



Region IV Wildlifer

A newsletter for landowners that fall within the 33 counties of Region IV, covering portions of Central and Coastal Texas



April 2025

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Our Wildlife Biologists

District 8 Field Notes

BY DERRICK WOLTER



Howdy! It finally appears that Spring has sprung. The ground is blanketed with new growth and tree canopies are filled with fresh, green foliage. The mesquite trees have also leafed out --- so that makes it official. Other tell-tale signs include songbirds singing, gobblers gobbling, and the strong winds we experienced each year during March and early April. It's no coincidence that oak trees have adapted the timing of their bloom to take advantage of these seasonal winds, but I'm glad that the mess of green pollen, as well as the oak flowers (called catkins), and the strong winds are done. The transition from winter to spring was relatively dry, but rainfall has increased as of late and let's hope the trend continues.

Biologists have been busy providing technical guidance aimed at enhancing native plants and wildlife on farms and ranches across the district. Staff wrapped up browse surveys, which measure the use (foraging pressure) of white-tailed deer on woody plants, in early March. In addition, staff helped landowners navigate the Managed Lands Deer Program (MLDP) reporting deadline as it approached and passed (April 1). Speaking of MLDP, enrollment is open and the deadline to enroll is June 15 for Conservation Option (CO) and September 1 for Harvest Option (HO), annually.

District biologists hosted several great workshops in the last few months. A focus recently was our three-session workshop series geared towards new landowners. We had great participation from both interested landowners and new staff! Also, our annual prescribed fire workshop was just held in Gonzales County on April 11, and it was packed! It was great to see so many folks with a burning desire to learn more about using prescribed fire as a management tool.

Like some of the plants growing right now, some staff are seeing their first spring in the district. Audrey Naughton joined the team in February as the new wildlife biologist responsible for Karnes and Wilson Counties, and she offices in Stockdale. Audrey earned a B.S. in Biology from the University of North Texas but has been living and working in Central Texas. Audrey's prior work experience includes conducting plant and wildlife surveys, in addition to assisting with research on alligators and rattlesnakes. Oh my!

Derrick Wolter began his career with TPWD in 2000 working as a wildlife biologist within the Upper Coast Wetlands Ecosystem Project, where he worked with wetlands, waterfowl, and on several Wildlife Management Areas. In 2004, Derrick moved to Central Texas to serve as a district biologist for Bell, Coryell, Lampasas, and Williamson Counties. In 2020, he became the Senior Wildlife Biologist for the Hill Country District. In November 2023, Derrick became the Wildlife District 8 Leader. He received a Bachelor of Science in Wildlife Science and a Master of Science in Wildlife Ecology from Texas A&M University.

District Field Notes, continued

District 9 Field Notes

BY BOBBY EICHLER

District 9 staff have made it through deer season and roles have changed to the 'normal' late-winter and spring duties. This year we have had a better than average burn season. Staff worked burns on private properties as well as our state managed Wildlife Management Areas. We have also partnered with groups such as the South-Central Texas Prescribed Burn Association and The Nature Conservancy as time allowed. Anytime we can join forces and get more fire across the landscape, that is a great thing. Fire is a natural part of our ecosystem but in today's time, it is preferred to be used on man's timeline rather than as an uncontrolled wildfire. If you have an interest in prescribed burning, contact your local biologist well in advance. A properly planned burn requires an actual written plan as well as preparing your property. If a late winter burn may be on your radar, you should contact your biologist the prior summer.

During the first week of March, staff played a large part in the Houston Livestock Show and Rodeo, Ranching and Wildlife Expo. For the past 15-20 years our district staff have assisted in overall planning for the Expo, provided speakers for presentations, and manned our Texas Parks and Wildlife booth where we have many interactions with the general public.

At this time of year, landowners interested in the Wildlife Tax Valuation keep staff busy. Staff assist landowners by providing recommendations during site visits as well as the many emails and phone calls. Regional staff host several workshops across the area to educate on the Wildlife Tax Valuation process. If you have not done so for the year and you are a landowner interested in the wildlife valuation, remember paperwork is due to your appraisal office by May 1.



Staff conducting a prescribed burn. Photo©TPWD

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District Field Notes, continued

Staff have been attending their local county Commissioners' Courts. While many of our staff have some contact with their commissioners, some do not. We hope that there is at minimum a relationship where the county officials know who the local biologist is and that they can reach out to us for wildlife or environmental type matters. While we as state employees cannot take sides in political type issues, we can provide facts and answer questions.

Currently District 9 is fully staffed. Matthew Johnson was hired in February. Matthew will be covering Austin and Fort Bend Counties, stationed in Rosenberg. Matthew is a Texas State University graduate with a Bachelor of Science in Wildlife Biology. After graduating, Matt worked several years with an environmental consulting firm before joining the District 9 team.

Lastly, it seems across much of our district that rainfall has been very sparse. The few spring rain showers we have had, have not produced much. Runoff has been very limited and stock tanks are low. Obviously, spring rain is vital since summer is so hot and dry. Spring rains not only fill the stock tanks, but more importantly supply much needed soil moisture for plant production. While I am far from being a rancher or farmer, the current situation is not faring well for the livestock and agriculture business in the near term. From a wildlife view, anytime drought situations negatively affect the overall range conditions, wildlife populations may suffer as well. Deer fawning, turkey nesting, and almost every other native species' reproduction should be occurring now through mid to late June. If the landscape does not provide ample vegetative cover during this time, wildlife reproduction will be lower than average. Do what you can to conserve the resources and the water, it seems with the population growth that has hit Texas, water will be the most vital natural resource going forward if it isn't already.

Until next time, enjoy the outdoors and stay safe.



*Top: New Austin and Fort Bend Counties biologist, Matthew Johnson.
Photo©Matthew Johnson*
*Bottom: New Karnes and Wilson Counties biologist Audrey Naughton.
Photo©TPWD*

Bobby Eichler is the District 9 leader for the Oak Savannah and Prairies District. He has Bachelor and Master of Science degrees in Forestry both with emphasis in Game Management, from Stephen F. Austin State University. A native of Giddings, Bobby started his TPWD career in East Texas before moving to La Grange in 2007.

