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Take a kid hunting! TYHP brings West Texas kids outdoors

by Misty Sumner

If I had a nickel for all the times I have heard “*I don’t have anywhere to take my kid hunting*” I would be rich, very rich. Probably the most underutilized program in West Texas is the Texas Youth Hunting Program (TYHP). If you like what you read, please help spread the word.

In 1996 TPWD and the Texas Wildlife Association decided to do something about hunter opportunity and the falling number of hunters in Texas. The Texas Youth Hunting Program was created with many goals in mind but primarily to promote the hunting heritage in Texas. It was then and is still important today to give families opportunities to get outdoors and hunt.

It is not our goal to give someone a place to hunt. Our goal is to hold positive, safe, educational hunting experiences full of mentors teaching basic skills and techniques. We want those involved to learn the values and responsibilities of hunting and to understand conservation and the im-

portance of habitat management. If you ever take the opportunity to be involved in a TYHP hunt either as a hunter, parent, guardian or volunteer you will find we meet and surpass those goals regularly. We know because we see it in the faces of those attending.

Texas Youth Hunting Program hunts are great for the hunting and non-hunting parent alike. It is not unusual to have a parent want to teach their kid about hunting but not have the knowledge or the experience to feel comfortable taking them on a hunt. I cannot tell you how many times parents have come to me after a youth hunt to thank us for sharing the experience and excited about how much they learned as well.

WARNING! Becoming passionate about the outdoors is contagious and once you find yourself surrounded by people who understand and love hunting you are likely to become hooked yourself. Whether you are an experienced or inexperienced hunter there are no excuses; take a kid hunting!

How do I get started?

It is easy to participate in a youth hunt through the TYHP. The youth hunter must create an account on the website (www.tyhp.org), peruse the scheduled hunts, sign up and wait for an email to indicate they’ve been drawn, then show up and be ready to meet a great group of people and have a fun-packed weekend. If access to a computer is difficult, hunters and their parents can call Barbara Scheib, TYHP Administrative Assistant, at 800-460-5494, and she will help. With the multitude of hunts offered, the hardest thing will be deciding which hunt to attend!

I want to get involved!

If you’re interested in helping on a youth hunt we are always looking for quality volunteers. There is quite a bit of work behind the scenes that

goes into running safe, educational hunts. One can volunteer to help with any of an assortment of duties such as cooking, guiding, firearm instruction, outdoor education, or providing medical expertise.

If you are a landowner and are interested in learning more about or having a youth hunt on your ranch we’d love to hear from you. Please contact TYHP Field Coordinator Chris Mitchell (cmitchell@Texas-wildlife.org or 800-460-5494) or if you are located in the Trans-Pecos and would rather contact me directly, you’re welcome to (see back page).

For more information, visit www.tyhp.org/ or www.tpwd.state.tx.us/huntwild/hunt/youth_hunting/tx_youth_hunt_program/.



Top left: Dove hunting in El Paso County. Above: Mule deer hunt in Hudspeth County. Right: Misty Sumner with a young hunter processing a mule deer in West Texas.

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WILDLIFE MANAGEMENT AREAS

There's no typical day at Sierra Diablo

by Clay Roberts

I often get asked what I do on an average day at work. The problem with answering that question is there is no typical day on the WMAs.

The tasks that we as Trans-Pecos WMA biologists perform are so varied it's almost impossible to give a concise answer: guzzler repairs and maintenance, fencing repair, road work, bighorn sheep/mule deer surveys and harvest recommendations, browse surveys, and on and on. Therefore, I thought I'd give an "amalgamated" overview of a week on Sierra Diablo WMA.

Heading up to Diablo is usually not a day trip. Typically, I give myself at least three days (sometimes more) to get things done. The drive alone takes about 3.5-5 hours to get to HQ depending on road conditions, or a minimum of seven hours' drive time roundtrip. Ergo, I usually make a weeklong trip of it. I have made some day trips there before and let me tell you I could've been an extra on the *Walking Dead* afterwards.

Monday morning I load up Cruzan (aka "the dingo"), gear, and ice chest and start the pilgrimage. I stop at the grocery store, stock up for the week, and head west across the desert. Arriving at HQ around lunch time, I unpack and get situated for the week ahead. Typically, there is about an hour or so of cleaning in the bunkhouse to combat the effects of the year-round resident Cactus Mice and Ring-tailed Cats. Then, I fire up the Jeep Scrambler and start making

my rounds to the guzzlers and drinkers that I can drive to. A total of three guzzlers, two troughs, and 10 drinkers are accessible by road on the area. The remaining 10 guzzlers and 20 drinkers are too remote and have to be walked to. One, the Victorio Peak guzzler, takes about 16 hours (round trip) to walk to and check, "praying" the whole way up that you have the right parts in your pack to make any necessary repairs.

“ On a clear day, I can see Mt. Livermore in the Davis Mountains, the Eagle Mountains, over to Sierra Blanca, and as far north as El Capitan in the Guadalupe. ”

Upon arriving at the "Super Guzzler", I see the tanks are dry. Tracing the line back I find a green spot on the ground and discover a rupture in the fast line. I return to the shop and grab the hot head, some couplings, the generator, and assorted other tools and return to the break. In an average year this break would be bad, but considering the extended drought conditions we've been in, it's devastating.

The super guzzler is composed of two aprons and over two miles of fast line which feeds three drinkers; it's really a guzzler on steroids! All the other guzzlers have a single apron



and two drinkers within a couple of hundred yards. More crucially, it also provides all the water for the southern fifth of the WMA. Looks like I'm going to be hauling water this week on top of the vegetation transects I had planned to do. Luckily, the water buffalo is parked in the shop.

Next morning, I haul the water buffalo up to the HQ water tanks. It takes about four hours to fill the buffalo so I have time to do some transects close by, of the 16 transects spread out over WMA. The plan for this week was to get the four transects in the bottom of Victorio Canyon knocked out for sure. Each transect takes about 1 hour to complete. These last couple of years, veg transects have been a challenge because of the lack of rain resulting in limited vegetative growth and regrowth, making plant identification in some cases nearly impossible.

