



# Oaks and Prairies Wildlifer

A newsletter for landowners in the Post Oak Savannah  
and Coastal Prairies Regions of Texas

TEXAS  
PARKS &  
WILDLIFE

Winter 2019

## Page 2

Ranching and Wildlife Expo

## Page 3

Artificial Wetlands

## Page 5

Little Bluestem

## Page 6

Our Newest Wildlife  
Management Area:  
Powderhorn

## Page 8

Texas Youth  
Hunting Program

## Page 10

Species Spotlight:  
Nine-banded Armadillo:  
Our State Mammal

## Page 12

Bats: The Unsung Heroes of  
Plant Pollination

## Page 14

Upcoming Events

## Page 16

Our Wildlife Biologists

## District Field Notes

BY DAVID FORRESTER

We experienced an average to below average deer harvest in 2018-19. The acorn crop was really good this year and we've been really wet. Most hunters have reported corn sitting under their feeders for most of the hunting season. Whenever we have conditions like this, we experience a fall off on harvest. However, we have seen some good bucks harvested and every deer has been in phenomenal shape. With the new Land Management Assistance system and the harvest option or conservation option MLD permits, doe harvest can go until the end of February. We do not recommend waiting that late to harvest your doe in this district, but it can legally be done. We recommend having your doe harvest complete by now. If you wait to harvest later into February, you can (in certain years) run the risk of harvesting an antlerless deer that is in fact a buck that has shed its antlers. Also, all doe are bred by now and waiting to harvest late just means you will be harvesting a heavy bred doe.

Once again, biologists in the district have done a great job collecting over 1,000 CWD samples so far this year. We want to thank the local sheriff's departments, game wardens, TxDot, and animal control officers that notified us about road kills. Also, we want to thank the hunters that brought us deer. Although we are shifting focus a bit, we will still collect and submit samples if you have an animal you want tested. You can find the latest information on CWD in Texas at this web site: <https://tpwd.texas.gov/huntwild/wild/diseases/cwd/>.

We've been holding scoping meetings in the district trying to get information out about a 4-day antlerless season and mandatory reporting regulation proposals. We also want to gauge the landowner's and hunter's opinions. We've held meetings in most of the counties in District 7. For the most part, they have been well attended. Results of the scoping meetings will be presented to the TPWD commission January 23, 2019.

We said goodbye to wildlife biologist Doug Jobes back in September. It took us a while, but we finally filled that open position, and Meagan Lesak started her first day on the job January 7, 2019. Meagan is a M.S. graduate from Texas A&M-Kingsville.

*Continued on page 2*

*District Field Notes, continued*

She's originally from the Victoria, TX area. Meagan is covering DeWitt and Goliad counties and will office out of our Victoria location.

Although it can get cold this time of year, it is still a great time to get out and enjoy the wildlife and habitat on your piece of Texas.

## Ranching and Wildlife Expo

WRITTEN BY CLINT FAAS

The 13th Annual Ranching and Wildlife Expo is scheduled to take place during the first week of the Houston Livestock Show and Rodeo (HLSR) on February 26-March 2, 2019 at NRG Center in Houston, Texas. This annual event is organized by the Ranching and Wildlife Committee, with help from Texas Parks and Wildlife Department, the HLSR All Breeds Committee, Texas A&M AgriLife Extension Service and the Texas Wildlife Association. It is designed to showcase the complementary and beneficial relationships that can exist between a successful ranching operation and a successful wildlife program.

The expo will start with 3 days of educational seminars beginning February 26-28. Each day will cover topics from a different focus: Managing Cattle and Wildlife, Human Interactions with Wildlife and the Environment, and Impacts to your Rural Land. There are also commercial vendor booths throughout the week and a wildlife auction on March 1. Finally, a youth wildlife video and poster board competition will round out the Expo with presentations from finalists and awards on Saturday, March 2. Past Ranching and Wildlife Expos have generated scholarship dollars for ranging from about \$235,000 in the early years to over \$400,000 in recent years.

Presentations will include:

- Arm and Hammer Animal Nutrition
- Cattle Market Report and Outlook 2019
- H-Calf: After the 1<sup>st</sup> Year
- Satisfaction and Motivation of Ranch Employees
- Profiting from Your Cattle Operation
- Cattle Handling Made Easy
- Urban Wildlife and What to do if you Find Them (*With Live Animals*)
- Red Imported Fire Ants: Their Spread, and Control
- A Look Into Houston's Weather Patterns
- Human and Environmental Influences on Water and Flooding
- Control of Invasive-Exotic Plants
- New Techniques for Managing Wild Pigs (*1 CEU, General*)
- Wild Game Preparation: Wild Pigs-Prasek's Hillje Smokehouse
- Learning Your Herps: Common Amphibians and Reptiles of Texas (*With Live Animals*)
- Recovering Americas Wildlife Act: What Does This Mean for You?
- How to get involved in the 2019 Legislative Session
- 2019 Legislative Expectations
- Ranch Financing Update and 2018 Texas Rural Lands Market Report
- Conservation through Innovative Filmmaking,
- Wild Game Preparation, Brennan's of Houston.

