Darks Darks Wildlife

HIT THE ROAD FOR A TOAD

Texas' reptiles and amphibians spur a quest to see them all

STATE PARK SURFING

Wintertime waves are swell at Mustang Island

WETLAND WONDER

Lone Star Land Steward winner focuses on water and wildlife

ME GOT DOOR MAGAZINE OF TEXAS . NOVEMBER 2021

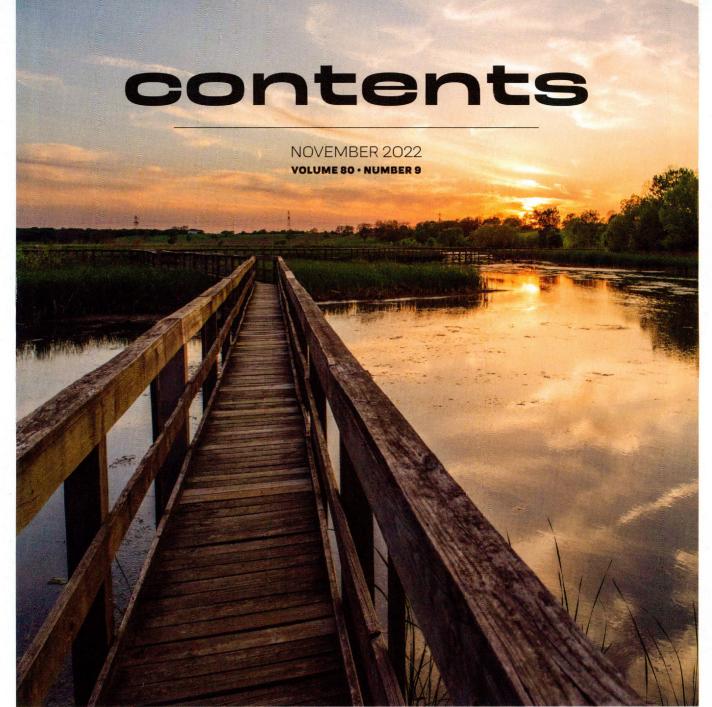
TIME TO TALK

Your preseason guide to hunting Texas' wiliest game bird.

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A boardwalk crosses a wetland area at the John Bunker Sands Wetland Center, winner of the 2022 Leopold Conservation Award.

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Watery Wonderland

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Hit the Road for a Toad

A fascination with Texas' reptiles and amphibians spurs a yearlong quest to see them all.

by Romey Swanson

ON THE COVER: A big gobbler shows his stuff on a ranch near Alice. a Adan Alvarez | Bull's Eye Photography

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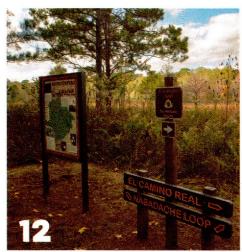


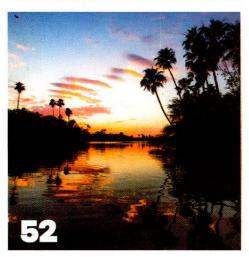
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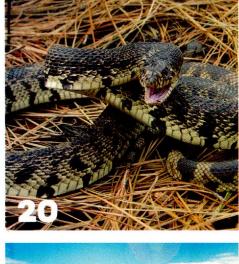
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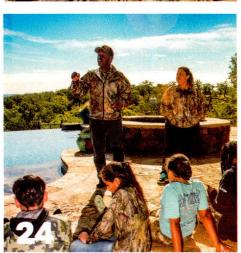
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WHEREIN TEXAS?





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FROM THE EDITOR

THERE ARE NO BAD SNAKES AND NO UGLY BIRDS. That's the lesson I learned seven years ago while working on the May 2015 issue of this magazine.

The snake article we were running, which contained some of the usual fear-and-loathing of vipers, "skirts the edge of my comfort zone since there is so much hysteria about venomous snakes," our state herpetologist said.

Certain snakes have developed incredible adaptations — such as venom — to survive and thrive, he said, so we shouldn't hold that against them. If anything, they should be objects of wonder, not fear, he told me.

The bird article we were running was a roundup of the most beautiful birds in Texas. Our state ornithologist, who wrote the article, threw in three not-so-beautiful birds as a sidebar. Our headline called them "ugly birds." He chastised us for calling them ugly — they are all nature's creatures. Realizing some birders also might not appreciate the derogatory term, we changed the sidebar heading to "And Three 'Other' Ones."

So there you go. There are no bad snakes and no ugly birds.

One person who might share that sentiment is Romey Swanson, who wrote this month's article "Hit the Road for a Toad," documenting his quest to see as many Texas reptile and amphibian species as he could in a year. Romey works for Audubon Texas, so he's a bird guy as well as a herp guy. Read the tale of his adventures on Page 40.

Whether you hunt turkeys in fall or spring, you can use Russell Graves' guide on Page 26 to prepare for the season. And speaking of turkeys, Thanksgiving is just around the corner. We hope you have a nice, fulfilling holiday, whether it's turkey-filled or turkey-free.

Our 2022 Lone Star Land Steward winner, and our summer intern Paula Levihn-Coon, have both found inspiration in Aldo Leopold's land ethic. Paula's profile of the John Bunker Sands Wetland Center is on Page 34.

In this month's State Park Adventure, I was happy to learn more about Texas surfing from surf icon Cliff Schlabach. He's been surfing in Texas for decades, and he says Mustang Island State Park's Fish Pass was once the hottest surfing spot on the coast. In winter, the main surf season in Texas, it regains some of its former glory.

I hope you find your own adventure this month, whether it's surfing, looking for snakes or admiring our state's beautiful birds (and even the "other" ones).

Russell Roe, Editor



MAIL CALL

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GOSH: CAMPING AND DOGS

We enjoyed participating in the Great Outdoor Scavenger Hunt this year and have a couple points of feedback.

It would be especially helpful if the scavenger hunts are near tent-friendly campsites or land where dispersed camping is available. For example, the South Texas region this year had a number of points near Corpus Christi/Brownsville that were not near campsites.

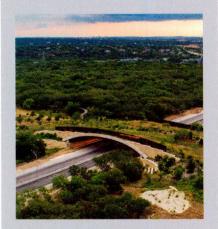
We enjoy bringing our dog on family trips, but a number of places did not allow dogs, such as the pool area of Balmorhea State Park.

We especially enjoyed the scavenger hunts that included hiking.

Thank you for making the scavenger hunt every year! We love it!

LACEY McCafferty

WHERE IN TEXAS?



A bridge in San Antonio doesn't serve cars but instead allows for safe passage of wildlife and people. The Robert L.B. Tobin Land Bridge at Phil Hardberger Park — the answer to October's Where in Texas? — connects two sides of the park. It opened in December 2020. See this month's Where in Texas? on Page 58.

A GREAT SUMMER OF GOSH

Thanks to everyone who participated in our third Great Outdoor Scavenger Hunt. As we start planning for GOSH 2023, here's a look back at what made 2022 our best GOSH summer yet!

Nancy and Greg Poort, Cyndi Morris, Jimmy Morris and the Melvin family visited all 48 statewide GOSH 2022 locations. Anita Braun, Tracy Campbell, Jolie Jennings, Lacey McCafferty, Nancy and Pete Weisell, Stephanie Bowers, Virginia Woods, the Bryant family, Mark Risha, Christi Johnson, Trisha Baker, Robin and Sharon Ruland and Karen Hacker completed at least one GOSH region.



▲ "Everything's bigger in Texas": Participants at Waco's Deep in the Heart Film Festival got together at Lover's Leap for an incredible 31-person selfie — the largest GOSH group shot we've seen!



▲ Rock on: This year, in addition to adding a music category, the magazine staff put together a Texas road-trip playlist to keep you company on your GOSH adventures. Here's a raised earbud salute to the nearly 1,000 of you who streamed along with us.



▲ Thanks, Mom & Dad: Magazine photographer Maegan Lanham's parents hold the honor of shooting the very first GOSH selfie of 2022, though we suspect they might have gotten some inside information in advance of the official launch date.



▲ Most committed explorers: Not only was the Melvin family the first to complete this year's scavenger hunt, they're also three-time GOSH finishers, having visited every GOSH location from 2019, 2021 and 2022 — that's more than 100 GOSH locations, plus corresponding selfies.



▲ She's still kicking: Three years ago, Virginia Woods completed every GOSH category at the young age of 92. Age may have slowed her down, but it didn't stop her from participating in GOSH again this year. Now a spry 95, Virginia and her family completed the Central Texas category, and visited six additional GOSH locations across the state.

▲ Goin' through Big D: Dallas/Fort Worth proved to be our most-visited GOSH region. The Fort Worth Water Gardens holds the distinction as the most-visited GOSH location.



▲ They had a plan: MHS Planning snuck in with our final GOSH selfie, a group shot in front of one of the San Marcos mermaids.



We could talk about class-leading comfort, space, and safety for both rows of passengers. We could fill this page bragging about the engine's famous reliability, or how the exclusive Automatic Dual-Clutch Transmission maximizes power and performance under any conditions. We could describe how the new Tow/Haul Mode makes hauling heavy loads easier, as if that needed explanation. But instead, we prefer to let quality speak for itself.

'NUFF SAID.



POWERS IN THE MADE HOLD WITH THE SEAT BELT ON AND HOLD RESPONSIBLY ALWAYS WEAR ALL ENOUGH FOR DOWNERS IN YEARS AND OLDER: MULTI-PURPOSE UTILITY VEHICLES (SIDE BY-SIDES) CAN BE HAZARDOUS TO OPERATE. FOR YOUR SAFETY, DRIVE RESPONSIBLY ALWAYS WEAR AS HELDER, EVEN THE SIDE NETS AND DOORS CLOSED, AVOID EXCESSIVE SPEEDS AND BE CAREFUL ON DIFFICULT TERRAIN, WE RECOMMEND THAT YOU COMPLETE THE RECREMINANCE OF HIGHWAY VEHICLE, MOVE COURSE, THE FREE COURSE IS AVAILABLEAT WAWNROHYA, DRIG. READ THE OWNER'S MANUAL BEFORE OPERATING THE VEHICLE. NEVER DRIVE AFTER CONSUMING-DRUGS OR ALCOHOL, OR ON-TUBLIC ROADS. DRIVER AND PASSENGERS MUST BE TALL ENOUGH FOR SEAT BELT TO SIT PROPERLY AND TO BRACE THEMSELVES WITH BOTH FEET FIRMLY ON THE FLOOR. RESPECT THE ENVIRONMENT WHEN DRIVING. FiguREPID IS A PROSSENGER MUST BE ABLE TO AND BOTH FEET ON THE FLOOR. RESPECT THE ENVIRONMENT WHEN DRIVING. FiguREPID IS A PROSSENGER MUST BE ABLE TO AND BOTH FEET ON THE FLOOR. RESPECT THE ENVIRONMENT WHEN DRIVING. FiguREPID IS A PROSSENGER MUST BE ABLE TO AND BOTH FEET ON THE FLOOR. RESPECT THE ENVIRONMENT WHEN DRIVING. FIGUREPID IS A PROSSENGER MUST BE ABLE TO AND BOTH FEET ON THE FLOOR. RESPECT THE ENVIRONMENT WHEN DRIVING. FIGUREPID IS A PROSSENGER MUST BE ABLE TO AND BOTH FEET ON THE FLOOR.



STATE PARK ADVENTURES

SURF TEXAS

ack in the day, it was the hottest surfing spot on the Texas coast.

The Fish Pass Jetties at Mustang Island State Park produced waves that wouldn't look out of place in California.

Since the pass silted up in the 1980s, the waves haven't been quite the same. But when winter rolls in, they return to a semblance of their former glory.

"The jetties cause the waves to line up right there, and they kind of peel off going down the line, like a small point break," says Cliff Schlabach, longtime local surfer and co-chairman of the Surfrider Foundation. "The waves are really good in the winter — 'long left' breaking waves."

Surfers need structure for good waves. In

Texas, that means jetties and piers, which slow down the current and create the sandbars needed for surf.

