

earthstar

examiner

Issue 102
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Newsletter of the Missouri Mycological Society



by Ken Gilberg

Annual Winter Luncheon

**Morel
Madness
April 22-24
Register now!**



Both Barb O'Brien and I feel very grateful that we could organize the Winter Luncheon this year. What a treat to plan and orchestrate our biggest big party of the year! As Willie May wrote, "It's always a pleasure to see friends we haven't seen in a while as well as ones we see often, bringing us all together in the middle of a cold winter." We luckily avoided the snowpocalypse that arrived the following day.

Dr. Britt Bunyard, editor of *Fungi*, came down from the frozen north to present Mushroom Jeopardy. He and his son Marty, in matching shirts and ties, kept everyone engrossed guessing answers in categories such as Surf and Turf; Waiter, Dessert Please; City Morgue; Fly, Fry or Die; Bird is the Word; and Things You Should Have Learned in Walt Sundberg's Mycology Class Had You Been Paying Attention. "I

loved the mushroom game and not just because we won with Patrick Harvey at our table," Lisa Hulett, one of the award recipients of the day, remarked.

Larry Evans, our special guest from Montana, thought our weather was "balmy." On Friday before the luncheon he led 30 folks on a mushroom foray at Litzinger Ecology Center. After finding half a dozen species, they moved indoors to explore the world through microscopes and heard the latest on environment remediation with fungi. "Larry was loads of fun," Maxine said. At the luncheon, he sang a few of his songs from the *Fungal Boogie* and *Fungal Boogiemans* CDs. Larry joined in singing "Show Me the Mushrooms" with the Earthstars, that famous girl group composed of Julie Cole, Barkha McDermith and Maxine Stone. Andrea Vadner and Catherine

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Williamson joined in on a couple of numbers. Granted, it was a bit raucous as I failed to quiet a rambunctious crowd. Those who actually heard Barkha singing "My Wish For You" were moved to tears. Thank you, Barkha.

As for the potluck: I was near the wines so I could see that appetizers were abundant, delicious and beautifully presented. Going last through the line for the main dishes, there were many empty platters. I've gone through the line last in past luncheons and always found plenty of tasty treats left. This year, though I didn't go hungry, it seemed like there was less. We hope next year will be more bountiful. As a matter of fact, we'll guarantee it.

Those going through the potluck earlier had a different take. Jan Simons and Charlie Raiser enticed Alanna Kellogg to join us for the luncheon. Alanna writes Kitchen Parade, a

food and recipe column and also blogs about vegetables on the award-winning Veggie Venture. Alanna had this to say: "Oh, yes! It was all very, very good, the best potluck I've ever been to including more than my share of church potlucks which are always great but yours, as you know, is especially 'homemade.' These dishes stood out for me—the butternut squash soup with the touch of orange and clove; the mushroom spread with the creamy sherry sauce, an appetizer; the beet-potato salad, very Eastern European/Russian; the hot chicken salad made with Durkee Famous Sauce. I'm making my variation of it for supper tonight!"

The silent auction was a big hit. Thank you all for bringing such interesting and valuable items. Specially made for the auction were Colleen Vogel's gorgeous morel pillows and Andrea Vadner's Winter Luncheon posters. Andrea also crafted the fabulous centerpieces for the tables. The silent auction format gave us more income and more time to socialize than a raffle typically allows and gave the opportunity for those who most desired an item to get it. Renee Bomanz did a super job of organizing the auction and getting some great gift certificates donated.

Thanks to David Sacks for doing the registrations and communications; Claudia Joyce, Charlie Raiser and Shannon Stevens for tending bar; Linda Mueller for setting up the show; Mt. Pleasant, Chandler Hill and Noboleis wineries for giving us wines to taste. I'm sure I'm missing somebody...

Head's up for next year—we hope to be back at Soulard Preservation Hall. It was just about perfect for us though we are close to the limit. Get your registrations in early.



Springfield Chapter's New President

by George Lanz

As an avid nature lover with a passion for mycology, I am very excited to serve as the president of the MOMS chapter here in Springfield, Missouri. When not hunting, growing, or eating mushrooms, I enjoy a career as a Network Systems Administrator for Springfield based O'Reilly Auto Parts. I have been happily married to my wife, Melinda, for the past five years. We were thrilled to welcome our new baby daughter, Gigi, to the family last October.

