

Bamfield Mushroom Festival 2015

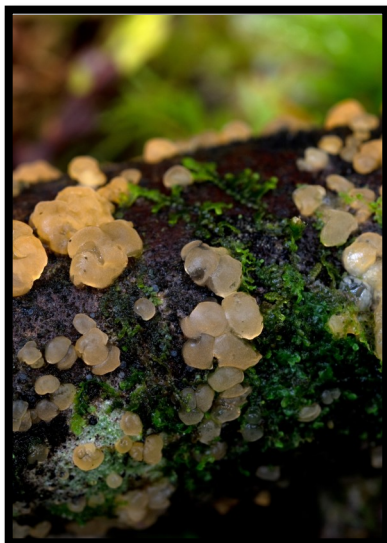


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IN THIS ISSUE:

Bamfield Mushroom Festival	P.1-3	Meet Kem Luther	P.8-9
The Ceska Mycology Award	P.4-5	Otidia chart-Ian Gibson	P.10-12
Upcoming Events	P.6	The (Very) Last Word	P.13
In the News	P.7		



Bamfield Mushroom Festival 2015

By Andy MacKinnon

Photographs by James Holkko

Bamfield has hosted a number of Vancouver Island's most riotously fun mushroom festivals over the years. I was fortunate enough to attend the last of them, perhaps six autumns ago. The festivals were presided over by 'Mushroom Jim' (Jim Jones), and featured talks, walks, and sales from local pickers and buyers. There was also a Firehall

Dance on the Saturday night (featuring fine music by local band The Broken Group, and the usual debauchery). But the highlight of the Bamfield Mushroom Festivals past was the concluding potluck in the Anglican Hall, a true community event where Bamfielders contributed plates and bowls and cutlery, and an array of delicious pot-luck dishes. There were prizes for biggest mushroom, weirdest-looking mushroom, grossest mushroom etc. – most handed out to kids. Several hundred people attended the event. The Hall was filled to overflowing.

And then the Hall was sold. Mushroom Jim left town. Some organizers moved on. And that was that.

Until this autumn, that is. Now, I have a long history with Bamfield, dating to 1976, when I first traveled to this idyllic west coast town to take a seaweed course at the Bamfield Marine Station (BMS). At the time, Bamfield had ~300 year-round residents, I think; today it's less than 150. I've returned many times over the years, occasionally for research, often to help teach field courses based at BMS. At the last course – summer 2014 – we had a terrific Teaching Assistant named Orla Osborne. And in autumn 2014 several members of BMS's Public Education program took part in a mushroom course taught by Shannon Berch and me in Tofino for Raincoast Education Society. Together we conspired to re-boot Bamfield's legendary Mushroom Festival.



And so it was that Shannon Berch, Sinclair Philip, Juliet Pendray, James Holkko and I found ourselves Bamfield-bound Thursday September 17 for Bamfield Mushroom Festival 2015. Orla Osborne organized things in Bamfield. We collected on our way to the west coast, where it was wet and fungal fructifications were everywhere (as opposed to the dry, barren east coast we'd left). There were presentations at the School on the Thursday and Friday nights, walks Friday and Saturday, and a modest (but very jolly) potluck on the Saturday night.

Friday's collecting was on the BMS grounds, on the Rainforest Trail. Saturday we took a boat to West Bamfield to collect in the Ghost Forest. (One objective here was to collect 'strawberries and cream' [*Hydnellum peckii*], one of two known fungal associates of the notorious mycoheterotroph Gnome Plant [*Hemitomes congestum*]; Gnome Plant is abundant in the Ghost Forest. We found Gnome Plant, but not the *Hydnellum*.) Fungi were abundant, participants were enthusiastic, and the weather was ...



well, the weather was wet, wet, west-coast wet!

Congratulations and thanks to Orla and to all of the other Bamfielders who were such hospitable hosts. I think that all were agreed that a Bamfield Mushroom Festival 2016 would be a good idea. Stay tuned!



Oluna and Adolf Ceska Award in Mycology Fund



During the summer, SVIMS member Jean Johnson hatched a brilliant idea. Thanks to her efforts, a mycology award fund has been endowed at the University of British Columbia (UBC). Major donors to the endowed fund are Jean and Stephen Johnson, the South Vancouver Island Mycological Society (SVIMS), and anonymous friends and members of SVIMS. Jean's many legacies now include the initiation of this award named to honour the educational and scientific contributions made by Oluna and Adolf Ceska to mushrooming and mycology in British Columbia and beyond. The award will be provided annually to an undergraduate or graduate student to support their mycological research on the mushrooms and fungi of British Columbia.



