



**Sessions Agenda & Descriptions  
Updated August 20, 2022**

Please Note:

All items on the agenda are tentative and subject to change prior to event registration and the final event agenda.

**Please consider the environment before printing this 20+ page agenda.**

T E X A S



### OUR MISSION

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 Texas.

### Program State Sponsoring Agencies:



### About the 2022 Annual Meeting

*Welcome to Houston, Texas! This year marks our 23rd Annual Meeting and the **24<sup>th</sup> year** of the Texas Master Naturalist Program. We have scheduled **over 100** different presentations and field sessions with a variety of topics and speakers from around the state. Outside of the classroom, we also have plenty of opportunities to meet new friends and old friends alike, some really beautiful artwork and photos entered into our annual contest, and a wide variety of chapter projects on display in the Project Fair. Enjoy this weekend of comradery and learning! Thank you for being here with us to celebrate another year of incredible conservation impacts on the land!*

### KEY for Agenda

**Field Session**  
**Meal**  
**Virtual Access**

# Thursday October 20<sup>th</sup> 2022

**8:00am - 2:30pm**

## **Botany Everywhere**

### **Field Session**

- *Anita Tiller, Linda Costanzo, Kari Hernandez – Mercer Botanical Center, Mercer Botanic Gardens*

Visit to the Harris County Prairie Dawn Preserve and Mercer Botanic Gardens! Due to the fragile habitat of the Harris County Prairie Dawn Preserve, we must limit the tour to 12 persons. Starting at 8 a.m. and an estimated ending around 2:30 p.m. Please bring your own sack lunch, personal water bottle, hat, insect repellent, walking stick, binoculars (optional) and wear hiking boots. The tours will be led by Mercer Botanic Gardens staff, Anita Tiller, Botanist; Linda Costanzo, Botanical Collections Curator; Kari Hernandez, Assistant Curator; and volunteer citizen scientists.

#### 1. Arrive at Harris County Prairie Dawn Preserve

Tour this unique urban pocket prairie preserve, a Native Prairie Association of Texas Prairie Heritage Property, to view naturally occurring rare plant species, including one of the rarest native prairie grasses, Texas windmill grass.

#### 2. Proceed to Mercer Botanic Gardens

Tour the Endangered Species and Native Plant Garden, a teaching garden for the Native Plant Society of Texas; TPWD and NWF Best of Texas Wildscape Demonstration Garden; and NABA certified Monarch and Butterfly Garden. Restrooms available. Lunch at Mercer Botanic Gardens. If time permits, view Mercer Arboretum's Cypress Swamp

#### 3. Proceed to Mercer Botanical Center (MBC)

Tour MBC research facility's botanical reference library; botanical illustration and herbarium (MERCA and SBSC) collections; seedbank and nursery for the Center for Plant Conservation National Collection of Endangered Plants. Restrooms available.

#### 4. Return to Omni Houston

**8:00am - 12:00pm**

## **Protecting the Prairie for People and Wildlife**

### **Field Session**

- *Shari Lewis, Coastal Prairie Chapter & Bethany Foshee, Coastal Prairie Conservancy*

The Coastal Prairie Conservancy (formerly Katy Prairie Conservancy) now protects over 30,000 acres of land including remnant and restored prairies in Fort Bend, Waller, Galveston, and Harris counties. We began our work as a nonprofit fighting to save open lands in 1992. Enjoy a morning of learning the who, what, and why of the CPC and visiting two of its Katy Prairie preserves. First, meet at Indiangrass Preserve for a narrated walking tour through restored native prairie and visit the nursery operation. Then depart for the Matt Cook Viewing Platform overlooking beautiful Warren Lake. Learn about the positive impact of CPC on native grassland bird populations and the importance of CPC to migratory species. Finally, you can enjoy fall migration birding

from the viewing platform. To see a piece of this historic prairie and hear more about the restoration work being done, sign up for a visit to the Katy Prairie with the Coastal Prairie Conservancy.

**8:00am - 12:00pm**

## **Prairie Potholes - What's Not to Love**

### **Field Session**

- *John Egan & Irmis Willcockson, Gulf Coast Chapter*

Visit Sheldon Lake State Park to see how multiple different prior uses shaped this suburban state park. Walk the boardwalk through the prairie and pothole restoration. Witness pond succession in former fish farm ponds. Climb the observation tower to gain a different perspective of the park.

**8:30am - 12:00pm**

## **Bayou, Forest, and Prairie Oh My! Exploring Armand Bayou Nature Center**

### **Field Session**

- *Jennifer Logsdon Kramer & Irmis Willcockson, Gulf Coast Chapter*

Come explore Armand Bayou Nature Center, one of the largest urban wilderness preserves in the United States. You will get an up close look at Armand Bayou and Horsepen Bayou as you come aboard and cruise on the Bayou Ranger II pontoon boat. We will look for osprey, bald eagle, herons, egrets, as well as many other animals in their natural habitat. The boat trip provides great viewing of the restored marsh wetlands established by volunteers and staff. You will also hike through the Coastal Flatwoods Forest and Coastal Tallgrass Prairie learning about the restoration and maintenance efforts and benefits of each habitat.

**8:00am - 11:30am**

## **Dig In: Tree Planting Workshop**

### **Field Session**

- *Stephen Brueggerhoff, Texas A&M AgriLife Extension Service & Rich Sommer, Exploration Green Conservancy*

Dig In: Tree Planting Workshop is a hands-on experience teaching best methods for tree planting at Exploration Green—a vibrant greenbelt in Clear Lake community that aids in flood control, environmental conservation, natural resource education and recreation. We offer program participants the opportunity to learn best practices of tree planting, including basic overview of tree biology, proper planting techniques, and sustainable management, and maintenance. Included is a visit to the Exploration Green tree nursery, as well as break-out groups receiving practical experience planting a tree as part of Exploration Green's conservation efforts.

**8:30am - 11:30am**

## **Texas Waters Day - Midtown**

- *Melissa Felty, Texas Parks and Wildlife*

The Texas Waters Specialist program develops a corps of well-informed volunteers dedicated to the beneficial management of aquatic resources and aquatic habitats. Advanced training and service opportunities are aligned to four categories: Conservation, Ecology, Education, and Stewardship. Texas Waters Specialists are fundamental to informing their communities of conservation issues specifically related to the need for fishable, swimmable, and drinkable waterways for our state. At Texas Waters Day, attendees will participate in hands-on, aquatic-based activities that connect us to Texas Waters. Activities are open to all certified, in-progress, and newly curious to the program. Each Texas Waters Day offers different activities so if you participated in the past, join again for continued learning. In addition, Texas Water Specialists will be recognized for their dedication to the Texas Waters Specialist program, along with special awards to those that have gone above and beyond as ambassadors for Texas Waters.

**9:00am - 12:00pm**

## **Nature Lover's Paradise**

### **Field Session**

- *Montse Canedo & Hoiman Low, Coastal Prairie Chapter*

What makes Brazos Bend State Park unique is its diversity. Within this 5,000-acre park, there are swamps, marshes, lakes, bottomland hardwood forests, and coastal tall grass prairie. The park is home to an abundance of wildlife, from white-tailed deer, water birds, butterflies, wildflowers, prairie grasses, to one of its biggest attractions, the American Alligator. Come join us to enjoy and learn about Texas wildlife.

**11:00am - 2:00pm**

## **Chapter Leadership Luncheon - Greenway Ballroom**

### **Meal**

### **Virtual Access**

This session is for Chapter Presidents, Chapter Advisor's or the Chapter President Designee to attend, hear about statewide initiatives, program updates and accomplishments. There is also usually time for an open format forum.

**12:30pm - 3:30pm**

## **Increasing Our Catch - Monitoring and Raising Fish Stocks for the Upper Texas Coast**

### **Field Session**

- *Paul Cason, Texas Parks & Wildlife Department*

"Sea" how the dedicated staff at Sea Center Texas raises Speckled Trout, Flounder, and Red Drum to enhance the fish populations along the Upper Texas Coast. Learn how populations in the Gulf are monitored and how stocking levels are determined. Visit various aquarium habitats, a touch tank, and get a behind the scenes look at how spawning occurs through to how fry are transferred to the Gulf at the appropriate times during the year. Also wander along the Wetlands Boardwalk and observe many species of birds and reptiles.

**1:00pm - 5:00pm**

## **Paddle Spring Creek**

### **Field Session**

○ *Kris Linberk, Jesse H. Jones Park*

We'll start off with a basic on-land know-before-you-go safety talk, and paddle stroke practice. Once loaded and in the water, we'll make our way downstream to the west fork of the San Jacinto, or just into the mouth of Lake Houston (depending on the skill of the group). Along the way, we'll chat about local & cultural history, current state of Spring Creek (no dredging, just tree removal from HCFC), birds, and other flora/fauna that call this riparian zone home. I like to think of it as a nature hike-but instead of using our feet, we're moving on water.

**6:00pm - 8:00pm**

### **Welcome Dinner & Social - Post Oak Ballroom**

#### **Meal**

Join fellow Texas Master Naturalist members and community partners for a casual and social dinner, get to see everyone again in person, and share experiences from the last year.

# Friday October 21st 2022

**7:00am - 8:00am**

**Breakfast - Post Oak Ballroom**

## **Meal**

Start the morning off fresh with a hearty meal and plenty of coffee and/or tea! We encourage you to sit and eat with new friends from different chapters or different corners of the state.

**8:00am - 12:00pm**

## **Nature Reborn at Seabourne Creek Nature Park: Master Naturalists Transforming a City Park**

### **Field Session**

- *Katie Sallean, Shari Lewis, Jerry Trenta & Lynn Trenta, Coastal Prairie Chapter*

In 2009, the Coastal Prairie Chapter had the grand idea of turning parts of a basic city park from cotton fields into a nature preserve. The chapter successfully pitched the idea to the City of Rosenberg, entered into an agreement with the city and then named it the Seabourne Creek Nature Park. Since then, chapter volunteers have strived to convert 164 acres into habitat for native Texas flora and fauna and for prairie restoration using the thousands of plants grown onsite each year and to educate the public about the importance of restoring this native habitat. Come see what has been done so far: There are seven distinct areas providing habitat for native Texas flora and fauna: Butterfly Garden, Seabourne Lake, Wetlands Area, Prairie & Native Plant Demo Garden, Arboretum, Prairie Restoration Area, Woodlands / Bird Sanctuary. The park is now a favorite birding location in Fort Bend County with more than 200 species observed by eBird users.