I also stay busy with a wide array of hobbies and interests – most of them include my being outside enjoying nature. The wonder and solitude of being outdoors is the perfect balance to a fast-paced career in computers. What I find particularly fascinating is that the relationship between all living things becomes immediately obvious when you spend even a small amount of time observing nature. Some of my other interests include computer programming, woodworking, beekeeping, caving, fly fishing, hiking, canoeing, mathematics, physics, and especially reading. I am a Missouri Master Naturalist, a member of the Springfield Plateau Grotto, and part of the National Speleological Society.

I look forward to joining local board members, Barbara Kipfer, Bob Kipfer, and Michael Baird, as we collaborate with all of you and work to make this a successful chapter!

New—

Memorial Day at Loggers Lake

May 27-30, near Bunker Hill, MO

By James Savens

Buried deep within the Mark Twain National Forest of the Missouri Ozarks lies a little blue gem known as Loggers Lake. Constructed in the 1930's by the Civilian Conservation Corp, Loggers Lake Recreation Area features a trail system, a newly renovated campground and a 25-acre lake fed by multiple pristine springs; truly a scenic beauty.

Missouri Mycological Society will be hosting a Memorial Day weekend foray at this remote and exciting location. On that Friday, Saturday, and Sunday night we will be camping at Loggers Lake campground, with forays being held on Saturday and Sunday mornings starting at 10 o'clock and lasting till early afternoon leaving time to explore the surrounding forest, swim, fish, canoe or simply relax in camp. Dinners will be potluck Saturday and Sunday nights with the remainder of meals left up to you. Due to the remote nature of this site, it is important to plan ahead for your needs because the nearest town, Bunker, MO, is 8 miles from the campsite and has limited amenities. While the town of Bunker does have a gas station and a small country store where you can buy gas, water, ice and some limited groceries, there are no restaurants or hotels in the immediate vicinity. Loggers Lake campground has potable water, picnic tables, trash disposal, and toilets, but no shower facilities; although the warm crystal clear waters of the lake should provide respite after an afternoon spent in the woods.

Directions

From St. Louis: take I-55 south to state highway 67 south to state highway 72, where you will turn right heading west toward Ironton. Once in Ironton, turn left going south on highway 21/72 which merges with highway 49 becoming highway 21/49/72 heading west toward Lesterville. Once past Lesterville highway 21/49/72 will split. Veer to the left going south on 21/72 toward Centerville. Once past Centerville you will turn right heading west on highway 72 toward Bunker. In Bunker turn on Forest Rd. 2221 and follow signs to Loggers Lake Recreation Area. Total drive time about 2.5 hours. See you there!

April 22-24, Camp Cuivre Group Site, Cuivre River State Park

Morel Madness

By Shannon Stevens



This year's Morel Madness will again be at our old favorite Cuivre River State Park. This will be our eighth year at Cuivre River and for good reasons. We have 6,168 acres consisting of rugged wooded hills surrounding Big Sugar Creek. There are 16 miles of trails for hiking or horseback riding. A 1,082-acre tract has been designated as the Northwoods Wild Area and will be preserved in its natural state. The park also has a prairie management area where native grasses are being restored through burning.

Be aware turkey hunting is allowed in several tracts around the lake until 1:00 pm. Hunter orange should be worn during hunting hours if you explore outside of the park including anyone hunting at Anderson on Saturday. We suggest you bring compass as well as a whistle and don't forget mesh bags or baskets for collecting. Proper footwear, (boots), is highly recommended and perhaps some trekking poles for those steep hills. Dress accordingly for the weather!

There will be at least three planned forays, including one for beginners, probably in Cuivre. The intermediate and more difficult hikes will most likely take place at Edward Anderson Conservation Area about an hour away. Of course, anyone may hunt on their own wherever they like.

Registration charge is a mere \$10 for MOMS members and \$20 for non-members for anyone attending any or all of the weekend. If you are staying overnight the charge is \$5 per person per night additional. Kids 15 and under are free with their parents, so bring the whole family.

Accommodations

We will be staying at Camp Cuivre. We will have access to the dining lodge with full kitchen and refrigeration facilities. The barracks sleep 16 and are clean, have electricity, toilets and showers. Bring your sleeping bag, pillow and towel. RV's and tents are not allowed in the camp, but there are campgrounds near-by. Hotels are available in Troy, Mo. just 10 miles away.

Food

Dinner on Friday and Saturday night will be potluck as usual--so please bring a dish to share for each night. Saturday lunch will be 'bring your own and something to share if you wish.' We'll have our BYO lunch in the field at a place to be determined Friday night. We will provide delicious breakfasts on Saturday & Sunday.

