



Oaks and Prairies Wildlifer

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

TEXAS
PARKS &
WILDLIFE

January 2022

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District Field Notes

BY DAVID FORRESTER



2021 went out with the COVID variant omicron causing problems for family get togethers. I had a Christmas Eve celebration canceled due to some attendees testing positive. Thankfully, it appears that this variant is less severe than past variants and the majority catching it can overcome it without too much difficulty. However, we still need to be careful and practice good social distancing techniques, etc. We continue to add tools to the toolbox for dealing with COVID, so I'm hoping we can get to a place where this virus isn't as disruptive as it has been. I certainly hope that we can get to a place where folks don't need to be as fearful.

As in past years, biologists in the district have concentrated efforts on collecting CWD samples during hunting season. Not as many deer have been sampled via road kills this year as in years past, but we want to thank sheriff's departments, game wardens, TxDot, and animal control officers that notified us about those road kills. Also, we want to thank the hunters that brought deer to us to be sampled. Finally, thanks to the processors and taxidermists that allowed us and helped us collect samples. 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/>.

During this time of year and into March, the district biologists start focusing on prescribed burning. Hopefully, weather conditions will cooperate, and the troops can get out on state property and private property across the district to put some fire on the ground. Hopefully, we'll be able to put on some in-person landowner workshops focused on prescribed burning. If you are interested in prescribed burning, contact your local biologist and he/she can provide you with information and technical guidance concerning burning on your property.

Another thing that starts increasing this time of year is folk's interest in the wildlife valuation and switching their property valuations from ag to wildlife. We will have some wildlife valuation workshops scheduled in March and April designed to help landowners navigate requirements and completing the management plans required by the appraisal districts. We'll keep you informed on when those will take place and how you can participate.

We've had an extremely mild winter so far. The older I get the more I enjoy the mild winter and the less I like the cold temperatures. Regardless, it's a great time of the year, so please get out and enjoy the wildlife and habitat on your piece of Texas.

Youth Hunt at Riverside Park

WRITTEN BY SHANNON GRUBBS

Knitted in between the traditional Christmas activities during December, The City of Victoria hosted a unique event on the weekend of December 10th. On Friday afternoon, 6 area youth met at Riverside Park to begin a weekend of learning how to responsibly hunt wild game, led by Texas Youth Hunting Program (TYHP) mentors. This is believed to be the first hunt in a city park in Texas. At least legally!

Riverside Park is 600 acres in the west-central area of Victoria and is also home to the municipal golf course and Texas Zoo. The Guadalupe River serves as the western border. White-tailed deer, feral hogs, opossum, raccoons, skunks, and many birds are numerous in the park. For years there has been concern over what to do with the very high population of deer. Deer litter the golf course and are frequently hit by vehicles on nearby Main Street. City officials had previously been presented with options for controlling the number of deer in Riverside Park. One option discussed was Texas Parks and Wildlife Department's (TPWD) Trap Transport and Process (TTP) program. With this program, deer are trapped and then taken to a processing facility. The meat is then donated to food banks. However, former City Council member and current mayor, Jeff Bauknight, had been trying for years to get a hunt organized at Riverside Park. Things began moving faster in June 2020 when TPWD's Executive Director, Carter Smith, and TYHP's Director, Chris Mitchell, met with City officials in Victoria. The path was paved to begin planning for a youth hunt in Riverside Park. It was officially approved by City Council in February 2021. While this hunt alone won't provide instant relief of deer numbers, if the hunt is deemed successful and becomes an annual event, the youth hunt may work to decrease deer density.



Riverside TYHP hunters, guardians, and volunteers at Riverside Park

December 11, 2021. Photo©Junior Munoz

Left: Youth hunters receive instruction prior to practicing with the firearms they will use for the next day's hunt. Riverside Park December 10, 2021, Photo©Meagan Lesak, Right: TYHP participant Alyse Gonzales practices her shooting skills. Riverside Park December 10, 2021, Photo©Shannon Grubbs



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Youth Hunt at Riverside Park, continued

When focusing on decreasing deer populations, doe harvest is key. Because of the park's location, the only time to harvest does is during the archery, youth-only, or muzzleloader seasons, or the 4 day "doe days" beginning on Thanksgiving Day each year. To have more flexibility, the park signed up for the Managed Lands Deer Program (MLDP) so they could be issued antlerless permits. City employees were asked to take herd composition counts, as are all MLDP participants. TPWD biologists also set up a spotlight route and worked with city employees to conduct the nighttime counts correctly. These formal counts began in 2020 and will continue moving forward. Based on the data collected for Riverside Park, 18 antlerless permits were issued for the 2021-22 season. This allowed each of the 6 participants the opportunity to harvest 3 antlerless deer. Additionally, youth hunters could use a tag from their hunting license to harvest one buck but were encouraged to focus on doe harvest. Feral hogs are also a problem in the park, causing damage to the riverbank, golf course, and new soccer fields. Youth hunters could harvest an unlimited number of hogs.

The event was capped at 6 participants between the ages of 12 and 16.

The City gave special permission for shotguns to be used within city limits for this event and the majority of the park and golf course were closed to the public for the weekend. The registration fee, meals, firearms, and ammunition were provided to the participants and the cost of this was covered by TPWD scholarships. As with all TYHP events, youth were required to have taken a hunter education course and have a guardian with them for the entire weekend. Hopeful hunters applied for a chance to participate on the THYP website and priority was given to those from Victoria or surrounding areas and first-time hunters. Participants were chosen by TYHP, but City officials also selected 6 additional youth from the applicant pool to attend a TYHP hunt at the Welder Wildlife Foundation in January. All costs will be covered for those youth as well.

