

- 1 MESSAGE FROM THE PRESIDENT by John Steinke
- 2 WMS UPCOMING EVENTS
- 3 REQUEST FOR NEWSLETTER MATERIAL
- 4 SPRING MUSHROOM DINNER (19 May 2003) by Ben Horn
- 5 NORTH KETTLE MORAINÉ MOREL FORAY by Peter Vachuska
- 6 MADISON AREA MOREL FORAY (4 May 2003) by Betsy True
- 7 MYCOBRIEFS by Colleen Vachuska
- 8 PLUTEOLUS/BOLBITIUS ALEURIATUS: A RARELY DESCRIBED MUSHROOM by Steve Nelsen
- 9 RECIPE: GREEN BEAN, CASHEW, AND MUSHROOM CASSEROLE From a recipe collection
of Sami Saad

MESSAGE FROM THE PRESIDENT

OK, I was wrong about the morel season. From what I have heard and seen, "Seek and Ye shall find" should have been the order of the day. The rains came just in time, and with the long stretch of cool humid weather, the morel season lasted into June. The best part of this whole weather pattern is that the conditions are looking good for a great chanterelle season; keep those rains coming.

Right up there with "what is the meaning of life?" is "why does one become a student of the fungi?" The Meaning of Life was cleared up for me in the movie "City Slickers". It is simple -- one thing -- and we all have to find that one thing. My meaning is my children Jesse and Rhonda; the rest of it is just life. The more complex question of the two above would be the one about fungi. Before I started acquiring more knowledge of fungi, I used to jump in the car, travel for hours, search several square miles of woods and then do it all again. In its own way this was fun, but if an employer would have asked me to work this hard I would have quit, but in my younger days the morel was the only picture in the Post Office and that was the way to find them. Now, with my passion for fungi and a very long list of most wanted, my travel is short (many times without a car), my walk is leisurely and what I bring home is a surprise. This morel season would be a perfect example of this statement. In between the morel dishes I had this spring, I had two dishes of a very fine unknown species of Agaricus. I had collected this before, from the same site, but never so early. I love the taste of morels, but I believe this Agaricus brings more to the plate. On another occasion I had morels and Flammulina velutipes, what most people call "the winter mushroom". I call it "the salad mushroom" for its very fine flavor. And the last addition to my morel season was Marasmius oreades, one of the many "fairy ring mushrooms". This I would put in the "salad mushroom" category too, but it is a wonderful soup mushroom as well. A couple of other species of lesser quality were given some thought but left to propagate.

I would be a very poor president if I did not point out a couple of no no's in collecting mushrooms. I did not know the species of the Agaricus that I ate, so technically it was not properly ID' d. I also have this problem with eating certain freshly picked mushrooms before they have been properly introduced to the frying pan.

Have a great summer, hope to see you at the picnic and the summer forays.

by John Steinke WMS President

WMS UPCOMING EVENTS

- July 12 (Saturday) -- Summer Foray. Meet at Papa Steinke's Farm.
- August 23 (Saturday) -- Photo Foray; Scuppernong Skiing and Hiking Trails --
South Kettle Moraine State Forest.
- August 29 -- September 1 (Friday--Monday) -- Labor Day Weekend Camping Foray
-- Phillips, WI
- September 6 (Saturday) -- Tom Volk Foray -- La Crosse Area
- September 7 (Sunday) -- South Kettle Moraine Foray
- September 13 (Saturday) -- Sami Saad Memorial Foray -- Mauthe Lake
Recreational Area -- North Kettle Moraine
- September 14 (Sunday) -- Sandy Knoll County Park Foray
- September 20 (Saturday) -- Bristol Woods County Park Foray
- September 21 (Sunday) -- Walking Iron County Park Foray
- September 27 (Saturday) -- North Kettle Moraine/Greenbush Foray
- September 27 (Saturday) -- UW-Madison Campus Natural Areas Foray and Mushroom
ID Clinic
- October 1 (Wednesday) -- Fall Mushroom Dinner and Talk at Morels Restaurant in
Middleton
- October 4 (Saturday) -- Hainer/Erskine Memorial Foray at Point Beach State
Forest
- October 4 (Saturday) -- Mushroom Meander (Madison area -- location TBA)

October 11 (Saturday) -- Illinois Foray (location TBA)

There should also be a fall mushroom dinner in the Milwaukee area, but date and location are TBA.

