

2023 Fall Field Day at the Daniels

By Beth Whelan



Ken and Deb Daniels hosted a field day at their residence on Saturday, October 15, 2023. Twenty seven members of Missouri Master Naturalist spent the day learning about Co-ops for deer, grasses and how to plan for property improvements, and Missouri native seeds and plants.

Cole Gander, employed by the NDA (National Deer Association) as a Deer Outreach Specialist for Northern Missouri was our first speaker. He works with other agencies that are involved with conservation, deer populations, diseases, and anything related with deer. One aspect of his job is looking to assist property owners who are interested in deer herd management and assisting with those willing to provide areas for youth hunts. Cole spoke briefly about quail as well.

Our second presenter was Jamie Ebbesmeyer. Jamie has worked with MDC for 20 years as a private land specialist. He provides a very specialized service as he learns more about the land owner and works closely with CRP acreage. As we took a walking tour of Ken and Deb's property, Jamie discussed different grasses and plants already established on the property. We took a short walk through the woods, and he pointed out several factors of the well established forest.

A delicious carry-in meal was enjoyed by everyone, and a wide variety of dishes were available. Smoked beef, goulash, vegetable soup, cinnamon rolls, apple crisp, doughnuts, cookies, scalloped corn, baked beans, pasta salad, summer sausage and crackers, and chicken wings. It was all incredible!

Our third speaker was Jennifer Eggemeyer from Heartland seeds. She provided many samples of native plants and seed pods. She explained about the cleaning of seeds, and what processes were best for gathering seeds, preserving seeds, etc. as these samples were examined by participants.



On December 2, a group of six curious Master Naturalists made their way up Hwy 61 to Clark County, Missouri.

Why were we curious?

We were asked to help repair a turtle fence.

Certainly, none of us were familiar with turtle fences. When we got to our destination, Chris Shulse, Environmental Compliance Manager from Missouri Department of Transportation, was there to explain the Turtle Fence Project and it all began to make sense.

This section of fence along the highway was installed about 20 years ago as a barrier to prevent turtles from entering the highway. There are sensitive wetlands in this area around Goose Pond, which is owned by a local farmer. These wetlands are home to two species of turtles that are on the state's endangered species list—the Blanding's turtle and yellow mud turtle. The fence is a .8 mile chain link fence with barbed wire at the top and a fine mesh material at the bottom that the turtles can't break through.

SAVING TURTLES

BY DENNIS HONKOMP

Our task was to clear limbs and brush off the fence and mend sections of mesh that needed repair. We managed to clear the fence but still have some work to do to repair the damaged mesh. Chris will need our help during the winter to complete the repair work.

This is an important task because the US Fish and Wildlife Service is planning to conduct a population survey in the spring to help determine if the Blanding's turtle and yellow mud turtle warrant listing on the federal endangered species list. It is rewarding to know that our work is so meaningful. Chris could not thank us enough and looks forward to working with us in the future. It looks like we have a solid partner in MODOT.

Partnerships drive conservation successes!



Blanding's Turtle

Yellow Mud Turtle



The Missouri Master Naturalist program is a community-based natural resource education and volunteer service program for adults, sponsored by the Missouri Department of Conservation and the University of Missouri Extension.

Its purpose is to develop a corps of well-informed volunteers to provide education, outreach and service dedicated to the beneficial management of natural resources and natural areas within their communities for the state of Missouri.

The Mississippi Hills Master Naturalist Chapter is located in Hannibal, Missouri, and serves the surrounding counties. We are involved in citizen science, community projects, nature interpretation, and community nature education.

A Year of Hiking

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By Randy Hill

My sore back started all of this. Seeing fellow Master Naturalists at the group meetings was a highlight of my month but the chairs took their toll. Fortunately an idea took shape. Could I find a way to wander around in the woods each month and rack up a few volunteer hours at the same time? Could I also get some of the wilder members our little group to join me?

This idea had promise but the planning and communication requirements were too much for me to take on alone. I was going to need help. I went to find a man who had never turned down a chance to wander through the woods – Matthew Harris. As suspected Matthew joined without hesitation. And just like that, a spit shake between agitators followed by some paperwork to appease senior brass, we found ourselves with a real life hiking group.

The rules were deceivingly simple. The hikes were open to MHMN group members and the general public. On the 3rd Saturday of each month we would meet at a predetermined trailhead. At 9 a.m. Matthew and I would "lead" the group. While finalizing these details we couldn't help but wonder, would anyone else join us? Fortunately our families could be pressed into service. My wonderful wife could be counted to join us and Matthew would bring at least a smattering of his courageous kids.

As a sign of the impeccable planning we would become known for, we scheduled the first hike for February. On the morning of the 18th we assembled at the northern most Lick Creek Trailhead. Any fears of low turnout were put to rest. Our hiking crew was made up of family and MHMN Members as well as a few nonmembers. Shortly after 9 a.m. we embarked upon the trail. Soon the gravel lot and our cars were gone behind us and the winter woods took us in.

The weather was brisk but our movement kept us warm. Our path was well marked and cleared, making both the travel and conversations come easy. Moss, If you have suggestions or would like to lead a birds, and hiking trails were the main topics du jour but there was plenty of just learning more about each other. Several of the non-MHMN hikers had never heard of our group. They were sufficiently impressed with our uncommon knowledge of mollusks, bats and fish hatcheries. In no time at all we had hiked our loop and were back at the trailhead with the majority of our group intact. Success!

Each month the calendar would turn and Matthew and I would find a new shaded area of the map to explore. Several brave souls would meet us at a trailhead. Like a confusion of guineas we would march into and return back from nature. By year's end we found



ourselves spelunking under Hannibal, Missouri, clearing trails with folks wielding chainsaws on horseback, and floating down the Salt River in an armada of kayaks led by Jan Golian herself.

After all of this we are obliged to give a word of thanks. Thanks from Matthew and I to all of you who helped make our hiking group a thing. We are sincerely grateful to all of those who braved a hike or helped get the word out each month.

Lastly, a confession. At the beginning of all of this Matthew and I made a side agreement. We felt the hikes might be more interesting if we occasionally appeared lost or unsure of the exact location of the trail we were on. To anyone we may have fooled, our apologies. This was purely theatrical.

Recap of our 2023 Hikes:

- February 18th Lick Creek Trail
- March 18th Mark Twain State Park, Dogwood Trail
- April 22nd Stevermark Woods, combined with MHMN group plant and bird ID
- May 20th Sodalis Nature Reserve, Pirate Ridge Trail
- June 17th Deer Ridge Conservation Area, trail explora-• tion work
- July 15th Cameron Cave Tour, Hannibal MO
- August 19th Salt River Kayak Trip, Reregulation Pool
- September 16th & 23rd Lick Creek Trail Cleanup with NEMO Back Country Horsemen
- October 21st Wakanda State Park, multiple trails
- November 18th Long Branch State Park, Bee Trace Trail
- December 16th- Frank Russell Rec Area, Audubon **Christmas Bird Count**

2024 hike, contact Randy Hills or Matthew Harris.