**8:00am - 12:00pm**

## **Beyond Tagging, Measuring Monarch Mass and Wings**

### **Field Session**

- *Jim Isleib, Houston Arboretum and Nature Center*

Participants will be trained in the tagging protocol of the University of Kansas and the measurement protocol for the Monarch Joint Venture. The session will be conducted at the Houston Arboretum and Nature Center (HANC) directly across from the meeting site. I have tagged and raised monarchs for the past 30 years and have tagged exclusively at HANC for the past three years. Although there is no guarantee of collecting migrating monarchs, some captive-reared monarchs will be available for practice. Insect nets will be provided for tagging. Participants will be encouraged to purchase a battery-operated scale and either a plastic metric ruler or calipers for measuring mass and wing length. To weigh live monarchs, participants will need a balance that weighs things to the nearest 0.01 gram, or preferably, 0.001 gram. These can cost anywhere from \$15-75. Pictured is my Hnzyfuta digital scale purchased for \$13. Digital calipers cost about \$10, but a clear plastic metric ruler is sufficient. Butterfly nets and monarch tags can be provided if participants do not have their own. Monarch tags

can be purchased at <https://shop.monarchwatch.org/Monarch-Watch-Tagging-Kit/121239>.

**8:00am - 12:00pm**

## **Explore a Neighborhood Gem - Bellaire Nature Center**

### **Field Session**

○ *Eric Duran*

Take a guided tour of this nature center in the middle of a neighborhood. Master Naturalists, Eagle Scout candidates, birding enthusiasts and staff naturalists all play a role in improving and maintaining this small nature center in the middle of Bellaire. Learn about the successes and challenges of this neighborhood gem. Bring your binoculars for a chance to do some birding afterwards.

**8:00am - 11:30am**

## **Grasses, Grasses, Grasses, Everywhere, but Which One is it!! - Apollo Boardroom**

○ *Dale Kruse, S. M. Tracy Herbarium*

The Poaceae (grass) family is one of the largest families of vascular plants in the world, especially in a largely prairie state like Texas. Grasses are also a vital ecological, as well as economic, force across the globe. As components of every landscape in the state, grasses are a dominant component of the rich biodiversity that is Texas. In this workshop, we will take a close look at the identification of grasses using two approaches. An initial lecture will delve into the basics of grass morphology, ecology, and biogeography. In the lecture the student will gain a better understanding of these topics, which can then be applied in the laboratory session that follows. The laboratory session is designed as a continuation of the introductory class. In this session, we will take a detailed look at the morphology of this group of plants with the aid of a dissecting scope and published references. Using dissecting microscopes participants will observe the macro and micro morphological characteristics that are essential for accurate identification of these groups. All equipment for the class will be provided, just bring your curiosity.

**8:00am - 10:15am**

## **Here an App, There an App: Getting the Most from Each for Community Science - Constellation East**

### **Virtual Access**

○ *Craig Hensley, Texas Parks & Wildlife Department*

Open the phone of many Texas Master Naturalists and you'll discover a variety of apps for documenting and learning about the natural world. If you are new to the world of nature apps, you're invited to join Craig Hensley, Texas Nature Trackers Biologist, to learn which apps do what and learn how to use them to enhance your learning as well as contribute to community science efforts. We'll begin with an indoor review and then head outdoors to use them. Come with your phone fully charged and be ready to download the following apps before we head outside. Apps we'll work with: iNaturalist,



SEEK, eBird, Project Feederwatch, Merlin Bird ID, Nature's Notebook, BumblebeeWatch, The Audubon Bird Guide App, Song Sleuth, and NestWatch.

**8:00am - 9:00am**

## **The Invasive Species Dilemma in Texas: Highlight on Houston Area - Heights**

○ *Matt Turner, University of Texas at Austin*

Of the hundreds of non-native plants and animals living in Texas, a relatively small number of species are increasingly affecting the economic, medical, and ecological health of the state. Some of these invasive species, like feral hogs, water hyacinth, and salt cedar, are well-known adversaries and millions are spent on their removal and extirpation. Others, such as house sparrows, starlings, and free-roaming cats, are either ignored or become subjects of intense controversy. Some long-term residents, like Chinese tallow, only showed their dark side in the last few decades. Based on research for my co-authored book, "Unnatural Texas? The Invasive Species Dilemma," this presentation will be both a primer and a "think piece." I will draw attention to some of the "big hitters" of Texas with focus on the Houston area. In addition to the species already mentioned, I'll touch upon hydrilla, giant salvinia, Brazilian peppertree, the emerald ash borer, nutria, zebra mussels, and lionfish. Discussing invasive species introduction, spread, and control strategies, we'll explore how culture and shifting attitudes influence their management. Some of these species offer unforeseen benefits in their new homes, making their wholesale removal complicated if not undesirable. This talk aims to show how the topic of invasive species is complex and nuanced. "Native good / exotic bad" distinctions can be overly simplistic and there is no one-size-fits-all solution to what are often site-specific problems."

**8:00am - 9:00am**

## **Houston Parks - The Large, the Linear and the Adapted - Memorial**

○ *Irmi Willcockson, Gulf Coast Chapter*

Houston is home to many innovative urban parks, from linear parks along bayous to small multi-use parks with native elements to parks with 100s of acres of active and passive recreation facilities. And let's not forget the conversion of golf courses into a combination of detention facilities and park amenities. Join Master Naturalists from the Gulf Coast Chapter to learn more about the varied parks in Houston and their challenges from a native landscapes perspective.

**8:00am - 9:00am**

## **Collecting Scientific Botanical (Herbarium) Specimens - Midtown**

○ *Tiana Rehman, Fort Worth Botanic Garden and Botanical Research Institute of Texas & Anita Tiller, Mercer Botanical Center – Mercer Botanic Gardens*

Preserved plant specimens provide us with important information about plant diversity and distribution, and represent an observable, relatively permanent, and verifiable form of evidence of a plant's existence in time and space. If these specimens are properly

preserved and maintained, they can last for several hundred years. Join us in exploring the best practices for collecting scientific specimens, specifically for deposit in your local herbarium. We will discuss methods for vascular plants specifically, but will briefly address some other special cases such as fungi, bryophytes, and lichens. Participants will take home specimens they have pressed from material provided by instructors.

**8:00am - 9:00am**

### **Recovering America's Wildlife Act - Montrose**

○ *Richard Heilbrun, Texas Parks & Wildlife Department*

The Recovering America's Wildlife Act has the potential to transform our work as Master Naturalists and as conservationists. Join us for an update on the political landscape of this once-in-a-generation legislation, including its reception in US Congress. We'll discuss implementation phases and how \$50 Million/year could be spent on wildlife restoration, nature education, and wildlife-associated recreation.

**8:00am - 9:00am**

### **Becoming a Doctor: Evaluating Land Health - Museum Park**

○ *Megan Clayton, Texas A&M AgriLife Extension Service*

We have a toolbox FULL of land management tools including prescribed fire, livestock grazing, herbicide applications, and mechanical control. How do you know land management is creating the right habitat type to meet your goals? What determines if the soil and vegetation are healthy? This session will cover evaluation tools that you can immediately start using to learn to 'read your land' and determine the best next management steps to take. These evaluation techniques are suitable for many different open spaces and are vital for educating others about the importance of healthy land management. Don't be intimidated...become a land doctor today!

**8:00am - 10:15am**

### **Intro to Interpretation, WHO CARES? - River Oaks**

○ *Ben Horstmann, Texas Parks & Wildlife Department*

Someone lit the spark of passion for the outdoors in you and now it's your responsibility to pass on that passion. This session will give a brief overview of what interpretation is, some tools to help you, and how we use it to move people to stewardship in our wild places.

**8:00am - 9:00am**

### **A Bird's-Eye on Night Skies - Timber Grove**

○ *Braulio Torres, Environment for the Americas*

With a focus on World Migratory Bird Day and its theme for this year, this presentation will highlight the negative impacts that light pollution has on bird populations as a whole, and especially on migratory bird species. A comprehensive guide to personally combat light pollution will be discussed, as well as ways to help at a community level through the missions of local bird conservation organizations.

**8:00am - 10:15am**

## **New Class Directors Round Table - Westbury**

- *Paige Wood, Good Water Chapter & Jeanette Geiman, Alamo Area Chapter*

We will lead a discussion of how our training programs have been affected by pandemic-caused and local issues in recent years and how we have and are addressing the changes to meet the needs of our members and further the evolution of our programs.

**9:15am - 11:30am**

## **Armchair Botanist Program: Participate in Virtual Community Science - Midtown**

- *Tiana Rehman & Ashley Bordelon, Fort Worth Botanic Garden and Botanical Research Institute of Texas*

While more than 3 million botanical specimens exist in Texas herbaria, providing important verifiable material for reference and sampling, only a small fraction of these are digitally accessible for observation or inclusion in scientific studies. Join us in working towards liberating these specimens for research, education, and YOU. This session will cover the following: (1) a discussion and update on the status of digitization of Texas specimens across North America, (2) learning the skills necessary to interpret herbarium specimen labels and data, (3) transcribing herbarium specimen labels, and (4) how to utilize this online data. We'll do some virtual botanizing and talk about botany, geography, and history. A computer with internet access is required.

**9:15am - 11:30am**

## **The Texas Coastal Prairie: Then and Now - Museum Park**

- *Bethany Foshee, Coastal Prairie Conservancy & Dan Worrall, Local Author and Historian*

Dan Worrall, local author and historian, and Bethany Foshee, Stewardship and Outreach Programs Manager at the Coastal Prairie Conservancy, will take the audience on a journey back in time. We will follow the formation of Texas' Coastal Prairie region, its coevolution with early grazers and hunter-gatherer communities, its progression into ranching and farming communities, and its place in our modern landscape today, dominated by human development. Bethany will also share what groups like the Coastal Prairie Conservancy are doing to help protect and restore these rare habitats with the help of Texas Master Naturalists!

**9:15am - 11:30am**

## **You Can Monitor Bats Too! —A Hands-On Introduction to Acoustic Surveying with the North American Bat -**

Constellation West

**Virtual Access**

- *Brian Reichert, Frank Tousley, Dane Smith, & Bethany Straw, NABat; Nathan Fuller, Texas Parks & Wildlife Department*

The North American Bat Monitoring Program (NABat) is a multi-national, multi-agency coordinated bat monitoring program that seeks to address the historic lack of information on status and trends of North American bat populations. Implementing

NABat has involved over 1,000 partners across 170 organizations who collect, process, transfer, preserve, and analyze bat monitoring data. This training will focus on the important first step: data collection. Bats can be detected and monitored via the acoustic recording of their echolocation calls. We will present an introduction on both stationary and mobile acoustic monitoring techniques. Stationary acoustic monitoring training will explain site selection, micrositing, and acoustic detector placement. We will also present an introduction to mobile/vehicular acoustic monitoring, covering topics in survey protocols, route planning, and safety. We will provide hands-on instruction with a variety of popular acoustic detectors and will highlight how to get involved with your local NABat hub to work within the NABat framework.

