FUNGIFAMA

SOUTHERN VANCOUVER ISLAND MYCOLOGICAL SOCIETY

ROYAL ROADS FUNGAL FINDS

L: *Auriscalpium vulgare* Above: *Otidea onotica*
Below: *Ramaria marrii* *Photo credits: Rich Mably*

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WHAT'S THAT MUSHROOM?

New Version 2.1 MATCHMAKER - Mushrooms of the Pacific Northwest

Michael Beug, Danny Miller, and Drew Parker joined the team of Ian Gibson, Eli Gibson, and Bryce Kendrick to author this updated version of MatchMaker 2.0. You will find 4000 species, 5000 illustrations, and a computerized identification key. The free download is available at http://www.matchmakermushrooms.com For a quick tour of the most popular features and how to use them, choose "MatchMaker Help" from the Help menu, and click on "Quick Guide to MatchMaker features".

SOUTH VANCOUVER ISLAND MYCOLOGICAL SOCIETY (SVIMS)
2014 MUSHROOM CALENDAR

Celebrate the joy of mushrooming and
inform people about the variety of mushrooms
growing on southern Vancouver Island.

Members only – submit your mushroom related digital photos or graphic art by June 1st.
Observe the following details:

1. Photo size is approximately 600x800 pixels when submitted. If selected, a larger size (see #8 below) must be available when requested.
2. Only SVIMS members in good standing can submit
3. No more than 15 photos will be accepted from each person.
4. Submissions may illustrate:
    a. the diversity of mushrooms found on southern Vancouver Island, both edibles and non-edibles
    b. mushroom cookery or crafts
    c. interaction of mushrooms with people, animals, other organisms, or the environment
    d. SVIMS events or activities
5. Submissions are visually appealing and artistic.
6. Some interesting information is provided about each photo e.g. habitat, when it was taken, the recipe.
7. Submissions of specific mushrooms are identifiable at least to genus.
8. Each photo must be available with a minimum of 2,000 pixels in width if in landscape orientation, more in portrait (see #1 above).
9. Each photo that is finally selected for the calendar was created by a different photographer i.e. no more than one submission will finally be selected from each person who submits.

All submissions should be given to Mabel Jean by June 1st 2013
on a compact disc or memory stick or
by email seagulls@islandnet.com (see #1 above for size).

FUNGIFAMA DEADLINE

Please submit your stories, announcements, and photos by **August 1st** for the next edition of the newsletter.

jillstanjs@hotmail.com

WELCOME TO OUR NEW MEMBERS!

Larry Glowach
Liz Williams
Barbara Rozalska
Spencer Weisgerber
Navit Giauque
Micha Kingston
Jessica Hoskins
Bruce Richards
Adam Gray
Matt Davies

UPCOMING

Mar. 23, 2013, 6pm

Chinese Mushroom Dinner

Golden City Restaurant

$40 in advance

Contact Barbara at bapender@shaw.ca

Apr. 4, 2013, 7pm

SVIMS meeting, Pacific Forestry Centre

Speaker: Will Hintz

Dutch Elm Disease/MPB

May 2, 2013, 7pm

SVIMS meeting, Pacific Forestry Centre

Speaker: Denis Benjamin

The Mushroom-Love Connection:

mushrooms as aphrodisiacs

June 6, 2013

Annual President's Picnic

FURTHER AFIELD

Aug. 7-10, 2013

Northeast Mycological Federation

Annual Foray

Rimouski, Quebec

$300 http://mycomontreal.qc.ca

Oct. 24-27, 2013

NAMA Annual Foray

Shepherd of the Ozarks, Arkansas

http://namyco.org

SVIMS ANNUAL SURVIVORS' BANQUET
JANUARY 2013

by Mabel Jean Rawlins

Young Tomos was the first person in the door. His dad had the key and they were responsible for setting up all the chairs and tables for the SVIM's annual Survivors' Banquet. Excitedly Tomos said, "I am getting to eat all sorts of foods."

