Fall 2005

THE NEWSLETTER OF THE WISCONSIN MYCOLOGICAL SOCIETY
September 2005
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MESSAGE FROM THE PRESIDENT

Hi again everyone. It doesn't seem that it should be time for another "message" already. Summer has gone by too quickly. It seems that this is becoming an annual event of late, but once again it has been a very dry year. I have found few fungi so far and I don't really expect it to get much better at this point. But that doesn't mean that you shouldn't take in a few of our fall forays. They're always a great opportunity to get out and meet other members and just enjoy some beautiful late summer weather in the Wisconsin outdoors. In fact, I'd like to extend my thanks and appreciation to all of the members who have led forays for our club. We'd be lost without you. Literally and figuratively. I've belonged to other groups of a similar type and I know that putting field trips and such together is easier said than done. People don't always have time to volunteer. So, thank you. While I'm on the subject, this newsletter doesn't put itself together either. Peter and Colleen Vachuska have been producing the WMS Newsletter for as long as I've been a member and longer. Having seen other newsletters I can safely say that ours is a polished, well done newsletter. I'm sure the entire club joins me in saying thank you and well done! While I'm sitting here typing away on my demon computer I hear a cicada calling outside. It's almost like he's saying "you better get out here, it's almost over." So, I'm going to get out there, enjoy the beautiful day we're having and maybe find a fungus or two! Hope to see you at a foray or meeting soon.

by Chuck Fonaas

UPCOMING WMS EVENTS

September 10 (Saturday) Bristol Woods Foray, led by Dave Menke -- Bristol Woods County Park, 10:00.

September 17 (Saturday) The 5th Sami Saad Memorial Foray, led by Alan Parker -- Mauthe Lake Recreational Area, North Kettle Moraine, 10:00.

September 24 (Saturday) Carnes Park Foray, led by Steve and Adrienne Nelsen -- Dorothy Carnes Park in Jefferson County, 10:00.

October 1 (Saturday) The Tula Erskine and Fred Hainer Memorial Foray, led by Chuck Soden -- Point Beach State Forest, 10:00.

October 1 (Saturday) Mushrooms and Lichens of Devil's Lake (See below)
October 9 (Sunday) Coray Woods Foray, led by Beth Jarvis -- Coral Woods Conservation Area, Illinois, 10:00.

MORE EVENTS

September 16--18 An Introduction to the EDIBLE & POISONOUS MUSHROOMS of MICHIGAN

This workshop will provide opportunities for field, lecture and laboratory experience in the recognition, collection, identification, and handling of some of Michigan's abundant edible as well as poisonous mushrooms. The workshop is scheduled during the peak fall mushroom hunting season. The experience is planned to accommodate beginners and more advanced participants alike. The workshop will include several concurrent lectures in order to accommodate the varied backgrounds and levels of participants.

REGISTRATION FEE ($160 with housing, $110 without housing): Includes the cost of instruction, education materials, three noon meals, two breakfasts and two dinners. WHAT TO BRING: Participants will be provided with a workshop booklet and other handouts. Participants are responsible for providing their own collection materials. Cool weather, rain, and/or insects may be encountered. Participants will find it handy to bring an inexpensive knife, a rigid collecting basket, a supply of paper lunch-size sacks, pencils, a spiral-bound pocket notebook and a 10x hand lens or magnifying glass.

INSTRUCTORS: Dr. Gerard Adams and Dr. Heather Hallen, Michigan State University, East Lansing, MI; Dr. Daniel Lindner Czederpiltz, US Forest Service, Forest Products Lab, Madison, WI; Joe Krawczyk & Mary Ellen Kozak, Field and Forest Products, Mushroom Cultivators, Peshtigo, WI http://www.FieldForest.net; Bernadette O'Reilly and Dr. Thomas Volk, University of Wisconsin, La Crosse, WI; Dr. Dana Richter, Michigan Technological University, Houghton, MI

For more information, contact Gerard C. Adams at gadams@msu.edu
October 1 (Saturday) Mushrooms and Lichens of Devil's Lake --- Join trip leaders Marie Trest, Dan Czederpiltz, Tom Volk, and Diane Derouen in an exploration of the mushrooms and lichens of Devil's Lake State Park. Learn growth forms, ecological importance, and reproductive strategies, as well as some common mushroom and lichen species and characters used for

identification. We will hunt in the lowlands and up the bluffs. You might like to check out Tom's website www.TomVolkFungi.net and the Wisconsin lichen website www.botany.wisc.edu/wislichens/.