**9:15am - 11:30am**

### **State Parks, Solar Eclipses, and Community Science - Timber Grove**

○ *Katie Raney, Texas Parks & Wildlife Department*

On one special day in 2023 and 2024, the skies of over Texas will darken for a solar eclipse. Our state parks and public lands will draw visitors from the world over to see these stellar sights. In this session, we'll talk about what a solar eclipse is and how to practice safe solar viewing. Then, we'll discuss ways to support your favorite state or local park and its visitors. Lastly, we will explore the myriad of community science opportunities involving plant and animal behavior during an eclipse, and how you can be involved even without any knowledge of astronomy.

**9:15am - 10:15am**

### **Report It and Stop the Spread! Using Texasinvasives.org for Identification, Management, and Reporting - Heights**

○ *Ashley Morgan-Olvera, Texas Invasive Species Institute*

Texasinvasives.org knows that the more trained eyes watching for invasive species and managing them, the better our chances of lessening damage to our native landscape. Our goal is to inspire strong stewardship practices through the detection of invasive species while encouraging all into manageable action in their local area; and we need the help of involved individuals like you! This presentation will introduce important invasive pests and plants in Texas while also providing the tools for identification, management, and how to report these species using the texasinvasives.org website or phone app. Other initiatives will be included in the presentation like our Citrus Greening detection program, Aquarium Watch!, and how to schedule workshops for your TMN Chapter.

**9:15am - 10:15am**

### **Fire & Goats: Vegetation Management Using Traditional Techniques in a Novel Setting - Memorial**

○ *Stephen Benigno & Trevor Rubenstahl, Houston Arboretum & Nature Center*

The Houston Arboretum & Nature Center is a 155-acre nature sanctuary with a mission to protect and enhance its ecosystems as a haven and as a sanctuary for native plants

and animals. Due to surrounding urbanization and removal of disturbances like fire or herbivores that naturally maintain these historic habitats, Arboretum staff have been working to reintroduce these management techniques for the long-term resilience of these ecosystems. Goats have been employed in select areas to graze dense understory vegetation, and prescribed fire has been deployed in both 2021 and 2022 within the Hwy 610 Loop for the first time in over twenty years. These techniques will be discussed, including the preparation and multi-agency coordination, as well as a discussion of vegetation monitoring data collected to quantifiably assess the effectiveness of these novel urban vegetation management methods.

**9:15am - 10:15am**

## **Ocelots in Texas: Conservation Challenges and Opportunities - Montrose**

○ *Shari Wilcox, Defenders of Wildlife*

Once ranging across much of Texas and as far east as Louisiana, today the only remaining breeding population of ocelots in the U.S. are found in South Texas. Split into two small populations with no more than 80 ocelots total, these cats face many challenges to survival. Join Dr. Shari Wilcox, Senior Texas Representative with Defenders of Wildlife, to learn more about this unique cat and the innovative work underway to protect and conserve the remaining population. Discover what you can do to join the fight to save this charismatic wild Texan.

**10:30am - 11:30am**

## **Birding with Today's Technology: Utilizing eBird, Merlin, and Other Online Resources to Be a More Effective Birder - Constellation East**

**Virtual Access**

○ *Kelsey Biles, Houston Audubon*

This session is intended to teach people about birding and how to bird with today's technology by reviewing smartphone apps and internet resources such as Merlin, eBird, and online field guides. Participants should pick up some tips on how to collect valuable scientific data while they are birding. We will also be going over ways to apply this knowledge with citizen science opportunities with Houston Audubon. Note that we will not be going over bird identification, though no specific knowledge of birds is required to attend- brand new and advanced birders alike can gain something by attending! No equipment is required to attend.

**10:30am - 11:30am**

## **Friends Don't Let Friends Spread Invasive Species - Heights**

○ *Matthew McClure, Lamar State College Orange*

Invasive species are non-native organisms introduced by human activity into a new area that become established and cause environmental and/or economic harm. More than 800 aquatic and terrestrial invasive species are currently known in Texas. This presentation will focus on various Texas examples, including some recent arrivals such

as the New Guinea Flatworm and the Black Velvet Leatherleaf Slug, with discussion of modes of introduction, spreading, various harmful effects, resources, and what you as citizen scientists can do to help.

**10:30am - 11:30am**

### **For The Birds! Rookery Enhancement at Armand Bayou Nature Center - Memorial**

○ *Chris Smith & Derek Sanford, Armand Bayou Nature Center*

We will outline work done on our rookery island: from 2012 to present. Participants will leave with ideas on how to improve colonial waterbird nesting sites.

**10:30am - 11:30am**

### **Endangered Species in Texas and How You Can Help - Montrose**

○ *David Powell, Heard Natural Science Museum and Wildlife Sanctuary*

Join us as we discuss Texas species that need your help to survive in our state. We'll share ideas on how you can be a part of efforts to save them.

**10:30am - 11:30am**

### **Interpretation for Master Naturalists - River Oaks**

○ *Jerrel Geisler, Heartwood Master Naturalist & Kickerillo-Mischer Preserve - Harris County Precinct 3*

Interpretation is an art that we all can learn. It can show us a better way to present our topics. Rather than just expressing the facts about a subject or topic, we should all learn to elaborate on why something is greater than just what it is. Join us as we discuss the art of interpretation and how it can fit into the presentations, talks, and discussions that we all provide throughout our Master Naturalist careers.

**10:30am - 11:30am**

### **New Member Trainee Handbook: A Valuable Asset - Westbury**

○ *Bruce Neville & Betty Vermeire, Brazos Valley Chapter*

In 2014, Betty Vermeire conceived of and prepared a New Member Trainee Handbook for that year's training class. The Handbook contained the class roster and schedule, directions to field trip locations, information on advanced training and volunteer opportunities, and important Chapter and State Program documents. In subsequent years, the Handbook grew and evolved. Now included are a list of recommended field guides to many groups of organisms, an introduction to iNaturalist, coherent beginner instructions for VMS, and more. The Handbook is loose-leaf to accommodate presenters' handouts. The Handbook has proven to be extremely useful and popular with both training classes and established members. It can easily be adopted and adapted by other chapters.

**11:30am - 1:30pm**

### **Conservation of the Night & Lunch- Post Oak Ballroom**

## **Keynote Address & Meal**

### **Virtual Access**

- *Cindy Luongo Cassidy, International Dark-Sky Association Texas Chapter*

Join us for a group lunch with a keynote presentation from Cindy Luongo-Cassidy. Are we ignoring half of the conservation work that needs to be done? Cindy will explore the natural world and its processes that depend on the absence of artificial light. Living things need natural darkness for navigation, reproduction, circadian rhythms, photoperiodism, competition, predation, and general habitat protection. We humans need it too. Learn what we can do to extend our conservation work to the nighttime.

**1:00pm - 5:00pm**

## **Get EnRaptured with Raptors and Houston Audubon**

### **Field Session**

- *Mary Anne Morris, Houston Audubon*

Join us for a two hour tour of Houston Audubon's Raptor and Education Center featuring live hawks and owls. Learn about the bird conservation work of Houston Audubon and all about the natural history of raptors. We will tour the gardens and visit Sims Bayou. Bring your cameras for great photo opportunities!

**1:00pm - 5:00pm**

## **Fun on the Trails**

### **Field Session**

- *Patti Bonnin, Houston Arboretum & Nature Center*

Tired of leading the same old hikes? Want tips on working with families and children in the field? Join us on the trails as we learn how to incorporate fun activities like sweep netting for insects, log rolling, and using apps to identify organisms while exploring the beautiful grounds of the Houston Arboretum & Nature Center.

**1:45pm - 5:15pm**

## **Sedges Have Edges, Rushes Are Round...Well, Not**

### **Always!! - Apollo Boardroom**

- *Dale Kruse, S. M. Tracy Herbarium*

The Cyperaceae (sedge) and Juncaceae (rush) families of vascular plants are often considered a difficult group to identify. As components of most landscapes throughout Texas, these "grass-likes" are important members of the rich biodiversity that is Texas. In this workshop we will explore this somewhat foreign world using two approaches. An initial lecture will delve into the basics of sedge and rush systematics, morphology, ecology, and biogeography. In the lecture, the student will gain a better understanding of these topics, which can then be applied in the laboratory session that follows. The laboratory session is designed as a continuation of the introductory class. In this session we will take a detailed look at the morphology of these groups with the aid of a dissecting scope and published references. Using dissecting microscopes participants will observe the macro and micro morphological characteristics that are essential for accurate identification of these groups. All equipment for the class will be provided, just bring your curiosity.

**1:45pm - 5:15pm**

## **iNaturalist: From Getting Started to Contributing to Community Science and Self-Learning - Constellation East** **Virtual Access**

○ *Craig Hensley, Texas Parks & Wildlife Department*

Virtually every Texas Master Naturalist has heard of iNaturalist. Many have downloaded the app, created an account, used it a handful of times, and then moved on without truly enjoying the power of this tool to learn about the natural world around them. Others have gone all in but still haven't harnessed the full power of this natural history tool. Join Nature Trackers Biologist Craig Hensley to explore iNaturalist, both the app and web page. Whether you are new to it or need a refresher, this session will provide you insights into how to enjoy personal benefits from it and contribute to community science efforts at the same time.

**1:45pm - 4:00pm**

## **Pollinators on the Night Shift - Constellation West** **Virtual Access**

○ *Lisa Tuck, Heartwood Chapter, Walker County Master Gardeners, The Herb Society of America*

One evening, I saw what I thought was the world's smallest hummingbird. When I looked it up, I discovered it was a hummingbird moth. There are pollinators working after dark! Moths outnumber butterflies many times--I have seen numbers from 6:1 to 15:1. This talk will provide ways to help these primarily nocturnal pollinators on three fronts: host plants for the caterpillars; nectar plants for the adults; and lighting that will reduce impact on their habits.

**1:45pm - 4:00pm**

## **Restoring Native Prairie Habitat on Public Land - Memorial**

○ *David Powell, Heard Natural Science Museum and Wildlife Sanctuary*

Join us to learn how we have dealt with city officials to restore the habitat in Wylie and Erwin Park in McKinney. A Power Point talk will look at what is growing at both sites along with a discussion of how it is being done and the challenges to be dealt with.