Morel Madness Registration Form

April 22 - April 24 at Cuivre River State Park

Please register early. Deadline is Friday, April 8.

Breakfast is included for both Saturday and Sunday mornings.

Name of person completing this form _____

Address _____

Phone (day/evening) _____

e-mail _____

Reservation for lodging: \$5 per person per night. All names need to be listed.

Name _____ Friday ___ Saturday ___ \$ _____

Name _____ Friday ___ Saturday ___ \$ _____

Name _____ Friday ___ Saturday ___ \$ _____

Name _____ Friday ___ Saturday ___ \$ _____

Registration fee: \$10 per adult member; \$20 nonmember; age 15 & under free \$ _____

Total enclosed: \$ _____

I would like to share accommodations with the following: _____

I would like to volunteer!!!! ___ **YES** My preferred time and task: _____

Send your check, payable to MOMS, to Maxine Stone 314 Park Road St. Louis, MO 63119.

For more information contact Shannon Stevens, 314-481-4131, sporeprince@sbcglobal.net

Guest Speaker: Michael Kuo, Ph.D.

Michael is a long time friend of MOMS and has joined us at many events over the years and never fails to impress us with his extensive knowledge of mushrooms. Dr. Kuo is the principal developer of the incredible website MushroomExpert.com and an English teacher by profession. Since we saw him last year he has published his third book, *100 Cool Mushrooms*. His first book, *Morels*, is an excellent read and great resource for those wanting to increase their knowledge of our elusive quarry. He will again dazzle us with all the recent findings in the world of morels and hopes to paint a very current picture of species identification. Or maybe he'll surprise us with something completely different!

At the time of this writing we don't have another guest speaker pinned down but I wouldn't count it out! Our special friend from Arkansas, Jay Justice, will again be making the trip up to join us. Maybe he'll have some news on how the hunting goes down south?

Directions:

One hour northwest of St Louis. Take Hwy 40/64 west, continuing on Hwy 61 north to Troy, Mo. Go right on Hwy 47 for five miles. Then go left into Cuivre River State Park.

Look for signs to Camp Cuivre which is about seven minutes from Hwy 47.

Volunteers needed!

Volunteers are needed to help in the kitchen, to clean-up after breakfast, or for final clean-up on Sunday morning. Please complete your registration form early making a note of how you'd like to volunteer.

Tentative Madness Schedule:

Friday, April 22(anytime after 4:00pm)

4:00 Registration begins

5:30 BYO cocktails & potluck appetizers

6:30 Potluck dinner

7:45 Welcome and announcements

8:00 Wingin' it baby! Campfire, topo map discussion, foray sign up or presentation?

Saturday, April 23

7:30 Breakfast (provided)

8:30 The Madness Begins

12:00 Lunch BYO in the field

12:45 The Madness Resumes

5:30 Madness ends - latest check-in

5:30 BYO cocktails & potluck appetizers

6:15 Potluck dinner

7:30 Awards ceremony

8:00 Speaker

9:15 Campfire

Sunday, April 24

8:30 Breakfast (provided)

10:00 Clean-up & departure

Featured Recipe

By Tracy Sarver Yates

Kenyan Samosas

...adapted from *Breaking Bread with Father Dominic*.

I watched Father Dominic Garramone, OSB on PBS as a child which instilled in me a love of baking, which I am returning to now that I am cooking for a family. Oh, and of course, my mom who taught me to eat bread with butter right after baking, skipping the recommended cooling time. Yum

- 1 recipe of dough (See my favorite below.)
- ¾ lb of button mushrooms ground in food processor or finely chopped
- 4 cloves of garlic finely chopped
- 1 teaspoon salt
- 1 teaspoon ground cardamom (If grinding your own, remove the greenish husk first, by using side of knife to smash open gently. It's a lot of extra work.)
- ½ teaspoon ground cumin (I love fresh ground.)
- ½ teaspoon black pepper, fresh ground if you can
- 1/8 teaspoon ground cloves
- 1 teaspoon cinnamon
- 1 large green bell pepper (Trust me on the green one, not my favorite, but in this yummy.)
- 1 large onion chopped
- ½ cup frozen peas, thawed and drained
- oil

Mix up dough and give it first rise. The best option is mix and refrigerate overnight or about 8 hours (while you are at work) for the rise in a well oiled bowl, turning dough over to oil top of it, then covering with saran wrap. This slow rise intensifies flavor, is easy, and makes the dough easier to roll and form.

