

The Missouri
Master
Naturalist
Program is
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Mississippi Hills Newsletter

October, November, December 2023
Volume 3, Issue 4

Missouri
Master Naturalist™



2023 CORE TRAINING CLASS

By Carolyn Trower



Front row: Sara Lubecke, Montana Walden, Peg Colyer, Cindy Vishy, Carrie Bross, Sister Sue Walker, Traci Kline, Jacqueline Bordeleau, Kim Caisse, Kim Eastin, Karen Bickel, Carolyn Waelder, Tena Jones

Back Row: Sarah McClelland, Frank Harris, Deanna Harris, Carl Crowder, Skye Rogers, Phil Noel, Ed Bordeleau, Randy Hilger, Kyle Hilger, Bob Havermale, Scott Bujnak, Shannon Jenkins, Kathryn Bujnak, Katie Johnson

Not Pictured: Michelle Kendrick, Glen Kendrick, Dale Roth, Jeremy Griesbaum

August 26, 2023, saw the addition of 31 new Mississippi Hills Missouri Naturalist graduates who were part of our fifth training class. Those awarded certificates and gifts represented a wide range of ages and experience. After her opening remarks, Advisor Kathy Moore asked each new member to come forward and tell their “lightbulb moment.”

There were specific programs that made an indelible impression. On the Lincoln Fold program one member commented that she never knew about the Fold and its effects on the geology of surrounding counties. Soil Science (or was that soul science) made several comment on how much they didn’t know about “dirt.” Whoops, soil, as all graduates now know to call it. “This class opened my eyes to the complexity of what was underground.” One member spoke about the Bird Program, “Watching the birds, listening to the birds. I can’t go outside now without hearing the birds.” Another said he was newly retired and loved the bird program, “I have a new hobby.”

Core Class—Continued

Some information on the habits of birds and bees, butterflies, and bugs of all kinds brought both delight and disgust to some faces. The “Taste Teas” program was a perfect example of this. We learned how little most of us know about the plants in our own backyard. Who would have thought to use local grasses and wild herbs in salad dressings and teas. “I loved the edible plants.”

A big plus for members was echoed in comments like, “I appreciate being in a class where we can bond over seeds and mushrooms.” “Coming here has helped reconnect with things I loved.” “This class opened my eyes to the impact humans have had on the landscape, on forests and prairies.” And my favorite quote, “I have a lot of learning to do.” Many of the members related stories of childhoods spent wandering fields and woods, fishing in lakes and streams, and hunting with family and school mentors. “I’ve come full circle from collecting bugs and doing things as a kid, microscopes and jars on the shelf.”

And of course, our wonderful slate of speakers received hands down the most praise. “The passion our speakers exhibit is contagious.” “The whole

program blew me away. It’s not just a job with them, it’s a way of life.” “The passion of our speakers and all of you. We all work together doing what we believe makes a difference.”

After listening to all the members speak, a palpable hum of geared up enthusiasm sparked the room. Moving into the hallway and the snack area, conversations filled the air. People connected to someone else that was interested in mushrooms or bees and honey. The upcoming hike was discussed. So many people sharing so many different ideas of what topics they want to pursue.

Mississippi Hills has grown, and not just in number of members, but in a web of topics shared across generations. The passion Missouri Naturalist programs ignites will be the spearhead of many new projects across our region. Some will plant prairies, some will make native flower beds, others will fill their school, home, and church yards with butterfly gardens. Others will build fish habitats, band birds, and make birdhouses. There will be guided hikes and nature walks. Private land will be improved for the benefit of wildlife. Education and safety programs will expand with new members and new interests.

**Mississippi Hills welcomes our new members.
What an exciting time to be a Missouri Master Naturalist!**

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.

FIND US ON THE WEB: <https://www.mississippihills.missourimasternaturalist.org/>

And on Facebook [@MississippiHills](#)

Missouri Master Naturalist Class of 2023 Capstone Project

Congratulations on a job well done to the graduating class of 2023 for putting in much work and effort on their Capstone Project to plant Pollinator Gardens at the Hannibal Regional Hospital to set off the entrance to HRH's new "Healthy Way Nature Trail". Also many thanks to Ann Humphreys, Pam Whiston and Phil Whelan as well as the entire Core Training Committee and other contributing members for their leadership on this project!



The Preparation—getting the soil ready for planting



The Plan—

1. Place the plants where they are going to be planted (beds are already marked with spray paint).
2. Dig a hole for each plant using a hand trowel.
3. Carefully remove each plant from its container.
4. If roots are spiraling around the plant, loosen the roots.
5. Put the plant in the hole deep enough that the top of the plant ball is level or just below ground level.
6. Fill the hole with loose topsoil. Firmly press down the plant into the soil to remove air pockets.
7. Water the plant to settle the soil and remove air pockets.
8. When the gardens are planted, put 2" of mulch on top of the beds using twice-ground compost or fine cured hardwood mulch, leaving space around the base of each plant.
9. Water the beds for 60 minutes to equal 1" of rainfall.



The Crew—great job everyone 

The Planting—executing the Plan!



Want to see the Butterfly Gardens' Layouts, Plant List, and Bloom Times?

Go to: <https://www.mississippihills.missourimasternaturalist.org/>

On the top banner, click on Outreach/Education

Under Pollinator Gardens click on—

Butterfly Garden Layout

Butterfly Garden Plant List

Butterfly Garden Detail and Bloom Times

New Nature Trail: A Way to Heal

By Bella Erakko



Not many hospitals have the ability to offer outdoor fitness trails with indoor medical care. Yet Hannibal Regional CEO Todd Ahrens, and his wife Lydia, carry this vision for Hannibal. First, you need land, and the Hospital sits on roughly 50 acres. City and suburban hospitals do not have that advantage. Second, it helps if the CEO is an avid birder with a true love of nature. Third, it takes a community with a philanthropic vision to raise funds to support outdoor opportunities.

