May - August 2024 Volume 18

the NATURALIST newsletter

Louisiana Master Naturalists, Greater New Orleans

Message from the President



Remember how much fun you had going through the master naturalist program such as the trip to Grand Isle, boating out to Turtle Cove, canoeing at Chef Pass, frogging at Jean Lafitte? Our program could use your support! If you are able please consider donating to LMNGNO during the GiveNOLA Day event this year – even a \$10 donation will help!

We use funds from fees and donations to buy the equipment and field guides that we loan out to our participants, outreach materials, caps, and T-shirts. Funding goes toward reserving camps, rent at STEM Library Lab, and honorariums for all of our workshop speakers. During each session we give out scholarships to participants if needed.

We would love to grow our program and make it sustainable. Everyone working in this organization is a volunteer. Dr. Bob probably volunteers a few hundred hours every year, at least! Please keep us in mind. May 7th is the only date you may donate. Check it out on our LMNGNO website at <u>GiveNOLA Day</u>.

-Julia Lightner

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Striped Bark Scorpion Centruroides vittatus

Copenhagen Hills Preserve Caldwell Parish, LA 4/14/2024

Editor: Bill Van der Meer Assoc. Editor: Catherine Leftwich Proof Reader: Dr. Mary Gubala

Contact: bvanderm1@gmail.com

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2024 Viosca Award

The Paul Percy Viosca award for Outstanding Naturalist of Greater New Orleans goes to Nancy L. Newfield. Nancy has been fascinated with and has studied, attracted, lectured, and written about hummingbirds for most of her adult life. She is a licensed hummingbird bander who has been banding hummingbirds since 1979, when she initially started a 5-year study of winter resident hummingbirds., The "study" is now in its 45th year during which she has banded a whopping 21,000 hummingbirds.



Flanked by Dr. Bob Thomas and chapter president, Julia Lightner, Nancy Newfield addresses an audience of GNO members upon receiving her Viosca award

Known to many as "the Hummingbird Queen", Nancy is reputed to know more about Louisiana Hummingbirds than anyone else. As of December 2023, fourteen hummingbird species have been reliably reported in Louisiana. Of these, 11 species have been banded. She was the first to band each of these birds in Louisiana. Nancy was the only person in Louisiana to have banded a green-breasted mango, and a Lucifer/black-chinned hybrid.

Through her voluntary banding efforts, we now have good evidence that in the fall some hummingbirds circumnavigate rather than fly directly across the Gulf. She has written five books and numerous articles including a free downloadable book, titled <u>Louisiana</u> <u>Hummingbirds</u>. The publication includes 2 pages listing native plants which attract hummingbirds. Many of these plants are present in her garden in Metairie that attract a wide variety winter resident species. Nancy has given hundreds of lectures around the US and internationally about hummingbirds.

Paul Percy Viosca Jr. was a Marine Biologist whose name has become synonymous with the distinction bestowed upon outstanding local naturalists. Born in New Orleans on June 24, 1892, Viosca was a preeminent naturalist of his day. Upon earning his master's of science degree, he taught at Tulane University through 1916, after which he set up the Southern Biological Supply Company. His company supplied specimens of crayfish and other aquatic life for research and commercial use. Viosca's publications, about life in the swamps and marshes of Louisiana, proved invaluable for posterity. By the end of his life, his remarkable contributions were acknowledged, among his peers, earning him the title as "the dean of Louisiana biologists".

Seth Nehrbass and Bill Van der Meer

2024 Events Calendar:

Board of Directors Meetings (5:30 pm)

Also open to all members in good standing

LMNGNO Resource Room STEM Library 3011 N I-10 Service Rd. Metairie, LA 70002

July 17th October 30th December 4th (if needed)

General Membership Meetings

Begin at 5:30pm Loyola University Miller Hall, Room 114

> July 24th November 13

Special Events

Annual Gathering Oct. 11-13 Location Bogue Chitto State Park

> The Louisiana Master Naturalists of Greater New Orleans is a community of citizens interested in engaging with the natural environment through education, stewardship and volunteering.

Swamp Lotus Forest Bathing with Master Naturalist Applicants by Tricia LeBlanc

When's the last time you spent time with a tree? Really spent time with an individual tree? Sat with it? Observed it? Really got to know that particular tree? If you've ever done this, what do you remember about the experience? If you've never done this, I invite you to give it a try.

What I describe above is one of many sensory experiences that may be had on a guided forest walk. If you are unfamiliar with Forest Therapy Guiding or Forest Bathing experiences, they are practices that focus on deep sensory explorations in nature. These explorations allow people to relax, destress from their daily lives and remember their connection with nature.