A complete schedule of topics and speakers is available on the HLSR website at: <https://www.rodeohouston.com/Portals/0/Content/VisitShow/Attractions/RanchingWildlifeExpo/Downloads/RanchingandWildlifeSchedule.pdf>.

Admission to the seminars is free. Pre-register today for a free gate and admission pass at: <https://www.eventbrite.com/e/ranching-wildlife-expo-seminars-tickets-54577195862>. For more information contact

Clint Faas at 832-595-8999 or [Clinton.faas@tpwd.texas.gov](mailto:Clinton.faas@tpwd.texas.gov).



*Clint Faas is the District 7 biologist for Wharton and Fort Bend Counties. A Wharton County native, he graduated from Texas A&M University in 2005 with a B.S. in Wildlife Ecology and Management and a minor in Rangeland Ecology and Management. He went on to obtain a M.S. in Wildlife Ecology from Texas State University in 2008. Post-graduation, and prior to his hire in 2017, Faas worked as a private sector biologist and Director of Conservation Programs for a statewide non-profit.*

# Artificial Wetlands

WRITTEN BY TODD PILCIK

**Having grown up in the rice fields of Wharton and Colorado counties, I remember with great fondness the arrival of the first fronts that marked the migrations of ducks and geese to the area.**

Deer were in limited numbers and, although we did take some time to pursue this big game animal, our main focus was on the vast numbers of wintering waterfowl that arrived to take advantage of the abundance of food and habitat provided by rice farming. Back then we didn't think about wetlands or waterfowl management.

Everything necessary was accomplished by the landowner or farmer who, once the crop was harvested, flooded the stubble, or not, and left the field to fallow for the winter. Over time, acreage under cultivation for rice production has decreased. Droughts came and went and the rice fields, once pockmarked with natural depressions, were terraced and leveled and converted to row crop, pasture, or developed to accommodate ever increasing urban sprawl. With the loss of so much of the native/natural wetland, it became necessary to recreate artificial wetlands to provide habitat for wintering wetland species.



*Richland Chambers Wildlife Management Area Wetlands. Photo©TPWD*

Artificial wetlands, sometimes referred to as duck ponds, impoundments or moist soil units are a common sight on the coastal prairies of today. And as with any manmade project designed for wildlife, careful consideration should be used in design and functionality of these projects. Some of the basic factors that should first be evaluated include soils and topography. Sites where soils hold water with little or no slope work best. The ability to flood the area is critical, and water acquisition may also pose a problem. Many impoundments are dependent on rainfall. In this instance, insure that the watershed is adequate to supply the impoundment. In dry years, alternate sources of water are crucial. Pumping water from a nearby ditch or creek, acquiring from a water entity or drilling wells can offer solutions for water availability. Constructed levees to capture and retain water may vary anywhere from a few inches to several feet in height depending on the size of the impoundment and the topography. Plans for the impoundment should also include a water control structure such as a flash board riser to allow the manager to manipulate water levels throughout the season/year.

The vast majority of these artificial wetlands are created and maintained to provide water for waterfowl and to increase hunting opportunities. However, many migrant shorebirds and wading birds readily take advantage of this available habitat. Water management on these sites consists of filling or "pumping up" impoundments in late August and early September. Water is then retained on the site throughout the fall and winter until the end of waterfowl season at which point, boards are removed from the control structure and the entire area drained. This fast drawdown allows for rapid drying of the area and conversion back to the primary agricultural uses, either farming or ranching; however, this practice usually does little to promote wetland species. If the land is not slated to be put into agricultural production, a slow drawdown is the better option. A slow drawdown is accomplished by removing boards one at a time lowering the water levels of the impoundment by only a few inches over the course of a few weeks or even months allowing water to recede at a slow pace.

*Continued on page 4*

### *Artificial Wetlands, continued*

This practice produces zones of shallow water, mudflats and early successional wetland plants in a mosaic across the wetland unit. Many beneficial food plants such as smartweed require these moist soils or mudflats for germination. Once the desired drawdown is complete, some water may remain to promote the growth of submerged vegetation which will not only act as food source for resident species but also as structure for invertebrates, another key component in the wetland ecosystem.

Continuous flooding is generally not recommended, especially for shallow water impoundments. Although it will allow for the development of more complex wetland ecosystems, it may also contribute to overproduction on invasive wetland plants such as cattail which can overtake the entire area and render it unproductive. At this point, it may be necessary to drain, dry and manipulate the wetland through burning, disking and/or herbicide treatment to rejuvenate desirable species. It is important to note, every wetland project is unique and this brief article by no means covers the intricacies of wetland management. For more detailed, site specific management options and information, contact your local biologist.