We use a Daubenmire frame to identify herbaceous species and percent cover and, the line intercept method to classify canopy cover and occurrence of woody species along each transect. Keeping an eye on my watch, I head back to the buffalo to start hauling water. Now begins the



Left: The "dingo" in his spot in the Scrambler (photo by Mark Garrett). Right: Vegetation transect in the bottom of Victorio Canyon. Top Right: The Super Guzzler, which provides all the water for the southern fifth of the WMA (photos by Clay Roberts).



almost 1.5 inches of rain! I drive down to the super guzzler, and on top of the water I've hauled earlier this week, another couple of thousand gallons have been collected. I got the break in the line fixed just in the nick of time! This should provide enough water for at least five months with normal usage. Feeling pretty good about the rain and what I've accomplished this week, I walk to the rim to sit and take in the grandeur of my surroundings.

On a clear day like this one, I can see Mt. Livermore in the Davis Mountains, the Eagle Mountains, over to Sierra Blanca and as far north as El Capitan in the Guadalupe from my perch. While glassing the rim I see I'm not the only one enjoying the euphoria caused by the recent rains: mule deer does are foraging on the hills behind me while fawns chase each other around in circles. Then, I see movement out of the corner of my eye and turn: a small group of desert bighorn sheep pops up over the rim and starts to wander along the edge. They work their way to a prominent shelf along the rim and start to settle in for the night, surveying their domain from their lofty beds. As the sun sets in the west, I race the dingo back to the Scrambler, and we head back to the bunkhouse for a hot meal, a shower, and a good night's rest.

Friday morning means packing up the bunkhouse, cleaning up, storing all the tools and Scrambler back in the barn, and making the long trip back to Alpine. It saddens me to have to leave my high desert retreat. Then I remember...next week is a whole new week!



Note: Due to its remote and rugged nature, Sierra Diablo WMA is closed to the public except for a limited number of public hunts (contact district office for details; see back page)

Above: After the rains on Diablo. Bottom Right: On the rim. (Photos by Clay Roberts)

slow haul to the super guzzler, a trip that takes about 45 minutes to keep sloshing and water loss to a minimum. Pumping into the guzzler tank is a breeze and 15 minutes later I'm heading back to HQ to start the process over again. I can make about two trips a day for a total of 800 gallons. It's a slow but critical process.

Wednesday finds me preparing for my trip into the canyon to complete the veg transects. This will be an overnight trip for sure. My camping spot in the bottom of the canyon is at the guzzler located there. The dearth of free-standing water in the area makes camping at guzzlers a must.

Guzzlers are strategically placed on the landscape every three miles or

(spider bite to the face) that it's easier and safer to sleep off the ground up at Diablo and the apron provides a ready-made roof. The veg transects are miles apart in the bottom of the canyon and it takes longer to walk to each one than it does to actually run each transect. As evening approaches clouds start to build in the west and it looks like rain, but I'm not getting my hopes up. We retire to the "Diablo Waldorf Astoria" and eat super and do a little reading by headlamp until exhaustion takes over, and I drift off to sleep to the gentle sway of the hammock.

Sometime in the middle of the night thunder crashes close by. I awake with a start. Minutes later, a downpour like I haven't seen in years rolls into the canyon. Water pours off the apron in sheets during the flashes of lightning. Cruzan and I sit under the apron and watch the rain. It doesn't last long, maybe an hour and it's all over, but the smell of ozone and creosote afterwards are like a sleeping tonic and I drift off again in no time. The next morning I pack up camp and head off to finish up the last of the veg transects before returning to HQ. The thunderstorm has left pools of water all along the return trip. Cruzan makes ample use of them splashing, playing, and drinking to his heart's delight.

I check the rain gauge at HQ; we got

“ The seven-mile hike from the end of the road to the guzzler takes about two to three hours. ”

so as the crow flies. However, since these guzzlers are placed in areas to be of the most benefit for wildlife, specifically desert bighorn sheep, the actual travel distance on the ground is often much further. The seven-mile hike from the end of the road to the guzzler takes about two to three hours. Cruzan is excited to walk – he's been "helping" me haul water and riding in his spot in the jeep, but he's getting a bit hyper at not getting to stretch his legs.

Once at the guzzler, I hang up my hammock and set up camp under the apron. I've learned from experience



STATE PARKS

Get back to Nature at Balmorhea and Davis Mountains

by Sharon Paterson, *Parks intern*
Photos courtesy of TPWD

Imagine that you are wandering the West Texas desert 200 years ago. You are sweating, parched with thirst, and stumbling along. Up on the horizon, you see what looks like water, and even though you believe it is just a mirage, you continue toward it. Finally, you stumble onto a huge desert wetland – a cienega. You are relieved; water is the difference between life and death in the desert.

Such a scene might have been common before the 1930s when the CCC came to Balmorhea and built the pool, San Solomon Springs Motel, and the bathhouses that make up the state park (see box on Page 5). Balmorhea would have been a beacon of hope to Native Americans, explorers, and settlers alike. A true oasis in the desert. People would have flocked to the wetland then just as they flock to Balmorhea State Park today.

The pool at Balmorhea State Park is home to San Solomon Springs, which provides an important source of water just as it did hundreds of years ago. The spring flows at a rate of about 15 million gallons per day. As spring-fed pools often are, the water is a delightfully cool 72-76 degrees year-round. It is indeed a relief

to jump in and go for a swim on a hot day. Much of the pool is about five feet deep, but at one end the pool opens up to a depth of about 20 feet. A unique experience, the pool can be enjoyed by swimmers, snorkelers, and divers all at the same time.

In addition to its historical and cultural importance, Balmorhea is also biologically important. When the CCC cemented in the spring to form the pool, the cienega dried up. But in recent years, efforts have been made to restore some of this amazing desert wetland. Balmorhea is home to five endangered species: two fish, one isopod, and two snails. The Comanche Springs pupfish is a small fish that is only found in waters fed by the San Solomon springs. The Pecos gambusia is found in spring-fed waters, primarily around Balmorhea. The amphipod is aquatic and can be quite small; it looks similar to a pillbug (or roly-poly) and can be found in *Chara*, the algae common in the canals. The snails are very small and can only be found in three spring systems; they may be limited by the introduction of an Asian snail of the



Balmorhea. It is somewhat smaller than other catfish with slightly different markings, and can often be found swimming in the canals. Balmorhea is the only place in Texas where this catfish shows no signs of hybridization with channel catfish. These are not the only animals that call Balmorhea home: there are other fish, birds, turtles and other wildlife to be enjoyed here.