Considerations for Brush Management

WRITTEN BY CLINT FAAS

With spring green-up well underway, it's time to begin thinking about habitat management projects for the year. In many instances, brush management is a task that jumps to the top of the list of "things that need to be done." Depending on where your property is located, there's a good chance that 200 years ago, it had considerably fewer woody plants than we see now. This woody plant encroachment was due in large part to changes in grazing practices and the suppression of the natural fires that would have burned across the state at varying intervals. While some of this encroachment comes from non-native plants, a significant portion can be attributed to native plants growing in new areas, or at higher densities, than historically documented.

When taking on a brush management project, there are many things to consider long before the first treatment starts. The first is the understanding that brush management is a form of vegetation manipulation. In some instances, it is simply reducing the plant density of a particular species. In others, it is setting back plant succession to an earlier stage that produces more forbs or grasses. Ultimately, it is a sculpting of the brush to help it meet a certain need within the landscape, or habitat, required by a particular species. It is imperative to keep in mind that brush management is a process not a project, meaning it is not a one-and-done project, but a process that must have follow-up treatments over time or it will convert back to the way it looked pre-treatment, or worse. Fortunately, there is no one "correct" way to approach brush management. Each property is unique, each set of goals is different, and the resources available among individuals vary greatly.

When it comes to brush management, it is important to keep in mind that goals can be accomplished on many different scales. From large acreage properties that may need large, landscape-level projects, to smaller tracts that are completing single-acre projects, each can be effective, and important, based on the scale of work. Typically, smaller projects can be much more selective and allow managers to "fine tune" their efforts whereas larger projects may have impacts on a larger number of desirable species simply because the larger size minimizes the small-scale selectiveness. The scale of a project is typically dictated by property size, budget, time, and individual goals. Although large projects may make larger impacts, small-scale brush management can be both cost- effective and cost-efficient.

There are many different treatment options available that are broken down into mechanical, chemical, and biological control. Each has its own pros and cons, and there is no single best method for all properties or target species.



A number of mechanical control methods are available to landowners. The specific practice usually depends on the habitat and target plant density. Photos©TPWD

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Considerations for Brush Management, continued**Mechanical Control**

- Grubbing – Using a skid steer, excavator, dozer, or tractor, grubbing is the selective removal of plants by digging them out below ground level. For resprouting plants, such as huisache, mesquite, and yaupon, this falls below the resprouting bud zone thus ensuring the plant is effectively removed. With grubbing, ground disturbance is localized to the spot where the plant was growing and typically has minimal impact from tires or tracks, depending on the equipment and operator. Grubbing can be extremely effective in areas experiencing problems with regrowth mesquite and huisache but becomes less cost-effective and time consuming with higher densities of plants. This method is typically used in more open areas and limited in use for closed canopy wooded areas, or locations with many other desirable trees.
- Hydraulic shear – Another method that can be highly selective is the use of hydraulic shears on a skid steer or tractor. For non-resprouting species such as Ashe juniper and eastern red cedar, shearing the plant below the lowest green foliage effectively kills the plant without the use of grubbing or chemicals. For some plants, like mesquite, huisache, and redberry juniper, hydraulic shearing must be followed by spraying the exposed stump with chemicals to ensure it does not regrow. This is commonly referred to as the “cut stump method.” Since hydraulic shears are mostly used on skid steers, this method can be used under the canopy of trees and minimizes the reduction of non-target species.
- Mulching – Most mulchers consist of a rotating horizontal drum with carbide “teeth” that grind woody vegetation into small pieces, although other variations exist that serve similar functions. Unlike the previous two methods, mulching is a less selective method of brush management. Although care can be taken to avoid desirable species, the wide swath removed by the mulcher is much less single-plant specific. This practice can be used in areas with much higher plant densities and is commonly used to reduce understory plant growth from species like yaupon. While effective, this practice results in the top removal of plants and will result in resprouting of many species. In addition, the mulching effects of the machine leave behind a layer of woody debris that may inhibit desirable plant growth like forbs.
- Dozer – As with mulching, the use of a dozer with a blade is a less selective method of brush management. They are capable of both pushing (top removal) and some grubbing of plants, but the treatment results in considerable ground disturbance. The use of a dozer can be effective in high-density areas and has the potential to remove vegetation more quickly than other methods, but resprouting is likely. The level of disturbance and plant response to that disturbance needs to be considered when applying this method.
- Hand cutting – Not all brush management requires heavy machinery. Although it is labor intensive, hand cutting with a chainsaw, gas trimmer with a brush blade, or lopping shears can be an effective method for removing vegetation on small acreage. These methods are highly selective with low cost and little to no ground disturbance, making them ideal for certain situations.

Chemical Control

- Broadcast treatment – Typically reserved for larger treatments or areas with high plant densities, broadcast treatments can be applied in many ways: aerial application, spray boom, boomless sprayer, blower, and more.



Chemical control can be done on many scales and is often a good follow-up treatment to mechanical control.
Photo©TPWD

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Considerations for Brush Management, continued

Each application technique has its merits for specific scenarios, but a case-by-case evaluation must be done to determine which method is best. With an even larger number of chemicals available, applicators must read and understand the chemical labels to know when and how to use herbicides for brush management. Although there are many chemicals formulated specifically to control woody species, some non-target impacts may be seen for other plants, like forbs, in broadcast treatment.

- Individual plant treatment – Commonly referred to as IPT, this method of application is the targeted use of chemicals on plants one at a time. Various methods can be used depending on the chemicals used and the target species: basal, foliar, cut stump, hack and squirt, soil applied, etc. With less chemical applied per treatment, these methods typically result in fewer non-target kills. While the overall cost depends on the size of the project, the application cost of IPT can be considerably less than broadcast because it can be accomplished with a pump-up sprayer or an electric sprayer on an ATV/UTV. In addition to being a stand-alone practice, IPT is commonly used as a follow-up treatment for resprouting species following mechanical brush management.