The Woodland Path

By Anne Coleman

What is it about taking that first step down the trail heading into the woods? Regardless of the time of day and the time of year, your senses are filled with the smells—the earthiness of new growth or fallen leaves; the sounds—scurrying critters, the hum of insects, or falling snow; the sights—the white flag of a deer running away, trees of all sizes and shapes or sun filtering through the leaves catching on dust motes dancing in the light. Yes, the woods hold so much of our memorable experiences, sometimes almost spiritual in nature and offer us new ones every time we take that first step down the path.

The woodlands give us so much in practical ways too. Oxygen exchange, food, warmth, and materials for shelter. And not just shelter for us, but for all of nature from the mycelium in the root of the trees to the woodland animals and the birds who flit from limb to limb of the trees over our heads. With so much good coming from the woodlands and forests, it is important to ask, how do we give back?

If you attended our November meeting, you heard Vanessa speak on "Forest Management: quality renewable resource— Technical Woodworking, NMU". We learned a lot about the Janka hardness scale and choosing the right wood for your needs. She also spoke about woodland management and the growth needs of oaks for successful regeneration. If you missed her presentation, hopefully there will be future opportunities to hear Vanessa speak on woodworking and woodland stewardship.

One of Vanessa's suggestions was to work with a land manager to help assess your woodlands for better management of this precious resource. See links at the end of this article for more information from MDC.

Recently I attended a GrowNative! webinar with Robbie Doerhoff, Forest Entomologist for the Missouri Department of Conservation, and she covered a few of the issues that can affect woodlands in Missouri:



- No management
- Heavy forest grazing
- Over-mature black oaks
- No regeneration
- Shallow, rocky soil
- Severe ice damage in 2007
- Severe drought in 2012
- Cedars & invasive plants

Soil Type

Tree age

Defoliators

Invasive species

Diseases

Borers

Tree stress by the following factors can make trees more susceptible to pests and initiate tree decline.

- Storm damage
- Drought
- Excessive Rainfall
- Late frost
- Herbicides
- Wounding
- Another factor she discussed was the wet to dry pendulum swing pattern that we have seen more of in recent years. We've had several years with periods of drought which are tree stressors and then those are followed by heavy, concentrated rainfall. Tree roots need oxygen and when the soil becomes saturated—especially clay soil the roots are affected and can stress the trees further.

Doerhoff also discussed issues such as Oak Decline, Rapid White Oak Mortality (RWOM), and Invasive species. All of these issues should be managed before, during and after tree stand harvest.

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The Woodland Path—Continued

Her primary message was that Forests and Woodlands need management, and she shared the following guidance on Woodlands Management:

Consult with a professional forester--

- MDC: Call before you cut program
- Check with your state's forestry agency

Make a plan based on goals and site--

- Not every acre will support white oak
- Keep soils in mind
- Take photos and be patient

Increase Tree Vigor--

- Maintain appropriate stand density
 - Use thinning and prescribed burns ٠
 - Work with a forester to come up with the plan since the appropriate stand density is dependent on the site and both forest and soil type
- Promote species diversity
- **Reduce stress**

Be on the lookout for invasive species-

- Manage invasive plants
- Report insect disease issues

One last area of Woodland management of interest is that we often don't think woodlands are significant to our pollinators. Prairies and native gardens get most of the attention when discussing how to support pollinators. However, a new USDA study discusses why forests are incredibly important to pollinators and how forest pollinators can provide substantial economic benefits to neighboring agricultural areas.

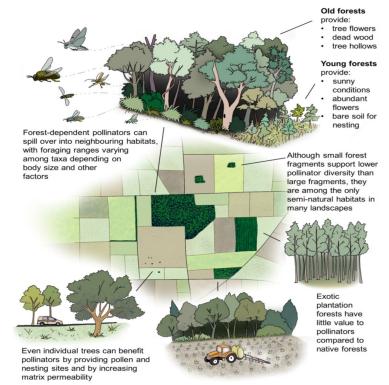
"There's a common misconception that bees don't live in forests," says USDA Forest Service researcher and lead author Michael Ulyshen. "Addressing that misconception is one of the main drivers for this review."

Forests are important to many pollinator species, which require dead wood and other nesting habitats found only in forests. For example, fallen trees actually provide extremely valuable, and often overlooked, habitats. Like in their upright phase of life, fallen trees provide food and shelter for a wide variety of organisms. When a tree falls, it marks a transition in the tree's life and its ecological role - not just an ending, but also a beginning as it provides a food source and habitat for a diverse population of insects and animals.

As Ulyshen discusses in the review, forest pollinators play a huge role in pollinating crops and increasing yields. Additionally, bee diversity has a positive effect on agriculture by supporting a variety of crops. This highlights the importance of sustaining the diversity of pollinators.

During restoration and conservation activities, keeping the needs of forest pollinators in mind will benefit adjacent crop fields. Even retaining individual trees can help bees.

"Trees provide shelter from extreme conditions for traveling bees that are sensitive to overheating," Ulyshen says. Trees may also provide pollen, nectar, and places where bees can nest. Woodlands are critically important to pollinator diversity and enhance pollination in adjacent crops as they provide pollinators with a wide variety of flowers, nesting sites, and other resources that are generally absent from other land cover types.



Forests serve as refugia from pesticide exposure

Forests are an important part of mixed-use landscapes worldwide where they enhance regional pollinator diversity as well as pollination services in adjacent habitats. Ulyshen, Michael et al, 2023.

The message is to love your woodlands & forests and take time to plan for their management. Appreciate the diversity you find there, even the twisted and odd-shaped trees. Dead trees should also be appreciated as they are actually full of life and are part of the big circle of life that we all are part of.

I hope your next step down the woodland path fills your senses and that you also have a sense of accomplishment in knowing that you are doing good work for the healthy survival of our woodlands.

Happy trails!