On Friday, the kids were kept busy with a safety brief, orientation, and shooting practice. After dark, a local hunter came to share stories and words of wisdom with the kids and they were also addressed by Mayor Bauknight and State Representative Geanie Morrison. Hunters were allowed to tent camp on the grounds or use the adjacent RV park. The kids had 3 hunting sessions: Saturday morning and afternoon and Sunday morning. Even with very high winds on much of Saturday, 18 doe and 1 buck were harvested over the weekend. Something to note: the deer that TPWD biologists saw being processed on Saturday morning were very lean (i.e. very little body fat), especially compared to deer harvested on other MLDP properties just across the river. While an anecdotal observation, this indicates the lower overall health of the deer at Riverside Park when compared to deer on managed properties. After the first morning session the kids learned about gutting and skinning the deer, meat processing, aging deer by tooth wear, and Chronic Wasting Disease (CWD). Of course, safety was a key component, especially since this was in a city park. City officials did their best to keep people out of the park, but a few people found their way in. Hunters were very aware of their surroundings and spotted unauthorized people from blinds on at least 2 occasions. Officers were on duty to escort them out.



Catharina Williams, 15, of Inez, harvested her first deer at the Riverside TYHP hunt on December 11, 2021.

Youth Hunt at Riverside Park, continued

While this was a controversial event, it had many supporters and went about as well as one could hope. After the hunt, Assistant Director of the Parks and Recreation Department, Kimberly Zygmant, was asked if she thought it was successful. She answered that it was very successful, not only in harvesting deer but as a lesson in safety. If the hunt does become an annual event, it will be a great opportunity for new hunters to get involved, potentially help the long-term health of the Riverside Park deer herd and achieve the goals of the City Parks and Recreation Department.

Alyse Gonzales and her father, Charlie, pose with the deer she harvested on Saturday morning of the hunt. Riverside Park December 11, 2021



Shannon Grubbs 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.



THE OFFICIAL HUNTING PROGRAM OF TEXAS



The purpose of the TBGA is to promote awareness about wildlife management and the role that hunting plays in habitat conservation, and to foster cooperation among stakeholders who ensure that our state's wildlife habitat is conserved forever. Animals eligible for entry in TBGA are: Whitetail Deer, Mule Deer, Javelina, Pronghorn Antelope, and Desert Bighorn Sheep. TBGA award categories include: Scored Entries, First Harvests, Youth Division, and Landowner Recognition.

Entry is always **FREE!** Submit your harvest this season.



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Plant Profile: Deep-rooted Sedge

WRITTEN BY CLINTON FAAS

Texas is a diverse state, with an even more diverse list of plants. Home to 5,000-6,000 native plant species, unfortunately, our great state is ever more becoming home to an increasing number of non-native species as well. Some of these plant species were introduced intentionally as either forage producers or ornamentals while some arrived on our landscape from unknown origins. However they got here, non-native species can have detrimental impacts on our native plant diversity and alter the habitat for the animals that live here. There are many reasons non-native plants may become invasive on the landscape, but some may include: the production of large quantities of seeds, the ability to thrive on disturbed soils, rapid distribution through people unknowingly moving seeds or other plant material long distances, and lack of the native species that evolved with and used these plants in their native range.

Throughout our region, one such species you are more likely than not to encounter is deep-rooted sedge (*Cyperus entrerianus*). The sedge family (*Cyperaceae*) consists of around 600 species worldwide mostly found in the tropical and warm-temperate regions. While we have many native sedges, deep-rooted sedge is an aggressive non-native species originally found in the temperate regions of South America. It was first reported in Texas in Cameron County in 1941. However, unfortunately, it was not recognized as a threat in the state until the 1990s. It grows in robust, loose clumps up to 40 inches high with glossy V-shaped leaves and the base of the plant will appear purplish black. The seed heads will appear on the top (end) of each stem and consist of 5-11 greenish-white clusters. A prolific seed producer, mature plants can produce up to 1 million viable seeds per year. In addition, it can also spread vegetatively through rhizomes. These appear as lateral stems that grow underground and produce additional roots and stems at intervals. The stems will be angular and strongly 3-sided; remembering the saying “sedges have edges” may help when trying to determine if something is a grass or a sedge. As with most other sedges, this species will likely be found in wet or poorly drained areas. Many times it is associated with disturbed soil, fallow fields, roadsides, or overused sites, but because of its aggressive growth, it is likely to be seen expanding into undisturbed or wooded areas as well. If left untreated deep-rooted sedge is likely to form dense monocultures that outcompete native vegetation. Depending on an individual’s management goals, this may result in a lack of food, nesting cover, fawning cover, or grazing grass.

Deep rooted sedge can form dense stands that outcompete other vegetation if left untreated.
Photo©Clint Faas



Each cluster of spikelets on the inflorescence is capable of producing thousands of seeds. Photo©Clint Faas

As with many plants, management is easiest in the early stages of detection.

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Plant Profile: Deep-rooted Sedge, continued