The endowed fund will provide one annual student award in perpetuity, so donations help support student research in mycology well into the future and pay back huge dividends in knowledge of our fungi and mushrooms.

Selected examples of work already done by students in mycology at UBC:

- * Common, unsightly and until now undescribed: *Fumiglobus pieridicola* sp. nov., a sooty mold infesting *Pieris japonica* from western North America. Grad student: Tanay Bose
- * Cortinarius species diversity in British Columbia and molecular phylogenetic comparison with European specimen sequences. Grad student: Emma Harrower
- * Is the booted tricholoma in British Columbia really Japanese matsutake? Undergrad student: Sea Ra Lim

The initial push for donations to reach the minimum of \$30,000 required for a fund endowed in perpetuity at UBC was successful. However, we do not have to stop at \$30,000; additional donations may permit more than one award per year or an increase in the amount of the award. For anyone interested in contributing to this fund, UBC provides instructions (<https://support.ubc.ca/>) for on-line donations and for donation by mail, fax or phone. All donations will receive a tax receipt.

To donate by mail or fax, download the Printable Gift Form (PDF) from <https://support.ubc.ca/waystogive/mail-fax-phone-automatic-bank-debit-or-payroll-deduction/> and send the completed form by mail or fax to:

UBC Annual Giving

500 – 5950 University Boulevard

Vancouver, BC Canada V6T 1Z3

Fax: 604-822-8151

Be sure to make it clear that your donation is to go to the Oluna and Adolf Ceska Mycology Award (G1453).

Many thanks to SVIMS and to everyone who has contributed so far.



UPCOMING EVENTS

SVIMS meeting—Nov. 5, 2015

Pacific Forestry Building, 7pm

Cultivating Mushrooms

Scott Henderson, “The Mushroom Man”

SVIMS meeting—Dec. 3, 2015

Pacific Forestry Building, 7pm

Without a Specimen, it’s only a Rumour

Brenda Callan, research scientist

Wild Mushrooms: An Introductory Course

Oct. 14, 2015, 7-9pm

Session 2, Juliet Pendray

Mushroom Field Taxonomy 1

Swan Lake Nature Centre

\$20 for SVIMS members - swanlake.bc.ca

SVIMS Lake Cowichan Foray

Oct. 23-25, 2015

Forestry Research Centre, Lake Cowichan

Wild Mushrooms: An Introductory Course

Oct. 28, 2015, 7-9pm

Session 3 Bill Jones

Cooking with Wild Mushrooms

Swan Lake Nature Centre

\$20 for SVIMS members - swanlake.bc.ca

Swan Lake Mushroom Show

Nov. 1, 2015

Swan Lake Nature Centre

10am-4pm by donation

Swanlake.bc.ca

Metchosin Bioblitz

Nov. 7, 9-4pm

Inventory of fall mushrooms in Metchosin

Metchosinbiodiversity.com

VNHS Foray

Nov. 8, 10am

Royal Roads Parking Lot

Victoria Natural History Society calendar

Oregon Truffle Festival

3 weekends in January 2016

Tickets on sale Sept 1

Oregontrufflefestival.com

In The News

Cesium radioisotope content of wild edible fungi, mineral soil, and surface litter in western North America after the Fukushima nuclear accident

By Matthew J. Trappe, Leah D. Minc, Kimberly S. Kittredge, Jeremias W. Pink

Canadian Journal of Forest Research, 2014, 44(11): 1441-1452, 10.1139/cjfr-2014-0105

Abstract

We measured activity levels of radioisotopes cesium-134 (^{134}Cs) and cesium-137 (^{137}Cs) in wild edible fungi, mineral soil, and surface litter of the west coast of North America from southern California to northern Vancouver Island after the Fukushima nuclear accident. All activity measurements were below United States governmental limits for human health. ^{137}Cs activity increased to the north in mineral soils and fungal samples, whereas ^{134}Cs activity increased to the south in surface litter samples. Chanterelles (*Cantharellus* spp.) did not significantly bioconcentrate either radioisotope, but chanterelle activity levels were correlated with those of mineral soil. Activity levels demonstrated a high degree of variability, even in samples from the same site. In most cases, the level of ^{137}Cs activity was substantially higher than that of ^{134}Cs , suggesting that ^{137}Cs was present in the environment prior to the Fukushima release.



Photo: FIU News

May 1/15 CBC technology news: Avocado Trees Dying of Fungus

A fungus has hit the avocado groves of Florida and dogs are helping to sniff it out.

The Asian ambrosia beetle is the cause of the spread of the laurel wilt fungus which has already killed 9000 trees in Florida and threatens to impact trees in other big avocado-growing locations such as California and Mexico.

