

Next Meeting Sept. 11th, 2006

SPORES Afield

The newsletter of the Colorado Mycological Society

September 2006

President's Column



Despite the early dry spell the mushroom season was a good one. It seemed you could not walk through the woods without finding *Boletus*

edulis, they were everywhere. This year we even found *Boletus barrowsii* the white king bolete in good numbers, that's not normal for me anyway. I hope you all filled your baskets many times over.

The CMS Mushroom Fair was held on Sunday August 13th with great success. There were many new mushroom to Colorado identified. The unofficial total was 14 new species to Colorado with two of them never before being identified. Dr. Roy Halling did a great job as fair identifier, one of his specialities is *Leccinum* and he identified 3 new species that were not on our Colorado list. We have had reports and debate for years now about people getting sick after eating *Leccinum*, this may be why. Rob Hallock did a great job as Fair Chairperson and kept everything flowing smoothly. I want to thank everyone who volunteered to help with the fair, it is quite a project to put on.

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Sept. Meeting: "Cook & Taste"

Members only please! You can become a member at the door, just bring \$28, cash or check.

"Partaking in the Bounty" The CMS Cook & Taste September 11th, 2006, 7:30 pm, Gates Hall, Denver Botanic Gardens

Greetings Members!

The 2006 mushroom season is winding down and its time to enjoy and share the bounty of this summer's fruitings. Our September 11th meeting will be a celebration of successful forays and a tribute to the wonderful tastes of wild mushrooms. Its time for the 2006 CMS Cook & Taste!

This has been the best mushroom season of the past few years so lets make this year's Cook & Taste a very special event. I'm putting out a call to all members to literally "step up to the plate" and contribute to and partake in the 2006 CMS Cook & Taste. Here is an outline of what we need you to contribute:

- 1) Main Dish with a Mushroom Theme - We need at least 10 members contributing a main dish.
- 2) Salads & Breads - We need at least 4 members to bring in Salads and Breads - Mary Ann Guthrie who is helping me with this event has committed to providing Caesar Salad. Salads do not need to include mushrooms, but creative use of mushrooms in a salad would be fun.
- 3) Desert & Drinks - We need at least 4 members to bring dessert and drinks. Drinks should include non-caffeinated and non-carbonated offerings.

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Upcoming Events

- Sept. 11th** Cook & Taste, Chairperson
William Windsor, contact him at
wnwindsor@comcast.net. or
303-544-6069
**Note: this meeting will be held in
Gates Hall.**
- Oct. 9th** Gary Lincoff on psychoactive
mushrooms
- Oct. 22nd** "End of the Season Fungi Feast"
at the Boulder Cork restaurant,
for more information contact
Tom Ruzicka 303-447-2740 or at
tomruzicka@comcast.net

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.

"End of the Season Fungi Feast"

CMS will be holding its fungi feast on Sunday Oct. 22nd at the Boulder Cork Restaurant. The doors open at 5:00 pm and dinner is served at 5:30 pm. Over half of the reservations are already filled so they are going fast. For more information and to make reservations contact Tom Ruzicka at 303-447-2740 or e-mail him at tomruzicka@comcast.net.

To find out more about the Boulder Cork Restaurant go to their web-site at www.bouldercork.com. Please make reservations through Tom Ruzicka. The featured vegetarian entree this year is Huicla-coche enchiladas. See related article on page 5, "Impromptu Foray, with Sweet Corn".

Special Event

Longtime CMS member and curator of the Herbarium of Fungi at the Denver Botanic Gardens Vera Evenson has graciously offered to give a tour of the herbarium. The herbarium contains over 23,000 specimens of fungi. The tour will be held before the Sept. 11th meeting and will begin promptly at 6:30 pm. Please meet at the front door of Gates Hall which is behind the water garden in the main lobby area of the botanic gardens. Don't miss this exciting opportunity to see this wonderful collection.

Nominations of Officers for 2007

Election of New Officers will occur at our October 9th 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
President	Chris Hardwick
President Elect	Rob Hallock
Vice President	Louis Gaz
Secretary	Joanna Seward
Treasurer	Harry Obermeier
Member-at-Large	Linda deLeon

SporesAfield

SporesAfield is published from March through October by the Colorado Mycological Society. CMS dues are \$28 for the first year and \$25 thereafter. Send membership dues to Linda deLeon, CMS Membership Chair, 14310 W. Fifth Ave. Golden, CO 80401-5226. All CMS members receive *SporesAfield* as part of their membership

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

CMS web site: www.cmsweb.org

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4) Plates, Cups, Plastic Ware, Napkins and Ice
- We need at least 2 members to contribute the "platform" for our feast.