Todd Ahrens developed an interest in birding while in college as a biology major. Taking ornithology classes from Dr. John Faaborg, probably the transformational moment for him occurred when the students did field work in the Mark Twain National Forest. “We studied how timber management strategies impacted migratory birds. To do this, we caught birds, banded them, and collected basic information so we could monitor whether they returned after their winter migration.”

Today he admits, “I’m always birding. I’ll be driving, talking to my wife, and then ... we’re pulling over to identify a bird.” His favorite? The Pileated Woodpecker—a huge feathered creature that looks like it belongs in Jurassic Park. One of the most interesting? The Snowy Owl, com-

mon in Canada but rare to see in the U.S. An avid user of the eBird app, once he posted a sighting of a Snowy Owl and within minutes, three or four people showed up with binoculars.

This may explain why when Gale Rublee, a founding member of the Mississippi Hills Master Naturalist group, suggested the hospital consider a wildflower meadow, Todd Ahrens quickly scheduled a meeting with the Master Naturalists. Bob Kendrick, a wildflower prairie promoter, extolled its Missouri-perfect restorative ecological virtues. He enthused, “Monarch butterflies eat only one plant, milkweed. Evolution paired insects with plants. They are dependent upon each other.” According to ornithologist Douglass Tallamy, a Carolina chickadee needs 9000 caterpillars to feed a clutch of six chicks. Native oaks host 557 caterpillar species; non-native ginkgoes support only 3. Americans, beginning with Thomas Jefferson, imported non-native “exotic” plants—peonies, irises, kudzu, bush honeysuckle. Bugs, birds, and butterflies cannot digest this spreading wave of imported vegetation. Likewise, mowed grass proves to be a nutritional Sahara. Ahrens could see Hannibalians coming to the campus not just to see doctors but also improving their health by walking the trail, enjoying nature’s beauty. Looking out his window, he envisioned a nature trail passing into the woods and pond below him. It would be paved, handicap-accessible, well-lit, with benches, picnic tables, even a pavilion.

Ann Humphreys, also a Master Naturalist, just happened to have a detailed native plant/pollinator garden plan because she and Pam Whiston had spent the past year developing one for the Frank Russell Recreation Area at Mark Twain Lake.

“We live on the dividing line between several different plant ranges so we had to customize it for our area,” she explained. “When I walked into that meeting, I happened to have the plan already drawn up—plant list, prices, set of graphics. I had no idea the meeting would go in that direction.” She described it to Todd Ahrens:

“Two butterfly gardens, each 5’ x 25’ containing 18 different plant species selected so there will be blooms, nectar, and pollen from early spring to late fall.”
CEO Ahrens asked one question. “How much will it cost?” They gave an answer and he said,
“Yes, let’s do it.”

After a fund-raising campaign managed by Wendy Harrington, CEO of the Hannibal Regional Foundation, the vision is now a reality. Though too many to name here, many stepped in to create a unified vision: Bleigh Construction Company, Klingner & Associates, P & D Electric. Fundraising from the annual Hannibal Cannibal and Shoeless Joe Celebrity Golf Classic also helped cover the costs of the trail. Currently, grant money is being solicited for the meadow seeding.

While the butterfly gardens will immediately attract wildlife, the proposed prairie meadow will slowly unfold as seeds take root to become a sanctuary for insects, butterflies, birds, and yes ... birders.

Today, the newly opened one-third mile walkway, aptly named “The Healthy Way Nature Trail,” invites one to a sense of calm and peacefulness. It softly curves downward into the woods and around the pond with a fountain. Set high on the hill, the vista of land and sky unfolds. Well-lit, handicap accessible, dog-friendly, this Nature Trail beckons us out of our stress-filled, worried world. We may one day even see a Snowy Owl.

The Trail is accessed to the west of the Emergency Department and parking is located on the northwest side of the campus to the east of the trail.



BY THE NUMBERS

(Hours through September 30, 2023 and rounded to nearest whole hour)

2023

SERVICE PROJECTS

Volunteer Service Projects Total Hours = 3569

ADVANCED TRAINING

Advanced Training Total Hours = 658

Congratulations on 2023 Recertifications!

- | | |
|---------------|------------------------|
| * Phil Whelan | * Donna Black-Blackman |
| * Deb Daniels | * Abigail Tumbleson |
| * Randy Hills | * Richard Tumbleson |

Recognition for achieving Initial Certification!

- * Shannon Jenkins



Special Congratulations—

For achieving *Bronze Milestone* pins for 250 volunteer hours—

- ◆ Donna Black-Blackman
- ◆ Al Davis

For achieving *Pewter Milestone* pins for 500 volunteer hours—

- ◆ Theresa Casey
- ◆ Quintin Heaton
- ◆ Ken Daniels



MEET

Matthew Harris

By Bella Erakko

Consider getting a Master's Degree in mental health counseling and moving your "office" to a trail, a park, a nearby creek ... and just *walk and talk* with your client. That's exactly what Matthew Harris does with therapy sessions for youth, adult, family, and especially those with developmental disabilities such as autism. He calls his practice *Real Help Mobile Counseling*.

