

**Texas Master Naturalist 16<sup>th</sup> Annual Meeting**  
**October 23<sup>rd</sup> - 25<sup>th</sup>, 2015 – Horseshoe Bay Resort, near Marble Falls, TX**

## Friday, 23<sup>rd</sup> October

Friday  
1:00 - 5:00

### **Fri-FT** **Friday Afternoon Field Trip** **Rendezvous at Conference Registration Desk**

#### **Doing what comes NATURALLY!**

» Billy Hutson (Upper Highland Lakes Nature Center)

*What comes more naturally to a TMN than outreach to children. Who are the future decision makers of our world and how can we connect with them. We already have the Texas Parks and some of us are fortunate to have national reserves and fish hatcheries to reach out in but some of us aren't that fortunate. Why not develop a nature center as one of your methods for outreach. It's not as difficult as it may sound. Visit the Upper Highland Lakes nature Center and learn how to get through the initial stages, form a volunteer base, develop a curriculum, build an audience, advertise and many other ideas to help you on your way.*

Friday  
1:00 - 3:00

### **Fri-2A** **Friday Afternoon 2 Hour Sessions**

#### **The WILDest of the WILD – What is up with those Project WILD Facilitators? - HICKORY**

» Kiki Corry (Texas Parks and Wildlife Department)

*Project WILD Facilitators are the hands, eyes and voices of Texas Project WILD. They conduct the workshops and maintain the presence of Texas WILD across the state, providing a far wider and stronger reach than TPWD staff could hope to do.*

*This session is for WILD Ones; past, present and future. Find out what it takes to be a WILD Facilitator. Hear about changes and updates in Texas WILD. Reconnect with what you love about Project WILD.*

#### **Texas A&M AgriLife Extension Water Conservation Stream Trailer Demonstration – LIVE OAK**

» Sam Silvers (Kimble County Extension Agent, Texas A&M AgriLife Extension Service)

*This model demonstrates stream processes and best management practices to protect and restore our streams and rivers. The demo uses crushed buttons to represent sediment and includes various props (houses, animals, etc.) to teach the lessons. Lessons include: Meandering Rivers, Vegetation, Flooding, and Sediment. The stream trailer includes curriculum, flip chart and materials for each lesson. This demo is an actual trailer and will require a vehicle with a 2" trailer hitch for transport. This demo requires water and an electricity source.*

#### **Tackling Those Confusing Composites – LIMESTONE**

» Craig Hensley (Guadalupe River State Park, Texas Parks and Wildlife Department)

*Most refer to them as DYC's (Damned Yellow Composites) and find all kinds of confusion and frustration on deciding which species is which. This presentation will provide you help in sorting out members of the sunflower family (Compositae). You'll learn tips and tricks for simplifying their identification and practice your newly learned skills.*

#### **Recruitment and Retention of Volunteer Members – SALON F**

» Rose Mary Fry (Degrees of Work)

*Volunteers are critical resources to today's nonprofit organizations. They can lend time and expertise in the administrative, financial, marketing, program, and technology areas. Nonprofit organizations must be thoughtful and deliberate about how they recruit, train, and retain volunteer members for their chapters. Volunteers can bring new talents and perspectives to your organization. Using these talents is an opportunity for new and established chapters. Attend this workshop to learn how to recruit and use the talents of volunteers, discuss techniques for volunteer retention, and discuss practical tools for tracking and managing volunteers.*

#### **Texas Master Naturalists Youth Education Projects Across the State - CYPRESS**

» Mary Ann Melton (Good Water Master Naturalist)

*This presentation will be based upon the results of the 2014 Survey and the upcoming 2015 Survey. It will describe the*

different ways and programs throughout the state where children and teens receive nature education. While the Junior Master Naturalist program is one of the programs, all types of opportunities to educate children, to give them opportunities to explore the outdoors, and to encourage conservation are currently happening in chapters across the state. This presentation will highlight the different approaches and different opportunities across the state.

### **The Tale of the Leopard Frogs or What is a Species Anyway? - TRAVERTINE**

» Scott Kiester (Elm Fork Chapter Texas Master Naturalist)

There are three species of Leopard frogs in Texas, and our three are just the tip of the iceberg, there are 21 recognized species. They stretch from central Canada to Panama. Some live in tiny areas, others inhabit a sizable portion of the continent. Some prefer lakes, others streams. Some are happy with a grassy puddle. A few have adapted to arid climates. Together they are formally known as the Rana Pipiens Species Complex.

Why are there so many closely related species? How do such things happen? Perhaps most important, from a naturalist standpoint. What is this thing called a species? How do species come to be separate from one another in the first place? How do they stay separate once they are? Together we'll explore the science behind these kinds of quandaries and in the process learn how to tell our local leopard frogs one from the other.

### **Return to the Crossroads, Geology at Big Bend Ranch State Park: Geology, Landscape, Culture, History – POST OAK**

» Blaine Hall (Texas Parks and Wildlife Department)

Introduction and review of the significance of the geology of Big Bend Ranch State Park and why it truly is a Crossroads of Geology. Expanding into a discussion of how the geology and climate control the landscape, how in turn, the landscape controls the cultural development of the area, and ultimately, how the cultural development over time is the history of the area. The presentation provides a strong case for how interpretation, based on something as ordinary as rocks, can reveal and create a fundamental understanding of one's surroundings and how Texas Master Naturalists can gain that insight and pass it on to others.

Friday  
3:30 - 5:30

## **Fri-2B Friday Afternoon 2 Hour Sessions**

### **TMN VMS Training - Volunteer Management System for the End User (TMN Member) – LIVE OAK**

» Cheryl Foster (TMN Volunteer Management System Team), Dale Hughling (TMN Volunteer Management System Team), Brad James (TMN Volunteer Management System Team)

Getting lots of advanced training at the 2015 State Meeting? Does reporting your hours really matter for Texas wildlife and the TMN Program? Find out how to post your volunteer service and training hours in the new Volunteer Management System (VMS) being implemented statewide by TPWD. In this session, participants will learn about the on-line VMS Help Desk, learn how to complete their registration as a TPWD volunteer, learn how to log in to the VMS software, learn how to post and edit your hours, and learn how to monitor your progress towards (re-) certification and milestones. Please note that during the conference, there is a kiosk booth in the Commons Area staffed by the VMS Implementation Team to answer questions and demonstrate program features.

### **A Natural History of Milkweeds - LIMESTONE**

» Craig Hensley (Guadalupe River State Park, Texas Parks and Wildlife Department)

With the attention being focused on monarchs today, milkweeds have become a focal point for conservation efforts to save this iconic butterfly. This presentation will introduce you to the human relationship with milkweeds and then expand to focus on the diversity of milkweeds in Texas and their unique characteristics. You will also learn the importance of these wildflowers to the wide variety of other insects that utilize these plants including monarchs.

### **Indian Marker Trees – POST OAK**

» Steve Houser (Texas Historic Tree Coalition, a 501(c)(3) Organization and NTMN), Sara Beckeklman (Texas Historic Tree Coalition, a 501(c)(3) Organization and NTMN)

American Indians used trees to mark trails & to signal the presence of important natural features, some critical to survival. Indian marker trees (IMTs) are living witnesses & a significant part of our natural & cultural heritage. The Texas Historic Tree Coalition (TxHTC) works to find, research, verify, recognize & celebrate these priceless treasures. TxHTC increases awareness and understanding of IMTs so others recognize their significance to America's heritage & culture. TxHTC educates volunteers- enabling them to read current landscapes to determine natural features present long ago by investigating old trail & topography maps, & historical documents of an area.

TxHTC works cooperatively w/Mountain Stewards, Tx Tree Trails, forestry councils, historical assn(s), Master Naturalists, Master Gardeners, among others. In addition, the Historic Tree Committee works to find at least 1 historic tree from each of the 254 Texas counties, requiring support of Master Naturalists & tree enthusiasts around Texas.

