

# fungifama

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South Vancouver Island Mycological Society

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## SVIMS

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## WINDER'S WOODLOT

It appears as if we have another dry season underway. Although this means a sort of lull in the mushroom season, it has by no means come to a grinding halt. Edibles such as the oyster mushroom (Pleurotus ostreatus) and the fairy ring mushroom (Marasmius oreades) were fruiting in the early part of the dry spell. I recently tried my first Marasmius mushrooms from a fairy ring growing in my backyard. I was delighted to find a pleasing, complex flavor in the small sample that I tested- so much so that I picked the whole ring and scattered bits of the mushroom in strategic places around the yard. Even the sun-dried specimens rehydrate well. Before everyone rushes out to check their yards- they've all pretty well dried-up out of sight now, at least until the next rains. Also, make sure of your identification, because there are a number of mushrooms that form fairy rings, some poisonous. M. oreades has a white spore print, with gills that are free or adnexed. Beware of poisonous Clitocybe dealbata with decurrent gills- not only can it grow in fairy rings in lawns, but it can intermingle with M. oreades. Don't collect blindly. Of course, if you don't particularly feel like tempting fate, you can always wait to see if we can find a way to culture it artificially.

Speaking of artificial culture, I've discovered that you can produce primordia of Boletus edulis (King Bolete) in simple laboratory cultures. While this has been done under more complex conditions before, and while it may

be premature to say that you can produce acceptable mushrooms with this method, it is an interesting development. We'll keep you updated on progress. Also along the lines of culturing, I've had an idea that may reduce our Spring morel frustrations. If any SVIMS members are interested in building morel beds, I will supply the inoculum (Morchella esculenta) to seed them. Basically, you dig a small, shallow pit in the ground, and fill it with cardboard, apples, lime, peat moss, sea shells, ashes, compost, soil, etc., keeping the pH high and not allowing the bed to get too dry. One person in California reports that he gets dozens from a 2 ft. by 2 ft. bed every year)

Returning to boletes, there's more good news. Boletus barrowsii, or a mushroom that looks very much like it, was spotted fruiting under Garry oaks in Saanich Peninsula several weeks ago. This is apparently the second time in a row that it has appeared in that spot. Although there is still some uncertainty as to whether this is truly B. barrowsii or an extremely white version of its bigger cousin, B. edulis, it is interesting enough to consider focusing some forays in Victoria's Garry oak meadows at some point to determine the extent and season of fruiting. B. barrowsii looks like a smallish B. edulis, but it has a white, non-viscid cap, and it likes to hang out around ponderosa pines and live oaks in the S.W. U.S. If we can confirm the association with Garry oaks this far north, it could be an interesting record (and it might add some spice to the spring foray calendar- it is reputed to be every bit as tasty as B. edulis, if not more so!)

One final note- Brenda Callan has reminded us to submit any interesting finds for possible deposit at the Pacific Forestry Centre's herbarium. Since dried specimens are preferred, I thought I should mention that there is a simple way to construct a dryer to quickly preserve specimens from rotting away. Construct a wooden box with no bottom or lid, but with brackets to hold a wire mesh screen in the middle. Place a 100 watt light bulb under the mesh (the mesh should be about a foot and a half or so above the light source, which could be something as simple as a trouble light, etc.).

Control the flow of the rising heat with a loose cover over the top, and lay the mushrooms on the screen for drying. While the drying isn't as thorough as the specimens would receive at an herbarium, it is sufficient for temporary preservation. -RSW

## **ASK THE EDITOR**

This month's question is- what is a mushroom? Last month, we explained what a fungus is. A mushroom is a certain kind of fungus, at a certain stage of its life cycle. In terms of complexity, there are two classes (classes are groups of orders, orders are groups of genera, genera are groups of species) of fungi to keep in mind. These are the Ascomycetes and the Basidiomycetes. The ascomycetes produce sexual spores in sac-like structures called asci (this is Latin- one ascus, many asci). Basidiomycetes produce their sexual spores on club-shaped cells that are named, amazingly enough, basidia (one basidium, many basidia). These two classes of fungi include the species of fungi which produce the fleshy structures that we call mushrooms.

If you look at the life cycle of these fungi, there is a vegetative phase and a sexual phase. In the vegetative phase, the fungus spreads via thread-like groups of cells called hyphae (one hypha, many hyphae). As the hyphae grow, they form a large, interconnected colony known as a mycelium (one mycelium, many mycelia). During the sexual phase, spores are produced which are functionally analogous to mammalian sperm and egg cells (they're not quite the same thing because the spores are all the same size, and there are differences in the genetics involved - sex is the objective here, though). When the spores land on an appropriate substrate, they germinate and hyphae start to emerge from the spore. There are many variations at this point in the life cycle, but sex usually occurs when these hyphae meet and fuse with hyphae that are sexually compatible. At this point, a vegetative mycelium is formed which is capable of sexual reproduction. It is the job of the mushroom to produce and house these sexual spores, usually sticking them up or out into the air far enough to permit them to drop from gills, pores, teeth, or whatnot so that they can make their way into air and wind currents. The standard definition of a mushroom insists that it must have a stipe (stem) and a pileus (cap), but there are variations. A radially symmetrical, parasol type configuration might be one of the more efficient and common ways to spread spores, but truffles, puffballs, conks, etc. are all fleshy enough to be considered mushrooms without necessarily having the standard "design".