Anyone whose office includes trees, birds, butterflies, and yes, bush honeysuckle, must have an intense love of nature. Even as a child growing up in Monroe City, Matthew was "a town kid wanting to be a country kid." Luckily the lot next door was vacant, a "nuisance lot," a "dream world" filled with bugs, grasshoppers, butterflies, frogs. In the name of childhood science, not every nature-buddy made it out of Matthew's enthusiasms alive.

He knew what he loved. He loved nature, so perhaps it comes as no surprise that he fell in love "at first sight" with his future wife, Teresa, on a bus while still in middle school. On this five-day school class adventure to New York City, he pledged, "I am going to marry you." Well, *that* took care of that problem. Twenty-four years together, 19 years of marriage, and four children ranging in age from 8 to 17, plus one temporarily fostered boy, has given Matthew plenty of fodder to encourage love of nature.

Actually, aside from often childhood trips to nearby places such as Indian Creek Campground, his first far-away adventure was under the guidance of the enthusiastic indefatigable Bob Kendrick. As a high school freshman, he was part of the football team's camping trip to Colorado. So enamored with that memory, Matthew decided to take his family on a nostalgic return to the Gunnison National Forest.

"It was fabulous. Best campsite ever." Because his wife preferred a little luxury, they had enchilada dinners, and on one stormy night, he took out his surprise: a projector, so they could watch a movie. The niggling concern throughout was the road. "I



Matthew relaxing at Gunnison National Forest

honestly didn't know if I could get us *off* this mountain. It was extremely rough. I was in a Suburban. We were really isolated."

They lived. But he has no plans to try that road again with that type vehicle.

Probably inevitably, Matthew and the Master Naturalists were bound to come together like bees to honey. Moreover, Matthew is like a natural "nature minister." You can almost see him standing at the entryway of nature's cathedral of trees, saying, "Come right on in." No surprise ... his mother, father, and sister have become Master Naturalists, joining our last class.

The welcome mat just keeps getting bigger. He and Randy Hills constantly explore the outdoors. One day it occurred to them that they might as well start a monthly outdoor adventure. "We're going anyway. Everybody was trying to find 'their thing,'" he admits. "Let's invite Master Naturalists to come along ... with their friends." Thus began a whole new chapter for our members. In addition to hiking various trails, they've sponsored kayaking and canoeing day trips, and visited Cameron cave. He enthuses, "I learn so much from individual people. Everyone is an expert in something. Members get to know each other on a deeper level when just spending time together in nature."

In a way, Matthew has come full circle. It started in a vacant lot paradise, where he could explore a "nuisance lot" of paradise. Today, he and Randy encourage us to step out of our sometimes too busy lives and re-enter the healing space of nature ...

To find or remember our own dream world.

OUR ENVIRONMENTAL HEROES

By Carrie Bross



David Parsons is a wildlife biologist, retired from his work for the US Fish and Wildlife Services, and has devoted his life to wolf conservation for over three decades. David oversaw the Mexican gray wolf recovery program and led the effort to reintroduce the endangered gray wolf to areas of its former range in the Southwest from 1990 to 1999.

Wolves are a keystone species and can be/are part of a healthy and functioning ecosystem. If a keystone species is removed, then the ecosystem can change drastically and could even collapse. In October 2020 the Trump Administration issued a regulation to delist all gray wolves from protections under the Endangered Species Act. This resulted in a massive increase in the killing of wolves.

Parsons came out of retirement and alongside wildlife organizations and conservation activists fought for the species and their essential role in the ecosystem. In February 2022, based on the work put in by David Parson, the organizations, and conservation activists, a federal judge reversed the Trump administration's decision to remove gray wolves from the endangered species list in the contiguous 48 states and Mexico, with the exceptions of the Northern Rocky Mountain population and to their being considered threatened in Minnesota.

David now works with Project Coyote, which is a national non-profit organization based in Northern California. The coalition consists of scientists, educators, ranchers, and citizen leaders to work towards changing the laws and policies to protect native carnivores from abuse and mismanagement. Their goal is to also educate others so there is not a misunderstanding or ignorance of predators such as wolves and coyotes.

Mississippi Hills Master Naturalist Library

New Master Naturalist, Katie Johnson, has organized a collection of books for our group's use. Below is a link to a spreadsheet that lists all the titles we currently have available to borrow. If you have any books you'd like to donate to our little library, she will gladly take them off your hands! If you'd like to borrow a book, let her know. You can contact Katie via email or phone to learn more.

https://docs.google.com/spreadsheets/d/1qEqYfJHa1nJnNs3qj4Cpiq3_KU02YAK8tlkzkJx6uA/edit?usp=sharing

Katie is also considering putting together some sort of book club if there is any interest. What to read and when to meet is TBD. If you'd like to participate, shoot her an email/text and let her know!

WELCOME HONORARY MEMBERS

Robert and Wendy Hendrickson

By Bella Erakko

**Like prairie plants that take time to blossom,
it was years before
Wendy and Robert had the
opportunity to find each other.**

Wendy grew up in Wauconda, Illinois—a small town with summer cottages where the fathers worked in Chicago and commuted to the picturesque setting with the big lake on weekends. Robert grew up in Litchfield, Illinois, a town Norman Rockwell could have painted. Though they both lived in Illinois, their paths never crossed.

Wendy built stick forts in the woods, hunted with her father, won an ice fishing contest by hooking the most bluegills, and played the piano. Robert sold rhubarb door to door from his Red Flyer wagon for a quarter a bundle, splitting the proceeds with Granny who cut and bundled it. It would be decades before the future married couple and business partners would meet.

Wendy became fluent in Spanish and a decent pianist. She excelled in horticulture classes at a Junior College. Robert, smitten by the Beatles, declared to the world, “MUSIC IS MY FUTURE!” They still didn’t meet. In fact, they both married others, and had children.