### **Texas Climate's Wild Ride - TRAVERTINE**

» John Nielsen-Gammon (Texas A&M University)

*Over the past few years, Texas has demolished at least three statewide records: the driest twelve months on record, the hottest summer on record, and the wettest month on record. This talk will show what happened and discuss the various factors that contributed to these unusual weather and climate events. Lastly, the talk will touch on what the future might hold because of both natural cycles and longer-term change.*

### **Citizen Science in Action - Bees and Wasps of Texas Project – SALON F**

» Paul Meredith (Mid-Coast Chapter Texas Master Naturalist)

*Our presentation will introduce participants to a statewide citizen science project, Bees and Wasps of Texas (B&WofTX), a Texas Native Bee Co-op and Texas Parks and Wildlife Department (TPWD) project supervised by TPWD Biologist Michael Warriner. Its priority is collecting information on Species of Greatest Conservation Need (SGCN) - bumblebees, and to improve our understanding of bee and wasp species populations, Texas' most important pollinators.*

*B&WofTX, a project any TMN citizen scientist can participate in will be explained: its mission, its relationship to pollinator conservation in general, and its size and scope explored.*

*Participants will see how to join the project and submit online bee and wasp observations (photographs). A project Curator will explain observation curation. Qualifications, required skills and knowledge will be discussed, as well as guidelines for making observations. Practical suggestions on taking useful observations will be explored. Actual observations will be recorded online and observation curation demonstrated.*

### **Tips and tricks for photo and sound documentation - HICKORY**

» Cullen Hanks (Texas Parks and Wildlife Department)

*Digital cameras and sound recorders have made it easier than ever before to document and share your observations in nature. In addition to being great tools for identifying and learning about the species you find, your photos and sounds recordings can provide valuable evidence for observations that can be validated. Whether you are using a smartphone or specialized equipment, this presentation will provide useful and efficient strategies for making the most of the photos and sounds that you capture in the field.*

*Sam Kieschnick from Dallas will join Cullen in presenting ways to photograph plants and specimens with intentions of using them for citizen science projects such as the iNaturalist program.*

### **Incorporating a Junior Master Naturalist Program into Elementary Schools - CYPRESS**

» Natalie K. James (Brenham ISD)

*This year, Brenham ISD is partnering with the Texas Master Naturalists - Gideon Lincecum chapter to pilot an in-school Junior Master Naturalists program for 4th grade students. Come join us for an honest assessment of the program's successes, the challenges we have faced, and what we have planned for the future.*

Friday  
6:00 - 7:00

**KN-1**

**Welcome and Keynote Presentation**

**Granite Ballroom**

### **Texas Natural History: A Century of Change**

» Dr. David Schmidly, Mammalogist

Friday  
8:15 - 9:15

**Fri-CPP**

**Friday Chapter Project Presentations**

### **Chapter Outreach - How to Expand your Chapter's Horizons – LIVE OAK**

» Kathryn Hedges (Lost Pines Texas Master Naturalist), Julia Akin (Lost Pines Texas Master Naturalist)

*We already know that the professionalism, collaboration, and collegiality of the TMN volunteers (new & experienced) is unequaled by other environmental programs in the state. Of course, as biologists put it, this is a "positive feedback system" and builds on itself. Texas Master Naturalists are committed to learning more about Texas natural heritage and in advocating stewardship and beneficial management of natural resources and natural areas within their communities. But how do you get teachers involved in your chapter? You offer CPE credits! Here's a short presentation that gives explicit instructions on how to become a CPE provider for Texas Teachers.*

### **Bird Tales for the Elderly - TRAVERTINE**

» Cindy Bolch (El Camino Real Texas Master Naturalist)

*Too often we think only of maintaining parks, educating children or members of our local communities, but the*

pendulum never seems to swing to the elderly. With inspiration from the Audubon Society's Bird Tales program we developed a version to work with the residents of a nursing home here in Cameron, TX. On a bi-weekly basis we bring the delight, beauty, and songs of the birds to residents of the home who have lost the ability to go outside and enjoy nature. Once word got out about our project we were surprised by the offers of support from the community in the form of donations, materials, and activity aids. This session will tell you how we initiated the project, the presentation format we used, the activities we offered, and how we engaged the residents.

Friday  
8:15 – 9:15

## Fri-RT Friday RoundTable Discussions

### **Designing - and Selling - Interpretive Programs for Schools - CYPRESS**

» Natalie K. James (Brenham ISD)

Interested in developing an interpretive program for a school, but not sure where to start? Have you tried to pitch a program to school staff, but felt like you were speaking to a brick wall? Come get honest advice from school district staff about designing and selling interpretive programs that will get - and keep - them interested, then stay for a roundtable discussion with fellow participants to share success stories and learn from each other's experiences.

### **Texas Master Naturalist Quiz Bowl - LIMESTONE**

» Richard Heilbrun (Texas Parks and Wildlife Department)

Ready for Round 2? Don't worry if you missed last year's Round 1, you can still bring your compatriots and take back the trophy for your chapter. Participants will compete for prizes by answering science questions, wildlife facts, and Master Naturalist trivia. Join us to compete in rapid response contests, and have lots of fun in this year's Texas Master Naturalist Quiz Bowl! Bring a light hearted attitude, refreshments, and your A-Game!

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

» Cheryl Foster (TMN Volunteer Management System Team), Dale Hughling (TMN Volunteer Management System Team), Brad James (TMN Volunteer Management System Team)

This roundtable will focus on resources available to help the chapter leadership manage their hours record keeping and reporting. Additionally, chapter VMS administrators who are in the process of doing the conversion or have completed the conversion 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 gain insight into the VMS conversion process and learn from the experiences of other chapters. Please note that during the conference, there is a kiosk booth in the Commons Area staffed by the VMS Implementation Team to answer questions and demonstrate program features.

### **Good Water Chapter's Youth Education Committee - HICKORY**

» Mary Ann Melton (Good Water Master Naturalist)

The Good Water Chapter's Youth Education Committee formed in late 2011. We have 3 years of Junior Master Naturalist Programming behind us as well as work with nature programming with Summer Camps and public schools. We are also doing nature programming for a homeschool group and a preschool group. We have worked with both the Cub Scouts and Girl Scouts. The committee concept has allowed us diversity in both our presentation topics and presentation techniques. It also allows a division of labor. This presentation will give a timeline as to how we got started, what we have done, what went well, what we could have done better.

# Saturday, 24th October

Saturday  
8:00 - 5:00

## Sat-FT-All Saturday All Day Field Trips Rendezvous at Conference Registration Desk

### Inks Lake State Park – Partnering with Parks for Projects and Programs

» *Highland Lakes Chapter Texas Master Naturalists*

*Join volunteers with the Highland Lakes Chapter as they showcase their projects and programs within the scenic Inks Lake State Park. Highland Lakes Chapter Member and interpretive trail guide coordinator, Allan Wolfe, will begin the day with a tour of the interpretive trail created and maintained by the HL Chapter 2013 Class. The steps to trail development will be highlighted along the way. Afterwards, a tour of the Bird Blind project spearheaded by the HL Chapter will be given with information on establishment and process. After lunch, which will be provided, a geology tour of the unique features of the park will be given by the Inks Lake State Park Interpreter, Sean Jones. Included in the field trip will be the opportunity to assist with a Volunteer Service Project including new trail construction work and earning Service Hours for TMN certification. Registration is limited to 25 participants, carpooling will be arranged, and participants are encouraged to dress for the field and weather. Don't forget your camera and binoculars!*

Saturday  
8:00 - 12:00

## Sat-FT-AM Saturday Morning Field Trips Rendezvous at Conference Registration Desk

### Nightengale Archeological Center

» *Chuck Hixson (Llano Uplift Archeological Society)*

*While at the Nightengale Center, volunteers will be able to tour the Kingsland Archaeological site where they can view the excavations of prehistoric Native American campsites dating back 8000 years. The center also has a small museum with artifacts from the site and surrounding area. Presentations and activities to be hosted by volunteers with the Llano Uplift Archaeological Society.*

