Upcoming Monthly Meeting
Thursday, October 9th 6:30 PM
MU Extension Building

COMPLICATED CHORUSES:
WHAT WE CAN LEARN FROM ANIMAL CALLS

Presented by Nathan Harness
Graduate Student in Biological Sciences
University of Missouri

Nathan’s talk will broadly discuss how advertisement calls can teach us about the biodiversity of life on earth. We can learn about how calls have diversified, and what sorts of evolutionary pressures might be responsible for the diversity we hear in our backyards. Ultimately this talk discusses research in animal behavior and evolution as well as introduces some local calling animals to the audience.

Amazing photo credit: Marsel van Oosten

Please don’t forget to bring your cup & plate & utensils!
There will be a fine of 25¢ if you need to use the house plates/utensils. Ouch!
Drinks: Marlene Willick    Dessert: Carolyn Flynn    Non-Dessert: Joy Rushing
Watching my four-year-old grandson play soccer always gives me something to talk about. For example, at a recent game, the two teams were running down the field and then, without warning, they all stopped on a dime. The fans all looked around, asking, “What’s going on? Is someone hurt?” Then the coach walked over to let us know that the boys stopped because did not want to step on a Wooly Worm. It made me and the other fans smile. It’s the time of year to make predictions about winter based on Wooly Worms and persimmons!

The folklore around the Wooly Worm is that its brown band, the middle section, can predict how long the winter will be. Supposedly, the width of the front black band tells us if winter will begin early; a small band indicates an early start. The width of the back brown band tells us when winter will end; a small band tells us that winter will end late. The direction it travels is also a predictor of how cold it be. In 1948, Dr. C.H. Curran, curator of insects at the American Museum of Natural History in New York City, started counting the brown bands of the Wooly Worm. The Wooly Worm has 13 sections, which would represent the 13 weeks of winter. Over the eight years he studied the band width, the Northeast had a normal winter conditions. His findings were published and the rest is history (= folklore). His results/predictions have never been duplicated.

There are Wooly Worm Festivals in at least five states and one in Canada. One of these might be a great field trip for our chapter. However, I must give you some bad news. Turns out, the Wooly Worm cannot predict what the winter will bring.

The Wooly Worm is the larva of the Isabella Tiger Moth (Pyrrharctia Isabella). Its band width is an indicator of age and the weather/conditions of the past winter and the current growing season. There are 260 species of tiger moths; that would also account for the different band widths and colors. As for the predictions to do with which way the Wooly Worn is traveling (i.e., they go south for a cold winter and go north for a normal winter), the worms are really just looking for the perfect spot to spend the winter (e.g., under the bark of a tree, or under a rock or fallen log). Their “wool” is called setae – it does not keep them from freezing, but actually helps them freeze in a controlled and even manner, making them better able to hibernate.

Back to my grandson’s soccer game! His team lost, but the Wooly Worm was released unharmed. I heard of the other fans comment that we are going to have a long cold winter since the Wooly Worm was all black. Sorry to say that may not be the case, since an all-black wooly worm may actually be the larva of the Giant Leopard Moth (Ecpantheria scibonia).

Check your persimmons to see what kind of eating utensil it has inside -- we’ll see if it is a better predictor!

-Emily Wilson

Suzanne Wright (Class of 2005) describes this month’s winning picture of Missouri Master Naturalists collecting seeds at Tucker Prairie: “Seed collecting has been a favorite of mine since 2006 when we first started offering it as a volunteer opportunity. It’s great fun to collecting seed on parts of Prairie Fork that were planted with seed the Boone’s Lick Chapter harvested from other prairies in those early years. There is a wonderful feeling of group accomplishment when we stand on a prairie in bloom knowing in part it’s the result of the Boones Lick Chapter’s efforts. Maybe it’s because I’m a Kansas girl and grew up on the prairie but ending my work day collecting seed is a wonderful de-stresser. Standing in a prairie, facing into the wind always helps me find my center.”

You are invited to collect seeds this Sunday Oct 12th – email Chris Newbold to let him know you would like to go, and he will give you the details. It’s very peaceful out on the prairie, so if you need some Zen time, please join us!