The fewer the plants/acre, the fewer seed produced each year, and the easier it is to achieve a higher percent kill. Low lying areas are subject to an influx of seeds from heavy rains or flooding, so even after acceptable control levels are reached, additional treatments may be necessary. Chemical treatments are effective with several products as options. Please read and understand all chemical labels before treatment. Some products are very selective, and some are non-selective, meaning they will kill a wide variety of plants including forbs, grass, and sedges. None of the treatments listed below can be applied without expecting at least some impact on the native plant community. It is strongly recommended to understand each chemical and its effects on all existing plant species before application. Broadcast or aerial treatment of glyphosate (2 quarts/acre) yields the highest percent kill across trials, but all other grasses and forbs are subject to the chemical as well so use caution if there are desirable species present. If only small patches or individual plants are seen, a 2% mixture of glyphosate in a pump-up sprayer can be used for spot treatment as well. If spot treating, plants should be sprayed to just wet the foliage but avoid runoff. Additional broadcast treatment methods include products containing Dicamba + 2,4-D (ex. Weedmaster, Rangestar) at 2 pt./acre, Picloram + 2,4-D (ex. Grazon P + D, Gunslinger P + D) at 2 qt./acre, Halosulfuron-methyl (ex. Permit, Manage, Sedgehammer) at 1.3 oz./ acre, and MSMA at 2 lb./acre. Regardless of chemicals used it is strongly recommended to use a quality surfactant in the mix to increase the effectiveness of the herbicide. Mechanical treatments may also be used as part of an integrated approach to managing a deep-rooted sedge problem, but have not shown to be effective in long-term control. Routine disking removes mature plants but provides the manipulation that may cause seeds to begin sprouting to revegetate the area. In studies, revegetation was shown to be rapid following rainfall events. Mowing/shredding can be used at 2-4 week intervals to suppress seed production, but may also open areas for germination of new seedlings and encourage spread through rhizomes. In addition to mechanical treatment, prescribed fire has also been used in conjunction with chemical applications with varying levels of success. In most cases, prescribed fire by itself did not control deep-rooted sedge and may result in an increase in sedge cover. Using chemical applications after post-fire regrowth has begun results in treating younger growth rather than older "rank" plant material that has more protection on the leaves.



Top: The base of the plants have a purplish-black appearance. Bottom: Seeds are very small and easily spread by water runoff. Photo©Clint Faas

Whichever method is used to control deep-rooted sedge, it will be more effective, and more cost-efficient if it is treated early on. The more plants present, the more difficult it will be to remove them. Keep in mind that broadscale removal of one species may open space for something else to move in. Ongoing management and possibly reseeding of desirable vegetation can help reclaim these invaded landscapes and shape them into quality habitats once again.



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.

2021 Antlerless Harvest Results — District 7

WRITTEN BY BOBBY EICHLER

The 2021 – 2022 hunting season marks the third year of the implementation of ‘Doe Days’ across 16 counties in District 7. With the implementation of ‘Doe Days’ back in 2019, mandatory reporting for antlerless deer across these counties was also implemented. Mandatory reporting was an idea proposed by the public and was discussed during the scoping meetings when the possibility of doe days was first introduced. At that time, some landowners and hunters were concerned with overharvest, particularly on smaller properties. Texas Parks and Wildlife Department (TPWD) staff felt this was a legitimate concern and mandatory reporting was a good method to track harvest. Prior to this part of the state implementing mandatory reporting for antlerless deer, no other area of Texas had attempted this with deer harvest. While this has been a new process for hunters, it is believed that most hunters are complying with reporting.

Table 1: Doe harvest by season and year for District 7 counties. Harvest numbers are only for hunters using hunting license tags, Managed Lands Deer Permit harvest not included.

County	2019	2020	2021	2019	2020	2021	2019	2020	2021
	Archery			Archery and Youth-Only			4 Doe Days		
Austin	20	15	10	4	3	10	72	58	66
Bastrop	49	65	32	11	12	9	233	207	138
Caldwell	29	61	27	9	7	8	163	134	115
Colorado	52	46	34	15	9	4	177	150	170
Dewitt	54	81	39	13	17	13	374	371	274
Fayette	62	71	28	20	25	11	306	285	197
Goliad*	24	34	11	7	10	3	141	162	111
Gonzales	28	30	13	7	5	4	209	199	142
Guadalupe	34	44	21	7	13	2	164	157	98
Jackson*	19	23	17	4	5	1	31	33	41
Lavaca	74	85	41	15	20	17	198	194	200
Lee	63	55	45	17	21	13	206	215	135
Victoria*	8	23	11	3	5		87	91	59
Waller	7	15	5	3	2		18	20	31
Washington	24	22	19	8	15	2	133	110	102
Wharton*	10	8	5	3	1	3	25	21	32
Total	557	678	358	146	170	100	2537	2407	1911

*Mandatory reporting only required north of U.S. 59.

This year, antlerless harvest across both archery season and the Thanksgiving holiday doe days was down compared to the last 2 seasons (Table 1). While the archery season harvest was down by approximately 200 doe and the 4-day season was down by approximately 500 doe, District 7 staff feel this may be mostly a reflection of the overall hunting and habitat conditions for this current year. Habitat conditions have been in good shape throughout the fall with the mild winter so far. Much of the district has not had a frost as of December 20th, and winter forbs and grasses are already coming on very strong in many areas. From a weather and habitat standpoint, the deer herd has ‘won’ so far. We will see how January and February turn out, but the deer may make it through this winter without a pinch period.



Bobby Eichler is the Technical Guidance Biologist for the Oak Prairie 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.

Fayette Prairie Chapter of the Native Prairies Association of Texas

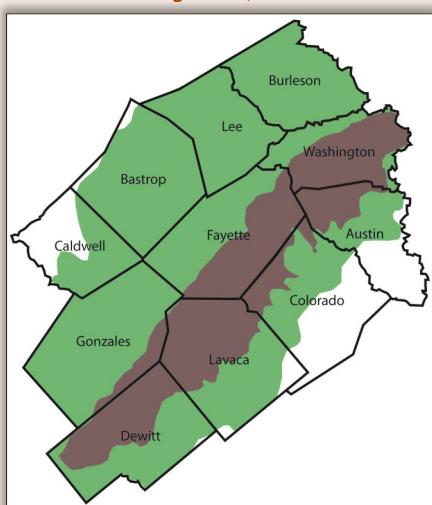
WRITTEN BY GARY KOCUREK

The Native Prairies Association of Texas (NPAT) is a nonprofit membership organization and an accredited land trust dedicated to the conservation, restoration, and appreciation of native prairies, savannas, and other grasslands in Texas. The newest addition to NPAT is the Fayette Prairie Chapter, formed in late 2020 (<https://texaspairie.org/fayette-prairie-chapter/>). The Fayette Chapter includes the Fayette Prairie and the surrounding Post Oak Savanna, all encompassed within an 11-county area centered around Fayette County. From the beginning, the Fayette Chapter has been a little different from the other NPAT chapters. Unlike the other NPAT chapters, which radiate out from the major urban centers of Fort Worth, Dallas, Houston and San Antonio, the Fayette Chapter has no major urban area, but is about equal distance from the sprawling cities of Austin, Houston and San Antonio. Another difference is that most of the chapter members are land owners who actually live on the prairie and are engaged in aspects of land stewardship.