### Inks Dam National Fish Hatchery Tour

» *Judy Parker (Friends of Inks Dam National Fish Hatchery)*

*This morning field trip will include an interpretive tour of the Inks Dam National Fish Hatchery provided by the Highland Lakes Chapter and the Friends association. The Inks Dam National Fish Hatchery covers approximately 150 acres. An onsite fish culture infrastructure consists of a feed storage building, holding house for egg and early fish development, isolation/ quarantine building, four 60 foot raceways, four 20 foot circulars are housed under a shade structure. The facility also has an isolation building for endangered species containing aquariums of various sizes of circular tanks. Highlights will be given to the projects done by local Highland Lakes Chapter, including nature trails, wildlife viewing stations, rainwater collection systems and more.*

Saturday  
8:00 - 5:00

## Sat-8 Saturday Full Day Session

### Texas Stream Team Core Water Quality Monitoring Workshop – GRANITE BALLROOM

» *Travis Tidwell (The Meadows Center for Water and the Environment)*

*This full day session will provide a hands-on and field-based training to certify participants in Texas Stream Team water quality monitoring procedures. Upon completion, trainees will be able to take water quality readings and report their findings to Texas Stream Team for submission in the statewide water quality database.*

Saturday  
8:00 - 12:00

## Sat-4A Saturday Morning 4 Hour Sessions

### **You Can Help With Pollinator Recovery – SALON F**

» Mark Klym (Texas Parks and Wildlife Department)

Bees and monarchs have made the news lately with reports of their decline and finger pointing accusations of responsibility. In reality, all pollinators are showing decline, and numerous factors are contributing to this fall. This workshop explores the needs of pollinators, their role in our ecosystem and what we can do to ensure pollinators remain a reality in Texas' future.

### **Beach-nesting Bird Stewardship Training – SALON G**

» Nicole Norelli (Central Texas Master Naturalists)

Join this workshop to learn about Beach-nesting birds and how you can help protect them. The workshop will cover identifying beach-nesting species of Texas, the state and federal protection status, and their life cycles. Following this, the workshop will cover where, when and why we need stewards on the beach to assist in conservation efforts. We will discuss how to be an effective steward for the birds and the community, address potential problems you may face, and resources for when and where you can volunteer to use your new training! The workshop will also cover information on how to begin working with the ebird website to submit surveys and how to correctly identify shorebird band combinations.

### **Geology and Soils of Texas; The Foundation of Nature – SALON H**

» Christopher Mathewson (Texas A&M University)

This training program is an extension of the regular class "Geology and Soils of Texas" that I have given at a few Master Naturalist Sections plus additional information about the geologic history and development of Texas bedrock, topography and surface processes. I will also include a "laboratory/hands-on" session on the common Texas rocks and where and why they are located in Texas. The final session will deal with active geologic processes that impact the environment of Texas; groundwater and surface water, coastal processes and hazards, landslides, and expansive soils and erosion.

Saturday  
8:00 - 10:00

**Sat-2A**  
**Saturday Morning 2 Hour Sessions**

### **Introduction to the Texas Nature Trackers Program - HICKORY**

» Cullen Hanks (Texas Parks and Wildlife Department), Marsha May (Texas Parks and Wildlife Department)

This presentation will provide an introduction to the Texas Nature Trackers Program. Whether you just want to learn about the species in your backyard, help discover new populations of rare species, or develop your own research project, Texas Nature Trackers provides helpful tools for learning about and contributing valuable data on native species. Learn about our different projects, and how to get involved.

### **Grow, Grow, Grow - Understanding Generational Differences to Recruit, Retain, and Grow Your Chapter – POST OAK**

» Amy Hays (Texas A&M Institute of Renewable Natural Resources)

Finding, keeping, and growing volunteers can be a challenge to TMN Chapters big and small, old and new. Did you know you have to market differently for different generations? Have you ever considered that generational challenges are important in Chapter management? Different generations have very different perspectives and needs when it comes to becoming part of programs. This session will concentrate on helping you understand the very real differences in the 5 generations you are working with both as participants and volunteers. Knowing how generations think, act, and join can help you truly create well integrated Chapters. Generational differences can account for a large number of retention and recruiting issues and most of us don't even know about! Come learn how Silent Gen, Boomers, Gen X, Millennials, and GenEdge frame your Chapters. Learn skills on marketing to each generation and learn to speak generational language.

### **Techniques to Develop New Leadership in Chapters - MESQUITE**

» Rose Mary Fry (Degrees of Work)

The development of new leaders is critical to the ongoing health of any nonprofit organization. Nonprofit organizations need dedicated and talented individuals who will consider taking a leadership role within their organizations. If new talent is not identified and developed, burnout can occur within the current officer team. This workshop will cover the types of skills needed in leadership positions, descriptions of officer positions, techniques for leading meetings, and working with members to achieve chapter goals. Although leadership positions require a greater commitment of talent and time, it is a rewarding role to play within a nonprofit organization.

### **Help in the Fight Against Invasive Species: An Introduction to the Texas Invaders Program - LIVE OAK**

» Hans Landel (Lady Bird Johnson Wildflower Center), Karen Clary (Lady Bird Johnson Wildflower Center)

This session is designed as an introduction to the Texas Invaders citizen science program. We will discuss what invasive species are and the problems they can cause, and the initiatives and programs developed by the Lady Bird Johnson Wildflower Center and its partners to manage invasive species. Some of these initiatives and programs offer opportunities for volunteers; we will spend the remaining time focusing on the Texas Invaders program. We will learn to identify some common invasive species and then how to use the [TexasInvasives.org](http://TexasInvasives.org) Website to report observations of invasive species, and to train to become a registered Texas Invaders volunteer.

#### **Getting Outside with Children and Adults - CEDAR**

» David Powell (Heard Natural Science Museum and Wildlife Sanctuary)

Take a nature walk to learn some ways to involve people with the natural world and identify some of the flora and fauna in the area. Learn some tricks of the trade of nature interpretation. We will be out for about two hours if you want to bring water. We will be stopping often to examine and discuss things of interest related to nature and how to experience them more fully and gain ideas on how to share your experiences in nature. I am a Certified Trail Guide at the Heard Natural Science Museum and Wildlife Sanctuary.

Saturday  
8:00 - 9:00

### Sat-1A Saturday Morning 1 Hour Sessions

#### **Climate Change: The Basics - TRAVERTINE**

» John Nielsen-Gammon (Texas A&M University)

How does climate change work? This session will discuss the basic scientific principles of global climate change and apply them to all manner of geologic and historic climate change whether natural or man-made. No science background is required, and nothing scientifically controversial will be discussed (unless asked).

#### **Spiders of Central Texas - LIMESTONE**

» Sheryl Smith-Rodgers (Texas Master Naturalist)

This one-hour presentation covers basic spider biology and introduces attendees to common spiders they might see in their yards and around the Hill Country.

#### **Monarch Habitat Assessment Guide - HIGHLANDS**

» Russell Castro (USDA - NRCS)

The Natural Resources Conservation Service nationally, has increased its efforts to address the decline of the monarch. NRCS has joined efforts with the US Fish and Wildlife Service, Xerces, Texas Parks and Wildlife and others to meet the needs of monarch and other pollinator species.

NRCS goal is to increase the Eastern population of the monarch butterfly to 225 million butterflies occupying an area of approximately 15 acres (6 hectares) in the overwintering grounds in Mexico, through domestic/international actions and public-private partnerships by 2020.

Currently efforts are being made to develop a Monarch Habitat Assessment Guide. The guide will address several parameters for assessing native and non-native habitats: Milkweed abundance and diversity, Nectar Plant abundance and diversity, Site Characteristics, Surrounding Area, and Site Management/Pesticides.

This assessment guide will allow for conservationist and landowners' to assess the current habitat, and to address absent life requirements of the monarch butterfly.

#### **Apps for Agriculture and Wildlife - CYPRESS**

» Bryan Davis (Wilson County Agent, Texas A&M AgriLife Extension Service)

Bryan will lead participants in a hands-on session to better utilize some of the hundreds of agricultural and wildlife apps currently available. Activities will include making sure participants understand the basics of using an iPad and iPhone, with a majority of the time devoted to looking at and assessing the wide range of agricultural and wildlife apps available. Bryan will discuss his favorite two or three ag and wildlife apps in several different categories such as weather, record keeping, decision aids, livestock, agronomy, wildlife calling, habitat management, agricultural news and general utilities.