Member’s Corner
It’s almost time for officer elections! If you would be interested in serving in a leadership capacity, please contact nominating committee member Becky Bohlmeyer. The Nominating Committee is seeking members to serve in a leadership capacity in the Boone’s Lick Chapter. Our chapter is self-governing with the guidance of our chapter advisors. According to the Bylaws of the Boone’s Lick Chapter, voting membership in the Chapter shall be extended to Missouri Master Naturalist Members and Certified Missouri Master Naturalists who have logged at least one hour within the last 12 months. The chapter holds annual elections at the end of the year.

WE WILL ELECT MEMBERS FOR THESE OFFICER ROLES:

PRESIDENT: presides at general membership meetings, appoints committees, and oversees chapter activities.

VICE PRESIDENT: assumes the duties of the President when the President is absent or temporarily unable to carry out her/his duties, oversees the chapter’s advanced education program.

SECRETARY: keeps a record of chapter meetings, conducts written correspondence pertaining to the chapter, disseminates minutes of general membership meetings.

TREASURER: keeps financial records of the chapter, and collects and disburses funds as needed.

The above officers, assisted by committee chairpersons, guide the operation of the chapter. Our committees are:

ADVANCED TRAINING COMMITTEE: Two co-chairs, the Vice President and Committee Chair, and their committee approve advanced training. They maintain a list of pre-approved and approved training, and notify chapter membership regularly of AT opportunities.

VOLUNTEER OPPORTUNITY COMMITTEE: Chair and a committee oversee a list of Volunteer Service (VS) project opportunities, and approve new volunteer opportunities. The committee maintains a list of VS projects and ensures chapter membership of regular notification of VS opportunities. One member of the committee will maintain and bring to the meetings a record copy of all previously approved Volunteer Service Projects.

COMMUNICATIONS: The committee supervises publication of the monthly newsletter, the Dragonflyer.

HISTORIAN: Chapter historian maintains a record of chapter business, including copies of the monthly newsletters, agenda, monthly programs and presenters with contact information, news publications regarding the chapter, and listings of all previous AT and Approved Projects/VS, etc.

HOSPITALITY: Recognizing the need for sustenance, this committee recruits volunteers to bring refreshments to our meetings.

PUBLIC RELATIONS: This committee manages the dissemination of information to the public pertaining to the mission, practices, and activities of the Master Naturalist Program. Activities include speaking to groups, creating information displays, presenting information at events and conferences, and sharing information about the program with media.
AN ENJOYABLE EVENING AT THE MISSOURI RIVER:
CHAPTER PICNIC & BIG MUDDY BOAT RIDES

On Thursday Sept 25th, we met at Katfish Katy’s Campground for our Annual Chapter Picnic & Big Muddy Boat Rides. Good weather, good food, and good company – if you did not join us this year, you must join us next year! Tim Haller and three other boat captains from Big Muddy National Fish and Wildlife Refuge took around 20 of us on a tour of the river. Check out these photos from Matt Boehner (Class of 2009 transfer from the Springfield Plateau Chapter). More photos will be shared in the November issue of the Dragonflyer! Also, a hearty THANK YOU to everyone that helped with this event: Jill Edwards, Jeanie Scott-Pillen, Robbie Scholes, Sally Swanson, and Suzanne Wright.

ADVANCED TRAINING OPPORTUNITIES

For updated information on advanced training opportunities, please see the online Chapter calendar. To submit an opportunity for advanced training consideration, use the form on the chapter website and email it to MMNATrain@gmail.com.
The University of Missouri sponsors “Saturday Morning Science” talks from **10:30AM to 11:30AM** in the Monsanto Auditorium of the Bond Life Sciences Center on the MU Campus (1201 Rollins Street, at corner of Rollins Street and College Avenue). The topics listed below have been approved for 1 hour of Advanced Training. For more information and directions, please click [here](#).

**NOTE: Other talks are listed on the website, but only the talks below have been approved for AT.**

**SATURDAY OCTOBER 11TH:** *The Mysteries of How Science Gets Done - Steve Alexander, Biological Sciences.* Who are the scientists? How are they trained and how is research funded? We will discuss the reality of how scientific advancement occurs.

**SATURDAY OCTOBER 18TH:** *Confessions of a Genome Sequencing Addict - Jerry Taylor, Animal Sciences.* ‘Next-generation sequencing’ is revolutionizing the rate at which genomic data are being collected, and data generation is becoming addictive. Here we discuss the process of making biological insights from vast amounts of biological data.