The practice of forest bathing began in Japan in the 1980's as a response to a health crisis resulting from the dot.com boom. As the Japanese government became concerned about increases in cancer rates and other illnesses, they discovered the health benefits of spending time in nature, and developed forest bathing experiences as a way to improve both mental and physical wellness.

As a certified forest therapy guide, I had the pleasure of guiding a group of future Master Naturalists on a forest bathing walk at Couturie Forest in City Park on Saturday, February 17. The group was comprised of applicants to the Master Naturalist program who were awaiting the start of their class. In some cases, their wait may be as long as a year. So to maintain their interest in the program, and keep them in the fold, so to speak, some activities offered by existing Master Naturalists were suggested to welcome the applicants and maintain a relationship with them while they await the start of their class.

After an introduction which included a land acknowledgement, as well as a brief explanation of forest bathing, forest therapy guiding and what the program for the day would consist of, we moved into a series of relaxing, meditative activities focusing on each of the senses, giving people an



Participant Greeting a Tree

Photo by Tricia LeBlanc

opportunity to settle into the experience and transition mentally away from their busy thoughts and worries, and focus on the present moment and their connection with nature.

In between each of the activities, we shared our observations with each other in a group circle. These were times to share whatever was being noticed externally, internally or both. Silence was included as a means of sharing as well.

After the walk, the participants shared how much they enjoyed the walk, what a unique experience it was for them, and how they had never experienced nature in that way before. They reported feeling very relaxed and rejuvenated. Their feedback supports the research that has been done on the impacts this practice can have on people's health and wellness.

Studies have shown forest bathing reduces the cortisol levels in participants, which is the hormone related to stress. Researchers have also found that these walks reduce blood pressure, and can reduce symptoms related to depression and anxiety. In addition, spending time in nature can also help fight certain kinds of cancer. According to some studies, breathing in the phytoncides, chemicals tree release as their defense against diseases and pests, benefits us as well. It has been claimed that these phytoncides boost our immune systems and that can increase our ability to fight cancer.

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Forest bathing (continued)

Aside from the benefits we gain from nature, forest therapy guiding is about helping people establish a reciprocal relationship with nature, where both nature and people benefit from each other. Forest therapy guides lead people on these experiences with the idea that the forest is the therapist and the guide opens the doors. As a guide, I am there to provide the framework and environment for participants to establish, develop, or remember their personal relationship with nature. The goal is that participants will continue to maintain their relationship with nature which will lead them to take meaningful steps towards the conservation and preservation of nature.

If you would like more information about forest therapy guides, please check out my website at <u>swamplotusnola.com</u>. The Forest Awaits You!

The Northeast Chapter of Louisiana Master Naturalists designed and conducted a masterful program that provided participants with a good look at the natural and historical wonders in their corner of the state. The main events were held at the Monroe Civic Center in Monroe, LA. Consistent with the vision of Rendezvous, there was ample opportunity to network with folks from other local chapters. Field trips included birding, a fungi walk, a session on aquatic macroinvertebrates, two night time frog walks and "moonlight paddles" on the cypress studded Black Bayou Lake National Wildlife Refuge.

The NWR also provided the venue for a number of excellent workshops there. . Archeologist Dr. Diana Greenlee gave a talk on the work being done at nearby Poverty Point and Linda Auld delivered her keynote address after being presented with the Dormon award. Several other interesting seminars rounded out the agenda. And finally there were the annual photo contest awards and a silent auction where folks were given the opportunity to trade books and bid on art and a multitude of attractive arrangements, all of it donated to help raise money for future Rendezvous events.

A late addition of a Paleontology lecture and hike in Caldwell Parish and a Bioblitz closed out the weekend. Suffice it to say that it was all good and so was the food. The Baton Rouge chapter has committed to hosting Rendezvous 2025. -Bill V.

Rendezvous 2024



A contingent of LMNGNO friends at Copenhagen Hills Preserve



Janna Wisniewski cradles a rare Louisiana Pine Snake at the Black Bayou Lake National Wildlife Refuge

Well-intentioned Human Intervention: Does planting non-native milkweed actually help Monarchs?

