THE NEWSLETTER OF THE WISCONSIN MYCOLOGICAL SOCIETY June 2001

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MESSAGE FROM THE PRESIDENT

After a long winter, it feels great to be back in the woods searching for mushrooms. Morels were found in good numbers this year. The club has had a good spring. Our May morel foray was successful and the April mushroom dinner made for a delicious and entertaining evening for our club members.

Like seasons of the year follow each other, so it is also with our club. This will be my last letter to you as your president. A new WMS president will be elected at our annual June membership meeting. I'm sure the nominating committee has chosen a fine candidate for my replacement. I'm looking forward to the new ideas which undoubtedly will come with a new president and board of directors.

I think the club is strong and will continue to grow in the years to come. I plan to remain on the board and to work at forays. I hope that I have served the club well over the past 3 years, and I want to thank everyone for making my job as your president a pleasant experience.

by Chuck Soden

UPCOMING WMS EVENTS

June 23 (Saturday) -- Annual Picnic & Business Meeting at Falk Park. July 21 (Saturday) -- Summer Foray; meet at John Steinke's farm.

Members should have received announcements with details and directions to each of the above events.

OTHER EVENTS

NAMA ANNUAL FORAY

The Minnesota Mycological Society is pleased to announce that it will be hosting the NAMA Foray on July 5-8, 2001, at St. John's University in Collegeville, MN. St. John's is located on 2400 acres of lakes and woods one hour west of Minneapolis.

The Foray will be honoring Clyde Christensen, who was a Professor of Plant Pathology at the University of Minnesota. Professor Christensen spent considerable time educating the public about edible and poisonous mushrooms, and in 1943 published his well known field quide, Common Edible Mushrooms.

The theme of the foray will be NAMA goes back to college. Dr. Thomas Volk, Associate Professor of Microbiology at the University of Wisconsin at La Crosse will be the Host Mycologist. For further information, contact Anna Gerenday, (612) 625-5759.

TELLURIDE MUSHROOM CONFERENCE

The 21st annual Telluride Mushroom Conference will be held August 23-26, 2001, in the historic Colorado mining town of Telluride. The Telluride Conference is designed for persons interested in mushroom identification, edible, poisonous and psychoactive mushrooms, and mushroom cultivation.

Some of the conference speakers include: Gary Lincoff, author of the Audubon field guide; Paul Stamets, author of Growing Gourmet and Medicinal Mushrooms; and Andrew Weil, author of Eating Well for Optimum Health. Daily forays will be led into the nearby forests generally productive of a wide variety of wild mushrooms, particularly edible species. For further information, contact:

Fungophile, PO Box 480503, Denver, CO 80248-0503 or call (303) 296-9359.

MARCH MEETING by Colleen Vachuska

It was "travelogue" time at the March 14 WMS meeting. Mycologist Hal Burdsall, formerly of the Forest Products Lab in Madison, showed slides and talked to us about his trip in March 2000 to Campbell Island, a small island 400 miles south of New Zealand. The island has been uninhabited (by humans at least) since 1985. There are basically no land mammals there either, except rats. Public access is essentially limited to tourists who are allowed to walk around on a roughly 2 mile boardwalk.

Hal was part of a research group there to study "subantartic" fungi. His specialty is wood-decay fungi and, though Campbell Island is not wooded in the sense that Wisconsin is, there is some woody material there to provide substrate for fungi. Most of the species Hal found grew on Brachyophyllum(?), a woody plant which can get up to 15 feet tall and 6-8 inches in diameter. Though there were no large fleshy fungi to be found and few "real" polypores, there were lots of crust fungi and Hal was impressed with the number of jelly fungi he saw. Another person in the research group was in charge of studying mushrooms, but 90% of what he found was LBM's such as Psathyrella.

On the way back to New Zealand, the study group was able to spend a couple of days inspecting the Auckland Islands. These are also uninhabited as far as people go (and for the most part as far as animals go), but there was some penguin watching to do there. These islands are more heavily wooded than Campbell Island, and Hal came across varieties of some of the larger and more familiar wood-decay fungi such as Fomitopsis, Trametes, Phellinus, and Armillaria (they have different species of Armillaria in the southern hemisphere than we do here).