Wendy began a career with florists and garden centers, quickly becoming recognized as a skilled landscape designer. “I knew that was my calling,” she relates. “All the farm fields were turning into housing developments. She came to a potential customer’s home, created a landscape design, came back later to present it, then sold the plants.



Meanwhile, Robert was all music, all bass guitar, all the time from 1964 to 1974, culminating as the opening band for ZZ Top. Living in Evergreen, Colorado, he helped a friend run a bookstore, where one fateful day he picked up an issue of *Mother Earth News* magazine. During this period, he knew of three kinds of musicians within his sphere: famous, arrested, or dead. “Life on a farm seemed a better option.” He pawned his music equipment, returned to the Litchfield area, rented a small farm for \$50.00 a month, and basically knowing nothing about farming ... began.

Obviously, classic pianist Wendy and rock-star Robert did not meet.

But across from his parent’s house (where Robert often visited for home cooked meals), was a small, backyard-based garden center. He thought, *This would be a great place to learn. Maybe they’d hire me.* They said the magic words for the budding garden center visionary: “Can you start tomorrow?”

Finding as good a skill for marketing as for music, he won several national contests and became recognized in trade magazines. During a conference, a much larger garden center seduced him into coming to Maryland.

**And NOW, at last,
Wendy and Robert would meet.
Awed by Wendy’s beauty,
\$ her ability to do seven landscape design appointments in one day,
he decided the perfect first date
would be in Mexico.
“Hey, Wendy, here’s an airplane ticket to Cancun. If you’d like to go on a date,
I’ll meet you at the airport.”**

**She spoke Spanish.
He loved Maya ruins. Perfect!**

Now joined together, Robert had the ideal partner. He started his company, The Garden Center Group in 1991. With Wendy’s help, they grew from 30 clients to 130. Garden centers could outsource every business requirement they didn’t want to tackle: marketing, finance, human resources, property design, buying/selling.

Robert and Wendy’s role focused on providing high quality sub-contractors and conferences. Then in 2015, Robert walked into the kitchen and said, “I’m DONE. I don’t want to do this any longer. I’m tired of spending six nights a week in a hotel”.

They found a buyer, brought him into the business for two years, then sold it to him... before heading for Paradise Lost ... Hannibal, Missouri ... driving distance from their two Illinois-based families.

These days, on their 10-acre property they call 3GFarm, Wendy goes for things to be “a little designed but not too tightly maintained.” This loose approach allows her to indulge her passion: “One of my favorite things to do is what I call grooming. I’m always out there making sure the dead leaves are pulled away, I cut back dead flowers. I *love* weeding. Also, remembering her childhood forts, she and Robert have carved woodland paths through their land, complete with meditation benches.

Robert thrives on the big picture: four acres of gardens, four acres of prairies, two acres of woods. Initially, gardening constituted a different vision: “Gardens meant you ate it.”

And he *hated* mowing. Talking to his long-time mentor, Henry Eilers, he became enamored with the potential of prairies.

Today the Mississippi Hills Master Naturalists share this passion; but they were only an *idea* back in 2019 when Robert began his sojourn with prairie.

Wendy loves being at the end of the road where, “No cars drive by.” In a true Normal Rockwell way, they sit in the morning and evening on their porch watching nature be, well, nature.

Ann Humphreys sent a picture of her Eastern Blazing Star plant (*Liatrix scariosa*) drawing in some Monarch butterflies to feed during their migration south.



Lynn Gibson posted a picture of a beautiful Hummingbird Moth visiting her butterfly weed.



Turkey Tail Mushroom

Scientific Name

Trametes versicolor

Family

Polyporaceae



Description

Meaning 'of several colors', *versicolor* reliably describes this fungus that displays a variety of colors. Because its shape and multiple colors are like those of a wild turkey, *T. versicolor* is commonly called **turkey tail**. The Cap is semicircular to spoon-shaped, irregular and grows in stalkless clusters of leathery, thin concentric brackets with multicolored zones above and whitish yellow pores below. **Lookalikes:** The false turkey tail (*Stereum ostrea*) is parchment-like and has a smooth underside. The multicolor gill polypore (*Lenzites betulina*) has a gill-like underside.

Size

Cap width: 1–4 inches.

Human Connections

Unlike other kinds of popular mushrooms, turkey tails are not edible but are considered medicinal and are typically made into a decoction and consumed as a tea or tincture. The Chinese use the turkey tail as a remedy against liver cancer and jaundice. Of course, be absolutely sure of your identifications before you consume any wild mushroom.

Ecosystem Connections

This is one of the many fungus species that live on decaying wood. It and other such saprobic fungi play an incredibly important role in breaking down the tough materials wood is made of and returning those nutrients to the soil

Habitat and Conservation

You can find this mushroom growing in clusters year-round on stumps and logs of deciduous trees. As turkey tails are a commonly found mushroom, there are no conservation concerns.

Life Cycle

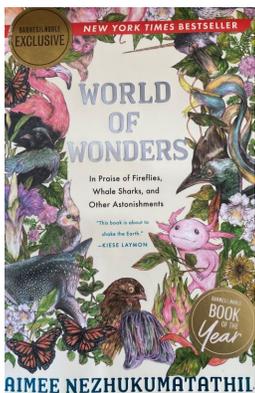
Turkey tails live within rotting logs as a whitish network of cells (mycelium) that digests and decomposes the dead wood. This species may be eaten by caterpillars of the fungus moth, maggots, and fungus gnats.

When ready to reproduce, the mycelium develops the mushroom that emerges from the log —this is the reproductive structure. In polypores, spores are produced in the pores on the underside and are released to begin new mycelia elsewhere.