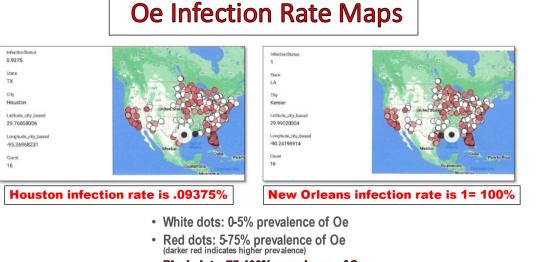
by Linda Barber Auld and Ginna Hoff

In 2013 it was shocking to hear the reports from the national organization Monarch Watch about lowest overwintering monarch the butterflv population in recorded history. Believing it to be helping, we gardeners rushed to our local garden centers, and purchased the milkweeds on the shelves. Unfortunately, at that time, native milkweeds were not being produced for many retail markets therefore only non-native "Scarlet", "Silky Gold", and "Giant" were readily available. Yes they are beautiful plants, and monarch caterpillars will eat them, but did this actually help? What is the difference and why does it matter?

Ω

Mild winters without freezes allow tropical milkweed to survive from fall into the following spring. Areas north of Lake Pontchartrain experience much colder winter temperatures that cause natural tropical milkweed die-back. (After spring bloom time, wild native milkweeds growing through their instinctive cycle will die back.) The Oe protozoan parasite (Ophryocystic elektroscirrha) is known to be a debilitating and sometimes lethal disease endangering monarchs. Oe is exceptionally rampant in warm winter locations where non-native milkweed is abundant and infects caterpillars that eat spores on milkweed leaves. Years of intensive studies of metro New Orleans conducted by Tulane University students confirmed the following results:

- Monarch caterpillars that ate tropical milkweed develop smaller wings, hindering them from long-distance migration and creating a large non-migratory population.
- The quick regeneration of non-native tropical milkweed leaves enables monarchs to repeatedly use the same plant only helping Oe to thrive.
- Overcrowding caterpillars on milkweed is a known major condition that spreads Oe infection spiking in summer and fall in Southeast areas.
- The winter breeding population is heavily infected with Oe and likely to contaminate habitats that migrants from all migratory populations encounter.
- New Orleans area gardeners should supply milkweed only in spring for healthy monarch migrants and thereafter, provide blooming nectar plants.
- This is why we cut back "used milkweed" beginning June 1 and repeated after each "wave" of caterpillars.



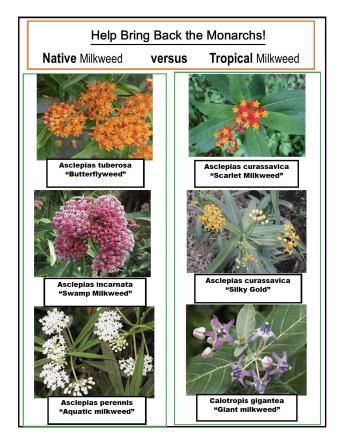
• Black dots: 75-100% prevalence of Oe (University of Georgia website: monarchparasites.org/maps)

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We know that New Orleans, Houston, and parts of the Florida peninsula are breeding infected monarchs (monarchparasites.org/maps), but what about other areas along the Gulf Coast? The greater Gulf Coast shoreline area has long been a spring east-bound flyway for monarchs re-migrating to the USA from Mexico.

In Pass Christian, Bay St. Louis, Ocean Springs, and D'Iberville, concerned citizens are creating pollinator habitats to support butterflies including migratory monarchs.

Many of these initiatives lack the component of procedures for detecting Oe and milkweed management. Education followed by appropriate action is needed. Therefore, in October a new testing study will begin in these cities. Volunteers will be trained in how to sample for Oe presence and those results will determine the current Oe levels. The data created from this research will help us to better educate those interested in Oe and milkweed management.



Linda Barber Auld received the Caroline Dormon Outstanding Louisiana Naturalist Award on Saturday on April 13, at the Monroe Civic Center, Monroe, LA. According to the press release: "This award is named for Dr. Caroline Dormon, a Louisiana naturalist, environmental educator, horticulturist, ornithologist, historian, archaeologist, preservationist, conservationist, and author. Auld became known as "the NOLA Bug Lady" through her lifelong passion, commitment to citizen science, teaching, and tireless advocacy on behalf of Louisiana's natural heritage, especially butterflies and other arthropods, with special focus on the monarch butterfly."

For the complete press release, which also includes a biographical sketch of Caroline Dormon and recognition of previous Dormon award recipients, visit:

https://www.louisianamasternaturalist.org/the_dormon_award.html_____-Bill V.