Your contribution to the Cook & Taste does not need to be limited to a single category, but we do need to have some idea what each contributor will bring in. Please e-mail me and Mary Ann as soon as possible at: wnwindsor@comcast.net (cc maguthrie@gmail.com) that we can coordinate dishes and set-up. You can also leave me a telephone message at: 303-544-6069.

Mushroom species use and rules for the Cook & Taste are outlined on the CMS Website at <http://www.cmsweb.org/> and in the August issue of *SporesAfield*. Please be aware that we will NOT have use of the Garden's Kitchen and any dish that must be heated should arrive with its own safe heating source. Contributors will serve their dishes to the attendees and Contributors get to be first in line for the tasting.

We anticipate 75 to 100 attendees so please size your contribution to provide a small serving for all. Contributors are requested to arrive at 7:00 pm.

(President's continued from page 1)

CMS is in need of a volunteer to take over the library. Our current librarian Julie Holmes has done a great job but can no longer continue with this important task. Would you be interested in having every mushroom book you can imagine at you home to study any time you want? Can you bring some of the books into the meetings and check them out to members? Please contact me Norm Birchler at 303-440-7123 or at nbirchler@comcast.net if you are interested.

Well, I heard stories this year of mushrooms the size of a dinner plate. On a foray earlier this year I came across the grand daddy of them all. I think I found the biggest mushroom in Colorado.
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The Crested Butte Wild Mushroom Festival

By Rob Hallock

This year's festival was packed with more events than last year, and it promised to be a long weekend full of fun. Roger Kahn, the Festival organizer, did a wonderful job this year filling the weekend of forays, opportunities for gourmet mushroom lunches at local restaurants, mushroom identification, talks on 'pressure canning mushrooms', 'Amanitas', 'medicinal mushrooms', a workshop on 'mushroom photography', and even a jazz concert on Friday evening. All these top-quality events were complimented by mushrooms that were so plentiful in the woods that you could stand still in the forest and easily spot 10 different species. Although we didn't pick them all (even if we had tried, I'm not sure it would have been possible), Chanterelles *Cantharellus cibarius* were out in full force and numbered in the hundreds.

I arrived into Crested Butte (CB) just before midnight on Thursday and set up camp in the pristine Gunnison National Forest, just outside of town. To get to the free Oh-Be-Joyful campground where I stayed, find Slate River Rd, which is about one mile north of town, then travel west on it for 4.6 miles, and the campground will be on the left. It turns out that there were about six of us from the mushroom festival camping out there.

On Friday morning I drove down to the CB community school, officially registered for the weekend, and received a bag which included a whistle, some local maps, and collection bags. There were about 60 eager mushroomers there, and we divided into three groups. We all received brief instructions, told to stick with a 'buddy', and asked to carefully collect one good specimen of each species encountered, i.e. that we shouldn't pillage the woods for the chanterelles or other good edibles. The groups then departed for their respective destinations. The locations that were chosen were as beautiful as the mushrooms we found.

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Early Friday afternoon, we reconvened after lunch for an identification workshop led by Larry Evans of the Western Montana Mycological Association. We spread out the mushrooms we found on tables and keyed out the mushrooms according to various mushroom books. After a few hours of identification, we had the option of attending one of two talks. I attended a talk by Debbie Viess, an Amanita expert from the San Francisco Bay Mycological group. Her excellent slide show and talk covered the major groups of Amanitas, and included mushrooms endemic to California, but also ones that occur in Colorado and throughout the country.



“Larry Evans talk about mushrooms at the end of one of the forays in Crested Butte”

Saturday and Sunday were set up similar to Friday; forays in the morning, followed by lunch, mushroom identification, and then various talks in the afternoon. On Saturday, I went to Cucina's for lunch with five other mushroomers. Aside from fresh peach sangria and copious red wine, we were started with a slice of fresh melon and crispy Portobello mushrooms wrapped in ham, followed by the most delectable velvet Bolete soup. The main entrée featured roasted salmon with local organic vegetables and chanterelles. The meal concluded with a chocolate truffle for desert. The owners, who also harvested all of the mushrooms, would come out before each dish was served and

tell us about the mushrooms and how the dishes were made. Similar tales of delicious food and great company was heard about the other restaurants catering to the mushroomers that weekend.

One highlight of the weekend was an invitation to Roger Kahn's house on Saturday evening, where I joined other mushroom festival helpers and speakers at a pot-luck dinner. Dishes included morels *Morchella esculenta* stuffed with ham or blue chanterelles *Polyozellus multiplex*, black chanterelle *Craterellus fallax* flavored wine, a delicious *Boletus edulis* soup, a puffball *Calvatia booniana* lasagna, and numerous other dishes. Just when everyone thought they were stuffed to their maximal internal capacity, four homemade pies were brought out and people had to make a little more room for the tasty treats.