**1:45pm - 4:00pm**

## **Plant Checklists: Finding and Filling Gaps in the Texas Flora - Midtown**

○ *Tiana Rehman & Brooke Best, Fort Worth Botanic Garden and Botanical Research Institute of Texas*

Plant Checklists or "floras" of a specific geographic or ecological region are created from specimen voucher data found in herbaria. This class will introduce you to tools to create your own similar lists, bringing together plant occurrence data from various online sources (observational and vouchered), using a Texas county as an example. We'll explore various sources of occurrence data and new tools to standardize names across these lists, and then discuss how these lists can be used to prioritize further



documentation of the flora. Please bring a laptop so you can follow along with the demonstration and leave the session with a meaningful list of your own!

**1:45pm - 4:00pm**

## **Native Host Plants for Texas Butterflies and Moths -**

**Timber Grove**

**Virtual Access**

○ *Lynne Weber, Capital Area Chapter*

Want to attract beautiful and beneficial pollinators like butterflies and moths to your garden? Learn about the special relationships that exist between several native plant species and the butterflies and moths that use them, beyond monarchs and milkweeds! Explore why native plants are essential to healthy ecosystems, the role of nectar and host plants, and how these insects find the desired host plant species upon which to lay their eggs. This talk will leave you with the knowledge and resources needed to encourage and appreciate a wider diversity of caterpillars, butterflies, and moths in a Texas native plant garden.

**1:45pm - 2:45pm**

## **Feral Hog Biology and Impacts: What We Know and What We Hope to Learn. - Heights**

○ *Mikayla Killam, Texas A&M AgriLife Extension*

Feral hogs are an invasive species that have been causing damage on the landscape for hundreds of years. They are capable of negatively impacting native wildlife, vegetation communities, riparian areas, agricultural operations, and even aspects of urban environments. Today we have identified the severity of some areas of impact, but there are other areas where we hope to learn more. At the end of this presentation, we will also discuss a volunteer opportunity related to long term monitoring of areas damaged by feral hogs. This information will help us better understand how long different environments take to recover after damage so that we can further quantify the extent of their impact.

**1:45pm - 2:45pm**

## **Coronavirus Should Awaken Us to Fight Global Wildlife Trafficking - Montrose**

○ *Mike Mitchell, Game Warden (retired)*

The COVID-19 pandemic sent tremors worldwide, cost trillions, grounded billions, and killed millions. Originating likely in a wet market, most attribute the origin of the SARS-CoV-2 virus to an illegally-traded animal. The world's attention should be drawn to the practice of illegal wildlife trafficking. There are no moats around countries in our modern world. International conservation efforts must stop the devastation of species, such as pangolins, rhinos, elephants, birds, reptiles, timber, and plants. Wildlife trafficking is big business. The stakes couldn't be higher. The time to act is now; the reasons stronger than ever. The speaker discusses wildlife trafficking trends, cash flows, and possible solutions.

**1:45pm - 2:45pm**

## **Revealing Hidden Coastal Prairie - Museum Park**

○ *Evelyn Merz, University of Houston Coastal Center*

The University of Houston Coastal Center (UHCC) in La Marque, TX, site of the former World War II Camp Wallace, is steadily restoring coastal prairie acreage and bringing it under active management at its 925-acre facility. Over 200 acres are now actively managed as coastal prairie. This presentation will focus on the special challenges of restoring coastal prairie heavily invaded by woody brush over time. The usefulness of historical documents in guiding restoration decisions is particularly important. Application of a series of different restoration techniques that deal with an evolving landscape as each technique is applied points out the need for multiple approaches in a multi-step process. Restoring coastal prairie severely impacted by invasive species over time can require a combination of mechanical treatment with heavy equipment, work crew labor, herbicide, mowing and prescribed burning. Each process step produces change that is built upon by the next process. The presentation will discuss the rationale for deciding upon a plan for restoring coastal prairie heavily impacted by brush, the implementation results, and future planning. Since so much of the original coastal prairie that once blanketed the Gulf Coast has been lost over time, preserving the remaining remnants is not sufficient. Restoration of eligible areas is necessary to increase acreage of this endangered habitat for wildlife and the ecological system services provided by coastal prairie.

**1:45pm - 2:45pm**

## **Interpreting Our Backyards - What Do We Say about Wildlife Interactions - River Oaks**

○ *Jerrel Geisler, Heartwood Master Naturalist & Kickerillo-Mischer Preserve - Harris County Precinct 3*

Every week neighborhoods are full of people who encounter wildlife in their backyards and nearby parks. Social media is full of incorrect identifications and a false narrative about what happens during these encounters. As Master Naturalists, we carry some responsibility in teaching others about our Texas wildlife. Join us as we survey some of those incorrect observations and learn better ways to assist the public and ourselves in properly making identifications. We will also discuss why more interactions are happening and how we can help mitigate and make these interactions positive ones.

**1:45pm - 2:45pm**

## **"Help, We Need Some More People!" Attracting and Retaining Motivated Volunteers - Westbury**

○ *John Stacy & Diana Filpot, Bayou Land Conservancy*

Everyone wants to attract and retain motivated volunteers. This session will discuss some of the successful methods and activities used by the Bayou Land Conservancy to generate literally thousands of hours of volunteer work. Multiple perspectives will be presented, including BLC staff, a long-time TMN volunteer leader, and a recently graduated TMN. Anyone thinking about ways to attract and retain volunteers should find something of value in the presentation.

**3:00pm - 5:15pm**

## **Bats Are Amazing: Conservation and Education is Needed and You Can Help. - Heights**

○ *Janet Hurley, Texas A&M AgriLife Extension*

Texas is home to 33 bat species, with 10 species that most are familiar with. 95% of the bat population are insectivores (they only eat insects) and typically in an average colony, rabies impacts only a small percentage (.005%). Texas has one of the most diverse bat populations in the United States that is growing every year. Our most common species is the Mexican Free-tailed bat (*Tadarida brasiliensis*), followed by the Cave myotis (*Myotis velifer*). Texas bats occupy a variety of habitats including caves, trees, bridges and, increasingly, buildings. They prefer to roost close to an abundant food source, but Mexican Free-tailed bats have been known to travel many miles in a night to feed on their favorite foods. This session is designed to inform and educate participants on how to develop bat watching areas, install bat houses, and learn more about Texas bats so you can educate yourself and the community about these beneficial mammals. At the same time you may act as a resource for your community and be able to assist with keeping children away from bats that can become grounded for a variety of reasons. In this two hour session, participants will learn the basics of bats in Texas, what resources are available, and how they can assist with educational awareness to local community members.

**3:00pm - 5:15pm**

## **Nature Journaling - Change Your Perspective - River Oaks**

○ *Irmis Willcockson, Gulf Coast Chapter*

Join me as we explore different ways to look at and journal about nature. From using a hand lens to look more closely to using a mirror and expanding to landscape maps, there are so many interesting ways to journal even familiar places. Bring your curiosity and a willingness to step out of your comfort zone among fellow naturalists. If you volunteer with children, these ideas can also be adapted for nature walks or camp activities. All materials will be provided for the workshop.

**3:00pm - 5:15pm**

## **Roundtable Discussion: VMS System Administration for Chapter Leaders - Westbury**

○ *Cheryl Foster, Clyde Camp, Dale Hughling, Bert Stipelcovich TMN VMS Administrative Team*

This roundtable will focus on resources available to help the chapter leadership manage their hour's record keeping and reporting. Additionally, chapter VMS administrators are invited to share their experiences and offer suggestions on improving the process. Attendees will have the opportunity to discuss Federal Grant auditor requirements and reporting implications of the VMS, and bring up their chapter's questions. Other chapter leaders may want to attend to learn from the experiences of other chapters.

**3:00pm - 4:00pm**

## **Living in Harmony with America's Song Dog - Montrose**

○ *Roberto Saucedo & Karin Saucedo, Texas Native Cats*

Coyotes are a native North American species that evolved during the Pleistocene epoch millions of years ago. They adapted well to living alongside early indigenous people and continue to do so today. They're highly resilient creatures able to adapt to threats and acclimate themselves in almost every environment, including cities and suburbs. As a keystone carnivore, coyotes play a critical role helping to maintain healthy ecosystems and species diversity. This presentation will look at the current challenges coyotes face in a rapidly evolving human-centric landscape. We'll examine the coyotes' seasonal behaviors that often influence increased sightings and dispel some of the most common myths. In conclusion, we'll discuss proactive methods we can use to help avoid negative encounters with coyotes. Song dogs have figured out how to live with us, it's time for us to learn how to live harmoniously with them.

**3:00pm - 4:00pm**

## **Assessing Prairie Quality from Field Observations - Museum Park**

○ *Carly Aulicky, Native Prairies Association of Texas (NPAT)*

Prairies are a dynamic and imperiled ecosystem, dependent on disturbance and vastly reduced from their original pre-colonization expanse. Remnant prairie is a rarity and, for most prairies, past management or restoration has influenced the community evident today. This presentation will cover prairie ecology concepts and how to apply this knowledge to observations of plants and animals to make assessments about prairie quality. Additionally, you will learn how these skills are being developed in local communities in a Native Prairies Association of Texas (NPAT) outreach and citizen science program.

**4:15pm - 5:15pm**

## **What's in a Name? More Nature of Naming - Memorial**

○ *Matthew McClure, Lamar State College Orange*

This presentation expands the basic TMN curriculum on the nature of naming. An overview of the theory and practice of scientific names and of scientific naming will be discussed, along with a brief history of classification from the Two-Kingdom view of Linnaeus to the Three-Domain system of today. The rules of naming species are also included, along with the various ways that scientific species names are written in the scientific and naturalist literature. The process of discovering and describing new species, and various ways to solve taxonomic discrepancies, will be presented using zoological examples. Time permitting, we will also do a taxonomy simulation and practice species identification using a dichotomous key. The importance of scientific naming not only provides a global standard for both the scientific community and for naturalists but avoids language barriers and the ambiguity of common names and regional naming discrepancies.

**4:15pm - 5:15pm**

## **The New University of Texas Fungarium - Midtown**

- ***Angel Schatz & Liz Bowman, Central Texas Mycological Society & University of Texas***

Join mycologist Liz Bowman and fungi enthusiast Angel Schatz from Central Texas Mycological Society to learn about the importance of the new fungi collection that will be preserved at the University of Texas. Learn how you as a citizen scientist can help with the collection in several ways. The panel will discuss how fungaria fuel research and teaching by documenting diversity and increasing our understanding of how anthropogenic activities can change species distributions. Currently, UT does not have a permanent fungal collection, or fungarium, but you can help us in the establishment and growth of a new collection.

