GREEN TPWD | MASTER NATURALISTS | MARFA T P W M A G A Z I N E . C O M / A P R I L PARKS& BESTOFTEXAS 2013

TOYOTA TEXAS BASS CLASSIC RETURNS





ONETOUGHTEXAN

Tundra, built in Texas for Texans, invites you to Conroe to celebrate the world championship of professional bass fishing. The "Official Vehicle" of the Toyota Texas Bass Classic is proud to support the Texas Parks and Wildlife Foundation Conservations Efforts.

For more information, please visit our website at www.toyotatexasbassclassic.com



CONTENTS

Features

COVER STORY Best of Texas 2013 By Louie Bond

TPWD partners share their love of Texas' natural wonders.

Nurturing Nature

By Sheryl Smith - Rodgers

Master Naturalists volunteer their time to conserve and educate.

48 Going Green By Rob McCorkle

TPWD 'walks the walk' by using environmentally friendly building designs.

Departments

At Issue

10 Mail Call

Our readers share their ideas.

BIRDS BY THE NUMBERS

The Great Texas Birding Classic goes statewide this year.

PARK PICK: URBAN GETAWAY

By Tara Humphreys

A stone's throw from San Antonio.

Government Canyon protects water and warblers.

WILD THING: GREAT WHITE BIRD

By Lee Ann Johnson Linam

Majestic whooping cranes were nearly lost

but have made a comeback here.

FLORA FACT: THE SEDUCTION OF VENUS

By Jason Singhurst

Venus' looking glass has shiny, mirror-like seeds to reflect its beauty.

SKILL BUILDER NATURE APPS

By Jonah Evans

Properly used, smartphone apps can enhance your nature experience.

PICTURE THIS: KIDS AND CAMERAS

By Earl Nottingham

Photography can serve as a catalyst to get children active in the outdoors.

Three Days in the Field

By Tom Harvey

Art + Nature = Marfa: The unlikely marriage of artsy hipsters and old-time ranchers has produced a quirky offspring.

Parting Shot

By Laurence Parent

Covers

FRONT: A windsurfer catches the breeze to glide across the waters of coastal Texas. Several coastal attractions and activities made this year's "Best Of" roundup. Photo © Jim Olive

BACK: Vintage travel trailers reflect the nomadic mood at El Cosmico, a trailer hotel, campground and art incubator in Marfa. Photo by Earl Nottingham/TPWD

PREVIOUS SPREAD: A whooping crane takes flight at Aransas National Wildlife Refuge on the Texas coast. The population of the endangered birds has reached about 300. Photo © Larry Ditto

THIS PAGE: With skimboard in hand, a boy looks out over the moonlit surf on a Galveston beach. Photo © Jim Olive

THE OFFICIAL OUTDOOR MAGAZINE OF TEXAS





10 issues for \$12.00
SEND NO MONEY NOW. JUST MAIL THIS CARD TODAY!

PLEASE PRINT

CITY	STATE	ZIP	

Please e-mail me new features and offers from *Texas Parks & Wildlife* magazine.

For new, U.S. orders only. Please allow 6-8 weeks for delivery. Ten issues produced annually.

NAME

6304SC



Visit us at tpwmagazine.com



BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 633 FLAGLER BEACH, FL

POSTAGE WILL BE PAID BY ADDRESSEE

TEXAS PARKS & WILDLIFE PO BOX 421105 PALM COAST FL 32142-6458 NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES



ORDER NOW! SAVE 70% OFF THE COVER PRICE.



որդկեմիկարելիկիներիկինիկինինինինինի

THE OUTDOOR MAGAZINE OF TEXAS

APRIL 2013, VOL. 71, NO. 3

GOVERNOR OF TEXAS Rick Perry

COMMISSION

T. Dan Friedkin, Chairman Houston Ralph H. Duggins, Vice Chairman Fort Worth Antonio Falcon, M.D. Rio Grande City S. Reed Morian Houston Dick Scott Wimberley Karen J. Hixon San Antonio Bill Jones Austin Dan Allen Hughes, Jr. Beeville Margaret Martin Boerne Lee M. Bass, Chairman-Emeritus Fort Worth

> Executive Director Carter P. Smith Communications Director Lydia Saldaña

MAGAZINE STAFF: Randy Brudnicki Publisher Louie Bond Editor Russell Roe Managing Editor Brandon Jakobeit Art Director Earl Nottingham Chief Photographer Chase A. Fountain Photographer Ana Kirk Business Manager Catherine Groth Photography Intern

CONTRIBUTING WRITERS: Mike Cox, Steve Lightfoot, Rob McCorkle, Larry D. Hodge, Dyanne Fry Cortez

CONTRIBUTING PHOTOGRAPHERS: Jim Olive, Rolf Nussbaumer, Larry Ditto, Laurence Parent

EDITORIAL OFFICES: 4200 Smith School Road, Austin, Texas 78744 Phone: (512) 389-TPWD Fax: (512) 389-8397 E-mail: magazine@tpwd.state.tx.us

ADVERTISING SALES OFFICES: STONEWALLACE COMMUNICATIONS, INC. c/o TP&W magazine 4200 Smith School Road, Austin, Texas 78744 Fax: (512) 389-8397

Jim Stone, Advertising Director (512) 799-1045 E-mail: jim.stone@tpwd.state.tx.u

> SUBSCRIPTIONS: (800) 937-9393

Texas Parks & Wildlife magazine (ISSN 0040-4586) is published monthly with combined issues in January/February and August/September by Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744. The inclusion of advertising is considered a service to subscribers and is not an endorsement of products or concurrence with advertising claims. Copyright © 2013 by Texas Parks and Wildlife Department. No part of the contents of this magazine may be reproduced by any means without the permission of Texas Parks & Wildlife magazine. The magazine is not responsible for the return of unsolicited materials provided for editorial consideration

SUBSCRIPTION RATE: \$18/year; foreign subscription rate: \$27.95/year. POSTMASTER: If undeliverable, please send notices by form 3579 to Texas Parks & Wildlife magazine, P.O. Box 421103, Palm Coast, FL 32142-1103. Periodicals Postage Paid at Austin, Texas, with additional mailing offices. SUBSCRIBER: If the Postal Service alerts us that your magazine is undeliverable, we have no further obligation unless we receive a corrected address within one year.

Texas Parks & Wildlife magazine is edited to inform readers and to stimulate their enjoyment of the Texas outdoors. It reflects the many viewpoints of contribut-

ing readers, writers, photographers and illustrators. Only articles written by agency employees will always represent policies of the Texas Parks and Wildlife Department.



SUBSCRIBER SERVICES

PHONE: (800) 937-9393



In the Field

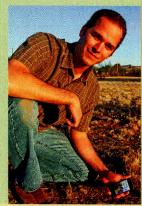
James Hearn, pulled mounds of Malta-star thistle last spring from their one-acre Blanco yard, recently designated as a Texas Wildscapes Wildlife Habitat Demonstration Site. She'd learned about the invasive species while on a field excursion



with her fellow Texas Master Naturalist trainees. That lesson, along with chronicles of her weekly classes, can be found on her blog, "Window on a Texas Wildscape" (the same title of her upcoming book to be published by Texas A&M Press). Sheryl has written for Texas Parks & Wildlife since 1989. She's also been published in numerous other magazines, including Texas Highways, Texas Co-op Power, Guideposts, Angels, American Profile and Better Homes & Gardens.

is the Trans-Pecos wildlife diversity biologist for TPWD, where he concentrates on research and conservation of wildlife (primarily non-game). Jonah grew up on a family ranch in Boerne and spent much of his childhood explor-

ing and learning about the outdoors. In his late teens, he developed an interest in animal tracking and began traveling the country to study with various experts. Before working for TPWD, Jonah and his wife, Ciel, worked as field biologists for numerous research projects around the country. While Jonah's primary interest is wildlife, he also has an interest in photography and technology. In 2011, Jonah published iTrack Wildlife, an iPhone field guide to animal tracks.



ROB McCORKLE'S love for the outdoors was sparked by childhood bicycle sojourns from his suburban Houston home to then-wild Braes Bayou, a campout at Huntsville State Park with neighbors and trips with his Uncle Joe to hunt geese on the Katy Prairie or quail in South Texas. Rob, who works for TPWD's news and information group, has spent the past 30 years running, hik-



ing and paddling through the scenic environs of Austin and the Hill Country. Rob has long had an interest in environmental issues, and this month, he reports on TPWD's rather aggressive energy-saving program utilizing renewable energy, such as solar panels, and incorporating "green" building designs into facilities recently built or on the drawing board. He felt it was a story worth telling for the state's lead conservation agency.

CARTER P. SMITH

There really wasn't much funereal about it. It was a bluebird day outside, and people had come from far and wide to say their goodbyes to a man who loved nothing more than Texas' lands, waters and parks. And, when the prayers had all been said, the eulogies all delivered, the sermon wrapped up and the tears all shed, someone announced it was time for song.

Not just any song, but one that captured the deceased man's indomitable spirit, zest for the outdoors and love of life with rare perfection. And so we all grinned wide when the services concluded with a thunderous rendition of Woody Guthrie's timeless folk hymn, This Land Is Your Land. Today, the Texas

Don Kennard would have liked the deal.

For the uninitiated. Don Kennard was a native son who went on to serve his state proudly for 20 years as a member of both the state House of Representatives and Senate. He made his mark as a legislator in many ways, not the least of which was his sponsorship of a bill to fund state parks through a new penny tax on every pack of cigarettes sold. His colleagues told him he'd get their vote but likely lose his Senate seat because of it. They were right.

When he was summarily voted out of office in the 1970s over the tax hike, Sen. Kennard took a position at the LBJ School of Public Affairs leading the Natural Areas Survey project of Texas. The survey, which was led by the University of Texas in partnership with the Texas Parks and Wildlife Department, Texas Historical Commission and General Land Office, set out to document some of the state's wildest and most biologically and culturally rich natural areas. The hope was that some of those areas might ultimately be acquired to add to a system of public lands that needed a good dose of diversification.

Kennard and his team of archaeologists, biologists, botanists, cartographers,

photographers, planners and land men tackled the project in earnest. Their reports documented irreplaceable landscapes like the Devils River and Devil's Sinkhole, Blue Elbow Swamp and Matagorda Island, and the Solitario and Victorio Canyon. They made the case that some places were so utterly and intrinsically important ecologically that they should be set aside permanently to preserve the natural history and cultural heritage that Texans treasure about their home ground.

Kennard transmitted each of his team's 13-some-odd reports in letters to a series of Texas Parks and Wildlife Commission chairmen, all with the same hopeful refrain:

"Texas is a diverse and beautiful land with a rich heritage and abundant natural and scientific wonders that should be preserved for the use and enjoyment of ourselves and of generations yet to come. As you pointed out in requesting this survey, our more significant natural areas are disappearing all too rapidly in Texas. It is our hope that the data gathered here will be instrumental in reversing that trend."

Today, the Texas Parks and Wildlife Department proudly stewards most of the special places explored and cataloged by Kennard and his team. In his honor, we plan to place a plaque at all state natural areas in the state park system memorializing his irreplaceable contributions to the lands and waters he loved so.

Thanks for caring about our wild things and wild places. As Don Kennard would no doubt tell you, they need you now more than ever.

Parks and Wildlife

Department proudly

stewards most of the

special places explored

and cataloged by

Kennard and

his team.

EXECUTIVE DIRECTOR

Texas Parks and Wildlife Department mission statement:

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





H2O XPRESS QUICK-DRAW WADING BELT

Padded and ventilated back support

Heavy-duty ripstop pliers sheath

One size fits most

Includes two tackle utility cases

Includes two removable rod holders



shop academy.com | stay connected | Stay 20





MAILCALL

PICKS, PANS AND PROBES FROM OUR READERS

FOREWORD

Folks seem to think we Texans brag too much about how everything is bigger and better in our fair state. Of course, there's only one response to that accusation. "It ain't bragging if it's true!"

Every April, we like to take out the "family" photos and do a little boasting about the natural wonders to be found in the 268,580 square miles we call home. We started the Best of Texas feature in 2011 by asking our own *Texas Parks & Wildlife* staff for their favorite natural wonders, then broadened our scope to the entire TPWD agency in 2012. What better for 2013 than to ask TPWD partners to join the fun?

In this issue, you'll find that those partners share our passion and yours for isolated canyons and bubbling springs, panoramic vistas and iconic creatures. Not surprisingly, many find paradise right in their own backyard as they work to protect and promote the natural assets of their region. While TPWD's 3,500-strong, dedicated work force can accomplish great achievements (as we'll discuss in our special 50th anniversary issue in July), the task would be daunting without our partners.

Who are these partners? They are as varied as the natural wonders they love. They are the smiling faces that greet you in small-town visitors centers, volunteer groups that support state parks, legal experts who help place parcels of land into conservancy, conservationists who protect rivers and the Gulf, people from all walks of life with one unifying passion—protecting our natural heritage for generations to come. Those we present here are just a sampling of a large and enthusiastic corps.

One of my favorite partner groups is the Master Naturalists. Long-time contributor Sheryl Smith-Rodgers decided to take the plunge and become a Master Naturalist. Maybe her experience will help you fishing this and available your own calling to join them (and us) in our mission. In 15 years, more than 7,000 Master Naturalists have contributed a whopping I.76 million hours of service by tagging birds, building trails, planting native grasses, tracking turtle eggs and, most importantly, sharing their knowledge and skills through education outreach.

The TPWD Infrastructure team has trailblazed a "green" building program that we feature this month as well. These innovative folks recognized that the agency had a responsibility to lead by example and put together a team to utilize construction methods that not only conserve energy but also create better working environments at our offices around the state. Our own Rob McCorkle has kept his eye on this program through the years and brings you a comprehensive look at the results.

These warm spring days give us all the fever to get out and fish, hike, bike and explore. Don't forget to take *Texas Parks & Wildlife* along with you on your smartphone or ereader. Each issue is available in a digital format just right for you. And don't forget *Texas Fishing 2013*, a free digital-only special publication to give you tips and inspiration, no matter where you wet your line. I hate to brag, but every inch of this amazing state is waiting for you, and in Texas, that's a lot of inches!

Louie Bond

LETTERS

FROM TRASH TO TREASURE

A few months ago I asked my teenage son and his friend to put a pile of newspapers in the recycle bin near our home. While they were tossing in the old papers, the friend spied a box of old-looking magazines with wildlife pictures on the covers. He con-

vinced my son they might be in good condition and probably had some cool gun photos, hunting tips and good stories to read. Sure enough, they hit the jackpot! It was a box of Texas Game and Fish magazines from 1954 to 1959, all in great condition. The boys realized these were the "old" editions of a magazine they enjoy reading every month.

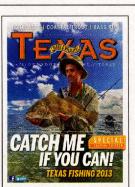
When the boys got home and studied the covers, they noticed each illustration was original art instead of the glossy photos used on most magazine covers today. A little sister noticed that the artist's name on several covers was the same, Clay McGoughy. They won-

dered if they could find out more about him.

A quick Google search revealed that Clay McGoughy is indeed still alive, still an artist and living in San Antonio, only half an hour drive from us.

After communication between the parents and the artist, a meeting was arranged. The children were so delighted to meet the very gracious artist and his lovely wife, Patsy. After an enjoyable conversation about the cover art, how it was commissioned and how the subjects were chosen and created, we were treated to a tour of his at-home art studio. Before we left, the children asked if McGoughy would please autograph the magazines they found, and he was honored to sign them.