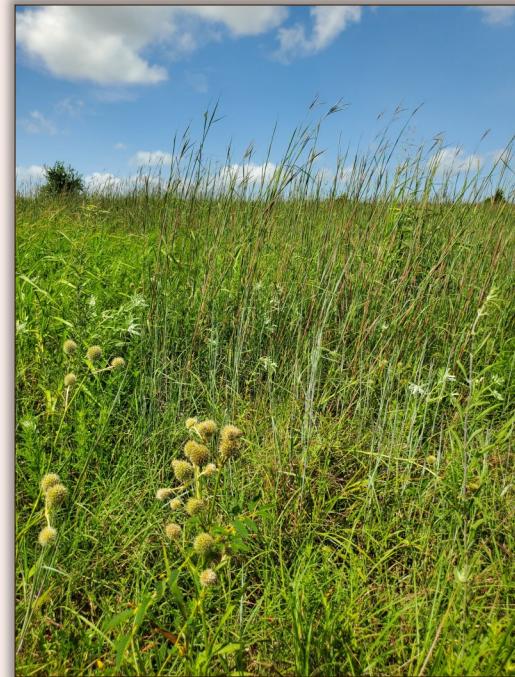
We know from early historical accounts that the area consisted of tall grass prairies with clusters of oaks, with a greater diversity and spatial density of trees along the Brazos, Colorado, Navidad, Lavaca and Guadalupe rivers and their tributaries. These were “disturbance-dependent” prairies, maintained by prairie fires and the buffalo herds that followed, seeking the green regrowth. A resilient prairie requires disturbances from fire and grazing to maintain the plant heterogeneity that makes this ecosystem an ideal habitat for a variety of grazing mammals, birds and pollinating insects.

Fayette Prairie (brown) and Post Oak Savanna (green).

Photo©Tim Siegmund, TPWD



Nearly all of this original ecosystem was lost with European settlement and the intensive agriculture of the latter 19th century. Farmland for cotton, corn and other crops yielded over the decades to rangeland, and after WWII cattle grazing and hayfields dominated. With the introduction of varieties of Bermudagrass, forage production changed dramatically and permanently away from native perennial grasses. Other non-native grasses, especially old world bluestems including King Ranch, Kleberg, Caucasian and Gordo bluestem, which now threaten to engulf the area, were both intentionally and accidentally introduced. Woody encroachment by low-quality trees such as red cedar, and brush such as yaupon increased as the frequency of fire decreased. Over-grazing of rangeland became commonplace, and monospecific grasslands were a goal. Accompanying the loss of habitat was a corresponding reduction in wildlife, including quail and turkey. Most recently, as much as any place in Texas, intense fragmentation of remaining habitat is occurring as large ranches are subdivided into smaller parcels.



*Remnant Fayette Prairie, Washington County.
Photo©Tim Siegmund, TPWD*

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Fayette Prairie Chapter of the Native Prairies Association of Texas, continued

So what can an upstart NPAT Fayette Prairie Chapter do? We cannot go back to a lost ecosystem; too many parameters have changed. Moreover, although there are preserved prairie remnants, their diversity shows that no one prairie type prevailed over the area before settlement. It is also difficult to run against the flow of history and demographic trends. Are the Fayette Prairie and Post Oak Savanna destined to become 10-acre tracts, essentially gentrified big yards? Will favorite sports such as hunting and fishing become impractical because the area has become just too fragmented?

From the beginning of NPAT, the vision has been clear, and the Fayette Prairie Chapter follows from this vision. As many as possible of the remaining remnant prairies need to be preserved. Restoration of prairies and savanna is also a major objective. These will probably not recreate what had been here, but will provide good habitats that work for our times. Most challenging, can a patchwork of preserved remnants and restored areas be connected by corridors of grazing and crop lands to provide an interconnected habitat for deer, turkey, quail and other species? If so, how do we get there?

Education is key at multiple levels, as is imagining the potential. A core of conservationists has long existed in the area, including those who have remnant prairies on their land. Most of the growing chapter membership, however, comes from recent transplants. These are usually people attracted to the natural beauty of the area, the rich history, the small towns, the “country” lifestyle, but few begin with any notion of prairie restoration. A big part of chapter outreach is sharing our vision with these people, and this vision resonates with many. A few are surprised to learn that they have bought a remnant prairie and have something rare that needs to be conserved. Others gravitate to the idea of restoring an over-grazed ranch back to a reasonable prairie. Yet others envision a restored savanna with majestic oaks and a grass/forb understory, turkey and deer included, just as soon as the pesky yaupon thicket is eliminated. Cattle grazing and haying are definitely part of prairie management, and these traditional practices can be carried out so that they are actually beneficial to the prairie ecology. Sustainable grazing and wildlife habitats go hand-in-hand in rangeland management.

Another aspect of education is educating ourselves. The prairie/savanna ecosystem is complex and *Third-year restoration, Burleson County. Photo©Tim Siegmund, TPWD*



multi-faceted. The Fayette Chapter regularly hosts presentations by experts in the many aspects of this ecosystem. Thanks to Zoom, we can bring in experts from all over the country. Talks over the last year have included topics such as the characteristic plants of the area, the role of prescribed burns, programs that can assist with restoration, the role of grazing, what defines ecological resilience in prairies, and the prairie carbon cycle. Upcoming talks and recorded past presentations can be found at the Fayette Prairie Chapter web site.