**4:15pm - 5:15pm**

### **Symbiotic Relationships in Texas and How to Teach it - Montrose**

- ***David Powell, Heard Natural Science Museum and Wildlife Sanctuary***

Join us for an explanation of the types of symbiosis with examples and an interactive game that can be used to teach students of all ages about symbiotic relationships in Texas.

**4:15pm - 5:15pm**

### **Re-Wilding the City, One Acre at a Time - Museum Park**

- ***Janice Walden, Friends of Don Greene***

How do you re-wild the city? One acre at a time. That's what a group of citizens did on a property in the most densely populated section of Houston when they worked to create the Don Greene Nature Park in 2016. Hear the story from Texas Master Naturalist Janice Walden who was part of the group: how the property came into their lives, how they protected it, and how they're enhancing it through urban conservation practices.

**4:15pm - 5:15pm**

### **TPWD's TEAM Tool: Ecosystem Analysis and Crowdsourcing Citizen Science - Timber Grove**

- ***Wendy Anderson, Texas Parks & Wildlife Department***

Texas Parks and Wildlife's Landscape Ecology Program has developed a Google maps based application, Texas Ecosystem Analytical Mapper, (TEAM) to deliver the Ecological Mapping Systems of Texas (EMS) data to Texas citizens. The TEAM application is an interactive mapping tool that assists users in understanding Texas habitats and integrating vegetation data with land management and resource planning of all types. Wildlife biologists, land managers, naturalists, planners, and conservationists are able to use TEAM to view and print the EMS data in relationship to other natural feature layers such as soils, geology, hydrology and ecoregion. TEAM allows the user to view and print custom maps and reports of habitat data from both uploaded files or areas of interest drawn within the application. TEAM also allows Texans to contribute to the mapping effort via a new citizen-science data entry module. Crowdsourcing information regarding errors in the map will allow TPWD experts to identify areas of change and systemic errors in the vegetation data. The information gathered from users will assist with land management and conservation efforts. It also

provides an avenue for community involvement in habitat understanding. Participants should bring a computer to this session.

**5:30pm - 6:30pm**

## **Quiz Bowl/Trivia Contest IX - Constellation East & West**

### **Virtual Access**

○ *Richard Heilbrun, Texas Parks & Wildlife Department*

How are you with wildlife trivia? Join us for a fun-filled, low-stakes, but high energy battle! Participants will compete for prizes and bragging rights by answering science questions, wildlife facts, Master Naturalist trivia, and general trivia. Test your knowledge or come to learn! Bring the beverage of your choice or just bring yourself and a sense of humor and represent your chapter in a contest of knowledge or battle of wits. Teams are encouraged this year. Bribes are welcome, but not guaranteed to work in your favor! Assemble your team beforehand, or during the session, or participate individually.

**6:30pm - 8:30pm**

## **Keynote Presentation & Dinner - Post Oak Ballroom**

### **Keynote Address & Meal**

#### **Virtual Access**

○ *Michelle Haggerty & Mary Pearl Meuth, Texas Master Naturalist Program*

Enjoy a fellowship dinner after a full day of advanced training sessions and field sessions. Our evening keynote speaker is still TBA, but trust us - it'll be out of this world!

**8:00pm - 9:00pm**

## **Moths! Bugs that Come to Blacklights, Yippee! - Hotel Lawn**

○ *Sam Kieschnick, Texas Parks & Wildlife Department*

Let's look for bugs and moths and whatever else may come to the blacklights around the hotel. We'll document as much as possible too.

**8:00pm - 10:00pm**

## **Houston's Night Life**

### **Field Session**

○ *Kelsey Low & Patti Bonnin, Houston Arboretum & Nature Center*

Houston is a wild place after dark! Experience the thrilling sights, smells, and sounds of Houston's habitats after dark. We will learn how to look and listen for nocturnal animals native to our region before heading out on the trails to put our skills and knowledge to the test. "HOO" knows what animals we might encounter along the way!

**8:00pm - 9:00pm**

## **Evaluate Your Lights for the Critters and Plants**

○ *Cindy Luongo Cassidy, International Dark-Sky Association Texas Chapter & John Cassidy, Hays County Friends of the Night Sky,*

***Founders Circle, International Dark Sky Association, Hays County  
Chapter***

Let's get outside after dark and learn how to evaluate the lighting to see better and protect all living things.

# Saturday October 22<sup>nd</sup> 2022

**7:00am - 8:30am**

## **Breakfast - Post Oak Ballroom**

### **Meal**

Good morning! Enjoy a longer & slower breakfast this morning. Find a new master naturalist friend, exchange ideas and things you learned in yesterday's sessions.

**8:00am - 12:00pm**

## **Creating a Pollinator Paradise at Home**

### **Field Session**

- *Lauren Simpson, St. Julian's Crossing & Carolyn Langlains, Heartwood Chapter*

Pollinators and other wildlife face many challenges to their survival, especially in urban areas, and they need our help. The good news is that we can take simple steps to help them—right here, right now, right in our own gardens. In this educational field trip, Lauren Simpson uses home wildlife-habitat gardens to demonstrate techniques for transforming traditional landscaping into a beautiful, native-plant paradise, one that supports wildlife and pleases neighbors. Ms. Simpson will also share free native-plant seeds harvested from her own gardens, in which over 90% of the plant species are native to the Gulf Coast Prairies and Marshes eco-region.

**8:00am - 12:00pm**

## **Fire & Goats: Impacts of Using Traditional Vegetation Management Techniques in an Urban Setting**

### **Field Session**

- *Stephen Benigno & Trevor Rubenstahl, Houston Arboretum & Nature Center; Chris Schenck, Texas Parks & Wildlife Department*

Take a walk around the Houston Arboretum & Nature Center to visit areas where recent prescribed fires were implemented, and goats were deployed to see their impacts on the natural landscapes of the Gulf Coast Region. This field session coincides with a presentation on the topic where monitoring results quantitatively assessed these traditional management techniques within an urban setting.

**8:00am - 12:00pm**

## **Urban Parks - Nature in the City**

### **Field Session**

- *Irmi Willcockson, Gulf Coast Chapter*

Join us for a visit to three different urban parks, each with unique features that preserve nature in the middle of Houston. We'll start at Buffalo Bayou Partnership's Lost Lake Visitor Center for a walk along Buffalo Bayou, then visit the prairie garden and bioswale at Mandel. Attendees will finish their tour at the award-winning Levy-Park, which integrates a variety of urban and natural amenities.

**8:00am - 12:00pm**



## **Bryophytes: Taking a Closer Look at Biodiversity - Apollo Boardroom**

### ○ *Dale Kruse, S. M. Tracy Herbarium*

Bryophytes (mosses, liverworts, hornworts) can be rather inconspicuous components of many ecosystems, especially in many of the drier regions of Texas. However, these organisms serve many vital functions in nature and are present in most habitats within the state. In this workshop, we will explore this miniature world using two approaches. First, in the lecture we will delve into the basics of bryophyte systematics, morphology, ecology, and biogeography. During the lecture, students will gain a better understanding of these topics, which can then be applied in the laboratory session that follows. The laboratory session is designed as a continuation of the introductory class. In this session we will take a detailed look at the morphology of mosses, liverworts, and hornworts to gain a basic understanding of their intricate morphology. Using dissecting microscopes participants will observe the macro and micro morphological characteristics that are essential for accurate identification of these groups. All equipment for the class will be provided, just bring your curiosity.

**8:30am - 12:00pm**

## **TMN Partnership Boosts Birding at Cullinan Park**

### **Field Session**

### ○ *Robbin Mallett & Hoiman Low, Coastal Prairie Chapter*

Spend a fall morning birding at Cullinan - a 754-acre regional nature park in Sugar Land just west of Houston - and learn how a partnership between the Cullinan Park Conservancy and TMN Coastal Prairie Chapter has created greater birding opportunities for all. Participants will visit the new Bird Viewing Area/Drips designed and built in 2021 and find out lessons learned about improving accessibility and getting the park listed on the Birdability map. We'll look for birds, alligators, and other wildlife from the park's boardwalk and observation tower on White Lake and walk the trails lacing the hardwood forests along Oyster Creek. Hear from the Cullinan Park Conservancy Board President and Coastal Prairie Chapter members how these successful projects, along with planting natives, park clean-ups, birding events, and social media efforts, have helped fuel the exponential growth of birding at the park. Cullinan boasts a Bird List of 276 species and a Plant List of 378 species. Other wildlife you may spot at the park includes a variety of mammals, snakes, amphibians, butterflies, and dragonflies.

**8:30am - 12:00pm**

## **Planting for Independence with Edible Native Plants -**

### **Montrose**

### ○ *Rachel Cywinski, Native Plant Society of Texas, Sierra Club, International Society of Arboriculture, Alamo Area Chapter*

During this session, participants will learn: Why there are several science-based definitions of "native plant"; how to locate credible sources to determine which plants are native to a specific geographic region of Texas; how ecoregions are defined and used, particularly with vegetation; ways that increasing use of native plants as food for humans also sustains wildlife, promotes global human welfare, and food security. We'll discuss the threats to native plant communities in Texas, threats to human health

caused by the extinction of native plants, and the practical applications of restoring native plant ecosystems. This workshop is most appropriate for students who are ready to create a plan for their property. Please come to class with a particular place in mind to use as a reference for your work. Participants may also use this workshop to enhance their teaching ideas for their classes, but their learning will be most enhanced by applying concepts to a specific geographic location.

**8:30am - 12:00pm**

## **Spiders - What Are They and Why Do They Do What They Do? - Heights**

○ *Melanie Hollenshead*

Whether you are an Arachnophobe or an Arachnophile, spiders are all around you! Join me as we learn about SPIDERS! We will trace their evolution through geologic time and see how this influenced their anatomy and behavior. We will look at their ways of sensing the world and how it differs from ours. Attendees will learn to identify some of the major spider families living in our state. And we will marvel at their amazing adaptations and behaviors that have made them the best natural insect pest control on Earth. Warning! It is hard to be afraid of spiders when you understand and appreciate them.

**8:30am - 12:00pm**

## **Camera Trapping for Science - Timber Grove**

○ *Tania Homayoun & Craig Hensley, Texas Parks & Wildlife Department*

Camera trapping – using stationary game cameras to detect wildlife – is a great way to document observations of animals we often miss with traditional surveys and counts. This workshop will introduce the basics of camera trapping, how to set up and manage a camera trap, and how to process and share your observations on iNaturalist. As part of the workshop, we will practice setting up cameras in the field, so participants should wear sturdy hiking shoes and comfortable clothes.

