest of the noodles.

Finally add the vegetables to the noodles and mix well. Add more seasonings if desired.

You can add 1-2 tbsp. of oyster sauce.

Note: For a spicier taste, you can add a chilli pepper and this should be added at step 2.

Fall

Robert Hass

Amateurs, we gathered mushrooms
near shaggy eucalyptus groves
which smelled of camphor and the fog-soaked earth.
Chanterelles, puffballs, chicken-of-the-woods,
we cooked in wine or butter,
beaten eggs or sour cream,
half expecting to be
killed by a mistake. "Intense perspiration,"
you said late at night,
quoting the terrifying field guide

while we lay tangled in our sheets and heavy limbs,
"is the first symptom of attack."
Friends called our aromatic fungi
"liebestoads" and only ate the ones
that we most certainly survived.
Death shook us more than once
those days and floating back
it felt like life. Earth-wet, slithery,
we drifted towards the names of things.
Spore prints littered our table
like nervous stars. Rotting caps
gave off a musky smell of loam.

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A Mushroom Burial Suit?

Artist Jae Rhim Lee has a bold dream — to minimize the environmental impact of our funeral practices by using mushrooms. Add embalming and cremation chemicals to the toxic stew already accumulated in our bodies during our lifetimes, but low impact, according to preserve our death, poison the liv-environment.”



and our death is anything cording to Lee. “By try-dead bodies, we deny ing and further harm the

Lee is working on an “Infinity mushroom” whose spores can be embedded into a funeral suit. By “training” edible mushrooms to eat her sloughed-off hair, nails and skin, she hopes to develop her Infinity mushroom. The mushrooms will decompose the body, and at the same time, clean the toxins. As she says, this may be “out there” for some people!

For this thought-provoking Ted talk, go to:

http://www.ted.com/talks/jae_rhim_lee.html

js

THE LAST WORD

Sicamous B.C. made the news for the flooding in June, but did you know it is developing into a little myco-hub? It is host to an annual Fungifest in mid-September, with a week of forays and a weekend full of lectures, workshops, music and a popular beer tent for post-foray chats. With fungal finds carefully labelled and open to the public, it's a good place to get introduced to mushrooms and meet mycologists and other fungal enthusiasts.

Like the Island, the Shuswap was bone-dry this summer and fall. Bernie and I like to mushroom in September but we weren't expecting to find much in the way of edibles. However, Revelstoke and Nakusp were respectable sources of chanterelles, boletes and pines much to our surprise. No motherlodes, but decent hauls...enough to feed us through 10 camping days. On our return, we popped into Sicamous' Red Barn to see the Fungifest's collection. Still quite a goodly number of species considering the drought conditions. Next year, why not check out Sicamous in September? <http://www.fungifestival.com/index.php>

Meantime, anyone know a raindance for the Island?

Jill Stanley