Spore-Addict Times



MONTHLY MEETING

WHEN? Monday, July 23, 2012

The 4th Monday of the month.

WHAT TIME?

Mushroom identification 6:30—7:00 pm. The regular meeting will come to order at 7:00 pm.

WHERE? Pikes Peak National Bank,

2401 W. Colorado Ave. (across from Bancroft Park). Enter at the door on Colorado Ave., just west of the bank door. There you will find stairs and an elevator. Use either to go to the second floor. The meeting room is on the second floor near the head of the stairs.

WEBSITE: www.pikespeakmushrooms.org

July Presentation Presenter: Lee Barzee

Look-a-likes

Identifying mushrooms with similar appearance

If you forage for wild mushrooms or are curious to learn more about the mushrooms around our area, this program is for you! Have you ever wondered if the mushroom you found while out hiking could be for dinner? Or is there a similar looking mushroom that actually may cause stomach upset or worse?

Lee Barzee will present a slide show demonstrating characteristics that distinguish similar looking

Share your mushroom hunting PHOTOS and stories on our Member Website!

Visit the blog on our website <u>http://pikespeakmushrooms.org</u> under the Members Only tab. You'll need the password to sign in. Contact ppmsmail@gmail.com for additional information

What is in a name?

Latin terms used in mycology nomenclature presents some complicated scientific names of mushrooms and sometimes hard for us to pronounce. Mykes, from which mycology is derived, is a Greek term for fungus, and fungus is the Latin word for mushroom. Here are some clues on the meaning behind many scientific names of mushrooms, taken from Pat O'Reilly's <u>Fascinated by Fungi</u> (First Nature, 2011), and a link to a website that lists many examples!

http://www.first-nature.com/fungi/facts/names-genus.php

Agaricus: of the country Amanita: Mount amanus Astraeus: star Bolutus: clod (a lump or chunk, especially of earth) Cantharellus: chalice/cup Clitocybe: sloping head Clitopilus: sloping cap Fistulina: tube or pipe Hygrophorus: water carrier Lactarius: milk Omphalina: little navel Pleurotus: sideways (attached) Tricoloma: hairy/fibrous The Newsletter of the Pikes Peak Mycological Society 1974 – 2012 Vol. XXXVIII ISSUE 4– July 2012 2

Mushrooming After Wildfires

Submitted By: Ashley Anderson

During June, wildfires impacted many communities in the Western United States. The lack of rain that left mushroom hunters empty-handed in the early season, lead to conditions the National Oceanic and Atmospheric Administration (NOAA) label as "Extreme" to "Exceptional" Drought conditions, the worst on their <u>scale of intensity</u> (1). Total rainfall reported in Colorado state by NOAA was only 0.42 inches. It was also the warmest June in state history.

The <u>Incident Information System InciWeb</u>, reported 165,000 acres burned by wildfire in Colorado during the month of June. While Waldo Canyon Fire was the most destructive in state history; the Hayman Fire of 2002, remains the largest, at 138,114 acres, according the USDA <u>final report</u> (2).



Hayman Burn Area near West Creek, 10 years later. 6/26/12

After the Hayman Fire, forest restoration and fire mitigation <u>budgets</u> increased (2, pg 333). Areas around our region have been thinned, underbrush cleared, trails restored, watershed restoration, habitat for Colorado's state animal— <u>big horn sheep</u> expanded, along with other projects to repair the Pike National Forest that are still under way.



Hayman Burn Area October 2011

and fruiting of mushrooms? What is known about the aftermath of wildfires on mushrooms?

Ask any mushroom hunter who has visited a burn area one or two springs after a fire, and they are likely to tell you morels flourished! Paul Stamets notes this in <u>Mycelium Running</u>, as well, saying the first to appear are morels (*Morchella*) and cup fungi (*Auricularia*), even within weeks of a burn.

Vera Evenson in <u>Mushrooms of Colorado</u>, writes, "Morels are apparently not mycorrhizal, but have a complicated life cycle involving a resting stage called a sclerotium" (p. 34). Morels colonize the roots or tissue of trees for a symbiotic relationship, but *Morchella* spp. are also saprophytic (decomposers). Sclerotium is a more persistent inactive period to survive harsh conditions, on which limited research has been done to determine factors that stimulate its awakening, though heat is one factor.

One study on the activity of mycelium after a wildfire talks more generally of mushrooms in a burn area, finding mycelium help forest with restoration of habitat, binding soil nutrients, prevent erosion by

How has this fire effect mycelium and the mycelium

Continued from page 2

helping reestablish plant life, but mycelium also cause soil to repel water, leading to a higher risk of erosion (3). This report states fruiting bodies appear with the first significant rain after the fire, when the conditions stimulate the spore bank deeper in the soil laid down in previous seasons, as opposed to budding from spores dispersed that season. "Some fungal spores are strongly dormant and require heat treatment to germinate," the report finds.

The intensity of the heat likely burns off surface layers of mycelium, but awakens buried spores, as the fire heats up the ground. Once water penetrates the soil, conditions cause the ripening of the fruits.