REQUEST FOR NEWSLETTER MATERIAL

If you have any mushroom-related material that you can contribute to the newsletter, we would very much appreciate your sending it our way. Original articles would be especially appreciated. To help you get started thinking, here are ten possible themes for articles:

- "My favorite mushroom"
- "My favorite genus of mushrooms"
- "My best foray ever"
- "My favorite field guide"
- "How I became interested in mushrooms"
- "Mushrooms that grow in my neighborhood or yard"
- "What I enjoy about mushrooms and mushroom hunting"
- "My most unusual mushroom find"
- a book review
- a log of all the mushrooms you found in a week, a month, or a season

My hunch is that almost everyone in the club could write an article on at least one of these topics. Writing requires a certain amount of effort, but it offers the satisfaction of organizing your experiences and observations into something coherent and sharing them with others. Usually, there is no reason to fear a blank sheet of paper. Even if you don't know what you are going to say initially, most of the time something will come to you. (The editors will accept any form of article and help convert it into a publishable work.) Other possibilities for material to contribute include drawings, photographs, and recipes. There are many excellent recipes to be found in books and on the Web, but we prefer to run recipes from our members, if possible. So, put on your thinking caps and send us some stuff!

SPRING MUSHROOM DINNER 19 May 2003 by Ben Horn

Since I have never been known as a food critic, I guess it seemed natural for John Steinke to ask me to help him out and write a little about our annual dinner at the Heaven City Restaurant in Mukwonago. I'll give it my best shot; so bear with me.

As usual, the night started with a little chit-chat while standing around the bar. This year the motif was different with the appearance of groups of morels sitting on the bar. Here I spend all this time in the woods searching for the elusive morel and all I really had to do was go to the bar! Along with the good conversation, there were also the much anticipated appetizers, a delicious way to talk to friends.

Soon we were seated. There were eight of us at the table, a boisterous bunch, all ready for Chef Scott and his excellent staff to treat us. Of course the meal wouldn't be complete without a flight of wine to bring out the taste of every course. So off we go...

- 1st course: Champignon Mushroom Terrine on Fresh Herb Sauce with Pickled Mushrooms. Maybe I'm old fashioned, but anything you can sop up with bread and wash down with wine is good with me. The texture of the Terrine was great with a rich taste of mushrooms. I polled my table and they all said "good". The Sauvignon Blanc set it off nicely.
- 2nd course: Warm Crimini Mushroom Strudel with Roth Kase Rofumo Cheese on Red Pepper Cream. Excellent! Everyone loved the strudel and the spiciness made you hungry for more. "Abundance" red table wine completed the course.
- 3rd course: Bowl o' Fresh Morels, Cream, Fresh Chives. Morels--Cream--Chives. Enough said! Fantastic soup; we were even able to get a little grit out of the morels to prove freshness. Served with a Chardonnay, you kind of began to wonder if it could get any better. We all loved it!
- 4th course: Kansas City Style Smoked BBQ Portabella Mushroom Cap with House Sauce, Texas BBQ Beans with Shiitake Mushrooms and Chilled Mushroom Salad. I was curious about this; I like mushrooms as much as the next guy, but to me if a Portabella isn't done enough I can get burnt out half way through. Leave it to Scott to have me finish in record time. Smoking is a great idea for cooking big mushrooms. The salad was fresh and the BBQ beans gave the spicy bite that went great with this entree. The Syrah that was served made a great companion for the spicy dish. Too spicy for some, great for most.
- 5th course: Candied Mushroom Flan with Sherry Sauce. Through the years you have to be intrigued by the notion of the chef trying to come up with a

mushroom dessert. This one tops them all for me and the rest of my table. Someone at the table said it was almost sexy! Mushrooms sexy... wonders never cease! If it wasn't improper to lick your plate, I would have looked like a starving Golden Retriever after dinner at Grandma's house. The Noble One dessert wine was a perfect finish to a fantastic meal.