Sources: Missouri Department of Conservation; Wikipedia, https://en.wikipedia.org/wiki/Trametes_versicolor

Reader's Review

By Bella Erakko



World of Wonders, by Aimee Nezhukumatathil, 2020

First, you have to love the author's last name. Then the lavish BEAUTY of this book.

(See the picture.) Those of us who love nature probably think we're knowledgeable ... somewhat. We watch nature documentaries; we read nature magazines. Heck, we are members of the Mississippi Hills Master Naturalists. But *she*, because of her eclectic life and yes, love of nature mixes the familiar (think cockatiel, catalpa tree, octopus) with a nature we've never even heard of: vampire squid, comb jelly, dancing frog. Then she brings us "home" with the monarch butterfly, firefly, and dandelion.

It's the interweaving of science, mystery, and memoir that keeps you wanting the next story, but also the absolutely luscious full-color illustrations by Fumi Mini Nakamura. My personal favorite: the Axolotl, a pink-faced cherub-like being with a definite smile. This amphibian lives its whole life underwater, and can regenerate (endless) limbs torn off. But mainly I love it because it's ... cute

Slightly Weird (But Good) Books to Read

Okay, these two books do not fall in the traditional genre of books about nature, but they really take you on a journey into (definitely) uncharted lands.

So here they are:

The Ragged Edge of Silence, by John Francis, 2011

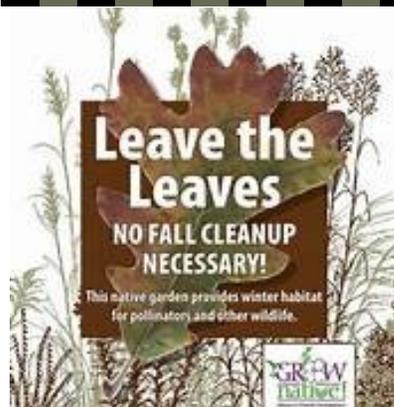
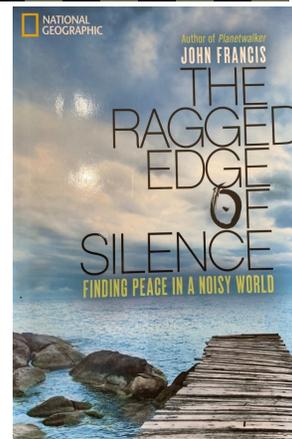
One day he got pissed. He was cleaning up oil-drenched birds after a spill off San Francisco. So that day, he gave up using any transportation that used oil. Then he found himself *arguing* with people who STILL used cars. So he decided to shut up and not talk for a day ... and just listen.

One day became one week became one month became one year became 17 years. He was a non-talking activist. He walked everywhere. He came up with his own sign language, played his banjo as a way of sharing, and journaled and water-colored his world of nature.

I remember this guy ... reading about him. And I thought how cool is that? In this book, he just takes us along for the ride. The places he walked; the people he met; the nature he communed with.

He garnered a media following (albeit small). And after 17 years, he decided to talk. I remember reading about it but I haven't finished the book so I don't know how he felt about that. The answer may be in the subtitle: *Finding Peace in a Noisy World*.

I think that is what strongly draws all of us to nature. Peace. Silence. Joy.



Project FeederWatch



Embrace the winter.
Count feeder birds
for science.

Learn more about a Citizen Science opportunity that you can do from your own home. This project runs from November 2023 through April 2024.

For more information, visit their website:

<https://feederwatch.org/about/project-overview/>

Establishing Native Warm-Season Grasses and Forbs

By Daniel Mallory



Continuing with the theme of helping the wild turkey, this article will discuss the benefits and challenges of native warm-season grasses and forb establishment. Links are provided below to access the full articles.

Fields with diverse vegetation typically attract a greater variety of wildlife than monoculture, or single species, stands of grass. For example, sod-forming grasses such as tall fescue tend to restrict movement for many species that need more open space for nesting and foraging. Lack of food is also an issue in monoculture stands of grasses, because they lack seed- and soft mast-producing forbs and shrubs. Mixed stands of native warm-season grasses, which include forbs and legumes, provide food and cover required by wildlife such as grassland birds, bobwhite quail and cottontail rabbits. Diverse stands also provide excellent habitats for pollinators such as butterflies, bees and other insects.

Warm-season grasses have traditionally been slow to establish because their chaffy, hairy seed is hard to handle using conventional grain drills, and their seedlings are poor competitors with weeds. Warm-season grasses may be planted into a conventional, tilled seedbed or drilled into standing or killed vegetation. Using conventional tillage, the seedbed should be free of weeds, fine-textured and firm. After tillage, the ground should be rolled with a cultipacker for firmness. If the seed is broadcast, the field should be cultipacked or rolled a second time to place the seed in good contact with the soil and to cover the seed properly. Seeding

with a drill that has press wheels eliminates the need for a second rolling. Whether drilling or broadcast/cultipacking, seed depth should be no greater than 1/4 or 1/2 inch. Non-debearded seed can be debearded by mixing the seed with the fertilizer. Apply half of the seed at a time and make two trips over the field, lapping in between the first tracks on the second trip. Remember to roll the field before and after broadcasting. Excessive weed competition is a major cause of slow stand establishment. Weed control can be accomplished by a combination of timely tillage, herbicides (pre- and post-emergence) and clipping.