*Left: Solar well  
cord grass.  
Right: Cordgrass  
Wetland.  
Photos©TPWD*



*Left: Water control.  
Right: Water control  
with water.  
Photos©TPWD*



*Todd Pilcik is the Private Lands Biologist for Matagorda and Brazoria counties. He received his Bachelor of Science degree in 1994 and pursued his Masters degree at Southwest Texas State University in San Marcos. Todd was hired in August of 1994. He worked with the migratory program until 1999 when he accepted a biologist position in the Texas hill country covering Lampasas, Coryell and Bell counties. In 2002, he transferred to the Texas coast and is currently stationed in Bay City.*

# Little Bluestem

WRITTEN BY ZNOBIA WOOTAN, NATIVE AMERICAN SEED

**Little bluestem, *Schizachyrium scoparium*,** is one of the three dominant species that make up our tall and short grass prairies. It can be found from Canada to Mexico and from the east coast to the west coast. The height will vary from 1 to 3-4 feet depending on the soil and rainfall it achieved. I observed it in our local school rain garden and it was 5 ft. tall and falling over. Junction gets an average of 17 -23 inches of rain a year and it wasn't a wet year in 2012 for sure, but the design of the garden held the moisture for longer letting the little bluestem and the other natives there grow larger. There is not an area that should not have little bluestem. As well as being a foundation species for both the tall and short grass prairies, it is also beautiful in commercial and suburban landscapes. It is a major component in any native restoration mix because of its easy establishment and its ability to grow in almost any soil type. One of its characteristics that makes it a favorite of prairie restoration is its proven establishment rate on thin, infertile, highly erodible soils. Little bluestem grows readily from seed and is a clump grass of medium size which makes it ideal for landscaping. It is a lovely blue grey color in spring maturing through the summer. During the late summer and early fall as the seeds begin to mature they become white and fuzzy, so that by fall and early winter you have white fuzzy seeds on stems that have turned a rich bronze color that is unmistakable.



*Little Bluestem fall of 2012 right before harvest.*

*Photo©Native American Seed*

For the Ag. producer little bluestem provides excellent forage for grazers until it begins to mature and then most livestock find it unpalatable if there is something better to be found. It also will make an excellent hay crop and like all natives it does not like additional fertilizers and does not need pesticides as it doesn't have any pests. If you have a wildlife valuation on your property little bluestem will qualify for food and habitat. The seeds are nutritious to birds, the lesser goldfinch loves it, and quail and dove as well as other mammals use it for cover from flying predators such as hawks and owls and as nesting material.

Since little bluestem is such a popular and necessary forage and landscape species a lot of time and money has been spent in developing different cultivars and improved selections. These cultivars and improved selections have been developed for specific areas and during this refinement process naturally occurring genetic adaptations are bred out. If the ability to adapt to changing environmental conditions over time is important to you then stick to a variety that was developed near your part of Texas.



*A close-up image of the white fuzzy seeds. Photo©Native American Seed*

# Our Newest Wildlife Management Area: Powderhorn

WRITTEN BY DANIEL WALKER

## **Powderhorn is the Texas Parks and Wildlife Department's (TPWD) newest Wildlife Management Area (WMA).**

It will be a great addition to our WMAs on the Texas coast providing research areas, field days, birding, hunting, and other outdoor recreation opportunities.

The portion of Powderhorn Ranch that was purchased included 17,351 acres, with 11 miles of bayfront on Powderhorn Lake and Matagorda Bay. The property consists of mature oak forests, upland prairies, and freshwater and saltwater marshes. The ranch is high-fenced on 2 sides and open to the bays on the remaining boundary. About 2,300 acres is slated to become a State Park years down the road. That area is still under private ownership and will be donated when the State Park is ready to start construction. The remaining 15,000 acres is the WMA.

Funds for the initial purchase came from the BP Deep-Water Horizon oil spill settlement. Money from the settlement will "remedy harm to resources where there has been injury to, or destruction of, loss of, or loss of use of those resources". Habitat acquisition fits that bill perfectly. Texas Parks and Wildlife Foundation (Foundation; non-profit organization) spearheaded efforts to buy the ranch with BP settlement money. The Nature Conservancy and The Conservation Fund also helped secure the property. In 2014, the first payments from the settlement went through and subsequent payments were made in 2015 and 2016. Texas Parks and Wildlife Foundation took ownership after the last payment in 2016. After that, Texas Parks and Wildlife Department worked closely with the Foundation to start building infrastructure and managing habitat.