At Balmorhea State Park, people can be seen sitting along the channels introducing their little ones to the joys of water in the desert, while others enjoy picnicking, swimming, snorkeling, or diving. Any time spent in the Trans-Pecos region is not complete without a visit to Balmorhea. Come make memories at Balmorhea State Park, a true desert oasis.

Just outside Balmorhea, mountains spring up all around. These mountains look different from many other mountains; they often have a unique pillar-like rock formation. Looking at these formations, one might think that they look volcanic, and in actuality, the Davis Mountains were formed through volcanic activity. The mountains are not volcanoes themselves; rather they are the result of flowing lava and spewed ash that erupted from two calderas on multiple occasions. The mountains make for an interesting high-elevation habitat in the middle of the lowland desert. Here, many species exist which couldn't survive in other parts of the desert.

After a rain, you might feel as though you've been transported to Ireland. The mountains get more

(continued on page 5)





rainfall than the surrounding area, allowing a diverse array of plants and animals to exist. The mountainsides are dotted with typical desert plants like yucca, sotol, cholla, and prickly pear, but these plants are joined by juniper, oak trees, various grasses, yellow-flowered esperanza, and lots of wildflowers.

Many birds migrate through the region, making it a birder's paradise. The park features two bird blinds, the newest of which features solar power and was built completely by park staff; it is an accomplishment to be sure! Birders flock to Davis Moun-

tains State Park from all over for a chance to see a year-round resident species: the elusive but beautiful Montezuma Quail. But if you like mammals, reptiles, and even amphibians, these animals are here for you too! Slow down and keep quiet on a late afternoon stroll through the park and you might see the Davis Mountains cottontail, the black-tailed jackrabbit, or mule deer. If you're really lucky you might see a gray fox or even a ringtail! Various snakes and lizards are often seen in the park. One of the more common lizards is the Chihuahuan spotted whiptail. This beautiful lizard is both striped and spotted, but don't blink – they move quickly!

The higher altitude also allows for lower temperatures, and being in the middle of desert, the humidity is low. These factors combine to make the Davis Mountains one of the coolest places in Texas, rarely reaching 100 degrees during the summer. It's true what they say; you might need a light jacket, even in the middle of August.

Being far from big cities and with increased altitude, you are in for a real treat if you simply look up on a clear night. Thousands of stars dance overhead, and when there is no moon, the Milky Way is easily seen spilling across the sky. Sit outside and watch the fireflies blink on and off as the stars rise.

Drive down Park Road 3 after dark, and the Indian Lodge will appear before you like a welcoming beacon in the night. The lodge looks almost like a small town nestled at the foot of a mountain. The lodge is a historic building, as the original part was built in

the 1930s by the CCC in the style of a Pueblo lodge, with an addition added in the 1960s. Here you can find friendly service and good food at the Black Bear Restaurant and comfortable rooms if camping isn't your idea of a good time. In addition to the historic part of the Indian Lodge, there are two other complete CCC buildings still in use along Park Road 3. Skyline Drive was cut by the CCC, and if you follow the switchbacks to the scenic overlook, you will find another CCC structure that frames a beautiful view of Fort Davis. CCC structures were built to last!

Across the highway in the Limpia Canyon Primitive Area there is a permanent spring, and Limpia Creek flows after rainfall. Currently, the park has teamed up with Americorps and is cutting six more miles of trail. Additional campsites will be added when the trail is complete. Views from the spur off of the new trail are spectacular!

Inside the park, it is often hard to find cell service, but that's okay! With 12 miles of trails, great bird-watching, and amazing people, who would want to be on the phone anyway? Davis Mountains State Park is a great place to slow down, unwind, unplug, and get back to Nature!



Texas and the CCC

The Civilian Conservation Corps, or CCC, was formed in 1933 by Franklin D. Roosevelt as part of the New Deal program. Not only did it provide work for unemployed, unmarried men (ages 18-25) during the Great Depression, the CCC also focused on enhancement of public areas and natural resources conservation programs nationwide.

In Texas, the CCC was responsible for developing the first state parks system. Twenty-nine of TPWD's state parks, including Balmorhea and Davis Mountains, were built by the CCC, and much of the original or restored architecture can still be seen.

Nationwide, the CCC employed over 3 million young men during its nine years of existence (1933-1942). Currently, the Texas Conservation Corps, modeled after the CCC, employs youths of both genders aged 17-28 to restore and preserve public lands all over Texas.



2014-2015 MLDP season: coming soon!

The season dates have been announced for ranches participating in the Managed Lands Deer Permit program.

Mule deer: Nov 1, 2014—Jan 25, 2015 (any lawful means) and Sept 27—Oct 31, 2014 (lawful archery equipment only).

White-tailed deer (Levels 2 and 3): Sept 27, 2014—Feb 28, 2015. Pay attention to which level you are on and what can be legally hunted during the dates.

Cooperators should begin spotlight or helicopter surveys in September (WTD) and October (MD). After submission of data to your TPWD biologist, it may take a few weeks for you to receive your permits from Austin HQ. However, if you would like a partial issuance (30% of the previous year's full issuance), contact your biologist.

Remember that all deer taken under MLDP authority must be tagged with the appropriate permit, and that harvest data (including date of harvest, antler measurements, sex, age, and weight) must be collected and submitted to TPWD after the season.

For any questions about enrolling in the MLDP program, or to receive technical guidance in fulfilling the habitat management requirements of the program, contact your local biologist.

Happy hunting!

WILD GAME RECIPES

Parmesan-encrusted dove filets

by Austin Stolte

By the time you read this article, dove season should be in full swing. When you think of a typical dove hunting field, images of a wide-open pasture or crop often come to mind. The Trans-Pecos region of Texas is often overlooked for its phenomenal dove hunting potential.