A drone can identify the wilt before the human eye, but by then the only remedy is to remove the tree. Another method that shows more promise is to use dogs trained to identify the fungus through smell. Farmers can then treat the disease through the tree's root system.

MEET SVIMS MEMBER KEM LUTHER



Kem Luther has lived in Nebraska, Illinois, Wisconsin, Virginia, and Ontario. He and his musician wife, Jeanne, moved to Metchosin in 2005. Now retired, Kem is a writer, an avid gardener, and a volunteer with several organizations, including the Metchosin Foundation, the Metchosin Biodiversity Project, the CRD, and the Southern Vancouver Island Mycological Society. He often gives lectures to/does guided walks for local natural history groups. Before his retirement Kem was a college/university teacher and administrator. He was the first Dean of the Communication, Culture, and Information Technology program, a joint venture between the University of Toronto and Sheridan College that now enrolls a thousand students.

Kem studied and taught philosophy for many years (Ph.D., University of Chicago). After moving to Canada in 1981, he switched fields, becoming a Professor of Computer Science at Ontario's Sheridan College (M.Sc., ABD University of Toronto).

Several of Kem's writing projects have been published as books. The first one was *Cottonwood Roots* (1993, University of Nebraska Press). His most recent effort was a volume of social history, *The Next Generation Gap* (2009, <http://nextgenerationgap.com>). *Boundary Layer*, his current writing project, is a foray into the lesser-known corners of Pacific Northwest ecosystems.

As part of Kem's volunteer work with the Metchosin Foundation, set up as a non-profit to "preserve and safeguard Metchosin's unique ecosystems, flora and fauna for the benefit of all Canadians", he maintains a Facebook page (<https://www.facebook.com/Metchosin-Foundation-378792368991000/timeline/>) that focusses on the diversity present in Metchosin. In addition to stunning photographs of insects, plants, birds and flowers, you will also find Kem's mushroom photos, complete with interesting and informative write-ups. To give you a taste, here's a sampling:



The caps of *Pholiota aurivella*, Golden Pholiota, almost seem to glow when the sunlight hits them. But you often find the clumps of this mushroom (and it usually grows in clumps) in dark recesses of decaying logs where no sunlight can reach. The caps have spot-like, sticky scales that sometimes wear or wash off, and the stem often has downward pointing scales. Young specimens may have veil; older ones often have a dark band where the ring used to be. These were found on Pearson College lands..

Conks, hard shelf-like fruiting bodies of mushrooms that grow on living or dead trees, can be seen year round. Many of the conks persist for several years. The most common conk in our area, *Fomitopsis pinicola*, the Red-belted Conk, is one of these long-lived ones. If a tree falls while the fungus is still alive and doing its work, the fungus will put out a new conk, this time turned 90 degrees from the old conk. The one in this picture, on Pearson College Lands, has pulled this trick. The fact that this conk was on a fallen trunk is no accident: Red-belted Conks contribute to the demise of ailing trees by causing heart rot.



Xylaria hypoxylon has several English names. Candlesnuff, Carbon Antlers, Stag's Horn. These small black and white sticks, growing on dead wood, do look a lot like antlers. The ones in this picture (from Pearson College Lands) are the straight variety, but *Xylaria* is often singly branched. The white top of the antler is due to a dusting of asexual reproductive structures. Most of our fall mushrooms are basidiomycetes--their spores are held on a clublike structure called a basidium. *Xylaria* is one of the less common ascomycetes. The spores are held, usually in groups of 8, in a sac called an ascus.



OTIDEA in the Pacific Northwest

SPECIES	SHAPE	INTERIOR COLOR	EXTERIOR COLOR	SPORES (µm)	OTHER
<i>onotica</i>	ear-shaped	yellow to yellow brown often with pinkish tinge	yellow to yellow brown without pinkish tinge	12-13.5 x 6-7	common
<i>smithii</i>	ear-shaped	brown to deep purple brown	somewhat darker purple brown	12-14 x 6-7.5	uncommon
<i>pseudoleporina</i>	ear-shaped	ocher orange to pinkish orange	yellow brown	10-12 x 5.5-6.5	uncommon
<i>leporina</i>	ear-shaped, narrow ear-shape may persist	yellow brown to brown, seldom pink stains	yellow brown to brown	12.5-14 x 7-8.5	uncommon
<i>tuomikoskii</i>	persistently narrowly ear-shaped	pale ocher to ocher yellow, pink stains rare	yellow brown, warty	10-11 x 5.5-6.5	uncommon
<i>nannfeldtii</i>	persistently narrowly ear-shaped	orange ocher to pale brown, sometimes with pink tones	orange ocher to pale brown, warty	9.5-10.5 x 5.5-6.5	rare
<i>alutacea</i> group	truncated ear	tan to grayish brown or yellowish brown	tan to grayish brown or yellowish brown	12-18 x 6.5-8.5	common
<i>oregonensis</i>	truncated ear	grayish white to pale ocher, sometimes with pink stains	bright citrine yellow, often wrinkled or ribbed	10-11.5 x 5.5-6	uncommon
<i>rainierensis</i>	truncated ear	buff to ochraceous	buff to ochraceous	11-12 x 6.5-7	rare
<i>propinquata</i>	stemmed cup	ocher brown to red brown	ocher brown to red brown	19-21 x 10-12.5	rare
<i>Wynnella silvicola</i>	ear-shaped	dark purplish red brown to dark brown	reddish brown	17-24 x 11.5-17	uncommon