Saturday  
9:00 - 10:00

### Sat-1B Saturday Morning 1 Hour Sessions

#### **Climate Change: The Not-Settled Part - TRAVERTINE**

» John Nielsen-Gammon (Texas A&M University)

Some of what you think you know about future climate change might actually be true. If, however, your main source

of information is the news media or friends and colleagues, you probably know a lot of stuff that just ain't so. In between the confident pronouncements from either side is a large gray area in the middle where scientists are still trying to pin things down. Find out why the range of future climate possibilities is still so large, and learn the difference between what's likely to happen and what anybody's guess is.

### **Social justice and natural environments: The legacy of Frederick Law Olmsted - LIMESTONE**

» John Sutterby (University of Texas San Antonio)

The opening of the natural environment to people of all social classes in the United States can be traced back to the work of Frederick Law Olmsted. Olmsted spent time in central Texas before the Civil War where he examined the central Texas Communities which rejected slavery. Later Olmsted was called to create the greatest urban park in the United States, Central Park in New York. Although associated with his work as an urban park designer. Olmsted was also instrumental in the development of natural elements such as Niagara Falls and Yosemite Park in California. Master naturalists will benefit from this presentation in that they will better understand the history of naturalists movements in Texas and throughout the United States that we rely on today.

### **Save the Night - CYPRESS**

» Cindy Cassidy (Hays County Master Naturalist, IDA Texas Section Leader)

Life on earth depends on natural darkness. Almost every living thing on our planet uses the cycle of light and dark to trigger life processes. So, how does our artificial light at night effect fauna and flora? This session helps us understand the effects of artificial light on living things and how we can reduce the negative effect of our lights. Participants will become more knowledgeable about outdoor lighting practices allowing them to have the light that humans want or need for nighttime activities while they save energy costs, reduce glare, increase safety, reduce light trespass, create a more aesthetically pleasing nocturnal environment for humans and limit the negative consequences on the environment.

### **Texas Master Naturalist Water Specialist Training - HIGHLANDS**

» Johnnie Smith (Texas Parks and Wildlife Department)

Work is nearing completion on this new Water Specialty training. The training focuses on Water and Watersheds in the State of Texas. This curriculum draws heavily on the Texas Conservation Action Plan, the United States Environmental Protection Agency Watershed Academy, and the AgriLife Extension's Texas Watershed Steward curriculum. We will solicit feedback from chapters and individuals about future involvement in this training and share details about the curriculum, upcoming workshops, and future plans.

Through this new specialty training we hope to inspire appreciation and love of the outdoors and create a willingness to protect and conserve it. The knowledge obtained through this training with special emphasis on an understanding of Texas' rare resources, special habitats, and conservation issues will empower participants to take an active role in addressing local conservation issues, serving as education and awareness ambassadors in their regional community in order to inspire and empower others to action.

Saturday  
10:00 -  
12:00

**Sat-2B**  
**Saturday Morning 2 Hour Sessions**

### **Texas Quail Index: Monitoring Quail using Citizen Science - MESQUITE**

» Becky Ruzicka (Texas A&M AgriLife Extension)

Bobwhite and Scaled quail have been declining across their ranges for decades. Historically, Texas was thought of as the last stronghold for wild quails in the U.S., but over the last few decades populations in this state have also experienced drastic declines. The Texas Quail Index is a statewide program making use of citizen scientists to monitor quail populations and teach stakeholders about the plight of these once ubiquitous birds. This training session will give an overview of quail biology and conservation, as well as techniques used by Texas Quail Index volunteers to monitor quail populations and habitats in their home counties.

### **Biodiversity: Putting Concept to Practice of Ecosystem Management - HICKORY**

» John Herron (The Nature Conservancy)

What makes ecosystems tick? Learn from a wildlife ecologist about putting science into the practice of habitat management. What is biodiversity and why is important? How can we manage our properties (whether it's a backyard or a ranch) in ways that will improve habitat and increase the number of plant and wildlife species that we all love. John Herron, Director of Conservation for The Nature Conservancy in Texas and one of the founders of the Texas Master Naturalist program, has given this class as part of Master Naturalist training for several TMN chapters in Texas over the past 10 years.

### **The Beneficial Bat - CEDAR**

» *Rebecca Schumacher* (Indian Trail Master Naturalist)

*This program focuses on the fascinating as well as beneficial animal - the Bat, including some basic Bat Biology and Bat Ecology, and the Bat species common to various Texas Eco regions. We will take a peek into the world of the bat, its habits, how they benefit the environment and agriculture, as well as some practical information about our local bats, how we can learn to share space with them and what to do in case of a "bat encounter".*

*Rebecca Schumacher, a Certified Texas Master Naturalist, has been a Veterinary Technician involved in wildlife rehabilitation for over 25 years. For the past 3 years Rebecca has held a permit from the State of Texas to rehabilitate orphaned bats. This Presentation does NOT include live bats.*

### **What plant is that?: A Beginner's Guide to Plant Identification - POST OAK**

» *Daria McKelvey* (Texas Tech University)

*The focus of the session will give those who are new to plant identification a starting point in honing their skills. The session will include how to identify plants, discussion of basic terminology, identifying key plant characteristics on pressed and live specimens, and information on how to interpret/ use field guides and technology to aid in identification. Participants are encouraged to bring their local field guide. Handouts for plant characteristics and plant families will be provided. Specimens will also be provided.*

### **Monarch Host City - City, County, Non-Profit & Chapter Partnerships - LIVE OAK**

» *Barbara Willy* (Monarch Gateway 501(c)(3), Coastal Prairie Texas Master Naturalist), *Diane Russel, Ph.d* (Coastal Prairie Texas Master Naturalist)

*"Monarch Host City" will present the real-life example of a city and how it became a "Monarch Host City". We will focus on three points required for this project, negotiating municipal and non-profit partnerships with TMN, growing native milkweeds for the project – including milkweed growing instructions, and finally the set of educational/outreach materials and technology used to make the educational materials available to an entire community.*

### **Riparian Plant Walk – CONFERENCE FOYER**

» *Ricky Linex* (Natural Resources Conservation Service)

*Participants will get to see native grasses, forbs and woody plants found on a typical riparian area for central Texas. Good walking shoes and a walking stick are recommended.*

Saturday  
10:00 - 11:00

**Sat-1C**  
**Saturday Morning 1 Hour Sessions**

### **Institute of Renewable Natural Resources - LIMESTONE**

» *Brian Hays* (Institute of Renewable Natural Resources)

*The Texas A&M Institute of Renewable Natural Resources (IRNR) and the Texas Water Resources Institute (TWRI) work together to foster and communicate research and educational outreach programs focused on water and natural resources science and management issues in Texas and beyond.*

### **The Shrinking Piney Woods: Loss of Southern Pine Savannas in Eastern Texas and Its Impact on Endangered Species Habitats - TRAVERTINE**

» *Angela Lands* (Alamo Area Chapter, Texas Master Naturalist), *Frank Lands* (none)

*Biodiversity is being lost as a result of urban sprawl and other increased human activities. Prior to European colonization, over 90 million acres of southern pine savannas could be found in southeastern U.S., all the way to east Texas. Today there are less than 3 million acres with only isolated pockets remaining in east Texas.*

*With the significant loss of this pine savanna ecosystem, many species have become endangered. Historically, the habitat range of the Red Cockaded woodpecker and other ecosystem dependent endangered species coincides with the historical distribution of these pine forests. Frequent fires ignited by both lightning and native Americans kept the pine savannas sustainable. Today, land conversion and urban sprawl has disrupted the natural cycle of wildland fires, resulting in the ecosystem's rapid decline. The isolated pine forest pockets are all that remain of animal and plant species associated with these forests.*

### **TEAM Tool: Habitat Analysis Made Simple - CYPRESS**

» *Amie Treuer-Kuehn* (Texas Parks and Wildlife Department)

*Texas Parks and Wildlife has developed a Google maps application, Texas Ecosystem Analytical Mapper, (TEAM) to deliver the current vegetation map, the Ecological Mapping Systems of Texas (EMS) data to citizens. The TEAM application is an interactive tool that assists users in understanding habitats and integrates vegetation data with management, education and planning. Biologists, land managers, naturalists, and conservationists are able to use TEAM to view/print the EMS data in relationship to natural features such as soils, hydrology and ecoregions. TEAM*

phase 1 (available now) allows the user to view/print custom maps and reports of habitat data from uploaded files (KML/shapefile) or areas drawn/selected within the application. Other capabilities include; exporting habitat analyses to pdf and calculating vegetation statistics within the study area. Phase 2 (2016) adds a data entry and individual profiles. TEAM supports land management incorporating current data and provides an avenue for community involvement in habitat understanding.