Naturalist Hiking Trails Close By by: Catherine Leftwich

One summer, I lamented to a friend that I felt guilty for spending so much time inside. A native of Kansas, she told me that she had adopted a reverse hibernation mindset when it came to Louisiana's seasons. In the oppressively hot summers, she spent time indoors, hibernating from the heat. Once Autumn arrived, she spent as much time as possible outside before the heat inevitably set in again in May.

Taking this mindset to heart, I have endeavoured to spend more weekends exploring our local hiking trails. All of the hiking trails presented are under a two hour drive from New Orleans (Mid City as a reference). The Explorers Guides: 50 Hikes in Louisiana by Janina Baxley was a major guide in creating this list, as well as informing my own local hiking adventures.

Blackfork Trail 1hr 56min Cat Island National Wildlife Refuge, Saint Francisville, LA Total Length: 2.3 mile circuit, Time: 1-2 hours Habitats: Bottomland hardwood, cypress swamp <u>Cat Island National Wildlife Refuge</u>

This trail, located in the Cat Island National Wildlife Refuge, is home to a "Champion" bald cypress tree. Cat Island NWR was established in 2000 to preserve local habitats. The hiking trail itself, is maintained by the United States Fish and Wildlife Service, as well as the Friends of Cat Island,

The bald cypress trees are estimated to be over 300 years old in this area. Birds are plentiful-barred owls, blue and green herons, and egrets are plentiful. The occasional deer and wild turkey can be seen, as well as alligators and red-eared sliders. Flora include swamp-milkweed during dry springs, and the ladies eardrop vine. If you wish to see the National Champion Cypress tree, branch out on the Big Cypress Trail.



Mary Ann Brown Nature Preserve 1h 40 min

13515 LA-965, St Francisville, LA 70775 Total length about 2 miles Hiking time: 1 hour Habitats: mixed pine and hardwood, upland forest <u>Mary Ann Brown Nature Preserve</u>



These 109 acres, donated to a Nature Conservancy, offer an overlook of the hilly bluffs of West Feliciana Parish, as well as the possibility to see the eastern chipmunk. The streams and ponds surrounding the trails make this an ideal birding spot; many warblers and hawks frequent the area. The Big Beech Trail is best hiked in the fall, when the golden colors of changing leaves can be observed. The trails are open to the public from sunrise to sunset each day. Some of the paths are worn from recent weather events; take caution when hiking over the boardwalk and small bridges over creeks, as some wood is rotted.

Port Hudson State Historic Site 1hr 30min Total :Length 3.4 miles Hiking time: 2 hours Habitats: mixed upland hardwoods, beech and magnolia forest Port Hudson State Historic Site

Located along two creeks with a view of local bluffs, Port Hudson is also known as the site of a 48-day siege during the Civil War. A gravel trail, beginning with a small museum of Civil War artifacts, leads hikers up and down some rather steep declines (for Louisiana). Wildlife is plentiful, including deer, armadillos, and wild turkeys. Interpretive signs line the trail, giving information about different uses of the land during the siege. There are not as many majestic, old-growth trees, as deforestation was wrought upon the area by both Union and Confederate forces, as well as by the federal government. One red oak, near Point B, is believed to have survived all four deforestation efforts.



Horse Branch Trail 1hr Horse Branch Road, Covington, LA Total Length; 1.2 miles Hiking time: 45 minutes Habitats: longleaf pine savanna, small-stream forest, bogs, seeps Horse Branch Trail, Lake Ramsey Preserve

Thanks to efforts to restore and preserve giant longleaf pine forests, the Nature Conservancy

acquired 500 acres of the 1300-acre Lake Ramsey Preserve. This is one of the few remaining pure areas of longleaf pine in eastern Louisiana. This trail begins with a small Horse Branch Creek and continues into a longleaf pine savanna. Hikers can find carnivorous pitcher plants throughout the area, as well as spot a few red cockaded woodpeckers. Although a relatively short hike in comparison to others nearby, this is not to be missed due to the uniqueness of the pines and the diverse habitats present.



Big Branch National Wildlife Refuge 45 min 61389 LA-434, Lacombe, LA 70445 Total Length: 6 miles Hiking time: 3 hours Habitats: pine flatwoods, mixed pine and hardwood forest, longleaf pine forest, fresh marsh Big Branch National Wildlife Refuge

Established in 1994, this refuge is a birders paradise. Boy Scout Road is a gravel path, accessible only to foot, bike, and horse traffic. Many live oaks, covered in Spanish moss and resurrection fern line the road. Birders can find red-cockaded woodpeckers, and migrant flocks pass through during the spring and fall. Ditches are covered in irises, wetland wildflowers, and blooming water lilies.