Additional Resources: Integrating Woodland and Wildlife Management Practices on Your Property:

https://extension.missouri.edu/publications/g9415

Find a local MDC forestry and or land management specialist: https://mdc.mo.gov/contact-engage/local-mdc-contacts

For Timber Stand improvement:

https://mdc.mo.gov/your-property/improve-your-property/habitatmanagement/forest-and-woodland-management/forest

For more information on Tree Health Stressors:

https://mdc.mo.gov/trees-plants/forest-care/forest-health-news

For information from the study "Forests are critically important to global pollinator diversity and enhance pollination in adjacent crops" by Ulyshen, Michael et al, 2023: https://www.fs.usda.gov/research/treesearch/65931

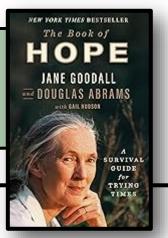


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By Carolyn Trower

The Book of Hope

By Jane Goodall and Douglas Abrams



Like most grandparents I sometimes fear the future my grandchildren will live in will be one of endless wars, world-wide poverty, pollution, and the devastation of

anything green. Pessimistic thoughts for one who considers herself an optimist. So, when the book club chose Jane Goodall's *The Book of Hope* I was skeptical. I have always admired Goodall's work and often used her work when I taught. Soon to be ninety, Goodall has been in the field all over the world for decades. She's seen poverty, destruction of the forests, and annihilation of animal species. She's witnessed the crumbling of a people's fragile existence and seen the pain in an animal's eyes at the hands of men fueled by greed and ignorance.

Hope, I thought, how can one woman who has seen so much to the contrary believe there is hope?

This book shows the reader just how she has maintained a belief in the intelligence and resiliency of humans. Years of watching small groups of people taking back their pastures, their forests, and their livelihoods fed Goodall's belief in her fellow man.

Throughout the book, Abrams questions and listens as Goodall shares stories of endless visits with the wise and the elderly from all over the world. She shares wisdom from the Native Americans and the determination of the children and young people in Africa and South America to make their homes places of growth and peace once again. When asked about statistics she replied that people don't remember numbers, but they do remember stories. The pages are full of stories about small victories on a grand scale.

One exceptional beacon of hope was her story about the creation of the Roots and Shoots program. Now spread to many countries these programs start with children. The program provides knowledge and materials for young people to take back impoverished communities. The ripple effects of such a program spread to the adults and ensures the legacy will continue. The children grow into adults who continue to be wise stewards of the environment and who will then nurture the program's ideals in their children.

Maybe my grandchildren will see a better world. Maybe they will be part of the solution. Goodall believes hope rests in the hands and hearts of our young people and as adults, we must be their guides and guardians.

Besides, any scientist who uses The Lord of the Rings as an example of

"fighting the good fight" is one whose battles inspire hope.



MHMN BOOK CLUB

By Katie Johnson

Naturalist and nature writer John Burroughs once said, "I go to books and to nature as the bee goes to a flower, for a nectar that I can make into my own honey."

This sentiment resonates strongly with me, as I have always found great joy in both books and nature. In the past, these interests were kept mostly separate (unless you count listening to audiobooks while hiking), but I recently discovered a way to combine my passions with the formation of the Mississippi Hills Master Naturalist Book Club.

I have always wanted to be part of a book club, but I was never sure how to go about it. Do I join a club that already exists and risk being a third wheel? Do I start my own extremely small club, consisting only of me and my one friend who reads? Nothing felt quite right until I joined the Master Naturalists and discovered a group of individuals all eager to learn more about the natural world. I heard many naturalists mentioning books they had recently read, and I suddenly knew exactly how to fill the book-club-shaped-hole in my heart.

The MHMN Book Club held its first meeting the evening of December 19 at Java Jive. Ten naturalists met to discuss *The Book of Hope: A Survival Guide for Trying Times* by Jane Goodall and Douglas Abrams. This book was a heartening read about the positive impact we can each have on the future of our planet. It encouraged and inspired our group's readers. I was uplifted not only by the book itself, but even more so by the sense of community I felt at our meeting. Hearing other naturalists' opinions and learning from their thoughts and ideas was a wonderful experience. It is my hope that as we continue to read various titles we will learn not only from the books themselves, but from each other as well.

Moving forward, the MHMN Book Club plans to meet quarterly in March, June, September, and December. Book picks and meeting times will be announced at our chapter meetings. If you have suggestions for future book picks or meeting locations, let me know. I am looking forward to reading and learning more with you all.

Book Choices for March's Meeting

Send your vote to: TheRealKatieJohnson@gmail.com before January's chapter meeting!

Nature's Best Hope: A New Approach to Conservation that Starts in Your Yard by Douglas Tallamy A Walk in the Woods: Rediscovering America on the Appalachian Trail

by Bill Bryson The Secret Network of Nature: Trees, Animals, and the Extraordinary Balance of All Living Things

by Peter Wohlleben The Comfort of Crows: A Backyard Year

Margaret Renkl

Beaverland: How One Weird Rodent Made America

by Leila Philip

Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants by Robin Wall Kimmerer

That's a Wrap for 2023 and New Beginnings for 2024!

By Anne Coleman

Our Christmas party was well attended with 76 attendees. Many thanks to Barb Holmer, Tracy Fuller and everyone who contributed to organizing the event. The food was delicious, the games were fun, the presents were delightful, and the chance to relax and visit with everyone was the best gift of all.

As we say goodbye to 2023, we look back with joy at all of the activities that made up our year. Although as naturalists we know that our work is never ending and that each activity or event is part of a circle that is ongoing. Some of our work has a place where we "picked it up" and then again where we have "left it" for now. Nature fills in the gaps in between with her own activities, and we are just encouraging our part of the world down the path in which we are led.

We want to thank Vanessa Laatsch, our former president, for all of the hard work and leadership that she provided in 2023. Under her leadership we almost doubled our membership, increased the number of committees which focused on areas of interest that our members could participate in more fully. She kept us on task at meetings, but encouraged everyone to be engaged and to share their interests with others.

Our new president, Theresa Casey, takes over the reins for 2024, and we look forward to working together under her leadership. Theresa is known for her education and outreach projects, and so it may follow that we see some focus on this very important aspect of our work. The more we share what we have learned about the natural order of things, the more people are excited to continue learning, sharing and join in doing the work that is needed.

Our rewards often come down to the smiling faces of children who are eager to learn more about nature, the blooming natives in an area once overtaken with invasive species, the call of wild turkey or bobwhite quail in the habitat that has been restored, or the newly main-tained hiking trail that helps people stay healthy and get a dose of nature's medicine!

The new officers that were elected for 2024 are as follows:

President—**Theresa Casey** Vice President and Chair of the Advanced Training Committee—**Dennis Honkomp** Treasurer—**Randy Hilger** Secretary—**Jan Golian**

Thanks to all who agreed to serve in these important positions for the chapter!

A recap of the many projects and events we held in 2023 can be found in the chapter's Annual Report. Be sure to read through that as well as the state's Annual Report when they are released. Thanks to everyone who has or will be participating in our work for 2024!



Former Presidents (left to right): Vanessa, Gale and George.