From listening to Hal's talk that night, I got the impression that with studying wood-decay fungi, perhaps one gets more of an appreciation for how organisms often fill very particular niches. For instance, the most spectacular jelly fungus he found on Campbell Island grew only on fern stems. A Hymenochaete species grew only on upright plant stems, never on downed stems. Another kind of decay fungus grew only on small stems. Another species only occurred on stems about the size of a thumb. Some species grew on only one kind of plant, and so on.

WMS MICROSCOPIC FORAY by Jay Kempinger

Have you ever looked at a fungal sample through a hand lens? Every time that we key out a mushroom we scrutinize our find on a macroscopic level, that visual information that we can discern with our eyes alone. At the microscopic level, however, there is an almost breathtaking view of detail that our eyes cannot perceive without the help of some kind of optics. The simple hand lens is one step into the microscopic world of fungi that we can easily take with us on a foray. Even a small ten-power hand lens can reveal structure and detail that will add a new dimension to the usual hunt for fungi. On March 21st about ten club members met at UW-Waukesha in the biology department for a clinic on the preparation of fungal samples for the microscope. Hosted by Dr. Allen Parker, the three-hour clinic explained the proper methods for mounting samples on slides and viewing them. The first time viewer as well as some members who brought their own microscopes had a great time studying over a dozen samples. Views of spores of all shapes and sizes, some with netlike surfaces, some with glassy tendrils, were easily visible through Dr. Parker's high quality microscopes. With each change in power or lighting came a totally different view of the cell structure of our samples. The clinic ended with discussion of running another microscopic foray in the near future. Thanks to Dr. Parker for teaching this clinic and for the use of his excellent facility.

WISCONSIN MYCOLOGICAL SOCIETY ANNUAL "MUSHROOM" DINNER Heaven City Restaurant Mukwonago, WI by Tanya Weber

On April 30th, almost sixty WMS club members and their guests descended on the historic Heaven City Restaurant, there to feast on and enjoy the Annual Mushroom Dinner once again. Chef Scott McGlinchey honored all attendees with a true culinary extravaganza! Our "seasoned" food reviewer, John Fetzer, gave up his post as reviewer this year to let someone else have a go at it, and I had the chance to realize that his are pretty big shoes to fill.

I entered the kitchen during cocktail hour, expecting chaos, only to be surprised by the orderly food preparation, well planned and organized. The staff there were all relaxed and appeared to be in good humor. I was hoping to hang out in the kitchen long enough to learn something besides the fact that the preparation started early in the morning, and that no fresh morels were to be found prior to dinner. Scott let me try the morel sauce featuring last season's preserved mushrooms, provided by Paul Horn, and it was apparent that

we were in for a treat. While the staff appeared to be unaffected by the uninhabitable temperatures caused by the wood grill, I had to make a hasty retreat.

Diners filled the cocktail area where some mushroom hors d'oeurves were served. Some people found the button mushroom caps, filled either with spicy sausage or cheese, a bit disappointing, as if prepared "almost as an afterthought", but nevertheless these morsels disappeared with mach speed. To get a chance at the appetizers, I found that one had to be either very aggressive or strategically placed near the kitchen door.

The dinner consisted of five courses, featuring mushrooms in each presentation. Diners were presented with an option of ordering flights of wine, full size or tasting size. I opted for the latter, therefore hopefully making possible total recall of the entire evening. What I found most impressive was Chef Scott's ability to perfectly pair up the wine with each course; his choices were indisputable.