Meet to carpool at 9:00 am in the parking lot of the Middleton Copp's food store at the intersection of Century Ave. and Allen Blvd. Or, meet at 10:15 am in the parking area nearest the trailhead for East Bluff Trail, Devil's Lake State Park -- from Hwy 12 take Hwy 159 east and follow signs to the north entrance of Devil's Lake State Park. A state park sticker is required. Bring a hand lens, if you have one, and all those mushroom and lichen questions that have been puzzling you. Please dress appropriately for the weather. If fungi are abundant, we may continue into the early afternoon, so you might like to bring a sack lunch. If you have questions, contact Marie at (608) 262-9873 or mttrest@wisc.edu. Field trip is jointly sponsored by Madison Audubon and the Wisconsin Mycological Society-Madison Interest Group. For more information about this group for people interested in fungi, contact Betsy True at (608) 821-0048 or btrue@wisc.edu.

DUES REMINDER

Your 2006 WMS dues ($15) are payable by January 1st. Please send your dues to: Fred Kluhsman, Secretary/Treasurer; 5315 S. Sunnyslope Road; New Berlin, WI 53151. Note that WMS dues are $15 and that NAMA (North American Mycological Association) dues are an additional $32.

ANNUAL PICNIC AND BUSINESS MEETING
by Chuck Fonaas

The Annual Summer Picnic was held on Saturday, June 25, at Papa Steinke's Farm. The weather was absolutely gorgeous although the weatherman said there was a threat of rain. We had a good turnout as about sixty or so people (and a host of ducks, chickens, etc.) showed up to enjoy the outdoors, some good conversation and some great food (which also involved chickens). The chicken was once again outstanding, as were all the dishes brought by members. There were grilled portobellos, some great desserts, beans, cheese, etc. The list is too long to mention them all, so thanks to all who contributed. We also had our annual business meeting at the picnic and the current group of Board Members and Officers was approved for another year. Once we got through yours truly's stumbling first attempt at an annual meeting we got back to our eats and greets. All in favor say aye, right? Well, it was a great night to go home with a full stomach and a quenched thirst (whether it was dark or pilsner). Everyone had a good time.

NAMA FORAY
by Colleen Vachuska

The 46th annual North American Mycological Association Foray was held July 21-24 in La Crosse. This was the first time the foray was ever held in Wisconsin. Despite the dry weather the state has had this summer, the foray

was successful, with approximately 300 species collected. Additionally, participants enjoyed many fine lectures and workshops.

Tom Volk of the UW-La Crosse Biology Department was the Host Mycologist, and the UW-La Crosse campus was the base of operations for the foray. Participants were accommodated at a dorm on campus, and lectures and workshops were held at the science building. Meals and evening activities took place in the student union. Buses or car caravans took people out in the field for mushroom hunting.

On Friday and Saturday of the foray, there were a number of forays to area locations, including Perrot State Park, Wildcat Mountain State Park, a park across the river in Minnesota, Hixon Woods, and Tom Volk's backyard. Some of the primary forays were to West Salem, to visit the largest remaining stand of American chestnut trees left in the U.S. Most American chestnut groves were destroyed by chestnut blight early in the 1900's. However, since the West Salem grove is outside of the natural range of the chestnut, it was blight-free until 1988. Unfortunately, it is now under siege and struggling, despite various efforts to save it.

If an attendee did not want to go out on forays, there were plenty of lectures and workshops to attend. Lectures covered a diverse range of mycologically related topics, from the taxonomy of Russula to the problem of building mold. I especially enjoyed the talk on the Oregon chanterelle study, where a group of volunteers has been counting chanterelles in the same plots for 19 years to determine the effect of picking; such persistence and dedication. (Their conclusion seemed to be that picking did no harm, though they thought it was better when picking to cut the chanterelles rather than pull them out). For the more ambitious, there were hands-on workshops on dying with mushrooms and on mushroom and lichen identification. There was also an adventurous wild-mushroom mycophagy session, where we were able to sample things like stinkhorns, as well as the more typical edibles like morels and chanterelles.