The saying "One man's trash is another's



Texas Fishing 2013
Our digital fishing special gives you the scoop on fishing this spring. It's free and available online at www.tpwmagazine.com/digital/2013/fishing.

MAIL CALL

treasure" is certainly true in this case.

We treasure all of our Texas Parks & Wildlife magazines, and now each child has his own highly valued historical object!

SARA CANADY Poth

GETTING OUR KIDS OUTSIDE

My wife and I have been talking about Mways to instill in our boys a love for the outdoors. We don't look to spend tons of money on it or to invest heavily in a new "hobby" but rather would like to find simple ways we can enjoy God's creation together as a family.

One night, I came home, opened up my January/February Texas Parks & Wildlife magazine and found Russell Graves' article, "Dirty Nails and Goat Slobber." I read it to my wife and am thrilled that your No. 6 item says "take your kids hunting and fishing" and goes on to say that there is much opportunity in Texas to do just that.

It was the right article at the right time for us. I was inspired by your article, and now look forward to taking some first steps. My goal is not to become a serious outdoorsman at this point in life, but I do desire to at least plant some seeds so my boys can take it forward from there.

RON FARACE Kingwood

A FINE ISSUE

Thave just finished reading the January/February issue of your fine magazine. And although I have regularly read your magazine for years, I find this particular issue one of the best that has ever been put together!

The three feature articles, along with nearly all the other articles, were really interesting, informative and a pleasure to read. Please keep up the good work.

ROBERT LAWLER Clarendon Hills, Ill.

BRINGING BACK MEMORIES

Just finished reading your outstanding December issue of the magazine, and did it ever bring back wonderful memories. We received the magazine during my entire growing-up years, and looked forward to receiving it each month, not only for the content, but to see what beautiful full-page pictures were included. We even

framed many for the ranch house.

Never did I dream that I'd eventually end up in a position where I was fortunate enough to have the opportunity to promote one of the premier nature-oriented destinations in the state. Congratulations to all of you who have shared the many natural amenities offered in our "whole other country" for the past 70 years.

I know you'll keep up the excellent work! Ann Bracher Vaughan

Port Aransas Chamber of Commerce/Tourist Bureau

Sound off for Mail Call

Let us hear from you!

Texas Parks & Wildlife magazine welcomes letters from our readers. Please include your name, address and daytime telephone number.

Write to us at

Texas Parks & Wildlife magazine, 4200 Smith School Road, Austin, TX 78744.

Fax us at 512-389-8397.

Email us at magazine@tpwd.state.tx.us
We reserve the right to edit letters for length and clarity.



NEWS AND VIEWS IN THE TEXAS OUTDOORS

BIRDS BY THE NUMBERS

The Great Texas Birding Classic goes statewide this year.



Birders, whether they're beginners fumbling to focus their binoculars or

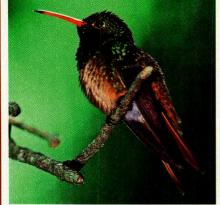
fumbling to focus their binoculars or seasoned veterans who hop in their car to chase a rare bird, take great pleasure in adding new species to their lists. Add a bit of friendly competition, and the desire to see new birds grows to a fever.

The cure? A solid month of competitive birding with the new and improved

Great Texas Birding Classic, back in force this year with new aspects sure to spice up the competition.

In 2013, there will be 42 different categories for participants, and the weeklong contest expands to an entire month, April 15 through May 15. Plus, the contest moves beyond the coast to include the whole state.

"This is a big change from previous years when there was only one week with specific dates allowed for each tournament category," says tournament director Shelly Plante. "Teams now have the ability to plan a time that fits their schedules and needs and, when they have flexibility, allows them to select their date within that month based on



The Birding Classic is back and bigger than ever, with more categories and more places to participate.

weather patterns and when the birds are most likely to be seen."

New categories include State Park Tournaments (within a park's boundaries for the day), Regional Big Day Tournaments for every age and every area of the state, and Statewide Tournaments for teams wishing to travel far and wide throughout the state. There's a Sunrise to Noon Tournament for teams that might want to focus on only a few sites nearby, have mobility impairments, want to bird as a family for a half-day or like the challenge of a shorter length of time. There's a category for just about every situation.

It's easy to get started, even if you're new to birding. The comprehensive website at www.birdingclassic.org has information on how to participate and which tournament is best for you, as well as tournament and sponsorship tips and advice.

You can get a team together simply by finding a few family members and friends who want to join you. Everyone can pitch in to pay the registration, or you can find a sponsor. Then you can pick the category and the dates you want to go. A few more details and you're on your way.

April I is the registration deadline for participating teams, so don't delay!

Birding Classic proceeds will be used for nature tourism and avian habitat conservation and enhancement projects in Texas. These grants will likely include a nature tourism grant, a state parks grant and a non-TPWD grant to a conservation project selected by some winning teams and TPWD staff. Since the Great Texas Birding Classic started in April 1997, team registration fees and sponsorship dollars have contributed to \$789,500 in donations to avian habitat conservation on the Texas coast.

-Louie Bond



ZEBRA MUSSELS HIDE HERE.

CLEAN, DRAIN, DRY YOUR BOAT.



Clean Your Boat. Save Your Lake. Zebra mussels are small invasive species that can spread from lake to lake by hitching a ride on your boat and trailer. One female

can have up to a million microscopic larvae. They mature quickly, aftach to hard surfaces and can damage your boat and engine. They hurt aquatic life, ruin ecosystems and fisheries – even affect your water supply. You can keep that from happening by cleaning your boat, motor, trailer and gear of all debris and craining it of all water. Then dry it for at least a week or wash it all with hot, spapy water before boating in another waterbody. Learn more at www.texasinvasives.prg

HELLO ZEBRA MUSSELS. GOODBYE TEXAS LAKES.







Urban Getaway

A stone's throw from San Antonio, Government Carryon protects water and warblers.







Government Canyon was established to preserve an aquifer watershed, but it also provides a home to endangered animals such as the golden-cheeked warbler.

It's hard to believe that such a vast and pristine wilderness area exists just a few miles from the bustling streets of downtown San Antonio. At more than 8,500 acres, Government Canyon State Natural Area is also one of the

nation's largest karst (rainfall's geologic

entryway) preserves.

Karst is a terrain formed by dissolving limestone and featuring sinkholes, caverns and underground streams.

This urban retreat covers a port:on of the Edwards Aquifer recharge zone, safeguarding the primary source of drinking water for the city of San Antonio and its surrounding communities. That's right — it's all about water at Government Canyon.

In addition to protecting groundwater, emphasis is placed on protection of this area's sensitive natural and cultural resources. Several endangered species call this place home, including the goldencheeked warbler, whose bright yellow cheek feathers may be spotted

in stands of ashe juniper during the spring and summer nesting season.

At Government Canyon, priority is placed on preservation and stewardship of the area through minimal human influence. The primary objectives are resource protection first, public education second and recreational opportunities third.

Whether you're an avid mountain biker or have a family with small children, you can choose from nearly 40 miles of hiking and biking trails leading through a mosaic of rolling prairies, rugged hills and spectacular canyons. Ask the staff about ways to experience the area that are best suited for you.

"The 'frontcountry' area is inviting for families and dogs, while the 'backcountry' area attracts mountain bikers and hikers," says Superintendent Chris Holm. Government Canyon is a top Hill Country destina-

tion for bird and butterfly watching, as well as a great place to discover spring wildflowers. Regularly scheduled guided hikes and ranger programs are offered to enhance the experience, or try an overnight stay. Government Caryon now has walk-in (50 to 60 yards) tent camping on Fridays and Saturdays (reservations recommended, as sites fill up fast).

No matter what kind of experience you're seeking at Government Canyon, this pristine wilderness promises a beautiful retreat.

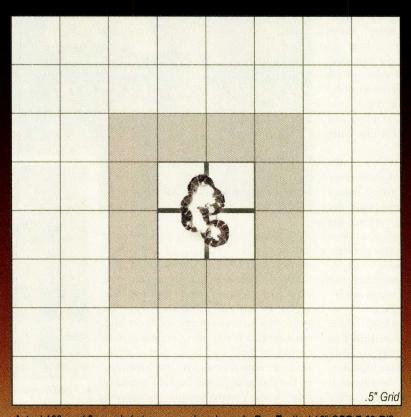
"Be prepared for wilderness. Have a healthy respect for it and your abilities," says park interpreter John Koepke.

Government Canyon State Natural Area is located northwest of San Antonio. From the intersection of Loop 1604 and Culebra Road, travel west on Culebra 3.5 miles to Galm Road. Turn north (right) on Galm and travel 1.6 miles. For more information, visit www.texasstateparks.org or call (210) 688-9055.

— Tara Humphreys

ACCURACY

ORIGINATES DEEP IN THE HEART OF TEXAS



Actual 100 yard 5-round shot group made using a LaRue Tactical 16" OBR 7.62 Rifle.









Great White Bird

Majestic whooping cranes were nearly lost but have made a comeback here.

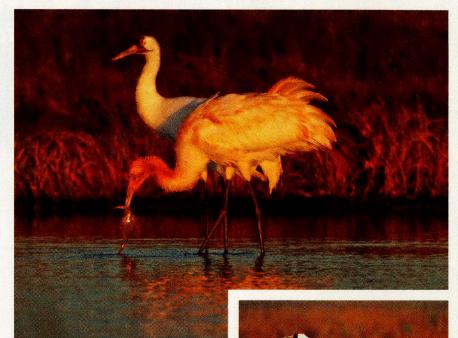
When my family moved to Aransas National Wildlife Refuge in 1973 (my dad was refuge manager), nestled among the live oaks and swarming mosquitoes was a tiny visitors center with a stuffed whooping crane, some photos and refuge artifacts, and a dark corner with a slideshow about whooping cranes. Though the tape recording and 35mm slides were primitive by today's standards, the haunting recording of whooping crane calls and the opening line of the narration still resonate in my memory: "The story of the whooping crane has been described as a love affair between a great white bird and two nations who have traditionally cherished the underdog."

Over the last half-century or more, these great white birds and their story have captured the imagination of Texans and of wildlife lovers throughout the world. Whooping cranes, named for that haunting bugling call, are the tallest birds in North America, standing nearly 5 feet tall. They are majestic in flight, with long necks and legs extended and with the black tips of their wings reaching a span of more than 7 feet.

Perhaps more than anything, their courtship behavior has contributed to their mystique. Cranes generally mate for life and raise their chicks together. They cement their pair bonds with dances, displays and calls that have earned them a place in mythology and legend in many cultures.

Whooping cranes almost disappeared before we knew we loved them. When Aransas National Wildlife Refuge was purchased in 1937, there were only a few dozen whooping cranes left in the world. In the early '40s, the migratory population that wintered at Aransas and nested at (then unknown) Wood Buffalo National Park in northwest Canada dropped to only 16 birds.

The recovery process has been slow, due in part to the fact that these long-lived birds usually rear only one chick per year. Though wildlife professionals took action to protect whooping cranes from being shot and to protect and manage the coastal wetland habitats that provide their food and roosting



sites, there were still only 49 whoopers left in the last flock in the wild when my family arrived at Aransas in 1973.

More recently, protection for whooping cranes and habitat has begun to pay off more steadily — by 1986, the winter counts in Texas had reached 100 birds, and the population surpassed 200 in 2004. Today, officials estimate that about 300 birds are in the Aransas-Wood Buffalo population, leading many people to describe the story of the whooping crane as one of the Endangered Species Act's greatest success stories.

Still, challenges remain for the magnificent underdog. Various experiments to establish additional whooping crane populations in other parts of the country have thus far failed to produce self-sustaining populations. Even keeping track of whooping cranes has become more challenging, as an expanding population has begun to use wintering habitats farther away from Aransas. Three whooping crane families even wintered in Central Texas in 2011–12.

Despite the challenges, our love affair won't let us give up on whooping cranes. The City of Rockport estimates that whooping crane tourism brings in



millions of dollars to the local economy annually. In fact, citizen interest prompted TPWD to create a Texas Whooper Watch program this year to track the cranes (www.tpwd.state.tx.us/whoopingcranes). Become a citizen scientist there, or just learn more

Forty years later, the closing line of that primitive slideshow in the darkened corner of the Aransas visitors center still rings true: "Slowly, very slowly, the number of whooping cranes climbs upward. Their story is truly an adventure in survival."

about whoopers.

- Lee Ann Johnson Linam



The Seduction of Venus

Venus' looking glass has shiny, mirror-like seeds to reflect its beauty.

Venus' looking glass (Triodanis spp.), also known as clasping bellwort, has a seductive appearance that will easily draw your attention, requiring a closer look at this amazing spring annual wildflower. Early in my botanical career in Texas, I was puzzled about how this plant received its common name. I found that it was named for its very shiny seeds that have an appearance of a looking glass or tiny mirrors.

Venus' looking glass mainly blooms from spring to early summer and grows in full sun, in mostly well-drained soils. It reproduces best in areas with sparse or low vegetation and are native to most of North America.

Texas is blessed with all seven species of Venus' looking glass known in the United States. No matter what region of the state you live in, you will likely come across this showy member of the bluebell family (Campanulaceae). The most prolific Venus' looking glass in Texas is the clasping Venus' looking glass (Triodanis perfoliata), which can be found in a variety of Texas habitats including tallgrass prairies, post oak savannas, longleaf pine savannas, creek and river banks, South Texas caliche and sandstone uplands, and isolated locations in the Davis Mountains in West Texas.

Texas Venus' looking glass (Triodanis texana) is endemic to Texas (meaning it's found nowhere else but the Lone Star State), where its habitat is primarily restricted to savanna openings in deep sand soils in the central and southern post oak savanna (from Tyler southwest through Bryan/College Station to south of San Antonio). Plant lovers can observe Texas Venus' looking glass at Bastrop, Lake Fairfield, Lake Somerville and Fort Boggy state parks and Gus Engeling Wildlife Management Area.

Venus' looking glass is a taprooted annual that grows to heights of 6 to 30 inches. The leaves are up to one inch long, alternate, light green, hairy and heart-shaped with wavy or toothed margins, and they strongly clasp the stem. The stem and leaves contain a milky sap.

Flowers are solitary, with five petals and five sepals (leaflike parts), and range in color from blue or violet to white. The

flowers on the lower stem are self-pollinated and never open, resembling little telescopes searching out the skies above. Flowers on the upper stem are wide-open and star-shaped. The flowers are tucked away in the axis of roundish, clasping, leaf-like bracts. Fruit is an elongated linear seed pod that releases many tiny, windblown seeds.

Invertebrate wildlife such as carpenter bees, green metallic bees and plasterer bees frequently visit the flowers. The plasterer bee is a specialist pollinator of Venus' looking glass. Other insect visitors include small butterflies, bumblebees, skippers and flies. Some mammal herbivores consume this plant; however, it is not a significant food source.

When you are hiking about Texas' landscapes this spring and early summer, look out for the telescope-appearing Venus' looking glass flowers that are in search of pollinators and plant enthusiasts.

— Jason Singhurst





Nature Apps

Properly used, smartphone apps can enhance your nature experience.



Smartphones are handy tools for identifying birds or animal tracks, finding your way or recording observations of the natural world.

All trails lead to Cameron Park one of the biggest and best municipal parks in all of Texas. Located in the heart of Waco, you will discover over 15 miles of trails scenic overlooks, playgrounds, and abundant wildlife along the banks of the Brazos and Bosque rivers. Experience more nature at Lake Waco where nesting bald eagles raise their young and soar high above.

Start planning your adventure today. Visit wacocvb.com or call 1-800-WACO-FUN.

