

November 2019

Meramec Hills

Upcoming Chapter Events

November 25:
Monthly Chapter
Meeting at Bray CA

December:
NO MEETING

Native Knowledge...

By Pat Perry

Woolly Bear Caterpillar

AKA Woolly worm, Black-ended bear, and Banded woolly Bear

I saw my second woolly worm this week and it was all black. What does folklore tell me about the upcoming winter? It will be harsh and severe if you believe this forecaster.

What is the legend: The woolly worm has 13 segments representing the 13 weeks of winter. The more rust colored bands, the milder the winter. The more black there is- the more severe the winter will be. The second part of the legend says that the fuzzier or woollier the caterpillar is- the colder it will be. The legend goes back to the Fall of 1948 when Dr. C H Curran, curator of insects at the American Museum of Natural History in New York City, went 40 miles north to Bear Mountain State Park and collected as many woolly bear caterpillars so he could study their bands. He conducted his experiments for 8 years and his weather forecasts were made through a reporter friend at the

New York Herald Tribune. The resulting publicity made the woolly worm one of the most recognizable caterpillars in North America. Most people discount the forecast but...

The woolly worm is an interesting caterpillar in its own right. It hatches out in the spring and spends the summer and Fall eating mainly leaves. It likes herbs including dandelions, plantains and nettles. It also eats violets, clover and some tree leaves. As the weather gets colder, it looks for a sheltered place to hibernate- under fallen leaves, rocks or a fallen log. It produces a kind of antifreeze



that protects its organs and soft tissue while the rest of the caterpillar freezes solid. In this state, it can survive to -90 degrees.

When temperatures reach 50 degrees during the day in the spring, it thaws out. It then begins eating spring greens especially dandelions. When it is ready, it spins a fuzzy cocoon using its own fur known as setae. It stays inside for 10-15 days and emerges as an Isabella tiger moth.

Woolly bear caterpillars can be found from northern Mexico throughout the United States and into the southern third of Canada.



Microscope Recommendation

At the October meeting, Lou Didier brought a dissecting (or stereo) microscope that she recommended to the Chapter and gave members a chance to try it out. It was the AmScope 20X-40X Binocular Cordless LED Metal Frame Stereo Microscope (SKU: SE306R-P-LED).

This dissecting scope provides 20x & 40x magnification and is great to magnify samples and can be very useful to identify invertebrates during stream team activities. This particular scope runs on batteries so it is

great to take into the field or out to events.

If you're interested, this particular microscope, it is currently available on Amazon.com for \$138.99 and can be found at this [link](#).



We're on the Web!

See us at:

<http://www.meramechills.org/>
and

[https://www.facebook.com/
MMNMeramecHillsChapter](https://www.facebook.com/MMNMeramecHillsChapter)

November

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

January

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			1	2	3	4
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Upcoming Activities

November 4 (Monday)

Cornell Webinar: State of Birds, 6:30pm. See page 5 for more details.

November 8 (Friday)

MO Botanical Symposium, 8:00am – 3:00pm, MS&T. Register & learn more at www.missouribotanicalsymposium.org.

November 9 (Saturday)

Wyman Outdoor Classroom Clean Up, 8:00am – Noon. See page 4 for more details.

November 12 (Tuesday)

Bray Workday, 1:00pm - 5:00pm, Bray CA. Come out and join the Bray Bunch! Work will include raking leaves, bagging seed heads and berries from invasive plants (great time to learn!). Dress for the weather and bring work gloves, hat, drink and a snack. For more info, contact pamela.barnabee@gmail.com.

November 14 (Thursday)

Invasive Plant ID and Control Workshop, 1:00pm – 4:00pm, Shaw Nature Reserve (Gray Summit). Visit missouribotanicalgarden.org for more information.

November 25 (Monday)

Regular monthly meeting of the Chapter, 6:00pm, Bray CA. Topic: Show & Tell (bring your favorite book, tools, etc to show & tell). Social hour & help session for questions regarding activities and entering hours from 5:00-6:00pm.

December 10 (Tuesday)

Bray Workday, 1:00pm - 5:00pm, Bray CA. Come out and join the Bray Bunch! Dress for the weather and bring work gloves, hat, drink and a snack. For more info, contact pamela.barnabee@gmail.com.

January 19 (Sunday)

Executive Board Meeting, 5:30pm - 8:00pm, Alex's Pizza Palace (122 W 8th St, Rolla). All Chapter members are welcome to attend. Arrive at 5:30 to order food or drinks with the meeting to begin at 6:00pm..