Cook over medium heat all spices, green pepper and onion until they begin to soften, then add mushrooms and peas. Cook through, adjust seasoning as needed. Drain well. I found a mesh strainer and a ladle to press the mixture worked best. Extra moisture will prevent a good seal and make dough soggy. Let cool. (I make the night before and let come to room temperature first.)

Punch down dough, let rest ten minutes on countertop with bowl overturned on top to cover. Most recipes say to let it come to room temperature before forming, but I find that warming it 10-20 minutes is fine. Divide dough into six equal portions and roll each into about an eight-inch diameter circle. Cut into four wedges. Put one tablespoon of mushroom mixture in middle of each wedge, lightly brush all edges with water, fold over into triangle, press with fingers to seal and crimp with fork. Pierce in middle several times with fork. Put on cookie sheets and let rise 30 minutes covered in clean light weight cloth (I like tea towels) for about 20 minutes until doubled in size.

Bake at 425 for about 20 minutes.

If you have extra filling, simply add a handful of breadcrumbs, wheat bran flakes and/or cup of rice or so and stuff extra green peppers, adjusting salt and pepper. Bake same as stuffed green peppers (yummy). If they fall over in pan surround with medium size onions cut in quarters, add a little water (quarter inch) and dabs of butter, which makes its own sauce for the onions.

Dough

- 3 cups all-purpose flour
- 1 (.25 ounce) package active dry yeast
- 2 tablespoons vegetable oil
- 2 teaspoon salt
- 2 tablespoon white sugar
- 1 cup warm water (110 degrees F/45 degrees C)

Combine flour, salt, sugar, and yeast in a large bowl. Mix in oil and warm water. Knead until elastic and smooth. 5-10 minutes.

This also makes a good pizza and I like to alter the type of flour for healthier variations.

Ha Ha Tonka Foray is now in July!

Friday-Sunday, July 1-3

By Chris Crabtree

Although it's still cold, I can daydream of spring rains, summer heat and sunny holidays with friends and family and, of course, mushrooms. I have always been a child of the summer. When I was a kid, all of my allowance and money from selling aluminum cans went to fireworks, because the Fourth of July was my favorite holiday. Every year, more burnt fingers and bottle rocket scars, but there was always plenty of laughter and good times. Luckily I grew out of that stage (for the most part) and turned my energy towards fungi and other pursuits. Now how do fireworks, burnt fingers and fungi relate. Here's how.

The Ha Ha Tonka foray will have its fifth year celebration the weekend of the Fourth of July. Normally we keep the Ha Ha Tonka foray in June, but schedules and such have shifted this great foray to the first weekend in July. Why you ask? After reviewing our species lists from the past four years, it is apparent that we have the best hunting and find the most number of species in the latter part of June. Well, schedules once again eliminated the last weekend in June, which puts us into July. Regardless of the month, the hunting should be great, the camaraderie excellent and the scenery majestic. Ha Ha Tonka is near Camdenton, Mo. and Lake of the Ozarks. I look forward to warmer weather at this very moment and look forward to seeing many of you at Ha Ha Tonka.

Augusta foray in April

Sunday, April 10

MOMS will head to 1500 acres of private property in Augusta, MO. The foray will begin at 10 a.m. Bring your basket, a smile and a tread lightly attitude. From St. Louis, go west on I-64/40 and exit at highway 94 making a left and heading west. After approximately 8 miles, make a right on highway F, then drive to Schluersburg Rd. where you will make a left and continue to Moll Rd. where you'll make a right. Then in about 1 mile turn onto the property called Moone Athy.

2011 Calendar

MOMS members will need to notify the leader of the foray they wish to attend before the evening prior to the foray at the very latest. Please meet at the visitor's center, unless otherwise specified, 15 minutes prior to the time listed.

