

THE NEWSLETTER OF THE WISCONSIN MYCOLOGICAL SOCIETY

March 2003

Volume 20 Number 1

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MESSAGE FROM THE PRESIDENT

A friend of mine from my Air Force days used to tell me that there are only two things in life that a person has to do, "Die and be Judged". Well for me, I need to add getting this letter written, for you people that have not paid your dues, you need to get that \$15 in the mail, and the rest of you, your options are limited.

The WMS winter events have been successful. Our January Social was again outstanding. Chef LeRoy prepared my favorite salmon chowder, with the salmon coming from one of his summer fishing outings on Lake Michigan. Good food and friends were enjoyed by all.

The February slide show with Steve Nelsen was outstanding. Steve takes such great pictures, and his wife Adrienne finds such wonderful and unusual fungi for him to photograph.

As I write this on March 18, tonight is our morel presentation, the weather looks good, and with a subject like that, I am sure I will see many of you there. I have seen parts of this presentation in the past and I am sure we are in for an entertaining night.

On the topic of morels, I am not of the belief that it is going to be a good year. This winter had a very long dry period and with the cold on the end, I think this could take out the early morel crop on those exposed slopes. When my winter wheat and alfalfa come through the winter in tough shape, which is the case this year, that does not point to a great morel season either, but all it takes is one good tree to make the season.

The last subject I wanted to touch on was the annual picnic/board meeting. Last year we did not wrap up the picnic until 11:30 PM and that was a good thing. This year, if anyone wishes to bring a tent or sleeping bag and avoid a long drive home, late at night, feel free to do so. We do have plenty of room and the more the merrier.

Hope to see you all this year,

by John Steinke
WMS President

WMS UPCOMING EVENTS

- April 9 -- Membership Slide Show: A slide presentation by several members, including Alan Parker and Chuck Fonaas. (Mitchell Park Pavilion)
- May 10 -- Morel Foray in the Madison Area
- May 17 -- Morel Foray in the North Kettle Moraine Area
- May 19 -- Annual Spring Mushroom Dinner at Heaven City Restaurant
- June 21 -- Annual Picnic & Membership Business Meeting at Papa Steinke's Farm.
- July 12 -- Summer Foray. Meet at Papa Steinke's Farm.
- August 23 -- Photo Foray; Scuppernong Skiing and Hiking Trails -- South Kettle Moraine State Forest.

Members should receive announcements with more details and directions.

DUES REMINDER

Remember, WMS dues (\$15) are payable at year end. Please send your dues immediately to: John Fetzer; 1309 S. 73rd Street; West Allis, WI 53214. Note that WMS dues are \$15 and that NAMA (North American Mycological Association) dues are an additional \$32.

JANUARY MEMBERSHIP SOCIAL
by John Fetzer

About 50 brave WMS members ventured out into the bleak Wisconsin winter for the Annual Membership Appetizer Hors d'oeuvre Social on January 22, 2003. No, wait! Contrary to many January meetings in the past, this one did not have a snowstorm wrapped around it. While it may have been cold, it was not bleak.

A wonderful spread of appetizers was presented by the membership including a wonderful assortment made by our favorite chef, WMS's own LeRoy Ciombor.

LeRoy made fish chowder, a smoked salmon spread, stuffed artichokes in a bearnaise sauce, a marinated mushroom tray, a cheese tray, and a crab and artichoke spread.

This is not to diminish the abundance, or the quality, of the food brought by our membership, but it does highlight where part of your annual dues are going.

If you haven't joined us at our winter appetizer foray, please make a note and try it next year - you will enjoy it. It may be cold, it may even be snowing, but it is a great way to make it through a January evening.

FALL MUSHROOM DINNER
by Tanya Weber

Hosted by the Riversite Restaurant's Executive Chef Thomas Peschong, the Second Annual Riversite Mushroom Dinner was held on September 30th, 2002. Rather than apologizing for the six month hibernation of this review, I would prefer that members use their recollections as an incentive to register for the upcoming May 19th spring mushroom dinner at Heaven City Restaurant. Reservations are being taken as you read this, so the following review should inspire you to get your checkbooks out and contact John Fetzer!

Recalling that the 1st annual dinner took place near Thanksgiving, I was somewhat surprised to find the Riversite's September kitchen staff equally busy, if not busier, than the preceding year. In spite of the bustle, Chef Tom seemed to be able to spare even more of his time this year, making very informative appearances before, during, and after the meal.