Smartphones are the ultimate technological multitool. They combine a computer, a camera, a camcorder, a GPS, a compass, a flashlight, a phone and access to a library of information, all in a handheld device that fits comfortably in your pocket.

For naturalists and outdoor enthusiasts, smartphones can be an amazing tool for learning about the natural world, collecting data and navigating the outdoors. The key for turning your smartphone into the ultimate outdoor tool lies in the apps you purchase.

There are many excellent apps for both the iPhone and Android operating systems; however, finding the good ones can be a challenge.

I researched many outdoor apps while developing my own iPhone app called iTrack Wildlife, which is a photographic guide to the tracks, scats, skulls and signs of 65 mammals of North America. I learned that the best apps are simple and intuitive and present complex topics in a way that is both engaging and understandable.

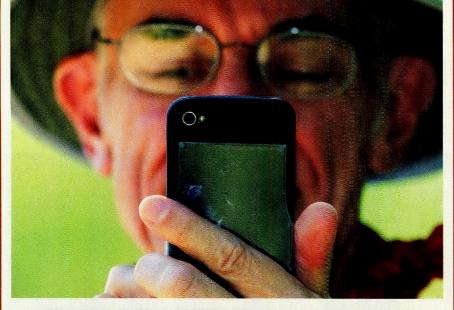
These are several of my favorite apps for the outdoors:

Field Guides

iBird Pro (iPhone, Android, \$19.99-\$29.99). There are many good birding apps. But iBird Pro has an exceptional user interface and great content with detailed information, paintings, photographs and several song variations for 926 North American birds. It also has an elaborate search function for finding birds by various field marks.

Audubon Apps (iPhone, Android, \$5-\$20+). Audubon makes many nature apps, including those covering birds, mammals, butterflies, insects and spiders, reptiles and amphibians, trees, wildflowers, mushrooms and fish. While the standard user interface is a little awkward, for many taxonomic groups Audubon offers the best guides available. It also offers a Texas compilation guide that is the equivalent of 10 field guides for \$9.99.

Maps and Navigation
MotionX GPS (iPhone, 99 cents).



HERE ARE A FEW THINGS TO CONSIDER BEFORE YOU PURCHASE AN APP:

- "Lite" and free versions: Many apps allow you to download free versions that allow you to test them.
- Research: Be sure to read the app description and the user reviews. Also, search for it online. Many developers post demonstration videos on YouTube.
- User interface: A good user interface is simple, intuitive, aesthetic and efficient.
- Content: An app with a beautiful user interface is of little use if the content is lacking or incorrect. It's worth paying a little extra for a good app. You usually get what you pay for.

This excellent GPS and ravigation app is leaded with features, has a beautiful user interface and allows downloading of various maps for use outside of cellular range.

GPS Essentials (Android, free). A great free GPS app for Android with many of the same features as MotionX GPS.

GeographTX (iPhone, \$4.99). This unique app can display cozens of different map layers such as vegetation, geology, hydrology, terrain, public lands, land use and more.

Maplets (iPhone, \$2.99). Enables users to download official park and recreation maps for thousands of sites across the country. Other maps often don't have details like trail names, campsite numbers, etc.

Topo Maps (iPhone, \$7.99). Provides downloadable, GPS-enabled, USGS topographic maps for the entire U.S. This app is extremely handy for traveling in remote areas without a cellular connection.

Astronomy

Star Walk (iPhone, \$2.96). Put a planetarium in your pocket. This appuses the compass and accelercmeter in your phone so that the view is always properly aligned with the stars you're seeing. It's an incredible tool for learn-

ing constellations, planets and stars.

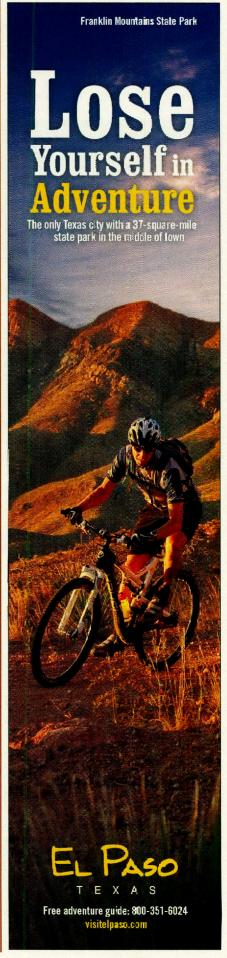
Google Sky Map (Android, free). Very similar to Star Walk, but it's free.

Data Collection

Theodolite (iFigne, Android, \$3.99). Combines the camera in your phone with a compass and accelerometer to overlay information such as altitude, direction, location and angle on photographs Great for documenting the exact location of a photograph so the subject can be found again later.

iNaturalist (iPhone, Android, free). Allows citizen scientists to participate in research projects and submit sightings to an online database where other users can assist in identifications.

While smartphones can greatly enhance our enjoyment of outdoors, there are drawbacks. First, smartphones are fragile and their batteries are short-lived, especially while using GPS. They are great for navigation, but should never be relied upon entirely. Second, remember that the goal of using nature apps is to learn about nature, not to play with your phone while in the outdoors. This is both a safety and practical precaution. Awareness of your surroundings in the wilderness is critical to avoiding hazards as well as seeing wildlife.





Kids and Cameras

Photography can serve as a catalyst to get children active in the outdoors.



SIGHTS & SOUNDS TEXAS PARKS & WILDLIFE TY AND RADIO

March 31-April 6: Documenting dinosaur tracks; TPWD firefighter Jeff Sparks; Cleburne State Park; historical nature film; natural abstracts.

April 7-13: TPWD firefighters on the front lines; wild game cooking, redfish: Bastrop tree planting; a day in the life of a fishing guide; nature up-close.

April 14-20: Fishing for gargantuan alligator gar; marsh maven Cherie O'Brien; park wildlife.

Possum Kingdom fire recovery; black bears of the Trans-Pecos: biking the Franklin Mountains.

April 21-27:

Removing Hueco Tanks graffiti; Cook's Branch Conservancy; cooking venison; kingfishers in Texas; Matador WMA winds.

April 28-May 4: Game wardens work the Gulf; Gibson Ranches restoration: science camp comes to life; Martin Dies



Work is being done to document and preserve the fossil remains of dinosaur tracks along the Paluxy River. Watch the week of March 31-April 6.

TEXAS PARKS & WILDLIFE

Winner of 12 Emmy Awards, our television series is broadcast throughout Texas or local PBS affiliates. In stereo with closed captions.



www.tpwd.state.tx.us/tv

Passport to Texas is your guide to the great Texas outdoors. Any time you tune in, you'll remember why you love Texas. Go to www.passporttotexas.org to fnd a station near you that airs the series.

PASSPORT TO TEXAS

Join host Cecilia Nasti weekdays for a 90-second excursion into the Texas outdoors. Find a station near you, or listen on the Web, at

www.passporttotexas.org

Persuading today's kids to step away from their computers, video games and smartphones to go outside and explore the natural world can be an exercise in futility. Our children's world increasingly revolves around electronic-based entertainment and social interactions rather than quality

time spent in the outdoors. However, one electronic device, the digital camera, can be the catalyst that provides a gateway between technology and nature. In his book The Nature Principle, author Richard Louv describes this as "hybrid learning," where technology and nature work together to create a new way of thinking.

The digital camera and its cousin the smartphone, with their varieties of menus and settings, are familiar interfaces to tech-savvy youngsters; just ask any parent who has had to ask a 6-year-old child to program a TV remote. The camera has the potential to become, in essence, an engaging electronic game, especially when it can be used in fun, challenging and even educational scenarios.

For instance, one simple game that can be enjoyed by kids and parents is a photo scavenger hunt. A list of common items in a park or yard can become the "hunted," and a picture



If your kids like electronics, digital photography may be an effective way to entice them to head outside.

must be taken of each item. The items could be plants, animals, insects, colors, shapes, etc. The possibilities are endless.

Very simple point-and-shoot cameras with automatic settings are ideal because they allow children to get very good images without having to be concerned about any advanced camera controls.

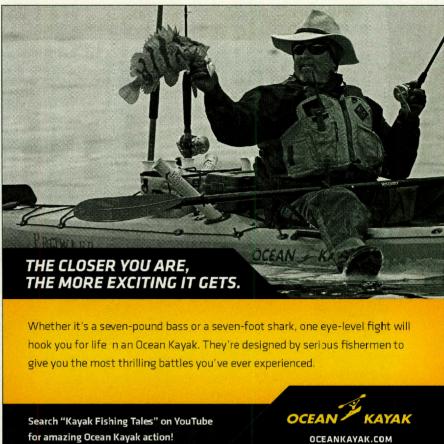
It's intriguing that children will often spend quite a bit of time composing each image in order to get it "just right." The time spent looking through the viewfinder and the concentration required are the special moments that allow the child to experience the details and nuances of nature in this up-close and personal way.

After shooting pictures, children can make a scrapbook with captioned photos detailing the names of plants, animals, people or locations. Additionally, photos can be shared with friends via online photosharing sites such as Flickr and Instagram or social media sites such as Facebook. Pictures taken in a Texas state park can even be posted to that park's social networking site.

Digital photography is a great tool not only to get today's technologyoriented kids out and discover nature but also to preserve and share those discoveries with their family and friends.

- Earl Nottingham

Please send questions and comments to Earl at earl.nottingham@tpwd.state.tx.us.







* ENCHANTED ROCK, TEXAS *

GUTS-GLORY 00



Days in the Field / By Tom Harvey

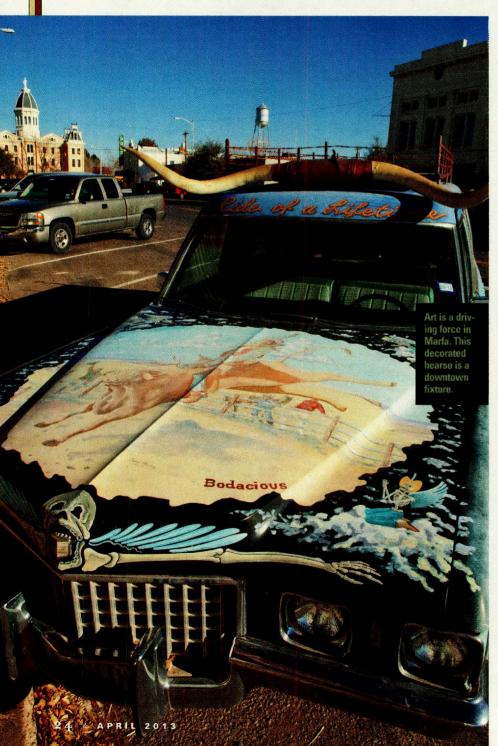
DESTINATION: MARFA

TRAVEL TIME FROM:

AUSTIN -6.5 hours / DALLAS -7.75 hours / HOUSTON -8.5 hours SAN ANTONIO -5.75 hours / LUBBOCK -5 hours / EL PASO -3 hours

Art + Nature = Marfa

The unlikely marriage of artsy hipsters and old-time ranchers has produced a quirky offspring.



This is a tale of two cities: Marfa,

old and new. Perhaps more correctly, it's about the integration of old and new into something more diverse, embracing modern times while keeping deep roots in the old soil.

There's plenty to do now in Marfa for travelers — art, music, great food, places to stay. But to understand the place's fundamental appeal, it's important to listen to the old guard as well as the new, and see how the two are blending.

"If you just stuck with people who have been here forever, you'd have very slim pickin's," says Aurie West, a Marfa matriarch whose son Hayes runs cattle on the family's Escondido Ranch nearby. "Some of what's happened is good and some is not so good, but there have been a lot of lovely people move in. So you have to grow with it."

Aurie's daughter Adele grew up on the ranch and now teaches school in Fort Davis. She says her mom is a bit of a social butterfly at age 75, mixing it up in the new Marfa.

"My kids in college say it's terrible when your grandmother has more of a social life than you do," Adele laughs.

For one thing, there's the craft group Aurie joined.

"A knit shop opened up a couple years ago, and they started a craft night," Aurie West says. "There's not anybody in that group I've known all my life, but it's a great group. The first year I went [in 2010], there were a whole lot of young Chinati [Foundation] interns. It's amazing to see knitting and crocheting taking vogue, to see them start and whiz by."

To be sure, a lot of new things are whizzing by in Marfa these days. The town still has only about I,900 permanent residents. But it's attracting all kinds of folks.

The week I was there, so was Morley

Safer and a 60 Minutes TV crew, shooting a travel story. The week before, the Houston Chronicle ran this item: "Natalie Portman, her husband Benjamin Millepied and their son Aleph were seen in Marfa this past weekend, according to the New York Daily News. Donald Judd's Chinati Foundation Weekend drew many art elites to town and to the restaurant Cochineal, where Portman and her family were forced to wait."

It wasn't always this way. In the early 1980s, Marfa was dying. Drought and economic recession took down many a ranching family.

"It was kind of a doldrums. The ranch families and businesses had left, and the art scene had not happened yet. So it was really a sad time; you'd go through town and see very little life," says John Fowlkes. Fowlkes grew up in Marfa in a ranching family, left to work in a Houston law firm for years, but has returned and is now the county attorney. The Fowlkes family owned the giant Sauceda Ranch, which later became Big Bend Ranch State Park.

Then things started happening. In 1986, renowned New York artist Donald Judd opened the Chinati Foundation, a contemporary art museum. It was joined later by the Judd Foundation, which offers tours of the artist's former residence, La Mansana de Chinati. Houston attorney Tim Crowley bought buildings and restored them, creating the Marfa Book Company and Crowley Theater.

"It's probably somewhat true that art, and the people it drew who came or came back, saved Marfa," Fowlkes says. "For the most part, I think the change has been welcomed. By me, anyway."

One of those who came back is Mercer Black Declercq, a fourth-generation rancher's granddaughter.

"I have vivid memories of growing up with no TV, and nobody to play with but my brother," Declercq told me as we lunched at the Food Shark, a Mediterranean food cart near the railroad tracks that draws an eclectic Austin-type crowd, serving dishes like "Marfalafel."

"We spent most of our childhood looking for arrowheads in dry creekbeds and riding horses," she recalls. "We had wild turkeys that we would feed daily. If you teach them to come to you, then when you're ready to eat them you know where they are."

But Declercq's family moved to Austin in 1983 after the ranching recession hit.

"I remember saying I would never go back to Marfa," she recalls. "There was nothing to do for a 16-year-old out there."

During a 2003 visit, she discovered her hometown had changed.

"I remember being wowed by this fab bookstore with great coffee and a wine bar," she recalls. "I asked, 'What's happening in Marfa?"" Friends told her that after Judd's death, the art scene took off.

Indeed, looming large over the improbable rise of a tiny West Texas town as an art mecca is the long shadow of one man: Donald Judd. Why did he









choose to relocate here in the 1970s?

Part of the answer is that Judd had a passion for the desert, nurtured by family trips to Baja California.

"He was interested in the connection between art, the way it's installed in buildings and the landscape it sits in," says Ann Marie Nafziger, Chinati Foundation director of education.

It's been said that nature abhors a straight line. Not Donald Judd. He loved clean, geometric precision. Perhaps he liked the way the razor-straight lines of his art contrasted with the wandering chaos of the surrounding high desert grasslands and mountains.

Another reason for his relocation to Marfa? Judd needed room. He'd already filled a five-story New York building with art. Marfa had space in spades: plenty of big empty buildings, surrounded by the big wide open.