**Conservation Easements: A Valuable Voluntary Tool - HIGHLANDS**

» Ken Cearley (Texas Ag Land Trust)

Concerned that Texas is losing her rural lands at a faster rate than any other state, TALT was formed in 2006 by leaders from several statewide agricultural, hunting and landowner organizations. A non-profit 501(c)3, TALT today works to protect agricultural lands, wildlife habitats, and natural resources for the benefit of all Texans. Learn more at [www.txaglandtrust.org](http://www.txaglandtrust.org).

Saturday  
11:00 - 12:00

**Sat-1D**  
**Saturday Morning 1 Hour Sessions**

**An Introduction to the Lichen Forming Fungi - LIMESTONE**

» Dale Kruse (S.M. Tracy Herbarium, Texas A&M University)

Lichens can be rather conspicuous components of many ecosystems, yet very little is known about these organisms in Texas. In this workshop we will explore this miniature world using two approaches. The lecture we will delve into the basics of lichen systematics, morphology, ecology, and biogeography. 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 the different lichen growth forms 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 organisms.

**CANCELLED - Texas' National Wildlife Refuges**

» Nancy Brown (U.S. Fish & Wildlife Service)

**Breaking Down Barriers: Success to Communicating with Young Families or Non- English Speaking Families - HIGHLANDS**

» Jennifer Bristol (Texas Children in Nature)

In this Advanced Training Workshop attendees will come to understand some of the barriers young and underserved families face when making choices about being outdoors. Barriers are compounded when some or most of the family members are not proficient in English. This workshop will explore communication methods to break down those barriers, create trust and ultimately allow families to relax and enjoy nature. Young families today often do not have skills or knowledge they need to feel comfortable in the outdoors. When they make the choice to attend an outdoor program, communication is key to help them feel welcome, safe and having gained confidence that they can spend time in nature on their own in the future. Attendees will learn hands-on tips to strengthen their communication style and be flexible in the field.

**Novel ideas for outreach, activities, and education about coastal communities - CYPRESS**

» Emma Clarkson (Texas Parks and Wildlife Department)

This workshop will focus on novel methods for outreach about coastal aquatic systems. Special focus will be placed on activities and outreach concerning seagrass habitats. Learn to identify the species of seagrass found in Texas, as well as some of the fish that you may find associated with seagrass habitat. Key conservation concerns will be discussed, as well as ways that you can help conservation efforts.

**You and TCAP: Understanding Your Role in Promoting the Plan - TRAVERTINE**

» Robert Denkhaus (Teaming with Wildlife: True to Texas)

Saturday  
12:00 - 1:00

**Lunch**  
**Conference Pavilion at Live Oak Lawn**

Saturday  
1:00 - 5:00

## Sat-FT-PM Saturday Afternoon Field Trips Rendezvous at Conference Registration Desk

### Geology Field Trip

» Charles Beierle (Highland Lakes Chapter Texas Master Naturalist)

The Llano Uplift is very important in understanding the geology of the entire state of Texas and is also the subject of frequent introductory field trips for geology students. This field trip will go beyond the introductory and explore the unique structures, rocks & minerals that make up the local geological formations and how it all ties in together with the history of the state of Texas. There will be several stops along the route; including stops at near Granite Mtn in Marble Falls; a short hike at the old Cold Spring Quarry in Granite Shoals -- these two stops will emphasize igneous activity and processes in the Precambrian. The third & fourth stops at Lookout Mtn & the Bloomquist Ranch near Kingsland will emphasize the structure resulting during the uplift stages. Time permitting we will include a stop at Inks Lake State Park to see the outcrop of the Valley Spring Gneiss the oldest outcrops in the area. All participants are encouraged to be ready for an adventure.

### Texas Quail Index Field Tour (Balcones Canyonlands National Wildlife Refuge)

» Becky Ruzicka (Texas A&M AgriLife Extension)

Join us for a tour of the local TMN chapter's Texas Quail Index site on the beautiful Balcones National Wildlife Refuge. We will be discussing Northern Bobwhite quail conservation and how it relates to threatened and endangered species conservation on the refuge, as well as the local chapter's activities that contribute to the statewide Texas Quail Index dataset.

Saturday  
1:00 - 5:00

## Sat-4B Saturday Afternoon 4 Hour Sessions

### How Many Mega Pixels? Camera, Lenses and Techniques for Nature Photography – SALON G

» John Herron (The Nature Conservancy)

Megapixels, zoom, shutter speed, small cameras, big cameras, Canon, Sony, Nikon, Fuji ... the variety of camera choices seems unending. John Herron, a wildlife ecologist and amateur photographer, will sort through the terminology and 'focus' on the features that are important for nature photography. We'll also discuss the basics of photo composition – how to make a good photo great! After a classroom discussion, the group will move outside for an hour of practice, then back to the classroom to look at the results. Dress comfortably for a short time outdoors and bring whatever camera you have. If you don't have a camera yet, you can try out one of John's!

### Monarchs Beg For Your Help – SALON F

» Kip Kiphart (Texas Master Naturalist), Cathy Downs (Texas Master Naturalist)

Texas Master Naturalists, Monarch Larval Monitoring Project Trainers, Monarch Watch Conservation Specialists, award winning Cibolo Nature Center Monarch Workshop presenters Kip Kiphart and Cathy Downs will discuss current trends in monarch conservation, basic ecology, milkweed ecology, monarch biology and life cycle, monarch migration and threats to the monarch population.

Participants will be able to examine milkweeds and live monarch eggs, larvae in all 5 stages, chrysalises and adults, pending Mother Nature's supply. Handouts and printed material from multiple monarch/pollinator organizations and citizen scientist projects will be available and discussed.

### Bryophytes: The Forest Under Your Feet - LIMESTONE

» Dale Kruse (S.M. Tracy Herbarium, Texas A&M University)

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 can be found in most habitats with a little training. In this workshop we will explore this miniature world using two approaches. The lecture we will delve into the basics of bryophyte systematics, morphology, ecology, and biogeography. 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 needed for the class will be provided.

### **After the Floods - Restoring Rivers and Riparian Areas – SALON H**

» *Rachael Ranft* (The Nature Conservancy)

After the Memorial Day floods in Central Texas, local conservation groups pulled together to help residents and landowners take the first steps needed to restore the riparian areas (where the river and land intersect) that were damaged by floodwaters. Representatives from several of these groups will share the lessons learned and the 'do's and don'ts' for restoring and rebuilding stream banks and riparian habitats. The session will start with presentations and discussion and end with a field visit to some natural habitats found along Central Texas rivers and lakes. Potential presenters will include representatives from The Nature Conservancy, Texas Parks and Wildlife Department, Hays County Master Naturalists, the Texas Forest Service, the Lady Bird Johnson Wildflower Center and others.

Saturday  
1:00 - 3:00

## **Sat-2C Saturday Afternoon 2 Hour Sessions**

### **Texas Milkweeds and Monarchs - POST OAK**

» *Mark Klym* (Texas Parks and Wildlife Department)

Monarchs have been in the news lately as their continued decline has resulted in proposals to list this amazing insect as a threatened or endangered species. Texas, being the mouth of the funnel through which they make their way into Mexico, plays a key role in the amazing story of this animals life. This session looks at a new citizen science project through which Texas Parks and Wildlife Department scientists hope to collect data that can be used in directing recovery activities within the state.