New Officers (left to right): Randy, Dennis, Jan and Theresa.

Nature Notes From Theresa

Happy New Year!!

I am looking forward to leading our wonderful group. For new members, I grew up in a small town in Indiana and spent a tremendous amount of time outdoors as many from my generation did. I enjoyed being in nature and encouraged our four children to do the same – climbing trees, hiking in the woods, observing nature. I retired from teaching high school science and during my tenure we took advantage of nice weather to learn outside whenever possible. I exposed my students in Citizen Science programs that you may be familiar with – Stream Team and Forest Keepers. I emphasized to them that information that they collected would contribute to a statewide program that could make a difference for the environment.

Later in my teaching career, I heard about the new Master Naturalist program but the training was too far away (Jeff City) so thought I would wait until after I retired. A few years after retirement, I read that the course was going to be held in Hannibal, and I signed up immediately because I really missed interacting and teaching with my students about the environment and felt this might be a way for me to reconnect with something I enjoyed.

I recently read Jane Goodall's "A Reason for Hope" with the book club (if you haven't read the book, it is a good read). I feel that many of her ideas about nature and our interaction with nature could be applied to our mission in Master Naturalists and would like to share a few with you.

"You cannot go through a single day without having an impact on the world around. What you do makes a difference, and you have to decide what kind of difference you want to make." (Jane Goodall) As Master Naturalists, our goal is to educate citizens of Missouri about our environment, conservation,



and management of natural resources. Every time you provide a program or a service for the public, you strive to illustrate this goal and you do make a difference by educating and influencing fellow citizens. The numerous prairies that have been planted and programs that have been requested and provided are a testament to the goal of Master Naturalists. We are making an impact in our community and making a difference.

As we begin this new year, contemplate on how you would like to make "an impact on the world around you" in Master Naturalists. Where are your strengths? What would you like to learn more about? Where do you think we can make a difference? Jane Goodall also referred to what a person does as only a drop compared to the million drops in the ocean. When an entire group (MHMN) is working together and "pouring their buckets" into the same container, imagine what we can accomplish.

I hope this New Year brings you..... Courage to try again Passion for doing what you love Ambition to aim higher Resilience to overcoming obstacles Humility to learn from others Kindness for yourself and others. Anonymous

Missouri Master Naturalist Core Training Planned

Our core training committee is working through the details for our next class to be held in early 2024! Important dates are: Introduction & Orientation— March 5th; Registration Deadline— March 19th; Classes will begin on April 2nd and occur every Tuesday through June 30th at M.W. Boudreaux Visitor Center at Mark Twain Lake. Saturday field trips are also planned. Registration information and a link to register will be shared as soon as it is available.

We need to fill this class so be sure to share with your family, friends, neighbors and invite them to join us!

IMPORTANT REMINDERS for 2024!

Annual Dues. The dues for our chapter should be paid by January 31st. They are \$20 and need to be paid by check made out to "MUE, Marion County". Please give your check to Randy Hilger.

Master Naturalist Annual Code of Conduct. Please be sure to sign the MUE Annual Code of Conduct for 2024 by simply logging into the MHMN Website and clicking on "Agree" and "Submit" when presented with the form. This must be signed every year! Anne Coleman will have paper copies at the January meeting, but it is preferred that you sign it on-line.

HLGU Annual Code of Conduct. Please be sure to sign the HLGU Waiver for 2024 by printing the form you can find under "Chapter Forms" on our website. Theresa Casey will also be sending an email with the form attached. Once printed & signed, please turn them into Theresa Casey. She will also have paper copies at the January meeting.



By Kathi Moore

Greetings Mississippi Hills Master Naturalist!

I am excited to see the chapter growing and flourishing. In the last year, new committees have taken shape with new leaders stepping forward to chair these committees. As President, Vanessa has done an amazing job inviting new members and old to step into leadership positions. As the chapter grows, it is important for all members to be familiar with the foundational documents that outline chapter operations.

These documents include the Mississippi Hills Bylaws and Chapter Manual, along with the 2023 State Chapter Manual. The first Core Training class created the Mississippi Hills Chapter foundational documents and put much thought into how the chapter should operate. With that said, they did not have a crystal ball to reveal all the chapter may encounter. So, these documents could be considered living documents that may need tweaking from time to time. When everyone is familiar with these documents, the chapter benefits. They are intentionally specific in some respects and vague in others. The group creating them had amazing conversations about allowing the chapter to be able to make decisions as technology improved and the world changed, but at the same time create processes to help stabilize the chapter through those same changes.

As the chapter grows, the Bylaws and Chapter Manual create the foundation for operation. These documents can always be found on the Chapter's website.

Happy new year, Kathi <u>Mississippi Hills Bylaws.pages (missourimasternaturalist.org)</u> <u>Mississippi Hills Manual 1st Edition 2019.pages (missourimasternaturalist.org)</u> <u>MNStateProgramManual.pdf (missourimasternaturalist.org)</u>

Winter Sowing Workshop

By Anne Coleman

In early December, Pam Whiston led a Winter Sowing Workshop at the MDC facility in Hannibal for our members to learn more about this method for planting natives. She provided us with the list of supplies and an educational handout, and we provided the milk/water jugs, potting soil, tape, markers, tags and seeds. We all contributed lots of questions, stories of plantings gone wrong and laughter. Yes, there was a lot of laughter as we tried our hands at cutting the jugs, filling them with dampened



soil, planting shared seeds and taping the jugs shut to create mini greenhouses. Thanks to Pam, we learned a lot using her hands-on method for the workshop.

For the full Workshop guide including lists of plants and detailed steps, see "Winter Sowing Workshop" on our website at:

https://www.mississippihills.missourimasternaturalist.org/OutreachEducation/PollinatorGardens/ WinterSowingWorkshop.pdf

Pam is also planning to hold the workshop again on January 16 at 6 pm at the Ralls County Library in Center MO. This workshop will be open to the public, so invite your friends, family and neighbors to get their hands dirty with Winter Sowing and join in the fun!

Missouri Master Naturalists at Work



Spotlight on Species

The Barred Owl

MISSOURI MASTER NATURALISTS 2024 CERTIFICATION PIN

Description :The large eyes and rounded head of this large owl help identify it immediately upon sight. Barred owls have a dark barred pattern on the upper chest and dark streaking below. Both sexes have the same brown upperparts with irregularly white spots. In flight, the observer may notice the owl having six or seven bands of lighter brown or grayish tan coloration. Primary feathers will have squarish lighter spots and tail will appear to have clean defined bands with lighter brown in flight. Barred owls lack feather tufts (so nothing to resemble false ears) on the head. They have grayish white eyebrows highlighting their dark irises and black crescent at the anterior of the eye, which appeal to naturalists and wildlife photographers when the raptor focuses on the observer.