Today, you'll see those buildings restored and filled with monumental art. The artillery sheds of former Fort D.A. Russell are filled with Judd's "IOO untitled works in mill aluminum," row upon row of gleaming rectangles, bounded by floor-to-ceiling glass walls that show the outside landscape all around. In this space, whispers of tour visitors echo like the voices of penitents in Renaissance cathedrals.

Likewise, the cavernous former Marfa Wool and Mohair Building is filled with Judd contemporary John Chamberlain's "22 variously titled works in painted and chromium-plated steel" (old car bodies crunched into folded shapes, like giant crumpled balls of colored paper).

Art has drawn rafts of newcomers and returnees, who mix with the old-timers. Declercq moved back in 2006 and stays hopping busy as a graphic artist and marketing consultant. She embodies the mix of new and old, and she says her ranching heritage is still

part of the scene.

"I think most people who come here come because of a respect for the old," she says. "They love that there are cowboys around. Just because we have New York-based nonprofit art spaces doesn't mean that it's New York. It's still the country, and people like that."

Few came from as far away as Verena Zbinden-Vollenweider, who arrived in Marfa from Winterthur, Switzerland.

"I was a Houston refugee wanting a better quality of life without air conditioning," says Zbinden-Vollenweider, who now runs Squeeze Marfa, a charming little eatery across from the county courthouse. Besides good coffee and breakfast, she sells artisan chocolate, air-shipped from the family business back home, Vollenweider Chocolatier Confiseur. You might say it's out of this world.

"This may be the only chocolate that's left planet Earth," she tells me, showing a photo of Swiss astronaut Claude Nicollier floating weightless in the space shuttle, holding a chocolate box. "All four times he went into space, he took my brother's chocolate."

For my first night in Marfa, I savored the elegant comfort of the historic Hotel Paisano. Built in 1929, it cemented its iconic place in Marfa history in 1955, when Elizabeth Taylor, James Dean and Rock Hudson stayed there while making the movie Giant.

But for night No. 2, I wanted something different. I found it at El Cosmico, along with another tale of a ranching daughter who emigrated to the big city, though her heart pulled her back west.

Liz Lambert grew up in Odessa, but spent a lot of time on the family's McKnight Ranch north of Marfa. She moved from Manhattan back to Austin in the early 1990s and developed a bevy of hip hotels and coffee shops.

In the mid-2000s, she took her hotelier moxy to Marfa. El Cosmico, per the website, is "part vintage trailer, safari tent and teepee hotel and campground, part creative lab, greenhouse and amphitheatre — a community space that fosters and agitates artistic and intellectual exchange."

"I look at El Cosmico as sort of an armada in the ocean of desert," Lambert says. "I think the trailers have a ship-like quality about them that fits so perfectly out there, despite the fact that there's no real body of water for hundreds of miles. Plus there's something so nomadic about the place. I think trailers and teepees and yurts fit that feeling of movement and exploration."

El Cosmico's trailers are an array of lovingly restored vintage travel trailers from the 1940s and 1950s.

"We like the orphan brands — we don't do any Airstreams," Lambert says. "We just like the shapes and interiors of Vagabonds, Mansions and Kozy Coaches."

If the trailers are too pricey for you at \$110 to \$150 per night, try a safari tent at \$65. If you want the full Cosmico experience, consider going during the annual Trans-Pecos Festival of Music and Love in late September.

After all that, I wanted to clear out and see things afresh from a high vantage. I found just the place for night three, one of the finest backpacking and day-hike mountain getaways in Texas. It's closer to the big cities than either of the Big Bend parks, and you can sip a latté in Marfa the next morning.

Many visitors know and love Davis Mountains State Park's developed southern portion, which contains Indian Lodge and the eye-popping view from Skyline Drive, drive-in camping and great trails. But few people know that most of the park - about 1,700 of its roughly 2,700 acres - lies north of Texas Highway 118. This is primo mountain wilderness, the beautiful Limpia Canyon Primitive Area, accessed by seven miles of hiking and horseback trails. From Limpia Creek by the highway, the trail ascends 900 feet to a stunning overlook that's higher than Skyline Drive — from here you can see right over the southern part of the park and behold the Marfa plain and great shadowed folds of mountains in the blue distance.

I'll let you in on a happy secret: the park is planning 10 miles of new trails for hikers, mountain bikers and horses in the Limpia Canyon area. The Sheep Pen Canyon trail system will abandon all the current old jeep road trails in favor of new singletrack. If all goes as planned, visitors should enjoy new trails and primitive campsites sprinkled throughout this gorgeous wilderness by late 2013.

Old and new, hip and primitive, sociable and isolated, Marfa offers an interesting mix of two diverse worlds.



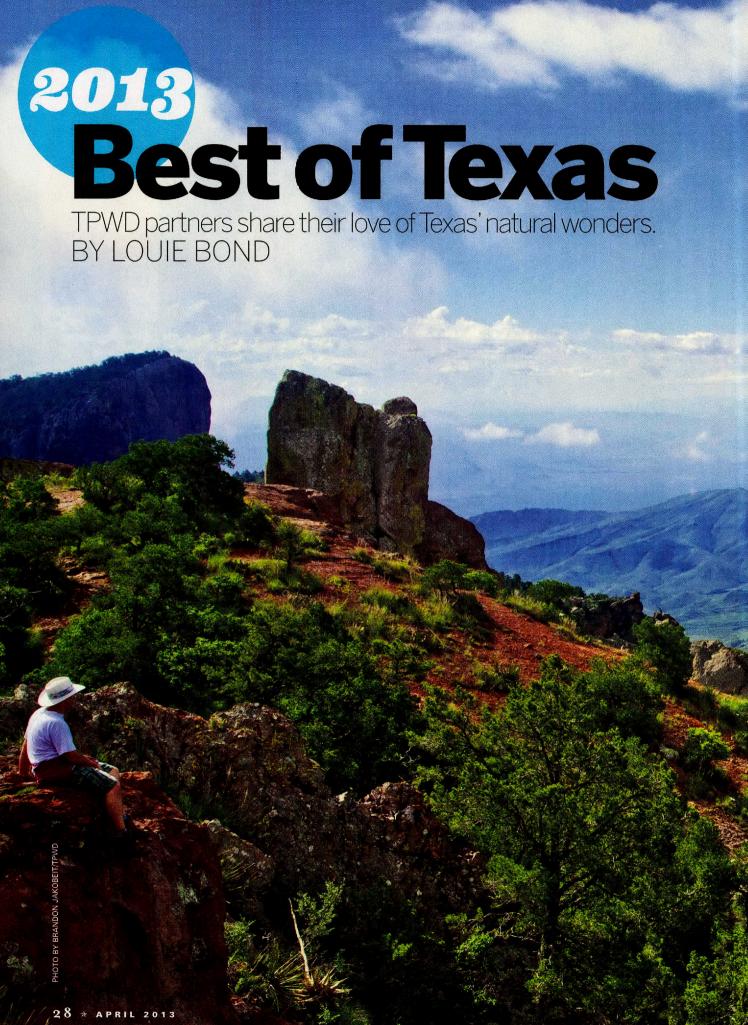


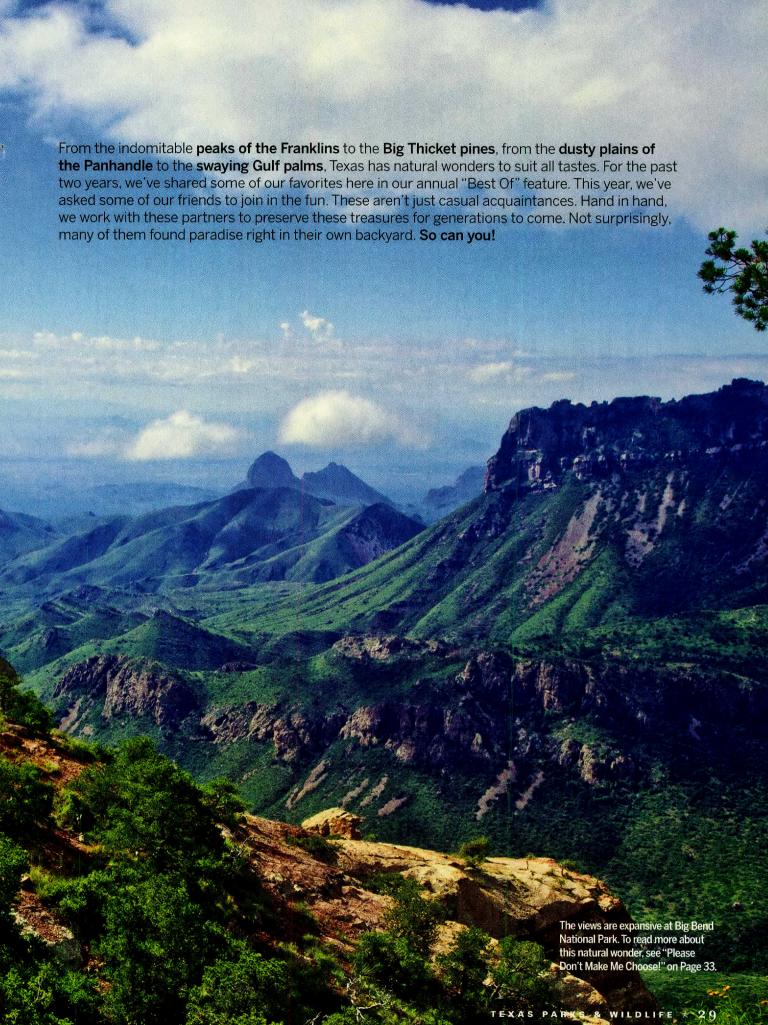
MEMORIES MADE HERE

Corpus Christi/Upper Padre Island offers dining options from white tablecloths to mocha beaches. This place of surf, sun and sky was first called Isla Blanca, the White Island, by Spanish explorers. Still timeless, and mostly untouched, these beaches are perfect places for making lifelong memories. So is the urban oasis of Corpus Christi. A city with a horizon-wide bay window. Here you can experience music venues, acclaimed dining, accommodations for any budget, museums and shopping. Don't miss unique attractions like The Texas State Aquarium or the USS Lexington Museum. What will you remember most?









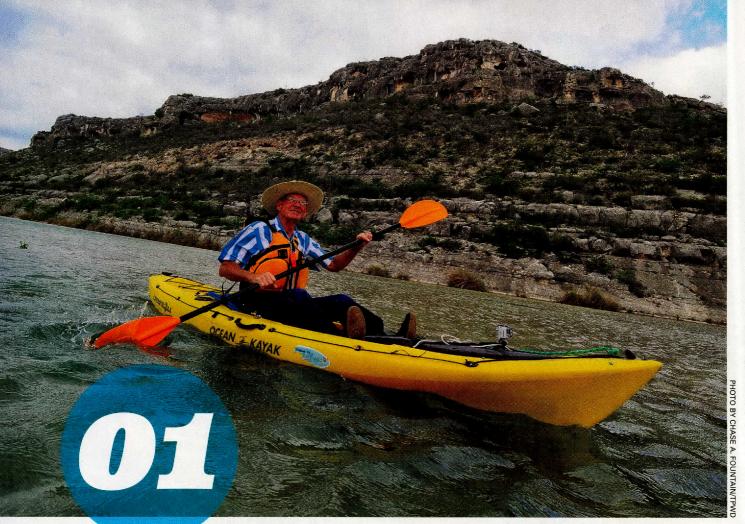
Fuel economy without power is like FISHIN' WITHOUT BAIT.

Best combination of towing and fuel economy.* 11,300 lbs. 22 hwy mpg. That's quite a haul.

*When properly equipped. Based or max, towing and EPA-est mated 15 city/22 hwy mog, 3 5L V6 4x2; 4x4 shown. Class is Full-Size Pickups under 8,50C lbs GVWR, Non-Hybrid vs. comparable competitive engines. Available EcoBoost® vs. 2C13 GM 5.3L, Ram and Toyota 5.7L and Nissan 5.6L V8 engines.







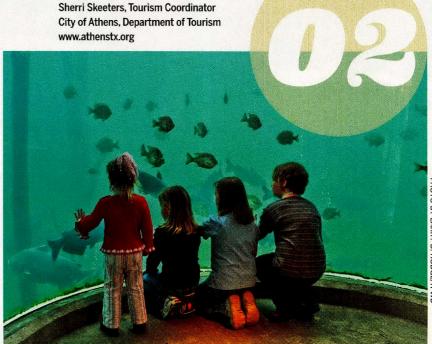
The Best River to 'Know Where' in Texas

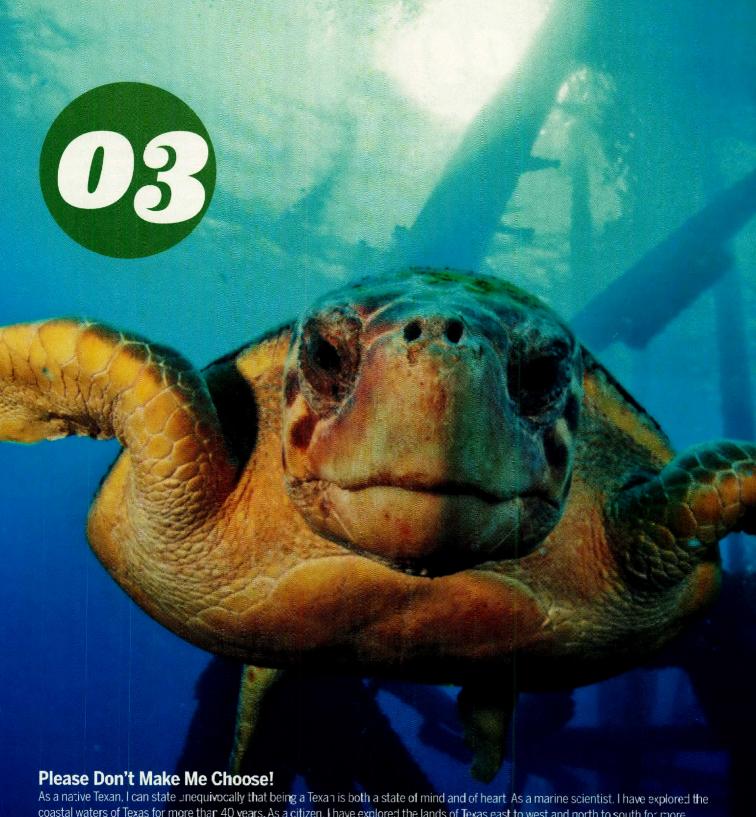
The Devils River, in a remote part of Southwest Texas, is the most unspoiled river in Texas or maybe even the entire Wild West. More than 90 miles long, the river winds through beautiful canyons and desert landscapes that display little evidence of people. These clear and pure waters remain so because the river is protected by miles of private lands on both sides, and a portion of it runs underground through a natural rock and gravel filter. While it is not for amateur paddlers because the conditions are unpredictable and often harsh, the rewards are worth the risk for those skilled and willing to take on the challenge. The river boasts both world-class scenery and a little-known fishery for smallmouth bass that is unrivaled anywhere.

Larry D. McKinney, Executive Director Harte Research Institute for Gulf of Mexico Studies www.harteresearchinstitute.org

Best Place to Play Catch

Many young anglers catch their first fish at the Texas Freshwater Fisheries Center in Athens, which makes it the best place to play catch in the state. Young anglers learn how to bait a hook at the 1.2-acre stocked fishing pond. They catch sunfish and catfish year-round; rainbow trout are stocked from December through March. No license is required for adults or children, and all bait and tackle are furnished. Visitors to the Texas Freshwater Fisheries Center can also explore the 300,000 gallons of aquariums with native Texas fish, watch the daily dive show, take a tram tour of the hatchery and walk the interpretive wetland trail for bird watching and turtle spotting.