January 27 (Monday)

Regular monthly meeting of the Chapter, 6:00pm, TBD. Topic: TBD. Social hour & help session for questions regarding activities and entering hours from 5:00-6:00pm

February 24 (Monday)

Regular monthly meeting of the Chapter, 6:00pm, TBD. Topic: TBD. Social hour & help session for questions regarding activities and entering hours from 5:00-6:00pm

Year End is Approaching

By Kari Lane

As the year winds down, please make sure you've entered hours for activities or trainings you've attended. These hours are reported to the Missouri Department of Conservation as well as the University of Missouri Extension and our community engagement and service justifies the cost of this program.

From land management to litter clean up, our activities are important contributions to the community and to the state, so make sure your efforts are counted! If you need help entering hours or have questions, arrive early to a meeting and ask a Board member!



Reminder: Check with the Publicity Committee !

By Kari Lane

If you are coordinating an event, hosting an activity or engaging with the public in some way, please provide your materials to the Publicity Committee for review prior to printing any materials. The Missouri Master Naturalists

program has explicit guidelines of use of the program name and logo as outlined in the [program manual](#).

The Publicity Committee also ensures consistency in communicating our events and

message to local press and community organizations.

If you have any questions, please contact Kari Lane at karlynnlane@gmail.com or at 573-458-0046.

Springfield Conservation Nature Center
 4601 S. Nature Center Way Springfield, MO 65804

Thursday, November 21 | 6:00–9:00 p.m.
 Professional panel and Q&A immediately following the screening

FREE EVENT REGISTRATION IS REQUIRED - Call (417)888.4237

Panelists:
 Ronda Burnett MDC and Grow Native!
 Brian Edmond Missouri Prairie Foundation
 Carrie Lamb City of Springfield Environmental Services Department
 Barbara Lucks Community Partnership of the Ozarks and Ozarks Environment News



JOIN US FOR A FREE screening and panel of Hometown Habitat
stories of bringing nature home




2019 MISSOURI BOTANICAL SYMPOSIUM

JOIN US IN ROLLA, MO FOR A DAY OF BOTANICAL PRESENTATIONS BY REGIONAL EXPERTS! LUNCH INCLUDED.

NOVEMBER 8, 2019

REGISTER AT WWW.MISSOURIBOTANICALSYMPOSIUM.ORG

Getting to Know You...Mitch Cottrell

How long have you been in the Rolla area?

We've been in the Rolla area since 1984, unless you count on the time we spent living at Ft Wood, then it would be 1982. We've actually lived in the same house since we moved here in '84, though it's not nearly the same house after doing the addition and several remodels. I work for Missouri S&T teaching Mechanical Engineering and running the Mechanical Engineering technical shop, so I'm used to dealing with all things technical.

What got you interested in Master Naturalists?

I've always been "outdoorsy" in my free time, boating, fishing, camping etc. My wife is actually degreed in Natural Resources, so it was her idea to come to Master Naturalists, which I somewhat reluctantly agreed to do. We both endeavor to take interest in things the other likes because we like to do things together, even if it isn't our favorite thing. Like baseball, I take her to games because she loves it, but otherwise I wouldn't pay the game any attention at all. Turns out I loved the classes and learned a whole lot more than I could have

imagined. I still much prefer those activities like boating and love doing stream team. Plants are okay, but I struggle at identification. I'm a techie. An engineer. So going naturalist wasn't something I would normally have migrated toward, but I now see myself looking at the world around me with a much different perspective.

Tell us about your interests!

We've recently gotten into bee keeping, though we've not had the best of success with our first hive.

Tell us about your family, pets, land, etc!

We have been married for 40 years now, have 4 super kids (1 boy and 3 girls) and 3½ grandkids, 2 dogs and 1 cat. My father-in-law was a renowned environmentalist in New Jersey, and when he passed we thought it would be appropriate to use the inheritance we received to purchase some land we could pass down to our kids, more or less in his memory. We purchased 79 Acres out near Montauk, which we are slowly working on improving for wildlife habitat. My wife and I designed and hand built our 800sqft cabin there, which is completely off



grid. So we have that property as well as our house just south of town on 3 acres of woods.

What was the last book you read?

I am an avid Sci-Fi reader and have actually written and e-published 2 sci-fi novels on Amazon under my pseudo-name: "M. Scott Cottrell".