I thoroughly enjoyed this meal. It's hard for me not to have some type of meat for the entree, but Chef Scott helped me through that with another delicious evening at Heaven City. Also, I wouldn't be doing the meal any justice if I didn't mention the great service that we have enjoyed every year. As usual I can't wait for next year. Thanks Scott and crew for a wonderful meal.

NORTH KETTLE MORAINES MOREL FORAY
by Peter Vachuska

The WMS had its annual morel foray on Saturday, May 7th. The turnout was overwhelming. While no one did a head count, it was noted that there were 35 cars in the convoy from Mauthe Lake Recreational Area to the foray location. This caravan became especially impressive when all the vehicles had to turn around because of a missed turn at the head of the caravan. Our timing was about right, though perhaps a week later would have been better. One person had a collection of about 30 morels that were all about 1--1 1/2 inches in height. These tiny morels would have become more substantial in another week. While overall a large number of *Morchella* specimens were found (including some *semilibra*), not everyone found them. It was especially disappointing when the participants drove from as far away as Madison or Chicago. However, I'm sure most of the forayers were able to find more morels this spring as this was a good season for them.

MADISON AREA MOREL FORAY
4 May 2003 by Betsy True

About 35 people attended. We found no morels and the conclusion was that it was still too early in the season. Bloodroot, Jack in the pulpit, and ferns were just coming up. The weather was overcast, but not raining, temperatures comfortable, and the site was ideal. Blackhawk Ridge is a vast woods with many interconnecting hiking/riding/skiing trails. It's normally closed to public car access, but Hal Burdsall was able to get the keys to the gate so we could drive the quarter mile to the hilltop shelter area. This is definitely a site that deserves a return. A hearty thanks to Hal Burdsall of Fungal & Decay Diagnostics, LLC for leading this trip.

Fungi found:

Sarcoscypha coccinea
Urnula craterium
Gyromitra brunnea
Dibotryon morbosum
Daldinia concentrica (old)
Hypoxylon atropunctatum (old)
Irpex lacteus (old)
Spongipellis spumeus
Xylobolus frustulatus (old)
Phellinus tremulae

MYCOBRIEFS
by Colleen Vachuska

* NEW GENUS OF TRUFFLES RELATED TO AMANITA FOUND IN AUSTRALIA: An Australian scientist has discovered a new truffle genus related to *Amanita*. Such a truffle has never been found before, even though scientists have been looking for one for a long time (probably only a mycologist would know why). The new genus was discovered by mycologist Neale Bougher in a rejuvenated forest at a former bauxite mine near Perth in Western Australia. This new genus has been given the scientific name *Amarrendia* - a fusion of the names *Amanita* and *Torrendia* of the most closely related genera. At least 5 species within the new genus have been identified. The newly discovered truffles are white and about the size of marbles, though some are larger. This new truffle genus supports the growing view that Australia is one of the earth's biodiversity centers for truffles. According to Bougher, "So far, we've found nearly 90 genera of truffles and over 300 species here. Thirty-five percent of the genera and 95% of the species occur nowhere else on earth." (adapted from an article in *Life Science Weekly*, January 27, 2003)

* FUNGI CAN BE USEFUL IN ASBESTOS DECONTAMINATION: Researchers at the University of Torino in Italy have found varieties of fungi that can make asbestos less dangerous. Though asbestos was once widely used in building and insulation materials, airborne asbestos fibers are considered a hazard with the potential to cause lung diseases and certain respiratory cancers.