I have hunted dove all over south Texas but the best hunt I ever experienced was right here in Terrell County. Dove hunting in the Trans-Pecos, however good it may be, is often hit or miss. Although our dove numbers are typically very strong, hunting success depends largely on rainfall. If conditions are right and we get good early summer rains that fill up stock or wildlife tanks, followed by an August dry spell, you can bet we will have some excellent dove hunting opportunities.

What happens is the early rains fill our tanks which hopefully stay full until September 1st. A dry spell in August will evaporate all the small puddles of surface water across the range, leaving only the stock ponds as a water source for the dove.

Come late evening after a long day of feeding, the doves will travel to tanks for water, concentrating them in a small area which in turn makes for a good hunt. If we get late August-early September rains you can bet the doves will be spread out and harder to hunt. If this occurs you may have to take a non-traditional approach to fill your game bag. This is where scouting and knowing your plants comes in handy.

Spend some time scouting your property or lease to determine areas where dove are feeding. Areas that have been previously disturbed by mechanical or burning practices are often a good place to start. These areas will be open and likely contain seed-producing plants favored by dove.

Hopefully you are able to get a few dove in the freezer this fall. If you have the means, be sure to take the time to introduce a kid to hunting; an action-packed dove hunt is a great way to make a long-lasting memory for kids. If you are so skilled (or lucky), this is a delicious recipe you can try!

Ingredients:

- 6 doves, breasted (12 breasts)
- ½ cup red wine vinaigrette
- ½ cup finely-grated parmesan cheese
- ½ cup fine zesty bread crumbs
- 1 table spoon sea salt
- 1 tablespoon black pepper
- Fry daddy filled to proper level with cooking oil



Directions: Place dove breast in container with red wine vinaigrette and allow to marinate for 1-3 hours. Mix parmesan cheese, bread crumbs, salt and pepper into 1-gallon Ziploc bag and mix thoroughly. Add dove breast and mix/coat thoroughly.

Place dove breast into fry daddy once oil reaches 325-350 degrees. Fry for 2-3 minutes or until done. NOTE: because your doves are coated in the parmesan cheese, your crust will brown very fast. There is a fine line to cook the dove properly without burning your crust. Watch closely

Dove season reminders

Central and North Zones: Dove seasons run Sept 1—Oct 20, 2014 and Dec 19, 2014—Jan 7, 2015. Daily bag limit of 15 birds (mourning, white-winged, and white-tipped, to include not more than two white-tipped doves).

Possession limit is three times the daily bag limit. Shooting hours half-hour before sunrise to sunset. Be sure to turn in bands from any banded birds!

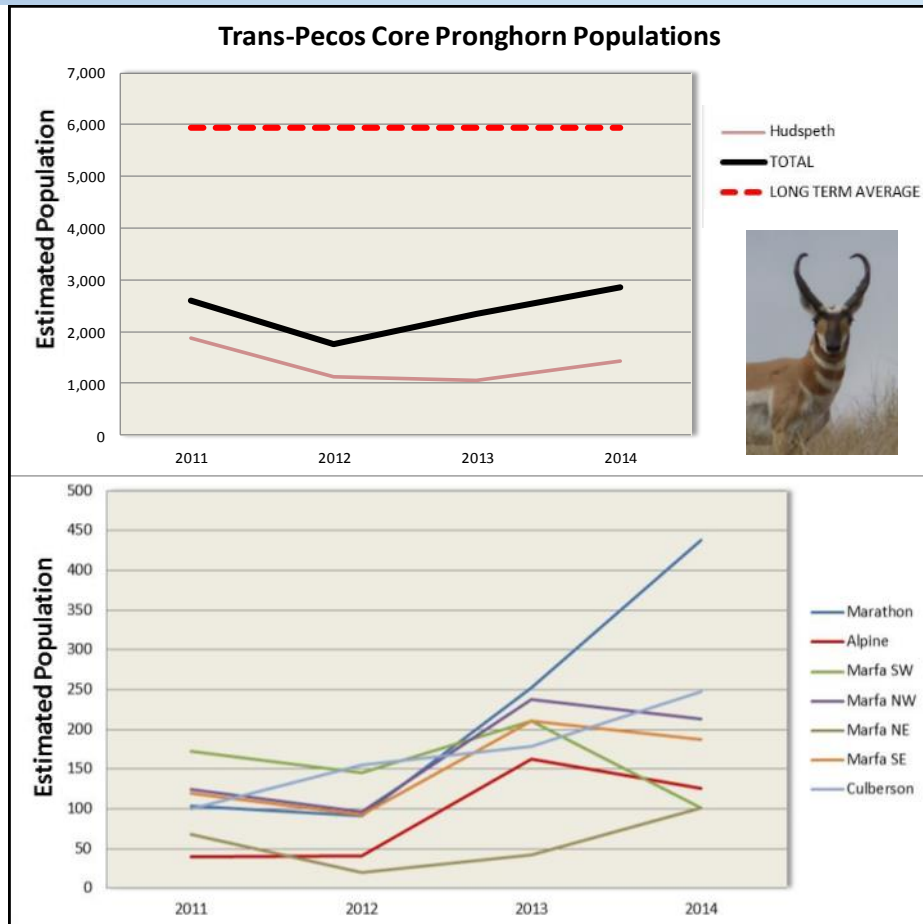
If you'd like to set up your land for public hunting of doves and other small game, contact your county biologist.

PRONGHORN UPDATE

by Mike Janis

Each summer in June or July, TPWD biologists conduct pronghorn surveys from a fixed wing aircraft. We fly North-South oriented transects and count and classify the pronghorn observed as bucks, does, or fawns. The transects are spaced such that we only survey about 1/2 of the acreage in the areas surveyed, so our results essentially need to be doubled to give the final estimate. By sampling only 1/2 of the acreage, we are able to survey more areas within the same budget and time frame, but the tradeoff is that our results are subject to sampling error, and thus our results are estimates only. Nonetheless, they provide valuable trend information, especially when combined over large areas.