Calhoun County was once covered with open prairie and scattered mottes of big coastal live oaks but over time has been invaded with large expanses of running live oak. Working with the Foundation, approximately 4,000 acres of running live oak were treated with Spike 20P herbicide starting in 2015. This spring, after letting the oak die and grasses grow for fuel for a couple of years, we had a series of prescribed burns to burn off the dead oak. A little rain after the burns helped the grasses really come back and now we have a restored 4,000 acre tallgrass prairie. As we get our feet underneath us on the WMA we will start to treat more of the running live oak and over the next few years increase the size of our prairie. This restoration will be beneficial to many species of wildlife that depend on open grasslands including whooping cranes, northern bobwhites, mottled ducks, aplomado falcons and many more.



*Top: Powderhorn boundary.  
Bottom: Powderhorn. Photos@Dan Walker, TPWD*



*Continued on page 7*

### *Our Newest Wildlife Management Area: Powderhorn, continued*

The Foundation donated the property to the Department in October of 2018, officially forming the Powderhorn Wildlife Management Area. We are full staff now with an area manager, a wildlife biologist, and 2 technicians. We have conducted several public hunts on the WMA so far and will be increasing our hunt numbers over the coming seasons. We currently have categories for youth deer and adult deer and exotics but will be assessing other hunting opportunities in the future.



*Right: Powderhorn prairie.  
Photo©Dan Walker, TPWD*



*Left: Powderhorn at  
sunset. Photo©TPWD*

# Texas Youth Hunting Program

WRITTEN BY CHRIS MITCHELL, TEXAS WILDLIFE ASSOCIATION

As a landowner, you have likely had guests on your property. The ability to highlight your hard work and showcase your land and its habitat is one of the many advantages of having your own slice of Texas. Of course, having guests can present some challenges. Liability has probably had more to do with preventing open gates than any other concern. The Texas Youth Hunting Program (TYHP) offers liability coverage for all of its landowners. Over 600 Texas landowners in 119 of the 254 Texas counties have hosted hunts in the program's 20-year history. Landowners quickly learn the joy of welcoming the new generation of hunters and conservationists, especially when a certificate of insurance sets the worries over liability aside.

So how does it work? A call or an email to TYHP will get the ball rolling with a visit to your property. A TYHP representative will visit and explain the program and hunt execution. This is your hunt so you make the decisions as to when the hunt is, the number and type species hunted, how involved you want to be, and if any facilities are included. The TYHP representative will be a Huntmaster. This is a trained, certified and background checked volunteer who runs hunts and provides all aspects of gear, personnel and the hunters to carry out the hunt.

A hunt will consist of the following: a lead Huntmaster, a cook, a minimum of four hunters (each accompanied by a parent or guardian), and guides for inexperienced hunters. If you prefer your own staff serve as guides that is great, but not necessary. TYHP will provide all the personnel necessary to run a safe, educational hunt.

Education is a key component of every hunt. When youth are not hunting, eating, or sleeping they are actively learning through presentations or hands-on activities. Hunter education is a prerequisite for every hunter. TYHP prides itself on making hunts an opportunity for hunters to put into practice what they learned in the classroom.

Facilities: TYHP can run a hunt almost anywhere. There is no need for you to house anyone. Most hunts are tent camping hunts. Use of on-site facilities is helpful, especially for the cook, but it is not necessary. You and your Huntmaster can discuss all the details during the visit.

Timing: TYHP asks for a minimum of 6 weeks lead-time prior to the hunt date. This allows time for TYHP to post the hunt to the website. TYHP chooses hunters about 30 days prior to the hunt date so that leaves two weeks for the hunters to find and apply for the hunt. During the 2017-2018 season TYHP ran over 225 hunts, so the more time TYHP has to post the hunt the more opportunity youth have to find and apply for the hunt.



*Photos@TYHP*

*Continued on page 9*

### *Texas Youth Hunting Program, continued*

Hunters must be 9-17 years old, be a Hunter Education graduate and have an adult accompany them. TYHP gives priority to new hunters. Those who have never hunted with TYHP are selected over veterans of the program. TYHP takes care of the hunter selection, but if you have hunters in mind, as long as they meet the minimums, we can accommodate your wishes.

TYHP hunts what species are legal and what the landowner allows. Regardless of the quarry, the hunters will learn proper field dress, skinning, and quartering of their harvest. If hosting a hunt sounds like something you want to do contact TYHP at 210-930-2177 or [TYHPREPLY@TYHP.ORG](mailto:TYHPREPLY@TYHP.ORG). You can also visit the website to learn more about the program. [WWW.TYHP.ORG](http://WWW.TYHP.ORG)



*Left: TYHP turkey hunt. Photo@TYHP  
Top, Bottom: TYHP hunts. Photos@TPWD*



*Chris joined the Texas Youth hunting Program in 2012 as the Field Operations Coordinator. He assumed the role as TYHP director in September 2014. Prior to 2012, Chris worked in the TPWD wildlife division and is a retired US Army Colonel. He is a TYHP Huntmaster, Hunter Education Instructor, Texas Master Naturalist and Boone and Crocket Official Measurer. Chris is married to Melissa Goad Mitchell, an Emergency Room RN at the Guadalupe Regional Medical Center in Seguin, Texas. Melissa and Chris have two children. Both children attended Texas A&M University. Their daughter Maura is a CPA in Houston and son Riley is a software analyst for General Motors in Austin.*