- Tues 3/8** 7:00 PM **Bimonthly**, Powder Valley Nature Center, Dr. John Pitkin presents the good, the bad and the ugly of fungi, Ken Gilberg, 314-822-7624, kengilberg@gmail.com
- Fri 3/18** 6:00 PM, **Springfield Chapter Meeting**, Springfield Conservation Nature Center, Speaker, Maxine Stone, followed by book signing, George Lantz, glantz@gmail.com, 417-234-4974
- Sat 3/26** 1:00 PM, **Talk and Book Signing**, Powder Valley Nature Center, Maxine Stone, verymaxine@aol.com, 314-963-0280
- Sat 4/02** 10:00 AM, **Class, Poisonous Mushrooms of Missouri**, Babler State Park, Maxine Stone, 314-963-0280, VeryMaxine@aol.com or Brad Bomanz, 636-225-0555 brad_bomanz@yahoo.com
- Sun 4/10** 10:00 AM, **Foray, Augusta, Mo.**, Cici Tompkins, 303-775-7084, ccseasaw@yahoo.com
- Sat 4/16** 10:00 AM **Annual Leland Foray, Pere Marquette State Park**, Leland Von Behren, 618-259-8517 or Steve Booker, Arohd2@aol.com
- Sun 4/17** 10:00 AM, **Foray, Washington State Park, Mo.**, Shannon Stevens, 314-481-4131, sporeprince@sbcglobal.net
- 4/22-4/24** **Morel Madness**, Cuivre River State Park, Camp Cuivre, Shannon Stevens, 314-481-4131, sporeprince@sbcglobal.net
- Thurs 4/28** 10:00 AM, **Foray, Babler State Park**, Joe Walsh, 636-343-6875
- Tues 5/10** 7:00 PM, **Bi-Monthly**, Powder Valley, Topic TBA, Ken Gilberg, 314-822-7827, kengilberg@charter.net
- Sun 5/15** 10:00 AM, **Foray, Castlewood State Park**, John Davis, shrooman@sbcglobal.net, 314-909-0272
- 5/27-5/29** Friday-Sunday, **Foray & Campout, Loggers Lake Rec. Area**, near Bunker, Mo., James Savens, 281-757-4218
- Sat 6/4** 10:00 AM, **Class, Common Mushrooms of Missouri, Part 1**, Babler State Park, Maxine Stone, 314-963-0280, VeryMaxine@aol.com or Brad Bomanz, 636-225-0555, brad_bomanz@yahoo.com
- Wed., 6/8** 10:00 AM **Forest 44 Foray**, Lisa Hulett, Lirn@535@yahoo.com, 636-548-8094
- Sun 6/12** 10:00 AM, **Foray and Wine Tasting, Charleville Vineyard**, Ste. Genevieve, Mo., Chuck Yates, 314-843-5580, c2yates@yahoo.com
- Sat., 6/25** 10:00 AM, **Rockwood State Park Foray**, Gordon White, gwdds@yahoo.com, 314-434-6720
- 7/1-7/3** Friday-Sunday, **Ha Ha Tonka State Park**, Chris Crabtree, 417-689-2709, cdcrabtree@hotmail.com
- Sat 7/9** 10:00 AM, **Foray, Hawn State Park**, Patrick Harvey, 314-771-3521, pgharvey@hotmail.com
- Tues 7/12** 7:00 PM, **Bimonthly, Foray and Food Fest**, Babler State Park, Cochran Shelter, Ken Gilberg, 314-822-7827, kengilberg@gmail.com
- 7/15-7/17** Friday-Sunday, **Sweat 'n Chanterelles**, Meramec State Park, Steve Booker, 618-346-1740, Arohd2@aol.com
- Sun 7/24** 10:00 AM, **Foray, Forest 44**, Maxine Stone, 314-963-0280, VeryMaxine@aol.com
- Sat 8/6** 10:00 AM, **Class, Common Mushrooms of Missouri Part 2**, Maxine Stone, 314-963-0280, VeryMaxine@aol.com or Brad Bomanz, 636-225-0555, brad_bomanz@yahoo.com
- Sun 9/4** 10:00 AM, **Foray, Rockwoods Reservation**, Charlie Raiser, 314-773-4551, Charlieraiser.aol.com
- Sat. 9/10** 10:00 AM, **Foray, location TBA**, Claudia Joyce, 314-968-2373, cl0ud9@sbcglobal.net
- Tues 9/13** 7:00 PM, **Bi-monthly**, Powder Valley Nature Center, Ken Gilberg, 314-822-7827, kengilberg@gmail.com
- Thurs-Sun 9/15-9/18 MINGO-SAVE THE DATES**
- Sun 10/2** 10:00 AM, **Foray, Hazlet State Park**, Carlyle, Illinois, Leland von Behren, 618-259-8517, or Steve Booker, 618-346-1740, Arohd2@aol.com
- Sat 10/8** 10:00 AM, **Class, Edible Mushrooms of Missouri**, Maxine Stone, 314-963-0280, VeryMaxine@aol.com or Brad Bomanz, 636-225-0555, brad_bomanz@yahoo.com
- Sun 10/16** 10:00 AM, **Foray, place TBA**, John Davis, shrooman@sbcglobal.net, 314-909-0272
- 10/28-10/30** Fri-Sun, **The Hawnting**, Hawn State Park, Steve Booker, 618-346-1740, Arohd2@aol.com
- Sun 11/6** 11:00 AM, **Wild Times at Babler**, Foray and Wild and Tame Food Fest, Babler State Park, Steve Booker, 618-346-1740, Arohd2@aol.com or Jan Simons, 314-773-4551, jan.simmons@mobot.org
- Tues 11/8** 7:00 PM, Election Day!, Vote, then come to the **Bimonthly**, Powder Valley Nature Center, Annual Photo Show, Ken Gilberg, 314-822-7627, kengilberg@gmail.com