Please Don't Make Me Choose:

As a native Texan, I can state unequivocally that being a Texan is both a state of Texas ease to coastal waters of Texas for more than 40 years. As a citizen, I have explored the lands of Texas ease to than 60 years. Texas is home. As hard as I might try, I cannot cite any single location as my favorite. On Padre Island National am struck by the realization that for thousands of years the waves have been rolling onto these shores, and at one time the Karar kawa Indians roamed the island. At the Flower Garden Banks National Marine Sanctuary, I am awestruck by the life of a coral reef. Giant whale sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks, manta rays and hammerhead sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks are coral reef. Giant whale sharks cruise over the coral and clouds of brightly colored tropical fish. The vast ranchlands of sharks are coral reef.



Best Place for a Swamp Meet

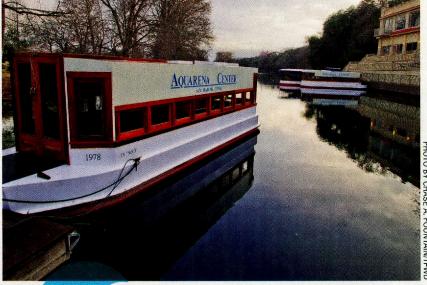
Beaumont has so many outdoor attractions, from birding at Cattail Marsh (inside Tyrrell Park) to learning about alligators at Gator Country Wildlife Adventure Park. Explore the Neches River, one of the last wild rivers in Texas, whether you prefer to fish or take a guided riverboat tour. Take a canoe trip through the Big Thicket National Preserve and camp at Village Creek State Park for some great hiking and birding. If you love flowers and foliage, check out the Beaumont Botanical Gardens and the Warren Loose Conservatory, or take a side trip to Shangri La Botanical Gardens in nearby Orange. There are a million options for nature lovers.

Stephanie D. Molina, Director of Marketing, Beaumont Convention & Visitors Bureau www.beaumontcvb.com

Best Small Bird, Best Tall Bird

Birders from across North America flock to Rockport every winter to enjoy what is arguably the finest bird-watching terrain anywhere in the world. Migrating **hummingbirds** (the smallest bird) herald the arrival of the annual HummerBird Celebration, and the endangered **whooping crane** (the tallest bird) descends every winter in the Aransas National Wildlife Refuge. More than 350 bird species can be found in the refuge.

Diane Probst, President
Rockport-Fulton Chamber of Comme
www.rockport-fulton.org



Best Historical Font

(and It's Not Times New Roman)

Many Texans in my generation grew up making an annual pilgrimage to a special place that for nearly 50 years was called Aquarena Springs Resort, located today on the campus of Texas State University in San Marcos. The heart of the resort, which featured Aquamaids and swimming pigs, was San Marcos Springs, the second-largest cluster of artesian springs in Texas. Archaeologists believe this site, discovered by Spanish explorers in the early 18th century, is one of the oldest continuously inhabited places in North America. The natural history of the springs is equally special, as they are home to a whopping eight endangered or threatened species. Today, the site has been fully restored, and virtually all remnants of the resort era have been removed (the glass-bottom boats remain), allowing the current generation of children to see this lovely place in its natural condition.

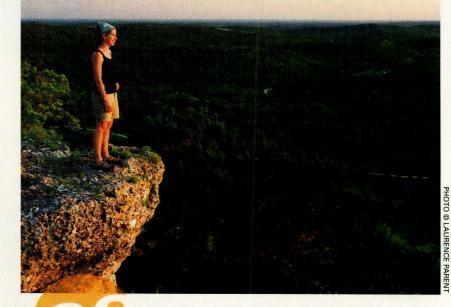
Andrew Sansom, Executive Director, Meadows Center for Water and the Environment, www.meadowscenter.txstate.edu



Best Friend to Roll, Roll, Roll Your Dung

If you got me in a hammerlock and forced me to choose my favorite critter, I'd pick the **dung beetle**, also known as the tumblebug. What a monumental job it has! Imagine being charged with keeping our soils alive by burying all the dung you happen upon.

David K. Langford, Photographer/Owner Western Photography Company www.westernphotographycompany.com



Best Place to Achieve Perfect Peace

My pick would be the **Hill Country State Natural Area**. The name says it all. Perfect peace and quiet interrupted only by the chirping of birds and the occasional sound of horses' hooves and hikers' boots. There are more than 40 miles of trails to enjoy. A true treat is to stay at the lodge with a group of friends. The stars are bright, and the silence is golden.

Patricia Moore, Executive Director

Bandera County Convention & Visitors Bureau
www.banderacowboycapital.com



PHOTO @ ROLF NUSSBAUMER/ROLFNP.COM

Best Rainbow-Flavored Sunrises

My favorite natural place in Texas is the beach at Mustang Island State Park. This stretch of sand near Corpus Christi offers memorable Gulf sunrises that paint the sky with every color of the rainbow. My family enjoys the serene environment at the park, where we fish, tell stories around the campfire, build sand castles and comb the beach for shells (winter is the best time to find them). After a day of playing in the sand, I head off for the paddling trails that follow the western shoreline of Mustang Island in Corpus Christi Bay. Even though my kayak is a one-seater, I always end up with one of my kids in the boat with me. That's because they know that the trails pass through some of the best shallow-water fishing areas in Texas. The last time we were coasting along the edges of Shamrock Island, my daughter and I watched a stingray dance across the sandy bottom just inches below the boat in the clear, calm water. We can either fish, bird or paddle along peacefully — that's what makes it the perfect natural place in Texas!

Michelle Horine, Vice President for Leisure & Nature Travel, Corpus Christi Convention & Visitors Bureau, www.VisitCorpusChristiTX.org

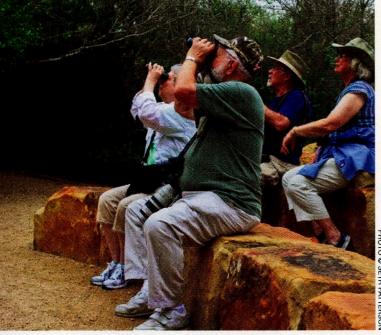


Best Place to Follow the Red Brick Road

Quinta Mazatlan, just minutes from the McAllen airport, is a 15-acre urban sanctuary. Visitors will enjoy a historic adobe home built for people, surrounded by a historic thorn forest built for wildlife. Granite gravel trails take you through the forest where you can meet South Texas natives like plain chachalacas, green jays and olive sparrows. The red brick road will take you to the historic adobe mansion with a beautiful courtyard, gardens and ponds.

Colleen Curran Hook, Manager, Quinta Mazatlan City of McAllen Parks & Recreation www.quintamazatlan.com







Best Family Vacation Backdrop

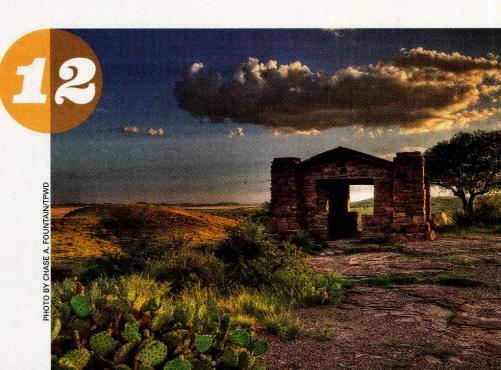
Kick back and soak up the sun. Splash in the warm Gulf waters. Cast for redfish from your Adirondack chair. Construct a regal sand castle. Search for sand dollars and other sea treasures. Boogie-board away boredom. Challenge yourself to windsurfing or kiteboarding. Do it all or nothing at all, at little to no cost. Whether soaking up the natural serenity or taking it to the extreme, there is something for everyone in the sand and surf of **Port Aransas**.

Ann Bracher Vaughan, President/CEO
Port Aransas Chamber of Commerce/Tourist Bureau
www.portaransas.org

Best Place to Unblock a Writer

In 2010, I had the opportunity to be a writer-in-residence near **Davis Mountains State Park** for two months. Often when I needed to think things through or hit writer's block, I would go to the park to hike. Usually a good mile or so jaunt would reveal the right phrase or the next paragraph. Enough so that *On Politics and Parks* was completed and is selling very well indeed. A great deal of the book is devoted to our national and state parks and the great contribution they make to society and the individual. **George Bristol, Chairman**

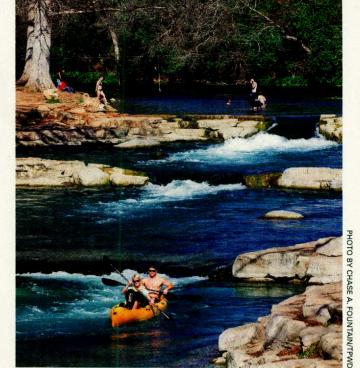
State Parks Advisory Committee



Best Place to Go Mad About Wildlife

Each December, the Nature Conservancy's Clive Runnells Family **Mad Island Marsh Preserve** throws open its doors to visitors for the National Audubon Society's Christmas Bird Count. With 7,000-plus acres of coastal marsh and wetlands, Mad Island Marsh Preserve is situated along the Central Flyway, one of four principal migratory bird routes of North America. For nearly two decades, Mad Island has garnered top honors as the largest and most diverse bird count in the country. Throughout the year, as many as 250 different species of songbirds, shorebirds, wading birds and waterfowl call the preserve home. But it's not just for the birds — an array of marine creatures and other animals, from blue crabs, brown shrimp, southern flounder and speckled trout to alligators, bobcats, armadillos, white-tailed deer and coyotes, can be found there, too.

Bronwen Taylor, conservation writer
The Nature Conservancy of Texas, www.nature.org/Texas





Best Place to Surf the Hill Country

Sounds crazy, right? Where can you surf a couple of hundred miles inland? The San Marcos River bubbles to life from hundreds of springs right in the center of town, and folks love to surf — yes, surf — at **Rio Vista Dam**. Always a refreshing 72 degrees, this natural wonder is enjoyed year-round to cool off or warm up. Grab a tube and go for a float. Rent a kayak or stand-up paddle and navigate its length. Bring your snorkel and discover its depth. Or just bring a picnic and soak up some sun.

Rebecca Ybarra-Ramirez, Executive Director San Marcos Convention and Visitor Bureau www.toursanmarcos.com

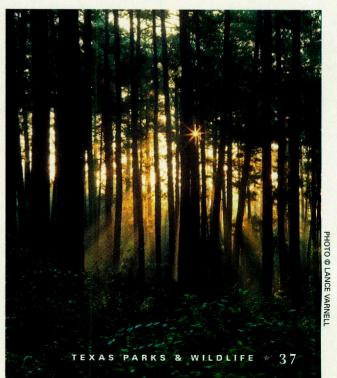


Best Place to Walk and Walk and Walk

The **Lone Star Hiking Trail** is more than 120 miles long and runs from the tiny town of Richards at the west end to Montague Church (just east of Cleveland) at the east end. Much of it goes through the Sam Houston National Forest, and very little of the trail is "road walking." The trail crosses rolling hills of tall pine forest and hardwood bottomlands with magnolias and rare beechnuts. It crosses two rivers, one named bayou, a number of swamps and flowing springs, and some very big creeks. The trail passes through both Huntsville State Park and the Double Lake campground, and is a joint effort of the Sierra Club and the National Forest Service.

Harold Hutcheson, Manager

Conroe Convention and Visitors Bureau, www.playinconroe.com

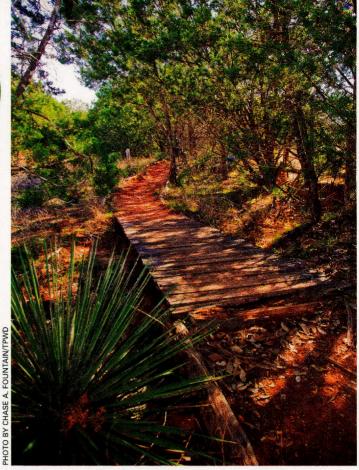


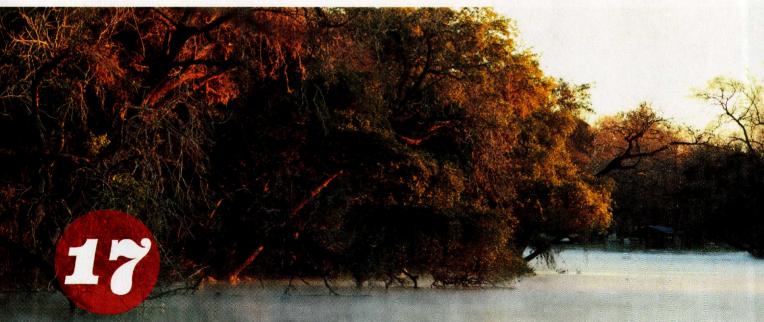


Best Place to Add to Your Life List

One lesser-known natural treasure can be found in Lady Bird Johnson Municipal Park in Fredericksburg. A small 10-acre tract along Live Oak Creek was left undisturbed and somewhat forgotten for decades while the municipal park was developed. Through thousands of hours of volunteer labor since 2000, this tract is now the Fredericksburg Nature Center, boasting more than 6,000 feet of hiking trails, with two loop trails and a 650vard wheelchair-accessible trail. Since Fredericksburg is located in the center of several geological and biological regions, visitors to the Fredericksburg Nature Center will find seven distinct habitats with an amazing diversity of over 650 species of birds, forbs, grasses, woody plants, amphibians, reptiles and insects. Species lists can be found at www.fredericksburgnaturecenter.org for those with "life lists," or just come experience the incredible natural beauty the German settlers in the Texas Hill Country first encountered in the 1840s.

Ernie Loeffler, Director, Fredericksburg Convention and Visitor Bureau www.visitfredericksburgtx.com





Best Version of 'Smoke on the Water'

My favorite natural place in Texas is the largest group of springs in the state, **Comal Springs**. Most folks think of the Comal River in New Braunfels as a summer place for water recreation, but my favorite time there is the winter. The warm water temperature (a constant 73 degrees) clashes with the cold air and creates steam that floats above the river, sometimes 10-plus stories into the air, creating narrow steam funnels. After hurricanes, misplaced coastal birds like pelicans enjoy our natural springs and are reluctant to return home. Spring means babies on the river: ducklings, nutria; fawns, turtles and migratory birds. Summer brings water recreation of all kinds. In the fall, cypress trees provide a colorful display.

Judy Young, New Braunfels Chamber of Commerce, www.nbcham.org



Best Quiet Place for Bird-Listening

Folks are beginning to discover the **Neches River**, a historic natural treasure flowing through the heart of East Texas. The Neches bottomlands sport some of the best hardwood forest habitat left in the country. Author Richard Donovan calls the Neches the "interstate" of the North American Central Flyway, used by millions of ducks, geese and songbirds as they migrate each spring and fall. The Davy Crockett Paddling Trail attracts 300 people each June during the Neches River Rendezvous. The Angelina-Neches/Dam B Wildlife Management Area (at the fork of the Neches and Angelina rivers, near Martin Dies Jr. State Park and the Big Thicket National Preserve) is nurtured by this special river. Getting on the river takes a paddler away from the sounds of highway and machinery and toward the twitter of songbirds, the scream of a hawk and the splash of an otter. Its everchanging beauty is exciting, no matter the season.