Volunteer Liaison for Elementary Outdoor Classroom Sought

By Pat Perry

Wyman Elementary School is located in Rolla at 402 Lanning Lane. This is east on Lanning from the stoplight with Hwy 63. Dr. Corey Ray is the principal. There is an Outdoor Classroom located behind the school that has not had much maintenance the last few years. Bob & I were asked to walk through the space with Dr. Ray and Gina Root (PTO President at Truman). We did that on the morning of Monday, October 28.

The classroom is mainly comprised of hardwood forest located on a slope behind the school. There is a primitive path through it and it is currently covered by leaves, sticks and other debris. At one point, someone put in some wooden steps but they have not been maintained. As the path proceeds

downhill, it has a bridge which goes over a wet weather creek or a run off drainage. When the path reaches the bottom of the hill, there is the remnant of an old pond. It appears that the downhill side was breached at some point. The path then goes fairly steeply up a short hill and ends in an open area of the classroom. In that open area is a butterfly garden (outside edges are block/concrete formed in the shape of a butterfly). The garden seemed over run with foxtail grass and some mares tail plants.

The overhead canopy of hardwoods has kept the amount of invasives somewhat under control. We found bush honeysuckle, multiflora rose, privet and Asiatic bittersweet. The outside edges of the woodland are

much more heavily infested.

Students from Rolla High School Show Me Volunteers have offered to help clean up the classroom as part of their volunteer service. Dr. Ray and Gina Root are coordinating that event on Saturday, Nov. 9.

Bob and I told them that we were not interested in adopting another school. If you would like to take on that task- providing knowledge of invasive eradication as well as leading workdays, please let Susan Wrasmann know as well as Dr. Ray and Gina Root. Also- if you would just like to help with the cleanup day only they would appreciate that. Dr. Ray can be reached at CRay@rolla.k12.mo.us and Gina Root at gina333r@gmail.com.

Removing Invasives from the Truman Outdoor Classroom

By Pat Perry

On Saturday, October 5, seven Master Naturalists (Pam & Jerry Barnabee, Lorely and Ron Lather, Edie Starbuck, and Bob and Pat Perry) joined with seven MS&T students and nine people associated with Truman Elementary School to cut and treat invasive species in the Outdoor Classroom. The event went from 8:00 until noon and people worked as long as they could.

We cut bush honeysuckle, autumn olive, privet, multiflora rose, Japanese honeysuckle and Asiatic bittersweet. The debris was loaded into pickup trucks and hauled to the City composting site. Bob Perry hauled 5 fullsize loads and Gina Root hauled two small bed loads. Gina also had the MS&T students load mulch from the composting site and it was spread on the path in the prairie area.

In the area that was cleared, we discovered several native forbs including white snake root and tickseed sunflower. There

was also a four-foot sweet gum tree found after clearing the invasive shrubs which completely hid it.

There are lots more invasives that need to be removed. Watch the newsletter for the next workday.

As a side note: The classroom is being utilized more this Fall. Bob and I helped with two Second Grade Outdoor Kids programs there in October. We conducted a scavenger hunt to get the kids familiar with the various areas. On the 9th, we had 17 kids representing two classes and on the 16th, there were 25 kids representing three classes.

I heard from the Librarian that the students who made their first quarter AR goal were treated to smore kits while walking through the Outdoor Classroom. The new administration is focused on getting the kids outdoors.



Cornell Lab of Ornithology to host live Seminar

According to research published online in September by the journal *Science*, wild bird populations in the continental U.S. and Canada have declined by almost 30% since 1970. The study quantifies for the first time the total decline in bird populations in the continental U.S. and Canada, a loss of 2.9 billion breeding adult birds—with devastating losses among birds in every biome.

Join Ken Rosenberg, who leads joint research initiatives by the Cornell Lab and American Bird Conservancy, to learn why these study results transcend the world of birds.

Registration is required to view the seminar which will be broadcast live at 6:30pm November 4. The seminar will be archived and available to

view after its completion as well.

To register, click [here](#). If you are interested in viewing the seminar but are unable to at your home, contact [Kari Lane](#) to set a time to view it at the Lane's home on their TV.

Project FeederWatch: A Simple Way to Help Birds

Cornell Lab of Ornithology

In light of recent news about the net loss of nearly three billion birds in the U.S. and Canada since 1970, it's more vital than ever that citizen scientists monitor their own backyard birds. Participants in Project FeederWatch at the Cornell Lab of Ornithology have been doing this for decades. Reports from participants are building the kind of long-term database needed to detect shifts in the number and distribution of birds facing challenges from climate change, habitat loss, and disease.