An important part of the chapter mission is encouraging and supporting restoration efforts.

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Fayette Prairie Chapter of the Native Prairies Association of Texas, continued

Education is key again because most of us interested in restoration do not know where to start, how to proceed, or what to expect. Fortunately, there is an able body of expertise in the TPWD, NRCS and TAMU AgriLife. These local experts are more than happy to become engaged on an individual basis or work with a group. Interest is clearly out there. The Fayette Prairie Chapter recently hosted a “Restoration Clinic” staffed by five experts, who covered the spectrum of restoration. We limited attendance to 35 participants to keep the field portion manageable, and after that we had to turn away people.

It is also important to see not just preserved remnant prairies, but also beginning and advancing stages of prairie restoration. The Fayette Prairie Chapter has been fortunate to have highly qualified TPWD personnel guide us through exactly this on field trips in the area. There is no one cookie-cutter recipe; each restoration develops differently depending upon a host of local parameters.

Another aspect of education is learning about programs that financially support restoration efforts. Multiple resources exist, but chapter members, working with TPWD, have been especially aided by the Pastures for Upland Birds program (PUB) and the Grassland Restoration Incentive Program (GRIP).

For most of us, actually launching into a restoration project means learning a whole new skill set. This involves serious education as you learn about herbicides, sprayers, brush mulchers, seed drills, seed selection, seed ecotypes, plant identification, prescribed burns, cattle grazing, fencing, tractors, chainsaws, cultipackers, hay mowers and rakes, and a host of now essential other things. The Fayette Prairie Chapter has a regular program where we tour each other’s restoration efforts, sharing and learning from each other’s successes and failures. Equipment gets shared because no one has everything. A program of cooperative work days has begun, and a lot can get done if 25 people show up on your place. The participation of the Texas Master Naturalist – Gideon Lincecum Chapter makes these work days hugely successful. Because of the importance of prescribed burns, our membership largely overlaps with that of the South Central Texas Prescribed Burn Association. The incentive here is to reintroduce prescribed burns as a vital part of prairie management. Cattle grazing as a prairie management tool is also being rediscovered, recognizing that fire and grazing are both essential to prairie resilience. A rewarding natural outgrowth of these interactions is the establishment of a social network centered around restoration.

*Seed drill demonstration, Fayette County.
Photo©Tim Siegmund, TPWD*

But how can our efforts be made permanent? Few of us who want to invest our time and money in a restoration just to see it lost after us. A major thrust of NPAT, often working with The Nature Conservancy, is the continued preservation of restorations and remnants. The most effective tool is a conservation easement. Essentially, you can design provisions such that a remnant prairie or a restoration is locked in conservation for perpetuity and monitored by NPAT or The Nature Conservancy. In some cases, NPAT will also take land donations, with its stewardship ensured. Other sister conservation organizations in the region have a similar function.

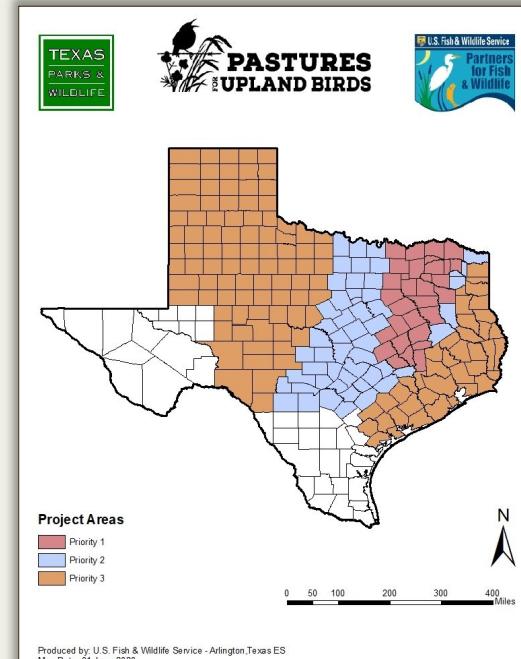


What is at stake here is the heritage of the Fayette Prairie and Post Oak Savanna. We can leave it a better place than we found it. NPAT and the Fayette Prairie Chapter welcome your participation. Please contact us at <https://texasprairie.org/fayette-chapter-contact/>.

The Pasture for Upland Birds (PUB) Program: Building Suitable Structure for Grassland Dependent Species

WRITTEN BY TIM SIEGMUND

As agricultural practices across Texas have intensified, diverse prairie plant communities have been reduced in both scale and size across the state. This fragmentation has occurred through direct conversion to row crops or monoculture non-native pasture and through woody plant encroachment. Trees and shrubs such as eastern red cedar, mesquite, huisache, and others change prairie plant communities and the wildlife species associated with them. As a result of these habitat changes, habitat quality is impacted and gamebirds such as wild turkey and Northern bobwhite quail have been reduced in abundance or even disappeared across their eastern range in the state of Texas. Additionally, grassland songbirds, bees, and butterflies have decreased in abundance as healthy prairie systems have decreased across the landscape and single species monocultures became the norm.