Warm-season grasses are best established during April and May. Early planting is critical even though warm-season grasses do not germinate when soil temperatures are below 50 to 55 degrees Fahrenheit. Early establishment allows seedlings to develop good root systems before summer drought and greatly increases the ability of the grasses to compete with weeds. Native grass seed typically contains higher percentages of dormant seed than cool-season forages. One way to break dormancy is to chill seeds that have absorbed water. Planting early into cool soil will chill the seed and can cause dormant seed to germinate.

Stands of native warm-season grasses and forbs need periodic prescribed fires to maintain optimum conditions for forage production, as well as to provide benefits for wildlife. Conducting a prescribed burn is an excellent management tool for increasing plant diversity and improving the forb component of a stand of grass. Fire removes accumulated dead plant litter and creates more open conditions at ground level that encourage the germination of these important food plants. The season, or timing, and frequency, or burn interval, of a prescribed fire is crucial to achieving success and to maintain plant diversity within the stand.

- **Establishing Mixtures of Native Warm-Season Grasses and Forbs for Potential Biomass, Forage and Wildlife Habitat**
<https://extension.missouri.edu/publications/g9423>
- **Big Bluestem, Indiangrass and Switchgrass**
<https://extension.missouri.edu/publications/g4673>

124th AUDUBON CHRISTMAS BIRD COUNT

By George Wisdom

This year will mark the fifth year the MHMN Chapter will participate in the annual Audubon Christmas Bird Count. The count area is located at Mark Twain Lake on Saturday December 16, 2023.



We will meet at the Frank Russell CA on the north side of Mark Twain Lake at 8am.

Please set you calendar and join us for a great winter day of birding. More information will be given at our meetings as we get closer to December.

Each participant or group will record every bird seen or heard in their assigned area.

Check this website for more information on the Audubon Christmas Bird Counts
www.christmasbirdcount.org

Frank Chapman and 26 other conservationists initiated the Christmas Bird Count (CBC) as a way of promoting conservation by counting, rather than hunting, birds on Christmas Day of 1900. Some counts have been running every year since then and the CBC now happens in over 20 countries in the western hemisphere! Now a long-standing program of the National Audubon Society, with over 120 years of community science involvement, it is an early-winter bird census, where thousands of volunteers across the U.S., Canada (where Audubon partners with Birds Canada), and many countries in the Western Hemisphere go out over a 24-hour period on one calendar day to count birds.

All Christmas Bird Counts are conducted between December 14 to January 5, inclusive dates, every year. Each circle compiler will choose a single calendar day within those dates and your CBC birding is done on only one calendar day for each circle.

To view previous year Bird Counts by the Mississippi Hills chapter visit
www.MississippiHillsMN.org



“Mulberry Times”

From our MHMN President, Vanessa Laatsch

Mississippi Hills Master Naturalists have just completed the fifth core training class with plans for a sixth class already under development. Hopefully, it will begin in April of 2024. Please talk to your friends and associates about this schedule so those interested won't be left behind because they weren't informed.

Our group can no longer claim beginner status. With nearly 60 active members and over 20 Committees and volunteer work opportunities there's sure to be something that might interest you. These include:

- Prairie Development
- Native Gardens/Native planting
- Interpretive Guides
- Forest Management
- Controlled Burning
- Volunteer Services Project Committee
- Website and Time Keeping
- Partner Support
- Handicapped Hunts
- Youth Hunts
- Fish Habitat Project
- Educational Trail Hikes Committee
- Advanced Training
- Core Training
- Hospitality Committee
- Newsletter Committee
- Stream Team
- Sodalis Night Hikes
- Bluebird Houses for Youth Activities
- Other Youth Educational Programs

If you are a new member or if you're an experienced member that wants to spread your wings and try something new, here's what you might do to make your time more fulfilling: Contact our Volunteer Services committee in charge of communicating with our partner groups.

For most local and youth activities and Sodalis Night Hike opportunities, contact Meagan Garey. Activity located near the Mississippi River or in adjacent counties, contact Dennis Honkomp. Meagan and

Dennis have developed our volunteer coordination committee and can provide you with necessary resources.

For Mark Twain Lake, Monroe City, Corps of Engineer opportunities, and prairie development, talk to Bob Kendrick. If you would like to assist with Youth Hunts, or Handicapped Hunts, please contact Bob, and let him know at what level you wish to participate so he can find a comfortable spot for you to serve. I volunteered last year at both of those hunts plus the Turkey Hunt just to see what was going on. I must admit, I enjoyed the hunts tremendously. You can be a mentor or aid with transportation. If nothing else, perhaps you might volunteer to arrive early and assist participants to get set up in their blinds in the cool darkness of early morning. I'm sure you won't meet a stranger at one of these events.

It's an exciting time to be a member of the Mississippi Hills Chapter of the Missouri Master Naturalist Program. Lots of fun stuff to do. And if you're super shy, just talk to me. I'd love to know what your interests and skills are. We can keep it fun and simple.

For those of you who are intimidated by the "Advanced Training" requirement, just keep in mind that you can meet that requirement merely by attending monthly meetings on the 4th Tuesday of the month usually at Hannibal-LaGrange University at 6:00 pm. I look forward to seeing you there.

Your friend in the Forest,
Vanessa Laatsch
President MHMN



Missouri Master Naturalists at Work



30-D Archery Tournament at Frank Russell Archery Park, Mark Twain Lake.



Night Hikes at Sodalis Nature Preserve.

August 11th Hike.

On September 8th over 40 attended our Sodalis Nature Preserve Night Hike. Cub scouts from Palmyra joined in the fun!



Master Naturalist program on animal adaptations at Hannibal Stowell Elementary School.



Wild and Wacky Art Adventure at Central Park in Hannibal. This year's theme was Dinosaurs and fossils.