Regardless of which method is used for managing brush, it is important to begin the planning process by looking at your property goals and thinking about your target wildlife species. It is essential to understand the woody plant requirements of that species and how those plants help meet the basic habitat needs of that species. In addition to the practices used for your target species, it is important to think about the non-target species as well. If brush is sculpted to maximize white-tailed deer habitat, how will that impact turkeys, or if brush is cleared for bobwhite quail what impact will that have on white-tailed deer, songbirds, or any other wildlife using the area. Like Newton's 3rd law of motion, where every action has an equal and opposite reaction, every brush management project has the potential to impact other species, whether intentional or not. Next is to know the plants that are being targeted in the management project. Understanding the needs of the wildlife species you're targeting, ask yourself how the presence or absence of a particular plant species will help reach your goals. If you are doing the work, it is imperative to know what species you're treating. If the work is contracted out, have a conversation with the operator/applicator to ensure that they know the goals, which plants are important to keep and which you're targeting for removal.



Individual plant treatment or IPT of yaupon. Adding a dye to your chemical application can help you identify where you've sprayed. Top and Middle: Basal bark IPT. Bottom: Cut stump IPT. Photos©TPWD

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Considerations for Brush Management, continued

Several other special considerations that should be considered when conducting any form of brush management:

- High disturbance practices may increase the potential for erosion. In highly erodible areas, consider steps to minimize ground disturbance, or mitigate erosion post-treatment.
- Invasive species are an ever-present concern across much of our state. Knowing what plants are present, and how they will respond to brush management may help minimize the risk of spreading or creating a favorable environment for these invasive species.
- Riparian areas can be sensitive to intensive brush management, especially when using machinery or heavy chemical applications. Evaluating these locations and identifying areas to avoid or selecting a less intensive method of control can help protect sensitive habitats.
- Pipelines and other underground utilities can pose a serious threat to operators of machinery on mechanical brush management projects. Call Texas 811 at least 2 days before any digging to ensure there are no buried utilities in the area.

Lastly, remember that follow-up treatment is a must. As previously stated, brush management is a process, not a project. Failure to revisit treatment areas can result in the regrowth of your target species. Not only is it nearly impossible to be 100% effective the first time, but resprouting plants and an unseen seed bank make it imperative to follow up with additional treatments to maintain the effectiveness of your brush management. Whether it is financial or man-hours, each brush management treatment is a significant investment that you don't want to lose simply because the habitat tried to regrow to the state it was previously in. Treat each habitat management project as an action plan, and don't forget to sit back and enjoy the fruits of your labor.

Set Goal → Identify Tasks → Allocate Resources → Develop Plan → Implement Plan → Evaluate → Repeat



Mulching (seen here and the following page) can effectively remove dense understory plants. This allows sunlight to reach the soil which promotes the growth of grasses and forbs. Many species, like yaupon, will resprout after mulching, so follow-up treatment is a must. Photos©TPWD

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Considerations for Brush Management, continued*Before and after from a recent brush management project. Photos©TPWD*

Clint Faas is the District 9 biologist for Wharton and Northern Jackson 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.

Plant Profile: Erect Dayflower

WRITTEN BY KATIE EDWARDS

Amongst all the wildflowers blooming across the state, you may have noticed a special blue flower. And no, I am not talking about bluebonnets. The erect dayflower (*Commelina erecta*) may look small and inconspicuous but, when you look closer, that small plant has much to offer beyond its eye catching colors.

The erect dayflower, also known as the widow's tear or white-mouth dayflower, is found in mild tropical conditions ranging from South America to the American Midwest. It can grow in various soil types and habitats such as prairies, easements, and woodlands. In high-traffic areas, the erect dayflower can commonly be found near yucca, underneath fence lines, or around cacti as they offer protection from the surrounding grazers and foragers.

Erect dayflowers grow multiple smooth, upright stems, and depending on the variety and location of the dayflower, the height can range from 4 inches to 36 inches. The leaves are characterized as having a linear or teardrop shape that can be up to 6 inches in length while alternating sides along the stem. Of course, the most defined part of the dayflower is the two showy blue petals ranging from 0.5 inches to 1.5 inches in width. For its namesake, the flower only blooms for a single day with new flowers appearing every few days during May through October. Another distinct feature the erect dayflower possesses is held within the sheath of the plant; a pair of leaflike structures at the base of the flower that, when squeezed, release a tear-like drop of liquid giving it its other common name, widow's tear.

Though small, the erect dayflower holds value to most wildlife. With the plant being very palatable, it is commonly foraged by many grazers and foragers such as, but not limited to, cattle, white-tailed deer, and pronghorn. The seeds are also commonly consumed by many species including songbirds, doves, and quail. In the sandy hills of South Texas, research suggests that dayflowers contribute 2-5% of the quail's dietary needs. With a showy flower,

Erect dayflower. Photo@TPWD https://tpwmagazine.com/archive/2021/oct/scout6_flora/index.phtml



Erect dayflower. Photo@iNaturalist

the dayflower also attracts a multitude of pollinators. Overall, the plant has a crude protein value ranging from 20% in the spring to 12% during the fall with energy values remaining high throughout the year; another reason why the erect dayflower is a favorite amongst the landscape.

If conducting management practices on your property, a herbicide mixture with glyphosate may not kill the dayflowers, as some varieties have developed a glyphosate tolerance. The dayflower also has various responses to prescribed burning depending on different conditions.



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Plant Profile: Erect Dayflower, continued

In all certainty, the erect dayflower, widow's tear, or white-mouth dayflower, is an iconic, eye-catching plant that is small but mighty. With two distinctive petaled blue flowers and wide, intense dark green leaves, they stick out like a sore thumb when you know where to look. But no matter what their size, the dayflower is a valuable plant on the landscape and is one to keep an eye out for this spring and summer.

References:

Brennan, L. A. 2007. *Texas Quails Ecology and Management*. Texas A&M University Press. Pg 347.

Hanselka, C. W., D. L. Drawe, and D. C. Ruthven III. 2007. *Management of South Texas Shrublands with Prescribed Fire*. USDA Forest Service RMRS-P-47.

Hansmire, J. A., D. L Drawe, D. B. Wester, and C. M. Britton. 1988. *Effects of Winter Burns on Forbs and Grasses of the Texas Coastal Prairie*. *The Southwestern Naturalist* 33:333-338.

Linex, R. 2014. *Range Plants of North Central Texas*. USDA NRCS pg. 60.

Plant Guide: *Erect Dayflower*. 2003. USDA NRCS.