The results presented here are summarized by the core areas we survey. The core areas are surveyed every year. In addition to the core areas, we survey pronghorn habitat on the periphery of the core range as our budget allows, but those additional areas only get surveyed periodically, and are not included in this summary. In the Trans-Pecos we have defined 8 core areas: Marathon Basin, grasslands north of Alpine, Marfa Plateau (divided into four sub-areas), and portions of Hudspeth and Culberson Counties.



Top: Graph showing the long-term average pronghorn population, total population estimate across herd units, and the Hudspeth County estimate. Bottom: Population estimates for the remaining pronghorn herd units in the Trans-Pecos.

SPECIAL NEWS—OUTDOOR ANNUAL FOR SMARTPHONES

AUSTIN — The official *Outdoor Annual — Texas Hunting and Fishing Regulations* app is now available for free download on iOS and Android platforms, providing sportsmen with mobile access to information they can use in the field and on the water.

Once installed, the app enables access to the 2014-2015 hunting and fishing regulations without having to be connected to the Internet. It can also utilize a device's GPS capabilities to access location-specific regulations, such as exceptions to fish size and bag limits and county-specific hunting regulations.

"We wanted to make it easier and more convenient for hunters and anglers to find out what they need to know about the season dates, bag and length limits and other important information when they are

enjoying the outdoors in Texas," said Carter Smith, TPWD Executive Director. "We felt it was a priority to use this new technology to provide an added value to the sportsmen whose license dollars help conserve fish and wildlife for all Texans."

The content is mostly the same as in the printed *Outdoor Annual*, just in a different layout and with added interactivity. The screens are easy to use and have an easy to navigate layout. It includes things like county listings, species listings, definitions, and even details about species. The app will be updated to include waterfowl regulations in September.

The new app will include links to additional information such as Hunter Education Courses and the Weekly Fishing Reports; as well as, an ability to contact your local game

warden office. Links to purchase a license online and apply for Drawn Hunts will also be available through the mobile app, though Internet connectivity is needed to access these outside links.

Like the print version of the *Outdoor Annual*, the mobile app is free, fully funded with sponsor and advertising dollars.

To download the app, visit <http://www.txoutdoorannual.com/app> or search the iTunes App Store, Amazon AppStore or Google Play for *Outdoor Annual – Texas Hunting and Fishing Regulations*. The new app was developed by Texas Monthly Custom Publishing in partnership with the Texas Parks and Wildlife Department and is compatible with iPhones, iPads, Android smartphones and tablets.

NRCS CORNER

Fire and Fertility

by H.A. Reed, NRCS Technician

What happens to a tall stand of grass when it burns, and to the fertility in the soil?

All that mass seems to go missing, but what's really remaining in ash? Its contents vary depending on the fire's temperature.

Ranchers here in West Texas know the connection between fire and soil fertility well. I spoke with a rancher who told his story about a series of fires on his ranch. He said that areas where hotter fires burned had really slow re-growth, and the areas with smoldering, slow-burning

fires had the best re-growth of grass. He said his brush gradually came back thicker, and that his winter browse was scarce after the fires. This rancher also witnessed how the burned areas were less effective at absorbing rain water; the best thing that you could get was a slow inch in the following couple of weeks. After a few months, the water would just skate right off the hills. Experience is a great teacher.

Back to ash; fire pre-digests vegetation and releases locked-up nutrients, so that they are suddenly available for whatever sprouts back first. Most often it contains a lot of calcium carbonate, a substance that makes the soil pH higher (more alkaline). If

the vegetation is burned at lower temperatures, ash can contain some Nitrogen, (which helps with growth of leaves and stems). Some other nutrients – Phosphorus, Magnesium, and Potassium – can be more available following a fire. Phosphorus helps with root and flower growth, where Magnesium and Potassium help plants develop seeds and with general good health.

The rancher has it right: studies have shown that although a fire induces a surge of nutrient availability, infrequent fires are more beneficial than annual fires, and cooler fires leave behind the most nutrients.

Sources: TX A&M AgriLife Ext., *Journal of Ecology*, & Natl. Wildfire Coordinating Group

STAFF SPOTLIGHT: ANNALIESE SCOGGIN, TECHNICAL GUIDANCE

Got a pasture that needs pruning, a mystery plant in your prairie, or perhaps a pesky pack of feral pigs? Chances are Annaliese Scoggin can help you.

As the Trans-Pecos's new Technical Guidance Biologist, Annaliese uses her expertise on native flora and fauna to provide professional habitat and wildlife management advice to private landowners, land managers, wildlife cooperatives, and others.

Raised in Abilene, Annaliese obtained her B.S. and M.S. from Texas A&M University before joining the

TPWD team in 2009 as the Midland/Odessa area Private Lands Biologist. After five years in the Trans-Pecos, she moved up to the TG position in 2014.

"I love working with the individual landowners and ranch managers and helping them translate their goals for wildlife management into visible, tangible results through sound habitat management," Annaliese said. "This area has some amazing places and it is awesome to get to see them improve bit by bit for wildlife."

As with many area biologists, issues such as disease, invasive species (plant and animal), wildlife population declines, and large-scale vegetative changes top Annaliese's list of concerns. She is especially passionate about the use of prescribed fire in restoring historic habitat types and processes, and over her years with TPWD she has been acquiring education and experience using this tool in the Trans-Pecos and beyond. She hopes to be able to help area landowners safely and effectively begin more widespread implementation of this valuable habitat management practice.

Prior to joining TPWD, Annaliese's experiences ranged from studying the effects of Hurricane Katrina on animal and vegetation communities in Mississippi to working in a botany herbarium and teaching biology. Not only is Annaliese a Toastmasters-trained orator and volunteer

for several Permian Basin non-profit organizations, she is an avid hunter, amateur taxidermist, and official scorer/measurer for the Texas Big Game Awards and Boone and Crockett Club.

She and her family still own and maintain a ranch near Abilene, and Annaliese attributes much of her love of all things outdoors to her experiences there.

"As a kid I loved spending time with my dad at the ranch learning about what animals lived there, what they ate, how they behaved, and where they spent their time," she said. "It wasn't until I was in high school that I learned the wildlife field existed. I still wasn't sure what I wanted to do or what it was called, but once at Texas A&M, I found the Wildlife and Fisheries Sciences program and the rest is history."