Janice Bezanson, Executive Director, Texas Conservation Alliance, www.TCAtexas.org



Best Place to Perch Yourself

There's a reason many visitors, both feathered and human, flock to Anahuac National Wildlife Refuge each year. Located 18 miles southeast of Anahuac, the isolated, 34,000-acre refuge has been a popular destination for bird enthusiasts wanting to gaze at the 279 avifauna species that call it home at some point each year. The refuge's southern border consists of nearly seven miles of pristine Galveston Bay shoreline. This important coastal marsh habitat serves as the basis for the estuarine food chain, improves water quality in Galveston Bay and acts as a buffer during storms. It is also a crucial food source for migratory bird populations crossing the Gulf of Mexico. Many people dor't realize that there are parts of Galveston Bay so serene, ecologically diverse and remote. Bob Stokes, President, Galveston Bay Foundation, www.galvbay.org





Best Bird Comeback

McHale Park in Seabrook is on the Great Texas Coastal Birding Trail. There, brown pelicans can be seen soaring over the water with a 6-foot wingspan and plunging 40 to 50 feet into the water after fish. The special adaptations of air sacs in their chests and long 18-inch bills cushion the blow when they hit the water bill-first. The amazing pouch holds about 2.5 gallons of water: the pelican will drain the water and toss its head back to swallow the fish. Between 1967 and 1974, there were fewer than 100 brown pelicans in Texas. They almost disappeared from Texas because of the pesticide DDT, which caused eggshells to be thin and susceptible to breakage during incubation. DDT was banned in 1972, and the number of these magnificent birds has steadily increased. The Wildlife Center of Texas has released many rehabilitated brown pelicans at this park after their recoveries from fractured wings. parasites and oil spills.

Sharon Schmalz, Executive Director, The Wildlife Center of Texas

12a honogmasquite pinantely cloubly compor u very of & you get your with zen " I though its promation to govern to mel 3





Nurturing Nature

MASTER NATURALISTS
VOLUNTEER THEIR TIME TO
CONSERVE AND EDUCATE.
By Sheryl Smith-Rodgers

The man hadn't meant any harm.

He'd simply found three horned lizards last April while working in West Texas and carried them home to Wichita Falls to show his kids. Naturally, they'd oohed and ahhed over the spiny reptiles. But then the family didn't know what to do with the trio. Nor were they aware of state wildlife regulations that prohibit the possession or transportation of the threatened species without a special permit.

When news of the problem reached Texas Master Naturalists with the Rolling Plains Chapter, an official partner in the state's Horned Lizard Watch program, several offered to help. Three days later, two specially trained volunteers hit the road and headed west with the lizards safely aboard their vehicle.

"Those Master Naturalists didn't take the easy way and try to find a zoo that would take the lizards," says Lee Ann Linam, a wildlife biologist with the Texas Parks and Wildlife Department. "Instead, they educated others about the drawbacks of releasing the reptiles outside their original habitat, researched to find out where the lizards had lived originally and then drove them 350-plus miles back home."

"They even fed harvester ants to the lizards along the way," Linam adds. "Those volunteers represent the best of the science, education and volunteerism that characterize a Texas

Master Naturalist."

Sixteen years strong

FROM RELOCATING HORNED LIZARDS to removing invasive plants and leading nature walks, Texas Master Naturalists work to conserve natural areas in their regions and share their knowledge with others. Toward those goals, these dedicated folks spend hours in classroom and field training and volunteer in their communities.

Initially, the Texas Master Naturalist program — the first of its kind in the nation — emerged from a meeting in June 1996 with staff from the

San Antonio Parks and Recreation Department and the Texas Parks and Wildlife Department's Urban Wildlife program. Their idea: Why not develop a program similar to Master Gardeners but with a focus on nature?

Eight months later, 19 volunteers took the first Master Naturalist training in San Antonio, forming the founding Alamo Area Chapter in 1997. Sixteen years later, more than 7,300 volunteers have been trained through the Texas Master Naturalist program, cooperatively sponsored by TPWD and Texas A&M AgriLife Extension. Similar naturalist programs have since spread to more than 25 states.

In Kerrville, statewide coordinator Michelle Haggerty with TPWD has overseen the program since 1999.

"We only had three chapters when I started," she recalls. "Now we have 44 chapters with another one in development. Over the past I4½ years, volunteers have contributed more than 1.76 million hours of service, which has an estimated economic impact of more than \$34 million. Master Naturalists have also impacted or conducted projects on roughly 190,000 acres of habitat and developed or maintained some 1,622 miles of interpretive trails. That's a tremendous contribution to our state's natural resources and their future!"

Willing to work

AN EAGERNESS TO LEARN, help and educate draws people of all ages into the Texas Master Naturalist program. Participants can be as young as 18, and many are in their 80s. The majority of members range between the ages of 40 and 59.

Lottie Millsaps of San Antonio, 82 and a "naturalist by nature," is a charter (and still active) member of the Alamo Area Chapter. Once a month, she helps tend the Texas Master Naturalist Wildscape Demonstration Garden on the San Antonio River Walk.

> "The program has enriched my life so much," Millsaps says. "It offers me so many opportunities to get outside and learn."

In Arlington, Hester Schwarzer, 75, joined the Cross Timbers Chapter in 2002 while still working as a schoolteacher.

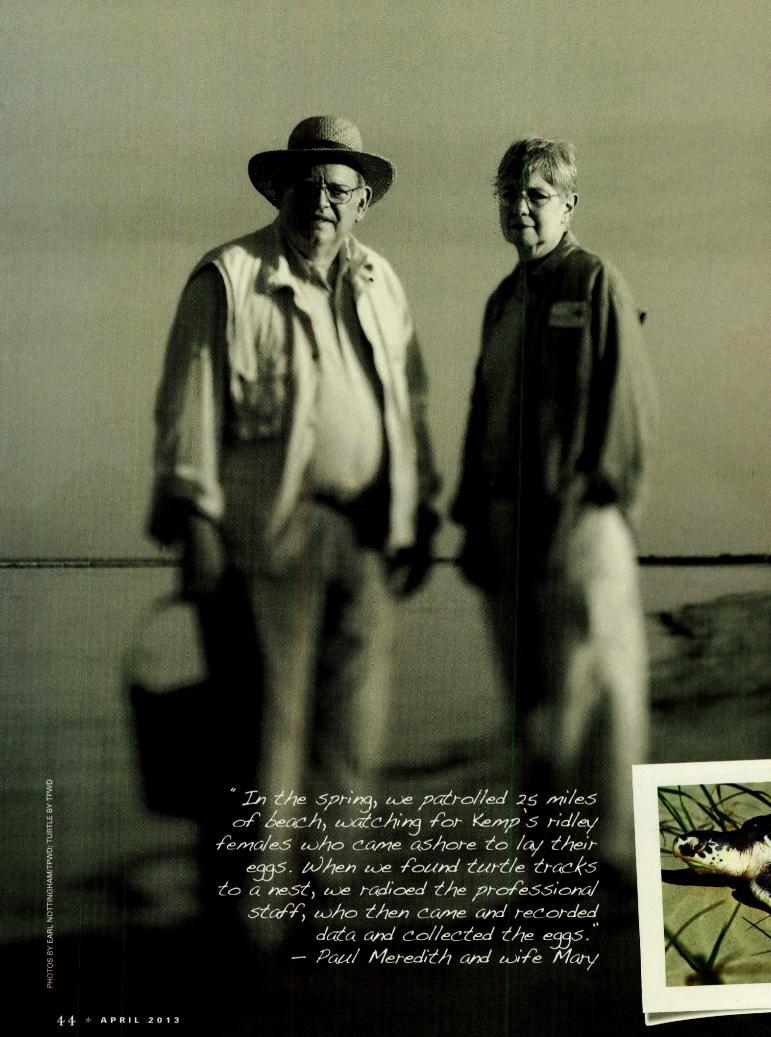
"Being in nature adds a dimension to your life that you can't get any other way," says Schwarzer, who's since retired. "Sadly, we have a generation that doesn't connect with

nature. I'll never forget the look of pure fear that came over a little boy's face when a blue butterfly landed on his sleeve at the Fort Worth Botanic Garden. He should have been thrilled!"

Ben Taylor, who's a senior at Texas State University in San Marcos, would have been. Now 22, he was raised to appreciate nature and was among the youngest members of his 2012 Master Naturalist training group with the Hays County Chapter.

"I wanted to add to my knowledge of the area and supplement what I'm learning in school," says Taylor, a geography major. "Now that I'm certified, I'm going to share my experiences in the program with my friends and encourage them to participate, too."





Service across the state

ALONG THE TEXAS COAST, Paul and Mary Meredith of Victoria, members of the Mid-Coast Chapter, monitor invasive beetles for the U.S. Forest Service and count phytoplankton species (such as red tide) in water samples for the National Oceanic and Atmospheric Administration. They've also tagged birds at the Welder Wildlife Refuge and volunteered with the Sea Turtle Recovery Project on Matagorda Island.

"In the spring, we patrolled 25 miles of beach, watching for Kemp's ridley females who came ashore to lay their eggs," says Paul, 68. "When we found turtle tracks to a nest, we radioed the professional staff, who then came and recorded data and collected the eggs."

Northeast of Dallas, the Blackland Prairie Chapter has partnered with the Wylie Parks and Recreation staff to restore 50 acres of blackland prairie at the Wylie Municipal Complex. Since fall 2011, the land has not been mowed so that native grass species can return. Cottonwoods, willows and other woody plants have also been removed.

"So far, we've seeded II pounds of native grass seeds," says member David Powell, 68. "Our goal is to harvest our own seeds so we don't have to buy them. We've also created a half-mile trail through the area that will include marked plots of II different grass species."

In the Kerrville area, members of the Hill Country Chapter offer a free Land Management Assistance Program. Since 2005, specially trained volunteers have offered management advice to landowners who collectively own more than 27,000 acres. They've also surveyed plant species for the landowners.

"This program is very important because so many of the owners did not grow up on the land here," says member Priscilla Stanley, 65.

Valeska Danielak, also with the Hill Country Chapter, is among 24 Master Naturalists who volunteer at Old Tunnel State Park south of Fredericksburg. From May through October, visitors gather at the site to watch millions of Mexican free-tailed and cave myotis bats emerge at dusk from an abandoned railroad tunnel.

"As volunteers, we collect fees, explain viewing options, talk about the bats and answer questions," says Danielak, 43. "We help raise awareness about bats and how beneficial they are."

Out west, naturalists with the Tierra Grande Chapter — which stretches across Brewster, Jeff Davis, Presidio and a portion of Reeves counties — volunteer at state parks and many other natural sites in the Big Bend region. For example, they've assisted in the search for rare Hinckley oaks at Big Bend Ranch State Park, and they maintain a native plant garden at Balmorhea State Park.

"We're also working to improve a pollinator garden and two bird feeder stations at Davis Mountains State Park," says member Pamela

Pipes, 45.

Bird and wildlife watchers around the globe can thank
the Rio Grande Valley Chapter for

funding a bird feeder video camera at the Sabal Palm Sanctuary in Brownsville.

"People love to watch our birds online," says member Virginia Vineyard, 63. "We get comments from all over the world!" (sabalpalm sanctuary.org/feedercam)



I did it. You can, too!

Nature has always fascinated me. So a few years ago, when I heard about the Texas Master Naturalist program, I thought, "Wow, that's something I'd like to do when I'm not so busy." Then in December 2011, I found out that the Highland Lakes Chapter in Burnet had one slot open in its upcoming class. Could I commit the time? Yes!

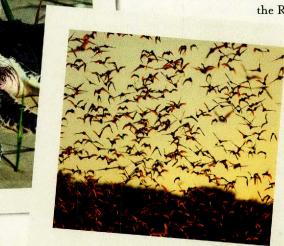
For 10 weeks, 19 fellow trainees and I met for Thursday classes at different locations in our area. We studied hydrology at Jacob's Well near Wimberley and learned about invasive zebra mussels at the Inks Dam National Fish Hatchery. We bird-watched at Pedernales Falls State Park, hunted invasive plants at Blanco State Park and peered at metamorphic formations at Inks Lake State Park.

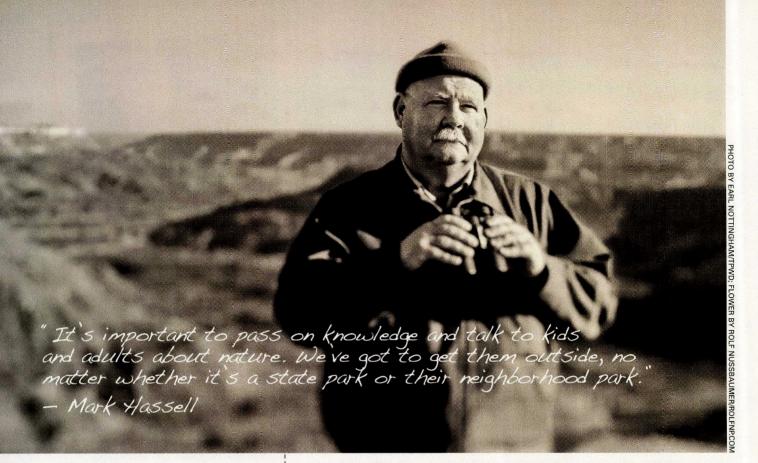
Noted experts led many of our classes. Conservationist J. David Bamberger told us how he restored his overgrazed ranch into prime wildlife habitat. Brian Loflin, who coauthored *Grasses of the Texas Hill Country: A Field Guide* with wife Shirley, led us on a native grass walk at the Balcones Canyonlands National Wildlife Refuge. Wildlife biologist Ricky Linex with the Natural Resources Conservation Service explained the importance of healthy creeks and watersheds.

On the volunteer side, I counted birds during Project FeederWatch, pulled invasive bastard cabbage at Blanco State Park and helped with a third-grade outdoor event at the state park.

By May, I completed both my training and volunteer service requirements, which meant I could wear the official badge of a Texas Master Naturalist. Even though I'm done with basic training, I'll continue to do my volunteer and advanced training hours each year to maintain my certification status. What's more, I'll never stop learning about our state's natural resources or sharing my knowledge, in hopes of inspiring others to become Master Naturalists.

Sheryl Smith-Rodgers





Want to become a Master Naturalist?

People 18 years of age and older may apply for training with a Texas Master Naturalist chapter in their area. Initially, volunteers must:

 Go through an approved training program that includes at least 40 hours of instruction in both the field and classroom.
 Plus, undergo eight hours of advanced training and perform at least 40 hours of community service.

• Complete the advanced training and community service hours within one year of basic training to become certified.

• Every year thereafter, complete eight hours of advanced training and 40 hours of community service to maintain certification as a Texas Master Naturalist.

For more information and to find a chapter near you, go to **txmn.org**.

Texas Master
Naturalist program mission: To develop a corps of well-informed volunteers to provide education, outreach and service dedicated to the beneficial management of natural resources and natural areas within their communities.

Way up north, bird watcher Mark Hassell — a Master Naturalist with the Panhandle Chapter — leads monthly bird walks at Palo Duro Canyon State Park, where he also works as a resources manager.

"It's important to pass on knowledge and talk to kids and adults about nature," says Hassell, 56. "We've got to get them outside, no matter whether it's a state park or their neighborhood park."

Speaking of kids, the Good Water Chapter in Williamson County is one of several that have started Junior Master Naturalist programs. Targeted at fourth-through sixth-graders, the bimonthly classes and field trips focus on amphibians, wildflowers, butterflies and other nature topics.

"We're taking every advantage we can as a chapter to teach children about our natural world," says member Mary Ann Melton, 60, of Hutto. "It's been fun to watch the kids get excited as they learn."