### **Six Hands-on Naturalist Activities for Kids - CEDAR**

» *Leanne Beauxbeannes* (Texas Parks and Wildlife Department)

This will be a fast paced, hands-on, fun way to connect kids to their natural environment. Some of these activities were created by the presenter while others have been gleaned from others and evolved. Activities include: Creating miniature habitats using native materials; Comparing and contrasting native critters using finger puppets; Camo-craft: Creating "seedy characters" animals out of plant materials; Entomology using Bug Bingo; Metamorphosis using play dough; What color is green?

### **Shorebird Identification and Conservation - HICKORY**

» *Nicole Norelli* (Central Texas Master Naturalists)

Shorebirds are everywhere in Texas. Texas is part of the Central Flyway, meaning we regularly have shorebirds of all shapes and sizes traveling through our state on their way to wintering or breeding grounds. The Texas coast itself also plays home to key breeding habitat for some of our more endangered species. However, shorebirds can be a tricky nut to crack when it comes to identification. Identification of species by body morphology, habitat, and behavior will be emphasized over birding by sight. Learning to identify these birds can be fun and they also play a key role in identifying a region, indicating the land or water health, and provide beauty and wonder to those who know how to look for them. We will also discuss methods of conservation of these birds and their habitat, and how this effort ties into protection of local communities (Houston Audubon Society, American Bird Conservancy).

### **Impacts of Youth Hunting & Conservation Programs - MESQUITE**

» *Denise Harmel-Garza* (Texas A&M AgriLife Extension)

Aldo Leopold mentions five tools of wildlife management – axe, plow, fire, cow and gun. It may be hard for some to understand how the "gun" or hunting has a place in modern society. In this session we will explore the reasons people hunt and the positive impact that hunting has on wildlife conservation, especially the huge monetary support it generates through the Wildlife Restoration Act. It is very important to all wildlife that hunting continues because the role it plays in wildlife conservation. In this regard, we will also examine youth wildlife conservation programs, including Texas AgriLife 4-H, TPWD and non-profits, that incorporate hunting into their curriculum. The shared goal of these programs is to continue the hunting heritage and thus ensuring that wildlife conservation remains strong and viable in our modern world.

Saturday  
1:00 - 2:00

## **Sat-1E Saturday Afternoon 1 Hour Sessions**

### **Nature Rocks! - HIGHLANDS**

» *Jennifer Bristol* (Texas Children in Nature)

In this workshop attendees will learn how to post their events on the Nature Rocks Texas website to reach more youth and families. Nature Rocks Texas is part of the Texas Children in Nature network and is one of the tools used to

connect families with nature in the Austin, San Antonio, Caprock, North and South Texas regions. Texas Children in Nature wants all kids and families to have access to nature, we know that sometimes that journey starts with an on-line search for things to do and places to visit. Nature Rocks Texas is designed to be a one-stop-shopping website so families can quickly find all the nature-based opportunities in a region. This skill will help Master Naturalist Chapters market their events in a clear and simple way that directly connects with families. Attendees will also learn how to feature their events on social media from the website.

### **CoCoRaHS, Introduction to the World's Largest Volunteer, Citizen Scientist Rainfall Network -**

#### **TRAVERTINE**

» *William Runyon* (Texas CoCoRaHS)

The Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS) is a grassroots, non-profit network of backyard weather observers of all ages and backgrounds working together to measure and map precipitation (rain, hail and snow) in their local community. The network has spread across the United States, Canada, Puerto Rico and the U.S. Virgin Islands. This network can be used and promoted by the Texas Master Naturalist program to educate its members on rain, drought, and water conservation. CoCoRaHS data is free to the public and is used by a rapidly growing group of users from all walks of life; including the National Weather Service, The Weather Channel, social media, science teachers, farmers and ranchers, community leaders and citizens, the USDA, researchers and scientists and anyone with an interest in weather.

### **Zebra Mussels in Texas: Ecology, Prevention, and Early Detection - CYPRESS**

» *Monica McGarrity* (Texas Parks and Wildlife Department)

Zebra mussels are a highly invasive species that was originally native to the Black and Caspian Sea drainages of Europe but became invasive long before it reached the US. Since its arrival in the US in the late '80s, it has spread throughout much of the eastern US and reached Texas in 2009. Zebra mussels are continuing to spread in Texas and are now found in seven lakes across three river basins. Learn more about zebra mussel ecology and impacts, invasion pathways and prevention, and steps that citizen scientists can take to assist with early detection.

Saturday  
2:00 - 3:00

## **Sat-1F Saturday Afternoon 1 Hour Sessions**

### **May 2015, The Texas Drought Buster - TRAVERTINE**

» *William Runyon* (Texas CoCoRaHS)

A look at the Wettest May in Texas History and How CoCoRaHS Captured the Event. Have you ever wondered who uses the daily CoCoRaHS reports? Or if the CoCoRaHS reports are even used...and if so...how? How the rainfall of May 2015 had an impact on the multi-year Texas Drought.

### **Strengthen Education, Outreach, and Volunteerism with TPWD's Wildlife Viewing Maps, Paddling Trails, and Birding Event! - HIGHLANDS**

» *Shelly Plante* (Texas Parks and Wildlife Department)

Learn how to best utilize TPWD's wildlife trail maps, paddling trails, and annual birdwatching event in outreach and education projects, fundraising, and logging volunteer hours.

The Great Texas Wildlife Trails program ([www.tpwd.texas.gov/wildlifetrails](http://www.tpwd.texas.gov/wildlifetrails)), the Great Texas Birding Classic ([www.birdingclassic.org](http://www.birdingclassic.org)), and the Texas Paddling Trails program ([www.tpwd.texas.gov/paddlingtrails](http://www.tpwd.texas.gov/paddlingtrails)) are not only great outreach, education, and marketing platforms for your region, but also they can give your chapter the opportunity to educate the public about the great birding and wildlife viewing opportunities in your region, provide a team building exercise through birdwatching, earn members volunteer hours, offer great partnership possibilities, help you raise money through map sales, and more! This session will show ways Master Naturalists, individually or as a chapter, can make these already existing statewide programs work for them on a localized, regional level.

### **Working with the oil and gas industry to protect the once pristine night skies of West Texas - CYPRESS**

» *Bill Wren* (University of Texas at Austin McDonald Observatory)

Advances in horizontal drilling techniques have led to a major boom in oil and gas exploration and production in and around the Permian Basin of far West Texas. As a result, the night skies over numerous state parks, and the University of Texas McDonald Observatory, have brightened significantly. This workshop will focus on efforts to raise awareness within the oil and gas industry of outdoor lighting practices that help to protect the night sky and promote better visibility and cost efficiency for their nighttime operations.

Saturday  
3:00 - 5:00

## Sat-2D Saturday Afternoon 2 Hour Sessions

### **Who Owns the Wind? - HIGHLANDS**

» Ernest Smith (Rex G. Baker Centennial Chair in Natural Resources Law, UT Law, Austin)

Professor Smith will explore the issue of deeds by Texas landowners to convey rights to wind on their properties for the generation of electrical power. He will examine whether wind can, or should be treated as a natural resource analogous to oil and gas, which are quite often severed from surface ownership, and more importantly, why landowners are attempting to separate wind rights from the rest of the land. The presentation will also focus on weather and topographical features for a successful wind farm, the federal and state incentives to build wind farms and the pros and cons of wind development. These points will include wind as a non-polluting renewable resource, but at the same time recognize effects such as animal deaths and habitat disruption.

### **Using Social Media to Build your Chapter's Capacity - HICKORY**

» Kathryn Gilson (AmeriCorps VISTA)

You can use social media to build your chapter's capacity by increasing class applicants, celebrating the work of your members, and educating and engaging with the public. You will learn how to write a social media strategy and set up Facebook, Twitter, and Instagram pages. Get ideas for posts and ways to interact with partners, other chapters, your chapter's members, and the public. Using social media can create new volunteer opportunities for your chapter and even give young professionals relevant work experience for their resume.

### **TNT Target Species Profiles - MESQUITE**

» Cullen Hanks (Texas Parks and Wildlife Department)

Come learn about our highest profile tracked species in Texas that could be hanging out in your neighborhood. Texas Parks & Wildlife tracks information on over 1,300 species in Texas, and you can help by documenting them in your area. This presentation will profile the habitat, range, identification, and conservation status of our highest priority species of plants and animals. In addition, we will introduce resources that will allow you to see what the unique and rare species are in your area, and how you can learn more about them.

