

Next Meeting Sept. 13<sup>th</sup>, 2004

# SPORES Afield

The newsletter of the Colorado Mycological Society

September 2004

## The President's Corner



### The Secret to Finding Those Elusive Fungi

The mushrooms are up in abundance! This time of year is prime time for finding mushrooms and I think we are having one of the best years! If you can't find any mushrooms, try driving a few miles to a new location. The rain has been very spotty this year and some spots are very dry with few mushrooms while others have so many mushrooms you can hardly walk without stepping on them! I've found more species of mushrooms this year than in the last few years. Although, I have yet to find many *Boletus edulus*, which are what many people want.

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## September Meeting: Cook & Taste

Please see page 3 of this issue for more information and call President Chris Hardwick with the type of mushroom dish you are going to bring.

## The Strange World of Worm Eating Fungi

Some very familiar fungi have some strange habits. Fungi in the genera *Hohenbuehelia* and *Pleurotus* which includes the Oyster mushroom, *Pleurotus ostreatus* both have devised cunning traps for nematode worms that may live or crawl over their fruiting bodies.

*Pleurotus* species form microdroplets of an acid, transdecenedioic acid, that is aimed at the nematodes. It produces these droplets on the ends of aerial hyphae and nematodes that brush against enough of these droplets eventually become paralysed. The hyphae then enter the nematode mouth and anus and grow inside the nematode digesting its contents.

Species of *Hohenbuehelia* have a slightly different method growing adhesive knobs. If a nematode becomes stuck on one of these knobs, hyphae penetrate the nematode and digest it from the inside.

Species in the genera *Pleurotus*, *Hohenbuehelia*, *Lentinus* and *Panus* have been argued about taxonomically for a long time with the species often switching names.

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*(Presidents from page 1)*

In the past, I've had a tough time finding those elusive fungi while others are filling their baskets. Even on our last foray, we found very few mushrooms at the place the foray leader brought the whole group. Myself, as well as others take the approach of going back to places that have produced in past years. However, this year, you have to use another tactic to find them and I think I've found the trick: It's called Doppler Radar! (Shhhh, it's a secret!)

Ed Swanberg was the one who led me to literally wheelbarrows full of mushrooms this year while other people were telling me it was a bad year for fungi. About a week or two before he went out, he watched the Doppler radar and tracked where it rained. Where there is rain, there will be fungi! Then he just followed the rain with a delay of about a week or two. That's all there is to it! We have yet to find a Doppler radar web site that will show moisture accumulations for more than the current storm total. Perhaps there is some way to store a whole week of data without having to check it every night? We are constantly in search of a method to make tracking the Doppler easier! In the meantime, if you can't find any fungi, follow the rain via Doppler! You can find two links to Doppler on my web site. Just go to [www.capsandstems.com](http://www.capsandstems.com) and click on the link 'Foray Info' at the top of the page. Good luck and follow that Doppler!

## Nominations of Officers for 2005

Election of New Officers will occur at our October 11<sup>th</sup> meeting. The following individuals have agreed to run for office yet nominations will be accepted from the floor at the Oct. meeting, the nominee must have agreed to be nominated. Please consider offering your talent to CMS.

Nominee	Office
Norm Birchler	President Elect
Louis Gaz	Vice President
Open	Secretary
Treasurer	Harry Obermeier
Linda deLeon	Member-at-Large

## Upcoming Events

- Sept. 13<sup>th</sup>** Cook & Taste, **Chairperson** CMS President Chris Hardwick. See page 3 for complete details.
- Oct. 11<sup>th</sup>** "The Beauty and Diversity of Mushrooms", winning slides from NAMA photo competitions.
- Nov. 14<sup>th</sup>** End of Season Fungi Feast  
Bring mushrooms for identification and display to any meeting.

All meetings are held at the Denver Botanic Gardens in Mitchell Hall at 7:30 pm unless otherwise announced.

Program Co-chairs  
Vera Evenson and Marilyn Shaw.