Range :They are a resident of the Pacific northwest region of Oregon, Washington to SE Alaska. They inhabit southern Canada and eastern United States with western Minnesota, the eastern regions of Nebraska, Kansas and Oklahoma south to Texas (absent or scarce in western Texas and southern tip). They occur statewide in Missouri.

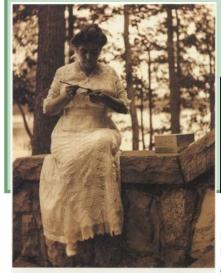
Population Status: The population of barred owls in Missouri seems to be stable and they are easy to manage in species and age diverse forests. Improving wooded stream corridors benefits barred owls as well as a suite of other species. Having some blocks of habitat of at least 40 acres or more with connecting corridors allows barred owls to fulfill an important niche as one of the apex predators. **Diet** :Barred owls are highly opportunistic, and the proximity of creeks, swamps, or a wooded lakeshore will influence the number of small snakes, frogs, crayfish, salamanders, and fish in their diet. Much of their prey will be small mammals (immature rabbits and smaller in size e.g., voles, shrews, deer and white footed mice). The birdlife remains found in owl pellets are usually songbirds and rarely larger than a medium sized woodpecker. However, there are records of screech owls and northern flickers being taken.

Habitat :They are non-migratory and loosely stay in the same habitat during nonbreeding and past nesting season. But they strongly advertise and/or defend their home range during pair bonding, establishing territory, nesting and brooding the offspring. Ideal habitat consists of relatively heavy, mature forests ranging from thick upland woodlands to riparian forest and wooded swamps. Natural habitat needs the dense leaf cover (especially for roosting) and maturing trees having natural cavities for nesting. Quality of habitat and prey density influence the size of defended (patrolled) territory; it is usually about one square mile.

Reproduction: Barred owls are a single brooded species and like other Missouri owls (Great-horned and screech owls) they are among the earliest nesting. Both male and female stay on territory the whole year, unless food becomes insufficient, then it is the male who will temporarily disperse first. The female seemingly to have a stronger bond to the established home range. Territorial owls will become more vocal in December and January. Courtship of the male approaching the female with bowing and wingspread behaviors occur throughout the winter leading up to nest selection in late winter.

The preferred nesting site is a tree cavity, often forming where a large tree branch fell. Occasionally barred owls utilize an unoccupied large bird's nest. The barred owls exhibit little if any nest building behavior and most cavity nests only contain a few owl feathers; nesting in a red-shouldered hawk nest or other abandoned nest may have a little moss, grass, or pine needles. Two or three eggs are laid, often a day apart. Incubation is performed by the female (rarely by the male). The eggs hatch in about 30-33 days and then both parents contribute to brooding the young (owlets). By the third week the owlets are growing fast and replacing their natal down with new down feathers and the start of wing feathers can be observed. At some point owlets leave the nest before they can fly. How early they leave depends on cavity size and how crowded the nest is for the brood. If owlets fall to the ground, they can usually climb their nest tree if it has rough bark. The owlets will learn to fly at twelve to fifteen weeks old and stay with their parents. By September the young may still be in vicinity of the parents, but they are able to hunt on their own and will disperse once parents start vocalizing and defending the late autumn territory once again.

OUR ENVIRONMENTAL HEROES



Gene Stratton Porter

By Kim Caisse

Gene Stratton Porter grew up on a working farm in Indiana, and spent her childhood observing birds and bugs intensely both on the farm and in nearby woods. She married a wealthy businessman who profited from the timber and oil drilling that brought them to live near her beloved Limberlost Swamp, even as the habitat was being destroyed by these same businesses. Her life embodies the contradictions and complexity of all conservation work.

GENE STRATTON-PORTER

She continued to spend long hours in the Limberlost observing birds, bugs and plants in situ in the swamp. Her daughter gave her a camera as a Christmas present one year, just

as she was beginning to write nature articles for magazines. Her frustration with the bad illustrations that were paired with her articles lead her to commit to photography as a serious endeavor, and this lead to her first book, <u>What I Have Done With Birds</u>, which was pioneering in that it was illustrated entirely with photographs of live, wild birds. This was at a time when the norm in nature illustration and photography was to work from dead subjects.

She continued to write books and articles sharing her observations and encouraging others to do the same. Her publisher told her fiction was far more profitable so she started writing novels, incorporating not just her appreciation of the beauty of pristine environments, but also with a keen sense of presenting the preservation of these areas as beneficial to humans commercially as well as aesthetically.

Her plots include: a one armed orphan who gets employment as a watchman to prevent timber theft, the sale of mounted, framed moth specimens, and a timber worker who also does wood carving, incorporating motifs derived from flora and fauna of the same woods. This was at the very peak of the highly utopian and idealistic and yet also wildly profitable Arts And Crafts movement in the decorative arts worldwide.

During this time the 13,000 acres of the Limberlost, also known as the Loblolly Marsh, were being drained and turned into farmland. Porter and others were lobbying for legislative action to protect these and other wetlands, unsuccessfully.

Her conservation efforts and her fiction writing were permeated with the awareness that working with, not against business interests was the only path forward. She quickly became wildly successful as a fiction writer, with estimates of her readership ranging between 25 – 50 million, at a time when the US population was between 80-114 million, between 1909 and 1924. In her records were found fan mail from soldiers in World War One, saying reading <u>A Girl Of The Limberlost</u> and the nature descriptions in it, "Brought me back to myself again."

This success increased demand and readership of her serious writing about nature and conservation, and she wrote regularly for the most widely read magazines of her time, including Ladies Home Journal, McCall's, and Good Housekeeping. Her fame allowed her to boost the readership of much smaller conservation focused magazines that were starting up at the time.

She started her own Hollywood movie production company which produced four films based on her books and was one of the top five most financially successful film production companies of the silent era. The financial success of her books and films gave her the leeway to purchase 120 acres of land in the Sylvan Lake area. As wetlands nearby were being drained, she hired workers to join her in removing rare species ahead of the drainage and transplanting them to her land, later known as Wildflower Woods.

She was a founding member of the Izaak Walton League, a conservation organization founded by wealthy fly fishing hobbyists in Chicago and she frequently wrote for its magazine, "Outdoor America". In this magazine she also published an "Open Letter To Calvin Coolidge" opposing a plan to drain upper Mississippi river bottoms. A quote exemplifies her passion and her understanding of the complexities of conservation and the needs of economic forces: " No greater lie ever was told to farmers and to agricultural interests than the lie which states that land which has been water soaked since the dawn of creation contains sufficient humus and nitrates for agricultural purposes."