### **TMN VMS Administrators Training 201 – LIVE OAK**

» Cheryl Foster (TMN Volunteer Management System Team), Dale Hughling (TMN Volunteer Management System Team), Brad James (TMN Volunteer Management System Team)

Join us to review some of the more advanced features of the Samaritan TMN VMS system, and procedures that coincide with the usage of the system. We will go over the process of transferring volunteers to and from your chapter. As well as handling volunteer opportunities in neighboring chapters when your volunteers join them. We'll discuss maintenance of your chapter's data. Cleaning up logbooks, opportunities and volunteer entries, and managing the Volunteer's drop-down box in eRecruiter. Advanced topics will also include exporting data to excel and using the email functionality for logbooks entries. Do you have a need to see data in a unique way? We will show you how to create grids for your chapter. Need to modify a large group of volunteer records? We will show you how to run an 'Automation' event to make those changes.

### **Promoting the Health of Monarchs and Other Pollinators: Collecting and Growing Milkweed Ecotypes - POST OAK**

» Minnette Marr (UT-Lady Bird Johnson Wildflower Center), Karen Clary (UT-Lady Bird Johnson Wildflower Center), Sean Watson (UT-Lady Bird Johnson Wildflower Center), Susan Prosperie (UT-Lady Bird Johnson Wildflower Center)  
Lady Bird Johnson Wildflower Center is expanding the network of volunteer cooperators to collect seeds of ecotypes for ten native milkweed species and to adopt seedlings of these ecotypes to restore local habitat. The focus area includes the East Central Texas Plains, Texas Blackland Prairies, Edwards Plateau and Cross Timbers. Volunteer cooperators come from the ranks of Master Naturalist and Master Gardener programs, Native Plant Society of Texas, Native Prairies Association of Texas, friends of parks, land trusts and youth groups. These cooperators have been encouraged to follow the wild seed collection protocol developed by the Xerces Society for Invertebrate Conservation. The seed collections will be used to stimulate production of bulk seed quantities in the focus area. Participants need to bring a clipboard and their enthusiasm for pollinator conservation to this session.

Saturday  
3:00 - 4:00

## Sat-1G Saturday Afternoon 1 Hour Sessions

### **L.A.N.D.S. In My Community...What is it ? How Do I Get Involved? - CEDAR**

» Leslie Wittenburg (Education Program Specialist - Texas Wildlife Association)

This session will introduce Texas Wildlife Association's L.A.N.D.S. (Learning Across New Dimensions in Science) program and explain why it is a win-win for Texas Master Naturalists to get involved with this unique FREE program that is offered to schools across the state of Texas to facilitate natural resource literacy within schools. We will discuss the program goals, explore the L.A.N.D.S. curriculum and learning modules, and discuss educational and volunteer opportunities for Texas Master Naturalist right within your community.

### **Caddo, The Lake, The Battle - TRAVERTINE**

» Carl Turner (Cypress Basin Texas Master Naturalist)

Caddo, Texas' natural lake and an internationally protected wetland under the Ramsar Treaty, is the home of the world's largest cypress forest and hosts more species of fish than any other lake in Texas. The history of this 25,000 acre cypress filled lake is unique in its natural formation and its impact on the cities of northeast Texas. It is also the site of the world's first offshore oil well.

This important lake is now under attack by Giant Salvinia. The battle being waged against this threat is a joint effort by the state fisheries department and local citizens who have raised awareness and money to build a greenhouse to raise weevils that appear to be the only hope of winning the battle.

The presentation will be a slide show detailing the history of the lake, the flora and fauna and the current community efforts to win the battle.

### **Promoting Conservation through Regional Journals: Post Oak & Prairie Journal Case Study- CYPRESS**

» Robert Denkhaus (Teaming with Wildlife: True to Texas)

Saturday  
4:00 - 5:00

## Sat-1H Saturday Afternoon 1 Hour Sessions

### **Engaging the New Naturalists - CEDAR**

» Ky Harkey (Texas State Parks)

Master Naturalists represent the pinnacle of the "Staircase to Stewardship" - the imaginary path that brings someone from their first positive experience in the outdoors to eventually become a steward of our public lands.

Community outreach helps get new and more diverse audiences engaged on their personal paths to stewardship. This presentation will explore what we can do today to reach the next generation of Master Naturalists, including why this is important, what strategies work, and what are some simple activities to add to your outreach toolbox.

### **CANCELLED - #FieldNotesFriday: A NATURAL Solution for an Online World**

» Erin Taylor (Lewisville Lake Environmental Learning Area)

### **Frog Calls Made Easy - TRAVERTINE**

» Marsha May (Texas Parks and Wildlife Department)

With the decline of amphibians world-wide Texas Parks and Wildlife biologists are interested in how these indicators of the health of our environment are doing in Texas. One way that you can contribute to the knowledge of the distribution of these important species is to record and share your observations in the iNaturalist Herps of Texas project. You can record your photos as well as recordings of frog calls in this project. Learning how to identify frog calls isn't always as difficult as it seems. In this presentation Texas Nature Tracker biologist, Marsha May, will share some tips on frog call identification.

### **Social Media: A Tool to Reach Your Constituents - CYPRESS**

» Jessica Alderson (Texas Parks and Wildlife Department)

Participants will learn about popular social media outlets and how to use them to promote TMN chapter events, projects and accomplishments.

Saturday  
5:00 - 6:00

**TMN Social, Year in Review, and Family Reunion  
Project Fair Display Judging**  
Conference Foyer & Granite Ballroom

Saturday  
6:00 - 8:30

**Dinner and TMN Awards Ceremony**  
Granite Ballroom

Saturday  
9:00

**Silent Auction Bidding, Project Contest and Popular Vote  
Contests Closes**  
Granite Ballroom

Saturday  
9:00 – 12:00

**Social Time and Campfire with Cash Bar**  
Palm Patio

# Sunday, 25th October

Sunday  
6:30 - 8:00

**President's Breakfast**  
Highlands

Sunday  
7:00 - 8:00

**Breakfast**  
Granite Ballroom

Sunday  
7:00 - 8:00

**Registration Open**  
Conference Registration Desk

Sunday  
7:00 - 8:00

**Silent Auction Winners Settle Bids**  
Granite Ballroom

Sunday  
8:00 - 8:45

**Annual Meeting Contest Awards & Special Presentations**  
Granite Ballroom

Sunday  
9:00 - 12:00

**Sun-3A**  
**Sunday Morning 3 Hour Sessions**

## **Natural History Walks: A Walking Workshop – CONFERENCE FOYER**

» Craig Hensley (Guadalupe River State Park, Texas Parks and Wildlife Department)

*So you need to lead a nature walk and you are nervous about exactly what you are going to talk about. Join Naturalist Craig Hensley for the real deal. You'll learn what kinds of things you can share with your audience even when you don't know the names of everything. Be ready to get ideas for loading your pack with sure-to-work ways to provide a meaningful, hands-on experience. Be sure to dress for being outdoors and bring binoculars, if you have them.*

## **Backyard Banding: Collaboration between Texas Parks and Wildlife Department and Texas Master Naturalist volunteers as the model for dove banding efforts in Texas – COTTONWOOD**

» Doug Jobes (Texas Parks and Wildlife Department), David Lobpries (Texas Parks and Wildlife Department), Mark Lange (Texas Parks and Wildlife Department)

*We will specifically highlight and demonstrate the partnership of Texas Parks and Wildlife District 7 biologist with the Texas Master Naturalist Coastal Prairie Chapter group. We will explain in detail the collaboration over the past years to capture and band mourning and white-winged doves as well as explain the training efforts and the importance of such volunteer efforts. With more and more emphasis being placed on banding data this working partnership will remain vital to the department and its federal partners which are solely responsible for managing these important game-bird species in Texas. Hands on training will include participation and demonstration of baiting sites and trapping techniques, tools, bands and data collection. We will also provide instruction on wing characteristics, aging, and sex identification.*

## **Plant Identification by Family Association and use of Written and Online Botanical Keys – POST OAK**

» Ricky Linex (Natural Resources Conservation Service)

*Participants will gain an understanding of how plants have been collected and identified through the past 150 years. Plants will first be identified by use of Family Associations and then followed by written and online botanical keys. Participants will learn how to quickly key out plants arriving at the proper identification. Session will be indoors, copies of the keys needed will be provided for all. Magnifier, tweezers, and knife would be useful. Handouts of Family*

Associations and list of useful plant ID books will be provided. Never again will you fear the challenge of keying out a plant.