Soon others arrived to help prepare for the banquet. For everyone to eat well each person should bring food to feed eight. Platters, pots and pans of delicious food were laid onto the smorgasboard. Friendly conversation filled the room. "Did you see the standing rib roast that Christian took out of the oven?" "Did you taste the moose and mushroom stew?" "I think Heather put her home baked apple pie on the swap table." And of course we sang to John before eating his 80th birthday cake.

Then Lee Smith, our intrepid president, started the Yankee Swap. Some people bought rows of tickets as long as your arm. Others held tightly to their one or two, hoping they were winners. Overseeing all this frivolity was Tomos, the wizard who controlled the luck by drawing the winning tickets out of the bag. Good natured exchanges and much laughter warmed the room, while some clever ingenuity was used to try to take home one of Kevin's hand crafted patio stones.

Tomos declared, "That was fun. Yes indeed." SVIMS is made up of volunteers who make things happen. Thank you Tomos, and to everyone who contributed to the Survivors' Banquet.

photo credits: Mabel Jean Rawlins

ROYAL ROADS FORAY
FEB. 2013

Paul Kroeger, Shannon Berch, and Oluna Ceska led the foray of about 20 keen fungiphiles to the grounds of Royal Roads University. Of the 41 species collected, three were especially notable: *Sistotrema confluens, Ramaria marrii* and *Hypomyces aurantius*

photo credits: Brooke Da Paoli

Sistotrema confluens

Julien Marceau found this strange white fungus with teeth on the underside on the ground. In the UBC herbarium there is only one Canadian collection from Quebec. The peculiar smell of *Sistotrema confluens* is described as "distinct and characteristic", "like vanilla" by others, and as "disagreeable". Our group agreed that it smelled like cough syrup. Another interesting microscopic feature is that it has basidia with 6 to 8 spores, and only seldom would some have the usual four spores. It is obviously rare throughout its range of distribution.

Thanks to Adolf and Oluna Ceska for the information provided in this report.

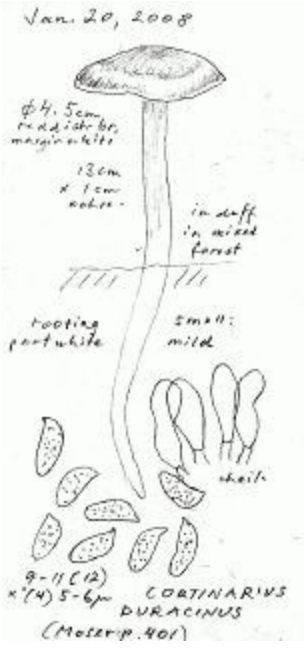
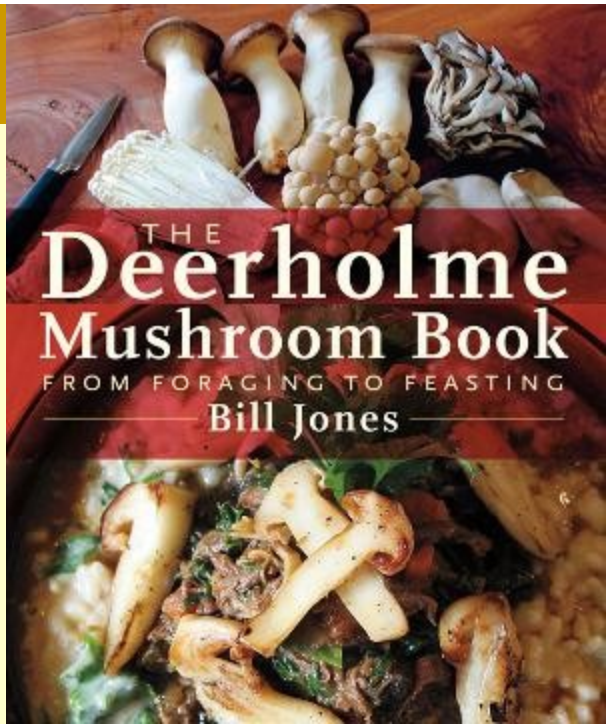


Illustration: Oluna Ceska

Sinclair Philip found an interesting "rooting" *Cortinarius, C. duracinus.* "Rooting" are those mushrooms whose stipes go deep into the substrate (typical of the genus *Phaeocollybia*, for instance)