Each year NAMA conducts a photo contest, with slide and digital divisions. The Wisconsin Mycological Society was well-represented in this year's contest. Members of our club who submitted entries included Chuck Fonaas, Dann Wilke, and Judy Kaplan. Chuck Fonaas was also a judge in the digital portion of the photo contest. Winning entries included a slide of Lactarius sulphureus by Chuck Fonaas, which received an honorable mention, and a photo of Pleurotus ostreatus by Judy Kaplan, which also received an honorable mention.

Besides the photo contest, NAMA gives several other awards. One of these is the award for Outstanding Contributions to Amateur Mycology. This year, we were all very happy to see this award go to Tom Volk, who received a standing ovation. Tom has always been very helpful and encouraging with amateurs and students. He has certainly been a great asset to our club, leading forays, giving lectures, and being a resource person. He maintains a wonderful, informative website, "to die for", as Gary Lincoff put it. He has involved

many students at UW-La Crosse with mycological research, and the walls of Cowley Hall were lined with posters on the fruits of their efforts.

At the end of the foray on Sunday morning, some of the mycologists gave a tour of the collection, going around the tables discussing the various trayed fungal specimens. Of course, the lack of precipitation had an effect on what and how much was found. For example, at that point, no Hygrophoraceae, few Amanita, and only one Agaricus had been collected and identified. In contrast, there apparently were many collections of Coprinus variegatus. Also, there were specimens of species associated with chestnut, such as Fistulina hepatica. The tour of the tables was a good way to pick up little tidbits of information. For example, we learned about Marasmius scorodonius, which is supposed to smell like garlic. We have since collected and tried it, and it not only smells like garlic, but tastes like garlic.

Despite the convenient location of the foray, only a handful of WMS members attended. These were: Britt Bunyard (who gave a talk on insects and fungi), Joe Krawczyk (who spoke on shiitake cultivation), Dan Czederpiltz (who gave a lecture on his trip to Belize), Dave and Greta Menke, Steve and Adrienne Nelsen, Bob and Judy Kaplan, Kathleen and Dann Wilke, Jon and Kim Loomis, Beth Jarvis, and Peter, Colleen, and Karl Vachuska. (If I missed anyone, I apologize.) This relatively light showing was no doubt due to the fact that participants had to be members of NAMA to attend the foray, and many of our members are not members of NAMA.

While the 2005 NAMA foray was a good start for us, we have a long way to go to catch up with our neighboring states. Michigan has had six NAMA forays and Minnesota has had four. Fortunately, we are on par with Illinois, which has also had one, and we are even ahead of Iowa which has had no NAMA forays.

Next year's NAMA foray will be held near Edmonton, Alberta, Canada.

PHOTO FORAY REPORT
by Colleen Vachuska

About a dozen people came out for the photo foray at Scuppernong Springs Nature Trail on August 27. Most actually came with cameras! After the dry hot summer we have had, I don't think most participants were expecting to find much, but we were pleasantly surprised by the amount of fungi that we did find. A nice orange-capped Leccinum greeted us at the beginning of the trail. Along the way, we found a number of other orangey-red and photogenic specimens, including a beautiful Hydellum aurantiacum with grass growing through it, a semi-ring of pretty Lepiota rubrotincta, and Hygrophorus acuticonicus lining the trail. The woods were moist and many specimens were quite viscid. We also saw many clusters of Mycena on logs, some large Lactarius with a cottony edge, several Agaricus with an interesting persistent ring, and a pretty purple Laccaria amethystina. All told, it was a beautiful, sunny, mosquito-free day, and an enjoyable foray. Those who came went home with pretty pictures and pleasant memories.

MYCOBRIEFS
by Colleen Vachuska

* ASTHMA-CAUSING FUNGI:, Asthma is a serious, occasionally life-threatening disease of both children and adults. Until recently, severe asthma attacks have been blamed primarily on air pollutants such as dust mites, pollen, or animal hair. However, researchers at the University of Manchester have now discovered that the condition can be triggered by an allergic reaction to certain types of fungi, such as household mold, and damp and dead leaves. Although most people do not have a reaction to fungal spores, when severe asthmatics inhale the spores, their airways are thought to narrow, making it harder for them to breathe. Researchers are now starting a clinical trial of the anti-fungal drug itraconazole with 100 asthmatics. It is hoped that use of the drug will lessen attacks, thereby reducing the need for hospitalization and/or the use of steroids. In initial trials, use of anti-fungal drugs was found to reduce the incidence of hospitalization by 75%. (The Scotsman Publications Limited, June 16, 2005, via LexisNexis)