The cocktail hour was a chance for WMS members and guests to exchange news, reflect on the foray season still in progress, and enjoy the hors d'oeuvres, a wonderful preview of the anticipated meal. Appetizers passed around were Button Mushroom Caps Stuffed with Crimini Duxelles and Crostini with Wisconsin Goat Cheese, Black Trumpets and Chives. Chef Tom mentioned that the duxelles included his personal touch of tarragon and Marsala wine, in addition to the traditional mushrooms, onions, and shallots, minced and sauteed in butter. My personal favorite was the Crostini; a world of flavor concentrated on that tiny toast. As noted last year, the Riversite's eclectic wine selection was delightfully unusual.

The first course was Lobster Mushroom Palmier with Roasted Peppers and Caramelized Onions. This delicacy features a crisp puff pastry offering a wonderful contrast to the textures of the tender peppers and sweet onions. I considered the lobster mushrooms visually exciting because they retain their unmistakable "lobster" color in cooking.

The second course was a very healthy-looking White Mushroom Salad with Parmigiano-Reggiano Cheese, Lemon, and White Truffle Oil. The grainy texture of Parmigiano-Reggiano shavings (one of the finest Italian cheeses, definitely not to be confused with that mass-produced dry tasteless powder known as Parmesan), added a beautifully fruity flavor to the potentially bland white mushrooms.

The selected wine, a '00 Pinot Gris from Oregon's Adelsheim Vineyard, was thoughtfully chosen. I, usually a big fan of huge and heavy California reds, recently added Pinot Grigio to my favorites. It was interesting to compare this crisp, bright Oregon white to its Italian counterpart. The Pinot Gris offered a lovely floral bouquet, a hint of apple and pear, and a spicy finish of lemon zest and allspice. It was promised to pair well with seafood or spicy dishes, including, of course, the evening's main courses, a difficult choice between two excellent entrees.

Of the two main course offerings, my favorite was the Seared Sea Scallops with Roasted Garlic, Chives, and Golden Chanterelles. The scallops were large and sweet, done to a perfect tenderness. The unmistakable flavor of chanterelles was an added bonus to an already mouth-watering presentation. The chef mentioned that he had chosen chanterelles for their slight citrus flavor, intended to combine favorably with the sweetness of the scallops.

The other entree was Hoi Sin Chicken with Snow Peas, Ginger and Shiitake, a playfully Far-Eastern and fragrant dish. An Asian marinade was used in the chicken preparation, and the milder nutty flavor of Shiitake was nicely

balanced by a fleeting hint of ginger.

Both entrees were served with Basmati Rice and Seasonal Vegetables. Even though portions were generous enough to qualify for an additional next-day meal, very few take-home packages were seen.

Now we come to the highlight of the evening, dessert. There is only one word to describe the Chocolate Caramel Macadamia Nut Tart, and that is SINFUL. Actually, the complimentary words were many, but no one could talk clearly through a mouthful of magnificently flowing caramel, uniquely tender and rich 'mac' nuts and silky chocolate.

This is where I feel compelled to mention the value of the entire meal. I believe that Chef Peschong spared no expense in preparing this meal, using only the finest ingredients, and favoring us generously with his remarkable expertise. Bravo and Bravissimo!

After most of the diners had dispersed, Chef Tom found time to retire to the bar and to have an enlightening chat with a few of us that remained. He was eager to share his knowledge regarding food preparation and mushrooms. We were pleased to find out that he tries to use organically grown fruits and vegetables whenever possible, and prefers small scale local farming operations to purchase most of his ingredients, including free range poultry. He also favors the use of fresh mushrooms, while noting the occasional necessity for previously frozen ones. He does not do a lot of drying to preserve, preferring dehydration only when necessary to pulverize. Examples of this would be Shiitake and puffballs, where the resulting powders are used in sauces and breading.

Other various topics included: using puffballs for breakfast, how they can be sliced, dipped in egg mixture and prepared as you would prepare French toast; his blanching and pickling technique for preserving Hen of the Woods; the marinating of dried cepes, morels, and porcini in olive oil; and lastly truffle oils, which Chef Tom feels may be overrated if one is not adequately informed on the subject.

Chef Tom then brought out a whole truffle mushroom that he had preserved in brandy. We each had a taste of it; I personally found the flavor to be overwhelmingly strong, the texture dense, grainy, and a bit dry. The surprising intensity of the flavor made it immediately obvious to me why truffles are used sparingly, and in such minute amounts, in most recipes.