NEW PUBLICATIONS



The Deerholme Mushroom Book

From Foraging to Feasting

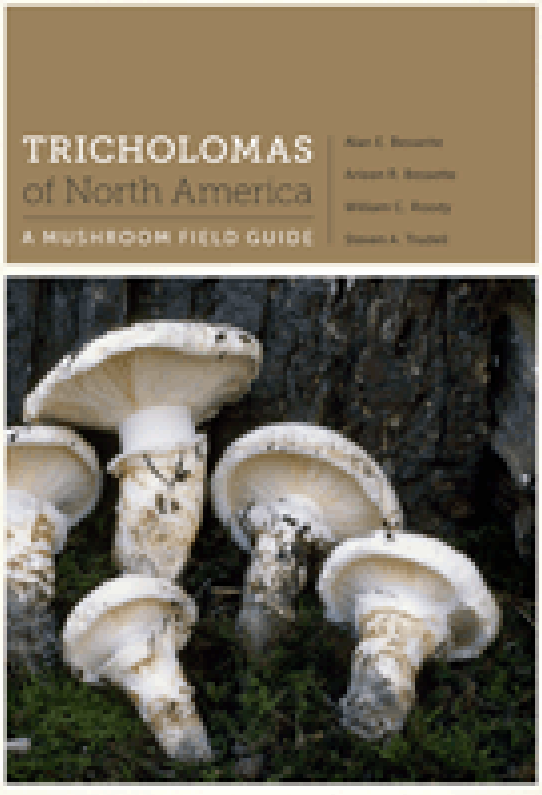
by Bill Jones

Touchwood Editions, forthcoming April 9, 2013

$29.95 CAD

Expand your culinary knowledge of wild and cultivated mushrooms with the comprehensive cookbook by award-winning writer and chef Bill Jones. Learn from an acknowledged expert in the field of wild foods how to source mushrooms through foraging, shopping, and growing, and get a thorough overview of the common types of wild and cultivated fungi. Gain insight into the medicinal and cultural uses of mushrooms, and reap the health benefits of simple, unprocessed food.

Delicious recipes for basic pantry preparations, soups, salads, meats, seafood, and vegetable dishes, all featuring mushrooms, include Truffle Potato Croquettes; Mushroom Pate; Porcini Naan; Semolina Mushroom Cake; Beef Tenderloin and Oyster Mushroom Carpaccio; Curried Mushroom and Coconut Bisque. The Deerholme Mushroom Book is every chef's essential guide to edible mushrooms.



Tricholomas of North America

A Mushroom Field Guide

by Alan E.Bessette, Arleen R. Bessette, William C. Roody, Steven A.Trudell

University of Texas Press, January 2013

$29.95 USD

More than 100 mushrooms in the genus *Tricholoma* have been reported in North America. Most are relatively large, showy mushrooms that grow on the ground near many species of temperate forest trees, both hardwoods and conifers. They typically fruit from late summer through early winter or even into spring in warmer areas. Some are fine edibles, including the matsutake. Others are inedible or even poisonous.

Filling the gap between technical publications and the limited representation of *Tricholomas* in general mushroom field guides, this book is the first comprehensive guide to North American *Tricholomas*. It contains more than 170 of the best documentary photographs available, often with more than one image of a spe-

cies to illustrate the dramatic variation exhibited by many *Tricholomas*. The species descriptions provide extensive identification information including scientific and common names, macroscopic and microscopic features, occurrence/habit, edibility, and a comment section that addresses such things as synonomy, comparisons with similar species, varietial differences, explanations of species' epithets, and other useful or interesting information. In addition, the authors provide a general introduction to *Tricholomas* that discusses identification features, ecology, simple chemical tests (for identification), and how to use the keys provided in this book.