A Fossil Walk Searching for Sharks Teeth, Scaphopods and a King Lizard

by Bill Van der Meer

Participants of Rendezvous 2024 were given ample warning that the fossil hunt they were about to sign up for would be both strenuous and muddy. However, there's something very intriguing and an almost primal attraction about the prospect of discovering and identifying preserved remains of animal and plants who lived nearly thirty-six million years ago. And so with paleontologist Dr Gary Stringer and LMNA president Bette Kauffman in the lead, a convoy consisting of thirty two master naturalists drove south from Monroe, LA to the small community of Copenhagen on a beautiful Sunday morning.

At least one of Copenhagen's claim to fame is that it is known as one the most, if not "thee" most famous fossil site in the state. It's been studied by paleontologists from around the world for nearly 200 years. The first specimen of an ancient whale was discovered here in 1829.

The area is characterized by prairie, upland forest and cedar woodland habitat. It contains deep marine sediments laid down during the Paleogene Period, Eocene Epoch. Fossils are exposed in various eroded outcrops composed of the highly calcareous soil associated with the Yazoo Clay formation of the Jackson Group.

Invertebrate fossils are represented by numerous phyla which include coelenterates (corals) mollusks (bivalves, gastropods, and scaphopods), bryozoans, annelids (segmented worms) and echinoderms (crinoids) and more.

Vertebrate fossils include the remains of sharks, rays, bony fishes, reptiles, and mammals, one of which is the 20 meter (65 feet long) early whale, *Basilosaurus*. This so called "King Lizard" (actually a mammal) is said to have gone extinct about thirty four million years ago whereas predecessors of modern whales continued on a divergent evolutionary track into the Oligocene Epoch.

Good fossil sites in Louisiana are rare, particularly in the Mississippi embayment. where successive oceanic incursions along with rivers and deltas have buried underlying Eocene marine deposits with deep sediment and alluvium. Fortunately, there's at least one notable exception.

Dr. Stringer writes: "The vertebrate fauna from the exposures at Copenhagen represents the most diverse assemblage documented from Louisiana and is one of the richest faunas known from the Tertiary (now known as the Paleogene) of the Gulf Coastal Plain with over 8,500 vertebrate specimens collected".



Dr. Gary Stringer and student share a teachable moment at Copenhagen Hills Preserve

Fast forward to April 14th, 2024 and our convoy of intrepid fossil hunters arrive at a Nature Conservancy site known as <u>Copenhagen Hills</u> <u>Preserve</u>. Not open to the general public, the Conservancy selected this site because of its stature of being one of the most significant botanical sites in the state. Our guides reminded us of our need to be safe and to respect the site. Only surface collecting would be allowed. One of the other conditions of our visit was that everyone would be required to have their respective fossil hauls inventoried by Dr. Stringer and his faithful scribe.

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He would in turn send a report on the material removed from the site to the Nature Conservancy. Hundreds or more specimens were collected, including a small segment of fossilized *Basilosaurus* vertebrae.

Our trek into the preserve began with a steep decline on an improved path, which then led us on to a tall grass prairie covering a broad ridgetop. The southern edge of the ridge sloped away towards a confused maze of highly eroded and broken topography where the loosely consolidated soil exposed a fossil oyster bed where shells were scattered about in virtually every nook and cranny.



Basilosaurus cetoides

As folks fanned out further downhill they quickly became believers of Bette Kauffman's predicted challenge of our having to negotiate a complex maze created by a series of very steep slopes with deep and often muddy ravines. The finds made it all worthwhile, however. Invertebrate and to a lesser extent vertebrate fossils were plentiful in this upland forest segment. Many had been washed out of the strata by an eight to nine inch deluge occurring several days before, which made for easy pickings.



Collecting fossils on an ancient oyster bed

Unfortunately, the creek further downhill, which had held promise of some of the best fossils, was flooded by the backwaters of the swollen Ouachita river. But despite the briars, the ticks, the sheer exertion and one cottonmouth that slid over Janna's boot, "the walk" (if you want to call it that) proved to be an exhilarating learning experience for all who braved the slopes and the quicksand-like Yazoo Clay.



A portion of Dr. Stringer's portable display case used as a teaching aid and is representative of species regularly found on the Copenhagen site. See if you can find the **scaphopods** or "tusk shells" in the display case.

Special thanks to Dr. Gary L Stringer, Professor Emeritus of Geology, University of Louisiana at Monroe, who took the time to review this article.