Her fiction is syrupy, sentimental and melodramatic, and that is what sold at the time—in LARGE numbers. And she knew it and used it to get her conservation message across to a massive audience in the US and abroad. At a time when everyone assumed that all swamps absolutely should be drained no question, she communicated to a massive audience in the US and abroad that wetlands and other natural environments are precious, and very much worth preserving, for aesthetic, spiritual and commercial reasons.

Christmas Bird Count 2023

By George Wisdom

I want to thank all who came out to count birds. I believe we all learned more about birds and maybe saw a bird we had never seen before. The day was a little rainy, but our volunteers were still enthusiastic. A great diversity of species (57) were seen. Hopefully, next year the weather will be a little better and our teams can spend more time enjoying being outdoors.

We had a great bird count. A total of 25 volunteers participated this year which is the highest attendance we have ever had. Some really interesting facts were that the wild turkey numbers were way up (86) and sightings of pileated woodpeckers were up as well (14).



Below is a summary of the results from the 2023 count. Bird count summaries for 2023 and previous years for comparison can be found on our website:

Bird Count Summary Report

Bird Species	Count	Bird Species	Count	Bird Species	Count
American Coot	2	Downy Woodpecker	13	Purple Finch	4
American Crow	151	Eastern Bluebird	55	Red-bellied Woodpecker	16
American Goldfinch	58	Eastern Meadowlark	4	Red-headed Woodpecker	10
American Kestrel	2	European Starling	384	Red-shouldered Hawk	6
American Robin	92	Fox Sparrow	13	Red-tailed hawk	8
American Tree Sparrow	10	Golden-crowned Kinglet	2	Red-winged Blackbird	4
Bald Eagle	18	Green-winged Teal (American)	3	Ring-billed Gull	16
Barred Owl	1	Great Blue Heron	1	Ring-necked Duck	2
Belted Kingfisher	1	Hairy Woodpecker	14	Rock Pigeon	1
Black-capped Chickadee	22	Herring Gull	3	Rough-legged Hawk	1
Blue Jay	148	Hooded Merganser	15	Sharp-shinned Hawk	1
Bufflehead	10	House Finch	6	Song Sparrow	3
Canada Goose	218	House Sparrow	21	Tufted Titmouse	197
Canvasback	22	Mallard	9	Turkey Vulture	2
Carolina Wren	7	Mourning Dove	175	White-breasted Nuthatch	18
Cedar Waxwing	318	Northern Cardinal	64	White-throated Sparrow	5
Common Grackle	218	Northern Flicker	17	Wild Turkey	86
Cooper's Hawk	1	Northern Harrier	2	Wood Duck	2
Dark-eyed Junco	195	Pileated Woodpecker	14	Yellow-bellied Sapsucker	1

Total Birds Counted	2692
Total Species Counted	57
Total Hours Observation	44
# Miles	299
# Participants	25





MEET Anne Coleman

By Bella Erakko



Easily recognized at our meetings and in voluntary efforts, Anne Coleman weaves her hair into a single down-to-the-waist braid. But even as a child, even when her mother preferred short well-managed hair, Anne began to braid her life into the fields, meadows, and trees where she lived in St. Charles, when it was a small town.

"I was the only girl with three brothers. I grew up building forts and climbing trees. I was quite the climber and fell out of a few. When my brothers picked on me too much, I would sit under this huge oak tree and tell the tree all my troubles. I can still remember that tree. I gain strength of spirit in the woodlands. "

While many of our master naturalists have parents who also thrived in nature, Anne's were more practical. "We didn't go camping as kids or do outdoor activities as a family. But my mother was always in the garden. I still get nostalgic when working in mine... the smell of the earth and dirt under my fingernails."

"We were not a wealthy family, not for college. But in my last year of high school, I took a technical class, learning to use the keypunch machine." (I had to laugh at this. The very first computer programs were not typed but punched, letter-byletter onto a card deck, which was then placed into a card reader. Hell knew no fury worse than a dropped card deck!)

A lifelong learner, Anne doggedly took two classes/semester, getting a degree in Information Technology after 20 years. Married, with two boys, she got an at-home job with Western Publishing Company (known for Golden Books), typing and proofreading until the boys were both in school.

During that time, the family lived in Weldon Spring, their house five miles from the sites of two abandoned manufacturing operations—one a TNT/ DNT Ordnance Works built during the 40s during World War II and a second facility that processed uranium ore for the Atomic Energy Commission in the 50s and early 60s. Plans were underway to make it a burial site for hazardous and radioactive waste from five states. She, and other women, wondered what would happen to their drinking water. Banding together as concerned citizens, they went on a mission. "I learned about hydrology and geology, karst topography and groundwater flow, environmental impact statements, and how politics work. I think we had a positive impact on the final plans." Today, it's an interpretive site, with the toxins contained within a 41-acre disposal cell.

Remembering that time, Annie learned "people can work together and having a relationship with our earth, be good stewards of it. Yes, we can make all these chemicals but at the end of the day, how do we decommission these manufacturing sites?"

Anne retired in 2018 from managing large software development teams in the information technology field where, she laughed, "I *was* a professionalmeeting-go-to'er." Moving to Ralls to be near her husband Chuck's family, they live near Mark Twain Lake, walking and hiking nearly every day, and camping once a month during the summer. "Missouri has so much to offer. We have a love of creek exploration," she enthuses, "I collect rocks. Missouri was once covered by seawater, leaving an abundance of fossils, corals and pretty rocks. I've also found arrowheads and even some pottery. For Christmas, we cut geodes with the grandkids." She can see an emerging naturalist in one granddaughter who particularly enjoys catching frogs in their frog pond.

One day her husband clipped an article about an upcoming Master Naturalist's class. She met Bob Kendrick at Robert Hendrickson's native plant seminar, and it just seemed like a right fit. "I'm a lifelong learner, and I'd get to meet new people, volunteer, and be a better steward of the Earth."

Stewarding for Anne often means walking slowly, stopping to examine a flower or fungi, using iNaturalist to research what she finds. "I'm kind of slow ... more of an explorer than a hiker." Though she has loved their many trips to Colorado with the mountain trails and vistas, Missouri is her favorite.

Perhaps her willingness to explore every aspect of nature can be summed up in one memory ...

"We were canoeing down Eleven Point River, our boys in one canoe, my husband and I in the other. It was early morning. Heavy mist hung over the river. We launched but could not see much of the river ahead. As we paddled, we began to hear the first rapids. The noise of the water ..." They didn't know what lay ahead.

Being a good steward of the Earth is like being in that canoe. Nature has secrets we have not even discovered, but we enter in with respect, with our canoe, trusting somehow that this misty almost mystical path, is really our true way, our braided encounter, with

Home.