Cleaning up contaminated soil around former asbestos mines and factories is especially difficult because the contaminated area cannot be well-contained. Asbestos fibers are toxic partially because they contain iron, which promotes the generation of free radicals that can damage DNA and trigger cancer. The Italian research team working on this project discovered several types of fungi that can lessen the toxicity of crocidolite asbestos (the most dangerous form) by removing iron from it. The best iron-gatherers are *Fusarium oxysporum*, a common cause of plant rots and wilts; *Mortierella hyalina*, a pathogen that targets plant roots; and *Oidiodendron maius*, a fungus that attacks trees and shrubs and withstands heavy-metal pollution. Besides removing iron from the asbestos, the fungi also bind the asbestos into its network of hyphal webs which would make it difficult for the asbestos to become airborne if the soil were to be disturbed. (adapted from an article in Waste Treatment Technology News, March 2003)

- * THE JACK O' LANTERN MUSHROOM AND CANCER: A chemical derived from the jack o' lantern mushroom (*Clitocybe illudens*) is being tested as a possible therapy for difficult to-treat cancers. The jack o' lantern mushroom was first investigated pharmaceutically after World War II. At that time it showed promise as an antibiotic, but was abandoned because of its high toxicity. However, in the 1960's, Trevor McMorris, then a scientist at the New York Botanical Garden, began studying the mushroom's chemical components. Analysis of these compounds, called illudins, by the National Cancer Institute, showed that they were powerful anti-tumor agents. After McMorris deciphered the chemical structure of these compounds, he went to work on finding a way to reduce their toxicity while retaining their anti-cancer activity. In the late 1980's his lab developed a compound called irofulven that was effective. Tests on lab animals at UC-San Diego, where McMorris is presently, showed that the compound killed tumors known as adenocarcinomas, deadly malignancies of the lung, breast, and colon. Irofulven is rapidly absorbed by cancer cells, where once inside, the compound latches on to the cells' DNA and proteins, preventing them from reproducing. Though the drug is more precisely targeted than standard chemotherapy, it does have typical side effects such as vomiting, nausea, fatigue, and bone marrow suppression. Irofulven was tested extensively on animals before the first tests on humans began in 1995. Though irofulven proved no more effective than standard therapy on patients with advanced pancreatic cancer, more recent research on other cancers has shown promise. In a 2000 trial of 15 women with recurrent ovarian cancer, five patients experienced at least a 50 percent reduction in tumor size, while the disease in two others was stabilized. In an ongoing test of 14 patients with inoperable liver cancer, one patient experienced a 74 percent reduction in tumor size, and three other patients' tumors didn't grow any larger. (adapted from an article by Linda Marsa, Los Angeles Times, January 7, 2003)

PLUTEOLUS/BOLBITIUS ALEURIATUS: A RARELY DESCRIBED MUSHROOM
by Steve Nelsen

Abstracted from Kauffman's description (1918): cap lilac-gray, viscid, striate, 1.5-4 cm; gills white becoming pink, then cinnamon; stem 2.5-4 x 0.2-0.3 cm, white, swollen base; spores cinnamon brown, 9-10.5 x 4-5 microns.

Agaricus (*Pluteolus*) *aleuriatus* was first described by Fries in 1822. Peck assigned American material as a new variety, *Pluteolus aleuriatus* var. *gracilis* (Peck) in his 54th report, from Westport, NY in October, 1900, saying it is darker in color with deeper and longer striations of the margin, and has more highly colored spores than the European material. Photographs of European material (Cetto, Vol. 5, p. 1741; Phillips, p. 120) indeed have caps that are lighter and colored more yellow-brown than the material I have found. Kauffman notes in 1918 that Ricken had already discarded *Pluteolus* (erected when only macroscopic characters were used and spore color was the first criterion, for *Pluteus*-like brown-spored species), absorbing it into *Bolbitius*, but he argues for keeping both genera on the basis of their macroscopic characters. Because macroscopic characters appear to no longer have any taxonomic standing, modern books make the species *Bolbitius* (Fr.:Fr.) Karsten. Kauffman lists it as rare, July, Bay View, MI. I am always pleased to find anything that Kauffman calls rare, because his experience generally is the case for Wisconsin as well. Graham (based in Chicago) shows a line drawing, but does not include it in his text, making me suspect that he had not seen it (and wonder where he got the plate; I noticed previously that his artist copied a Peck picture of *Caulorhiza hygrophoroides* which was in an unusual view, so it is clear it was copied). This species has disappeared from almost all American books since color photography has taken over, because it is not common enough (books exceeding 1000 species are scarce as hen's teeth, and always try to cover too large an area to boost sales, so less common species in any area get squeezed out), and most authors no longer mention things they cannot illustrate. David Arora, as usual an exception, describes *aleuriatus* as being rather common but overlooked in oak woods in California in the fall and winter, and shows a B&W photo of tired material.