Erect dayflower. Photo©Katie Edwards, TPWD



Katie Edwards serves as the wildlife biologist for Colorado county. A hill country native, she earned her B.S. in Wildlife Science from Tarleton State University in 2022. While in college she interned with TPWD at the Kerr Wildlife Management Area and with the Central Coast Wetlands Ecosystem Project. Katie now offices in Columbus and enjoys assisting local landowners and wildlife management associations achieve their wildlife and habitat related goals.

Your Native Prairie Education Partner

WRITTEN BY MARVELYN GRANGER



Your Native Prairie Education Partner

Submitted by Marvelyn Granger

The Native Prairies Association of Texas (NPAT) is a non-profit land trust dedicated to the conservation, restoration, and appreciation of native prairies, savannas, and other grasslands in Texas. Understanding the importance of these ecosystems is the first step in protecting them, as the consequences of neglect affects everyone.

The Fayette Prairie Chapter supports local land stewards by offering workshops, presentations, and field trips. Our volunteer opportunities provide additional ways to contribute to the preservation of diverse grasslands while learning from our many partners, including professional biologists, land managers, and ecologists. We look forward to seeing you at an upcoming event! You can find registration details for these and other events at <https://texasprairie.org/fayette-prairie-chapter/>.

Elder Prairie Spring Plant Walk

Led by Tim Siegmund, TPWD

Friday, April 25, 2025

9:00 am - 12:00 pm

Chappell Hill, Washington County

Native Seed Propagation Hands-On Workshop

Speaker: Matthew Gaston

Saturday, April 26, 2025

9:30 am - 1:00 pm

Lee County Extension Office, Giddings

Post Oak Savannah Restoration Tour

Holistic restoration methods in the Post Oak Savannah region (with goats!)

Friday, May 2, 2025

9:00 am - 12:00 pm

88Ranch, Columbus, TX

Native Grass Planting in Practice

Led by Clare Fields, NPAT Lands Manager, help us restore one of the largest remaining tracts of Fayette Prairie!

Wednesday, May 7, 2025

9:00 am - 12:00 pm

Chappell Hill, Washington County

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*Your Native Prairie Education Partner, continued***Elder Prairie Bird Watch for All Levels**

Start birding or sharpen your identification skills with our guides, avid birders and Texas nature enthusiasts Erik Wolf and Debbie McMullen

Friday, April 25, 2025

9:00 am - 12:00 pm

Chappell Hill, Washington County

Identifying Native and Invasive Grasses & Forbs

A Hands-On Conservation Workshop led by with WHF

Saturday, June 21, 2025

9:00 am - 12:00 pm

Five Tools of Prairie Restoration Landowner Symposium

Friday, August 22, 2025

9:00 am - 5:00 pm

La Grange, TX

Fall Social

Saturday, September 27, 2025

6:00 pm - 10:00 pm

The Fayette Prairie Chapter supports its members in the 11-county region covering Caldwell, Bastrop, Lee, Burleson, Gonzales, Fayette, Washington, DeWitt, Lavaca, Colorado, and Austin counties.

For more information on how to become a member of the Native Prairie Association of Texas, join the Fayette Prairie Chapter, and support prairie conservation, visit:

NPAT: <https://texasprairie.org/>

Fayette Prairie Chapter & Calendar: <https://texasprairie.org/fayette-prairie-chapter/>

Become a Member: <https://texasprairie.org/join/>

Subscribe to "The Latest Dirt" Newsletter:

<https://lp.constantcontactpages.com/s1/mHEIYVv>

Email: fayette@texasprairie.org

Highly Pathogenic Avian Influenza

WRITTEN BY KELLY NORRID

According to the latest data from the USDA, highly pathogenic avian influenza (HPAI) has been detected in every state since it was first detected in the U.S. in 2022. In the past 30 days, the number of states that have reported finding the virus is 25 stretching from Maine to California.

In December of 2024, the Houston Urban Wildlife office was asked to investigate the report of dead and dying Muscovy ducks in a neighborhood in northeast Harris County. Upon investigating the area, a dead Muscovy was found behind a residence and subsequently tested positive for HPAI. This, and a story on affected birds in Austin, prompted the media in Houston to publish a story on the issue. Once the public was made aware of the spread of the virus, the phone calls began to flood in.

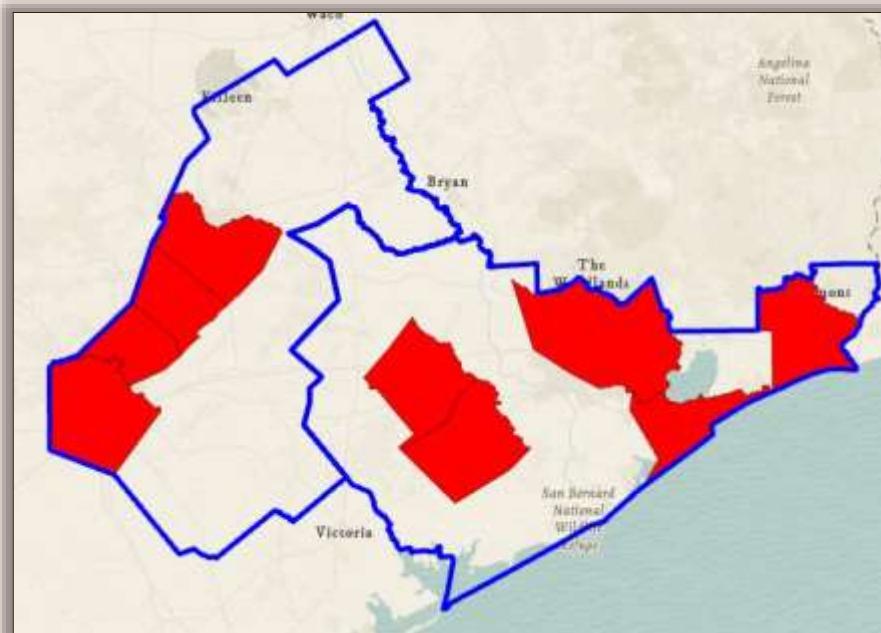
Reports from the Area:

Most of the calls our office has received have been waterfowl, particularly Muscovy ducks. The Muscovy ducks seen in the Greater Houston area are a domesticated, introduced species of duck native to Central and South America. They are often seen in large numbers inhabiting ponds in residential neighborhoods where they are often sustained on a diet of bread. Because of this proximity, HPAI tends to spread quickly and these flocks can act as a reservoir for the virus, increasing the chance of spreading to wild populations of waterfowl during migration.

