



Among Fungi

Cascade Mycological Society Newsletter

December 2005 Vol. 6 Issue 5

FUNGAL FEAST IS COMING TO TOWN!

CMS Events

January 12, 2006: Meeting

Charlie LeFevre will be our speaker this month. Dr. Lafevre will discuss truffles and truffle cultivation. As always, at LCC, Science Building, Room 115 at 7:30 p.m. Contact Kyle Hammon for more info. (463-5447)

February 4, 2006: Foray

The next scheduled foray is set for February 4, 2006. This foray will be lead by our own Joe Spivack. He says "we will probably head out towards Brice Creek unless there is snow below 2000 ft. We will be looking for Hedgehogs, winter chanterelles, and possibly black trumpets."

As usual, we meet at the South Eugene High School parking lot (east side), 9:00 am Carpooling encouraged. Please contact Joe (683-4254, jspivack@epud.net) for more information.

February 9th, 2006: FUNGAL FEAST

The Fungal Feast is an annual event co-sponsored by CMS and LCC's Culinary Arts Program. This year the Feast will be held on **February 9th at 7:00 pm in the LCC cafeteria**, Center Building lower level. CMS provides wild and cultivated mushrooms and Culinary Arts students provide the artistic interpretation of world cuisine with a focus on fine fungi. Our aim for this event is to provide an educational opportunity for members of the public to learn more about edible mushrooms. There's always lots of food, so this is no mere tasting of samples! Cost is sliding scale \$5-\$15, no reservations required.

Last year's menu included Black Chanterelle Polenta, Hedgehog Mushroom Stroganoff, Sauteed Yellowfoot Chanterelles with Scallions, Black Chanterelle Fritata, Maitake Ziti with Roasted Vegetables, and Porcini Risotto.

Cultivation Corner

Kyle Hammon

Several years ago, when I was a graduate student at Arizona State, my office was in a long hallway that also had many display cases of snakes found in the Sonoran desert. One fine spring day, under the case with the two-headed gopher snake, a mushroom was growing out from the mopboard. I'd been interested in growing mushrooms for several years, but this really piqued my interest. Mushroom growing was always a wonderful mixture of the mysterious and scientific, and as I've learned more about the science, the mystery part remains. I never did learn the identity of the fungus growing out of the wall.

Growing mushrooms can be as simple as ordering a kit (see *Resources* at the end of this article), misting it with water and standing back to watch the rascals grow. That's an easy way to start growing your own, but by learning a bit more, you can bring the price down to a point where you aren't paying more for home-grown than commercially grown 'shrooms.

In this article, I'll discuss how to use pasteurized straw to grow oyster mushrooms and oak logs for shiitake. Next time, I'll share some other methods to prepare the bulk substrate.

Oyster Mushrooms on Pasteurized Straw

You'll need the following items:
Sawdust or Grain Spawn, about 1 gallon.
Straw, about 7 tightly-packed gallons, chopped into 4-6 inch lengths. You can do this with scissors, but you'll want to enlist your friends and family, because it'll take quite a while for one or two people. A lawnmower or chipper shredder makes this go very fast. Straw is sold by the bale, and one bale will make many batches of this recipe.

Large kettle that holds 8-10 gallons.

Thermometer. You can use a candy or meat thermometer, just so long as it will read in the 150-212°F range.

Fill the kettle with very hot tap water, and bring to 160-180°F. Submerge the straw into the hot water and maintain for 1 hour. Pour off the hot water.

Allow the now-pasteurized straw to cool to room temperature (no hotter than 85°F), then mix the spawn into the straw.

Pack the straw-spawn mix tightly into a plastic bag, and press out air pockets. Wrap the bag to secure the opening. Poke 20-30 holes into the bag. Place the bag in a dark, warm place. One large bag will work, or you can divide it up into as many as 8, two-gallon bags.

In 2-3 weeks the straw should be fully colonized by the oyster mushroom mycelium. When the bag is fully colonized, move the bag to a warm lighted area. A clean terrarium or old aquarium is a great place for the bag at this stage. Mushrooms should begin to grow from the holes you poked in the bag. Harvest by slicing off the mushrooms when they are three inches wide or less. They begin to get tough when larger. Take care to not disturb newly emerging mushrooms.

Shiitake on Hardwood logs

You'll need the following items:

Plug Spawn.