An Angel Hair Pasta with White Truffle Cream Sauce and Shiitake Mushrooms dish was presented for the first course. This was my (and my guests') favorite dish; Pecorino cheese in the sauce gave it just the right edge. An Australian Chardonnay, 1998 Tyrell Wines, was a perfect compliment to this starter. After the first course was served, things fell into certain rhythm. It was like watching an exciting play to unfold, act by act, full of surprises and anticipation. To add to the theatrical feeling, Chef Scott made personal appearances, in spite of being short on help in the kitchen, and talked to each group of tables about each dish served. Visual effect also artistically contributed to the evening's theme, since Chef McGlinchey was sporting his traditional mushroom printed pants.

The second course featured Yukon Gold Potato and Crimini Mushroom Enchilada with Salsa Verde and Mt. Sterling Monterrey Jack Goat Cheese. I am usually not in favor of spicy food, but I stand converted. Chef's own spice mix, the cilantro presentation sauce, the wonderful goat cheese, and the gold potato gave this combination an exotic twist. The Crimini mushroom morsels were certainly in good company! To compliment this dish, Chef Scott chose 1998 Delas Freres, Saint Espirit, Cotes du Rhone, a wonderful red varietal blend from Southern France, lower Rhone region.

Third course took us on a visit to Asia. Oyster Mushroom and Salmon wrapped in Rice Paper with Lemon and Leek in a Plum Sauce Broth was perfectly complimented by 1999 Bonny Doon Pacific Rim Dry Riesling. The pink fleshed fish was a bit of a surprise, but it added nice color to the presentation and did not interfere with the mild taste of oyster mushrooms.

Our fourth (and main) course was Marinated Grilled Portabella Mushroom on a bed of Caramelized Vidalia Onions with "Paul's" Morel Sauce, Mushroom Smashers and Grilled Asparagus. This creation, a favorite of many, made a comeback this year. (I believe Mr. Fetzer had something to do with its reappearance.) I was forced to request a "doggie bag", and it was even better the next day. A generous portion of wood-grilled portabella cap was to be enjoyed as a beef steak. Nothing went to waste; all the stems and smaller mushroom pieces were blended into the mashed potatoes. Also, without Paul's morel contribution, the sauce would not have been the same. I found that the flavor was more intense than when fresh morels are used. The asparagus was marinated in Chef Scott's version of Italian dressing prior to being grilled. A 1999 Canyon Road Merlot was served with this treat. This wonderful California red was a perfect partner to Portabella, as it would be to a grilled steak.

The fifth course was Mushroom Schaum Torte with Mushroom Ice-Cream and Fresh Strawberry Sherry Sauce. The mushrooms in the dessert were dehydrated and ground into powder. The ice cream featured a beautiful lavender-taupe tint and a delicate flavor, which was hard to place at first, since the brain does not allow the idea of mushroom dessert to be accepted freely. The sweetness of this dessert was harmoniously complemented by the sweetness of Sandeman Sherry. The dinner was very reasonably priced, especially considering the expensive and rare ingredients, and a true gourmet mastery showcasing the inventiveness and artistic caliber of the Chef.

For those members who are unable to attend the scheduled WMS dinner, or those with a dinner companion of "I-Don't-Like-Mushrooms" persuasion, I highly recommend visiting Heaven City during "Mushroom Madness" week, which comes a couple of weeks after the main event. In addition to the regular menu, the same mushroom fare is served, down to the price and wine choices. The absence of your favorite WMS members is almost compensated by the possibility of freshly picked morels being served, as it gets closer to the season.

I am already looking forward to the next dinner, hoping to see old friends and newcomers. Don't forget to bring that designated driver with you so you can take full advantage of the wine tasting. I would like to close my ramblings by a quote from an anonymous fellow diner: "I don't believe I had a

fancier meal in my entire life!". Ditto.

ANNUAL MOREL FORAY by Peter Vachuska

For the last several years, conditions have been good for morelling. Unfortunately, it seems everyone knows it. The thirty-odd people who showed up for the 2001 Annual Morel Foray on May 12 found a few morels for the pot and a few stumps left by previous hunters. The hunt was not as good as the 2000 Morel Foray, but still almost everyone found something.