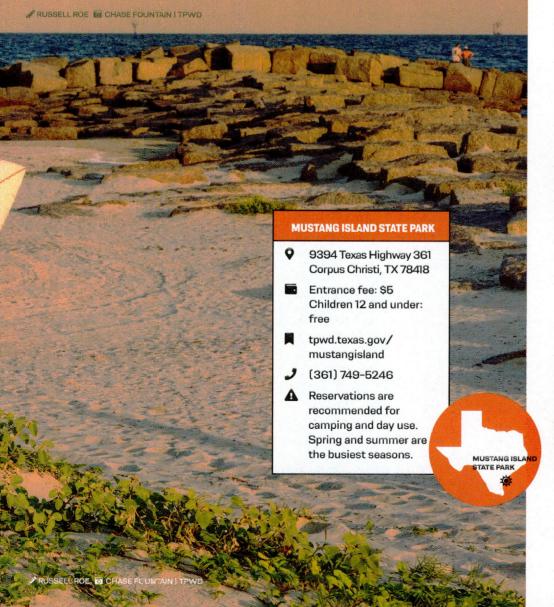
Mustang Island's Fish Pass Jetties fit the bill, and wintertime offers prime surf.

"By November, we start getting our fronts moving through, and that switches our swell," Schlabach says. "The swell switches from southeast to northeast, and that's a whole different wave. It's bigger, longer and cleaner."

For Schlabach, Mustang Island offers an escape from the surfing crowds that gather in Corpus Christi or Port Aransas.

"It makes you feel like you're off on a real surf safari," he says.

Grab a board and a wetsuit, and you, too, can go on your own Texas surf safari.



At the Beach

Mustang Island was named for the wild horses that roamed the island. The state park opened in 1979 and contains more than five miles of coastline.



BUILD A SANDCASTLE

There's plenty of sand to build your own castle or whatever you can dream up. Shells and sticks provide decorative touches.



FISHING/PADDLING

On the bay side, three paddling trails pass through some of the best shallow-water fishing areas in Texas and offer close-up views of coastal birds.



ACCESSIBILITY

If you need mobility assistance, two beach wheelchairs are available for loan, free of charge.



TAKE A HIKE

ROYAL ROAD

Nabedache Loop at Mission Tejas State Park

You can trace the origins of Mission Tejas State Park to a dispute between two world superpowers.

France and Spain both coveted the land that is now Texas. After French colonists settled on the Texas coast in 1685, the Spaniards responded by building Mission San Francisco de los Tejas in a Caddo village in 1690, the first mission in the province of Texas.

In the 1930s, local citizens bought land to commemorate the mission, and Mission Tejas State Park followed.

The park's Nabedache Loop, named for a Caddo tribe, is a moderately easy and invigorating walk in the woods that takes you past the remnants of El Camino Real, the Royal Road that Spaniards traversed to build missions and maintain their presence in Texas.

The trail encircles a surprising pocket prairie amid the pines and hardwoods of East Texas.

"It's a unique ecosystem in the middle of the woods," says park Superintendent Gary Coker. After following the San Pedro Spur to access the Nabedache Loop, a left turn takes you to a bird blind, where wildlife watchers can see woodpeckers, cardinals, sparrows and thrushes.

A short distance later, San Pedro Creek appears, with creekside benches for resting. The trail roughly follows the creek for a while, with bottomland hardwood trees on the outside of the loop and grasslands on the inside. As the trail doubles back, it follows the base of a slope filled with pines and hardwoods. Along this section, traces of El Camino Real come into view.

"It's like a big swale, a ravine, reflecting years and years of travel," Coker says. "It's really visible for 50 to 100 feet."

The park attracts school classes as a living lesson in Texas history.

"It's a nice place to stop and reflect on how Texas got started," Coker says. "Just about everybody you see in a Texas history book, all of them probably spent time on El Camino Real."

PRUSSELL ROE SONJA SOMMERFELD | TPWD



Trail sign/El Camino Real



Bird blind



San Pedro Creek access



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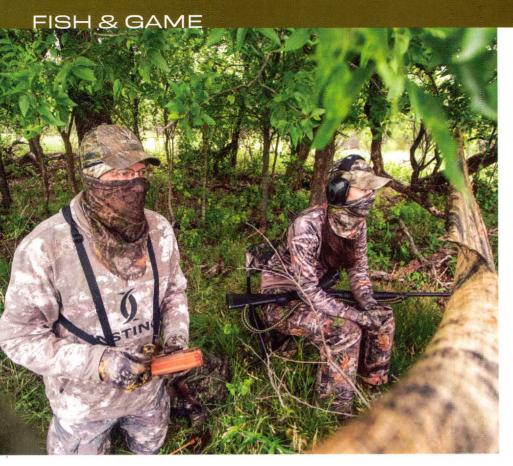
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HUNTING ACCIDENTS HIT RECORD LOW IN TEXAS

ere's a trend that's heading in the right direction as fall hunting season approaches:
Hunting-related accidents in Texas are at an all-time low since
Hunter Education became mandatory in 1988, according to the 2021 Texas Hunting Accident Report released by the Texas Parks and Wildlife Department.

Texas experienced only one fatality and 11 nonfatal accidents statewide in 2021, according to the report, and recorded 49,000 Hunter Education certifications.

"In 2021, three-quarters of the incidents were what we call 'swinging on game outside of a safe zone of fire," says Steve Hall, Hunter Education coordinator for TPWD. "This is the most common mishap in Texas, besides careless [firearm] handling in and around vehicles. The cardinal rule of hunting and shooting safety is keeping the muzzle of a firearm always pointed in a safe direction."

The latest accident total marks a significant decrease from 1988, when Texas reported 12 fatalities and 70 total accidents throughout the state. More than 18,000 Texans received their Hunter Education certification that year.

Texas hunting accidents peaked in 1968 with 105, including 68 fatalities.

Hunter Education became mandatory in Texas in 1988 for hunters born on or after Sept. 2, 1971. TPWD has offered courses since 1972, certifying 1.5 million students.

Hall says these three tips will help ensure a safe experience for hunters whether they're at home, in transit to their hunting spot or spending time in the field:

- Unload all firearms when not in use; don't reload them until you're ready to shoot.
- Be sure of your target and what's in front of or behind it.
- Wear blaze orange to be seen by other hunters.

NEW DIGITAL LICENSE OPTION AVAILABLE FOR SUPER COMBO USERS

a paper Super Combo license at home again with the new digital tag option from the Texas Parks and Wildlife Department. Texas residents can now purchase a digital Super Combo license that allows you to digitally tag your harvested deer, turkey and oversized red drum. (This digital license option is available through online purchase only.)

ever worry about forgetting

Digital license holders will not receive a printed license or tags but must keep their digital license available while in the field. The license can be viewed through the TPWD Outdoor Annual and My Texas Hunt Harvest mobile apps.

"This has been a long time coming, but we think it's a great first step toward offering more options for our hunters and anglers in the field," says Carter Smith, TPWD executive director.

The pilot program is also offered to Lifetime Combo license holders this year.

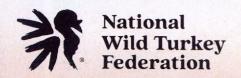
TPWD is seeking feedback from customers who choose this option so the agency can evaluate how well it works.

More information can be found at *tpwd.texas.gov/digitaltags*.

Digital Super Combo tag tips:

- Digital tagging for harvested deer, turkey and oversized red drum must be completed through an updated version of the My Texas Hunt Harvest mobile app.
- Digital license holders are not exempt from the Federal Duck Stamp requirement. Sign that license and keep it with you while hunting waterfowl.
- Other licenses purchased (Annual Public Hunt, Bonus Red Drum Tag, etc.) will show up as separate digital items.
- The number and type of tags issued are limited by species; find a full list on the TPWD digital tag webpage. All other regulations still apply.
- Track your tag usage in the My Texas Hunt Harvest app. Never harvest an animal without an available tag.

P TPWD STAFF @ CHASE FOUNTAIN | TPWD



We're enhancing Texas wildlife habitat, restoring wild turkey populations and growing support for hunters in the Lone Star State.





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OFF THE PAGE

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OCT. 30-NOV. 5

A home for native bees, coastal prairie ranch habitat, Fort Boggy State Park.

NOV. 6-12

Saving our sharks, Indian Springs stewardship and history, crazy ants invade.

NOV. 13-19

Collecting native seeds, below the Wuest Ranch, Huntsville State Park.



NOV. 20-26

Guarding a rookery island, tallgrass prairie restoration, San Angelo State Park.

NOV. 27-DEC. 3

Hiking a hundred miles for fun, Wagley Ranch's Cross Timbers habitat.

BLOG

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Join us for tips to enhance your outdoor experiences! Check out our blog at tpwmag.com as we help Texans find joy in the outdoors.



NEW PADDLING TRAIL LAUNCHES AT TOLEDO BEND

Looping route explores bay and bayou on East Texas lake.

exas' newest paddling trail has opened on Patroon Bayou at Toledo Bend Reservoir, an East Texas lake known for scenic beauty, bird-watching and bass fishing. This trail, the 79th official one in Texas, is ready for canoeing or kayaking adventures.

"The Toledo Bend-Patroon Bayou Paddling Trail lets you explore a quieter part of the Toledo Bend Reservoir," says Shelly Plante, nature tourism manager at the Texas Parks and Wildlife Department. "By paddling through this side arm of the lake, paddlers will experience great birding and fishing while enjoying views of the surrounding national forest lands. It's quite an experience!"

Paddlers can access this loop trail at Holly Park Marina, so no shuttle is needed. The trail length ranges from two to eight miles depending on the chosen route, and takes up to six hours to complete, depending on factors



including the route, water level and wind speed. Of course, stopping to fish will add to the time as well.

The trail offers an open-water paddling experience on Patroon Bay before moving to the more riverine Patroon Bayou on the opposite side of the bay. It's also important to note that paddlers crossing the open-water portion of the trail could face high winds and waves.

Birders will see wood ducks, egrets, herons, bunting and storks in the summertime, while a winter trip enables paddlers to view sparrows, pintails and teals — great bird-watching opportunities all year long. Paddlers can also expect to see other forest wildlife in the bayou.

If fishing is the objective, ample opportunities abound to reel in a big catch. Largemouth bass are the most popular game fish at Toledo Bend. In addition, plenty of bluegill and sunfish provide excellent fishing, especially for young or new anglers.

ROADRUNNER PLATE DEBUTS

Project benefits wildlife viewing programs in Texas.



he Texas Parks and Wildlife Department has launched the long-awaited greater roadrunner conservation license plate to help support and expand wildlife viewing programs and habitat conservation work in Texas.

"The greater road purpoer is an isomic image for Texas that we have

"The greater roadrunner is an iconic image for Texans that can be seen in every county of the state and is one of the toughest birds around — it's even known for eating rattlesnakes," says Shelly Plante, TPWD's nature tourism manager. "It's also one of the few birds people recognize and remember the first time they see it, given its unique profile — all of which makes it the perfect symbol for Texas wildlife viewing and nature tourism."

TPWD invited the public to vote for their favorite design last April. The winning design, now on the plate, shows the roadrunner in a proud, confident stance, a signature look for this Texas bird.

Texas wildlife photographer Hector Astorga generously donated the image.

Funding from the roadrunner plate will help support and expand programs such as the Great Texas Wildlife Trails, Texas Paddling Trails and Great Texas Birding Classic, all of which make it easier for Texans to find great places to view wildlife and enjoy nature. The roadrunner joins last year's monarch plate and other plate designs such as the horned lizard, largemouth bass, hummingbird, white-tailed deer, bluebonnet and bighorn sheep. Conservation plates benefit Texas fisheries and rivers, state parks, big game management and more.

All TPWD conservation specialty plates cost \$30 a year, with \$22 supporting various programs and efforts. To buy a roadrunner plate or for more information on TPWD's conservation license plates, visit www.conservationplate.org.

MARINE LIFE

U.S. STAMP FEATURES CORAL REEF OFF TEXAS COAST



Flower Gardens' queen angelfish will grace envelopes.

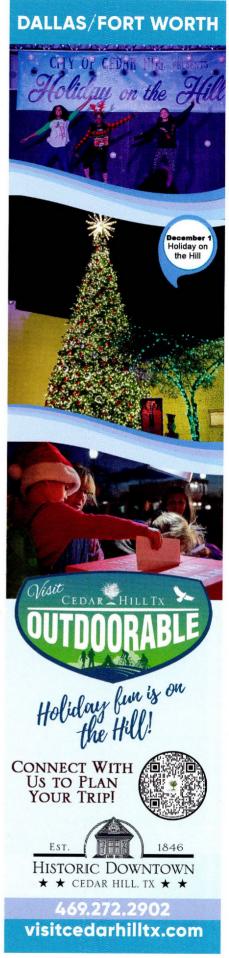
he U.S. Postal Service has released a new stamp series featuring Texas' own Flower Garden Banks National

Marine Sanctuary. The stamp set honors the 50th anniversary of the National Marine Sanctuary System, our nation's underwater national parks that protect areas with special ecological, cultural and historical significance.