Tales from past forays: Importance of habitats

By Harold W. Keller

Botanical Research Institute of Texas, haroldkeller@hotmail.com

Microorganisms that include some fungi and myxomycetes (plasmodial slime molds) are associated with specific habitats and are subject to many environmental variables including types of vegetation and soils, temperatures, rainfall, pH, nutrients, and geographic location sometimes referred to as biotic (living) and abiotic (nonliving) factors. Collectors pay attention to these environmental variables when they hunt for fungi and myxomycetes, especially edible fungi such as morels, truffles, agarics, boletes and many others. Habitats with species of macrofungi that occur in Ha Ha Tonka State Park are highlighted in a recent paper by Crabtree et al (2010) based on collections made in part by MOMS members. More forays over time at Ha Ha Tonka will undoubtedly add additional species of macrofungi in the different habitats thus increasing our understanding of where and when to collect fungi.

Myxomycete collectors also tend to gravitate to habitats that will yield developing or mature fruiting bodies especially on ground sites such as decaying logs and leaf litter after rainy periods. Myxomycete species assemblages are frequently associated with habitats characterized by specific terminology, for example, **corticulous** myxomycetes complete their life cycle on the bark of living trees and woody vines extending into the tree canopy (Everhart and Keller 2008); **lignicolous** myxomycetes on decaying logs with or without bark and **folliculous**

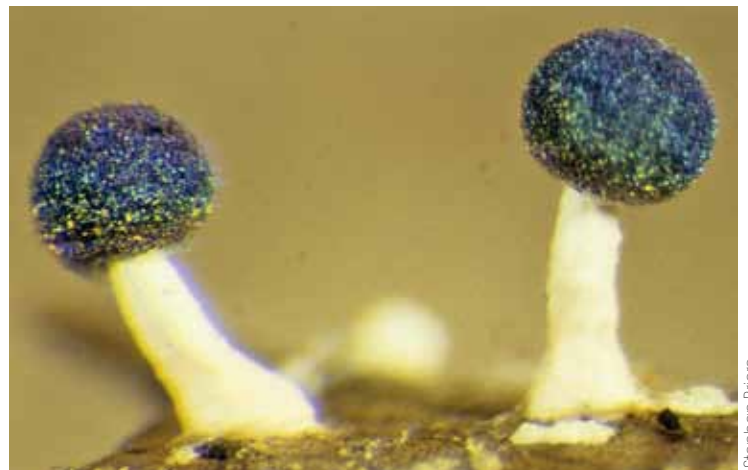
myxomycetes on decaying leaf litter on ground sites; **fungicolous** myxomycetes like *Physarum polycephalum* have plasmodia that feed on the oyster mushroom, *Pleurotus ostreatus*; **muscolous** myxomycetes grow and fruit on mosses and liverworts; **acidophilic**, **neutrophilic**, and **basophilic** myxomycetes have an optimal pH range; **floriculous** myxomycetes are found on the inflorescences of neotropical herbs; **fimicolous** (coprophilous) myxomycetes on the dung of herbivorous animals; **nivicolous** myxomycetes are found at high altitudes in alpine and subalpine mountains at the snowline or underneath melting snowbanks; **succulentulous** myxomycetes on the fleshy parts of cactus in semiarid areas deriving moisture from the tissue fluids of the host plant; and a new term "**herbiculous**" for a group of myxomycetes that frequently occur on herbaceous grassland plants in prairies or glades. Myxomycetes associated with species of prairie coneflower (*Echinacea*) in glades and prairies and also the purple milkweed (*Asclepias syriaca*) represent the source of herbicolous myxomycetes in Missouri (Kilgore et al 2009).