**SATURDAY NOVEMBER 15TH:** *More than a Gut Feeling: Microbes and Your Mind - Catherine Hagan, Veterinary Pathobiology.* Trillions of microbes inhabit our bodies and they are not just neutral passengers. Learn how bacteria in your gut may affect your brain, mood, and behavior.

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**SIGN UP TO ATTEND “BACK TO NATURE WITH NATIVE PLANTS” WORKSHOPS:**

The Native Plants Program offers training workshops that include hands-on demonstrations about topics related to native plants. The workshops are sponsored by the Native Plants Program at Lincoln University Cooperative Extension. During every class staff will offer a 20 to 30 minute talk regarding a special topic followed by orientation to conduct activities of the day. Please bring pruners, gloves, shovels, bucket (optional) and dress comfortably. Some tools will be available during classes. Pollinator observation activities will be done during every session. Data will be collected and sent to the ‘Great Sunflower Project’. All experience levels are welcome! All classes meet on Thursday from 2:00 p.m. to 5:00 p.m. Classes will gather in the Dickinson Parking Lot located on 1219 Chestnut Street, Jefferson City, MO. (Class location will be at the Allen/Foster Native Plant Outdoor Laboratory.)

**Upcoming workshop dates include:**

- Thurs 11/6 (Discussion of 2014 Accomplishments & Thanksgiving Potluck – bring a dish to share)
- Check this [link](#) for additional workshop dates and topics.

**Classes are free but advanced registration is encouraged.** Space is limited. RSVP by email to Amy Hempen, or call Sue Bartelette at (573) 681-5581 or Nadia Navarrete-Tindall at (573) 681-5392.

**SAVE THE DATE! Our next statewide Advanced Training Conference will be May 1-3, 2015, in Springfield, and will be hosted by the Springfield Plateau Chapter. Hope you can make it!**
For updated information on volunteer opportunities, please see the online calendar on the chapter website. Please contact the person indicated for more detailed information on any of the projects. To submit a project for consideration for service hours, fill out a Volunteer Opportunity Approval Form, and email it to MMNVolOpps@gmail.com for consideration.

ASSIST WITH “BAND WITH NATURE” 2ND GRADE FIELD TRIP (Oct 8th, 9th, and 10th)
This field trip is intended to reinforce the 2nd grade nature curriculum. It consists of 6 half day sessions over 3 days. Each half day session will have 4 activity stations: Raptor Rehabilitation, Bird Banding, Quail Survival Game, and Beak Adaptation. The 2nd grade students will stay with their classroom teacher. Volunteers are needed for a variety of duties, examples include assisting the students with their nature courses, helping them learn about birds and the natural world, taking students into the woods to experience nature first hand, guiding teachers and students to each of the 4 activity stations, and helping with set-up and lunch. The event will be held at Columbia Audubon Nature Sanctuary, 3607 Bray Avenue, Columbia. It is being sponsored by Columbia Public Schools, Missouri Department of Conservation, Raptor Rehabilitation Project, Missouri River Bird Observatory, Songbird Station, and Columbia Audubon Society.
Three to four volunteers are needed for each of the 6 half day sessions. You may volunteer for a single half day session or for more than one session. Morning sessions are 9:30 a.m. - 11:30 p.m. Afternoon sessions are 12:00 p.m. – 2:00 p.m. Those who volunteer all day will be provided with lunch. Volunteers should arrive 30 minutes early. Wear standard clothing for outdoor field work, and bring insect repellent and sun screen.
CONTACT: Bill Mees, Columbia Audubon Society, or call (573) 445-7781.
Opportunity Code for Timesheets: CAS

SIGN UP TO HELP AT THE 11TH ANNUAL HINKSON CLEAN SWEEP
Saturday Oct 11th 10am-Noon
Find more information and register to help here.
Opportunity Code for Timesheets: COC
ASSIST WITH NATIVE PRAIRIE SEED COLLECTION
There are many opportunities to assist with native seed collection throughout this summer and fall. It’s an excellent way to learn new species of plants while assisting with prairie restoration in Missouri. See below for a tentative schedule -- locations and times are TBD. Volunteers will travel to different locations within about 45 minutes of Columbia to gather seed for prairie restoration at Prairie Fork Conservation Area. MDC will provide limited transportation; carpooling is encouraged. Chris Newbold will send an email a week or so before each trip. To be included on the list, contact Chris Newbold. You can find excellent pictures and descriptions of wildflowers at this link.