The 16 new Forever stamps showcase the abundant wildlife and diverse ecosystems that can be found throughout the national marine sanctuaries. The Flower Gardens stamp features a brilliantly colored queen angelfish.

The Flower Garden Banks sanctuary, 100 miles off the Texas coast, protects 160 square miles of marine habitat in the Gulf of Mexico.

Its deep-water features include salt domes and the reef-building corals that live on top of those formations. Those who visit for sportfishing and diving can see coral heads bigger than cars and a bounty of wildlife including whales, sea turtles, birds, rays and hundreds of species of fish.



FLORA FACT

FEATHERY FRUITS

Silverleaf mountain mahogany is a hardy survivor with a delicate side.

BY ADAM SAUCEDA

f you are ever hiking the limestone trails of the Rolling Plains or the rocky chaparral uplands of the northern Trans-Pecos and come across a seemingly alien plant that seems to be growing feathers, take a closer look. The otherworldly plant may be silverleaf mountain mahogany.

Cercocarpus (Greek for "tail" and fruit") montanus (Latin for "mountain") is a well-named native perennial. Its seeds sport fuzzy feather-like tails, and it often grows at elevations above 4,000 feet. It requires little moisture and is adapted to withstand hot, direct sunlight and even fire.

Spanning from Texas into New Mexico and other Western states, it is notably identified by its silverywhite, feathery fruits occurring from May to November in Texas.

The hairs on these fruits aid in dispersal, often getting carried by the wind or caught in animal fur. When these strange-looking fruits finally come to rest in dry, well-drained soil, they begin to curl or "twist" to help anchor themselves for germination.

Dainty, yellowish flowers precede the fruit. The plant's leaves are primarily evergreen, remaining dark green on top all yearround with a white or silver fuzzy underside.

While silverleaf mountain mahoganies in Texas can grow up to 15 feet tall, they often don't get beyond shrub size because they make popular forage for deer, antelope and livestock.

Indigenous tribes found numerous ways to utilize the parts of this hardy plant to overcome numerous ailments in their difficult day-to-day lives.



Almost every part of the plant was used to combat medical problems ranging from stomach aches, pneumonia, coughs and colds to wound care of sores, cuts and burns. It was brewed with tea and ground up for dyes and paints. In New Mexico, Spaniards used the leaves around and under their mattresses to ward off bedbugs. The wood was used to make tools.

In today's Texas yards and landscapes, it can be used as a small, drought-tolerant ornamental for its unique beauty.

✓ LAURA ADAMS



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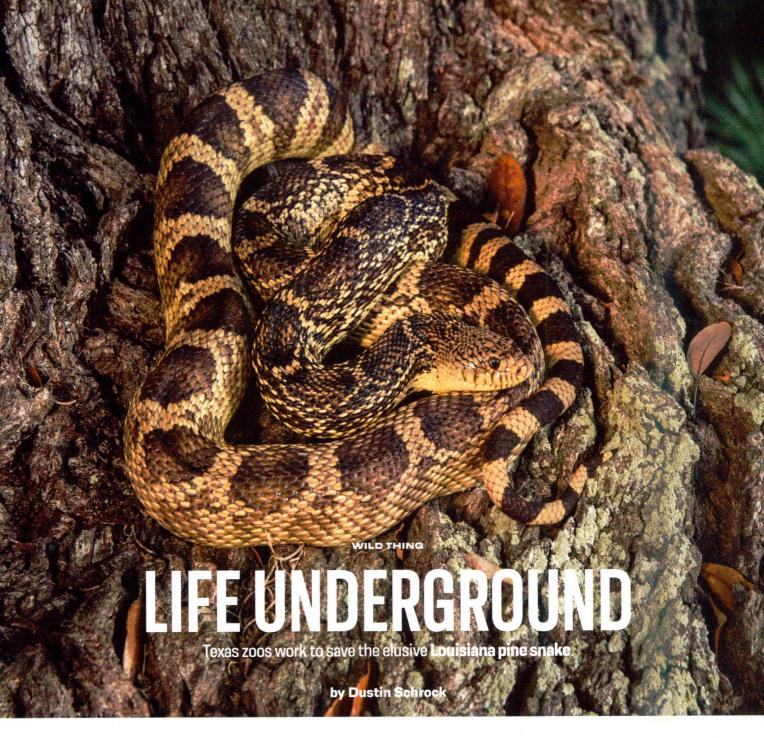
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onsidered one of the rarest snakes in North America, the Louisiana pine snake once ranged across East Texas and west-central Louisiana. Loss of habitat and the snake's tendency to spend much of its life underground ensure that even the most dedicated herpetologists and snake enthusiasts have difficulty locating the shy forest dweller today.

The scarcity of sightings may seem odd considering the reptile is a large constrictor that can grow up to 5 feet, with earthy brown, blotched patterns on a white-and-yellow background. However, the snake doesn't spend much time on the

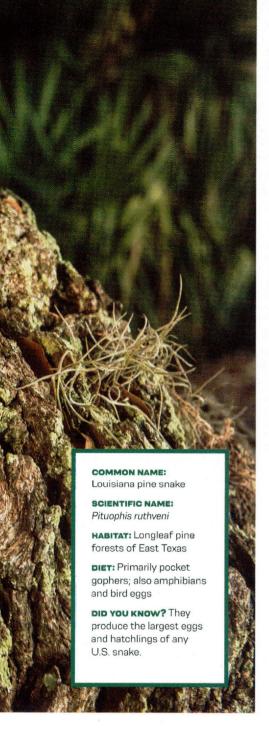
forest floor, instead hunting Baird's pocket gophers in their burrows. Unlike most constrictors that tend to coil around their prey, the Louisiana pine snake slithers down into the narrow burrow past the gopher, turning around to pin it against the wall, suffocating it.

The destruction of longleaf pine habitat has been a major factor in the reduced population of the Louisiana pine snake. Like the Baird's pocket gopher and the red-cockaded woodpecker, these snakes thrive in fire-adapted longleaf pine savannas with sparsely covered sandy soils. Commercial harvesting of the longleaf pine and fire suppression

throughout the 20th century changed the characteristics of the southern pine forest. Once the dominant plant community of the South, covering 90 million acres, only 3 percent of longleaf habitat remains.

Snake lovers, take heart! While this threatened reptile's future is uncertain, conservation efforts may bring it back from the brink. The Fort Worth Zoo and the Ellen Trout Zoo in Lufkin are working with the National Forest Service, the U.S. Fish and Wildlife Service and other national zoos to breed and release the Louisiana pine snake.

Hatchlings are usually born in July. After a year of care and feeding of the

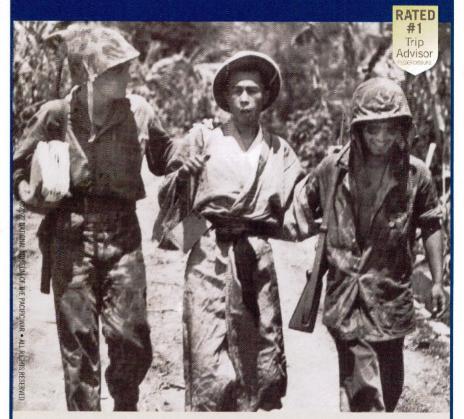


snakes, researchers implant them with microchips and release them.

Vicky Poole, assistant curator of ectotherms at the Fort Worth Zoo, says that over the past several years, the zoo has sent 99 snakes to Kisatchie National Forest in Louisiana for reintroduction and release (36 this past April). The zoo can hold 100 breeding adults (50 pairs), with selection based on heritage "so that we can avoid inbreeding in order to produce the most genetically diverse and fit animals for release."

In Texas, the Louisiana pine snake remains a threatened species, making it illegal for people to collect, harm or sell them.

An Unexpected Moment in the Midst of Battle



During the 1944 Battle on Saipan, thousands of Japanese were captured. One young Marine is credited with persuading over 1,000 to surrender.

Marine Privates First Class Jim Gilner (left) and Guy Gabaldon (right) escort a prisoner reportedly "tipsy" on sake on 27 June 1944.

Gabaldon, who grew up in Los Angeles, learned to speak Japanese as a boy while living with a Japanese family. He was often called The Pied Piper of Saipan for convincing the enemy to surrender using his language skills.

He was awarded the Silver Star, later upgraded to the Navy Cross for "extreme courage and initiative in single-handedly capturing enemy civilian and military personnel during the Saipan and Tinian operations."

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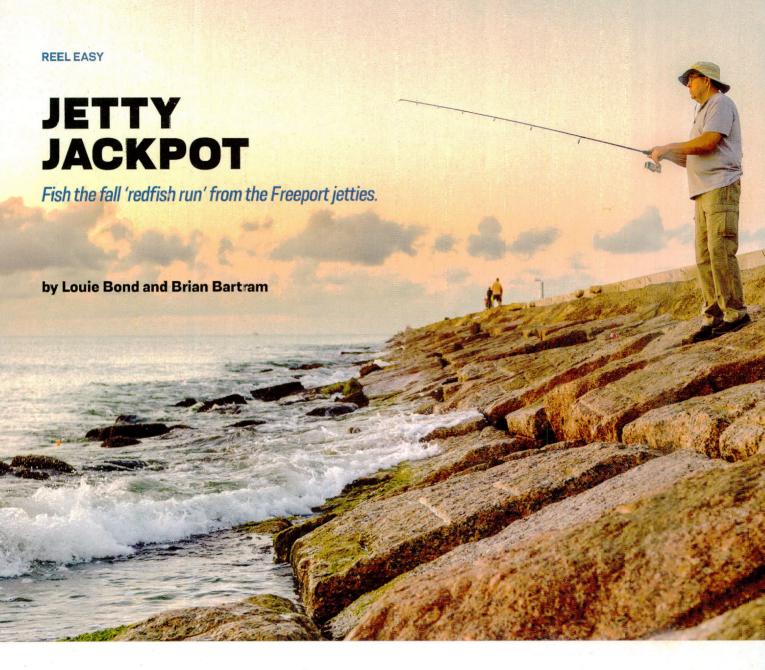
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n the Texas coast, the only rocky shores you'll find are the jetties built with huge stones. These outcroppings attract game fish of all kinds and the anglers who want to catch them.

One favorite spot for coastal anglers is the Surfside Jetty County Park near Freeport. The jetty juts out more than a half-mile with a walkway five feet above the water.

There are ample fishing opportunities, such as the redfish run each fall. This is one of the most accessible opportunities for anglers to catch a large "bull" redfish, frequently more than 40 inches long.

As the weather cools, migration starts to push sexually mature 4-year-old reds

out to the Gulf to spawn; more bull reds are caught at this time than at any other time of the year. Most are then released for spawning. You're allowed to keep only two reds over 28 inches per license year (if using a bonus redfish tag). Check outdoorannual.com.

Reds up to 35 inches can be good eating, though some anglers think larger ones have coarser flesh.

At *brazoriacountytx.gov*, follow the Parks Department link to Surfside Jetty, where there's a live jetty cam, day-use park rules and a list of nearby license retailers.

Timing: Check the tide chart because the best times are different each day. Two hours before the peak of high tide and two hours before low tide

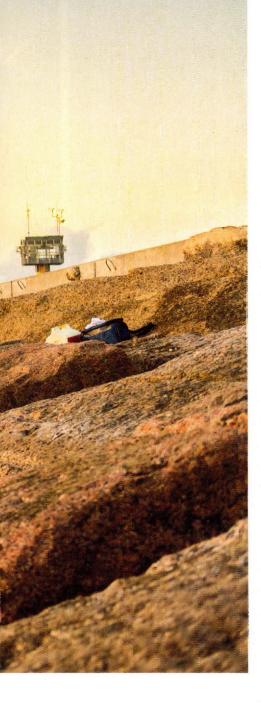
are optimal, because water movement triggers the fish to feed.

Clothing: Clothes should be light and loose, as always, but it's crucial to wear nonslip shoes that will prevent a case of "rock rash" from falling on the slick rocks. Many prefer shoes that let the water flow through.

Gear: Heavy equipment is needed to pull in big reds quickly. Try a 7- to 10-foot surf (shark) rod with a 15/0 circle hook, designed to hook the red in the corner of its mouth for a successful release.

Bait: For best results, cut up a mullet (freshly harvested or frozen) into 2- to 3-inch chunks. Whiting and menhaden also work well.