A high-tech native garden representing the state's 10 ecological zones piques students' curiosity about nature at Heritage Elementary School in Highland Village, north of Dallas. The interactive project — jointly developed by school staff and Master Naturalists with the Elm Fork Chapter —

incorporates iPads with school curriculums and wildlife information produced by the Texas Parks and Wildlife Department.

"We couldn't have done the Texas Cur Heritage Garden without the expertise of our Texas Master Naturalists," says principal Toby Maxson. "They're very generous with their time, and they don't expect anything in return. They're also very passionate about nature and educating kids."

Learn, educate and volunteer — that's what Texas Master Naturalists across the state do best. And back at home in West Texas, three horned toads would definitely agree.





Opening minds



Giving you a place to get away from it all



Stocking fish



Protecting people and wildlife



Blazing trails



Managing land to keep water flowing



Saving wildlife



Keeping traditions alive

50 years of making life better outside in Texas.

In 1963 the Texas Parks and Wildlife Department was created from the merger of the Texas Game and Fish Commission and the State Parks Board.

Help us celebrate by inspiring others to get outdoors - because some of the best times are still to come.

Share your stories and photos.

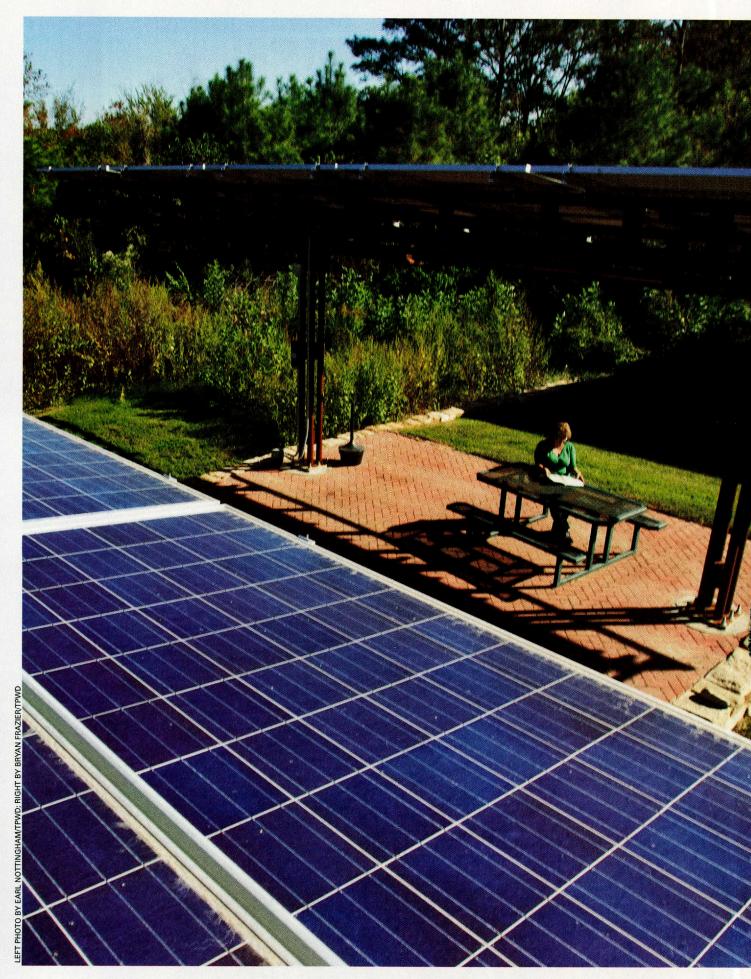
Submit a story or photo online that shows how life's better outside in Texas.

Become an Ambassador.

Do your part to keep life better outside in Texas. Pledge online to take one or more actions — such as visiting a state park, volunteering or buying a fishing or hunting license — and we'll send you a free "Life's better outside" window sticker.



www.LifesBetterOutside.org





TPWD 'walks the walk' by using environmentally friendly building designs. BY ROB McCORKLE

When the City of La Porte

expressed interest several years ago in purchasing the old bank building on Main Street occupied by Texas Parks and Wildlife Department staff since the 1970s, the agency jumped at the chance to sell. The flat-topped roof leaked and needed replacing, quarters were cramped, and the poor insulation resulted in monthly summer utility bills that topped \$600.

TPWD used \$450,000 from the 2009 sale as seed money for design and construction of a new 7,500-square-foot, eco-smart facility located just north of Sheldon Lake in Houston. The building, completed in 2010 at a cost of \$1.2 million, serves as the Texas State Parks Region 4 headquarters. It houses offices, storage and a large, state-of-the-art training facility used by TPWD personnel from state parks and other divisions. It even has a shower for TPWD's first responders to hurricanes and other coastal emergencies.

"It's so comfortable compared to the old headquarters," says Justin Rhodes, director of state parks for the Gulf Coast region. "The building has lots of windows that let in plenty of natural light and has an open feel, unlike the traditional cubicles in La Porte. Plus, we love the savings in our monthly utility bills, that now average about \$175 a month."

TPWD received word in late 2012 that the regional facility had earned the state agency's first-ever Gold LEED (Leadership in Energy and Environmental Design) certification from the U.S. Green Building Council for its use of a multitude of cost-efficient and energy-saving "green" building features geared to a sustainable future.

The single-story structure features passive design that takes into account sun angles and natural light. Construction materials include insulating concrete forms (ICFs), heat-blocking low-E windows, a radiant barrier in the ceiling that achieves an R-35 rating and a metal roof that reflects heat, says architect Gordon Bohmfalk, head of the planning and design branch of TPWD's

Infrastructure Division.

Bohmfalk says the use of passive design elements and recycled brick, along with the later addition of solar panels to provide an alternative energy source, propelled the project into the gold certification realm. The solar panels, placed on pedestals behind the building, serve to shade picnic tables and walkways as well.

"LEED Gold addresses not only the way you site the building and how much you use recycled construction trash and building materials, but also how you minimize water use and utilize energy-saving features like ICF in the walls, radiant barriers and low-E windows," Bohmfalk says.

Bohmfalk considers the Sheldon headquarters as the flagship of the agency's still-developing green building design program, which has begun picking up steam in recent years.

The department first dipped its toes into the waters of green building and sustainability in 2004 when it opened the \$7 million World Birding Center headquarters in Mission on more than 700 acres of former agricultural fields. The center, at Bentsen-Rio Grande Valley State Park, recalls classic agricultural structures of the region and incorporates rainwater collection, passive energy-saving design, low-flow toilets and sustainable building materials. TPWD saw the headquarters project as a prototype for future eco-wise building efforts and as a way to educate the public about the growing importance of water and energy conservation.

TPWD revealed its next foray into the world of green construction a year later when the gates of Government Canyon State Natural Area swung open amid the limestone hills of the Edwards Aquifer recharge zone just west of San Antonio. The project showcases the award-winning sustainable architectural design of Lake/Flato Architects of San Antonio.

The Government Canyon visitors center design includes a shaded, open-air pavilion and exhibit gallery, as well as an adjacent building insulated with recycled blue-jean material. The structures, built of recycled steel pipe, native limestone and eastern red cedar, feature corrugated metal roofs designed to efficiently funnel rainwater to collection tanks. Solar power pumps the rainwater into two metal cisterns for irrigating the butterfly-friendly landscape and for flushing toilets. Boardwalks made from sustainably harvested timber, leading from the parking lot to the visitors center, allow water to flow unimpeded through the site.

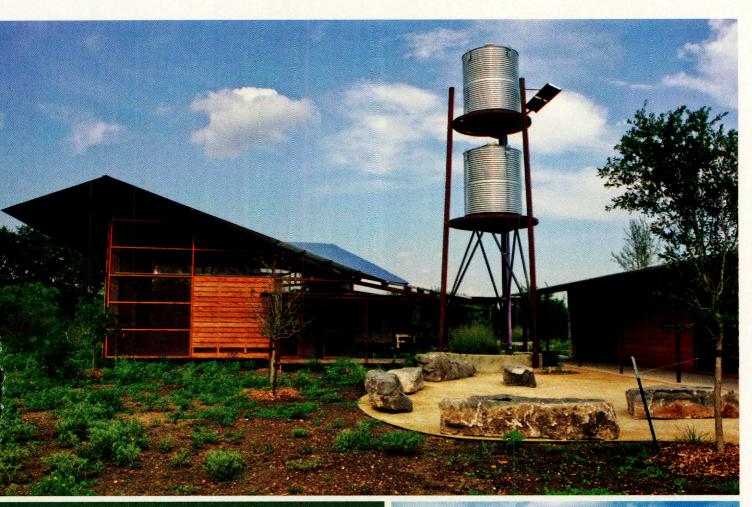
Mission of Conservation

At about that same time, TPWD architects were flexing their alternative energy and green building muscles during a major renovation of Sheldon Lake State Park's Environmental Learning Center in Houston. Here, for the first time, TPWD employed a holistic approach to development that limited environmental impact, safeguarded water, stressed green building principles and promoted renewable energy through the use of photovoltaic cells, a wind turbine and geothermal energy.

TPWD's embrace of green building and renewable energy has blossomed into a more comprehensive program in the past two years. The program is designed to reduce the agency's energy costs and conserve natural resources while educating and inspiring the public to follow its lead.

"Our facilities are most often the first thing people see when visiting a state park, fish hatchery or wildlife management area. As such, they make an important first impression," TPWD Executive Director Carter Smith says. "Anything we can do to ensure the facilities reflect not only the surrounding landscape but also our conservation mission is an important element of our stewardship of these special places."

Thanks to the ongoing efforts of Bohmfalk and his staff, visitors to state parks and other TPWD facilities from the Gulf Coast to the Panhandle will see that



TPWD's embrace of green building and renewable energy has blossomed into a more comprehensive program in the past two years. The program is designed to reduce the agency's energy costs and conserve natural resources while educating and inspiring the public to follow its lead.





The facilities at Government Canyon State Natural Area, top, were built with recycled and native materials. Palo Duro Canyon's new pavilion, above, features spacious shaded porches. TPWD's regional parks headquarters in Houston, left and right, won gold certification for energy and environmental design.

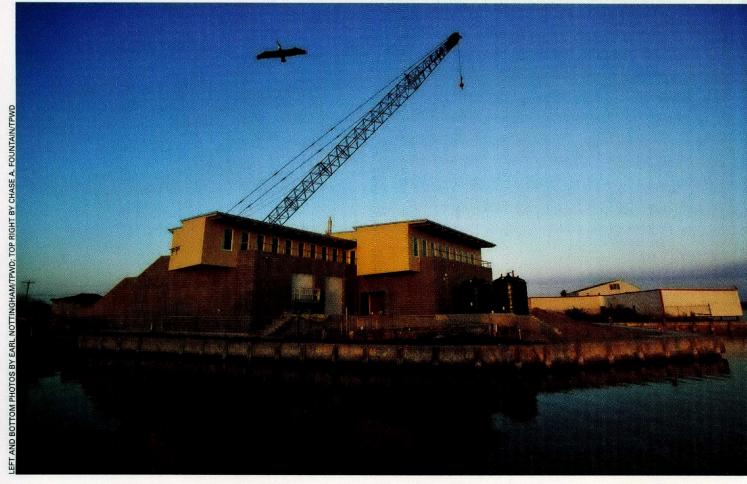




The Coastal Fisheries office in Port O'Connor, at left and below, incorporates insulation and site orientation in its eco-friendly design. TPWD's Norman Boyd, left, inspects construction. In 2011, TPWD installed solar panels, right, on the roof of its headquarters building in Austin to provide energy to the building. TPWD has 25 solar installations across the state.



Thanks to the ongoing efforts of Bohmfalk and his staff, visitors to state parks and other TPWD facilities from the Gulf Coast to the Panhandle will see that when it comes to energy-saving and green-building initiatives, the state's lead conservation agency is not only talking the talk, but walking the walk.



when it comes to energy-saving and green-building initiatives, the state's lead conservation agency is not only talking the talk, but walking the walk.

"A principle we've adopted around here is passive first in design," Bohmfalk says, "which means you design a building to shade itself from the sun and build a super-insulated envelope. Those are things that don't involve mechanical systems that you have to operate. Water harvesting and solar power are part of the package. You also have to factor in the psychological aspects of design that create a more productive environment for workers."

In addition to the precedent-setting Region 4 headquarters, Bohmfalk's design and planning team is awaiting LEED certification for two recently completed green building projects: the Mack Dick Pavilion at Palo Duro Canyon State Park and a new Coastal Fisheries field office at Port O'Connor.

At Palo Duro, the handsome building on the canyon floor includes indoor meeting space and spacious shaded porches, reflecting a passive design that takes advantage of the shade and breezes while avoiding direct sun exposure. All openings are shaded, and a sophisticated mechanical heating and cooling system can be easily adjusted to account for small or large crowds, thus saving energy.

The Port O'Connor office sits on a peninsula jutting into Matagorda Bay. The need for a tight building site with an orientation that allowed sunlight to penetrate and heat up the interior challenged designers. The building also had to be designed and built to withstand hurricane winds and storm surges. The design team oriented the first floor as dictated by the geography, but turned the upstairs floor (housing office space) so it avoided the east-west exposure. The bottom floor, subject to possible flooding, includes a lobby, boat storage bays and a lab. Recycled materials, site sustainability and water conservation systems make the building a candidate for Silver LEED certification, Bohmfalk says.

At Fort Boggy State Park near Center-ville, work is under way on a project that will incorporate a number of sustainable building practices. Plans call for constructing a new cabin (using insulating concrete forms), a camping loop, restrooms, a boardwalk and pavilion, and

ultimately a rainwater collection system to supply a small pond.

The design team also has been busy with green building projects at Galveston Island and Sea Rim state parks, which have been undergoing extensive renovations in the wake of damaging storms. Both will include manager's residences incorporating passive design such as single-sloped roofs and ICF walls.

Here Comes the Sun

Visitors to the Texas Parks and Wildlife Department headquarters in Austin can't see the array of solar panels mounted on the rooftop, but they can witness live renewable energy data being generated by the panels by scanning a set of gauges mounted on the lobby wall. They show the kilowatts currently being produced, how many kWh (kilowatt hours) of power have been generated and the amount of carbon dioxide avoided.

The \$495,813 Austin headquarters project is one of 25 such solar installations at 17 TPWD facilities across Texas - from Fort Davis to Wichita Falls - and was the first such project completed, in early 2011. More than 400 photovoltaic panels work together to provide up to 92 kilowatts (kW) of power, the most powerful of the TPWD systems. Thanks to the solar installation, the agency is shaving roughly \$10,000 annually off its energy costs. Additionally, TPWD has been able to take advantage of one of the best solar incentives in the country. Austin Energy, the city utility, is providing a performance-based incentive that will pay the agency for the solar energy it produces. TPWD expects to earn an additional \$10,000 each year for 10 years through this incentive.

The smallest TPWD solar installation is a 5 kW system at Davis Mountains State Park, with most installations at about 20 kW. As an example, Mustang Island State Park in Port Aransas has a 20 kW system that produced 31,920 kilowatt hours of solar power in 2012, resulting in a savings of \$2,075 and a reduction of 22.5 metric tons of CO2 emissions. Overall savings to TPWD from solar installations are difficult to predict, according to Bohmfalk, because power generation depends on the amount of sun each site receives.

Funding for the TPWD solar projects came from federal stimulus grants that

provided for 80 percent reimbursement of eligible project costs under the American Recovery and Reinvestment Act. TPWD will receive \$2.9 million in reimbursements through the State Energy Conservation Office, says Andee Chamberlain, who is energy manager for TPWD's Infrastructure Division and directs the solar grant program.