## Species Spotlight: Nine-banded Armadillo: Our State Mammal

WRITTEN BY SHANNON LAWRENCE

**Imagine a young adult, raised in a suburban area, on her first camping trip. An armadillo roots his way into the campground, completely oblivious to the presence of humans.**

The girl freezes as the armadillo slowly forages his way through camp and eventually bumps into her. The startled armadillo leaps into the air, and the campers erupt into laughter. An instantaneous fascination with armadillos is born. Often a personal experience in the outdoors is all it takes for a love of nature to ensue.



Top: Nine-banded armadillo. Photo©Trey Barron, TPWD  
Bottom: Armadillo tracks. Photo©TPWD

The nine-banded armadillo (*Dasyus novemcinctus*) is a prehistoric-looking mammal with bony plates that overlap on the skin. This overlapping arrangement allows for free movement and forms bands. Despite the name, there can actually be more or less than 9 bands. Armadillos are about the size of a domestic cat and can weigh between 8 and 17 pounds. Several features point to their insectivorous lifestyle and aids in foraging for insects: long claws, an elongated snout, and peg-like teeth. Like all mammals they have hair, but it is very sparse. For this reason, armadillos are easily affected by climatic conditions and their activity depends on the time of year. They are mostly nocturnal when temperatures are warm and diurnal when it is cooler outside. They do not hibernate but may spend increased time in their burrows when it is cold.

While the armadillo is an iconic symbol of Texas, they worked their way northward from South America. They are prevalent throughout the southeastern United States and north into Kansas and Missouri. Their range has been expanding with warming temperatures and human infrastructure. One study says their potential range is as far north as Massachusetts (*Taulman and Robbins 1996*). In Texas, armadillos are found throughout most of the state, except the western Trans-Pecos. Soil type is a definite predictor of armadillo abundance within an area since their livelihood is dependent on rooting for insects. An almost insatiable insectivore, armadillos rely on looser soils for ease of probing the soil for insects. Looser soils can generally support a greater number of armadillos. When the soils are tighter, armadillos concentrate closer to water where it is easier to forage. Armadillos are attracted to water for drinking, foraging, and taking mud baths, but they avoid marshy areas.

Burrows are variable in size and depth, with shallower ones serving as food traps for insects, and deeper ones are used for breeding purposes and contain a nest chamber. Armadillo burrows may be used by a variety of other creatures such as opossums, rabbits, mice, skunks, and burrowing owls.



*Continued on page 11*

***Species Spotlight: Nine-banded Armadillo: Our State Mammal, continued***

Their burrows and foraging divots often anger landowners and may lead to their persecution. Armadillos aren't there to mindfully destroy your yard, but rather to eat insects and common garden pests such as grubs and fire ants. Even though they readily consume fire ants, they are unfortunately not the answer to sustained fire ant control since they are likely not getting to the queen of each mound.

Besides their unique appearance, armadillos have other interesting attributes. To cross a body of water they can either walk across the bottom of a narrow area while holding their breath or for longer treks, they have the ability to ingest air which gives them increased buoyancy for an easier swim. Another interesting fact pertains to reproduction; armadillos give birth to identical quadruplets each spring. Perhaps the strangest oddity is their propensity to show up on a roadside holding a beer can!

*Schmidly, David J. 2004. The Mammals of Texas. Sixth edition. University of Texas Press. Texas Parks and Wildlife Department.*

*Taulman, J F, and Robbins, L W. 1996. Recent range expansion and distributional limits of the nine-banded armadillo (*Dasyopus novemcinctus*) in the United States. Journal of Biogeography 23: 635-648.*

*University of Georgia Extension. Natural History Series: Nine-Banded Armadillo. <http://extension.uga.edu/publications/detail.html?number=C866-2&title=Natural%20History%20Series:%20Nine-Banded%20Armadillo>*



*Shannon Lawrence is the wildlife biologist for Victoria, Calhoun, and Refugio counties. She received her B.S. in Range and Wildlife Management from Texas A&M-Kingsville. After several internships, including 2 years at the Attwater Prairie Chicken National Wildlife Refuge, Shannon moved to Arizona for 13 years. There she earned her M.S. in Wildlife Conservation and Management from the University of Arizona and worked as a wildlife biologist for the Arizona Game and Fish Department and Fort Huachuca Army Installation. Shannon reclaimed her Texas residency and began her career with TPWD in February 2018.*

# Bats: The Unsung Heroes of Plant Pollination

Article used with permission from Bat Conservation International

WRITTEN BY DONNELL GASBARRINI

**Bats are interesting and unique animals in many respects, and they lend a helping wing in more ways than we tend to think, including their irreplaceable role as pollinators.**

It's likely that plant populations, which have both economic and ecological importance, would suffer if nectarivorous bat populations declined. It is incredibly important to protect our bats and their habitats, not only to preserve biodiversity but also to maintain the mutualistic relationships that these important mammals have with many of the plants in their environment.