There were about a hundred different species identified over the weekend, including many interesting finds. Of special note, we found four species of hypogeous fungi (mushrooms that grow under the ground!), a field of a dozen giant Western puffballs *Calvatia booniana*, a few false morels *Gyromitra infula*, about 15 species of *Hygrophorus*, and plenty of Amanitas for the Amanita expert.

All in all, it was a great weekend, full of good company, great food, and hundreds of mushrooms. I look forward to doing it all again next year. Check out Roger's site at www.cbmushfest.com or Larry's site at www.fungaljungal.org for more pictures of the festival and other information.

(From Reuters News Service)

Can fungi trim the gasoline habit?

By Timothy Gardner

Fri Feb 24, 2:33 PM ET

Reprinted from The Kansas Mycologist, the Newsletter of The Kaw Valley Mycological Society. April-May 2006.

Souped-up microscopic fungi could help cut the U.S. gasoline habit by converting a billion tons of agricultural waste into domestic fuel, while also slashing greenhouse gas emissions.

As if that isn't enough, the concept has the blessing of the president -- an ex-oilman.

On a tour of the Midwest this week, President George W. Bush reiterated that he wants to wean the United States off its "addiction" to imported oil, partly by funding research into new methods of producing ethanol -- a fuel currently made in North America mostly from corn kernels and in Brazil from sugar cane juice.

Filamentous fungi and other microbes can be bred to break down an array of feedstocks, including wood chips, corn stalks and switch grass, that require no fertilizer and less input than traditional sources of the fuel.

James Woolsey, former CIA director under Bill Clinton, compared the state of the science for the new ethanol to the quick rise of the aero industry after the first flight.

"The Wright Brothers have flown," said Woolsey, who is now a consultant at Booz Allen Hamilton.

Woolsey and other experts say the biggest factors supporting the growth of an ethanol derived from native grasses and crop waste is that the science to make it is already within reach, and cars that burn it are already on the road.

To make cellulosic ethanol, enzymes spewed from fungi convert cellulose from the fibrous parts of plants, such as stalks, into sugar that then is fermented. In traditional ethanol, yeast breaks down sugar from the starchy parts of plants, such as corn kernels.

Scientists bioengineer fungi -- such as "jungle rot" that chewed through tents of the U.S. Army during World War Two in Guam -- to make the best enzymes for different fibrous plants.

"Fungi are the scavengers in nature that break down cellulose anyway, so we're not trying to turn an elephant into a mouse," said Mark Emalfarb, president and chief executive of Florida-based Dyadic International Inc.

Emalfarb said fungi Dyadic uses to soften and lighten blue jeans can break down corn stalks, sugar cane waste and rice straw into fuel.

It's a step beyond making conventional ethanol in which yeast breaks down easier-to-process plant starch.

COSTS

The current price is high, about \$2 to \$3 per gallon, compared with about \$1.07 a gallon for conventional ethanol, according to Glenn Nedwin, president of Danish enzymes company Novozymes.

But as the first commercial plants open and processing is perfected, costs should quickly fall, Woolsey said.

Feedstock abounds. The U.S. government estimates that more than 1 billion tons of crop and forest waste are available. Potentially, that amount of waste could make 80 billion gallons a year of ethanol -- about a third of U.S. gasoline demand.

And native crop switchgrass and other low-input feedstocks can be grown far away from the current Gulf of Mexico and Midwest oil refining centers. That would allow the fuel to be produced nationwide and could cut the need to transport fuels thousands of miles.

What's more, the fuel can cut carbon dioxide emissions. At least one big energy company under mandate by the European Union to cut greenhouse emissions is investing. Royal Dutch Shell has invested \$40 million in Iogen, which has been operating a pilot plant making the fuel in Canada for two years.

Impromptu Foray -- with Sweet Corn

By Norm Birchler

On my way home from work the other night I stopped in at my local farm stand to pick up sweet corn, tomatoes and Colorado peaches. At the August meeting I spoke a little bit about, *Ustilago maydis*, also know as Huiclacoche or Corn Smut. I have been lucky enough from time to time to get Huiclacoche at the farm stand. Well I saw the fellow I had gotten some from a week or two before; I went over to thank him and as I did an older gentlemen asked how I knew about the corn mushroom. I told him I was in the Colorado Mycological Society and I knew a little bit about mushrooms. It turns out he is the owner of the farm stand, Bob. We started talking about corn mushrooms and he said lets go see if we can find some. Cool an impromptu foray!