Fish Habitat Project— construction of structures for placement in Shell Branch & Route U at Mark Twain Lake.



Missouri Master Naturalists at Work *Continued*



Bethel Wildlife & Outdoor Expo
Building Bird Houses!



Thank you to all of our dedicated volunteers and to all of you who have contributed



Heartland Field Day
Volunteers.



Summer Safety program at the Pike County Fairgrounds. The Master Naturalist program teaches 4th graders about Snakes, Poison Ivy, Sun Safety, Ticks and Mosquitos.



MDC Booth at HAYS Back to School Fair. Students received School supplies, information on September fishing clinic and wildflower seeds.



Prescribed Burn Workshop with Jamie Ebbesmeyer at M.W. Boudreaux Memorial Visitor Center, Mark Twain Lake.



National Public Lands Day on Lick Creek Trail with Missouri Back Country Horsemen NEMO Chapter.



UPCOMING EVENTS

—Volunteer Opportunities—

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

◆ **October 21, 2023; Master Naturalist Group Hikes: Wakonda State Park , La Grange MO 9am-Noon**

Join other Master Naturalists on our next Group Hike at Wakonda State Park. Exact meeting place at Wakonda TBD. Watch for more information from Matthew Harris. The public is welcome on these hikes, so bring your friends and family!

◆ **October 28 and/or 29, 2023; Hannibal Regional Hospital, Seeding Prairie Saturday & Sunday**

Everyone is welcome to join in this event sponsored by HRH. See available times below—

- | | | | |
|--------------|-------------------|--------------|--------------|
| ◆ 10/28/2023 | 9:00-10:30 am | ◆ 10/29/2023 | 1:00-2:30 pm |
| ◆ 10/28/2023 | 11:00 am-12:30 pm | ◆ 10/29/2023 | 3:00-4:30 pm |
| ◆ 10/28/2023 | 1:00-2:30 pm | | |

◆ **November 17, 18 & 19, 2023; Army Corps of Engineers: Deer Hunt for People with Disabilities**

This will be the 35th year that this event has been held. The hunt will be held at the Indian Creek Access Area on 11/18 & 19 starting at 4:30am. You can come for all or a part of this event. There is a mandatory meeting at 6pm on Friday evening. Contact Bob at 573-248-7361 if you are interested or if you have questions.

◆ **December 5, 2023; Mississippi Hills Holiday Party, Hannibal MO 5:30 —10pm**

Join us for a catered Holiday Party on December 5th at the America Legion Post, 3819 Hwy MM Hannibal Mo. More details to come. We plan to have a voluntary gift exchange: gifts should be in the \$12-15 range and be nature orientated. Bring a gift to get a gift! Volunteers for set-up and clean-up will be needed.

◆ **December 16, 2023; Audubon Christmas Bird Count Mark Twain Lake 8am—3pm**

Meet at Frank Russell Archery Park to organize groups and areas to be covered. See article by George Wisdom on page 13 for more information.

—Advanced Training Opportunities—

◆ **October 14, 2023; Mississippi Hills Chapter— 2nd Annual Field Day , Shelbyville MO 9:00 am– 1:00pm**

Join us at Ken & Deb Daniels' farm in Shelbyville MO. Advanced Training tentatively includes:

- o Seed Collecting, Heartland Seeds,
- o Jamie Ebbesmeyer/ Land Management
- o Cole Gander/ Environmentalist/ Quality Deer Management
- o Farm History and Background

Watch for more information to come!

—Speakers at meetings—

- ◆ **October:** TBD
- ◆ **November:** Kylie Helmig with Stream Teams United VISTA Program will be our speaker.



Volunteer Opportunity Calendar for October, November and December 2023

Event Date	Event Time	Event Title
10/11/2023	06:00 pm	Citizen Science :: Bats :: Sodalis Bat Count
10/11/2023	08:00 am	Conservation Group Partnership :: Missouri Conservation Partners Roundtable
10/11/2023	10:00 am	Natural Resource Stewardship :: Pollinator Garden Projects :: Miller's Farm
10/12/2023	07:30 am	Conservation Group Partnership :: Missouri Conservation Partners Roundtable
10/13/2023	06:00 pm	Hannibal Parks & Rec Interpretive Programs :: Night Hike
10/18/2023	06:00 pm	Citizen Science :: Bats :: Sodalis Bat Count
10/21/2023	09:00 am	Master Naturalist Led Group Hikes :: Wakonda State Park
10/24/2023	07:00 pm	Program Support :: Chapter Meeting :: (10) October
10/25/2023	05:45 pm	Citizen Science :: Bats :: Sodalis Bat Count
10/28/2023	09:00 am	Hannibal Regional Hospital :: Prairie :: Seeding Prairie--First Flight
10/28/2023	11:00 am	Hannibal Regional Hospital :: Prairie :: Seeding Prairie--Second Flight
10/28/2023	01:00 pm	Hannibal Regional Hospital :: Prairie :: Seeding Prairie--Third Flight
10/29/2023	01:00 pm	Hannibal Regional Hospital :: Prairie :: Seeding Prairie--First Flight
10/29/2023	03:00 pm	Hannibal Regional Hospital :: Prairie :: Seeding Prairie--Second Flight
11/11/2023	07:30 am	MDC: CWD mandatory sampling station :: CWD Monitoring
11/12/2023	07:30 am	MDC:: CWD mandatory sampling station :: CWD Monitoring
11/14/2023	06:00 pm	Program Support :: Executive Board :: Board Meeting
11/17/2023	06:00 pm	Army Corps of Engineers Special Hunts :: Deer Hunt for People with Disabilities Meeting
11/18/2023	09:00 am	Master Naturalist Led Group Hikes :: TBD
11/18/2023	04:30 am	Army Corps of Engineers Special Hunts :: Deer Hunt for People with Disabilities
11/19/2023	04:30 am	Army Corps of Engineers Special Hunts :: Deer Hunt for People with Disabilities
11/28/2023	07:00 pm	Program Support :: Chapter Meeting :: (11) November
12/5/2023	05:30 pm	Program Support :: Chapter Meeting :: (12) December :: Holiday Party
12/16/2023	08:00 am	Citizen Science :: Christmas Bird Count

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

A tree stump and a human fingerprint.