**Texas Whooper Watch--Be a part of the Whooping Crane Story! – HICKORY**

» Mark Klym (Texas Parks and Wildlife Department)

The Texas Whooper Watch has developed over recent years to include almost year round involvement from Texas Master Naturalists. This workshop explores the history of Whooping Cranes in Texas, factors contributing to their decline, recovery efforts, future plans to continue recovery and how Master Naturalists can contribute to this continuing story of an amazing return.

Sunday  
9:00 - 10:00

**Sun-1A**  
**Sunday Morning 1 Hour Sessions**

**Aspects of Devastating Flood Events In South Central Texas - TRAVERTINE**

» Joe Arellano (National Weather Service Austin/San Antonio), William Runyon (Texas CoCoRaHS)

Aspects of Devastating Flood Events In South Central Texas – Some of the most devastating floods in Texas and perhaps in the entire country occur over the Texas Hill Country and the adjacent areas of South Central Texas. Recent historical flood events in South Central Texas are analyzed and compared, including similarities and differences in their origin and development. Is the frequency and intensity of these extreme precipitation events likely to increase in this part of Texas?

**Rainwater Harvesting SYSTEMS: Taking it to the Next Level - LIMESTONE**

» Chris Maxwell-Gaines (Innovative Water Solutions LLC)

Small rainwater systems or rain barrels are prevalent in the mass media and for the general public, rain barrels represent the extent of their knowledge about rainwater harvesting. But a rainwater harvesting SYSTEM can provide so much more water over the typical rain barrel. There needs to be a new emphasis placed on doing more than just “putting a rain barrel under a downspout”. This presentation will discuss the need for the development of these larger systems. It will use system water balance examples to show the effectiveness and advantage of creating larger systems. It will also go through all of the special component needs of these larger systems.

**How You Can Improve The Products of Citizen Science - LIVE OAK**

» Derek Broman (Texas Parks and Wildlife Department)

Texas Master Naturalists have been incredibly important to Citizen Science efforts in Texas, especially in assisting Texas Parks and Wildlife to meet their conservation goals. Unfortunately, many Citizen Scientists are not aware of just how their information is used and that can negatively affect data collection. In this presentation, I will discuss techniques for improving your contributions to Citizen Science and what that can mean for data analysis and products such as habitat models and maps. Many examples will be given using iNaturalist, a website used extensively throughout Texas and the world to collect Citizen Science data. When used correctly, many components of iNaturalist can be utilized to yield data of the highest quality.

**TMN State Representatives RoundTable - HIGHLANDS**

» Marsha Elrod (Lost Pines Master Naturalist Chapter)

The TMN Chapter's State Representatives role was established to help be another communication link to the state office for each chapter. This position within a chapter's organization can help to relieve some of the administrative burden from the president, along with review and provide input to statewide policy updates etc. Roughly, about 1/3 to 1/2 of chapters still have this position on their boards and use them to some degree or another. Join this discussion to learn the ways that chapters with active State Representative roles use their members, ways that the State Representatives can function as a whole across the state and other opportunities for this role within a chapter. All State Representatives from the TMN Chapters around the state, or other chapter leadership interested in being a part of this discussion are invited to attend.

Sunday  
10:00 - 11:00

**Sun-1B**  
**Sunday Morning 1 Hour Sessions**

**Poison Ivy: differentiating fact from fiction - LIMESTONE**

» Yvonne Fele (Central Texas Master Naturalist, Texas Parks and Wildlife Mother Neff State Park)

There are many myths about Poison Ivy and as Master Naturalists, we need to know the facts both for our own protection and the protection of those who we teach and lead in outdoor experiences. It is important to be able to

identify Poison Ivy as well as to know some treatments for both before and after exposure. As citizen scientists we can also give our assistance to groups that need location and form information on Poison Ivy.

**Organics, Water Conservation, Tree Preservation, Drip and Turf - TRAVERTINE**

» John Kiser (Stone Oak Property Owners Association)

The Stone Oak Property Owners Association's John Kiser, Board Vice-President and Certified Master Naturalist, will showcase the major work done over the past three years to vastly improve water conservation and landscape preservation efforts within the Stone Oak POA boundaries, thus resulting in a 60% decrease in water costs. The presentation will demonstrate how volunteers and employees have worked together with vendors, the City of San Antonio, and SAWS to move from the list of "water wasters" to one of the best conservation communities in the City. Through coordinated community events as well as newsletter and website education, this has resulted in outreach to residents who have enlisted these techniques in their own neighborhoods.

**Let's Keep the Emerald Ash Borer OUT of Texas! - LIVE OAK**

» Karen Clary (UT-Lady Bird Johnson Wildflower Center), Hans Landel (UT-Lady Bird Johnson Wildflower Center)  
With the emerald ash borer (EAB) knocking on Texas' door, it is imperative that we maintain high vigilance for this destructive pest. In this presentation we will provide the latest information on EAB and how to help prevent its introduction into Texas. We will also discuss a program to collect and preserve seeds of ash trees (the prime target of the EAB) from around the state.

Sunday  
11:00 - 12:00

**Sun-1C**  
**Sunday Morning 1 Hour Sessions**

**Nature as a teaching tool: Outdoor learning at the Lady Bird Johnson Wildflower Center – LIMESTONE**

» Anjoli Fry (Lady Bird Johnson Wildflower Center)

Educators from the Lady Bird Johnson Wildflower Center will give an overview of outdoor learning experiences in the gardens for youth and families. Learn strategies that you can use to adapt your programs and topics to various audiences and their needs with a focus on nature play and guided inquiry. You will also learn helpful tips and tricks for engaging the disengaged and learn about how you can volunteer for programs and events at the Lady Bird Johnson Wildflower Center.

**Ideas for Outreach: Sharing Activities from Girl Scout Troop 581 – LIVE OAK**

» Donna Cole (Blackland Prairie Chapter)

Join Blackland Prairie Chapter member Donna Cole as she presents some amazing Girl Scout activities and projects from a troop that believes in getting the girls outdoors! The troop is sharing their plans so you can use them in your Master Naturalist outreach or to inspire youth groups in your area. Activities include "GSI: Girl Scout Investigation" where the girls visited different stations to learn skills needed investigate a "crime scene" in nature, and "Zombie Apocalypse: 2014" where girls learned outdoor survival skills. Attendees will receive copies of the activities to use in their local chapters. Additionally, an overview of various troop members' Silver & Gold projects involving nature will be presented. The projects included adding interpretative signage on trails, creating monarch habitat, tracking wildlife on the shoreline of a suburban lake and more.

**Development of a Sodium Nitrite based toxicant for feral swine - TRAVERTINE**

» John Kinsey (Texas Parks and Wildlife Department, Kerr Wildlife Management Area), Justin Foster (Texas Parks and Wildlife Department, Kerr Wildlife Management Area)

Several control methods are commonly employed to manage feral swine and the damage they cause to the ecosystem, but they have not proven efficient or cost effective in reducing damage or limiting populations on broad a scale. Only lethal control methods reduce densities of feral swine and currently variations of shooting (e.g., recreational hunting, trapping and culling, agency culling) are the only lethal strategies available. Additional methods are needed to address this national issue and development of a toxicant for feral swine is warranted. Our interdisciplinary team is working to develop, evaluate, and register a toxicant against feral swine in the United States (US). Our efforts began in controlled captive settings and will be expanded to free-range settings in representative habitats across the US. By aiding efforts to reduce and eliminate populations of feral swine, our toxicant will serve to improve native habitats and thus benefiting native flora and fauna.

Sunday  
12:00 - 1:00

**Conference Closes (Lunch available in Lantana Grill in Hotel)**  
**Hotel Room Check Out Before 1:00pm**