Another reported effect of mushrooms in a burn area is their ability to capture nitrogen and return it to the soil (3). Because nitrogen is released as a fuel burns, mushrooms assist with reintroduction of nitrogen and other nutrients to the soil. Decomposers capture the remaining nitrogen in the soil and organic matter after the fire. As the fruiting bodies die themselves, they offer fertilizer to the soil.

The Forest Service has closed the Waldo Canyon Fire burn area, saying it is unlikely to be reopened to the public in the next few years. At this time, as the monsoons roll in and wet the land, imagine the number of mushrooms awakening and going to work on their forest recovery project.

References:

1. State of the Climate Wildfires June 2012. NOAA Website. http://www.ncdc.noaa.gov/sotc/fire/ Accessed July 2012.

2. Kent, Brian et. al. Social and Economic Issues of the Hayman Fire. USDA Forest Service Gen. Tech. Rep. RMRS-GTR-114. 2003.

3. Claridge, Andrew W., Trappe, James M., Hansen, Karen. Do fungi have a role as soil stalilizers and remediators after forest fire? Forest Ecology and Management 257 (2009) 1063-1069.

From "Sour Salty Bitter Sweet" cooking blog which also explains much more about the pleasure of morels. Recipe: Israeli Couscous Risotto with Morels

2 large shallots (about 1/2 cup diced)

5 T. butter

5.5 oz fresh morel mushrooms or 1 oz. dried, soaked in hot water for a couple of hours

1 cup Israeli couscous (ptitim)

1/2 cup white wine

3 cups water or stock (and/or mushroom soaking water if you have it)

2 t. bouillon (if using water)

2 oz. parmeggiano reggiano, or about 3/4 cup finely grated (microplane highly recommended)

salt and pepper to taste

Melt 4 T. of butter in a large pot or saucepan. Dice the shallots and cook in butter until golden-brown (7-10 min).
While the shallots cook, brush or rinse any dirt from the morels and slice them into rings, looking out for critters that may be hiding inside. Add to the shallots and cook until the mushrooms begin to release some of their liquid.
Add the wine to the mushrooms and cook until about half of the liquid has boiled off—what remains will thicken 4. In a separate skillet, melt the remaining tablespoon of butter and toast the couscous until golden (about 5 minutes).

Add the couscous and stock (and mushroom soaking water and/or bouillon if using) to the shallots and mushrooms. Simmer, stirring occasionally, until the liquid is absorbed and the couscous is done, but still has a little chew to it (15-20 minutes). Add more water or stock at any point if it begins to dry out or stick to the bottom.
In the last minute of cooking, stir in the grated cheese and season with salt and ground pepper to taste. Remove from heat.

7. Garnish with curls of hard cheese (I use a vegetable peeler) and, if desired, a few chopped herbs like parsley or chives.

For full recipe, visit this blog posted by Margot May 2010



From the Editor: Please take note of the following corrections for previous 2012 editions of the Spore Addict Times.

April 2012: None reported.

May 2012: *Fairies, Rain, Mushrooms* was an article excerpt, not an original article from Lee Barzee. Alternate pictures were included, as digital images of the originals were not available and the information about the original photo credits was omitted.

June 2012: The mystery mushroom erroneously also provided readers with the answer! The error may have been to our benefit in the end, being that our June meeting was cancelled due to the wildfires. Who was able to catch that one in their initial reading?

The Newsletter of the Pikes Peak Mycological Society 1974 – 2012 Vol. XXXVIII ISSUE 4– July 2012 4

The Pikes Peak Mycological Society is a nonprofit organization dedicated to the advancement of mycology. Membership is open to anyone wanting to study mycology. Annual dues are \$20 (\$25 includes a printed newsletter Apr to Sept) for individual and family memberships and may be paid at the meeting.

Submissions of ideas, articles, letters, artwork, and recipes are welcome. Photos and stories may also be submitted to be posted on the website.

PIKES PEAK MYCOLOGICAL SOCIETY 10 Swallow Drive, Colorado Springs, CO 80904 PPMSmail@gmail.com

President	Mike Essam manit	toufarmer@gmail.com
Vice President	Tom Abbott	229-3973
Secretary	Patricia Gaffney	633-1959
Treasurer	Frieda Davis	630-7140
Hospitality	Martha Zenger	277-7067
Foray Coordinator Ad-Hoc (contact Frieda Davis)		
Newsletter Edito	r Ashley Anderson	660-2345
Webmaster	Bud Bennett	783-9209

MYSTERY MUSHROOM

This riddle is offered to encourage everyone to practice their mushroom identification skills. Bring your answer to the meeting!

May's mystery mushroom was Geopora cooperi.

I have a slippery, reddish-brown cap often with a white brim and whitish attached gills. My cap is 2—6 cm across and broadly convex. My gills are adnexed to nearly free, close, with wavy edges, especially as I **mature. With pale pinkish buff spores, you'll** find me in the needle duff under conifers. Even if not a choice edible, you can eat me! WHO AM I?

The Spore-Addict Times, the official newsletter of Pikes Peak Mycological Society (PPMS), is published monthly from April to September. All articles appearing in this newsletter may be freely reproduced, unless otherwise noted, for use in other newsletters provided source and author are acknowledged. We consider this to be a reciprocal agreement for clubs that send their newsletter to us unless we are advised to the contrary.

Spore-Addict Times P.O. Box 39 Colorado Springs CO 80901-0039