Barotrauma: Some reds swim deep



enough to need depressurizing. Carefully insert a thin point through its side, just behind the upper part of the pectoral fin base. Let the air escape without pressing, then put it in the water. Hold the fish upright and face it into the current, gently forcing water through gills. If it doesn't swim away, recover it and try again. Give your fish a fighting chance — learn more in the Catch and Release Tips at outdoorannual.com.

Pro tip: It's a "reel drag" to continually get your line caught on the jetty rocks — those "granite groupers" never give up, they say. The trick is to reel your leader in quickly using a special weight designed for jetties that folds its legs down when you jerk the pole tip.



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TEXAS TRAILBLAZERS

Finding Hope in the Outdoors

by Melissa Gaskill

"THE OUTDOORS

GAVE ME THAT HOPE.

SHOWED ME

THE WORLD IS NOT

ALL ASPHALT AND

efore he experienced the outdoors, Leon McNeil was a kid who didn't have a sense of hope.

"The outdoors gave me that hope, showed me the world is not all asphalt and craziness," he says.

As middle school teachers, he and his wife, Leticia, have seen a lot of kids with that same hopelessness, so they decided to give them the outdoors, too.

In 1995, they founded City Kids Adventures in San Antonio to introduce city youth to a wide variety of outdoor recreation. Their first outing took 76 kids camping in Port Aransas. Now Leon, Leticia and their 21-year-old son Lee Charles are out with kids almost every weekend, serving about 150 youth each year.

every weekend, serving about 150 youth each year.

"Getting kids out on the weekend gives them
enough to push through the week," Leon says. "Innercity kids see a lot of negative aspects of life and start to think that's what life is. They have nothing to compare it to, which makes it hard to make decisions about things that matter."

"We CRAZINESS."

These passionate teachers seized the opportunity to teach new lessons outside the classroom.

"Kids can see that learning doesn't just take place in the classroom," Leticia says. "It takes place everywhere you go."

Lee Charles believes that the program is built on longevity and relationships.

"Now that you've gone through all these experiences, what are you giving back? It's about helping out the next person," he says.

Most participants start City Kids Adventures in middle school, and the organization continues to mentor them through

high school, college and beyond. Older members return as guides and mentors.

"The TPWD motto, 'Life's Better Outside' — that's the truest thing since sliced bread," Leon says. "A lot of problems we see in the inner city is because we have removed the natural world."

He shares a line that Lee Charles recently wrote: "In the wake of a pandemic and the world's mounting problems, we must stay steadfast in uniting our next generation in positive experiences that generate a concept of virtuous success."

Those words hit the mark for Leon when he thinks about his goals for the next generation.

"We can get bogged down in the problems in the world, but we have to keep kids united and moving forward," Leon says. "We can't let them down."

The nonprofit (*CityKidsAdventures.org*) relies on donations and volunteers. Teachers, parents and community advocates refer students, and the group evaluates them based on their capacity for long-term commitment and their home environment.

MAEGAN LANHAM | TPWD



TEXAS HILL COUNTRY RESORT

"EXCELLENT END TO-END EXPERIENCE!"

| Chris O. | Orvis.com Review

Doshua Creek was my first experience at an Orvis-Endorsed wingshooting lodge, and my group had a thoroughly enjoyable time from arrival to departure. A walk-up hunt was the highlight. Throughout the trip, everyone on staff went out of their way to make it as easy and fun as possible, and the kitchen staff deserves extra credit for the delicious meals.

A great weekend all around!"

- UPLAND BIRD HUNTS FOR QUAIL, PHEASANT, & CHUKAR -

- EUROPEAN-STYLE DRIVEN PHEASANT SHOOTS
 - DECOYED MALLARD DUCK HUNTS -
 - FREE-RANGE TROPHY AXIS DEER HUNTS
- FLY FISHING FOR BLUEGILL, BASS, & RAINBOW TROUT
 - SPORTING CLAYS & SIMULATED DRIVEN SHOOTING -
 - HANDGUN & LONG-RANGE RIFLE SHOOTING -
- LUXURY LODGING, FINE DINING & RESORT AMENITIES -



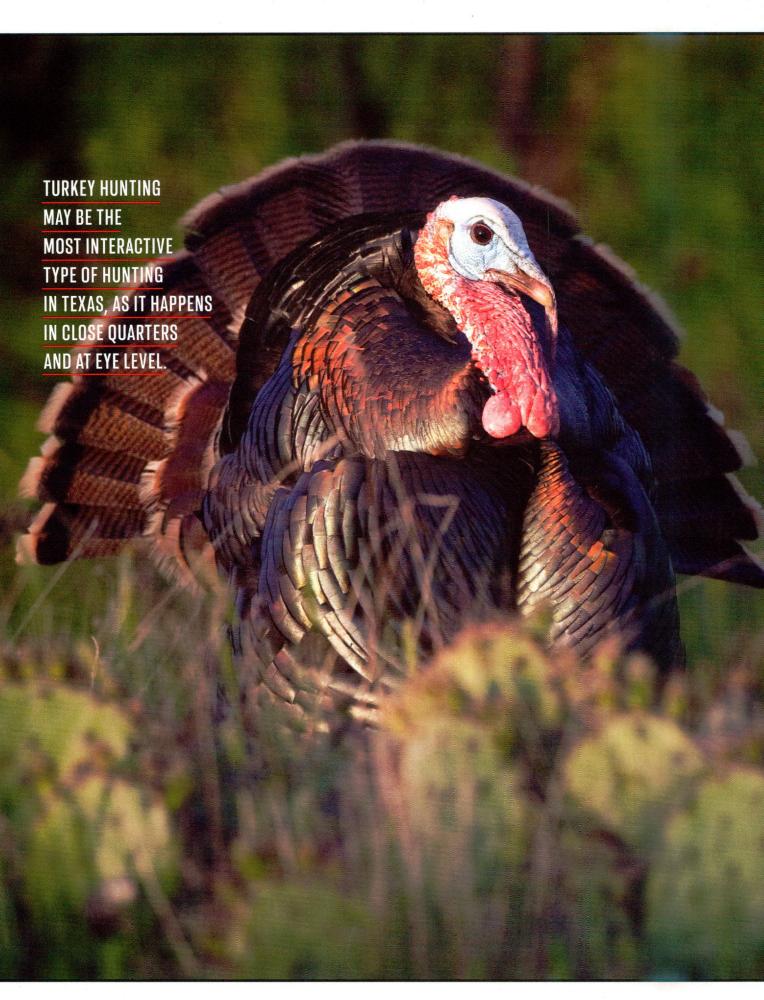












SCRATCH THE WAND across the slate call, and almost instantaneously, the tom turkey responds with a thundering gobble. For 30

minutes, we play a cat-andmouse game of call and response. He gets closer each time.

Now, he's 15 yards away. We are eye to eye. In the shade, turkeys look dark and drab. In the sunlight, however, they shine with an iridescence not seen in many other Texas critters. Here in the early morning sunlight of the Texas Rolling Plains, this big ol' tom is a kaleidoscope of ever-changing colors as the light hits from various angles.

When he steps from behind a mesquite tree, he's in full strut. His feathers are puffed and his bright red head is tucked into them. He fans his tail and drags his wings across the ground to make a noise that sounds like a long, resounding crunch.

He's giving it his all to impress an unseen hen. For fun, I scratch the call one last time to make him gobble. The noise and the scene are making my heart race.

Turkey hunting may be the most interactive type of hunting in Texas, as it happens in close quarters and at eye level.

From the first moment I saw a turkey up close, I was hooked. In hunting circles across Texas, turkeys may not always get top billing. Those who pursue the challenging bird will tell you there may not be a better hunt than a turkey hunt. The birds are wary and have excellent eyesight, helping them evade hunters. If turkeys had a good sense of smell, it would be nearly impossible to harvest one.

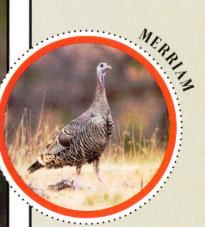
TURKEYS of TEXAS

WHILE THE TERM "turkey" is generally used to describe the bird now found in 223 of Texas' 254 counties, three subspecies of turkeys occur in the state. Regardless of the different subspecies, it wasn't too long ago that turkeys in Texas were rare. Overhunted to near oblivion, turkey populations were at critical levels around the turn of the century. Turkey numbers have eventually increased thanks to trap-andtransport programs, and permanent populations have taken hold.



The Rio Grande turkey is most common. This subspecies roams chiefly west of Interstate 35 and is common from South Texas all the way north to the creek and river drainages of the Texas Panhandle. Rio Grandes prefer habitats with tall trees such as cottonwoods for them to roost at night. They are distinguished from other turkey subspecies by the buff-colored tips on the end of their tail feathers.

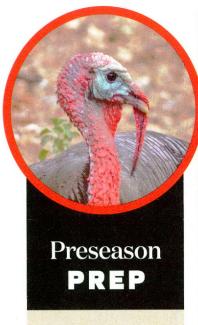
Eastern turkeys are found in the eastern part of Texas. These Big Woods birds prefer tighter cover than their openarea, big-ranging Rio Grande cousins. They are also slightly bigger than Rio Grandes. Tail feathers provide the best way to tell the difference between the two at a distance. Eastern wild turkeys have dark-brown feather tips, in contrast to a Rio Grande's buffy tips.





EASTERN

The least common turkey subspecies in Texas is the Merriam's. Merriam turkeys are found in the dry, mountainous regions of the Trans-Pecos. They prefer ponderosa pine forests at higher altitudes. Like other Texas turkeys, they can be identified by their tail feather tip color, white. (Although Texas has no specific season on Merriam turkeys spelled out in the Outdoor Annual, they are managed as part of the Rio Grande wild turkey population; harvest is allowed in the counties where they occur.)



Unlike some types of hunting, there's not a ton of preseason prep for turkey. However, like anything you plan to hunt, you owe it to the animal to do as much preparation as necessary for a safe and ethical hunt.

Turkey hunting does require some specialized gear that's not used in any other type of hunting. A thorough knowledge of your equipment and turkey hunting processes is essential.



FINDING a place to HUNT

IN TEXAS, a hunting lease offers a tried-and-true method of securing a hunting location. Outfitters are another option. Some outfitters provide multiday hunts, with or without a guide. These hunt packages are less expensive than a lease — you don't

have to commit long-term financial resources.

Suppose you are looking for public land hunting. Texas Parks and Wildlife Department offers more than 1 million acres of land for public hunting. With a \$48 Annual Public Hunting permit, you can access all the lands in the portfolio for various hunting opportunities; a handful of them offer turkey hunting.

If you're an avid hunter who needs more than one turkey hunt, a yearlong lease does allow you to pursue other types of game when

they are in season. You can talk to a local Texas AgriLife extension agent, Texas Parks warden or local chambers of can help connect you with landowners looking to lease their property.

and Wildlife biologist, game commerce. Often, these folks

LICENSE, PERMITS AND REGULATIONS

Find regulations and more information at: tpwd.texas.gov/turkey and Outdoor Annual.com

TEXAS REQUIRES a hunting license for anyone who hunts. The price varies depending on age, license types and other factors. Licenses are readily

available in person at sporting goods retailers or Texas Parks and Wildlife Department field offices, and online through the TPWD website.

Hunter Education is a good idea for anyone who hunts. It teaches valuable information and skills to make every outdoor excursion a safe and responsible one and is required if you were born on or after Sept. 2, 1971.

Hunter safety training comes in many forms but essentially consists of six hours of

classroom or online training, plus field training for hunters under 17 years old. An online-only version is also available for hunters 17

In the preseason, before you go afield, take the time to understand all the game laws and limits for each area and the turkey subspecies you hunt.



SCOUTING IT OUT

SCOUTING FOR turkeys is relatively straightforward. Turkeys are relegated to specific habitat types, so they tend to be more concentrated than, say, white-tailed deer.

Before you scout, take the time to understand all you can about turkeys. Research is the single best first step you can take to becoming a better hunter.

THE BEST STRATEGY FOR SCOUTING IS TO JUST LISTEN. By researching, you'll discover that Rio Grande turkeys roost in bigger trees. Since Rio Grandes live in the semi-arid parts of the state covered in brush, look for creeks and drainages with big roost trees (such as cottonwoods, live oaks and big hackberries) where the birds spend the night. While it's considered by some to be unethical to hunt near roost

trees (because the turkeys will abandon the trees if they feel threatened), you'll at least know they are in the area. You can plan your hunting locations



around feeding or strutting areas.

Eastern wild turkeys are a bit harder to scout. Since they live in a habitat with abundant big trees, they can roost almost anywhere. To find them, look for feathers, droppings and tracks along creeks or road paths. Eastern wild turkeys will readily use small private backroads — their tracks are a sure way to assure they are in the neighborhood.