OUR PRAIRIES

Seven Prairies Per Year For Seven Years

Seventeen Master Naturalists met at Ann Humphreys for our last prairie seeding event of the year. This is our 5th season of this work clearing, treating, seeding and restoring prairies. We are on track to meet our goal of seven prairies for seven years. In fact, we worked on eight in 2023 and had to turn down requests. We are looking forward to more in 2024!









UPCOMING EVENTS

-Volunteer Opportunities-

Watch for Emails and Check our Calendars for Updates and New Events

• January 20, 2024 9am-Noon; Master Naturalist Group Hike: Joanna Trail; Mark Twain Lake

Join other Master Naturalists on our next Group Hike on Joanna Trail starting at trailhead by Spalding Beach at Mark Twain Lake The public is welcome on these hikes, so bring your friends and family!

• January 27 and 28, 2024 9:30am-4pm; Clarksville Eagle Days; Clarksville MO

On Saturday and Sunday, January 27 and 28th from 10 am – 4 pm, Mississippi Hills Master Naturalists will assist the city of Clarksville host Clarksville Eagle Days. **Please arrive at 9:30 am to help set-up.** This is the fifth year that our organization has participated in this nature event that draws thousands to observe the American Bald Eagle. Spotting scopes will be set up on the riverfront below Lock and Dam #24. MHMN sponsors the children's activities at the Apple Shed located on Hwy 79. Activities include animal print stamping, making eagle bookmarks and eagle masks. If you can volunteer for either day or both, please contact Theresa Casey. Food and drinks will be available for our volunteers. Car pooling can also be arranged.

• February 17, 2024 7:30am-3pm; 12th Annual Ben Sapp Memorial Antler Shed Hunt for Youth; Mark Twain Lake

The Shed Hunt will be held at the M.W. Boudreaux Visitor Center at Mark Twain Lake on February 17th 8-2pm. Youth will visit stations both inside and outside completing various activities. MHMN will provide activities such as learning about eagles, prairies and blue birds; plus set-up/tear-down. If you are interested in being part of the volunteer team, contact Bob Kendrick.

• February 24, 2024 10:00am-noon; Master Naturalist Group Hike: Ted Shanks Conservation Area

Master Naturalist Group Hike at Ted Shanks CA. Please register at <u>http://mdc.mo.gov/PrivateEvents</u> with Event Code: 8E9a Presentation on wetland and wildlife viewing opportunities followed by hike and/or driving tour.

• February 24, 2024 11:30 am-4 pm; Hannibal Eagle Day; Hannibal MO

On Saturday February 24th from noon to 4 pm, Mississippi Hills Master Naturalists will assist the city of Hannibal with their first Eagle Day. **Please arrive at 11:30 am to help set-up** at the Admiral Coontz Recreation Center . Activities will include eagle/ nature related crafts and games for children. Educational information will also be available for all visitors on how eagles became endangered and their recovery. A short video on the recovery of the Bald Eagle will also be available for viewing. Spotting scopes will be set up at Rotary Pavilion on the riverfront. If you can volunteer for this event, contact Theresa Casey.

March 16, 2024 9:00am-noon; Master Naturalist Group Hike: Frank Russell RA, Mark Twain Lake

Master Naturalist Group Hike at Frank Russell Recreation Area will feature winter tree identification with David Vance.

-Advanced Training Opportunities-

◆ January 26th, 2024 8:30 am—3:30pm; Ralls County SWCD: 6th Annual NEMO Soil Health Workshop

On January 26th, the Ralls County SWCD will host the 6th Annual Soil Health Workshop. This workshop will again be held at the Monroe City Knights of Columbus Hall, 8:30am-3:30pm, and will be FREE to attend. There is no cost to attend the workshop and lunch is provided at no charge. This years' main speakers include Russel Hedrick, Jerry Hatfield, and Harley Neumann. If you are interested in attending or want to know more please contact the Ralls County SWCD office at 573-985-8611, ext. 3 for more details. Register by January 19th. <u>https://mosoilandwater.land/ralls</u> (Look under "News" for event details).

-Speakers at meetings-

- January: Kylie Helmig; Stream Team United
- February: Nick Wesslak (our new MUE Advisor); Pesticide and Chemical Safety. We look forward to meeting Nick!
- March: TBD



Monthly Meetings Monthly Chapter Meetings are held on the 4th Tuesday of every month

Bi-monthly Board Meetings are held on the 2nd Tuesday of every other month

	January, February and March 2023				
Event Date	Event Time	Rvent Lifle			
1/20/2024	09:00 am - 12 noon	Chapter Education & Interpretation Projects :: Master Naturalist Led Group Hikes :: Joanna Trail, Mark Twain Lake*			
1/23/2024	07:00 pm - 08:00 pm	Program Support :: Chapter Meeting :: (01) January			
1/27/2024	09:30 am - 04:00 pm	Parks / Conservation Areas :: Clarksville Eagle Days			
1/28/2024	09:30 am - 04:00 pm	Parks / Conservation Areas :: Clarksville Eagle Day			
2/17/2024	07:00 am - 03:00 pm	Parks / Conservation Areas :: Mark Twain Lake :: Boudreaux Visitor Center :: Education/Outreach :: Shed Hunt (8am-2pm)			
2/24/2024	10:00 am - 12 noon	Chapter Education & Interpretation Projects :: Master Naturalist Led Group Hikes :: Ted Shanks Conservation Area *			
2/24/2024	11:30 am - 04:00 pm	Parks / Conservation Areas :: Hannibal Parks :: Hannibal Parks & Rec Interpretive Programs :: Eagle Day (12-4pm)			
2/27/2024	07:00 pm - 08:00 pm	Program Support :: Chapter Meeting :: (02) February			
3/12/2024	06:00 pm - 07:30 pm	Program Support :: Executive Board :: Board Meeting			
3/16/2024	09:00 am - 12 noon	Chapter Education & Interpretation Projects :: Master Naturalist Led Group Hikes :: Frank Russell, Mark Twain Lake *			
3/26/2024	07:00 pm - 08:00 pm	Program Support :: Chapter Meeting :: (03) March			

Volunteer Opportunity Calendar for

* For specific information about the monthly group hikes, see 1/12/2024 email sent by Theresa Casey.

BY THE NUMBERS 2023

(rounded to nearest whole hour as of December 31, 2023)

SERVICE PROJECTS

Volunteer Service Projects Total Hours = 5895

ADVANCED TRAINING

Advanced Training Total Hours = 893

Congratulations on 2023 Annual Certifications!