In partnership with the US Fish and Wildlife Service Partners for Fish and Wildlife Program, Texas Parks and Wildlife Department (TPWD) offers landowners the ability to convert non-native, monoculture pastures and former row crop land back to a semblance of the original prairie through the [Pastures for Upland Birds Program](#) (PUB). The PUB program partners with landowners to restore native prairie by providing the materials and sometimes equipment for the project. While it is impossible to recreate the unique plant and animal assemblages associated with the historical prairie expanse in its pre settlement condition, it is possible to create the correct habitat structure on restoration sites that grassland dependent wildlife need to survive. Species diversity of native plant species directly increases a restoration site's potential for utilization by numerous grassland wildlife species. Pollinator species and other insects increase as plant diversity increases. In turn, bird species such as loggerhead shrike, scissor-tailed flycatcher, eastern meadowlark, grasshopper sparrow, wild turkey, and Northern bobwhite can all benefit from the increase in insects, seeds, and vegetation structure types provided by a diverse plant community.

The majority of non-native pasture grasses (Bermuda grass, bahia grass, Johnson grass, and old world bluestems) are grown in monocultures (single species environments) that provide little in the way of insect or seed production for wildlife and bird species. These grasses typically are managed as a low growing and uniform habitat providing little nesting, foraging, or loafing cover for grassland bird species.

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The Pasture for Upland Birds (PUB) Program: Building Suitable Structure for Grassland Dependent Species, continued

With the PUB program, TPWD has contracts in place for 15 native grass species, 14 perennial and annual forbs/wildflowers, and most recently an additional 32 species mix of wildflowers with pollinator benefits. This diverse mixture has the ability to provide the bunch grass structure necessary for ground nesting birds, seeds from wildflowers for food, and a greater abundance and diversity of insects for chick and poult production when nesting birds are fledging young.

Conducting proper restorations take time and no two projects are the same. So you can start this process by contacting your local TPWD biologist and determining if the PUB program is a good fit for your property. Further a plan of action via herbicides, mechanical treatments or some combination will need to be devised for the best chance of success.

Contact your local TPWD biologist:

[https://tpwd.texas.gov/landwater/land/
technical_guidance/biologists/](https://tpwd.texas.gov/landwater/land/technical_guidance/biologists/)

More Information on the PUB program:

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Pastures for Upland Birds Webpage:

<https://tpwd.texas.gov/publishing/pubs/pubs>

PUB Video Link:

<https://www.youtube.com/watch?v=L0giW3z7vYo>



Tim was born and raised in Giddings, TX. A bachelor's degree and graduate research at Stephen F. Austin State University in Nacogdoches, TX was followed by employment with TPWD in 2009. In College Station, Tim was responsible for 7 counties performing wildlife surveys, public outreach, technical guidance, prescribed fire assistance, public hunting opportunity, wildlife tax valuation planning and dealing with other wildlife issues. Starting Nov 1st, 2017 Tim began his role as the Private Lands Program Leader for TPWD dealing with private lands issues in a statewide capacity. Tim resides in College Station with his wife and three children.

Hoof Rot

WRITTEN BY CLINTON FAAS

Wildlife diseases take on many forms, and some are more problematic than others. Each year biologists field questions from all over our district, and statewide, about problems that arise or animals that appear to have some clinical issue. This year, one such concern seemed to come up over and over with the same two questions: "What is causing the swollen hoof on this deer" and "What should we do about it?"

If you've spent time observing deer, it is likely that you've encountered an animal that seems to be walking with a limp or favoring one leg that appears to have a "swollen ankle." While there are several things that may cause this, one possible culprit is what is commonly referred to as foot rot or hoof rot. This condition can be the result of an infection from bacteria called *Fusobacterium necrophorum*. These bacteria occur worldwide in most species of mammals, either as a normal intestinal bacteria, or as a cause of disease. *F. necrophorum* belongs to a group of anaerobic bacteria meaning that they do not need oxygen to survive, and, in fact, some can not survive in oxygen rich environments. Because of this, the bacteria can thrive in tightly compacted soil, deep inside soil particles, and in wet, saturated soils where oxygen is limiting. Once present in the soil it may remain viable for several months. However, since it is commonly present among other intestinal bacteria, its presence alone is not sufficient to cause disease. Outbreaks of hoof rot are typically associated with congregations of animals around water holes during drought conditions, concentrated food sources visited by many animals, and contamination of the environment through feces; all conditions that can be found around corn or supplemental feeders. Once the bacteria begins to propagate in the soil deer can pick it up externally on their hooves and feet. The bacteria can then enter the healthy tissue through cuts, punctures, or any other condition that causes a breakdown of the normal protective properties of the outside layer of skin. It can then multiply in its new anaerobic environment under the skin. Toxins produced by the

bacteria can kill the tissue surrounding the infection site causing external lesions to appear and sometimes lead to a severe breakdown in tissue causing loss of the hoof or affected foot. Often, an infection of the subcutaneous tissue can penetrate adjacent bones and joints causing a sudden and severe onset of arthritis and swelling of the bone. This condition is usually the first sign that the infection has occurred. The resulting decrease in mobility and pain can cause inadequate foraging and loss of appetite which may lead to severe weight loss and poor body condition. As with any disease, each animal may be affected differently. For some, the condition may be fatal either through malnutrition or rarely, disease spread to other organs. The decreased mobility may also increase the risk of predation because the potential for escape is less. For other animals the infection may heal and result only in a deformation of the bones in the foot but an otherwise healthy animal. It is likely that the effects of *F. necrophorum* are considerably enhanced by the concurrent infection from other bacteria as well.



Before and after photo on the effects of hoof rot on body condition. Photo©Ben Downs



The characteristic "swollen ankle" appearance can be seen here along with visible lesion.

Photo©Scott Mitchell

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Hoof Rot, continued

Although this bacterium can infect any part of the animal, it is most commonly found in the hoof because of its prevalence in the ground and exposure to small wounds from any number of sources.