## SO HOW DOES POLLINATION WORK?

Pollination is a process that involves the transfer of pollen between a male stamen and a female pistil within a plant, and is used by many plants to reproduce. The challenging part of this process is that plants are quite literally rooted into the ground. They can't move in order to distribute their pollen, so they have to rely on help from others to reproduce. This is where bats come in. Similar to hummingbirds and bees, bats play a vital role in the pollination of plants, many of which people rely on for their livelihood.

## EVERYBODY WINS

Of the many ways in which bats are unique to the mammal class, their ability to fly is surely at the top of anyone's list. Like birds, bats require an energy-rich diet in order to satisfy their fast metabolism and maintain their ability to fly. Many bat species, including the greater long nosed bat (*Leptonycteris nivalis*), spear-nosed bat (*Phyllostomus discolor*), and Pallas's long-tongued bat (*Glossophaga soricina*) are nectarivorous, which means they rely on nectar for nourishment. Nectar is a sugary substance produced by plants and is located very close to the pollen-containing stamen. When a bat approaches a plant to collect nectar, it inevitably makes contact with the stamen, and flies away with pollen on its body. This pollen is then transferred to the pistil of the next plant the bat visits as it continues its hunt for nectar. This relationship is mutualistic, as bats benefit from the nutritional reward provided by plants in the form of nectar, and plants benefit by having their pollen distributed. Some plants, like four species of Venezuelan columnar cacti (*Stenocereus griseus*, *Pilosocereus moritzianus*, *Subpilocereus repandus*, and *Subpilocereus horrispinus*) have evolved to become specialized in size and shape to accommodate bat pollinators, which are the only pollinators that aid in the reproduction of these cacti.



Photos@Bat Conservation International

Continued on page 13

### *Bats: The Unsung Heroes of Plant Pollination, continued*

#### FAR FLUNG FLIERS

An added advantage for plants using bats as pollinators is their ability to fly much farther than insects typically can. The farther a pollinator can move, the greater chance it has of encountering another plant to deposit pollen into. As highly mobile mammals capable of flight, pollination across large distances is among the most important of the ecological services provided by bats. The *Phyllostomid* family of bats are able to transport pollen up to 800m between trees in their native Puerto Rico. Even more impressive, leaf nosed bats (*Phyllostomus sp.*) in Brazil can move pollen up to 18km between trees!

#### POPULAR POLLINATION

Bat species aid in the pollination of about 530 species of flowering plants worldwide, many of which are economically and/or ecologically important, especially in the southwestern United States, Mexico, and northern South America. Three bat species within the genus *Leptonycteris* are among the critical pollinators for blue agave plants (*Agave tequilana*) in tropical latitudes that are harvested to supply the multimillion dollar tequila industry in Mexico. In fact, the relationship between these bats and agave plants is so intertwined that the bat populations grow and shrink with the success of these plant populations. Other plants that rely on bats as pollinators include eucalyptus, wild and cultivated bananas, and balsa trees (which are used to produce the world's lightest timber).

#### Mission & Vision

*"The mission of Bat Conservation International is to conserve the world's bats and their ecosystems to ensure a healthy planet."*

*BCI is dedicated to the enduring protection of the world's 1300+ species of bats and their habitats and creating a world in which bats and humans successfully coexist. In pursuit of this vision, during the next five years BCI will work worldwide at scale with local, regional, national and multinational public and private partners to respond rapidly and effectively to bat conservation crises, preventing the extinction of threatened bats and the extirpation of globally significant populations of bats.*