* PLANT CUE FOR MYCORRHIZAL DEVELOPMENT: About 80% of plants in terrestrial ecoystems get essential nutrients from mycorrhizal fungi. The fungi branch around the host plant, building a network of thread-like structures. In a major step toward understanding how plants and fungi interact, Japanese scientists at Osaka Prefecture University have identified the substance which provides the cue for this branching to happen. It is the ringed molecule, strigolactone, produced by the plants' roots, which provides the signal. This scientific study also revealed an interesting twist: strigolactone also triggers the growth of parasitic weeds. (Pharma Law Weekly, July 5, 2005; via LexisNexis; originally published in Nature)

* BANANAS UNDER ATTACK: Bananas are currently the most popular fruit eaten in America. Unfortunately, they may be headed for extinction. The Cavendish is the variety of banana that we currently eat. A fungus dangerous to the Cavendish was discovered in Asia 13 years ago, and has since been wiping out plantations in Indonesia, Malaysia, Australia, and Taiwan and is spreading throughout southeast Asia. Experts say it is inevitable that the Cavendish will be wiped out worldwide. In an effort to save the banana, two strategies are being employed. On the one hand, scientists are trying to genetically alter the Cavendish to make it better able to resist the fungus, and on the other hand growers are trying to develop another variety of banana similar to the Cavendish. This second approach has worked before, since up until the 1960's, Americans ate Gros Michael bananas, which were killed off by a different fungus, and subsequently replaced by the Cavendish. (New York Times, August 13, 2005)

* FUNGI PROTECT ROADSIDE TREES: Many cities that have to deal with snowy winters often spray their roads with salt, which can be damaging to adjacent trees. However, a scientist at the University of Alberta (Canada) has found that certain types of fungi may protect trees from salt damage. James

Zwiazek, a professor of plant physiology, has discovered that some kinds of fungi, when injected into the roots of saplings before or after planting, act as a barrier that blocks the salt from being absorbed by the tree. The results of Zwiazek's research could eventually guide city workers on which trees would fare better if planted close to city curbs, since the fungi protect some trees more than others. The results could also be used in Alberta's oilsands, since the mining process used to extract the oil makes the soil more salty. (Edmonton Journal, Aug. 25, 2005)

* FUNGI MAY AID GLOBAL WAR ON MALARIA: Malaria kills more than one million people a year, mostly children younger than 5 and pregnant women, especially in Africa. Despite new drugs and better mosquito nets, some experts say that malaria deaths may be increasing. In many areas, mosquitoes have become resistant to the chemical pesticides used on them. In a hopeful finding however, scientists recently reported in the journal Science (6/10/05) that two fungi that are harmless to humans and the environment can be used to kill the mosquitoes which spread malaria. The fungi, Beauveria bassina and Metarhizium anisopliae, are already licensed in Western countries to control aphids, termites, and other pests. In one of the studies being reported, scientists from Imperial College in London and the University of Edinburgh sprayed oil containing Beauveria bassiana fungus into cardboard pots. Mosquitoes that had taken blood meals were put into the pots for six hours, about the minimum time that they usually rest on a wall to digest their meals before flying outside to lay eggs. Many mosquitoes died within 14 days, about how long it takes the malaria parasite to move from the mosquito's abdomen into its saliva so that it can be transmitted. Also, surviving mosquitoes flew poorly and bit less, and the parasites in them developed more slowly. One reason the method works so well is that malaria infection appears to make mosquitoes far more vulnerable to fungal infections. Huge batches of Beauveria bassiana and Metarhizum anisopliae can be grown in fermenting tanks, so prices should not be prohibitively higher than those for chemical pesticides. (International Herald Tribune, June 11, 2005; via LexisNexis)

XEROMPHALINA TENUIPES
by Steve Nelsen

(note that the original papercopy version of this article includes photographs)