Hardwood logs, 3-4 inches diameter. Oak is great, but other species such as alder will work. The best time for harvest is late winter to early spring, just before leaves emerge from buds. Cut logs to 3-4 feet long, and use them 2-3 weeks after cutting. Any sooner, and the tree's natural defenses may overwhelm the fungus. Any longer, and competing species may colonize the logs. Larger diameter logs will produce for several years, but are more difficult to move around, and take longer to start producing mushrooms. Smaller diameter logs will also work, but will produce fewer mushrooms. Dead wood will have been colonized by competitors and will not produce useful quantities of mushrooms.

Drill with 5/16ths inch bit. Drill holes as deep as the plugs in a diamond pattern along the sides and both ends of the log. Holes should be 4-6 inches apart. Drive in the plugs, then keep the logs in a cool, moist area. You'll need to mist the logs 2-3 times a week during the dry part of spring, summer, and fall. An inexpensive low-pressure misting system can be set up using off-the-shelf parts from most any hardware store. Use a hose timer set for 4 hours. Three to four months after inoculation the logs may be colonized sufficiently to produce mushrooms. You could wait for the fall rains to trigger this, or you can use your misting system set for 36-48 hours to saturate the logs. Another traditional method is to submerge the logs in water for 12 hours. After the first flush of mushrooms, let the logs rest for 6-8 weeks, keeping them cool and moist. Soaking them will produce another flush. Logs maintained in this way can produce 3-4 flushes from April to December.

RESOURCES

Coastal Farm and Home Supply, 2200 W 6th, Eugene. Good local source for straw and hardware.

Information on shiitake production on logs:

<http://www.mycosource.com/shiilog.htm>

Mushroom the Journal – see especially Ken Litchfield's column on cultivation

To subscribe, send a query to Leon at

leon@mushroomthejournal.com, or write to him at

Mushroom The Journal

Leon Shernoff, editor

1511 E. 54th St., Garden Apt.

Chicago, IL 60615

Used copies of *M the J* are sometimes available at Smith Family Bookstore.

Northwest Mycological Consultants. One of the best local sources for gourmet edible mushrooms, these fine folks specialize in shiitake, maitake, pleurotus, and other cultivated strains. For more information call (541) 753-8198 or e-mail:

NMC@nwmycol.com.

Mailing Address:

702 NW 4th Street,

Corvallis, OR 97330

Stamets, Paul – Fungi Perfecti, LLC. Stamets' company provides everything you need for growing mushrooms indoors or out, at small to humongous scale. Visit his website at www.fungi.com, or send correspondence to

Fungi Perfecti, LLC.

PO Box 7634

Olympia WA 98507

Telephone 800-780-9126

Stamets has also written several books. I recommend *Growing Gourmet and Medicinal Mushrooms* and *Mycelium Running: How Mushrooms Can Help Save the World*.

Wayne, Rush. Wayne has pioneered the hydrogen peroxide method of preparing bulk substrate (straw, sawdust, etc.) for mushroom production. His books, including *Growing Mushrooms the Easy Way*, *Home Mushroom Cultivation with Hydrogen Peroxide*, are available at www.mycomasters.com. Wayne writes, "I am personally available for free technical support via e-mail for anyone who orders any one of the manuals. Need to reach me by telephone? My number is 541-342-6144, at 2720 Onyx St. in Eugene, OR 97403." Wayne can also be reached by email at rushwayne@comcast.net.



"Life is like a mushroom, it'll grow on you."
Anon.

CMS Board meetings are generally held on the first Thursday of the month in the home of a Board member. Contact Kyle Hammon (463-5447) or Chris Melotti ((746-7548) to learn the time and place for meetings.

**Cascade Mycological Society
P.O. Box 110
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This is the newsletter of Cascade Mycological Society. It is published four times a year, on a mycologically oriented schedule so expect them in late summer, fall, winter and spring.

PLEASE send articles, poems, drawings, announcements and corrections to Meredith Allen at intrepids2003@yahoo.com

CMS is a non-profit under 501(c)(3). Donations are tax deductible to the fullest extent allowed under the law.

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A reminder: if you move or change your e-mail let the CMS know, that way you'll keep getting the newsletter and notices of CMS happenings:
Cascade Mycological Society P.O. Box 110,
Eugene, OR. 97440 attn: Membership Chair

**Cascade Mycological Society
1275 Sunnyside Drive
Eugene, Oregon 97404**

Join us in Fungal Fun!

Mail completed form and check/money order to:

**Cascade Mycological Society
P. O. Box 110
Eugene, OR 97440**

- Oyster (Senior/Student/low income) \$ 10**
- Chanterelle (Regular) \$ 15**
- Morel (Family) \$ 30**
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Please make checks out to the Cascade Mycological Society. Thank you!

Name(s) _____

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Is this a renewal? _____ (thanks) new membership? _____ (welcome!)

Change of address? _____