This was the second year at this location and after last year's bonanza we had high expectations. Everyone who had been there the previous year ran to places they had found esculenta the year before. They mostly were disappointed. Climatic conditions as well as forest conditions had changed slightly -- perhaps conditions in the fall when the sclerotia develop had also been different. Whatever the cause, in most cases the morels were not in exactly the same locations as in 2000 and not as abundant. (The sensitivity of fungal fruiting bodies to so many variables is such that their development is probably chaotic in a mathematical sense.)

Our second location was at an untested location which looked like it had all of the ingredients necessary for Morchella. Unfortunately, no one told the morels. While the foray planners showed no psychic abilities in choosing the location, one subgroup of forayers did and found a few dozen specimens growing gregariously under the mandrakes.

Next year holds the promise of new sites and new possibilities, but we've got a long summer and fall foray season before then, with many new fungi to meet and old friends to rediscover.

MYCOBRIEFS

by Colleen & Peter Vachuska

- * Easter Island fungus drug may help kidney transplant patients: For most patients with kidney failure, the best hope lies with a transplant. Then, after a transplant, drugs to prevent rejection of the donor organ must be taken for the remainder of the patient's life. However, the drugs themselves can cause kidney failure, which means the patient must go back on dialysis until a new organ becomes available. As there is constantly a shortage of organs available, this can mean the patient dies before receiving a new kidney.
- However, a new drug developed from a fungus found on a remote but famous Pacific island may help increase the survival of transplanted kidneys. The fungus was found in soil near the famous Easter Island statues. The drug developed from it, called Rapumune after the local word (Rapu Nui) for Easter Island, was recently launched in the United Kingdom. Clinical trials have shown it to be very effective at lowering the rate of rejection of new kidneys, only 11% with Rapumune compared to 29% with the standard drug treatment. It also appears to have fewer side effects than other immunosuppressants and to be less toxic and damaging to kidneys. (BBC News Online, July 15 '98 and April 25 '01)
- * Pine uses Laccaria Hitmen: Scientists have found that the white pine employs hitmen to satisfy its nitrogen requirements. Laccaria bicolor maintains a symbiotic relationship with the white pine by killing small invertebrates, and trading their nutriments for carbohydrates from the tree. The fungus paralyzes small springtails, infects them and digests them.
- Using radioactively labeled nitrogen, John Klironomos and Miranda Hart of the University of Guelph, Ontario, followed the nitrogen from the springtails through the fungus and to the trees. Since mycorrhizal fungi similar to Laccaria are near-ubiquitous among trees, we may have to rethink our ideas about who's eating who in forest ecosystems. (Klironomos & Hart, Animal nitrogen swap for carbon, Nature 401, 2001)
- * Mushrooms -- they're what's for dinner: We're all familiar with generic government advertising for commodities such as beef and milk. I can't say I recall seeing or hearing any for mushrooms, but it must be out there. In recent years, mushroom growers have been fighting each other in court over whether the government can force them to join such collective advertising efforts. The fighting started in 1996 when United Foods, one of the country's largest mushroom producers, refused to pay its \$8,000/month bill from the Department of Agriculture for advertising. Among its complaints were that the mandatory advertising violated the First Amendment by forcing speech and that it thwarted the company's efforts to distinguish its mushrooms from those of other companies. The Justice Department, backed by many mushroom growers who support collective advertising, responded by taking United Foods to court. Although the government won the first trial, an appeals court later sided with United Foods that the mandatory

advertising payments were unconstitutional, at least in agricultural industries that are not heavily regulated. Recently, the Supreme Court has agreed to hear the case. Certainly, whatever the court decides could have implications for all of the USDA commodities advertising programs. (Reason, April 2001)