The best strategy for scouting is to just listen. Turkeys (both male and female) are highly vocal birds; if they are around, you'll hear them.

CHASE FOUNTAIN | TPWD; RUSSELL A. GRAVES



Turkey hunting is a technical activity that requires some specialized gear. You can make your outing as straightforward or as gear intensive as you'd like. In the end, there's no right or wrong amount of gear. Simply focus on the things you need to ensure your success. And don't forget the bug spray.

CAMO and OTHER GEAR

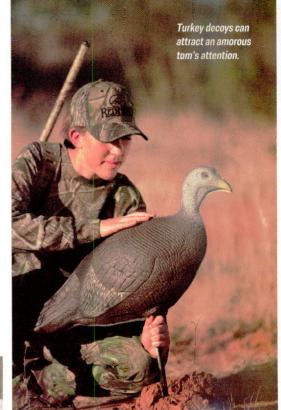
TURKEYS HAVE incredibly keen eyesight and are adept at pinpointing movement. Therefore, wearing camouflage is essential for pursuing these wary creatures. For the utmost stealth, match your camouflage to your hunting habitat and cover yourself from head to toe, including gloves and a head net.

To hunt travel corridors, you need only camouflage and a means to harvest the bird. If you want a completely interactive experience, you'll also need a turkey call. Of

the three types of turkey calls box, slate or diaphragm - box and slate calls are the easiest to learn and master. The key to being a good turkey caller is to practice.

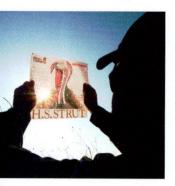
Rounding out the complete turkey hunter's gear list is a turkey vest. These vests hold your calls and shotgun shells and have an integrated pad for you to sit on in the field. Hang a good set of binoculars around your neck, too.

Some hunters like to use turkey decoys to get an amorous tom's attention and lure him closer.





GUNS and ammo



FIREARM manufacturers make shotguns specifically for turkey hunting. These firearms are fully camouflaged and have thumbhole stocks, optimized choke tubes, fiber-optic sight beads and other technical features. While these shotguns have their place, they aren't necessary. Any 12-gauge shotgun with a heavy, number 4 shot

load will suffice. Like firearm manufacturers, ammo makers have loads geared toward turkey hunting.

After you select a firearm and pick a load, it's imperative that you practice before the season begins so you'll know how your shotgun shoots a BB pattern at various ranges. As a rule, the farther the BB shot travels away from the muzzle, the wider the BBs become spaced. In other words, the farther the turkey is from the shooter, the less effective the shot becomes. Get a turkey target and a box or two of shells, and head to the range to shoot targets at various ranges to gauge your firearm's optimum range.

If you want to hunt with a rifle, that's OK, too. However, that applies only to Rio Grande turkeys hunted in the fall. For all spring eastern birds, a shotgun is the only means of harvest. Turkeys are legal with a bow during all seasons and in all counties with an open season.



NEVER WEAR RED, WHITE, **BLUE OR BLACK** ON A TURKEY HUNT, THOSE **COLORS CAN** BE MISTAKEN FOR A TURKEY'S HEAD OR BODY.

RUSSELL A. GRAVES



WITH ANY kind of hunting, safety is paramount.

When turkey hunting, always be sure of your target and what lies beyond your target. Turkeys move through thick brush and are stealthy. What you think is a turkey splitting through the brush may be a cow, dog or person. Never fire on an obscured target.

Wearing blaze orange isn't required while hunting on private land, but it is a good idea to wear it while traveling to and from your hunting area. You don't want to be seen by turkeys, but you do want to be seen by other hunters when you move.

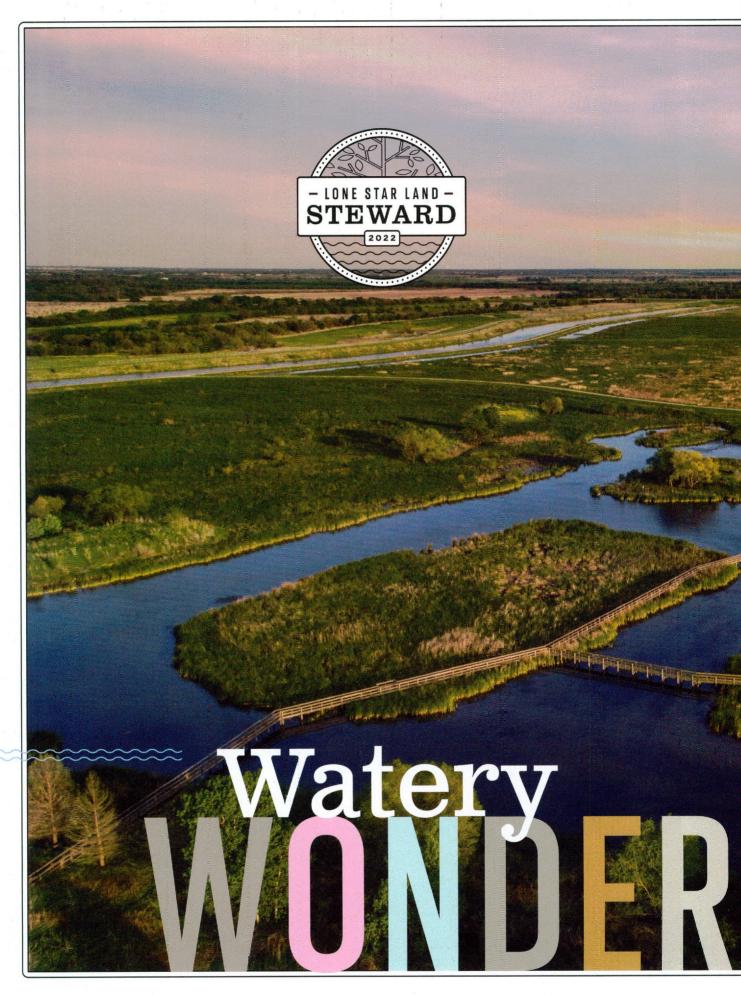
One important word of advice: Never wear red, white, blue or black on a turkey hunt. Those colors can be mistaken for a turkey's head or body.

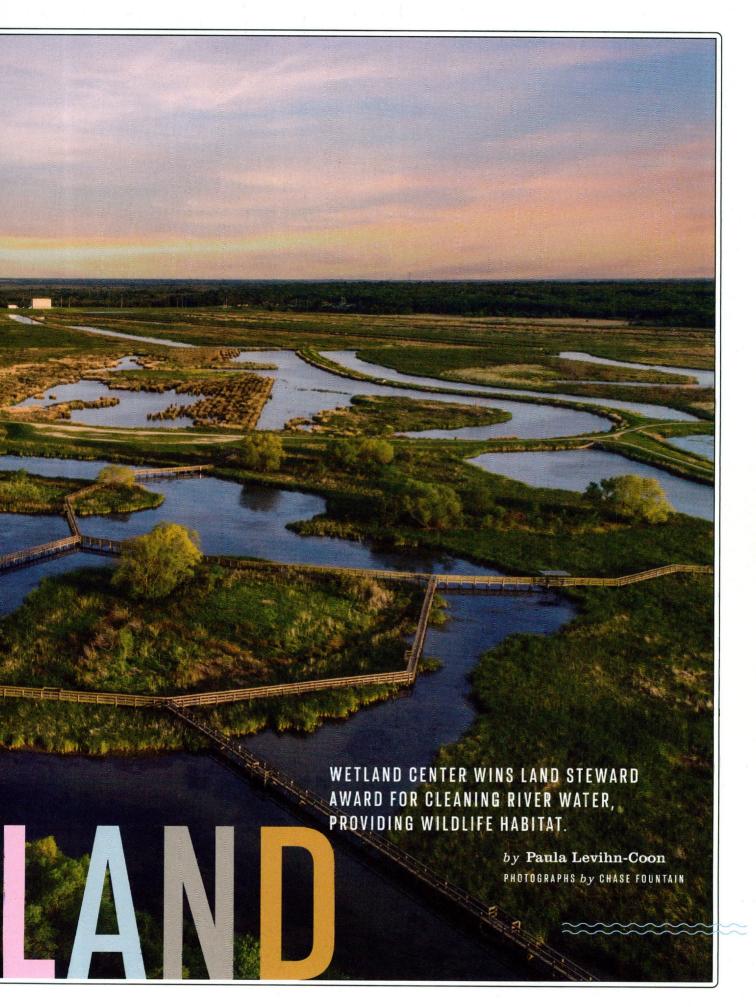
Running through various safety scenarios in the field is always helpful. Understanding where you are likely to shoot and what lies beyond your target are the building blocks of a safe hunt.

The bottom line? Make sure of your target all the time.

Enjoy the turkeys don't be one.







Watery Wonderland





ldo Leopold, the father of wildlife ecology, spelled out his land ethic in stark and simple terms.

Land management is done right, he wrote, "when it tends to preserve the integrity, stability, and beauty" of the land's plants and animals. It is done wrong, he noted, "when it tends otherwise."

The John Bunker Sands Wetland Center, 25 miles southeast of Dallas, embraces Leopold's vision of what is right. The center's healthy ecosystem supports vibrant populations of animals and plants, serves as a massive water filter and lifts the spirits of visitors who marvel at the diversity.

The wetlands teem with life, providing a wildlife show for those strolling along the meandering boardwalk. More than 270 species of birds, including sandhill cranes and 21 species of ducks and geese, have been sighted here, along with river otters, bobcats, American minks and beavers. The water constantly ripples as tiny fish break the surface. Blanchard's tree frogs, the size of a human fingernail, hop across algae mats and lily pads. Blue dragonflies (called Comanche skimmers) and green herons rest on the boardwalk's handrails.

The sounds of aquatic animals — glugs and slaps — fill the air, as does the buzz of insects and the calls of egrets, herons and ducks flying overhead. Patches of animal scat from coyotes, foxes, bobcats and other nocturnal visitors form curious deposits on the boardwalk.

How these wetlands came to be, in an area drained long ago for farming and cattle grazing, is the story of the John Bunker Sands Wetland Center and the Rosewood Ranches, this year's winner of Texas' highest honor for private land conservation,

the Leopold Conservation Award. The award, presented at a May banquet, is sponsored by the Sand County Foundation and the American Farmland Trust, in partnership with TPWD's Lone Star Land Steward Awards program. Recognizing extraordinary achievement in voluntary conservation, the \$10,000 award is given annually to private landowners in 24 states. It honors Aldo Leopold (1887-1948), considered the founder of wildlife ecology.

Leopold, a forester, hunter, educator, philosopher, writer and thoughtful observer of the natural world, was a visionary who recognized the devastation wrought on the natural world by "progress" and agriculture. On his 100-acre farm in Wisconsin, he observed the interactions of the plants and animals



"A LAND ETHIC, THEN,
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FOR THE HEALTH OF
THE LAND."

Aldo Leopold,A Sand County Almanac



RTESY OF JOHN BUNKER SANDS WETLAND CENTER X2

and worked to restore forests and grasslands, undoing the ecological harm of farming.

During this process, he penned a collection of essays that became *A Sand County Almanac*. In the book, Leopold shared his thoughts on the interconnectedness of people, plants and animals in a healthy ecosystem. He advocated for the adoption of a "land ethic" to restore ecological balance.

RESTORING Wetlands

Sands (1948–2003) was a visionary with a land ethic. He had an ecological conscience and shouldered responsibility for the health of his family's land and its interdependency with the surrounding community. He was a director of his family's multinational business, the Rosewood Corporation; the company's Rosewood Ranches runs cattle-raising operations within the Trinity River basin in North Texas.

In the 1980s and '90s, Sands



Watery Wonderland

followed his vision and oversaw the re-creation of wetlands on the ranches. By creating levees, with gates that could be opened and closed to flood fields, Sands' work grew into 2,100 acres of seasonal wetlands that provide habitat for migratory birds and high-quality grazing land for livestock.