Some folk definitions make pronouncements to the effect that toadstools are inedible and/or poisonous, and mushrooms are edible. The term "toadstool" is an antique, rooted in fear of fungi and taxonomic confusion. Although I am reluctant to dismiss the fanciful term I learned about in childhood, I recommend disregarding it altogether in order to avoid confusion. After all, it is a rare mushroom indeed that can support the full weight of a toad...

## **TERMINOLOGY**

Regarding native terms for fungi, Ken Howse had a question about the terms KWANIS, OILLIE, and

OWYIE. I mentioned Qames, which I discovered is actually a Nitinat word. It mostly refers to pine mushrooms (*Tricholoma magnivelare* and few other edibles. A more general name for Agaricus-type mushrooms is qimis. I can't find any other relevant native terms for fungi. -RSW

## **SOCIETY HIGHLIGHTS**

Three main topics of interest were discussed at the general meeting on May 4. First, President Nadel reported on her trip to the State of Washington, where she took part in meetings of the Pacific Northwest Key Council, and in a truffle study which looked at the effects of various forest management practices on subterranean mushrooms. Since these fungi are important food sources in natural ecosystems for small mammals like squirrels, voles, and other spotted owl prey, it will be interesting to see what the results of this study will be.

The second point raised may involve SVIMS in this question of the importance of mushrooms in our coastal forests. Member Tony Trofymow informed us that there is an opportunity for SVIMS to become involved in a Canadian Forest Service study proposed for the Greater Victoria Area watershed. Several plots have been laid out for different stages of forest development in the watershed, and Tony would like to know what the relative frequency of various mushrooms may be in the plots. Because the watershed area has restricted access and mature forest stands, this would be an unparalleled opportunity for SVIMS members to become involved in assessing the fungal flora of relatively undisturbed local forests, and the implications for forestry.

Finally, Dennis Ingersoll reported on his visit to a mushroom cultivation workshop held by Western Biologicals in Aldergrove, B.C. One commercial growing operation he mentioned involved the use of prefabricated growth chambers that can produce commercial quantities of oyster mushrooms while being small enough to park in your driveway! If anyone is interested in obtaining a Western Biologicals catalog, their address is P.O. Box 283, Aldergrove, B.C. V0X 1A0.

Our speaker for the evening was Brenda Callan, who gave us an excellent summary of how fungi are named. She also covered the importance of depositing specimens in an herbarium for future reference, and took us on a tour of the mycological herbarium at the Pacific Forestry Centre. Member Fiona Ring has determined that there are a more than a few species appearing on the SVIMS cumulative checklist that have not yet been officially recorded and/or deposited for B.C. Brenda showed us some simplified forms that we can use to record information on collections, and explained how specimens are deposited. Members interested in depositing specimens at the herbarium should contact Brenda for further information. Fungi brought to the meeting included:

Amanita aprica nom. prov.  
Amanita, spp. (unknown griseola types)  
P. ostreatus (cultivated)

In the last issue of Fungifama, there was not enough room to mention the mushrooms identified at the Mushroom Madness meeting on April 6. Here is that list:

Agrocybe sororia  
Agrocybe praecox  
Amanita pantherina  
Auriscalpium vulgare  
Clitocybe inversa  
Coprinus micaceus  
Creoidotus mollis  
Gyromitra esculenta  
Nolanea verna group  
Phaeolus schwienitzii  
Pluteus cervinus  
Stropharia ambigua  
Trametes versicolor

## **UPCOMING EVENTS**

### 4 June Field trip to Lake Cowichan

Leader: Ingeborg Woodsworth. Meet at her house (6596 McLean Rd., Lake Cowichan) at 9:30 a.m. For more info, call Ingeborg at 749-6291.

June- no Fungifama

July- no monthly meeting, no Fungifama

### 1 July Canada Day Early Summer Botete Hunt

SVIMS members will split into teams to optimize our chances of bringing in some of the early-fruiting form of B. edulis. Boletes can be saved for consumption at the barbecue the following Saturday, where prizes will be handed out for the biggest bolete catches. If there are a lot of A. augustus out, there might be prizes for those, too. Call the team leaders for information on marshall points and times. Team leaders and possible destinations are tentatively:

Bruce Norris - Pemberton, North Vancouver (743-5192)

Dennis Ingersoll- Mill Bay (727-0265)

Hannah Nadel - TBA (544-1386)

Richard Winder - Sooke flats, Muir Creek (642-7528)

### 8 July B. edulis BBQ

Informal gathering in sunny Saseenos at the Winder Estate, 5614 Woodlands Road, Sooke, commencing at 1:00 p.m. Fresh B. edulis will be supplied, providing the boletes are on their usual friendly schedule and the chickens, deer, rabbits, and poachers stay away from them. If not, we'll fall back on oyster mushrooms. You can call 642-7528 for details, bus schedules, etc.

August- no monthly meeting

### 26 August (tentative) Duncan Agaricus Foray

Leaders- Ken Howse, Bruce Norris. Foray for Agaricus spp. and Lepiota spp. in pastures around Duncan area, as well as some old growth forest areas.

### 7 September (Thursday) Monthly meeting

Scheduled speaker: Ted Underhill (gourmet mushroom taster)

### 17 September Shawnigan Foray

Leader- Bruce Norris. Check for early chanterelles, Suillus, and B. edulis along the Renfrew Road area and around West Shawnigan Lake.

### 7 October (Saturday) 2nd Annual Renfrew Rally

Leader - Richard Winder

Destination - Lizard Lake & environs

Objective - Chanterelles & Boletus mirabilis & biodiversity Bridge status- repaired

### 20-22 October SVIMS/VMS Fall Foray

Lake Cowichan. Organizer: Shannon Berch