For a detailed introduction to the book, go to http://www.utexas.edu/utpress/excerpts/exbestri.html

ZAP! Lightning, Gods and Mushrooms

By Miwa Oseki Robbins

http://sculptingearth.wordpress.com/

The farmers of Japan say thunderstorms are good luck – they make the mushrooms grow. And mushrooms and thunderstorms are partners in folklore all over the world. The ancient god Soma may even have been a mushroom himself. In the book, *Soma: Divine Mushroom of Immortality*, Gordon Wasson argues that *Amanita muscaria*, the classic red or yellow fly agaric, is the identity of the mysterious Soma, god of the Rigveda, a sacred collection of ancient Vedic Sanskrit hymns. These hymns are some of the world's oldest religious texts, and from them we know Soma is "the child of the thunderstorm". Is Soma really a mushroom? Are mushrooms the children of thunderstorms? Read on.

Science, alas, has had little to say about mushrooms and thunderstorms. Until now. Recently, scientists in Japan have demonstrated a link between lightning and prolific mushroom fruiting. Although their interest in lightning and mushrooms is not driven by a religious quest, their research may inadvertently shed light on an ethnographic mystery.

In Japan, mushrooms are particularly coveted for their delicious, nutritional, and medicinal qualities and demand is outstripping supply. But now scientists are finding ways to harness the power of electricity to increase mushroom production. Can you imagine farms where man-made lightning bolts strike the ground and induce large flushes of mushrooms? Well, this is what scientists in Japan are doing.

Today, shiitake (*Lentinula edodes*), buna-shimeji (*Hypsizygus marmoreus*), eryngii (*Pleurotus eryngii*), and matsutake (*Tricholoma matsutake*) mushrooms are high value health foods in Japan. Matsutakes now sell for $439 U.S. dollars a pound; before you think you might get rich by growing some, you must consider that this is an ectomycorrhizal mushroom that only grows symbiotically with its pine tree hosts, so the world's harvest is entirely collected from the wild. Although harvest of Matsutake mushrooms in Japan peaked at 12,000 metric tons in 1941, harvest declined to 34 metric tons in 2005, not due to lack of demand but

due to many threats to these red pine forests, including a pine wood nematode infestation that has been wreaking havoc in these ecosystems. People want more mushrooms. Let's harness the power of lightning.

The use of direct current (DC) electric fields on living tissue is not a new idea, but has a long and contentious history. Even back in 1985, when Robinson wrote a review of the topic, he was able to find 8 reliable reports involving plant cells and animal cells responding to DC fields. The reports ranged from growth of neurons towards the negative electrode to a "healing" response of wounds. Many of these observations seem to have been dismissed as "laboratory curiosities," unlikely to have much real world application. In Japan, though, electrical stimulation has been used in the production of shiitake, buna-shimejo, and eryngii mushrooms for almost half a decade. And this technology doesn't seem to be limited to mushrooms, as farmers are also using electromagnetic field technology in the production of tomato, lettuce, strawberry, and some ornamental plants.

Lightning is notoriously disobedient , so Islam and Ohga built a "Small Population Lightning Generator" (SPLG), conveniently powered by rechargeable AA batteries. This device can be wheeled through the forest, and administers 50kV electric pulses to the ground through its electrode wheels. No, it isn't exactly like lightning—it's more like the shock you get from a metal doorknob after dancing in your polyester leisure suit. The SPLG delivers maybe 500 milliJoules of energy per zap; a bolt of lightning might deliver one billion times more than that. Other studies have delivered shocks as low as 30kV and shown increases in mushroom yields.

One fall day in a Japanese forest, Islam and Ohga trundled the SPLG across their 2 by 3 meter experimental plots in parallel passes that were each 0.10 meters apart. The results were yields of matsutake mushrooms just about double the yields in unzapped control plots. A monstrous flush came two weeks after the pulse and a second one nearly as large 3 weeks after. But it wasn't just the quantity that increased; the quality, as measured by weight and size of individual matsutake mushrooms, also showed dra-

matic increases. Harvests from the zapped plots were, on average, almost 70% heavier than controls. If you thought mushrooms were magical all on their own, the combination of mushrooms and electricity might knock your socks off.

Fungi are mysterious things and the mechanism by which electrical stimulation promotes mushroom fruiting is still not much understood. Perhaps the mushroom mycelium is responding to an apparent threat of death by redoubling its reproductive efforts? Many electrifying questions remain. How does the zapping affect forest trees? Can the high fruiting rates be sustained without damaging the mushroom-tree symbiosis? When's the next thunderstorm due in my neighborhood?