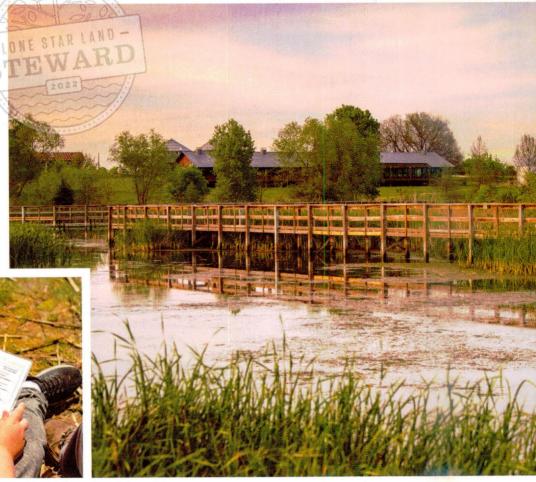
Sands died young from cancer, but the wetlands he established morphed into a one-of-a-kind nonprofit through the subsequent creation of a unique public-private partnership between the North Texas Municipal Water District and the Rosewood Corporation. The John Bunker Sands Wetland

Center provides "education, research and conservation opportunities pertaining to water reuse and supply, wetland systems and wildlife habitat."

The East Fork Water Reuse Project, one of the largest constructed wetlands in the U.S., makes use of much of Sands' wetlands, 1,840 acres. The project diverts treated wastewater from the East Fork of the Trinity River.

The wastewater enters the wetlands through an intake structure, where a pump





station transfers it to three sedimentation basins. The water sits in these basins for 24 hours, allowing solids to settle out. The water then moves through a series of 24 cells — some opening by gravity and others by manual gates — over a period of up to 10 days so wetland plants can naturally filter or "polish" the water. This process reduces nitrate by about 65 percent, phosphate by about 60 percent and suspended solids by about 45 percent.

Finally, the water is pumped 43 miles through a huge pipe to Lake Lavon, where it blends with other water for further treatment and its ultimate use by 2 million Texans. Fifteen to 20 percent of the lake's water comes from the project — the more than 102,000 acre-feet of water per year is enough to

The John Bunker Sands Wetland Center educates school groups and community groups about wetland ecology through water sampling, macroinvertebrate identification, lab work and observation. satisfy the needs of nearly a million people.

The native wetland vegetation — almost 2 million plants of 20 different species initially propagated onsite — includes squarestem spikerush, pickerelweed, water primrose and giant bulrush. The plants provide a refuge for wildlife but also perform their designated job of phytoremediation, a long name for cleaning the effluent-

rich water pulled from the Trinity River.

"[People] really don't do very well when there are nitrates and phosphates in the water," said Carol Garrison, an educator at the center. "However, as far as the plants are concerned, that is a 24-hour-a-day, high-nutrition buffet because the main ingredients in plant fertilizer are nitrates and phosphates."

At the ranch, another 1,200 acres of flooded forest



conceived of this mitigation bank in 1992, before wetland mitigation became legally required by the U.S. Army Corps of Engineers in the mid-'90s. Both the wetlands and forest provide valuable wildlife habitat and are home to a variety of aquatic and terrestrial species, including a pair of bald eagles, which have been raising offspring there for 11 years.

TEACHING Children

FROM A young age, Leopold was an observer of nature who journaled about what he witnessed.

"My earliest impressions of wildlife and its pursuit retain a vivid sharpness of form, color, and atmosphere that half a century of professional wildlife experience has failed to obliterate or improve upon," he wrote.

The Wetland Center, which opened in 2010, honors
Leopold's early experiences by providing an environment that welcomes children. In this educational hub, more than 45,000 children and 29,000 adults have learned about the system's hydrology and reveled in the watery environment.

Private- and public-school students, home-schoolers and scout groups come on day trips for hands-on lessons about wetland ecology and how these wetlands polish

"WHEN WE SEE LAND AS A COMMUNITY TO WHICH WE BELONG, WE MAY BEGIN TO **USE IT WITH LOVE."**

- Aldo Leopold, A Sand County Almanac

restoration area form the Bunker Sands Mitigation Bank, used by developers to offset their environmental impact in the East Fork watershed. Ahead of his time, Sands

the water. Students scoop water out of the marsh, test its quality and learn to identify the macroinvertebrates in it.

"[At first] they don't want to be here — they're in the back, leaning back," says Nicole Ujita, an education coordinator at the center. "Then, when we go and collect macroinvertebrates and ID them, they're so into it. They get competitive about the number that they find or the different species. They get so proud of whatever they found and sampled."

John DeFillipo, the center's director, hopes students find inspiration when they come to the wetlands.

"I see the opportunity for middle school and high school students — and that's the majority of the kids that come — to learn about careers in conservation," he says. "They can learn about what it might be like to work in conservation itself and be inspired to create the next best solution."

When Leopold wrote about "land," water was part of it, and all of it deserves our care.

"When we see land as a community to which we belong, we may begin to use it with love," he wrote.

The U.S. has lost more than half of its wetlands in the past couple of centuries, with human activity being the major cause, according to the U.S. Fish and Wildlife Service. Every day, water becomes more precious as we use it at increasingly unsustainable levels.

By educating people about where water comes from and what it takes to provide clean drinking water, the center is teaching its visitors to "use it with love." Visitors, who may end up drinking the water polished at the wetlands or brushing their teeth with it, come to understand that water is part of their "community."

THE PUBLIC Interest

LEOPOLD BELIEVED that landowners should work not just in their own interest but in the public interest as well.

"Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest," he wrote in an essay.

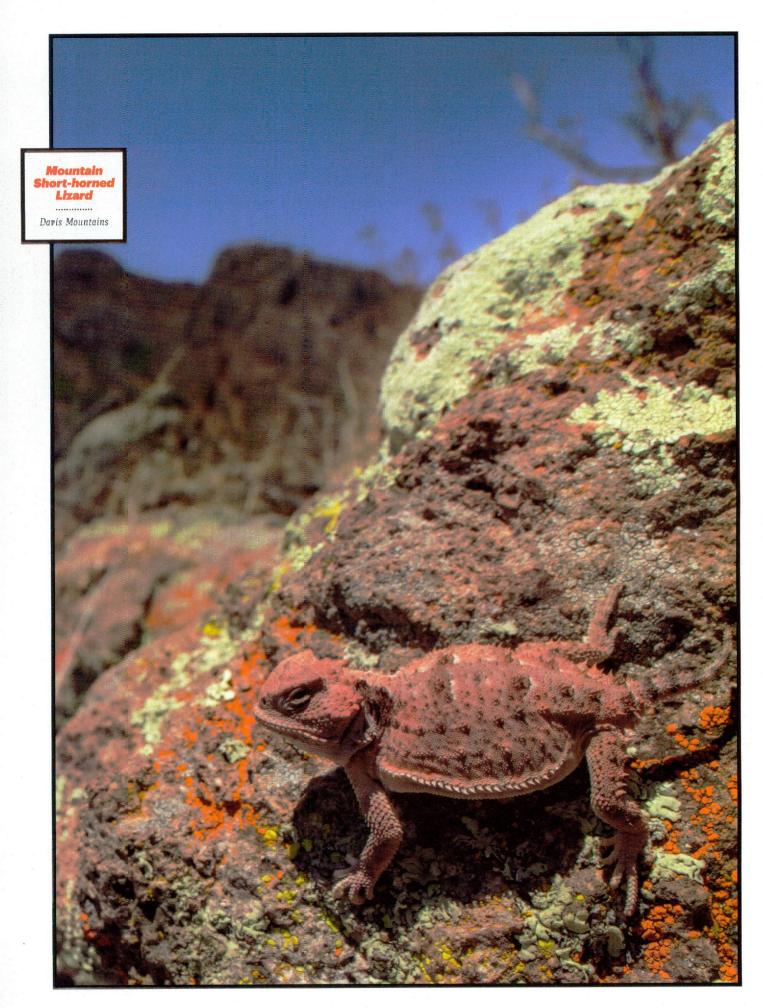
Conserving the public interest is the reason the Wetland Center was selected for the Leopold Award, says Lance Irving, the director of the Sand County Foundation's Leopold Conservation Program. The award didn't just recognize the center and its wetlands but also the Rosewood Ranches, an integral part of the ecosystem.

"The really noticeable parts — the parts with the boardwalk that people see — don't function without the input from the Rosewood Ranches, without the behind-the scenes, off-the-beaten-path parts of the property," Irving says. "I look at it a little bit like a restaurant. You see this beautiful plate that's in front of you, but you don't see all the prep work and the trial-and-error that goes on behind the scenes in the kitchen to bring you this beautiful, finished product."

The "finished product" at the wetland center is quickly becoming a model for a world grappling with environmental challenges. DeFillipo recently traveled to Russia and the Philippines to share his knowledge about how water can be cleansed using wetlands created and operated by a public-private partnership.

"What gives me goosebumps is to think about what our organization inspires," DeFillipo says. "I see an opportunity for replication. I see promise for the future as an example of a public-private partnership for energy, for electricity, for resources, for water, or even trash ... ways that public-private partnerships can help our changing population to adapt."

Paula Levihn-Coon was the 2022 magazine editorial intern.



THE

FOR A TOAD (or a snake, or a turtle, or a salamander...)

A FASCINATION WITH
TEXAS' REPTILES AND AMPHIBIANS
SPURS A YEARLONG QUEST
TO SEE THEM ALL.

Story and photos by

ROMEY SWANSON

DEEP IN THE GLOOM OF THE EAST TEXAS PINEYWOODS, I'M ON A HUNT FOR SOME OF TEXAS' MOST ELUSIVE CREATURES. SECRETIVE SALAMANDERS ARE PLAYING OUT AN ANCIENT DRAMA HERE, AND I'VE ALWAYS WANTED TO EXPERIENCE IT.

Earlier in the week, heavy winter rains filled drainages and depressions throughout the forest, triggering a salamander breeding frenzy. Unique to this region of Texas, these mostly lethargic creatures hide beneath logs or buried deep underground.

When the pitter-patter of raindrops breaks their subterranean trance, the nolonger-sleepy salamanders emerge with a singular focus: Perpetuate the next generation.

On the edge of one of these winter wetlands, I flip logs and fallen branches. I'm not sure what constitutes a good salamander log, but I key in on what I consider an especially nice stump. Beneath it, the big payoff.

I'm looking at my first-ever spotted salamander.

Such remarkable beauty. Its shiny, dark skin is punctuated with bold yellow dots.

And it's only the beginning. This special find will kick off my year of searching for reptiles and amphibians across Texas. My goal is to discover as many "herps" as possible to document the rich diversity of this group of more than 220 species.

I continue to turn over more stumps and logs in these deep woods and eventually uncover another first-time prize — a marbled salamander, silver and black. This vision of subtle splendor has already distracted me from the remarkable find of only moments earlier.

My Herping Texas Big Year (#HerpTX21) is off to an incredible start.

The ending isn't bad either: In a year of dedicated searching I managed to see 178 species, more than 75 percent of the Texas total. Of course, the real story is in the journey between the salamander with yellow spots sleeping under a stump and Herp No. 178.

WHAT'S A HERP?

known hobby of pursuing and observing wild reptiles and amphibians. Herpers are like birders, only they seek snakes and salamanders instead of hawks and herons.

Herping, in general, is less well understood and not nearly as well organized as birding. A lot of herpers prefer it that way.

The word "herp" is short for "herptile" and comes from the Greek root *herpeton*, meaning "to creep." That makes herpetology the scientific study of creeping animals, more specifically, reptiles and amphibians.

With more than 220 native species, Texas proves to be a great place to experience herp biodiversity. Texas is home to more snakes — around 75 different species — than any other state. Our herps also include cave-dwelling salamanders and legless lizards, tiny pink blind

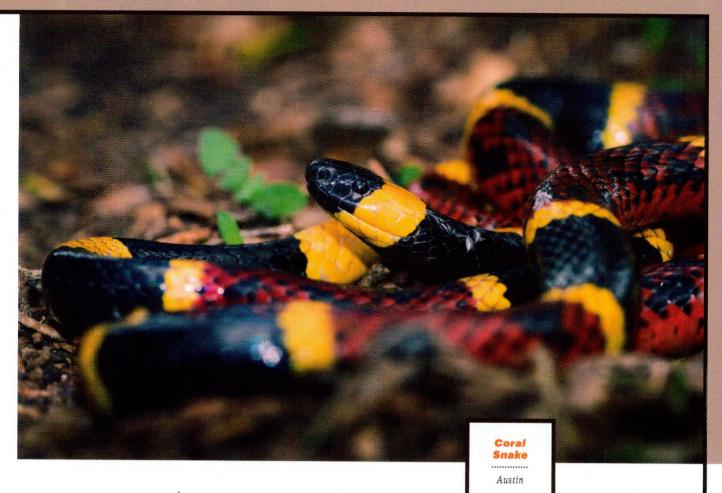
snakes and enormous, ocean-swimming sea turtles.