**8:30am - 10:45am**

## **Convincing a Park to Reduce Mowing (Updated!) -**

**Constellation West**

**Virtual Access**

○ *Sam Kieschnick, Texas Parks & Wildlife Department*

One day, you enjoy the margins of your favorite local park. Lots of plant diversity, interesting insects buzzing around, birds flying, and singing around the tall grasses and wildflowers. You come back the next day, and it's all mowed! How can we, as Master Naturalists and nature enthusiasts, deal with this?! In this presentation, we'll go over some ways to convince and guide the management of public parks. It's a long process to develop the necessary relationships with park management, but we'll show you some positive ways to encourage and entice management to allow some of the parks to go 'wild.' We'll also talk about ways to deal with discouragement. Not all stories end with success, although we will mention some positive cases here in Dallas/Fort Worth.

**8:30am - 10:45am**

## **Go Beyond The Road with TxDOT - Memorial**

- ***Rebekah Dobrasko, Amanda Fowler, Samuel Glinsky, Sean Palmer, & Travis Jez, Texas Department of Transportation***

Did you know that the Texas Department of Transportation is the largest landowner in Texas? In addition to building and maintaining our transportation systems, TxDOT must also manage hundreds of thousands of acres of land. To do that, TxDOT has a robust environmental management program that addresses the historic bridges and roads, rest areas, endangered species, wildflowers, water, and karst systems that go along with our state's roads and bridges. Join TxDOT's vegetation specialists and environmental program manager to learn more about how TxDOT protects the environment. Learn about the monarch highway, our wildflower planting program, bats and bridges, and how TxDOT incorporates the environment as part of our project planning. This session will also provide you with the knowledge on how to get involved in TxDOT projects to protect and preserve the environment of our state. There may even be some wildflower seeds for you to take for your own garden!

**8:30am - 10:45am**

## **Screech Owls, Owl Boxes, and Owl Cameras - Museum Park**

- ***Mike Mitchell, Game Warden (retired)***

Eastern Screech Owls are amazing creatures. And no matter what toys we gift to our children, they will always be the most amazed by interacting with another living creature. In this session we'll discuss owls, boxes, and cameras to learn how you can invite children of all ages to learn about owls. Having cameras in his backyard for several years, Mike Mitchell, retired Texas Game Warden, will guide attendees through several annual owl life cycles. Using videos and stills, he will explain the timelines of owl activities. Sometimes nature is harsh, and things in an owl box do not go as planned. The lecture demonstration format is geared to help attendees learn how to set up an owl box and be amazed at what may occur.

**8:30am - 9:30am**

## **The TPWD Adopt-a-Loop Program Two Years Later: How Master Naturalist Chapters Can and Are Helping - Constellation East**

### **Virtual Access**

- ***Bruce Neville, Brazos Valley Chapter, Lisa Marler, Hill Country Chapter, Terri Stinn, Heartwood Chapter, Shelly Plante Texas Parks & Wildlife Department***

At the first TMN Volunteer Fair, TPWD representatives sought help to update the Great Texas Birding Trail maps. With just one dedicated staff and 123 loops on 9 trails which included 920+ sites to monitor, the staff were overwhelmed. They found willing partners in the Master Naturalists.

Many chapters adopted one or more loops. Chapter members update management information on and directions to the sites, order new signs, recommend new sites to be added and also sites that should be deleted due to functionality. Chapter members conduct quarterly field surveys of their adopted sites. The TMN volunteers' surveys are

contributing to ecological databases, not just on birds, but on the entire flora and fauna of the sites, using the citizen science platforms eBird and iNaturalist. There are still many trails that need a "forever home." Come hear what three chapters are doing and see what you can do to help move the project forward by joining the TPWD Adopt-a-Loop Program.

**8:30am - 9:30am**

### **Insect Photography - Midtown**

○ *Mary Ann Melton, Good Water Chapter*

Master Naturalists photograph insects for their beauty and to document species. This presentation will provide several techniques to help Master Naturalists photograph insects during the day and at night as well as focusing on aquatic invertebrates. From smartphones to bridge cameras and DSLR cameras, there are many ways to improve your insect photography. Bring your photography equipment and your smartphones.

**8:30am - 9:30am**

### **Plants and Children Grow Healthy Together - River Oaks**

○ *Melissa Felty, Texas Parks & Wildlife Department*

Outdoor learning environments encourage diversity of children's play experience and contribute to healthy development. Plants offer a variety of experiences and discoveries by stimulating their senses, providing loose parts for creative play, and encouraging children to crawl, jump, and tunnel as they connect to the natural cycles around them. This program will review research relating to the benefits nature has on child development. Parents, educators, and landscape designers will learn which Texas native plants enhance learning experiences in early childhood programs, schoolyard classrooms, and backyards. The plants highlighted are approved for child care licensure and balance qualities that engage children with plant selection and care practicalities.

**8:30am - 9:30am**

### **Creating an Accessibility Initiative for Your Chapter - Westbury**

○ *Charlise Hill-Larson, Blackland Prairie Chapter & Cristina Araiza, Rehab Without Walls*

In 2022, the Blackland Prairie Chapter started an Accessibility Initiative to (1) educate our chapter members on the importance of universal access to nature and the benefits and barriers that local chapters may face, and (2) to facilitate accessible nature outings, including trail guiding and birding, in the counties where we serve. Join us as we share our journey to make the outdoors accessible for all.

**9:45am - 12:00pm**

### **The Young and the Nestless: The Secret Lives of Songbirds - Constellation East**

**Virtual Access**

○ *Kelsey Low, Houston Arboretum & Nature Center*

Don't be fooled by their cute, fluffy exteriors – songbirds live complex lives full of drama and intrigue! From romances and infidelities to song battles and even serial killers, the secret lives of songbirds are more gripping than any soap opera. In this “episode” you'll get an introduction to songbird anatomy, foraging, migration, communication, and courtship with examples from common Texas birds. These stories will help you better interpret the incredible features and behaviors of the songbirds around you in a fun and engaging way.

**9:45am - 12:00pm**

### **Here be dragons! Odonata 101 - Midtown**

○ *Brent Franklin, Cross Timbers Chapter*

Come learn about the fascinating life cycle of dragonflies and discover the differences in families and species. We'll also discuss tips on locating and photographing these amazing creatures.

**9:45am - 10:45am**

### **Texas Hemp and Bats; and Natural Inhibitors of Deadly Bat Fungus – River Oaks**

○ *Calvin Carpenter, High School Junior & TMN Science Fair Winner 2021*

What do bats think about Texas hemp? Come discuss the findings of a foraging analysis. Also, hear about a high school student's mission to mitigate the deadly bat fungus that causes White-Nose Syndrome. He tested soil bacteria and identified natural inhibitors. His soil samples are from potential bat roosts in King County where the fungus (Pd) is confirmed.

**9:45am - 10:45am**

### **Supporting Full and Equal Access to a Community's Natural Environment: A Class Project Case Study -**

**Westbury**

○ *Kristi Kerr Leonard, Shelby Smith, & Rebecca Posten, North Texas Chapter*

We will present an engaging case study of a NTMN Class Project in the historically marginalized Bonton+Ideal black and brown community. It evolved from the Buckeye trail restoration, to a simple community event, to the start of much deeper community relationships. We will describe how we studied the history of the community - from historic records to recent naturalist efforts by outside organizations; how we established relationships with the true influencers in the community; how we overcame “invisible barriers”; and how we are moving into a long-term relationship as educators supporting the community's work promoting their own environmental justice. We will share key lessons learned from this experience to help inform other Master Naturalist community outreach efforts.

**10:00am - 2:30pm**

### **A Hidden Man's Gem**

## Field Session

### ○ *Allison Copony & Wendy Sera, Heartwood Chapter*

Texas Master Naturalists will learn about the history of Kleb Woods, and then participate on a guided tour of the facilities and hiking trails and learn about the life and times of conservationist Elmer Kleb. Kleb Woods and Nature Center is a tranquil preserve made up of wetlands and forest, with trails, ponds, wildlife, and nature programs. Participants will learn how one person made a difference for conservation. Please wear comfortable shoes, bring a bird guidebook, binoculars and/or a camera. Participants can bring their own prepared lunch or receive a box lunch prepared by the hotel. Hats and suntan lotion are always appropriate. Participants will receive up to three hours of advanced training. We will meet at 10:15 at the designated area on the first floor of the hotel to organize a caravan. Participants should be mindful that the hours of this training may conflict with other trainings and should be considered when making choices for other advanced training. The following is a schedule for Saturday October 22, 2022: Meet to organize caravan 10:15 a.m. Depart hotel at 10:30 a.m. Arrive Kleb Woods 11:00 a.m. Depart Kleb Woods 2:00 p.m. Arrive hotel 2:30 p.m. Total advanced training 3 hours.

**11:00am - 12:00pm**

## **Twists and Turns Replacing Lost Canopy - Constellation West** **Virtual Access**

### ○ *Beth Miller, Piney Wood Lakes Chapter*

An EF3 tornado struck Onalaska, TX on April 22, 2020, cutting a wide swath of destruction through Polk County, which has a population near 60,000. Three were killed and hundreds left homeless after nearly 1,000 homes were damaged. It is estimated that over 5,000 trees were lost and arborists expect many more to die from stress over the coming years. Within days of the twister, Arbor Day Foundation (ADF) contacted the Polk County Judge with an offer of help to purchase and distribute trees to replace some of the 5000 lost. It was nearly 18 months later that the Onalaska Canopy Recovery Program, initiated by Piney Wood Lakes Master Naturalists and Polk County AgriLife Extension Office, and the ADF distributed 750 native hardwood trees to 125 families who had their properties wiped almost clean. Learn about the twists and turns it took before \$11,500 gave the lost canopy a new start.

- A \$1.5m grant request became \$11,500 of funding.
- Reaching 800 property owners without an official list of impacted residents.
- Getting word out in a very remote county isn't easy.
- Would anyone care 18 months later?

**11:00am - 12:00pm**

## **Talk with TxDOT! - Memorial**

### ○ *Amanda Fowler, Samuel Glinsky, Sean Palmer, & Travis Jez, Texas Department of Transportation*

Meet with the Vegetation Specialists that help manage vegetation in the 800,000 acres of TxDOT roadside. Now is your chance to ask the questions you have always wanted answers to, concerning TxDOT's vegetation management program, including wildflower and grass seeding, mowing, and herbicide applications.