Myxomycete habitats described in field manuals and monographs too often lack enough detail to pinpoint the location of special habitats. For example, *Diachea splendens* is perhaps one of the most beautiful and certainly conspicuous myxomycete species.

The white calcareous stalks have a spherical spore case (1 to 2 mm in total height) covered with a brilliant iridescent blue peridium that encloses a black spore mass. Sporangia that often number in the thousands can be seen with the unaided eye on decaying leaf litter mixed with woody twigs on ground sites. Martin and Alexopoulos (1969) on page 180 describes the habitat as "leaves, herbaceous stems, and dead wood" and this is accurate as far as it goes. Fragments of leaves and twigs pasted in a collection box do not give habitat details necessary to predict where *D. splendens* can be found in the field. Even though this species is not common I have collected it in the states of Georgia, Indiana, Kansas, Missouri, and West Virginia. These collections were all characterized by similar habitats where decaying leaves, twigs, and wood fragments had accumulated in a dry stream bed often in a pile several feet deep. Our collections of *D. splendens* in Ha Ha Tonka were confined to Black Sink and along dry rivulets about 1 to 2 meters across. These habitats were created as the water washed leaves and twigs into piles that accumulated along different places in the dry streambed. These piles often were wet at the bottom and dry at the top thereby providing ideal conditions for the white plasmodia to develop and increase in size in the lower levels and migrate some distance to the top of the pile to form sporangia where it was drier. A common species found in



Diachea leucopodia This species was also mentioned in the article.



Diachea splendens Two stalked sporangia of *Diachea splendens*. Please see the text narrative for morphological details. This image is taken from Keller, H.W. and K.L. Braun. 1999. Myxomycetes of Ohio: Their Systematics, Biology and Use in Teaching. Ohio Biological Survey Bulletin New Series Volume 13, Number 2 xvi + 182p. 30 b & w. 51 color.



Diachea arboricola, mature sporangium with iridescent peridium exhibiting gold, silver, and colors of the rainbow.

Ha Ha Tonka is *D. leucopodia* that develops extensive white plasmodia that migrate over great distances to form cylindrical iridescent and white stalked sporangia. I have collected sporangia several feet off the ground on fern fronds, and on the stems and leaves of living plants of poison ivy and stinging nettle. Apparently this myxomycete species is not allergic to poison ivy!

Most collectors of myxomycetes carefully scan ground site habitats because tales of the past learned from fellow myxomycologists and field manuals emphasize their presence on decayed wood and leaf litter. Standing dead or dying trees also can be the source of fungi and myxomycetes that would encourage collectors to look above ground level. However, the trunks and canopy of living trees represent one of the last frontiers on planet earth not extensively explored. Melissa Skrabal, a former student at the University of Central Missouri, used the double rope climbing method to discover a myxomycete species new to science (*Diachea arboricola*) apparently confined to the tree canopy. She observed plasmodial tracks and sporangia along a vertical path of approximately 15 meters on a living white oak tree. To find mature myxomycete fruiting bodies on living trees requires a sharp eye, a 15 or 20X hand lens, a soaking rain over 48 to 72 hours, cloudy weather, temperatures in the 20 to 30 C (68-86 F) range, seasonality from July to September, and a species of tree with absorbent bark. Perhaps the tree species that has the highest myxomycete species diversity is *Juniperus virginiana* (red cedar) that can be found frequently in cemeteries. This field information will help the collector to be in the right place at the right time and

increase chances of finding some spectacular specimens. Close observation based on detailed habitat descriptions as well as GPS readings or landmarks should be included in collector's field notes. If repeatability is the essence of science, collectors must pass this field knowledge on to the next generation either through direct observation at MOMS forays or through publications that provide enough detail to find and collect fungi and myxomycetes.

References

- Crabtree, C.D., H.W. Keller, and J.S. Ely. 2010. Macrofungi associated with vegetation and soils at Ha Ha Tonka State Park, Missouri. *Mycologia* 102: 1229-1239.
- Everhart, S.E. and H.W. Keller. 2008. Life history strategies of corticolous myxomycetes: the life cycle, fruiting bodies, plasmodial types, and taxonomic orders. *Fungal Diversity* 29: 1-16.
- Kilgore, C.M., H.W. Keller, and J.S. Ely. 2009. Aerial reproductive structures on vascular plants as a microhabitat for myxomycetes. *Mycologia* 101: 303-317.
- Martin, G. W. and C. J. Alexopoulos. 1969. *The Myxomycetes*. Iowa City: University of Iowa Press. 561 p.