*(Strange World continued from page 1)*

Now, this habit of consuming nematodes, backed up by DNA work, is proving to be a defining character. *Hohenbuehelia* and *Pleurotus* are now shown to be distinctive from *Lentinus* and *Panus* and this strange habit has solved a long term controversy. But will it affect your choice of edible fungi???

Source: Thom, R.G et al (2000): Phylogenetic analysis & the distribution of nematophagy support a monophyletic *Pleurotaceae* within the polyphyletic pleurotioid-lentinoid fungi. *Mycologia* 92(2), pp 241-252

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### *Spores Afield*

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CMS is an affiliated member of the North American Mycological Association.

CMS website: <http://www.cmsweb.org>

# SEPTEMBER MUSHROOM TASTING

SEPTEMBER 13 2004

We are planning a wild mushroom Cook & Taste for the September meeting. The cook & Taste will be held at 7:30 in Mitchell Hall at the Denver Botanic Gardens. Members are encouraged to bring a mushroom dish to share with other members. Those who have no time to cook or cannot cook may bring drinks, desserts, salads, or bread (prepared food from the grocery is fine.) The cook and Taste is being organized by President Chris Hardwick. Contact him at 303-237-0356 or at cchardwick@yahoo.com to let him know what you are bringing. We don't want all the same dish.

Only the following mushroom species may be used:

*Boletus barrowsii*

*Boletus edulis*

*Cantharellus cibarius*

Commercial mushrooms from a grocery

*Coprinus comatus*

*Dentinum repandum*

*Flammulina velutipes*

*Hydnum imbricatum*

*Lactarius deliciosus*

*Marasmius oreades*

Matsutake - *Tricholoma magnivelare* or *Tricholoma caligatum*

*Morchella angusticeps*

*Pleurotus ostreatus*

All the dishes brought to the Cook & Taste must follow these rules:

- 1) All mushrooms must be well cooked. Raw mushrooms will not be allowed in any dish.
- 2) Use only one species of mushroom in each dish.
- 3) A written recipe prominently showing the species of mushroom in the dish and the cook's name **MUST** accompany each dish.
- 4) *Leccinum* species are not allowed!
- 5) If you have a supply of a good, common edible species of mushroom that you would like to use in a dish, but it isn't on the list above, call Marilyn Shaw at 377-1278. All exceptions must be approved in advance of the Cook & Taste.

# Squirrels & Truffles

By Ann Floyd

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In some places both are considered delicacies. Pictured in the original article is an Abert's squirrel, *Sciurus aberti*. These squirrels depend on the Ponderosa pine for food, cover and nesting sites. Abert's squirrels are tassel-eared, have grey fur and are white underneath. Their tail is short and wide.

Wherever you see pinecone "cobs" squirrels have been at work. Another tell-tale sign of squirrel activity are "clippings" of pine needles on the forest floor, bitten off to get at the sweet inner layer of the new twigs

Yet another important source of squirrel food is furnished by the Ponderosa Pine - underground (hypogeous) fungi. These fungi increase water and mineral absorption for the tree. The fruiting

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bodies (true truffles) are dug up and eaten by the squirrels as high-energy food. The squirrels then pass the truffle spores throughout the forest, spreading them to more pine roots, creating more truffles.

Thus another example of the many symbiotic relationships found in nature.

Look for Abert's squirrels the next time you are in the Sandias.

## MYCOLOGY LOSES A MAJOR FIGURE

News has just been received that Dr. W. Scott Chilton passed away unexpectedly in early August while hiking on Mt. Adam in Washington State. Dr. Chilton was a professor in the Dept. of Botany at North Carolina State Univ. in Raleigh, North Carolina. I first met him at the Aspen/Snowmass Conferences in the mid-'70s and was impressed with his research into mushroom toxins. He contributed a definitive chapter on the subject to the 1994 *Handbook of Mushroom Poisoning Diagnosis and Treatment*. I had used him as the final authority when esoteric questions came up concerning the chemistry of mushroom toxins, and had just asked, via e-mail, for his opinion on an unusual recent case. I had received no reply and was about to call when the sad message from his department head was received. This is a real loss for me and for the field of mycology.

Marilyn Shaw, CMS Toxicology Chair

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