**11:00am - 12:00pm**

### **Magical Migrations: Birds on the Move - Museum Park**

○ *Shelia Hargis, Capital Area Chapter*

Most birders are very familiar with spring migration when colorful warblers, tanagers, orioles, and other species hit the Texas coast on their way north to their breeding territories. It is wonderful to experience, but there are other amazing migrations that you may not be as familiar with, migrations that tend to be really spectacular in the late summer and fall. This presentation will introduce you to the southbound migrations of Purple Martins, Chimney Swifts, and hawks. The migrations of these species are as spectacular as spring migration, just in different ways. Join us for this presentation so that you'll be prepared to experience them for yourself!

**11:00am - 12:00pm**

### **"Be the Biologist" Junior Ranger Program - River Oaks**

○ *Laurie Gonzales, Trinity River National Wildlife Refuge*

Mud in the face is inevitable! Trinity River National Wildlife Refuge hosted a unique Junior Ranger Program last school year. This innovative program, titled "Be the Biologist" Junior Ranger Program, was unlike other Junior Ranger Programs in that the participants were in training to perform the career of a Field Biologist and a Park Ranger. During the 50-hour course, Junior Rangers performed public speaking, created wildlife habitat, explored habitat, and became incredibly muddy, all while following a curriculum which took action to conserve insects and pollinators, particularly the monarch butterfly. The program was inspired by two publications which discussed the anthropogenic stressors (various pollution, intensified agriculture, climate change, pesticides, etc.) affecting insects and eight simple things anyone can do to help insects. Laurie Gonzales encouraged learning through play and welcomed Junior Rangers to play in the mud, climb the trees, and smell the flowers. They harvested insects and ate them while Gonzales explained how humans depend on insects for food sources. (Insects were cooked on a camp stove.) Gonzales taught students curious lessons they would never learn in school, such as why moths fly towards light bulbs and how pollinators see different colors using light-spectrum glasses, including UV light. This session is a must-see for those interested in creating a Junior Master Naturalist-style program or are interested in environmental educational programming.

**11:00am - 12:00pm**

### **Science, Social Media, and the Sea: My Summer with Texas Master Naturalists - Westbury**

○ *Kiara Carrasco, Texas A&M AgriLife Extension - Galveston County*

This presentation will highlight the partnership created between the Texas A&M Science Influencers program and Galveston County AgriLife Extension, Texas Master Naturalists, and Texas Sea Grant. The USDA-funded Science Influencers program aims to provide undergraduate students with science, technology, engineering, and math backgrounds with experience in research, education, and Extension services. Through this collaboration, students have the opportunity to work alongside scientists and outreach experts across the state, while providing their unique lens as the next

generation of science communicators. This presentation will be a retelling of one student's experience throughout the duration of the program.

**12:00pm - 1:00pm**

## **Lunch & Science Fair Winners Presentation - Post Oak Ballroom**

**Meal**

**Virtual Access**

Lunch and learn! Hear from our Junior and Senior Science Fair winners!\* Each of these students earned a certificate from the Texas Master Naturalist program for their conservation focused science fair project at the state Science and Engineering Fair. Incredible young minds at work!

\*(one or both depending on final student availability)

**1:00pm - 5:00pm**

## **Asters and Rasters: GIS for Landscape Ecology and Citizen Science at George Bush Park**

**Field Session**

○ *Wendy Anderson, Texas Parks & Wildlife Department*

From soils and ecosystems to plants and birds, there's a map for that. Texas Master Naturalists will learn how to utilize free and publicly available applications like TEAM, Google My Map, Google Earth, and iNaturalist to learn more about the natural world and also for citizen science projects. Texas Parks and Wildlife's Landscape Ecology Program has developed a Google maps based application, Texas Ecosystem Analytical Mapper, (TEAM) to deliver the Ecological Mapping Systems of Texas (EMS) data to Texas citizens. The TEAM application is an interactive mapping tool that assists users in understanding Texas habitats and integrating vegetation data with land management and resource planning of all types. Wildlife biologists, land managers, naturalists, planners, and conservationists are able to use TEAM to view and print the EMS data in relationship to other natural feature layers such as soils, geology, hydrology, and ecoregion. Participants will be encouraged to collect citizen science data using the new tools and apps. No prior geographic information system (GIS) experience required, but strongly encouraged to attend TPWD's TEAM Tool: Ecosystem Analysis and Crowdsourcing Citizen Science workshop. Accompanied by the TPWD Landscape Ecology Program, visit different areas of the park to learn about GIS, collect citizen science ecological data, and survey flora and fauna.

**1:00pm - 5:00pm**

## **Native Plant Propagation**

**Field Session**

○ *Caitlin Keating, Houston Arboretum & Nature Center*

Many native plants aren't available at nurseries, so at the Arboretum, we grow them! Tour our nursery and learn about different methods of plant propagation. Then, you'll get the rare opportunity to collect seeds and cuttings to get your own plants started. Each participant will leave with a native species to start from seeds, seedlings, and cuttings, as well as supplies and information to propagate more plants on your own.



**1:15pm - 3:30pm**

## **Exploring Ambiguous Moral and Ethical Situations (Formerly Laws and Ethics) - Constellation West**

### **Virtual Access**

- *Richard Heilbrun, Texas Parks & Wildlife Department & Mike Mitchell, Game Warden (retired)*

Open to previous attendees and newcomers, in 2022 we'll explore all the new ethical dilemmas and legal situations that a Master Naturalist might encounter. This interactive exercise will discuss situations that every Master Naturalist should know and understand. Some situations may be straight forward, and some may ask you to dig into your life experiences and training to apply your conservation ethic to real world situations. Brought to you in a friendly, common sense dialogue between a retired game warden and a wildlife biologist, the speakers will challenge each other and the audience to answer conservation's most challenging quandaries. This activity will supplement the Laws, Rules & Ethics module in the TMN curriculum. Now in their sixth year teaching this topic at the annual meeting, Richard Heilbrun and Mike Mitchell put a new spin on this interesting discussion.

**1:15pm - 3:30pm**

## **Fungi is Fantastic in Texas - Midtown**

- *Angel Schatz, Central Texas Mycological Society*

Join Central Texas Mycological Society to learn about what people are calling the "earth's internet" or the "wood-wide-web," the invisible, underground network that connects most plants and distributes water and nutrients. We will learn the basics of mycology and learn how the fungi queendom is entangled in all parts of our life. We will also cover some basics on mushroom identification and see lots of photos of mushrooms that grow in Texas. We will also share our community science projects that you can get involved with. Come learn about how we have spawned a community of people fascinated by fungi.

**1:15pm – 3:30pm**

## **Gardening for Jewels - Montrose**

- *Deborah Repasz, Galveston Bay Area Chapter*

Hummingbirds are as beautiful as they are necessary in our gardens. They prettify our yards as they flit about helping our plants reproduce for future generations through pollination. Without pollinators such as hummingbirds, bees, bats, and butterflies, plants necessary for mammal survival will slowly decrease in numbers. Attendees will increase their knowledge of how to attract hummingbirds by providing them with shelter, a food source, water, and no pesticides; be informed of resources to reach people who rehab birds; plants that attract the hummingbirds to their growing zone; and learn how to clean feeders so that the birds are not poisoned. I have hummingbirds in my yard 12 months a year on the S.E. side of Houston; I maintain my yard so that something is blooming constantly that hummingbirds like; I use no herbicides, red dye, or pesticides.

**1:15pm - 3:30pm**

### **Look, Listen, and Learn - Timber Grove**

○ *Mike Farley, Good Water Chapter*

Look and listen to wildlife using game cameras and acoustic recorders for observing, documenting, and understanding habitat and behaviors in rural and urban communities. Learn strategies that improve game camera observations and generate dynamic captures. Attendees will become familiar with the worldwide acoustic analytical platform Arbimon and how you and your chapter can use it. Get more organized with your equipment, power supply management, and data storage.

**1:15pm - 2:15pm**

### **iNaturalist 301: Advanced Applications & Exploring Data in iNaturalist - Constellation East**

**Virtual Access**

○ *Tania Homayoun, Texas Parks & Wildlife Department*

The iNaturalist platform is so much more than just a place to share your nature observations and contribute to others' community science projects. Moving beyond the iNaturalist basics, this session will explore topics such as creating Projects and using them to collect and organize observations; using filters and URL searches to explore observations; and how to download iNaturalist data and use it to fuel your own investigations and projects. This session is for advanced iNaturalist users and assumes that participants are comfortable using iNaturalist to make observations and identifications and are familiar with the website. Participants are encouraged to bring their own laptop or tablet to the session. New iNaturalist users should attend iNaturalist 101 and 201 sessions first.

**1:15pm - 2:15pm**

### **Good for Us, Good for Them - Heights**

○ *John Gardner & Karen Gardner, Gideon Linsecum Chapter*

Educating people on the benefits of snakes, spiders, vultures, and other not so popular critters can be challenging. We are providing examples of how to teach people about the benefits of some not so popular animals and birds and how to safely co-exist. As Master Naturalists, we believe knowledge is a powerful way to overcome negative perceptions of some of the most commonly misunderstood animals in our environment. Our teaching objective is to show Master Naturalists ways to educate people to recognize, appreciate, and tolerate animals with negative public images.

**1:15pm - 2:15pm**

### **Join the Flock! - Museum Park**

○ *Cindy Luongo Cassidy, International Dark-Sky Association Texas Chapter & Soll Sussman, Hays County Friends of the Night Sky*

Step through the process that Hays County Friends of the Night Sky, an outreach group supported by one of our Master Naturalist projects, went through to help the Lights Out Texas program take flight in Hays County. We brought together representatives from a variety of groups and communities within Hays County in order to coordinate our

efforts for the Lights Out Texas program. We built a webpage just for Hays County to show people who in Hays County they could thank for supporting protection of migrating birds. This was outreach at its finest! Rather than just giving out information, we worked side by side with non-MNs in outreach to the greater community. The group coordination within Hays County demonstrates strength in collaborative efforts and makes a wonderful statement.

**1:15pm - 2:15pm**

### **State Parks as Training Grounds - Memorial**

○ *Ben Horstmann, Texas Parks & Wildlife Department*

Join state park staff for a brief description of the types of training opportunities at Texas State Parks. Training topics include interpretation, outdoor recreation, resource protection and management, and just about anything else! We will discuss current sites near you offering training as well as identify sites that you may want to contact. We will also discuss the types of chapter volunteer project opportunities at your local state park.

**1:15pm - 2:15pm**

### **Excellence in Youth Research Presentations - River Oaks**

○ *Lynn Seman, Rolling Plains Chapter*

Each year, Texas Master Naturalist Organization provides a junior and senior special award at the Texas State Science and Engineering Fair in the spring. This promotes and encourages student research in conservation issues of Texas natural resources. Come listen to this past year's amazing winning presentations! Also, find out how you can get involved with this project to support our youth.