Over the next few weeks of my Big Herp Year, I worked on adding more species to my growing list. I saw an American alligator lurking at Choke Canyon State Park, a common snapping turtle basking at Palmetto State Park and DeKay's brown snake slithering along in my neighborhood dog park.

That momentum screeched to a halt in mid-February when Winter Storm Uri blanketed Texas with snow and freezing temperatures for nearly a week.

Herps are ectothermic
— they derive warmth





from their environment. That's why we typically see less herp activity during the cooler months. Because of the historic snowfall and frigid temperatures, February was my slowest month. My Big Herp Year list grew by only two species.

Thankfully, in the aftermath of the storm, it became obvious that herps had not experienced lingering consequences.

SPECIES AT THE EDGES

point of several disparate landscapes — forest, desert and prairie — making the place we live a cornucopia of biodiversity. We have a variety of species whose range barely enters the state.

I observed many examples of species at the edges

during the year, including pig frogs near Beaumont (just like bullfrogs except they oink instead of moo) and mountain short-horned lizards, found in the highest elevations of West Texas mountains.

The Rio Grande Valley is one of those unique and incredible Texas landscapes on the edge, home to many species typical of the tropics of Mexico. In my Big Year, South Texas gave me some of my greatest triumphs.

I had a healthy dose of work-related projects at Sabal Palm Sanctuary — a site owned by Audubon Texas. I had no problem finding Mexican tree frogs calling from the central resaca; indigo snakes (known for eating rattlesnakes) slipped around the gardens. One lunchtime,

a daring thornscrub rat snake edged right across the kitchen table.

Every herper hopes to spot the elusive speckled racer here. This slender and intelligent snake uses its large front-facing eyes to hunt lizards, and I used my front-facing eyes to see six of these amazing animals over the year. Beautiful aquamarine speckles edged in jet-black make it one of Texas' most beautiful snakes.

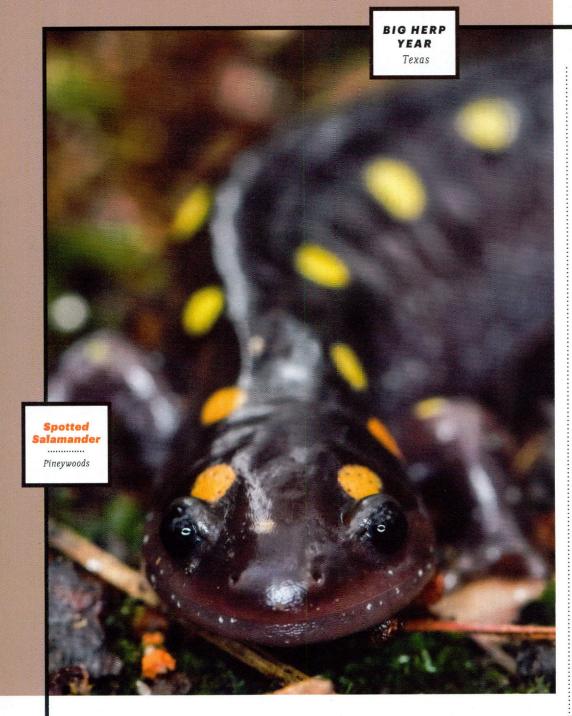
One night in May, a large Gulf storm traveled up the Rio Grande Valley and dropped more than three inches of rain along its path. Such a heavy deluge can stir the underground slumber of one of our state's most unusual species of frog, the Mexican burrowing toad, at which time it emerges to

contribute its unique song to the cacophony of calling frogs and toads.

When you are working on a Big Year, you're regularly forced to solve something like an algebraic equation with variables like RTS (remaining target species), EN (the effort necessary to get into proper habitat), SW (season/weather) and PD (probability of detection).

After the storm in May, the equation worked out in my favor to pursue this bizarre creature. It was spring, a big rain had come, and I could catch up on sleep later — it was "go time."

The Mexican burrowing toad (it's not really a toad) is one of the most difficult animals to see in Texas. It lives in just a couple of remote South Texas counties, inactive and buried through



most of the year.

That evening, as dusk transitioned to twilight, the din of calling frogs began to crescendo into a deafening cacophony. Standing roadside, I picked out the western narrow-mouthed toad, the Rio Grande leopard frog and three highly prized regional additions to my yearlong list — the giant toad, sheep frog and Mexican white-lipped frog.

Then, from across an inaccessible expanse of rangeland and thornscrub, I heard it — the faint but distinct rising wood of the Mexican burrowing toad. I knew that I would commit the EN (effort necessary) to hold one of these animals in my hands.

I drove around for hours that night hoping to find a burrowing toad calling from an accessible roadside ditch. In the process, I learned that the call of these frogs could carry deceptively long distances, as much as a halfmile. Finally, at around 2 a.m. — an hour seen too often by field herpers — I located a pair of burrowing toads calling from the side of a quiet county road. Overcome with joy, I held this dark, palm-sized blob with a pointed, calloused snout in my hands. So worth it.

THE WILD WEST

AS THE SEASONS advanced, I started sharing photographs and stories to highlight the life histories and conservation challenges of these animals I love. I found that many people were interested in these often-maligned creatures.

I believe that some people's strong aversions to snakes and other herps can be lessened through an improved understanding of the value they contribute to the great theater of nature. After all, herps are a barometer of the health of the environment we all share.

During the fall, I helped coordinate a week of herpfocused cinematography with Fin and Fur Films — the crew that produced Deep in the Heart: A Texas Wildlife Story. My team and I assisted with filming and scouted for herp subjects in the mountains and deserts of the Big Bend region. Although my year list stood at 150 species — already a new high-water mark — I had no intention of slowing down. This trip allowed me to clean up a few missing West Texas species, including one nocturnal lizard that had always eluded me.

The reticulated gecko is a larger, rarer cousin of the more familiar Texas banded gecko. It is found only in the southern mountains of Brewster and Presidio counties.

Field herpers consider the reticulated gecko to be a "Holy Grail" species of the Big Bend.

Each night, I went roadcruising for snakes to film, stopping to explore



the nooks and Marathon crannies of road cuts in the mountain passes, places where geckos like to linger. Burning the candle at both ends, I paired early-morning shoots with late-night searches, and each became more challenging.

On the last night, at the final stop, I rolled over a roadside boulder at the foot of a cut and unveiled a juvenile reticulated gecko — another first.

I reared my head back in celebration. My howls of excitement and the arcing beam of my headlamp tore through the murky twilight as this small, fragile and nearly translucent lizard jumped from my hand onto my shirt.

THE BIG YEAR ENDS

ABIGYEAR is a personal challenge to observe and identify as many species as possible, but it can be so much more — adventure, education,

fellowship, perseverance, triumph and defeat.

For me, it was also about taking care of unfinished business.

In Texas, we have an abundance of found-onlyhere endemics, native plants and animals that are limited to a specific site or geography. I found most of our endemic reptiles - the Concho water snake, plateau earless lizard, Texas map turtle and Cagle's map turtle, each representative of a distinct river basin or land formation.

There was one endemic I had never taken the time to find, despite ample opportunity. Maybe I was iust too close.

I spent six years living in San Marcos while studying for my undergraduate and graduate degrees in wildlife biology. It's where I met my wife. My son learned to swim in the crystal-clear waters of the San Marcos River.

It's also where I rediscovered the awe and joy in nature that would form the foundation for my vocation in land, water and wildlife conservation.

My Big Year ended on Dec. 26, when I went snorkeling on the upper San Marcos River. Despite living so close to this river while attending Texas State University. I never took the time to seek out the river's namesake creature — the San Marcos salamander.

Now, 12 years later, I corrected that shortcoming when I observed a slender. purplish form crawling among the cobbles of the riverbed.

I couldn't have scripted a more meaningful conclusion to my Big Herp Year of passion, exploration and personal reflection.

Romey Swanson is director of conservation strategy for Audubon Texas.

HERPING TEXAS

230

Total Texas herp species (reptiles and amphibians)

Romey Swanson's **Big Herp Year total**

SNAKES:

76 species (Romey's tally: 56)

Romey's favorite find: Western pygmy rattlesnake in the Pineywoods





LIZARDS:

52 species (Romey's tally: 44)

Romey's favorite find: Mountain short-horned lizard in the Davis Mountains

FROGS/TOADS:

43 species (Romey's tally: 35)

Romey's favorite find: Mexican burrowing toad in the South Texas brushlands





TURTLES:

31 species (Romey's tally: 24)

Romey's favorite find: Razorback musk turtle in Houston

SALAMANDERS:

27 species (Romey's tally: 18)

Romey's favorite find: Marbled salamander in the Pineywoods



ALLIGATORS: 1 species (Romey's tally: 1)

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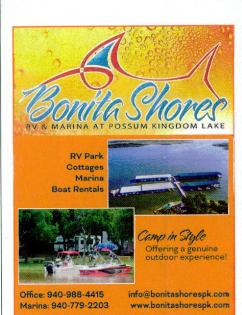
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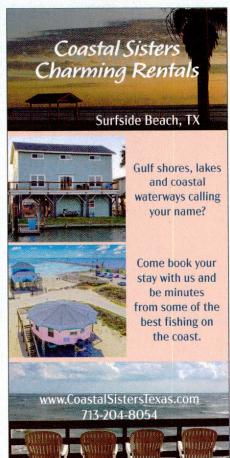












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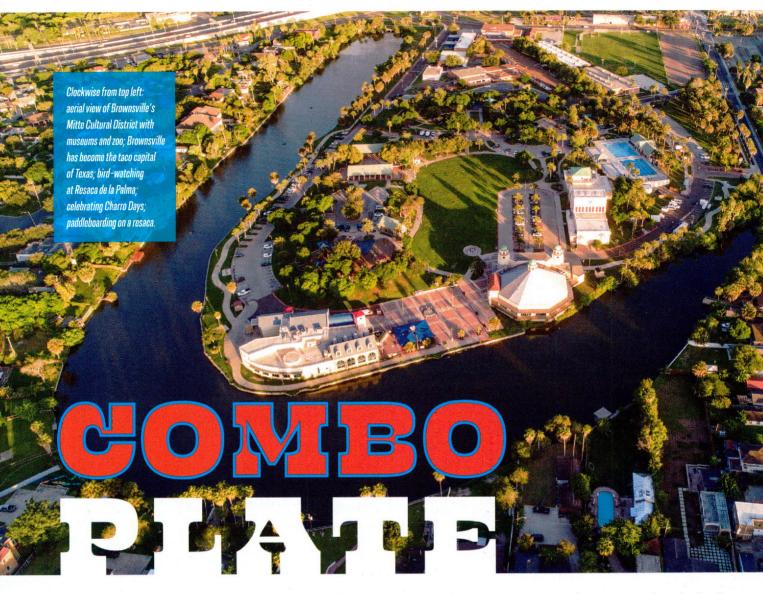
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BROWNSVILLE BECKONS WITH BORDER-INFLUENCED FOOD, RICH CULTURE AND THRIVING WILDLIFE.

BY STEVE HALL



here are we going for dinner?" I ask Santiago "Junior" Muñoz.

Smiling and licking his chops, Muñoz

responds, "I'm going to take you to one of my favorite places where they serve *real* Mexican food. It's just up the way."

Muñoz lived in Brownsville some years back. He now lives and works at Aransas National Wildlife Refuge, on the Coastal Bend of Texas, but he still finds his way back south.

Muñoz's friend, Ruben Rangel, whom I consider to be a "pied piper" of the outdoors in Brownsville, joins us. After shuffling our way through the small, crowded restaurant, I order several tacos de bistec (beef) and tripitas (tripe) — yummy goodness tucked into corn tortillas. I wish I ordered more of the crunchier tripitas — simply amazing!

I'm not here just to soak in the South Texas culture, including the authentic eateries around every corner. I've come to Brownsville to assist Muñoz and Rangel with a Hunter Education course. Both are "area chief" volunteer instructors for the Texas Parks and Wildlife Department. They host many educational courses, youth hunts and shooting sports opportunities for people in and around Brownsville. Ruben's already led two such courses in August at Resaca de la Palma State Park; both filled quickly, with 40 students each. Muñoz and Rangel, former Resaca employees, return each year to assist with dove hunts and other activities at the park.

Resaca de la Palma Superintendent Kelly Malkowski says the park welcomes hundreds of hunters each fall.

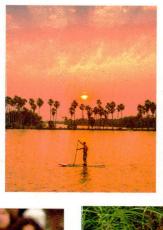




With the hikers, mostly locals, and birdwatchers from throughout the United States and even the world, we stay busy year-round."