Due to the nature of these bacteria, and the fact that there are regulations against medicating game animals in the wild, treatment can be extremely difficult. In the livestock industry, medication can be administered to treat the infection and preventative measures can be taken for herds that are commonly exposed to the bacteria. In the wild, both preventative and reactive measures can be taken to minimize exposure or to help decrease risk of spread. Since these bacteria can be found most anywhere, removal of the infected deer is not always needed. Although this will decrease the risk of spread from that animal to others, or to the environment, it is likely that the concentrations of the bacteria in the environment are already higher than what the animal would spread. However, if an animal appears to be in poor physical condition and it is not likely it will survive, harvesting that animal will prevent a prolonged natural mortality. Long periods of nutritional stress, or a permanent decrease in mobility, may also affect a buck's antler potential in subsequent years.

As previously mentioned, feeder location can often be sources of high bacteria loads. If a property has multiple animals with symptoms of hoof rot, it is generally recommended to either turn off feeders or move them to another location. The first decreases the congregation of animals, which is commonly linked to disease spread, and the latter takes them away from possible higher concentrations of bacteria. This is especially true if the animals have created depressions around the feeder areas that are muddy or holding water. One possible option for removing the bacteria at suspected high concentration areas, or areas where deer congregate, is to treat the soil with a copper sulfate solution. It is worth noting, this solution may be highly corrosive to metals (i.e. feeder legs), and may cause toxicity in sheep. Other preventative measures can be taken to make the environment around feeders less conducive to bacterial growth. Ensuring proper drainage will decrease the amount of water standing at these sites. If depressions exist, filling with sand, gravel, dirt, or caliche will prevent water from pooling where deer stand to feed. Consider also removing or protecting sharp objects, like feeder leg stakes, from around feed sites. It is quite likely that injury or cuts may occur away from feeders but minimizing that risk around areas congregated by deer may reduce the introduction of bacteria.

Another question that comes up regularly with disease concerns is "can I eat the meat?" In this case it may come down to the ever-so-often used "it depends." A study done by the Washington Department of Fish and Wildlife stated that, under microscopic examination, meat tissue "has not revealed evidence of infection, inflammation, or any other indication that the meat is unsuitable for human consumption." Hoof rot is generally a localized infection but may be found infecting other parts of the body. Although it is not likely to spread throughout the body care should be taken if there are other clinical signs or if field dressing reveals abnormalities in internal organs. Even if the bacteria are present in other areas of the body proper meat handling and cooking temperatures will likely be sufficient at killing any remaining bacteria. If you observe an animal that appears to match these symptoms give your local biologist a call, they can advise you on how best to proceed. If an animal is harvested that you are concerned about, or a person would like to have tested for *F. necrophorum*, an un-opened joint is best. Severing the leg above and below the joint and refrigerate, not freeze, the joint to have it sent in for testing. A necropsy (post-mortem examination of the body and internal organs) may also help to determine if other underlying conditions are present. If there are concerns about widespread infection, please contact your local biologist for assistance and additional information.

Find your local TPWD biologist:

https://tpwd.texas.gov/landwater/land/technical_guidance/biologists/

2022 HLSR Ranching and Wildlife Expo Educational Seminars

Tuesday, March 1, 2022: CEU Credits

1:00 p.m. — Using Prescribed Fire to Manage Brush — *Greg Pleasant, TPWD*
 2:00 p.m. — *Break*
 2:15 p.m. — Non-Native Species of Southeast Texas and Their Control — *Clinton Faas, TPWD*
 3:15 p.m. — *Break*
 3:30 p.m. — Selecting the Right Control Method for Your Project
 Megan Clayton, PhD, Texas A&M AgriLife Extension Service
 4:30 p.m. — R&W Kids on the Land Program — *Travis Adair, Ranching and Wildlife Chairman*

Wednesday, March 2, 2022: Small Acreage Management

11:30 a.m. — Meet our Texas Game Wardens (*With Live Animals*)
 12:15 p.m. — *Break*
 12:30 p.m. — Wildlife Tax Valuation Overview — *Stephanie Damron, TPWD*
 1:00 p.m. — Wildlife Tax Valuation Practices — *Clinton Faas, TPWD*
 1:30 p.m. — Alternative Ranching Options and Direct Marketing
 Megan Clayton, PhD, Texas A&M AgriLife Extension Service
 2:00 p.m. — *Break*
 2:15 p.m. — Managing for Pollinators — *Ross Winton, TPWD*
 2:45 p.m. — The Role of Small Acreage and Backyard Wildscapes in a Changing Ecosystem
 Mary Pearl Meuth, Texas Master Naturalists
 3:15 p.m. — Case Study: Experiences from a New Landowner
 Mark Brown, Ranching and Wildlife Committee
 4:15 p.m. — *Break*
 4:25 p.m. — R&W Kids on the Land Overview — *Travis Adair, Ranching and Wildlife Chairman*
 4:30 p.m. — Ways to Use Game from Your Property, Including Sausage Making Demonstration;
 Prasek's Hilljie Smokehouse

Thursday, March 3, 2022: Large Acreage Management

11:00 a.m. — Amphibians and Reptiles of Texas (*With Live Animals*)
 12:00 p.m. — *Break*
 12:15 p.m. — *TBD*
 1:00 p.m. — Dove Management in Texas — *Owen Fitzsimmons, TPWD*
 1:45 p.m. — *Break*
 2:00 p.m. — Population Management for Deer — *Shannon Grubbs, TPWD*
 2:45 p.m. — Cattle Grazing for Wildlife — *Clinton Faas, TPWD*
 3:30 p.m. — Update on Texas Land Markets and Rural Financing
 Joe Patterson, Vice President Ranch Lending, Crockett National Bank.
 4:15 p.m. — *Break*
 4:25 p.m. — R&W Kids on the Land Overview — *Travis Adair, Ranching and Wildlife Chairman*
 4:30 p.m. — Wild Game Preparation: Turtle, Alligator, and Frog Legs — *Brennan's of Houston*