**1:15pm - 2:15pm**

### **Plants and People: Making Meaningful Connections for Enhanced Inclusion - Westbury**

○ *Laura Zarate, Native Plant Society of Texas Hill Country Chapter*

The relationship between plants and people extends far back into our evolutionary history. Because of its size and geography, Texas is one of the most biologically diverse states, with over 5,000 species of native plants. Yet while the short supply of dedicated, well-informed volunteers is often cited as a limiting factor for conservation efforts, diverse populations are not yet adequately represented in the membership or leadership of these groups. This workshop will include lessons learned from the Native Plant Society of Texas Equity, Diversity, and Inclusion (EDI) statement development, process, and action plan strategies for engaging diverse communities through a 'Plants and People/ Plantas y Gente' focus. Bilingual social media outreach posts with Spanish language hashtags for enhanced community engagement will also be discussed.

**2:30pm - 4:45pm**

### **Wrens: Little Birds with Lots of Energy - Constellation East Virtual Access**

○ *Scott Kiester, Friends of LLELA*

North America is host to eleven species of wrens. All are small, most reclusive, and they are always on the move. Males often sing year round and their scolding calls from the undergrowth may be the only hint that they are around. Known to many a non-birder as the "the little bird with the perky butt" because they usually have their short stiff tails pointed skyward. Join us for an illuminating talk about this energetic little bird.

**2:30pm - 4:45pm**

## **Human:Nature – Expanding Conservation in a Socially and Ecologically Diverse Region - Museum Park**

○ *Berri Moffett, Houston Audubon*

Houston Audubon owns and manages 17 nature sanctuaries totaling 4,121 acres in 11 counties. This area coincides with nine separate Texas Master Naturalist Chapters. Spanning from the Piney Woods to the Gulf, through both urban and rural settings, Houston Audubon's conservation efforts reach a huge number of Texans and visitors from around the world. We will showcase some of the lesser known Houston Audubon properties and discuss initiatives seeking volunteers including bird collision monitoring, spring migration in High Island, native plant propagation, and urban community connections.

**2:30pm - 4:45pm**

## **Interpretive Trail Guiding to Help Adults and Children to Enjoy Being Outdoors - River Oaks**

○ *David Powell, Heard Natural Science Museum and Wildlife Sanctuary*

Join us as we discuss how to interpret nature in a way that is informative and exciting for participants of all ages. Attendees will gain tools to get adults and children involved while outside on a trail walk or hike.

**2:30pm - 3:30pm**

## **Weed or Wildflower? - Heights**

○ *Cindy Chrisler, Good Water Chapter*

Native species are used more and more in private yards, pocket prairies, pollinator waystations, and landscaping. This presentation gives insights on plants encountered in working at the various wildflower gardens at Berry Springs Park and Preserve in Georgetown, TX (part of the Blackland Prairie), and gives participants useful information on determining if native species, invasives, and exotics have a place in the space they are cultivating. Most species discussed are forbs, but some vines, shrubs, and trees are included.

**2:30pm - 3:30pm**

## **Filling the Gap in Cold Stunned Turtle Response - Memorial**

○ *Brigid Berger, Mid-Coast Chapter*

In February 2021 Winter Storm Uri had a devastating impact on wildlife across the state including marine species in shallow bay waters. While there was heroic effort along the Texas Gulf Coast to rescue endangered sea turtles during this cold stunning event, it was only after the storm when a large gap in the rescue system became apparent. The

subsequent program that was developed as a result shows that every cloud indeed has a silver lining.

**2:30pm - 3:30pm**

## **Coordinating And Leading Dementia Friendly Nature Walks - Westbury**

○ *Fran Witte, Elm Fork Chapter*

Walking is one of nature's most perfect exercises because it not only works many muscles, but it also feeds oxygen to the brain, increases energy, and improves mood and cognition. This is especially important for individuals who live with dementia. This presentation focuses on coordinating and leading dementia friendly nature walks. Participants will learn steps to take including initial planning and partnerships, coordinating, and implementing the nature walks, and follow-up/post program review. These steps are critical for conducting safe and enjoyable nature walks for patrons with dementia, as well as for their caregivers and other assisting volunteers.

**3:45pm - 4:45pm**

## **Operation Game Thief: Collaboration to Catch Poachers - Constellation West**

**Virtual Access**

○ *Daniel Shaw, Operation Game Thief & Mike Mitchell, Game Warden (retired)*

If Texas Game Wardens work to protect our state's resources, and Texas Master Naturalists work to serve beneficial management of our state's resources, then it's time to focus more on this collaborative relationship. Operation Game Thief is a nonprofit created in 1981 to help facilitate conservation-related crime stoppers tips. But it's actually much more and forms the third leg in an important triad. This presentation, by a Texas Game Warden, gives a detailed description of Operation Game Thief, how it works, and how the three organizations could better collaborate to improve our quality of life. The new executive director of Operation Game Thief will also join in, helping explain the history, funding, flow, and success of the Operation Game Thief program. This is a first-time program focused upon collaboration to help work towards conservation achievement.

**3:45pm - 4:45pm**

## **A Look into Beneficial Aquatic Plants - Heights**

○ *Brittany Chesser, Texas A&M AgriLife Extension Service*

During this presentation we will discuss 15+ aquatic plant species that may be used to enhance the overall function and surrounding environment of a freshwater pond. We will also discuss planting location and spacing to meet specific goals of a pond owner.

**3:45pm - 4:45pm**

## **1 Million Trees Across Texas, One Billion in Return? - Montrose**

*Brenda Dees, Scenic Texas*

Efforts to reduce or prevent the emission of greenhouse gasses from tree planting has always had a broad appeal and strategy, but does long-term performance from high planting volume and capacity result in a higher rate of return? Getting billions in return with fewer trees properly planted can become significant city assets. Planting 1 Million Trees Across Texas is great, but is the number of trees less important than what it takes to grow the kind of tree that will pay off this investment? Can we conclude that 1 Million Trees can yield a billion in return if actual tree survival and longevity are educationally incorporated into planting trees? In this workshop, you will explore and learn the following: -How to yield the highest rate of return when implementing quality tree maintenance plans -Understand which tree species to plant in specific Texas regions for proper survival rate. -Identify the long-term effects and benefits for proper tree care vs mass tree planting. -Raise awareness on the importance of tree survival.

**3:45pm - 4:45pm**

### **Ned Fritz: Founder of Nature Preservation in Texas - Memorial**

o *Amy Martin & Kristi Kerr Leonard, Ned Fritz Legacy*

Close readers of the TMN textbook know Ned Fritz, who appears in two entries. No one had a greater impact on Texas nature than Ned and his wife, Genie. They spearheaded the Big Thicket preservation; defeated the Trinity River barge canal; started the Texas land trust movement; fought clearcutting in East Texas national forests; shepherded several East Texas wilderness areas; established protections for golden eagles, Harris hawks, and red-cockaded woodpeckers; founded the Texas Land Conservancy, Texas Conservation Alliance, and several other groups. Just to name a few accomplishments. Join us for an inspiring presentation woven with excerpts of Fritz's nature poetry and photos of places he protected. Learn how he used lawsuits, policy papers, negotiations with politicians and bureaucrats, alliances and coalition building, and media outreach to achieve his goals.

**3:45pm - 4:45pm**

### **Ornamental Ponds & Water Gardens in Texas - Midtown**

o *Todd Sink, Texas A&M AgriLife Extension Service*

Have you ever considered installing an ornamental pond or water garden? Perhaps you enjoy the aesthetic beauty of water features or the bubbling sound of a waterfall in the evening, you have a green thumb for plants and the garden alone will not suffice, would like to attract wildlife to your yard, are a fisherman who does not get to spend enough time on the water and enjoys watching fish, or maybe you simply want to add value and beauty to your home. What exactly is an ornamental pond or water garden? They can be very simple and small or extremely complex and large—and about any combination in between—but for the most part they are a landscaping feature that incorporates water, aquatic plants and in some cases, ornamental or native fish. These features are not bird baths or water fountains, but instead contain some type of living ecosystem within the water feature itself. What is the difference between an ornamental pond and a water garden? In general, they are just different names for the same thing and may be used interchangeably. However, some purists state the difference between an ornamental pond and a water garden is an ornamental pond contains ornamental fish, hence that

name 'ornamental', while water gardens contain only plants, hence the name 'garden'. Both types of features include aquatic plants. This program will cover construction, components, and the ecosystem of Ornamental Ponds & Water Gardens.

**3:45pm - 4:45pm**

## **Little Brown Birds: Who's Who Among Our Native Sparrows** - Timber Grove

○ *Craig Hensley, Texas Parks & Wildlife Department*

As fall arrives, so too comes waves of little brown birds with names like Grasshopper, Vesper, Song and more. Texas is an important overwintering ground for a host of these native sparrows. With this workshop, Texas Nature Trackers Biologist Craig Hensley will explore the world of sparrows, sharing tips and tricks to their identification, from their physical characteristics to behavior. You'll also learn how these birds are doing and what Texans can do to enhance their long-term survival. By the end, you'll gain a new appreciation for these LBJs.

**3:45pm - 4:45pm**

## **Digging into the Past: A Look Back** - Westbury

○ *Patti Bonnin, Houston Arboretum & Nature Center*

Discover history's secrets as we take a glimpse into the past. From Ima Hogg and Catharine Emmott to the WWI Training Center Camp Logan, learn a little more about the people who occupied the land before us. We will also examine artifacts recovered during our Emergency Salvage Archeology Project in 2020 performed by the Houston Archeological Society.

**5:00pm - 6:00pm**

## **Evening Social** - Ballroom Foyer

**6:00pm - 8:00pm**

## **Dinner & Evening Awards Presentation** - Post Oak Ballroom **Meal**

### **Virtual Access**

Enjoy a final dinner with us. We'll celebrate the milestone awards of our attending master naturalists, recognize award winners and special recognitions and celebrate the programs annual successes.

# Sunday October 23<sup>rd</sup> 2022

**7:00am - 8:00am**

**Breakfast** - Post Oak Ballroom

**Meal**

Get a full breakfast on your final day before preparing to depart from this year's Annual Meeting.

**8:00am - 9:00am**

**Contest, Awards, & 2023 Recertification Pin**

**Presentation** - Post Oak Ballroom

**Virtual Access**

This morning we celebrate the winners of our Contests & Awards to round off our 2022 Annual Meeting. We'll also be announcing our 2023 Recertification Pin!

**End of Conference**

**Thank you all for attending and have a safe trip home!**