We are nature.

Advanced Training Calendar for October, November and December 2023



Watch for new training that is added on the website.

If you find additional training not on the calendar, please send to Tracy Fuller and Anne Coleman so that it can be added. If you aren't sure whether the new training qualifies please ask!

THANKS!!

Event Date	Event	Event Title
10/10/2023	11:00 am - 11:30 am	MDC: Wildlife: Virtual Fall Feature
10/12/2023	06:00 pm - 07:00 pm	Wild Ones: "Creating and Managing Landscapes for Native Bees"
10/13/2023	06:00 pm - 07:00 pm	MDC: Nocturnal Animals: MDC Science: Bats of Missouri (Virtual)
10/14/2023	09:00 am - 01:00 pm	Mississippi Hills Chapter- Field Day at Ken & Deb Daniels Farm
10/18/2023	02:00 pm - 02:30 pm	MDC: Spiders: Creature Feature: Missouri's Tarantula (Virtual)
10/18/2023	03:30 pm - 04:30 pm	MDC: Trees: Fall Color (Virtual)
10/19/2023	12 noon - 01:00 pm	Deep Roots webinars - Native Plants at Noon
10/20/2023	03:00 pm - 04:00 pm	MDC: Birds: Virtual: Birds of Missouri
10/21/2023	09:00 am - 10:00 am	MDC: Conservation Families: Virtual: Where Can I? -- Birdwatch
10/24/2023	06:00 pm - 07:00 pm	Chapter Meeting----TBD
10/24/2023	06:00 pm - 07:00 pm	MDC: Mammals: Bats of Missouri Webinar
10/31/2023	01:00 pm - 02:00 pm	MDC: Learn to Fish: How to Catch-and-Release Trout (Virtual)
11/1/2023	09:00 am - 10:30 am	MDC: Birds: Project FeederWatch Kickoff-Virtual
11/2/2023	12 noon - 01:00 pm	Deep Roots webinars - Lunch and Learn
11/4/2023	09:00 am - 10:30 am	MDC: Conservation Families: Virtual: Where Can I? -- Find Safe Trees
11/7/2023	03:30 pm - 04:15 pm	MDC: Birds: Backyard Birds Virtual Program
11/8/2023	12 noon - 01:00 pm	MDC: Learn to Fish: Match the Hatch (Virtual)

Most training requires advanced registration. Check the AT Description for how to register. If you want to sign up for a training session with MDC or Missouri Prairie Foundation (MPF) you can use the appropriate link below.

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

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

For other advanced training, follow the instructions in the email sent by Vanessa. 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 December 31, 2023.

Advanced Training Calendar for October, November and December 2023 *Continued*

Event Date	Event Time	Event Title
11/16/2023	12 noon - 01:00 pm	Deep Roots webinars - Native Plants at Noon
11/16/2023	04:00 pm - 05:00 pm	MDC: Birds: VIRTUAL: Backyard Bird Feeding
11/16/2023	06:00 pm - 07:00 pm	Wild Ones: "The Gardener's Guide to Prairie Plants"
11/18/2023	08:30 am - 10:30 am	MDC: Deer Hunting: Virtual: Learning to Hunt: Measuring Your Trophy
11/18/2023	12 noon - 01:00 pm	MDC: Learn to Fish: Fishing Equipment Maintenance (Virtual)
11/20/2023	10:30 am - 11:00 am	MDC: Learn to Fish: Fishing Equipment Maintenance (Virtual)
11/21/2023	06:00 pm - 07:00 pm	MDC: Outdoor Survival: Best of the Ozarks: Camping Virtual Program
11/28/2023	06:00 pm - 07:00 pm	Chapter Meeting----Kylie Helmig w/Stream Teams
11/28/2023	02:00 pm - 02:30 pm	MDC: Mammals: Creature Feature: White-tailed Deer (Virtual)
11/29/2023	06:00 pm - 07:00 pm	MDC: Birds: VIRTUAL: Whacky Woodpeckers
11/30/2023	11:00 am - 12 noon	MDC: Birds: Virtual: Attracting Backyard Birds
11/30/2023	06:30 pm - 07:30 pm	MDC: Birds: Virtual: Attracting Backyard Birds 2nd one
12/7/2023	12 noon - 01:00 pm	Deep Roots webinars - Lunch and Learn
12/8/2023	03:00 pm - 04:00 pm	MDC: Mammals: VIRTUAL: Mammals of Missouri
12/9/2023	08:30 am - 10:30 am	MDC: Outdoor Cooking: Virtual: Learning to Hunt: Wild Game Prep
12/13/2023	12 noon - 01:00 pm	MDC: Birds: Winter Woodpeckers (virtual)
12/19/2023	02:00 pm - 02:30 pm	MDC: Mammals: Creature Feature: River Otter (Virtual)
12/21/2023	12 noon - 01:00 pm	Deep Roots webinars - Native Plants at Noon



Just a friendly reminder...

Now is a great time to enter your hours!

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

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!