Along with Muscovy, other avian species have been reported exhibiting the symptoms of HPAI throughout the area. These include owls, vultures, crows, jays, brown pelicans, cowbirds, and raptors. Species that have had positive HPAI tests include green- and blue-winged teal, gadwall, snow geese, bald eagles and Muscovy.

Common Symptoms:

In wild populations, the symptoms of HPAI can include neurological issues such as lack of coordination, walking/ swimming in a circle, inability to stand or walk, and sudden death. Other symptoms may include respiratory issues, nasal discharge, difficulty breathing, swollen eyes and discharge. Unfortunately, none of these symptoms are exclusive to HPAI.



HPAI county positives. Photo©TPWD

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Highly Pathogenic Avian Influenza, continued

Cause for Concern:

The biggest concern for the majority of the constituency is how to protect themselves and the wild songbird populations, as well as their pet's wellbeing.

Fortunately, currently there have been relatively few documented cases of the virus spreading in songbirds. But, as with all flu viruses, they can and do mutate. With increased mutations, we have seen increased species spillover, especially to mammals.

When asked if we believe people should refrain from feeding birds, the Houston office has been advising that if the virus has been detected or, you see symptoms of the virus in local wildlife, feeders should temporarily be brought in out of caution.

Although the virus does not spread easily to domesticated cats and dogs, HPAI has been detected in domestic cats and in wild canine species. While there have been fatalities reported in both felines and canids, canids typically show more mild symptoms, and the fatality rate is not as high as in felines which also many times have more severe symptoms. These cases have been associated with long-term exposure to the virus such as consuming or interacting with an infected bird, consuming unpasteurized dairy or contaminated uncooked meat products.

Symptoms in cats and dogs are like that in birds; lethargy, loss of appetite, respiratory issues and neurological signs. Like with many other hazards, outdoor cats are more likely to encounter infected birds. Indoor cats live much longer, healthier lives.



Bird mortality from HPAI. Photo©TPWD

What do I do?

If you live in an area that has had a positive report or have witnessed animals exhibiting symptoms, the best thing is to avoid contact with any sick or dying birds and stay away from areas where there is excess fecal material present. Avoid walking yourself or your dog through the areas or allow your dog to swim in small ponds where a lot of ducks congregate. If you have backyard poultry, keep them in an area that is not exposed to wild birds.

Do not pick up any sick or dead birds without proper personal protection equipment.

If you must remove a dead bird from your premises, it is advised to use disposable gloves, an N95 mask (if possible), double bag it in plastic bags, and dispose of it in the trash.

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Highly Pathogenic Avian Influenza, continued

Megan Hahn, TPWD Wildlife Health Specialist says, "We really should be out of the worst of the "HPAI season" since our wintering populations have left but may see some continued mortalities due to smaller regional migrations of a few species."

When do I report and Who do I report it to?

If there is just a single animal and there has been no prolonged exposure to people or pets, TPWD advises to dispose of the remains if you can safely do so. If you are seeing multiple mortalities (15+) or multiple species over the course of a week, please report it to your local TPWD biologist. Be prepared to provide them with the location, quantity, species, symptoms, and the timeline the mortalities occurred.

To report possible cases contact:

Department of Health Services: (713) 767-3000

Texas Animal Health Commission: (979) 212-5440

DHS for human health concerns

TAHC for domestic poultry

TPWD Find a Biologist link:

<https://tpwd.texas.gov/landwater/habitat-management/find-a-wildlife-biologist/>



Growing up in southeast Texas, Kelly spent countless hours exploring his backyard - which just happened to be the creeks and game trails of the Sam Houston National Forest. Using field guides, he taught himself about the plants and animals he was discovering. Kelly decided to channel his love of the outdoors into a career. His diverse background includes participation with wildlife reintroduction programs, plant surveys of Buffalo and White Oak Bayous and rare plant surveys throughout southeast Texas. This background led Kelly to participate in habitat restoration projects throughout the area. This work led Kelly to become proficient in the identification of native plants and the ecology of southeast Texas. In early 2010, Kelly was hired by Texas Parks and Wildlife to be the Natural Resource Specialist for Sheldon Lake State Park and later, Davis Hill State Natural Area. This position saw Kelly overseeing the day to day management of the natural resources of Sheldon Lake and to help lead and manage the habitat restoration efforts for both Sheldon Lake and Davis Hill. In January, 2015, Kelly became part of the Texas Parks and Wildlife, Wildlife Diversity Program by becoming an Urban Wildlife Biologist serving the Greater Houston/Galveston Area.

Mexican Long-nosed Armadillo

WRITTEN BY SKYLER HICKMAN

When you think of Texas, you might envision longhorns, bluebonnets, pecan trees, and cowboy hats. Texas has a variety of state symbols that scream "howdy". Amongst these famous symbols, you can't forget about the small, armored mammal you tend to see digging in yards, or as roadkill - the mighty armadillo! Although the overall look of the armadillo has stayed the same for centuries, this armored animal recently received a new name. The nine-banded armadillo (*Dasypus novemcinctus*) was found to be a complex of different species. The United States resident is now known as the Mexican long-nosed armadillo (*Dasypus mexicanus*).



Mexican long-nosed armadillo. Photo©Clinton Faas, TPWD

In past years, it was thought that the nine-banded armadillo was only one species, with a wide geographical range. However, recent genetic and morphological (physical characteristics) studies show that the one species is actually four separate species altogether, and the Texas state small mammal originated from North America, Mexico to be exact. This geographic separation assisted in the renaming of the United States resident to, the Mexican long-nosed armadillo (*Dasypus mexicanus*). The scientific name is derived from the "used-to-be" subspecies *Dasypus novemcinctus mexicanus*. When it arrived in the United States nearly two centuries ago, there was no question that this species belonged to the one that ranged from Argentina to the United States, the nine-banded armadillo. The new name, Mexican long-nosed armadillo, gives the species a better pinpoint of its origin.