- October 12 – Sunday– Prairie Fork or Auxvasse Glade

CONTACT: Email Chris Newbold
Opportunity Code for Timesheets: MDC

HELP THE COLUMBIA AUDUBON SOCIETY COLLECT PRAIRIE SEEDS
The Columbia Audubon Society will schedule several field trips to nearby prairies for the purpose of collecting seed from native Missouri grasses, wildflowers and other forbs. These trips will familiarize volunteers with nearby prairies. Volunteers will learn to identify various native prairie plants. They will also gain knowledge of the process required to re-establish native prairie. The seed that is collected will be used to replace a field planted in fescue for grazing cattle with a field resembling native prairie. This will restore habitat for native grassland bird species as well as serve as an example of prairie for educational purposes. Seed collection trips will be scheduled the fall months of 2014 and throughout the growing season may-November 2015. Trip dates will be will be dependent on weather and timed to coincide with the ripening of seed for specific plant species. Field trips will last 2-3 hours with 1-1.5 hours of seed collection. Interested volunteers can register and will be informed of specific dates and times as collection conditions warrant.

CONTACT: Email Bill Mees, Board Member, Columbia Audubon Society, or call (573) 445-7781.
Opportunity Code for Timesheets: CAS

HELP IMPROVE PRAIRIE PLANTING AREAS AROUND COLUMBIA SCHOOLS
Fall is a lovely time to get outside and help care for the native prairie plantings in local school outdoor classrooms, with or without students around! Lea Langdon is still looking for a few more volunteers. Please let Lea know if you are interested, and she will add you to her email list for upcoming volunteer opportunities.

CONTACT: Email Lea Langdon, or call 573-864-7647.
Opportunity Code for Timesheets: COCP

Picture Above: Aromatic Aster at Rock Bridge Elementary School Outdoor Classroom
See an interesting video or article online? Please share your link via email to mmndragonflyer@gmail.com, and it could end up in the next issue of the Dragonfly!

Far Fewer Animals Left on Planet Than Previously Thought

Read how Pat Jones hopes to perpetually inspire youngsters with the wonder of nature at Prairie Fork Conservation Area.

Check out these pics from the 2014 Wildlife Photographer of the Year Competition (presented by London's Natural History Museum and the BBC)

See this amazing video footage of the September 6th Phoenix Haboob

Take a walk through the world's most dangerous garden!

This soon-to-be-married couple got photobombed by a herd of deer!

What happens when nature reclaims civilization?

Enjoy pictures from the winners of the 2014 National Geographic Photo Contest

Wildlife thrives in the most dangerous place on Earth

A camper sleepwalks off a cliff!

SEE YOU AT OUR NEXT MEETING:
Thursday November 13th
6:30PM
MU Extension Building

PLANTS ‘SAY’ THE DARNDEST THINGS:
COMMUNICATION IN THE PLANT WORLD
Dr. Heidi Appel
Senior Research Scientist, Plant Sciences
University of Missouri
Plant communication is usually underappreciated because it takes such different forms than our own. Yet there are very active – even noisy – conversations going on in them and with other plants, microorganisms, and insects. We’ll look at many examples of these, including new research showing that plants can detect the feeding vibrations of caterpillars. You can find more information about Dr. Appel’s research [here].

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**NATURE QUOTE OF THE MONTH**
Submit your nature quote/poem/joke to  
[MMNDragonflyer@gmail.com](mailto:MMNDragonflyer@gmail.com)

“Two sounds of autumn are unmistakable...the hurrying rustle of crisp leaves blown along the street...by a gusty wind, and the gabble of a flock of migrating geese.”  
- Hal Borland

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**Missouri Master Naturalists**  
**Boone’s Lick Chapter**  
**2014 Officers**

Please Join Us on Facebook: Missouri Master Naturalist, Boone’s Lick Chapter

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<td>Advanced Training Co-Chair</td>
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<td>Project Approval &amp; Volunteer Opportunities</td>
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<td>Hospitality Committee</td>
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**Chapter Co-Advisors**

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- Bob Pierce  
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To promote awareness and citizen stewardship of natural resources through science-based education and community service.