"Our solar installations not only generate renewable energy in keeping with the agency mission of protecting and conserving the natural resources of Texas, but also represent a considerable savings to the state parks operations budget," Chamberlain says. "Typically, it's best to spend money on energy efficiency measures first and then move on to more expensive renewables, but we decided to break that rule because of the one-time opportunity to obtain federal grant funds."

TPWD's executive director sings the praises of the agency's design team as it continues to look for new ways to save money and support the agency's core mission of conserving the state's natural and cultural resources for the enjoyment of present and future generations.

"Our infrastructure team has made great strides in bringing new green building ideas and sustainable technologies to the design and construction of our facilities and surrounding areas," Smith says. "It is gratifying to see their handiwork, from xeriscaping to rainwater catchment to rooftop solar arrays to the materials they use to construct the buildings themselves."

Bohmfalk hopes one day to complete a system-wide study of energy use and energy needs to determine economically feasible ways to reduce consumption and conserve precious resources in a growing state. He notes that many TPWD facilities built in the 1960s and 1970s are in dire need of retrofitting to be more energy efficient or should be decommissioned so new environmentally friendly facilities can be built.

"I think some of these new projects are starting to get some real attention because now we have some ammunition that's specific," Bohmfalk says. "You can do the math and project the numbers out over the next 30 years and see that it makes sense. You realize it's not just some fuzzy, feel-good endeavor — it really works." *

GDDDS AND SERVICES FOR THE OUTDOOR ENTHUSIAST

OUTDO R M A R K E T P L A C E

CALL FOR MORE INFORMATION & MECHANICAL SPECIFICATIONS: (512) 799-1045





FISHING



FOR ALL YOUR FISH STOCKING AND POND MANAGEMENT NEEDS

Bass-Catfish
Bluegill-Crappie
Minnows



Aeration Systems
Windmills
Feeders

WWW.GLASSFISHSERVICE.COM

CONTACT DUSTY - 254-253-0705

DUSTY@GLASSFISHSERVICE.COM

VISIT

www.tpwmagazine.com
For Links to Our Advertiser's Websites

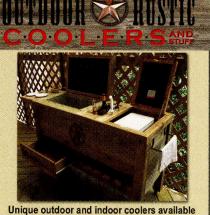
PRODUCTS AND SERVICES

TREKR® Jungle Travel Washcloth. Rinses clean and stinkjy free. 2 pack \$8

www.lunatecgear.com

LUNATEC

PRODUCTS AND SERVICES



Unique outdoor and indoor coolers availab
Hand made out of real "barn wood"
Hand-crafted in Texas
Inclues Official Igloo Brand Ice Chest
Customize your cooler with adornments

OUTDOOR WILCOOLERS.COM 800-833-5998



SELF-FEEDING DR® CHIPPER!

Just load a DR® RAPID-FEED™ CHIPPER, step back, and watch it chip branches up to 5½" thick!

SELF-FEEDING saves time and energy. Most branches can be dropped into the hopper and will self-feed, instead of you having to force-feed them.

POWERFUL ENGINES up to 18 HP.

PRO-SPEC" CHIPPER KNIFE is made of forged alloy steel, making it exceptionally strong with an excellent edge-holding ability.

TRACTOR OWNERS! 3-Point Hitch, tractor-mounted models also available.

Call for a FREE DVD & Catalog!

TOLL-FREE 888-212-0585 DRchipper.com



SUBSCRIBE TODAY AND...

ENJOY – each issue brings you breath taking photography of Texas's wildlife and spectacular destinations.

LEARN – every month you'll receive advice from the state's foremost outdoor authorities.

SAVE! — subscribe now and save 70% off the newsstand rate!

Visit us online at tpwmagazine.com





NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL

PERMIT NO 17897

HOUSTON TX

POSTAGE WILL BE PAID BY ADDRESSEE

THE LIGHTHOUSE OF HOUSTON PO BOX 130435 HOUSTON TX 77219-9955



FREE INFORMATION

To receive free information about advertisers, just circle the numbers below that correspond to advertisers listed to the right. Fill in your name and address, then simply drop the card in the mail.

We pay the postage!

Name		
E-mail		
Address		
City		
State	ZIP	

		The second second			
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
	7 13 19 25 31 37 43	7 8 13 14 19 20 25 26 31 32 37 38 43 44	7 8 9 13 14 15 19 20 21 25 26 27 31 32 33 37 38 39 43 44 45	7 8 9 10 13 14 15 16 19 20 21 22 25 26 27 28 31 32 33 34 37 38 39 40 43 44 45 46	7 8 9 10 11 13 14 15 16 17 19 20 21 22 23 25 26 27 28 29 31 32 33 34 35 37 38 39 40 41 43 44 45 46 47



GET FREE INFORMATION FROM ADVERTISERS

Listed to the right are advertisers in this issue. Just circle the corresponding numbers on the card to the left and drop it in the mail—

Or you can call us toll-free at: 877-526-7924

Our e-mail address is: atorres@houstonlighthouse.org

TPA304A

PRODUCTS AND SERVICES



A C C O M M O D A T I O N S

RIO FRIO LODGING S NATURE CENTER



Retreat to the Hills for a Week or Weekend of Relaxation & Adventure

with Birding, Nature by Kayak & Storytelling 830-966-2320 * www.friolodging.com Plus 14th Annual Nature Quest April 24,25,26,27,28th, 2013 www.texasnaturequest.com

A C C O M M O D A T I O N S

Kerrville-Schreiner

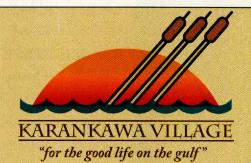


Kerrville-Schreiner Park is a beautiful 517-acre recreation and camping park on the Guadalupe River. Our park and camping park on the Guadatupe River. Our park is home to an abundance of wildlife including whitetail and black buck antelope, axis deer, rabbits, fox, birds, butterflies and more. Full hookup water / electric & sewer RV sites available in 30/50 amp; tent sites, cabins, dining / recreation Halls, playground, volleyball / basketball courts also available in this patrolled family orients.

Leashed pets are welcome but are not allowed at the beach area and must be kept on a leash at all times. The park includes 7 miles of hiking /biking trails, seasonal canoe /kayak rentals and access to the Guadalupe River. All campsites include a picnic table, campfire pit with cooking grill and maximum occupancy of 8 people.

> 2385 Bandera Highway Kerrville, Texas 78028

WWW.KERRVILLETX.GOV 830-257-7300



THE LODGE & CATTAILS





The ambience is casual at The Lodge but the amenities are luxurious. Each of the eight rooms are uniquely styled, featuring the finest organic bedding, large bathrooms and original artworks. Gourmet coffees and flat screen televisions are found in each room and two outdoor living rooms with fireplaces are yours during your visit. Our popular mercantile shop, Cattails, is part of the Karankawa Village just across the boardwalk. Here you will find more of the finest coffees, wines, cigars, gourmet foods, artwork, clothing and homewares.

Phone: (979) 863-7737

www.karankawavillage.com



Information!

To receive more information on our advertisers, fill out the card at left or go to www.tpwmagazine.com/advertising/thismonth or scan the QR code below with your smartphone.

1. Corpus Christi, pg. 27 800-766-2322 www.VisitCorpusChristiTx.org

2. El Paso, pg. 19 800-351-6024 www.visitelpaso.com

3. LaRue Tactical, pg. 15 512-259-1585 www.larue.com

Ocean Kayak, pg. 21 www.oceankayak.com

5. Rockport-Fulton, pg. 21 800-242-0071 www.rockport-fulton.org

Sand Creek Post & Beam, pg. 17 888-489-1680 www.sandcreekpostandbeam.com

7. Waco, pg. 18 800-WACO-FUN www.wacocvb.com





CAMPS

2013 SUMMER CAMPS

Camps Include: Hunting Camp, Fishing Camp, Fly Fishing Camp, Saltwater Camp, Waterfewl Camp, Hunting/Archery Camp, And Deer Camp

Camp Activities Include:

Bass Fishing :: Kayakving :: Fly Tying :: Fly Fishing Bay and Flats Fishing :: Offshore Fishing :: Knot Tying Riflery :: Archery :: Shotgunning :: Hunting Techniques Game Calling :: Camping and Survival Dog Training :: And MUCH MGRE.

All Instructors are Experienced Texas Professionals.

Texas Parks and Wildlife :: Hunters Education Certificate

Great Location :: Great Activities :: Great Instructors Cal or Email for Camp Brochure outdoortexascamp@yahoo.com

(512) 217-1587 or (830) 562-3354 www.OutdoorTexasCamp.com











AQUATIC SCIENCES ADVENTURE CAMP

Curriculum immerses campers in aquatic biology and water chemistry activities. Act vities are led by staff of Texas State University and certified teachers. Other activities include tubing, glass-bottom boat rides, intro to scuba/snorkeling, rafting, swimming, fishing and fish-printing.

> Who: Boys/girls; ages 9-15 What: Overnight and day camp When: Two-day, one-week sessions; June-August Cost: \$150-\$750

> > Cantact. (512) 245-2329

www.eardc.txstate.edu/camp.html



Presented by Edwards Aquifer Research and Itata Center at Texas State University - San Marces

REAL ESTATE

EDNA TO EDEN. BEST RANCHES. BEST FOLKS.

- RANCH BROKERAGE, CONSULTING AND EVALUATION
- **♦ CUSTOM HIGH-END RANCH MAPS**
- **♦ AUCTION/PRIVATE TREATY SALES**

www.landtx.com - dec@landtx.com 210.422.4676 - 830.997.8616 FREDERICKSBURG - MASON

TX BED & BREAKFAST ASSOCIATION (TBBA)

BELLVILLE

Texas Ranch Life. Restored historic Texas homes on 1,400-acre ranch between Bellville & Chappell Hill. Weekend rental includes bass fishing, trail and chuckwagon rides, cutting, bird/coyote/raccoon hunting and cow works

www.texasranchlife.com (866) TEXASRI

COMFORT

★ Meyer B&B. On Cypress Creek, Hill Country, mid-1800s stage stop, Texas landmark. Pool, hot tub, fireplaces, golf. www.meyerbedandbreakfast.com (888) 995-6100

★ The Whistler B&B. 1859 Victorian home, lovingly restored. Original antiques. Peaceful atmosphere on three wooded acres. Gourmet breakfast. (800) 404-2834

www.thewhistlerbnb.com

GRUENE

★ The Lamb's Rest Inn. Located on the Guadalupe River. Featuring garden with fountain, pool, and hot tub, private balconies and fireplaces. Delightful breakfasts often served al

www.lambsrestinn.com

(888) 609-3932

FREDERICKSBURG

- * Palo Alto Creek Farm, Landmark historic German-Texas farmstead on the creek. Ancient oaks, abundant wildlife, Hill Country tranquility. Beautifully renovated log cabin, barn, farm-house, all with private spa therapy rooms. www.paloaltocreekfarm.com (800) 997-0089
- * Settler's Crossing Bed and Breakfast. Private historic log cabins and cottages spread over 35 park-like acres, just minutes from www.settlerscrossing.com (800) 874-1020

NEW BRAUNFELS

★ Historic Kuebler-Waldrip Haus & Danville Schoolhouse. 43-acre deer haven near Gruene, rivers. Getaways, reunions, weddings, corporate retreats. 10 luxurious rooms, Jacuzzis. Delicious breakfasts.

www.kueblerwaldrip.com

(800) 299-8372

ROCKPORT

Hoopes' House ROCKPORT, TEXAS (800) 924-1008 www.hoopeshouse.com



NATIONALLY HISTORIC VICTORIAN HOME. EIGHT ROOMS EACH WITH PRIVATE BATH. FULL BREAKFAST INCLUDED. CALL FOR BROCHURE.



LOOKING FOR SOMETHING SPECIAL FOR HOLIDAYS, ANNIVERSARIES, BIRTHDAYS, COMPANY GIFTS ETC...

TBBA

Gift Certificates

ORDER ONLINE ON A SECURE SERVER
WWW.TEXASBB.ORG



A natural way to RELIEVE DISCOMFORT and ENERGIZE YOUR LIFE

Introducing the NEW VS2 VersoShock™ sole: 3X more SHOCK ABSORPTION -2X more ENERGY RETURN

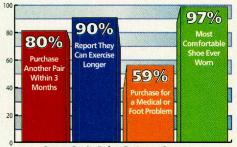


ABSORBS SHOCK ON HEEL STRIKE Relieve Discomfort



REBOUND PROPELS YOU FORWARD Maximize Energy Return

Thousands of testimonials available online!



Source: Gravity Defyer Customer Surveys

Ease tender feet, knees and even your aching back! The all-new VS2 VersoShockTM trampoline sole absorbs the pounding that your body receives every day. Experience relief from standing on hard surfaces like concrete, brick and tile with the only shoe that makes every step pillow-soft. You'll find yourself parking further from the entrance of the grocery store –just to walk more. You'll feel enthusiastic about your

work –even if you spend all day on your feet. Life can be enjoyable again!

Feel less of your own body weight on your feet and relieve the harmful stress that walking and running can put on your muscles, bones and joints. This amazing footwear is unlike anything you have worn before, reducing nerve pressure and allowing your muscles to relax. They

Dr. Arnold Ross, DPM

"I recommend Gravity Defyer shoes to my patients and friends... I wear them myself!"



Associate Clinical Professor: Western University College of Podiatric Medicine, Private Practice: West Los Angeles Board Certified, ABPOPPM

will help you feel rejuvenated by restoring energy and propelling you forward with every step. Imagine a healthier more active you — free from the stress and discomfort of being or your feet... Walk more, run more, jump higher and stay on your feet longer with the ultimate in comfort and athletic performance: the new **GALAXY** by **G-Defy**TM!

Galaxy \$129.95 FOR MEN

TB9005MWU • BLUE/WHITE TB9005MGN • BLUE/GREY

TB9005MBY • BLACK/YELLOW TB9005MBR • BLACK/RED TB9005MGB • RED/GREY

TB9005MNB • DARK BLUE/GRAY

Sizes 7.5 - 15

FOR WOMEN

TB9005FWS • BLUE/WHITE TB9005FGP • GREY/PURPLE TB9005FSO • BLU/GRN/ORNG

TB9005FGL • GREY/ GREEN
TB9005FBP • PINK/ B_ACK
TB9005FWP • WHITE/PURPLE



scan to learn more

NO PRESCRIPTIONS • NO INSURANCE REQUIRED



A Try a pair FREE* for 30 days!
If you don't love them, send them back.

www.GravityDefyer.com/MX8CDK5

1 (800) 429-0039 Coupon Code: MX8CDK5

Sizes 5 - 11

PARTINGSHOT

IMAGE SPECS:

Canon 5D Mark II camera with 70-200mm lens, f/22 at 1/80 second, ISO 200.

Spring Lake in San Marcos, fed by San Marcos Springs, is the headwaters of the San Marcos River. Photographer Laurence Parent drove to San Marcos early on a cold winter morning hoping the spring-fed water, which stays relatively warm in winter compared to the air temperature, would produce steam. It did, so he took a number of shots, including this backlit view of a bald cypress. "The early rays of the sun gave the mist a

beautiful golden color," he says.





GEICO for your RV

GEICO is the right choice for you. You'll find

competitive rates, plus all the coverages you'd expect from a great RV insurance company. You'll work with people that know and love RVs as much as you do, so you'll know you're being taken care of by an enthusiast who understands your needs.

geico.com

1-877-434-2678

local office