Much like the newly named species in the United States and Mexico, three other lineages were also uncovered. These include the South American long-nosed armadillo (*Dasypus novemcinctus*) found in Ecuador, Columbia, Venezuela, and to the south, and the Central American long-nosed armadillo (*Dasypus fenestratus*), found in Argentina, Peru, Ecuador, Columbia, Venezuela, and extended northward to Costa Rica. Not only were these new complexes renamed, the first armadillo described within the last 30 years was found in French Guiana - the Guianan long-nosed armadillo (*Dasypus guianensis*). Thus, uncovering four new lineages from the thought-to-be one species.

The combination of physical characteristics and genetic data (DNA) allowed scientists to discover the different lineages. For this study, a total of 81 armadillo samples were collected from a combination of fresh tissue samples and museum dried specimens. Using information from DNA, phylogenies were constructed into a phylogenetic tree to show the lineages. The differences in DNA sequences show they are closely related but are, in fact, 4 separate lineages.

Muzzle length and brain case size were the two major differences observed within the separate species. Paranasal sinus morphology also contributed to the physical characteristics that scientists studied. Even at that, the differences were so slight, it was difficult to tell three of the four apart. However, the newly discovered Guianan long-nosed armadillo has key differences in its overall traits. This armadillo is considered a bit larger than the other three with a hairless shell, dome-shaped skull, and additional bone in its spine.

Continued on page 17

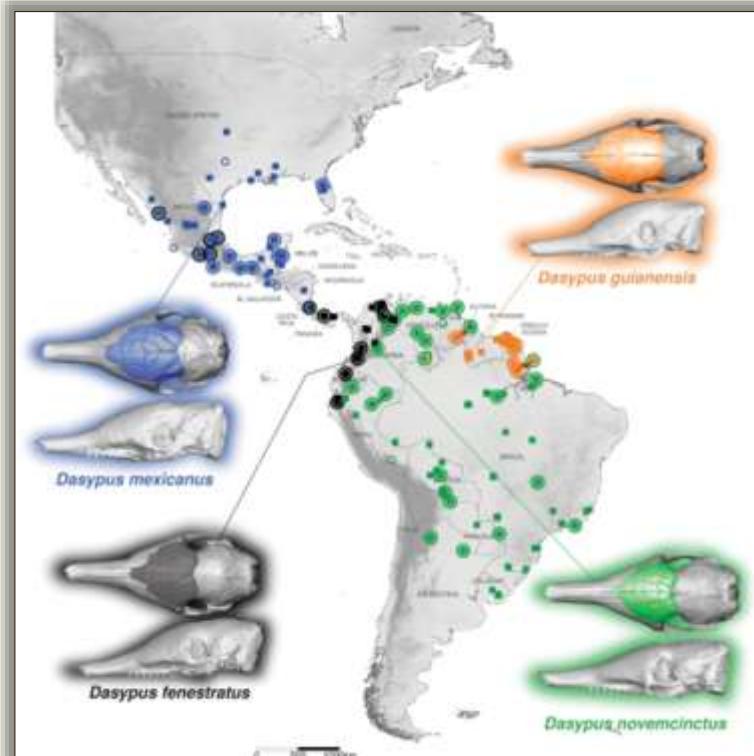
Mexican Long-nosed Armadillo, continued

While the nine-banded armadillo has been around for ages, with new research, scientists were able to dig deeper into its lineage. The new names further allow people to distinguish the specific species of armadillos based on their geographical range. Although newly named, the Mexican long-nosed armadillo is still the same animal Texans hold dear to their hearts! So, the next time you see the Mexican long-nosed armadillo while driving the beautiful countryside, make sure to give a big Texas howdy!

References:

Field Museum. (2024, June 26). Rewriting the armadillo family tree: A new species, plus a name change for the state mammal of Texas. *ScienceDaily*. Retrieved March 6, 2025 from www.sciencedaily.com/releases/2024/06/240626151911.htm

Mathilde Barthe, Loïs Rancilhac, Maria C Arteaga, Anderson Feijó, Marie-Ka Tilak, Fabienne Justy, William J Loughry, Colleen M McDonough, Benoit de Thoisy, François Catzeffis, Guillaume Billet, Lionel Hautier, Nabholz Benoit, Frédéric Delsuc, *Exon Capture Museomics Deciphers the Nine-Banded Armadillo Species Complex and Identifies a New Species Endemic to the Guiana Shield*, *Systematic Biology*, 2024;, syae027, <https://doi.org/10.1093/sysbio/syae027>



Distribution map of four distinct species showing skull characteristics.

Figure © Systematic Biology



Skyler Hickman is the Wildlife Biologist for DeWitt County. She graduated from Texas A&M University with a Bachelor of Science Degree in Wildlife and Fisheries Sciences. She grew up in Weimar but now resides in Cuero and offices in Victoria. During 2024, Skyler was hired by Texas Parks & Wildlife in May as an intern for the Kerr and Mason Mountain WMAs in the Hill Country and migrated to a seasonal technician position along the central coast in July at the Justin Hurst WMA, before accepting her current biologist position in October. Skyler enjoys all things outdoors, including assisting landowners and wildlife management associations with their property goals.

Landowner Field Day

Yegua Knobbs Preserve

Lee & Bastrop Co.

Friday, May 16, 2025

9:00 a.m. to noon

Followed by lunch at 12:30 p.m.

Field event: Johnny Baker Road, Lexington, TX 78947

Lunch: 233 Edmonson Ranch Road, McDade, TX 78650



Join Texas Parks and Wildlife and partners as they share experiences restoring the Pine Oak Savannah and improving habitat for native wildlife.

Learn about how you can implement the following habitat management practices on your property:

- Understory brush management
- Herbicide treatment
- Selective thinning
- Native grass restoration
- Prescribed fire



Registration required:

**[CLICK HERE
TO REGISTER](#)**

\$15 Registration
(Drinks and snacks at the field tour, and lunch at Rising Sun Vineyard are included in the registration fee.)