Annaliese lives in Midland with her husband, three dogs, two cats, and three chickens. When she's not busy working, she can frequently be found exploring her favorite Trans-Pecos getaways: the Chisos Mountains and Big Bend Ranch State Park, the latter of which she believes is the area's best-kept secret.

"The beautiful views along the river road, historic sites, shaded canyons, dozens of springs, mountain vistas, miles of off-roading, hiking, or biking – and usually not another soul in sight!" she said. "Just save it for the fall or spring – the heat can be a bit much during the summer."



TG Annaliese Scoggin assisting with a wild turkey translocation project in 2013.

RESEARCH UPDATE

Shaving rats and mice in the name of science

by Sara J. Gray, BRI

As administrative coordinator of the Borderlands Research Institute, I've worn a lot of hats. My usual role as paper-pusher and bureaucracy-tamer takes up most of my time, but I've had a few other notable titles, too. I was a mule deer graffiti artist, spraying the hind ends of captured bucks for an antler development study (that way, the helicopter crew wouldn't catch the same deer twice). I was a pronghorn fawn tracker, trying and failing to catch a fawn at midnight, though I did succeed in whacking a graduate student in the head with my net. I was even a telemetry flight co-pilot, despite spending more time fighting airsickness than listening for radio signals.

But the role I enjoyed the most was that of rat-shaver. On a cool July dawn, I joined graduate student Bobby Allcorn on the Mimms Ranch for his study of rodent populations. Bobby's project is assessing the effect of past fires (both wild and controlled) on rangelands, and determining the size and population recovery of various small mammals. He had set the crackerbox-sized traps with a handful of seeds, peanuts, and corn kernels the evening before. The grass was tall from the recent rains, which made finding the traps like an Easter egg hunt.

If a trap was still open, I banged on it until it sprung; Bobby would return later that day to reset it with more food. If I found a closed trap, I opened it to see if a rodent was inside. Then I wrapped the trap's door with a Ziploc freezer bag and dumped my furry prize into the bag. After checking each set of six to eight traps, Bobby and I rejoined and measured our charges.

Gently, Bobby arranged each rodent within its bag to best measure its body, tail, hind leg, and ear with a set of calipers. (They stayed in the bag only long enough for us to measure them, so there was no risk of their suffocating.) I took a turn at this task as well, and though I was afraid at first of hurting the mice, I soon learned that they could squish down much flatter than I thought they could. Then he weighed each bagged rodent with a portable scale. I dutifully wrote down each number on

a legal pad as he called them out. Finally, he donned a work glove and carefully pulled each rodent out of the bag by the tail or neck scruff so he could assess its sex.



The next chore made me laugh. We had to mark each rodent so Bobby could later record how many he trapped more than once. He did so with a nose hair trimmer. He buzzed a little square of fur off of each critter, either on the nape of its neck or on its haunch. Some of them seemed to enjoy the haircut, sitting still and closing their eyes, while others thrashed around for dear life, squeaking all the while. I tried my hand at rat-shaving, only to find that the clippers were really dull. It took me a long time to make a visible patch, and it didn't help that the little guys were so squirmy. Bobby had a better knack for it. "I've been shaving rats for a while," he admitted. Our measurements done, we released each rodent back into the grass.

Though we recorded several different species, silky pocket mice (*Perognathus flavus*) were by far the most numerous of the rodents we caught. "Do you know why they're called pocket mice?" Bobby asked.

"Because they can fit in your pocket!" I grinned. They were barely bigger than the dwarf hamsters I'd seen at pet stores, and just as cute.

"Good guess, but no," he said as he fished another pocket mouse out of its bag. Grasping the mouse by its tail, he used the trimmer to flip it onto its back. I watched its tiny mouth open as it squeaked in protest, baring its yellow teeth. "See those flaps near its mouth? Those are its pockets. It stores seeds and other food in there. Sometimes, when I

catch one with its pockets full, it'll reach its little paw in and push out all the food at me, as if that's what I'm after."

Bobby: the world's largest mugger of mice.

We finished at 11:00, just as the day was growing uncomfortably hot. We had bagged and tagged 29 rodents in all—not a bad haul. "I have 120 traps in all, and the most I've caught is about 60," he said as we drove back to the ranch gate. "Some days I've caught none at all."

Though the silky pocket mice, kangaroo rats, and other small mammals Bobby studies aren't endangered, they are an important indicator for the health of an ecosystem as a whole. Their numbers can show which kinds of plants bounce back more quickly after fires. A healthy, varied population of rodents can also indicate what other predators—skunks, coyotes, snakes, birds of prey, and more—can be supported by recovering grasslands. Studies such as Bobby's are one of many tools BRI and TPWD use to study and steward the wide range of lands under their care. Though the silky pocket mice may be small, their influence is a big one. I'm looking forward to new roles within BRI—bighorn sheep and puma tracker, perhaps—but I won't soon forget the day I shaved rats.



Top: Measuring a silky pocket mouse's ear. Above: Graduate student Bobby Allcorn before the mouse's release back onto Mimms Ranch. (Photos by Bill Broyles.)

INVASIVE SPECIES

Aoudads compete with native ungulates

by Mike R. Sullins

Photos courtesy of TPWD

Aoudad sheep (*Ammotragus lervia*), also known as Barbary sheep, are native to the Saharan and sub-Saharan region of Africa. In the late 1800s, aoudads were introduced into Europe, in Spain, France, Germany, and Italy. Around 1900, surplus animals in European zoos and collections were brought to the United States to be placed in zoos. Surplus zoo stock was sold to private parties who eventually released some to the wild in New Mexico circa 1950, in Texas in 1957, and in northern Mexico at about the same time. Certainly there were more undocumented releases in West Texas and elsewhere since that time.

Now? Most of the southern and western counties in the Trans-Pecos ecoregion harbor free-ranging aoudad sheep, primarily in Presidio, Brewster, Jeff Davis, Hudspeth, and Culberson counties.