The 2019-2020 season of FeederWatch kicks off on November 9.

"The good news is that most feeder birds are faring much better overall than other species," says FeederWatch leader Emma Greig. "But we do see some patterns of loss in FeederWatch data. There are declines in the numbers of Dark-eyed Juncos and Blue Jays being reported, for example. These are common birds but over time we're seeing fewer of them."

FeederWatch data show the "shifting baseline" phenomenon very clearly, Greig explains. Even though just as many people are reporting species such as juncos and Blue Jays, the numbers that they are reporting are smaller. This means that the declines are subtle, but they are widespread and steady.

"FeederWatch is easy to do and the reports we get are making a real contribution to science," Greig says. "It's one simple step people can take to help birds."

FeederWatch participants make two-day counts each week from



Blue Jay by Ryan Marcum. Courtesy Cornell Lab of Ornithology



Blue Jay by Ryan Marcum. Courtesy Cornell Lab of Ornithology

November through early April. They can spend as much or as little time as they like collecting data. Even counting birds once or twice all winter has value.

Project FeederWatch is a joint research and education project of the [Cornell Lab of Ornithology](#) and [Bird Studies Canada](#). To join tens of thousands of other participants, sign up online at [FeederWatch.org](#) or call the Cornell Lab toll free at (866) 989-2473.

In return for a participation fee of \$18 in the U.S. (\$15 for Cornell Lab members) or a donation of any amount in Canada, participants receive the FeederWatch Handbook and Instructions with tips on how to successfully attract birds to feeders, an identification poster of the most common feeder birds, and a calendar. Participants also receive Winter Bird Highlights, an annual summary of FeederWatch findings.

7 SIMPLE ACTIONS TO HELP BIRDS

- Do Citizen Science
- Make Windows Safer
- Keep Cats Indoors
- Reduce Plastic Use
- Use Native Plants
- Drink Shade-Grown Coffee
- Avoid Pesticides

Missouri Master Naturalist – Meramec Hills

PRESIDENT
Judy Cavender

VICE PRESIDENT
Phyllis Murphy

SECRETARY
Kathy Gallagher

TREASURER
Drew Lane

NEWSLETTER:
karilynnlane@gmail.com

ADVANCED TRAINING:
slvrhawk@embargmail.com

WEBSITE:
jerry.barnabee@gmail.com

We're on the Web!

See us at:

<http://www.meramechills.org/>
and

<https://www.facebook.com/MMNMeramecHillsChapter>

**Volunteer Outlets Profile:
Chapter Executive Board: The Vice President**

The role of the vice president (VP) for the Meramec Hills Chapter of the Missouri Master Naturalist has a few specified responsibilities, primarily filling in for the President should he or she be unable to attend the monthly meeting or the

executive committee meeting. The VP also keeps the refreshment list and encourages folks to sign up for food for the monthly meetings. The VP is a member of the executive committee and they do not automatically move into the president position the

following term. The position itself requires only a few hours monthly, but it does require the VP to be aware of and knowledgeable about the issues and business of the chapter given the need to fill in for the president from time to time.

Chapter Executive Board: The Secretary

The position of the secretary for the Meramec Hills Chapter of the Missouri Master Naturalist has just a couple duties but they are very important for functioning of the chapter. The secretary receives the agenda for each monthly meeting and records the minutes for each meeting. This involves taking notes on what is discussed at the

Chapter and Executive Board meetings, which are then summarized and typed up shortly after each meeting. The draft of the minutes is sent to the President for review prior to posting a final copy on the upcoming meetings calendar entry. The secretary also sends them out attached to the meeting reminder the week prior to the next

meeting. Given the importance of the secretary's role at meetings, if the secretary is unable to attend, they must find an alternate who is able to fill in temporarily the same fashion. The time average time commitment is about 4 to 4.5 hours per month.

About the Master Naturalists...

The Missouri Master Naturalist™ program is a community-based natural resource education and volunteer service program for adults sponsored by Missouri Department of

Conservation and the University of Missouri Extension. Our mission is to engage Missourians in the stewardship of our state's natural resources through science-based

education and volunteer community service. Our chapter is comprised of residents primarily from Phelps, Pulaski and Dent County. Meetings are held once a month in Rolla.

A High Five to our Members!

Initial Certification: Herbert Turner

2019 Re-Certification: John Johnson, Nancy Moenster