Resaca de la Palma and nearby Estero Llano Grande and Bensten-Rio Grande Valley state parks serve as the hub of park visitation in the lower Valley. All Valley parks provide residents and visitors with places to get outside for activities such hiking, biking, wildlife watching or just getting away from the city. TPWD's wildlife management areas (18 units throughout the Lower Rio Grande Valley), the region's national wildlife refuges (Santa Ana and Laguna Atascosa) and a multitude of municipal and private nature centers provide even more options for outdoor exploration.

Brownsville and the Rio Grande Valley brim with wildlife, most notably the





CLOCKWISE: ERICHSCHLEGEL; LARRY DITTO X3; ERICH SCHLEGEL

"We hosted 800 dove hunters during the 10 days of hunting season [two September weekends and the days between] at the park last year, and 600 the year before that," she says. Local hunters from Brownsville make up the biggest percentage of those numbers.

The park offers a variety of activities beyond hunting for visitors.

"Even more popular are our interpretive tram rides/tours along a 3-mile loop at the park," Malkowski says. "We also conduct a lot of events, including an archery class every month.

region's hundreds of bird species, many of them found nowhere else in the U.S. The state parks and other nature sites joined together to establish the World Birding Center, with attractions at each site for beginner and expert birders. The Valley's variety of habitats, proximity to Central America and location on migration corridors make it a birding hotspot.

Brownsville is the largest city in the Rio Grande Valley and serves as an outdoor and cultural center not only for the fast-growing local population but also for the hundreds of thousands of



tourists who flock to the southern tip of Texas each year. In winter, thousands of "snowbirds" bring their motor homes to deep South Texas because of its comfortable semitropical climate.

The nearby towns of Port Isabel and South Padre Island add to the rich menu of choices with historic sites, beaches, a wide variety of fishing options, dolphin tours and more.

Rangel and his wife, Marcia, know Brownsville well. They stay busy with two teenage kids, full-time jobs, sports and school schedules. However, heading outdoors is their preferred choice when searching for things to do.

"It's our way of life," Rangel says.
"We hunt, fish, camp in our RV and bird/wildlife watch together, just about every week."

Their favorite activity? Fishing.

"I will never leave Brownsville," Rangel says with a chuckle. "The fishing down here is the best in the world."

Muñoz doubles down on that sentiment, sharing photos and stories of the many charters and fishing tournaments held in the area. (Muñoz, Rangel and another friend took first place in the flounder division in one tournament.)

"I like to go after snook and even tarpon in the Brownsville Ship Channel, and for a 'Texas Slam' [redfish, spotted seatrout and flounder] in the bays," Rangel says. Naturally, the two also volunteer as Angler Education instructors. They host an annual Hooked for Life fishing event each April for 2,000 to 3,500 kids at the Brownsville Event Center, where they stock the local resaca with 5,000 pounds of catfish.

"That is just one of the many events held in and around Brownsville to expose the community to the outdoor wonders in their own backyards," Rangel points out.

When I ask Rangel what he enjoys doing in Brownsville besides all those great fishing opportunities, his answer comes immediately.

"We love to go to the zoo," he says. "It is a great zoo, and even rivals the one in San Antonio."

The Gladys Porter Zoo is nestled inside 31 acres in the heart of the city and boasts nearly 400 species from four continents. In the Mitte Cultural District, the zoo is near other attractions such as the Brownsville Museum of Fine Art, Children's Museum and Historic Brownsville Museum.

An even wilder Rangel favorite destination can be found in southeast Brownsville. Sabal Palm Sanctuary harbors a rare ecosystem of sabal palms, once a dominant plant along the Rio Grande. The striking Rabb Plantation home serves as the visitor center.

The Rangels embrace the Mexican heritage of the border, on display in Brownsville every day with special emphasis on holidays.

"We love to celebrate at the parade each year, Charro Days," Rangel says. They join family and friends to watch.

In late February, Brownsville celebrates this binational event with its neighboring city of Matamoros, Mexico. Charro Days offers four days of fiestas, music, traditional foods, performances and fun, culminating in the International Parade.

Rangel is an accomplished birder, though he only started several years ago. This past year, when a bat falcon showed up near Alamo, he left work and drove over to photograph the rare bird, something he routinely does when he gets word from his birding group about rarities such as blue buntings, crimsoncollared grosbeaks and fork-tailed flycatchers traveling through the area.

During the fall and winter months, the entire Rangel family likes to hunt together, primarily for dove, deer, wild hogs and waterfowl. In December and January, the Rangels and their friends go duck hunting out on the mangrovelined shores of the Gulf for pintails and redheads, among the many other waterfowl species that migrate through the North American funnel that is the Rio Grande Valley.

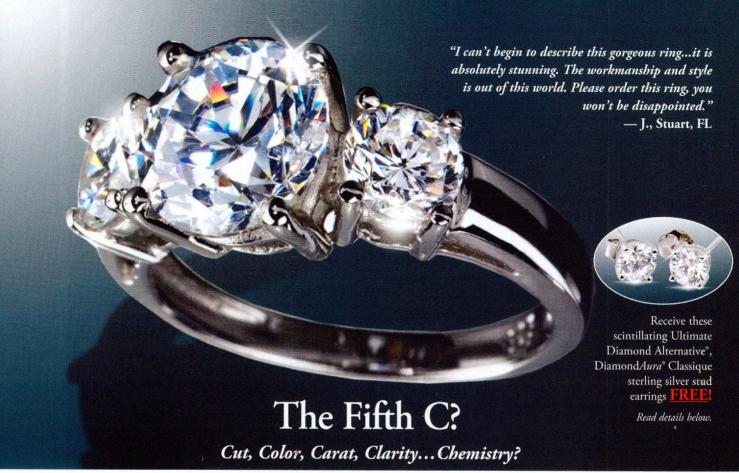
Growing development brings new hunting challenges as the shorelines and small islands face big changes to the landscape.

"We still hunt in the same spot," he says. "There's just a different view these days, with all the wind turbines that dot the lower Valley and coast."

Brownsville has a lot to offer for outdoor enthusiasts, especially for folks like Rangel and his family who generally know best where and when to enjoy the various activities. For those new to Brownsville, take time to tour the city to find culture, historic sites, shops and authentic Mexican cuisine, then head outside to enjoy the beaches, bays, parks and wildlife refuges.

Disfruta de Brownsville. Enjoy Brownsville.

Steve Hall is the Hunter Education coordinator for the Texas Parks and Wildlife Department.



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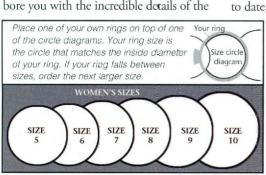
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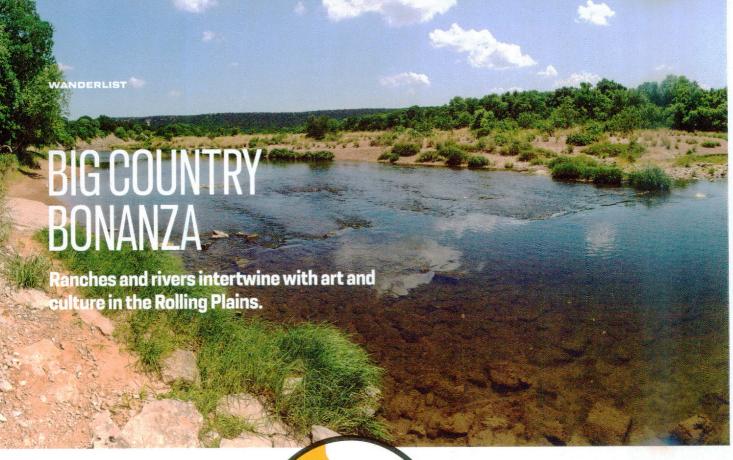
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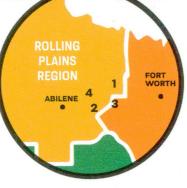


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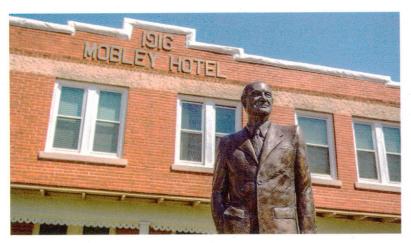
he Rolling Plains region of Texas contains undulating hills, canyons and rangelands broken by rivers and streams, and encompasses cities such as Abilene and San Angelo. Here are five things to do in Texas' Big Country.



1) JOHN GRAVES SCENIC RIVERWAY @

Named for Texas author John Graves, this stretch of the Brazos River begins at the dam forming Possum Kingdom Reservoir and flows for 19 miles, following a portion of the river Graves paddled for his classic Goodbye to a River. Concerns about expanding quarry operations led citizens to seek protection of the river, which courses through tall limestone bluffs and cedar-covered slopes.

by Rushton Skinner

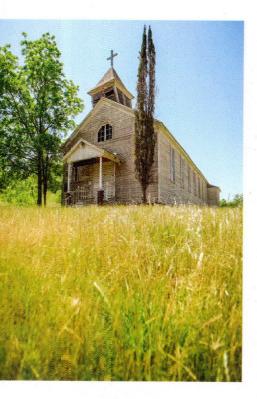


2) CONRAD N. HILTON CENTER (

Between Abilene and Fort Worth in the town of Cisco, you can find the first Hilton Hotel. Now turned into a museum, the Conrad N. Hilton Center documents the hospitality empire that ensued. After a 1919 visit to Cisco to buy a bank, Hilton instead bought a hotel, the Mobley, doing a booming business catering to oil workers. Hilton went on to buy and build hotels throughout Texas.

MAEGAN LANHAM | TPWD X 3; ART CENTER KAREN LOKE | TPWD





3) THURBER GHOST TOWN ()

Thurber, about an hour west of Fort Worth, was a coal-mining town and a brick town. Now it's a ghost town. Once the biggest city between Fort Worth and El Paso, Thurber attracted droves of immigrant workers from Europe, reaching a population close to 10,000. Two restaurants remain, including the Thurber Smokestack. The W.K. Gordon Center for Industrial History of Texas preserves the past of this colorful town.



4) OLD JAIL ART CENTER (3

Albany's acclaimed cultural center is full of surprises — it houses works by artists such as Picasso, Rembrandt and Renoir, along with an extensive collection of Asian art. There's regional history here, too: The Sallie Revnolds Matthews historical collection and Watt Matthews ranching collection document the area's rich ranching history, including the Matthews' own iconic Lambshead Ranch.







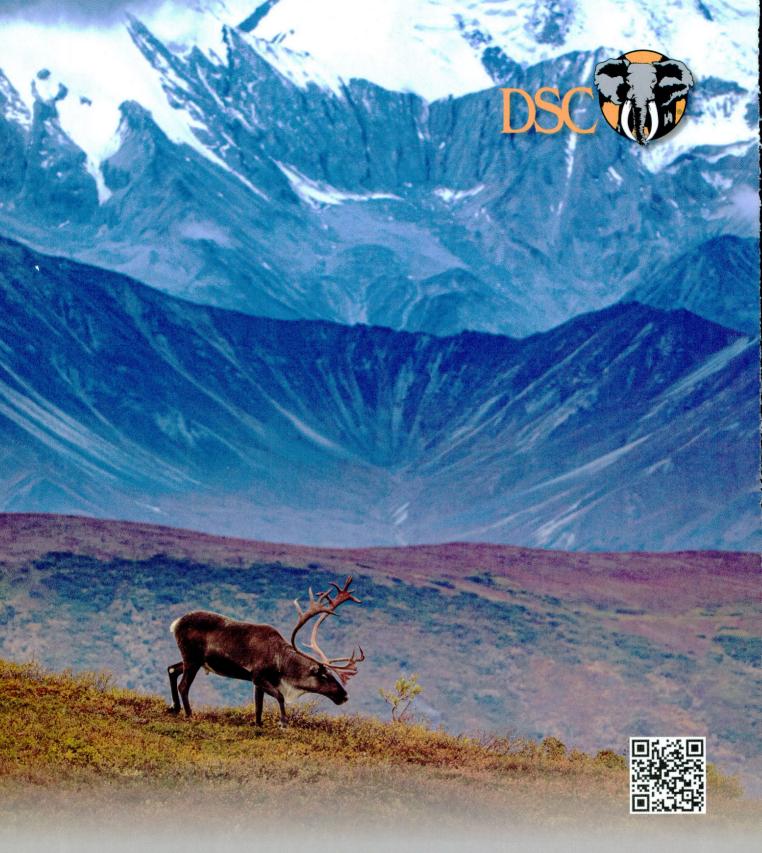
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