Many producers see significant economic benefit from the presence of aoudad sheep on their properties. Some folks just like to see them. This should not be undervalued. But here is the qualifier-

Aoudad sheep (like feral pigs) are a classic invasive exotic species. Aoudads compete directly with native ungulates (primarily bighorn sheep and mule deer). Because aoudads evolved in the Sahara desert, one of the driest places on earth, these animals are highly adapted to droughty conditions.

Aoudads have been reported in excellent condition during dry periods when domestic livestock, mule deer, and pronghorn were starving

and dying. It is reasonable to assume that during extended dry periods, when our native ungulates are severely declining, aoudads will continue to thrive and reproduce. One could surmise that this extra pressure on the landscape would further decrease the ability of native animals and vegetation to hang on in hard times and bounce back when conditions improve

Other competitive advantages aoudad sheep have over native species include higher fecundity rates; in other words, they can out-produce native ungulate species. Aoudad ewes may give birth twice per year, twins are the norm, and lambs seem to have high survival rates. Desert mule deer does in contrast will produce twin fawns once a year, if conditions are fair or better (often not the case), with a highly variable fawn survival rate. Aerial surveys flown in the rougher country may count more aoudad sheep than mule deer. Good data on total aoudad numbers, population trends, etc. is not available as yet, but anecdotal reports from ranchers, managers, and resource professionals indicate a continually growing population.

In addition, in terms of forage use, native ungulates are at a great competitive disadvantage because aoudads have the ability to change their diet from browse (brush and low trees) to predominantly grass, which mule deer and bighorn cannot. Thus, they can eat all the deer food available and then go to grass, while deer starve. One could presume that aoudads also compete directly with live-



stock for forage at times. Another great advantage these particular exotic animals have over our native animals is they do not appear to be as prone to predation, possibly because of their size and herding behaviors. When predators attack, adults surround lambs and yearlings, and large rams defend the group. Mule deer and bighorn sheep, on the other hand, are subject to heavy predation.

Aoudads can survive long periods without fresh water, longer than any of our native ungulates, and can disperse over long distances. They have a long life span as well (reported to be as much as 20 years in captivity), effectively twice that of mule deer.

Native wildlife habitat/range condition would be impacted negatively where aoudad sheep are abundant. Aoudads can monopolize waters, feed stations, and useable space. Aoudads are presumed to interrupt bighorn sheep reproduction. It is likely the presence of high numbers of aoudad can impact bighorns negatively because of direct competition for resources between the species and possible disease transmission. Because of this, the presence of aoudads may affect attempts at reintroduction of bighorn sheep, and are a chronic worry of resource managers.

At this point aoudad sheep are here to stay. The question is: Will aoudad sheep be the numerically dominant herbivore species in the Trans Pecos?

And is this a good thing?



RESEARCH UPDATE

Gambel's quail transplant update

by Bonnie McKinney, ECLCC

In August 2013, TPWD approved a proposal by the El Carmen Land & Conservation Co. (ECLCC) to reintroduce Gambel's quail to historic range in southeastern Brewster County. Thus, the following December, Bonnie McKinney (ECLCC), Mike Janis and Mike Sullins (TPWD) selected sites for the capture of wild Gambel's quail in Presidio County.

After prebaiting, trapping was conducted one day in December and two days in January. A total of 213 Gambel's quail were captured. All quail were banded with standard aluminum numbered TPWD bands on one leg, and color banded with coil plastic bands on the other leg. A total of 12 quail (6F, 6M) were affixed with backpack radio transmitters. Pertinent data was taken from each bird.

Two birds escaped while being transferred to transport cages, for a total of 211 birds transported from the trap sites along the Candelaria Road (west of Presidio) to ECLCC in southeastern Brewster County. Quail were held overnight in transport crates (25 quail per crate to prevent overcrowding), and they were kept at a constant temperature inside the headquarters house. The next morning quail were transported to the release site along the Rio Grande floodplain in typical Gambel's habitat.

No mortalities occurred during capture or transport, and all birds were in excellent shape at the release. A remote camera was placed at the main water trough near the release site. Quail with transmitters were monitored closely by ECLCC and TPWD personnel. One quail was killed by a predator, and an additional eight transmitters were dropped. However, we were able to identify these birds later by their color bands using remote cameras and direct observations, confirming that they were not mortalities but dropped transmitters. Three birds still have transmitters and are being monitored by radio telemetry.

The quail settled in, re-formed coveys, and slowly spread out from the release site. At least one covey moved across the Rio Grande into Mexico but remained along the floodplain. We supplemental fed using milo and quail blocks in strategic locations. By early April, pairs had formed,

and using the color bands for identification, individual pairs were identified as well as 106 single birds. Currently this population of transplanted birds is in excellent condition; reproduction was excellent, and hatches were large with most pairs hatching upward of 12 chicks, with several pairs hatching 16-24 chicks. Trapping and banding of this year's young will be conducted this fall to obtain more information on survival and longevity. Six additional small water guzzlers have been installed to provide not only Gambel's but scaled quail with permanent water sources in the lower desert elevations.

Many thanks also to Billy Pat McKinney and Robert Haynes (ECLCC), TPWD, Robert Perez, Billy Tarrant, Philip Dickerson, Mark Garrett, Travis Smith, Brandon Childers, Christopher Maldonado, Don Cash, and Alan Fisher for all of their contributions to make this project a success.



News and Events

Sept 19 & 20: Guest speaker Brad Lancaster talks about rainwater harvesting in Alpine and Marfa. Contact the Highland Soil and Water Conservation District at (432) 729-4532 for details.

Oct 16-19: Mule Deer Foundation Guzzler Project. Help build a guzzler to benefit wildlife species on the Adams Ranch in southern Brewster County. Contact David Wetzel for questions/RSVP as soon as possible (preferably before Sept 17): dwetzel@phoenixlandandcattle-company.com

IMPORTANT REMINDER

Chronic Wasting Disease (CWD) Check Stations: TPWD biologists will again be collecting samples from harvested deer at check stations throughout the district. Stations will operate every weekend of the Mule Deer General Season (Nov 29—Dec 15). The Van Horn check station will operate on an on-call basis throughout mule deer MLDP season to collect samples from any Containment Zone deer (as required by law).