Above: *Otidia onotica*. Photo: ©Michael Beug

Below: *Otidea alutacea*. Photo: ©Adolf Ceska



There are at least 10 species of *Otidea* in the Pacific Northwest. There are three general forms: "ear-shaped" fruitbodies (rabbit-ear-shaped or spoon-shaped, at least when young), "truncate" (as if the top of the ear-shaped is lopped off), and "stemmed cup" (one rare species).

Truncate shapes are characteristic of the *Otidea alutacea* group, *Otidea oregonensis*, and *Otidea rainierensis*. The *O. alutacea* group is the most common of these three: fruitbodies are light brown to grayish brown or dingy yellowish brown, medium to large and usually densely clustered. The other two have smaller spores and paraphyses with clavate to capitate ends. The first of those two, *Otidea oregonensis*, has a citrine yellow exterior.

Of the spp. with ear-shaped fruitbodies, *Otidea onotica* is the commonest: the fruitbodies are yellowish to dull orange, usually with rosy tints on the inside (spore-bearing surface). Pinkish tinges can appear in several other species. *Otidea smithii* is deep purplish brown inside and out, and relatively large. *Wynnella silvicola* is dark purplish red brown to dark brown and has very large spores. *Otidea leporina* is yellowish brown usually without any rosy tints. It could be difficult to distinguish from some fruitbodies of *Otidea onotica* but averages smaller and has broader spores. *Otidea pseudoleporina* has orange to pinkish orange tints in the interior and smaller spores than *O. leporina* and *Otidea onotica*. Two other ear-shaped species have small spores and tend to retain a narrow ear-shape well into maturity: *Otidea tuomikoskii* and *Otidea namfeldtii*. See Olariaga et al.(2015) or the MatchMaker *Otidea* table for the detailed differentiation between these two. Finally *Otidea propinquata* is a rare stemmed cup, usually without a slit in the side, with large spores.

All of these species usually grow on the ground near conifers, tend to have a smooth interior and a scurfy or warty exterior, and have rather brittle flesh. Spores are colorless or pale, more or less elliptic, contain 2 large droplets, and (in all Pacific Northwest species) have a smooth surface. They are borne in 8-spored asci. The species differ in color, shape, and microscopic characters including spore dimensions, paraphysis shape, wart height, and the reactions of exterior resinous exudates to KOH. Paraphyses in *Otidea* are mostly curved to hooked without marked enlargement at the ends. Paraphyses of *Otidea rainierensis* and *Otidea oregonensis* have clavate to capitate ends.

The best single recent source of information for *Otidea* is the 2015 monograph by Olariaga et al.

References:

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4. Castellano, M., Jane E. Smith, Thom O'Dell, Efrén Cázares, Susan Nugent. 1999. Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan. General Technical Report PNW-GTR-476. United States Department of Agriculture.



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THE (VERY!) LAST WORD

I regret to announce that this is my last issue as Editor of Fungifama. It is time to move on and let someone else bring new and fresh ideas to the newsletter. In the years I have been doing this, I have been immensely fortunate to have had the support of many people. Jean Johnson who invited me to be Editor has been a bedrock of support; Shannon Berch, my eagle-eyed contributor and encourager; Ian Gibson, a wellspring of patience for my all-too-frequent cries for help; Adolf Ceska and James Holkko for their generous sharing of photographs; and all the club members who have recorded their adventures with mushrooms—scientific, agricultural, gastronomic and otherwise. Without your contributions, there would not have been a newsletter. My sincerest thanks to all.

Speaking of “new and fresh ideas”, it is fitting that this Fungifama comes out right before the Canadian election, so I can encourage you all to vote! On October 19th, vote for the earth—for our forests, for our water, for our environment, so that our children and grandchildren can still enjoy what SVIMsers find so precious here on Vancouver Island.

Thanks again. It's been a slice.

Jill