## Upcoming Events

### FEBRUARY

- 1 Lee County Wildlife Association Annual Meeting**  
The Silos on 77, Giddings, TX  
Begins at 5:00 p.m.  
Contact Laura Sherrod at 979-540-2744 or visit [leecountywildlife.org](http://leecountywildlife.org)
- 8 16<sup>th</sup> Annual Neasloney Prescribed Burn Field Day**  
M.O. Neasloney WMA, 20700 St. Hwy. 80 N., Gonzales, TX 78629,  
8:30 a.m. to 4:00 p.m.  
RSVP by 5:00 p.m. on February 7.  
Contact Trent Teinert at 830-203-0896 or [trent.teinert@tpwd.texas.gov](mailto:trent.teinert@tpwd.texas.gov)
- 16 Central DeWitt County WMA Awards Banquet**  
VFW Hall  
934 US HWY 183, Cuero, TX 77954  
Doors open at 5:00 p.m.  
Contact Mary Keating at [cdcwma@gmail.com](mailto:cdcwma@gmail.com)
- 21 Quail Appreciation Day**  
2335 Williams Way Blvd, Richmond, TX  
Register:  
<https://www.texas-wildlife.org/resources/events/quail-appreciation-day1>  
Contact Clint Faas at 832-595-8999  
[clinton.faas@tpwd.texas.gov](mailto:clinton.faas@tpwd.texas.gov)
- 23 Jackson County Wildlife Management Association**  
Jackson County Service Center located at 411 N. Wells St. Edna, TX 77957  
Begins at 4:00 p.m.  
Contact Jim Theiss at 713-253-1135 or [jtheiss13@comcast.net](mailto:jtheiss13@comcast.net)  
<https://www.facebook.com/jacksoncowildlife/>
- 26-28 Ranching and Wildlife Expo Houston Livestock Show and Rodeo**  
NRG Center, 1 NRG Park, Houston, TX  
Contact Clint Faas at 832-595-8999  
[clinton.faas@tpwd.texas.gov](mailto:clinton.faas@tpwd.texas.gov)



Photo © Trey Barron, TPWD

***JANUARY: TIME TO CLEAN OUT THOSE NEST BOXES! Make sure nest boxes are cleaned out and ready to go by the start of nesting season.***

*Continued on page 15*

*Upcoming Events, continued***MARCH**

- 1-2 Ranching and Wildlife Expo  
Houston Livestock Show and Rodeo**  
NRG Center, 1 NRG Park, Houston, TX  
Contact Clint Faas at 832-595-8999  
[clinton.faas@tpwd.texas.gov](mailto:clinton.faas@tpwd.texas.gov)
- 16 Colorado County Wildlife Management Association Spring Banquet**  
Columbus Hall 3845 IH10 Columbus, TX 78934  
Begins at 4:00 p.m.  
Contact Chad Emmel at 979-732-1399 or at  
[www.ccwma.org](http://www.ccwma.org)
- 23 Meyersville WMA Spring Meeting**  
13052 South US HWY 183 Yorktown, TX 78164  
Begins at 5:30 p.m.  
Contact Hank Chinnery at  
[hchinnery@hotmail.com](mailto:hchinnery@hotmail.com)
- 29 Columbus Wildlife Tax Valuation Workshop**  
Colorado County EMS Building 305 Radio Ln.  
Columbus, TX 78934  
Begins at 8:30 a.m. (RSVP Required)  
Contact Mark Lange at 979-732-3458 or  
[mark.lange@tpwd.texas.gov](mailto:mark.lange@tpwd.texas.gov)

**Rio Grande Turkey Spring Season**

(see TPWD Outdoor Annual for County Listings)