What are we doing these days?

Your TPWD biologists participate in a number of annual wildlife surveys and regional activities every year. In addition to working with MLDP co-operators on surveys and habitat management, here's a list of what we'll be doing in the coming fall/winter:

Sept: Conduct state white-tailed deer spotlight surveys in Terrell, Pecos, Midland, and Upton Counties. Conduct vegetation transects on WMAs.

Oct: Begin collecting age/weight/ antler data at deer processing facilities (throughout deer season). Conduct mule deer surveys on WMAs.

Nov-Dec: Operate weekend CWD check stations during the Mule Deer General Season (and later for MLDP-harvested deer in counties which require testing), conduct browse surveys on private ranches and WMAs, and possibly assist with bighorn sheep translocation (if one occurs).

Jan-Feb: Conduct state mule deer helicopter surveys, and possibly assist with pronghorn translocation (if one occurs).

Snap that snake! Log that frog!

by Cullen Hanks, TPWD Texas Nature Tracker Biologist

The Herps of Texas Project (HoTX) is documenting amphibian and reptile diversity in District 1. Through the online portal iNaturalist, HoTX is a repository for photo-based observations of amphibians and reptiles in Texas. However, HoTX is more than just a simple repository; it is a tool for species identification and an online community for sharing information. Images posted to HoTX are identified to species and vetted by project curators and other project participants. Ultimately, this data has the potential to serve a number of conservation and research purposes. In just under two years, HoTX has generated close to 10,000 observations of amphibians and reptiles in Texas, 14% of which were made in District 1 alone. www.inaturalist.org/projects/herps-of-texas.



Managed by the Texas Nature Tracker Program, the HoTX project is a collaboration between TPWD's Wildlife Diversity Program, Texas A&M University, and the University of Texas in Austin. When you post to the project, your observation will be identified to species and made available to research and conservation efforts now and in the future. It will also keep track of your observations, giving you a tally of how many species you have encountered for a given county or region.

Posting observations is easy; most observations are made with smartphones, but you can post photos taken with any digital camera. To post observations with your smartphone, download the Texas Nature Tracker App: www.tpwd.texas.gov/tntapp.

Data collected will be used to improve our understanding of the current distribution and seasonality of amphibian and reptile species in Tex-



as. This data is a valuable addition to research efforts at UT Austin, Texas A&M, and by our state Herpetologist, Andy Gluesenkamp. This data, along with specimen records from museum collections, is being used to help direct more sophisticated surveys for high priority species across the state.

For the Wildlife Diversity Program, our highest priorities are the Species of Greatest Conservation Need (SGCN). You can download the complete SGCN list here: www.tpwd.state.tx.us/landwater/land/tcap/sgcn.phtml

Data for SGCN species will be added to the Texas Natural Diversity Database (TXNDD). This database is our primary repository for information on populations of rare species in Texas. The TXNDD plays a critical role in the ranking of species. In addition, when our Habitat Assessment team reviews the potential impact of a road or other development project, TXNDD data is always consulted.

In addition to posting to the Herps of Texas Project, you can submit a reporting form directly to the TXNDD. The TXNDD reporting form is a great tool for documenting additional information about a population that is a known tracked species. To learn more about the TXNDD and download a reporting form, go here: www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/txnndd.

In addition to documenting rare species, this is a valuable tool for documenting introduced species and expanding ranges. Two examples are the Brown Anole, an introduced species from Cuba, and the Rio Grande Chirping Frog, a species that has been expanding its range with the help of the horticulture trade. If you detect an exotic or unexpected species, it could be really valuable observation.

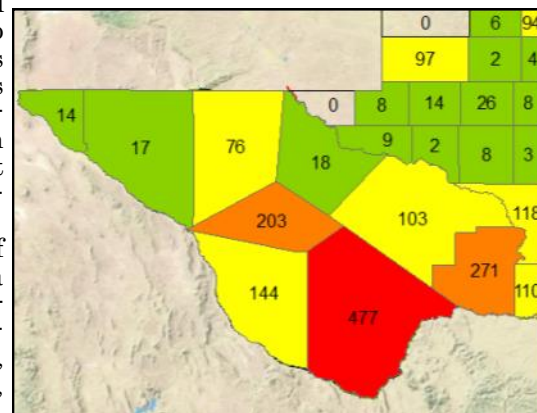
District 1 is a critical part of the project as West Texas hosts a high overall amphibian and reptile diversity which includes several SGCN species. For example, box turtles, prairie rattlesnake, massasauga, Woodhouse's toad, and all three species of horned lizard are high priority species that can be observed here.

Currently, about 14% of HoTX observations have come



from District 1, but these observations represent about 50% of the species documented in the state. This includes about 20 species of amphibians and 80 species of reptiles. The most common observation was Western Diamondback (117 observations) followed by Black-tailed Rattlesnake (57 Observations). Together, these two species made up over 12.5% of the observations. The most common amphibian was Red-spotted Toad (37 observations) followed closely by Texas Toad (36 observations).

There were observations in every county except for one, Loving County. So if you find yourself in Loving County, you could be the first person to post an observation for it!



Photos from iNaturalist observations. Left: Black-necked gartersnake. Top right: Couch's spadefoot. Middle: Greater short-horned lizard. Bottom: Number of observations for D1 as of September 2014. (Photos by Cullen Hanks)



Life's better outside.®

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Mission

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.

Philosophy

In fulfilling our mission, we will:

- ▶ Be a recognized national leader in implementing effective natural resources conservation and outdoor recreational programs;
- ▶ Serve the state of Texas, its citizens, and our employees with the highest standards of service, professionalism, fairness, courtesy, and respect;
- ▶ Rely on the best available science to guide our conservation decisions;
- ▶ Responsibly manage agency finances and appropriations to ensure the most efficient and effective use of tax-payer and user fee resources;
- ▶ Attract and retain the best, brightest, and most talented workforce to successfully execute our mission.

We're on the Web! Look for our Facebook page, or read about programs and habitats at http://www.tpwd.state.tx.us/landwater/land/habitats/trans_pecos/

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