Questions? Contact:
Paul.Crump@tpwd.texas.gov
512-389-8722

LOST PINES WILDLIFE & HABITAT DAY



Bastrop State Park | May 17 | 9am - 12pm

Free Event

Scan the QR code for more information



- Meet a Houston Toad and other wildlife
- Discover the wildlife of the Lost Pines
- Meet a Wildland Fire Fighter
- Participate in a Seed Stomp
- Explore how to conserve wildlife
- Connect with Land owner assistance programs



9:30 - Wildlife Tax Appraisal

Lost Pines Habitat Conservation Plan and TPWD

10:00 - Introduction to the Houston Toad

Texas Parks & Wildlife Department

10:30 - Wildfire Preparedness

Texas A&M Forest Service

11:00 - Natural History of the Lost Pines

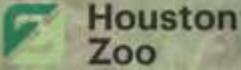
Amphibian and Reptile Conservancy

11:30 - Fire in the Pines

Texas Parks & Wildlife Department



Partners:





Thriving In Snake Country Workshop

Whether you live out in the country or are an urbanite who simply enjoys recreating in the outdoors, snakes are a fact of life here in Texas, but ultimately not the threat we make them out to be. This workshop is designed to give you the tools to not only survive in Snake Country but thrive in it. Join us for an exciting evening of talks from subject matter experts and hands on training exercises.

When - Friday, June 6th, 5pm to approximately 8:30pm

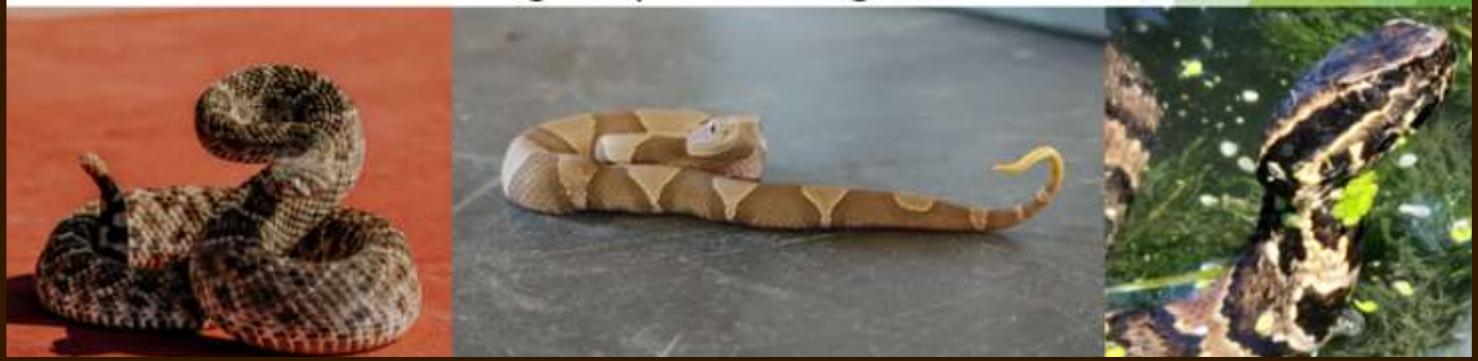
Where - Fayette County Agricultural Building - 255 Svoboda Ln Ste 134, La Grange TX 78945

Cost - Free

Presentation Topics Include

- Snake Safety & Identification
- How to Make Your Yard Snake-Resistant
- What to Do if You/Someone else/Your pet are bitten
- Snake Relocation Best Practices

Space is limited so please RSVP by contacting Drake Rangel by phone at 979-250-3398 or email at evan.rangel@tpwd.texas.gov





WILD TURKEY MANAGEMENT WORKSHOP

JUNE 6, 2025 9:30 AM —3:00 PM

Doors Open at 8:30

Free Registration — Includes Lunch

LIMITED SPACE AVAILABLE — MUST RSVP BY MAY 30TH

TEXANA COMMUNITY EDUCATION CENTER

344 Park Rd 1, Edna, TX

- Turkey Ecology: Breeding, Nest Selection, and Brood Rearing -
 - Turkey Habitat Requirements -
 - Cattle Grazing for Wildlife -
 - Predator Management and Is It Needed? -
 - Habitat Management in the Post Oak Savannah -
 - Effects of Turkey Management on Non-Game Species -
 - A Multi-Species Approach to Management -
 - Native Vegetation Restoration -
 - Food Plots: To Plant or Not to Plant -
 - Realistic Expectations -
 - Coming Together as a Cooperative -

To register contact: clinton.faas@tpwd.texas.gov



Life's better outside.®



Landowner Workshop:

All About BIRDS



Friday
June 13th

Time: 12pm to 4pm

Location:

Colorado County - TBD

TOPICS TO INCLUDE:

- BIRDING 101
- LOCAL BIRD IDENTIFICATION
- NESTBOX INSTALLATION
- MIGRATORY BIRDS
- BIRD NEST IDENTIFICATION
- HABITAT MANAGEMENT AND RESTORATION



CONTACT

Katie Edwards

(979) 732-3458

catherine.edwards@tpwd.texas.gov

Upcoming Events

APRIL

<p>25 Guadalupe County WMA Spring Meeting Red Barn, 390 Cordova Rd, Seguin, TX 78155 Begins at 6:00 p.m. Contact Melissa Englke at 830-660-3296 guadcountywma@gmail.com</p> <p>25-28 San Antonio City Nature Challenge 12 County area surrounding Bexar, including Comal, Guadalupe, Karnes, and Wilson Counties. Contact Peter Joseph Hernandez at: questions@cnc-sa.org List of local events near you: https://cnc-sa.org/events/</p>	<p>26 Earth Day at Woodlawn Lake Berta Almaguer Dance Studio and Community Center 138 S. Josephine Tobin Dr., San Antonio, TX 78201 10:00 a.m. - 2:00 p.m. Contact Connie Swan at 210-207-6122 https://www.sa.gov/Directory/News-Releases/Parks-and-Recreation-hosts-Earth-Day-event-at-Woodlawn-Lake-Park</p> <p>26 Meyersville WMA Meeting 13052 US Hwy 183 South Begins at 5:00 p.m. Contact Clay Haun at 361-243-6026 or clay.haun@dow.com</p>
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MAY