The Challenge of Mushroom Identification

By Maxine Stone

Do you go out in the woods, see mushrooms and have no idea what they are? Have you wanted to pick and eat the mushrooms you see but you don't know if they are edible or poisonous? Do you gather with other mushroom enthusiasts and feel that everyone is smarter than you? If you answered yes to any of these questions, I have the perfect solution.

Come to the mushroom classes offered by MOMS four times a year!

Saturday, April 2, 2011
 Saturday, June 2, 2011
 Saturday, August 6, 2011
 Saturday, October 8, 2011

Poisonous Mushrooms of Missouri
 Common Mushrooms of Missouri, Part 1
 Common Mushrooms of Missouri, Part 2
 Edible Mushrooms of Missouri

Each class covers 10 mushrooms in its category. If you attend all 4 classes you'll know 40 mushrooms. We offer optional homework and a test for each class. If you successfully complete these, you will be awarded a beautiful pin for that particular class. Once you earn all 4 pins you will receive the Harry Thiers Certificate for Mushroom Proficiency. A number of people have already been awarded pins and certificates. Their names are below.

Each class will meet at 10:00 AM at Babler State Park Visitor's Center. We will have classroom experience in the morning, then break for lunch—byo. After lunch we'll go into the woods, forage and identify our finds. Don't hesitate to repeat and repeat and repeat a class. You'll learn more and it's always lots of fun.

Please register for each class with Maxine Stone, VeryMaxine@aol.com, 314-963-0280 or Brad Bomanz, brad_bomanz@yahoo.com, 636-225-0555. Classes are free to all MOMS members.

Pins and Certificates Awarded

Congratulations to the Mushroom Identification Class participants who recently received awards. A specialty pin was awarded at the winter luncheon for successful completion of class, homework and test for the following people:

Poisonous Mushrooms of Missouri: Lisa Hulett

Common Mushrooms of Missouri, Part 1: Joseph Rainwater, Lisa Hulett, Dennis McMillan

Common Mushrooms of Missouri, Part 2: Joseph Rainwater, Lisa Hulett, Floyd Schmitz, Nancy Schmitz

Edible Mushrooms of Missouri: Joseph Rainwater, Lisa Hulett, Jim Clark, Dana Drake

The Harry Thiers Certificate for Mushroom Proficiency was awarded to those who earned all four pins: Dennis McMillan, Lisa Hulett

Good going! We are proud of you!



Missouri Mycological Society

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Patrick Harvey does a great job in keeping the MOMS Facebook page updated. Check it out for news, photos and discussions.

earthstar

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MOMS Chapters

By Maxine Stone

It's really happening. We have successfully started a MOMS chapter in the Springfield, MO area, thanks to the energy of Michael Baird, a very interested and diligent Springfield resident. At this point there are 17 members with many more ready to sign up. Their initial meeting was January 30. Michael talked about the history of MOMS, NAMA, forays, events, education and, of course, all of the enjoyment we get from being mycophiles. At that meeting these 17 people chose officers, and they are planning forays for the spring.

All chapter members are regular members of MOMS. They will use the Earthstar and website, they will come to any and all forays and events, but they will also plan their own regional forays and events. The world of the mushroom aficionado is expanding! This is exciting.

The officers of the newly formed Springfield Chapter are:

President	George Lantz	glantz@gmail.com	417-234-4974
Secretary	Barbara Kipfer	bkipfer@sbcglobal.net	417-883-9382
Membership	Bob Kipfer	bkipfer@sbcglobal.net	417-883-9382
Foray Chairperson	Michael Baird	michael@gladewinds.com	417-209-3227

Congratulations, Springfield. Glad to have you on board!

Next Bimonthly

The upcoming bimonthly on March 8 brings us an "amped up on science" plant pathologist from Monsanto, Dr. John Pitkin. According to Rachael Slightom, MOMS member and coworker, "He's very comical and engaging."

He'll cover some history of fungi—ergotsim and witches and the potato famine. He'll explain the major classes of plant pathogens and fungal secondary metabolites—the good (hallucinogens), the bad (vomitoxin, etc.) and the ugly (Aflatoxin-induced cow gangrene, etc.) Join us at Powder Valley Conservation Nature Center. We'll start promptly at 7.