Xeromphalina tenuipes (Schw.) Smith is an example of a mushroom that is much more common in the woods of Wisconsin than in manuals that include color photos, and is well worth knowing for anyone who goes out looking for morels. It appears at the same season (but stays around longer), and seeing it might make you feel better if you can't find any morels. Perhaps not a lot, but I am always pleased to find something I can identify besides a morel in May; there are not a lot of species out then. It was described by Schweinitz in the 19th century as a Collybia. Peck in his 49th report (for 1895), which contains a monograph on Collybia in New York state, lists both it and the species he had described, C. amabilipes, as extralimital species, which he had not seen from

the state of New York in 27 years of collecting and being sent specimens from throughout the state in his capacity as the New York State botanist. He separated these species on macroscopic features (saying that C. amabilipes differs from C. tenuipes by having a shorter stem, 2-3 inches versus 6-12 inches). Macroscopic features no longer have taxonomic status, and Halling equates amabilipes and tenuipes. C. tenuipes is curiously missing from Kauffman (1918), who did key C. amabilipes but does not mention ever finding it in Michigan (which makes me wonder what he called C. tenuipes; he certainly must have seen it). This causes a huge gap in citations, as most popular manuals were abridged from Kauffman for forty years. A. H. Smith resurrected tenuipes and transferred it to Xeromphalina in 1953. Groves has a nice B&W photo of X. tenuipes in Mushrooms of Canada (1962), and Smith, Smith and Weber show a good drawing in their 1973 "How to Know" book. It is mentioned but not illustrated in Miller's 1977 and Bessette, Bessette and Fischer's 1997 books. The only color photo in U.S. books that I have is in Phillips' Mushrooms of North America (1991) which is getting hard to find. He designates it "Quite common. Found in Eastern North America, west to the Great Plains. Season, April to July." Given the above lack of information on it in popular manuals, "quite common" might have been thought to be a bit of an exaggeration, but C. tenuipes is in fact rather common in southern Wisconsin and Door County. We have most often found it in May. For example, this year it turned up on May 14th at Belmont Woods (LaFayette Co.), May 21st at Wildcat Mountain (Vernon Co.), and May 29th at Abrahams Wood (Green Co.). Once we realized what it looks like (for years we did not recognize it because of the lack of illustrations) we have seen it in several places south and west of Madison. We also found it in June, and once in September, but have yet to see it in July.

X. tenuipes is the largest Xeromphalina, the cap usually being 2-7 cm in diameter, with a rather fuzzy orangey brown nearly concolor cap and stem, and yellowing gills. The spores are elliptical, smooth, and amyloid (which separates it cleanly from modern Collybia and Halling's segregates Rhodocollybia and Gymnopus: Halling retained only the parasitic species in Collybia, producing the maximum number of name changes). We typically find X. tenuipes growing on decorticated logs, occasionally buried.

No one that I have seen has said that X. tenuipes is good to eat, although there seems to be reluctance to saying that it is poisonous. It feels pretty tough, and might taste more like the wood it grows upon than would be desired. It occurs outside North America, in Japan (as usual, Iwaseki, Otani, and Hongo (1998) include lovely color photographs, although I would not swear from them that the variety in Japan is identical to that in Wisconsin. Some books describe the cap as longitudinally grooved, like IOH's photos. The specimens that we have found in Wisconsin are not, but of course, macroscopic features no longer count for classification). M. H. Zoberi's Tropical Fungi (1972) lists it as occurring in a variety of more southern locales, including four countries in Africa, Brazil, India and Pakistan, and Australia. Googling the name produces "about 148 hits" in less than the time it takes to type it, but as usual produces entries on species lists, photographs (Halling's are convincing, but some are questionable) and relatively little solid

information, except that it appears on postage stamps from Grenada, Barbados, and Trinidad and Tobago (at least; I stopped checking).

RECIPE:
Black Trumpet Cracker Spread by Adrienne Nelsen as brought to the January meeting

RECIPE: Black Trumpet Cracker Spread by Adrienne Nelsen
1/2 c. dried trumpets
8 oz. cream cheese, softened
milk
butter
3 T. chopped chives
1/4 tsp. seasoned salt (optional)

In saucepan, cover the trumpets with a small amount of milk, and simmer until reconstituted. Remove from heat, drain mushrooms, and reserve the milk for later use. Cut mushrooms into small pieces. Melt butter and saute mushrooms for about 4 min. Using a fork, blend chives, mushrooms, and butter and salt mixture into the cream cheese. Add the reserved milk as needed to obtain spreading consistency. Refrigerate at least one hour before serving.

Enjoy!

NEWSLETTER MATERIAL NEEDED

The editors are still looking for mushroom--related articles and recipes. If you have anything you would like to share, please send it to us at: Colleen and Peter Vachuska, 440 North Street, West Bend, WI 53090 or email pvachusk@nconnect.net

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