<p>3 Red Rock WMA Annual Fundraiser and Auction Sacred Heart Catholic Church-Holtman Hall 4045 FM 535 Bastrop, TX 78602 5:00 p.m. to 10:00 p.m. Contact Jim Russell at 512-203-9031 or 99sanddollar@gmail.com https://rrwma.org/</p> <p>10 Tri-Community WMA Meeting Dehli Community Center 1:00 p.m. to 2:30 p.m. Contact Adam Shaw at 907-957-5257 or backin3@gmail.com</p>	<p>16 Pine-Oak Savannah Field Day Yegua Knobbs Preserve Johnny Baker Road, Lexington, TX 78947 9:00 a.m. to 12:00 p.m. Contact Paul Crump at 512-389-8722 or paul.crump@tpwd.texas.gov https://www.fortworthzoo.org/landowner-workshop-lee-county</p> <p>17 Lost Pines Habitat and Conservation Day Bastrop State Park 9:00 a.m. to 12:00 p.m. Contact Madalyn Miller at madalyn.miller@tpwd.texas.gov https://tpwd.texas.gov/calendar/bastrop/lost-pines-wildlife-habitat-day</p>
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*Upcoming Events, continued***JUNE** —

6 Thriving in Snake County Workshop
Fayette County Agriculture Building
255 Svoboda Ln., Ste. 134, La Grange, TX 78945
Begins at 5:00 p.m. - 8:30 p.m.
Contact Drake Rangel at 979-250-3398 or
evan.rangel@tpwd.texas.gov

6 Wild Turkey Management Workshop
Texana Community Education Center
344 Park Rd. 1, Edna, TX 77957
Begins at 9:30 a.m. - 3:00 p.m.
Contact Clint Faas at
Clinton.fass@tpwd.texas.gov

13 All About Birds
Location: TBD
Begins at 12:00 p.m. - 4:00 p.m.
Contact Katie Edwards at 979-732-3458 or
catherine.edwards@tpwd.texas.gov

28 Gonzales County WMA Annual Meeting
Elks Lodge
1222 E. Sarah DeWitt Dr., Gonzales, TX 78629
Begins at 5:00 p.m.
Contact Ty Tinsley at tytinsley@ymail.com

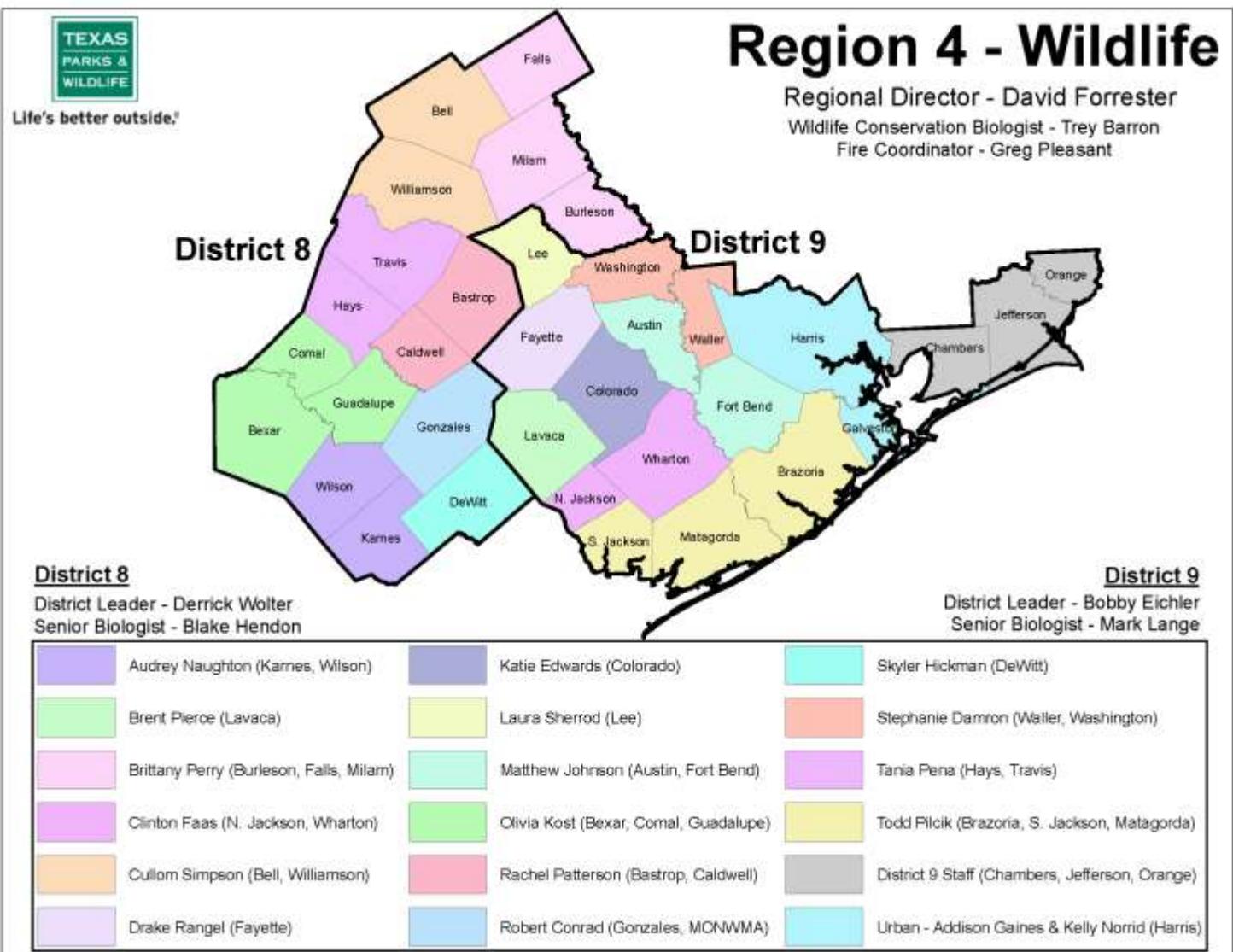
JULY —

25 Lee County Wildlife Expo
Giddings High School
2335 N. Main St., Giddings, TX 78942
Begins at 8:00 a.m.
Contact Lee County AgriLife Extension Service
at 979-542-2753

*Photo©Maegan Lanham, TPWD*

Our Wildlife Biologists

Click on the map for your biologists contact information



Click on the map for your biologists contact information

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David Yoskowitz, Ph.D

Editors
David Forrester
Bobby Eichler
Mark Lange
Stephanie Damron



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"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."

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www.tpwd.texas.gov

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