In our area it appears to be a spring to early summer mushroom. I have found

what I believe to be it five times, twice in May (5/18/86, Pike's Peak S.P. near McGregor, IA; 5/26/91 at Pine Glen by Devil's Lake S.P., Sauk Co.), twice in June (6/11/95 at the Madison school forest in Verona, Dane Co.; 6/11/00 at Astico C.P., Dodge Co.), and once in July (7/19/92 at Warren's Wood, MI). Three of these are sites recognized as being among the best deciduous forests in the western Great Lakes area. I am old-fashioned enough to prefer to still call this genus *Pluteolus* (the diminutive of *Pluteus*) because three times out of the five I have seen it, I thought it was a small *Pluteus* until I took a spore print. The pinkish gills convinced me, but it has a distinctly viscid cap and appears to arise from soil (unusual for a *Pluteus*). The spore color makes its identity as a *Pleuteolus/Bolbitius* clear. I am pleased to say that I am learning, and the most recent time, I was quite certain of what it was before I took the spore print. The purply undertone referred to by Kauffmann does not come out in my photographs but is noticeable in the woods.

[images not in email version]

Pike's Peak S.P., Iowa, 5/18/86 Astico Co. Park, 6/11/00

Although the Astico specimen does not look very viscid or striate in this shot, it was; the lighting was direct, and demonstrates why I don't like to photograph mushrooms without shading them. There was such an annoying haze of mosquitoes around that I was in a hurry. (Our pet name for Astico Co. Park is "the mud hole".)

The cover specimen [not in email version] is from Warren's Wood, Michigan 7/19/92 (with Coral Slime, *Ceratiomyxa fruticulosa*). This specimen looks much darker than the others, but Warren's Wood is really dark in July, and I think having the white slime mold under it darkened up the appearance of the mushroom quite a bit. I am pretty sure that this is the same species as the others.

This specimen [image not in email version] from Mauthe Lake certainly seems to be a *Bolbitius*, and I had it identified as *aleuriatus* also, but am not so sure now, after comparing it with the other pictures.

References

- Kauffman, C.H., *The Gilled Mushrooms of Michigan and the Great Lakes Region*, Vol. 2, page 506.
Cetto, Bruno, *I Funghi dal Vero*, Vol. 5, page 1741.
Philips, Roger, *Mushrooms and other Fungi of Great Britain and Europe*, page 120.
Graham, V.O., *Mushrooms of the Great Lakes Region*, plate 42.
Arora, David, *Mushrooms Demystified*, page 475.

RECIPE: GREEN BEAN, CASHEW, AND MUSHROOM CASSEROLE

From a recipe collection of Sami Saad

1 pound green beans, cut into 1-inch pieces
1/4 cup chopped cashew nuts
1/4 cup butter or margarine
1/2 pound mushrooms, sliced
3 tablespoons flour
1 teaspoon seasoned salt
1/4 teaspoon salt
1/4 teaspoon white pepper
1 1/2 cups milk
1 tablespoon instant minced onion
3 tablespoons grated Parmesan cheese

Cook beans in 1 inch of boiling water; drain. Saute nuts in butter for 5 minutes; remove nuts. Add mushrooms to butter, and cook until lightly browned. Blend in flour and seasonings. Add milk and cook, stirring, until thickened. Add beans, half of the nuts, and the onion. Mix well and pour into a shallow casserole. Sprinkle with the remaining nuts and the cheese. Bake in a preheated moderate oven (350 degrees) for about 20 minutes. Makes 6 servings. Enjoy.

END