**North Zone** - March 30 - May 12

Special Youth Season: March 23-24, May 18-19

**South Zone** - March 16 - April 28

Special Youth Season: March 9-10, May 4-5



Photo © Chase A. Fountain, 2012, TPWD

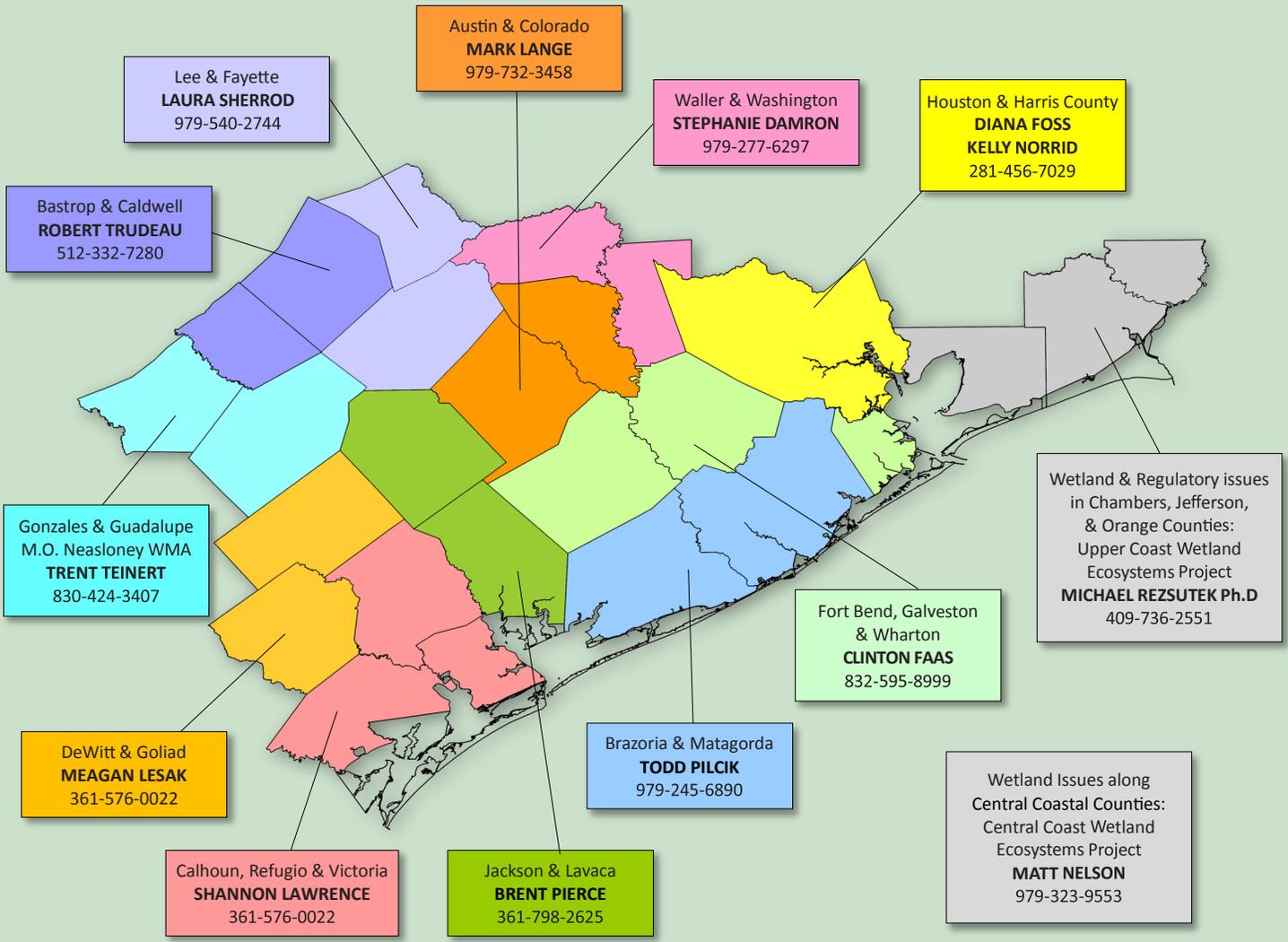
**APRIL**

- TBD 23<sup>rd</sup> Annual Wildlife Activities and Practices Workshop**  
Contact Laura Sherrod after March 1 at  
979-540-2744 or  
[laura.sherrod@tpwd.texas.gov](mailto:laura.sherrod@tpwd.texas.gov)



Photo © TPWD

# Our Wildlife Biologists



District 7 Leader	Technical Guidance Biologist	Wildlife Diversity Biologist
<b>DAVID FORRESTER</b>	<b>BOBBY EICHLER</b>	<b>TREY BARRON</b>
979-968-3501	979-968-9942	361-576-0022

**COMMISSION**

Executive Director  
**Carter P. Smith**

Editors  
**David Forrester**  
**Bobby Eichler**  
**Stephanie Damron**

**TEXAS PARKS & WILDLIFE**

Life's better outside.®

**Ralph H. Duggins, Chairman**  
Fort Worth

**S. Reed Morian, Vice-Chairman**  
Houston

**Arch H. "Beaver" Aplin, III**  
Lake Jackson

**Oliver J. Bell** Cleveland

**Anna B. Galo** Laredo

**Jeanne W. Latimer** San Antonio

**James H. Lee** Houston

**Dick Scott** Wimberley

**Kelcy L. Warren** Dallas

**Lee M. Bass, Chairman-Emeritus**  
Fort Worth

**T. Dan Friedkin, Chairman-Emeritus**  
Houston

**TEXAS PARKS AND WILDLIFE DEPARTMENT MISSION STATEMENT**

*"To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations."*

You may view this publication, as well as other newsletters created by the department, through the TPWD website. Please visit [www.tpwd.texas.gov/newsletters/](http://www.tpwd.texas.gov/newsletters/) for more information.

**FOR MORE INFORMATION**

All inquiries: Texas Parks and Wildlife Department, 4200 Smith School Rd., Austin, TX 78744, telephone (800) 792-1112 toll free, or (512) 389-4800 or visit our website for detailed information about TPWD programs:

[www.tpwd.texas.gov](http://www.tpwd.texas.gov)

©2019 Texas Parks and Wildlife Department  
PWD LF W7000-2068 (1/19)

TPWD receives funds from the USFWS. TPWD prohibits discrimination on the basis of race, color, religion, national origin, disability, age, and gender, pursuant to state and federal law. To request an accommodation or obtain information in an alternative format, please contact TPWD on a Text Telephone (TDD) at (512) 389-8915 or by Relay Texas at 7-1-1 or (800) 735-2989. If you believe you have been discriminated against by TPWD, please contact TPWD or the U.S. Fish and Wildlife Service, Office for Diversity and Workforce Management, 5275 Leesburg Pike, Falls Church, VA 22041.