Off we went in his pickup truck to his large corn fields just down the road. We hopped out of the truck on a small dirt access road between fields of sweet corn, as I would soon find out he has many different types of sweet corn. He took off down between the rows of corn and I moved over a few rows and followed along looking for ears of corn that were swollen with the corn mushroom.

In the United States most farmers see corn smut as a blite on their fields and actively spray chemicals to keep it at bay. I think that must be where

someone came up with the derogatory name corn smut. In Mexico however for centuries they have been "in the know" to its culinary delights, it's a delicacy. Huiclacoche is the Spanish word for the corn mushroom. A couple of the Hispanic guys I work with love it and get it at the Mile High Flea Market.



This mushroom starts off white in color turning gray and then black. It infects (infects is such a nasty word) the corn kernels under the husk and swells a single kernel to the size of a quarter or larger. The ear pictured above did not have a single kernel that was not infected with corn mushroom.

Not very far into the field I came across a small ear that had been completely consumed by the mushroom, unfortunately we were too late, it was all dried out and falling apart. Bob came over to see what I found and while we were standing there he pulled a couple of ears of corn off the stalks around us. He handed me one and we both pulled back the husks and took bites from the ears.

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(*Impromptu Foray* continued from page 6)

Being a suburban boy growing up I had never eaten raw sweet corn right off the ear before, it was sweet as sugar. It's a variety known as "peaches and cream", one of my favorites, I buy it



every time I make it to the farm stand.

We continued foraging and eating, he found some corn mushroom that had actually started on the stalk of the corn plant which he said was very unusual, it was dried up too. We moved on to another field to no avail, but I did get to try another type of sweet corn that was from Japan. It seemed even sweeter than the "peaches and cream" it was a type of white corn. Well we were not having any luck finding mushrooms so we went back to the truck and tried just slowly driving down the road between the fields and to see if we could spot some. Luck was not with us for finding mushrooms but I do consider myself lucky to have had the experience and to make a new friend. Bob has my number and is going to keep an eye open for this summer treat.

Here is my recipe for Huicilacoche Quesadilla's:

- 1 lb corn mushrooms, about 1 fully infected ear
- Butter and olive oil, about 1 tablespoon each
- 1 small onion, diced
- A green chile, Pablano is good and maybe a Jalapeno if you like it a little hot, I do. Roast and chop.

- 2 cloves of garlic, minced
- 1/4 teaspoon oregano
- 1/4 teaspoon salt
- One small hand full of fresh cilantro
- Tortilla's, flour or corn, I use whole wheat.
- Monterrey Jack Cheese or another mild cheese



Start by sauteing the small onion in a frying pan with a mixture on butter and olive oil. While the onion is cooking you need to get the mushroom off the cob, this can be messy. You can just pick the enlarged kernels off with your fingers; I do not use a knife because you will cut into the kernels and they will fall apart.

Once you have all the mushrooms off the cob add them to the sauteed onions and cook over medium heat about 5 minutes. Add the chilies, garlic, oregano and salt. Mix in these ingredients thoroughly and simmer covered for another 5 minutes.

Because this is for quesadilla's you do not want the mixture too moist, that will lead to soggy tortillas. Continue to cook uncovered until the majority of the moisture has cooked off, add the fresh cilantro and mix it in just until it wilts. Place tortillas on a cookie sheet and spoon the mixture onto your tortillas. Grate the cheese on, as much or as little as you like, place another tortilla on top and place in the oven at 350 until the cheese melts, about 5 minutes. Serve with salsa and avocado slices. Yum Yum!

On Getting Lost

No one plans on getting lost in the woods, but it's pretty easy to do. I have two friends who spent 5 hours trying to find their way back to the road, any road, and when they did they had to walk for miles to get back to their car. Needless to say they are pretty freaked out straying too far from the car.

In Colorado if you need to have the search and rescue team come and find you; you could have to pay for the full cost of the rescue. This could cost thousands of dollars if helicopters are involved. Here is the web-site that will give you all the information you need to avoid paying for a rescue. Do you know about the hiking card, did you know if you buy a fishing or hunting license you are already covered.

To find out everything you need to know to cover yourself in the event of a rescue go to:
www.dola.state.co.us/lgs/fa/sar/

My digging knife was no where near big enough to get this out of the ground. I even tried to pull it out with both hands but it would not budge.



Next year I'll get a bigger truck and try to bring one in to the fair and have it identified. I don't think it is edible though.

See you at the "Cook & Taste".