In the meantime, if you feel like experimenting (safely, of course) with mushrooms and electricity, you might want to check out this intriguing post about a New York City mycophile who in 1923 grew his mushrooms amid Jazz music, artificial fog, and static electricity (http://blog.modernmechanix.com/tiny-thunderbolts-help-mushrooms-grow/). Or, next time you go in the woods foraging for mushrooms, look for trees recently struck by lightning. Who knows what you will find? Maybe you will even have an encounter with the god Soma, child of the thunderstorm.

For related literature, see: http://blog.mycology.cornell.edu/

Reprinted from: Cornell Mushroom Blog, with permission

photo credit: Philip Ross

EAT MUSHROOMS?

NAH!

SIT ON THEM

Artist and mycology devotee, Philip Ross, has combined his talents into the making of fungal furniture. His chairs, footstools, and tables last longer than IKEA's, he claims, but will eventually degrade. Using *Ganoderma lucidum,* otherwise known as the reishi fungus, he uses kerosene mixed with Vaseline to determine where mushrooms will bloom from the malleable and eventually concrete-like mycelium. When his creation is to his liking, he bakes the piece in a 67 degree oven to kill the spores and paints it with a biodegradable lacquer. To see more of his innovative work, visit http://philross.org

SPRINGING


photo credit: Esteban Cavrico


photo credit: Mary Smiley

INTO MORELS

ASPARAGUS WITH MORELS

12 ounces fresh morels, stems removed, cut in half if large
2 tablespoons butter, unsalted
1 tablespoon freshly-squeezed lemon juice
2 tablespoons water
salt and pepper
36 asparagus spears
1/2 cup crème fraîche
2 teaspoons sherry or port
12 sprigs flat Italian parsley

In a 9-inch non-stick skillet, cover and slowly cook the morels with the butter, water, lemon juice and salt and pepper to taste for 12-15 min. or until moisture has evaporated from the bottom of the pan. Shake skillet to avoid sticking. Set aside.

Cook asparagus (upright) until crisp-tender in boiling salted water. Drain, cover and keep warm. Just before serving, add the crème fraîche (http://www.seriouseats.com/recipes/2011/02/how-to-make-creme-fraiche-in-1-easy-step.html) to morels and reduce liquid to half by boiling. Remove from heat, stir in sherry and adjust seasoning. Drizzle over asparagus and garnish with parsley.

Adapted from *The Edible Mushroom - A Gourmet Cook's Guide* by Margaret Leibenstein.


photo credit: chuckeats.com

SVIMS EXECUTIVE 2012-2013

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GROSS US OUT

Nicolas Money, the author of *Mushroom*, was asked in an NPR interview (Jan. 18, 2012), what were the most inappropriate places he had seen mushrooms growing. He replied:

"I rented an apartment years ago in New Haven, and there were mushrooms there that were growing, actually these were cup fungi, large things that were growing around the wooden surround of the bathtub. And - absolutely revolting. So for even somebody that loves the fungi, this was really quite disconcerting.

But far worse than that is a photograph that I've seen of a mushroom, an ink cap mushroom, actually growing in the throat of a patient. So this was actually photographed in some very unfortunate individual whose immune system was really crashing, and actually a mushroom growing in that location is something that none of us want to experience."

What's the worst place **you've** ever seen a mushroom? Write and tell us. We'd love to know!

THE LAST WORD

Any bets on this year for a bumper crop of edibles? Will it be another dry season or will we get rain, sufficient to bring on those shrooms? Let's hope we get just enough to keep everyone happy.

Like mushrooms need rain, a newsletter too requires a lot of input. Without the contributions of club members it would not be possible, so I want to express my gratitude to all who keep me supplied with articles, photos, reports, and hot leads. Your input is both very welcome and appreciated. Thanks too, to Shannon Berch and Ian Gibson who proofread and advise in ways that help to make Fungifama better, rain OR shine.

Thanks to all,

Jill