Upcoming Events

FEBRUARY

5 **Western DeWitt WMA Awards Banquet**
5D Steakhouse
632 W. Main, Yorktown, TX 78164
Begins at 5:00 p.m.
Contact Stephen Gowens at 361-564-2977
Or Larry Franke at 210-215-7124

19 **Central DeWitt WMA Awards Banquet**
VFW Hall
934 US HWY 183 Cuero, TX 77954
Doors open at 5:00 p.m.
Contact Karen Filip at cdcwma@gmail.com

MARCH

4 **Feathers, Furs, and Farming Workshop**
Weimar Civic Center
1754 IH-10, Weimar, TX 78962
Begins at 1:00 p.m.
Topics Include: Exotics and Invasive Species
Contact Mark Lange at 979-732-3458 or
mark.lange@tpwd.texas.gov

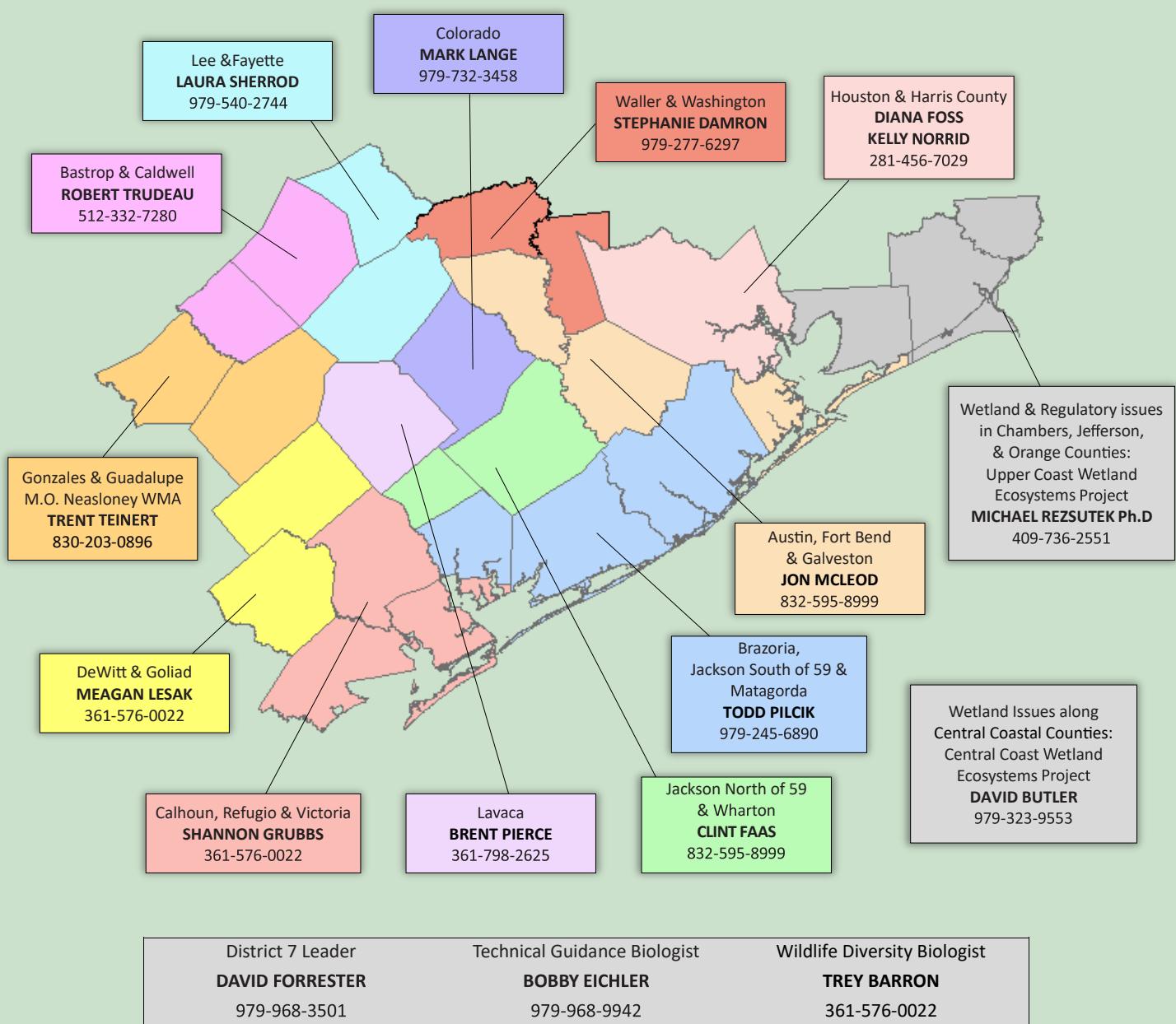
12 **Colorado County Wildlife Management Association Spring Banquet**
Columbus Hall (KC Hall)
3845 I-10, Columbus, TX 78934
Begins at 4:00 p.m.
Contact Chad Emmel at 979-732-1399 or
chad@befcoengineering.com

1-5 **Ranching and Wildlife Expo and Seminars Houston Livestock Show and Rodeo**
NRG Center, 1 NRG Park, Houston, TX 77054
Contact Clint Faas at 832-595-8999
clinton.faas@tpwd.texas.gov

25 **Columbus Wildlife Tax Valuation Workshop**
Colorado County EMS Building
305 Radio Ln., Columbus, TX 78934
Begins at 9:00 a.m.
Contact Mark Lange at 979-732-3458 or
mark.lange@tpwd.texas.gov

26 **Meyersville WMA Spring Meeting**
Waskow Camp House
13052 S. US HWY 183, Yorktown, TX 78164
Begins at 5:30 p.m.
Contact Diane Chavez at
mdafchavez@gmail.com

Our Wildlife Biologists



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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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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

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PWD LF W7000-2068 (1/22)