I would like to thank Chef Thomas Peschong for a memorable evening. Also many thanks go to Chuck Soden and my friends and dinner companions, Mike Krueger and Connie Wilson, for their assistance in refocusing and reinforcing my foggy recollections.

FEBRUARY MEETING REPORT STEVE NELSEN: MUSHROOMS OF POINT BEACH
by Peter Vachuska

Steve Nelsen took us on a couple of walks with a visual tour of the mushrooms he and his wife Adrienne found this past year at our Tula Erskine/Fred Hainer Memorial Foray on October 5th, 2002 at Point Beach State Forest. Steve began by saying that on a scale of 1 to 10, this past year rated at most a 5 in terms of quantity and diversity of fungi. Then he went on to show us over 130 slides and almost an equal number of species that he had photographed, mostly during the foray. (There were some species from other years and from elsewhere, but the vast majority were from October 5th, 2002.)

The first trail he took us on was the Red Pine Trail (3.1 miles) that runs north and south parallel to the road. This produced a diversity of species that were shown in (as I took it) the same order as found. This took up about a third of the show. Then for the second two thirds we walked perpendicular to the road, through the dunes and swales, to the beach. I got lost a few times, but the abundance of fungi seemed to surpass reality.

Throughout our walk, Steve gave us a running commentary, telling us stories of the fungi's history or how to identify it (or partially identify it) or interesting facts about it. Steve's pointed out that Meltzer's solution is very important in identifying the white-spored mushrooms. Steve described the three reactions to Meltzer's and often pointed out if a certain mushroom had an amyloid or dextrinoid reaction and how that was useful in separating the mushroom from something else. At one point he said that a particular *Pholiota* had dextrinoid spores, the reaction being somewhat hard to see since the spores were brown to begin with -- but they became even browner in Meltzer's solution.

I should add that Steve was not above discussing edibility or the lack of it. He even shook up the beliefs of some of the more confident club members in expressing his doubts that what we call 'blewits' are really *Lepista nuda*. [Generally the members who dare to discuss such things believe that either we

have two species *L. nuda* and *L. irina*, or that they are really the same and display a continuum of forms from a typical *nuda* to a typical *irina*.] Steve sent the audience into shock by suggesting that there may be a half dozen or more species that make up the purplish tinged mushrooms we call blewits. Steve also pointed out that what several of us had agreed to call *Catathelasma* was really the white matsutake. The night was very educational and enjoyable.

MARCH MEETING REPORT by Alan Parker

The topic of the March 18th meeting was a spring ritual critical to the mental well-being of most wild mushroom hunters. Dr. Darrell Cox presented a slide lecture entitled "Morels of the Midwest -- a Life-long Passion." Darrell has been collecting morels since childhood, and has over 50 years of field experience. Among his many morel-related accomplishments is being the only two-time winner of the Illinois State Morel Hunting Championship. This yearly extravaganza (since 1996) is held in early May in Magnolia, IL. The 2003 festival will be held 2--3 May, and detailed information is available at the website www.morelmania.com.

Dr. Cox addressed the technical side of *Morchella* during his Ph.D. work in mycology at the University of Illinois -- Champaign-Urbana. Biological curiosity, however, made an anomalous new basidiomycete the ultimate subject of his Ph.D. thesis. Those of you who have attended many WMS forays may have seen one or two of us weirdos breaking off and closely examining dead twigs of musclewood/blue beech. We were searching for a minute "stalked snowball" that is the new genus and species described by Cox.

Darrell's slide program included an excellent introduction to both morels and false morels, with some cup fungi and spring wildflowers thrown in for color. Distinguishing features of the common *Morchella* species (*M. esculenta*, *M. semilibra*, *M. angusticeps*) were discussed, along with habitat preferences and collecting tips. Two *Verpas* and various *Gyromitras* appeared on screen, and cautions were given concerning the potentially dangerous practice of eating false morels. Unfortunately, Dr. Cox forgot to pass out the detailed maps he had prepared of the 20 best places to collect morels in Wisconsin.

The lecture concluded with slides of both the Magnolia morel festival and a similar yearly event held in south-central Indiana. Judging from the number of post-lecture questions, the audience truly enjoyed an evening of morels and advice from a genuine morel authority. Too bad about those maps!