* Mold drives family from home: In June of 2000, the John and Lynn Droegkamp family moved into their dream home on Prairieview Lane near Okauchee Lake in Waukesha County. Right after they moved in, the family noticed that the house had a bad smell. Soon afterwards, family members developed various illnesses such as sinus problems and pneumonia. They eventually discovered mold after removing the woodwork around some leaky windows. In January of this year, Lynn wrote to the Waukesha County Division of Environmental Health about the mold, and they sent out health inspectors to take samples. Seven different molds were found to be growing inside the walls of the house. The mold that is believed to have caused their illness is Stachybotrys chartarum (SC), a toxic mold known to cause respiratory problems. SC is a greenish black mold that grows on materials such as fiberboard, gypsum board, paper and lint when the material is exposed to chronic moisture. After the tests, the Droegkamps hired a company to try to remove the mold. This was unsuccessful -- in fact when workers tried to sand the spores off an exterior wall, the wall disintegrated. Son Shaun became more ill, contracting mononucleosis and then asthma. Finally, on April 4, the family moved out of the house, leaving behind their possessions. It is expected that the house will have to be bulldozed and buried. Since leaving the house, the family continues to have health problems -- both Lynn and Shaun have developed problems with their lymphatic systems. (Lake Country Reporter, April 26, 2001)

FORAY IN A CORNFIELD by John Steinke

Last September, I had to put together 600 bundles of corn stalks for our pumpkin customers. The actual bundling is done by what is called a corn binder and tractor and goes reasonably fast, but the catch is, the corn cobs need to be removed in order to make a nice bundle that the squirrels and mice do not tear apart. Now you are saying, "what does this have to do with mycology"? Well, I needed something to do while I was performing this hugely repetitive job, so I started looking for fungi on the crop residue between the corn rows.

Before I take this article down that unusual path called mycology, I need to explain why there is crop residue between my corn rows. I farm with a practice called "No-Till" or what more traditional farmers call "farming ugly". To put the practice in its simplest form, I harvest the crop in the fall and the following spring I go through with a planter that makes a slit through the remaining crop residue and tucks the seed in the soil, much like a squirrel tucking an acorn in the woods. When a crop like corn grows out of this residue, it grows tall, shades the residue and maintains a high humidity level for fungi.

The most numerous fungi award for this field foray went to a very small Clavaria or at least what looked like a Clavaria. At first I tried to ignore this species, but they just kept coming. My interest changed when I found two little, brown, wrinkly, round objects on a piece of debris that had turned over. This in itself was very interesting to me, but my excitement really peaked when I saw that the wrinkly brown balls were connected to the Clavaria by a stem. This was no Clavaria; with this ball, better described as a sclerotium, attached to this little club, it had to be Typhula erythropus or a species very close. As I continued down the rows, I found areas where the number of specimens of this species had to exceed one thousand per square foot. Most areas were nowhere near that dense, but the species could be found in good numbers over acres of residue. Mushrooms and other Fungi of Great Britain & Europe by Roger Phillips has a good picture of this species on page 259.

The most fragrant species award goes to Macrocystidia cucumis; plate 90 in The Audubon Society Field Guide to North American Mushrooms is a good shot of this species. Plate 90 is actually about 50% bigger than life size, but with the strong cucumber smell I knew what I had almost immediately. The Macrocystidia was common but not plentiful in the residue. And the award for the prettiest I give (with extreme prejudice of course) to the Gasteromycetes as a group. Mutinus elegans was found with regularity; Sphaerobolus stellatus loves old corn cobs; Disciseda showed up in both forms, round in the soft sand and lens shaped in the harder clay/gravel; three species of birds nest fungi were there; two species of Lycoperdon showed up; there was also one nice specimen of Calvatia cyathiformis and two or three small gilled fungi.

This little, accidental foray I had is an example of why some things are listed as rare or only found in some other area of the country. Many of us are determined to go to the woods and look for fungi instead of looking for these little gems where they live, which could be 80 yards from where we live.