- **Shannon Jenkins**
- **Mark Weatherford**
- **Quintin Heaton**
- Doris Kurz
- Gale Rublee
- **Bella Erakko**
- Pam Whiston
- **Matthew Harris**
- **Barb Holmes**
- **Tracy Fuller**
 - **Beth Whelan**



Recognition for achieving Initial Certifications!

- **Cindy Vishy**
 - Mack Ellis

Special Congratulations for achieving their **Bronze Milestone** pins for 250 volunteer hours:

- \Diamond Mark Weatherford
- **Matthew Harris** \Diamond
- \Diamond **Shannon Jenkins**
- **Deborah Daniels** \diamond
- **Ann Humphreys**



Congratulations for achieving Gold with Rhinestone Milestone pin for 5,000 volunteer Hours! **Bob Kendrick**



Watch for new training that is added on the website. If you find additional training not on the calendar, please send to Tracy Fuller so that it can be added. If you aren't sure whether the new training qualifies please ask! THANKS!!

	Advanced Training Calendar for January, February and March 2023				
Event Date	Event Time	Event Title			
1/16/2024	06:00 pm - 08:00 pm	MDC: Useful Knots for the Outdoors			
1/16/2024	11:00 am - 12 noon	MDC: Birds: Virtual: Attracting Winter Birds			
1/16/2024	06:00 pm - 07:00 pm	Pollinator Garden CommitteeWinter Sowing Workshop			
1/18/2024	12 noon - 01:00 pm	MDC: Native Plants: at Noon - Virtual			
1/18/2024	12 noon - 01:00 pm	MDC: Native Plants: Winter Wonderland (Virtual)			
1/19/2024	02:00 pm - 02:30 pm	MDC: Discover Nature: VIRTUAL: Animal Feeding			
1/22/2024	06:00 pm - 08:00 pm	MDC: Outdoor Survival: Introduction to Knot Tying			
1/22/2024	06:30 pm - 07:30 pm	MRBO: Trends in Urban Biodiversity from the Global to Local Scale			
1/23/2024	06:00 pm - 07:00 pm	Chapter MeetingKylie Helmig			
1/23/2024	05:00 pm - 08:00 pm	MDC: Predator Hunting: Introduction to Predator Hunting			
1/24/2024	03:30 pm - 04:30 pm	MDC: Hiking: Hiking in Winter Virtual Program			
1/24/2024	12 noon - 01:00 pm	MDC: Trees: Missouri Oak ID (Virtual)			
1/24/2024	02:00 pm - 02:30 pm	MDC: Wildlife: Creature Feature: Alligator Gar			
1/26/2024	03:00 pm - 04:00 pm	MDC: Wildlife: VIRTUAL: Ozark Animal Folklore			
1/26/2024	08:30 am - 03:30 pm	Ralls County SWCD: 6th Annual NEMO Soil Health Workshop			
1/27/2024	08:30 am - 11:30 am	MDC: Outdoor Survival: V- Learning to Hunt: Blade Sharpening & Care			
1/27/2024	10:00 am - 11:00 am	MDC: Trees: Virtual Program: Winter Tree ID			
1/29/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) The Problems with Plastics – It's Worse Than You Think!			
2/3/2024	08:30 am - 11:30 am	MDC: Predator Hunting: V- Learning to Hunt: Predator Hunting			
2/5/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) Rare Insects of Missouri and Their Conservation			
2/7/2024	12 noon - 01:00 pm	MDC: Birds: Where to Watch the Migration Fly By (Virtual)			

Most training requires advanced registration. If you want to sign up for a training session, please use the appropriate link below.

FOR MDC: https://mdc.mo.gov/events

FOR MPF: <u>https://moprairie.org/events/</u>

For other advanced training, follow the instructions in the email sent by Theresa. If you aren't sure, please ask! Someone will be happy to help you get signed up.





We're searching for articles for our next newsletter.

What would you like to read about or to learn more about?

Have you read a good book lately? Would you like to share an article?

Contact Janet Golian for more information, to share your ideas or to provide feedback for our newsletter.

The deadline for contributing to the next newsletter is March 31, 2024.

January, February and March 2023				
Event Date	Event Time	Event Title		
2/12/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) Light Pollution and Birds		
2/14/2024	12 noon - 01:00 pm	MDC: Learn to Fish: Fly Fishing Introduction (Virtual)		
2/15/2024	12 noon - 01:00 pm	MDC:Native Plants: at Noon - Virtual		
2/19/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) What Does Coffee Have to Do With Birds?		
2/20/2024	06:30 pm - 07:30 pm	MDC:Trees: Sap to Syrup - Virtual		
2/20/2024	03:00 pm - 04:00 pm	MDC: Wildlife: Nature's Common Diseases Virtual Program		
2/21/2024	02:00 pm - 02:30 pm	MDC: Mammals: Creature Feature: Groundhog (Virtual)		
2/23/2024	03:30 pm - 04:30 pm	MDC: Native Plants: Planning and Prepping Your Garden Virtual Program		
2/24/2024	09:30 am - 10:30 am	MDC: Birds: Hybrid Virtual: Backyard Birds and Blooket Trivia		
2/26/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) Your food – Prairie, Birds, and Beef Production		
2/27/2024	06:00 pm - 07:00 pm	Chapter MeetingNick Wesslak		
3/4/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) Nature's Best Hope		
3/11/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) Dicamba/2,4-D and Trees: Old Chemicals Causing New Problems		
3/13/2024	01:00 pm - 02:00 pm	MDC: Amphibians and Reptiles: Frog Calls (Virtual)		
3/13/2024	12 noon - 12:30 pm	MDC: Turkey Hunting: Where can I? Turkey Hunt		
3/13/2024	12 noon - 01:00 pm	MDC: Native Plants: Planting for Hummingbirds (Virtual)		
3/16/2024	08:30 am - 11:30 am	MDC: Deer Hunting: V- Learning to Shoot: Shed Hunting		
3/18/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) Creating Safer Passages for Migrating Birds		
3/25/2024	06:30 pm - 07:30 pm	MRBO: (Virtual) The Swine Republic: Struggles With the Truth About Agriculture and Water Quality		
3/26/2024	06:00 pm - 07:00 pm	Chapter MeetingTBD		
3/26/2024	02:00 pm - 02:30 pm	MDC: Birds: Creature Feature: Eastern Bluebird (Virtual)		

Advanced Training Calendar Continued for



Now is a great time to enter your hours!

Please visit—<u>https://www.hills.missourimasternaturalist.org/</u>

Enter your hours for Advanced Training and Volunteer Service or send your Hours to Anne Coleman. Please let her know if you need assistance.

Tracking hours helps you towards Certification and credits our Chapter for your hard work and conservation efforts.

THANK YOU!