MYCOBRIEFS by Colleen Vachuska

- * TREES SUPPLY WATER TO FUNGI: It has long been known that trees and fungi help each other through mycorrhizae, the fungal attachments which extend the roots of trees. Through mycorrhizae, trees are able to absorb more nutrients from the soil, and fungi obtain sugar from the tree's photosynthesis. Now for the first time, there is evidence that trees can supply water directly to fungi. In an experiment, Ecologist Jose Querejeta and colleagues at the University of California, Riverside, planted live oaks with symbiotic fungi in a three-chambered planter. Researchers supplied fluorescently labeled water to the bottom compartment of the planter which contained the oak's deep roots. This labeled water showed up in the fungi in the two upper compartments, but not after researchers severed their connections with the roots. Ecologists believe that this funneling of water may allow the fungus to survive and the plants to harvest nutrients that might otherwise be locked up in dry soil. This may help explain why plants are able to grow in environments where nutrients and water are physically separated, as in the desert. (SCIENCE NOW 10/24/2002)
- * THE GOOD THAT FUNGI CAN DO: Mushrooms and other fungi received some good press recently in a couple of articles, one in Audubon magazine and the other in Utne Reader. Both articles talked about the good things fungi can do and some of the possibilities for their future use. One quote from the Audubon article: "There's good reason to celebrate fungi, beyond their culinary credentials. They protect green plants from parasites and diseases, build soil, help prevent floods by making the soil more permeable, and alleviate droughts by siphoning water from inaccessible areas to the roots of plants." Most of the plants on earth are able to live because they coexist with mycorrhizal fungi attached to their roots, which help in the uptake of nutrients from the soil. Saprophytic fungi help keep the planet clean by breaking down dead or decaying organic material. More recently, fungi have been found to be useful in cleaning up chemically contaminated sites. Paul Stamets, a mycological researcher in Washington state, has trained strains of oyster mushrooms to feed on petroleum by starving them and is starting a new company that will use mycotechnology to help clean up wastes. In a bioremediation experiment at a contaminated highway maintenance yard in Bellingham, Washington, three different substances were tested: enzymes, engineered bacteria, and oyster fungus. Only the oyster fungus

produced any significant improvement. And what's more, the fungus treated area became an oasis of life as the mushrooms sprouted up, then rotted away, which brought in fungus gnats, which attracted other insects, which attracted birds, and so on. Stamets, who runs Fungi Perfecti, a company that cultivates and promotes mushrooms, figured prominently in both articles. He is a former logger who became inspired by the potential of mushrooms and who now spends much of his time collecting and cloning strains of wild mushrooms and investigating them for useful properties. Stamets has investigated the anti-HIV properties of oyster mushrooms and the ability of *Polyporus umbellinus* to inhibit the parasite that causes malaria. He is even developing fungi that break down nerve gas and other chemical warfare agents. He has also worked on "mycofiltration" projects, where bark and wood chips are placed on road surfaces and then inoculated with fungi which form mycelium that holds the soil. This can help prevent erosion into streams where salmon spawn. ("Make Way for Mushrooms," Audubon, Dec. 2002, and "Truly Magical Mushrooms" Utne Reader, March-April 2003)

MUSINGS ON "*SPRAGUEOLA IRREGULARIS*" AND UPPING THE ANTE FOR THE
CLASSIFICATION OF FUNGI
by Steve Nelsen

Adrienne and I went to Buckhorn State Park (north of Mauston) this fall, and found relatively little because of poor rainfall in this very sandy area, but there were exceptional numbers of individuals of the species that Smith and Smith described as *Spragueola irregularis* (Peck) Nannfeldt in *How to Know the Ascomycetes* (1973). It is an unusually variably-shaped yellow club fungus that grows in mosses or the needle carpet of conifer forests, is rather widely distributed, and is illustrated in both the Audubon and Arora's guides. It was first described as a new species, *Geoglossum irregulare*, on p. 45 and plate 1 by Peck in his 32nd Annual Report of the New York State Museum of Natural History, which contains the summary of activities in 1878. Peck found it at "Sand Lake", that is, near his home. The Report is dated at its end "Albany, January 4, 1879", and marked "transmitted to the Legislature March 19, 1879" on the title page. In his description he notes that *irregulare*, with *G. luteum*, *rufum*, and *pistillare* are "clearly congeneric", appearing to invite someone to separate these species from the several black ones that at that time formed the core of the genus. He was naturally taken up on this before long. However, in the "Additions, Remarks and Observations" section of the 37th Annual Report (on work done in 1883) Peck notes on p. 28 that *Bresadola* had published the same fungus in *Revue Mycologique* 1882, 212 as *G. vitellina*, and "owing to the imperfect publication of the 32nd Report, it will be better to adopt this later name." Although the 32nd Report was incorporated into N.Y. Assembly Document 89, Vol. 6, which reached the N.Y. Public Library in 1880 (the year recommended as that for "publication" in the introduction to the reprint volumes that I have), it was not published separately, so that people outside the city could have access to it, until 1886 or 1887 (as *Museum Bulletin* No. 2, after the legislature allowed the Museum to publish separately from the Reports, presumably because of the problems with getting them distributed), which included this name change on the key to Plate 1. Nevertheless, Nannfeldt transferred this species to *Spragueola* as *irregularis*, the name the American Smiths preferred, while Korf and J. K. Rogers transferred it to *Neolecta* as *vitellina*, the species name apparently invariably used in Europe. [!b] *Spragueola irregularis* from Treehaven, Lincoln County, September 11, 1997