MERIWETHER LEWIS ON MORELS by Steve Nelsen

As the morel season in Wisconsin approaches(Note: This article was submitted in February 2001. --Ed.), I think it is timely to consider the opinion of Meriwether Lewis on morel mushrooms. He was co-leader and principal journalist of the Lewis and Clark Expedition, organized in the first decade of the 19th century to explore the Missouri River in the recently purchased Louisiana, and look for the fervently desired best passage to the Columbia River and Pacific Ocean. The Expedition spent the winter of 1805-1806 in an uncomfortable encampment on the Pacific Ocean, and they were anxious to return to the East as soon as possible, but unusually heavy snows in the Rocky Mountains held them up. They tried an early crossing of the mountains but were driven back by the still deep snows. They waited impatiently to go on, and had little food because it was so early in the season and they had left the Indians, who of course stored food to use at this season. As Stephen E. Ambrose describes in his best-selling book, Undaunted Courage (p. 372), on June 19th, 1806: One of the men found some black morel mushrooms which Lewis "roasted and eat without salt and pepper or grease in this way I had for the first time the true taste of the morell which is truly an insippid taistless food."

Despite the 19th century spelling (Lewis had quite understandably not carried a dictionary with him on this more than 6000 mile trip through unknown territory), I believe that Lewis's observation is why my Japanese friends have told me that they don't eat morels, because they don't like the taste. Indeed, you have to know how to cook them, and without salt, pepper, and "grease", the taste would be very different. Nevertheless, I am quite looking forward to the melting of the unusually heavy snows of the winter of 2000-2001 in the upper Midwest, to see if I can't find a few morels, to dip in egg, dredge in flour, salt, and pepper, fry in butter, and savor, for their quite remarkable flavor. I agree that this flavor is doubtless best if you don't need calories. I usually have the first morels of the season with a nice, thick and juicy steak (which Lewis and his men would probably have killed for in 1806).

RECIPE: CHANTERELLE STUFFED PORK CHOPS WITH CREAMED CHANTERELLE SAUCE by Greta Menke

This is a two part recipe and worth every minute it takes, to say nothing of the joy of gathering the chanterelles.

This is a basic medium thin cream sauce which I used as the sauce on the pork chops. Use fresh mushrooms, but dried could also be used and then the liquid the mushrooms soaked in could be used in the soup or to boil the rice in.

CREAM SOUP

2 cups chopped chanterelles, sauted in butter
6 Tablespoons butter
2 Tablespoons flour
4 cups hot milk
2 chicken bouillon cubes
salt and pepper to taste
1/4 cup sherry (optional)

Melt 4 tablespoons butter in a 2 quart saucepan. On medium heat, saute chopped mushrooms for 10 minutes. Remove to a bowl.

In the same pan, melt 2 tablespoons butter. Add flour and blend until bubbly. Do not brown. Gradually add hot milk. Add 2 crushed chicken bouillon cubes. Stir occasionally with a wire whisk until slightly thickened. Add the sauted mushrooms and heat through. Season with salt and pepper.

We ate this the first night as soup and then the second day used it over the pork chops. The flavors had really blended by the second night!

CHANTERELLE STUFFED PORKCHOPS

2 center cut pork chops, 1 1/2 inches thick!!! (You could use pork tenderloin
 cut in thick slices and flattened so you can cut a pocket in them)
2 cups of chanterelles chopped finely
2--4 Tablespoons butter
salt and pepper to taste

Cut pocket horizontally in large side of pork chop. Trim off all fat.

Heat skillet or a circular grilling pan on stove.

Spray with oil or use a little olive oil.

Braise pork chops about 8 minutes on each side. Cover them with a piece of

foil while doing this, to keep heat in but not to make airtight. Remove and put in glass casserole. Saute chanterelles in butter. Remove from heat and stuff in pork chop pockets. Really pack them in there!! The pockets should gape open so you can see them!! Season pork chops with salt and pepper to taste.

Pour cream soup over pork chops.

Cover tightly with foil.

Bake at 350 degrees for 20--25 minutes until fork tender.

In the meantime cook a good rice. No minute rice!! Use any piece of chanterelles or use the liquid from soaking the chanterelles as part of the liquid.

To serve, place pork chop on warm plate, surround with rice, and pour sauce over rice and pork chop.

Enjoy.

German Reisling is wonderful with this. It compliments the apricot flavor and aroma of the chanterelles.

END