In a considerably more recent development, *Neolecta* has now been transferred to a separate subphyllum from *Geoglossum* and all other discomycetes. In *Nordic Ascomycetes* it appears in Subphyllum *Taphrinomycotina* O.E. Eriksson & Winka, Class *Neolectinomycetes* Eriksson & Winka, Order *Neolectales* Landvik, Eriksson Gargas & P. Gustafsson, Family *Neolectaceae* Redhead, Genus *Neolecta* Speg. [Carlo Luigi Spegazzini (1858-1926); a student of Saccardo in Venice] The only other genus in the entire subphyllum is *Taphrina* (in a separate Class, Order, and Family), a rather large genus of some 90 species of parasites, on plants from ferns to trees, that cause "witch's broom" growths on birch, among other trees. The reason for separating these two genera to this forlorn position is given as "sequence data". Some keyed characteristics of *Neolecta* are now paraphyses and croziers absent (not unique), clavate fruiting body (not distinctive), spores reniform or kidney-shaped (not unique, and none of the three spores illustrated by Smith and Smith are reniform in the view shown, so some pretty fair mycologists did not consider this as distinctive either) and asci which become amyloid after treatment with hot KOH. I find the latter fascinating because I have never read of anyone treating asci for other species with hot KOH before testing them with Meltzer's. There are a whole lot of other species, so it would seem that one would have had to do considerable work to demonstrate how unique this character actually is. One had better learn how to wash those asci well after heating them with KOH, which destroys the iodine in Meltzer's reagent that causes the amyloid reaction with starch. I had thought that subphylla were pretty big boxes, and that I should be able to stick things in different ones by fairly casual inspection. No way! Now, not only are macroscopic features considered pretty much worthless for classification at any level, but also microscopic characteristics are

insufficient even to clearly define a subphylum. One needs a specialized chemical test that as far as I know has not been run on the vast majority of ascomycetes, or even better, DNA sequence data. Both involve molecular level information that cannot be observed even with an electron microscope! All I can think of upon considering that is "stay tuned for future changes in classification!"

RECIPE: MUSHROOM CREPES

from Cooking With Mushrooms by Kay Shaw Nelson

1 medium onion, finely chopped
3 tablespoons butter
1 pound fresh mushrooms, cleaned and chopped
2 tablespoons flour
1/2 cup sour cream at room temperature
2 tablespoons chopped fresh parsley
Freshly grated nutmeg
Salt, pepper to taste
1 cup milk
1 large egg, beaten
1 cup sifted all-purpose flour
Salt to taste
Grated Parmesan cheese

Saute the onion in the butter until tender. Add the mushrooms and saute for 5 minutes. Mix in the flour and cook 1 minute. Add the sour cream, parsley, nutmeg, salt and pepper. Cook slowly for 1 or 2 minutes to blend the flavors. Remove from the heat and cool.

Combine the milk, egg, flour and salt in a bowl and mix well with a whisk or fork to blend thoroughly. Pour about 1/4 cup of the batter into a lightly greased 7 or 8 inch skillet. Tilt at once to spread evenly. Cook until brown on one side. Turn over and cook on the other side. Keep warm in the oven while cooking the others.

Spoon about 2 large spoonfuls of the mushroom mixture onto each pancake. Roll up and arrange, seam-side down, in a buttered shallow baking dish. Dot the top with butter and sprinkle with cheese. Put in a preheated hot (400 degreeF.) oven for about 10 minutes before serving. Makes 8 to 10 crepes.

EDITOR'S NOTE: This would be good with a soft lightly flavored mushroom such as shaggy mane (*Coprinus Comatus*).