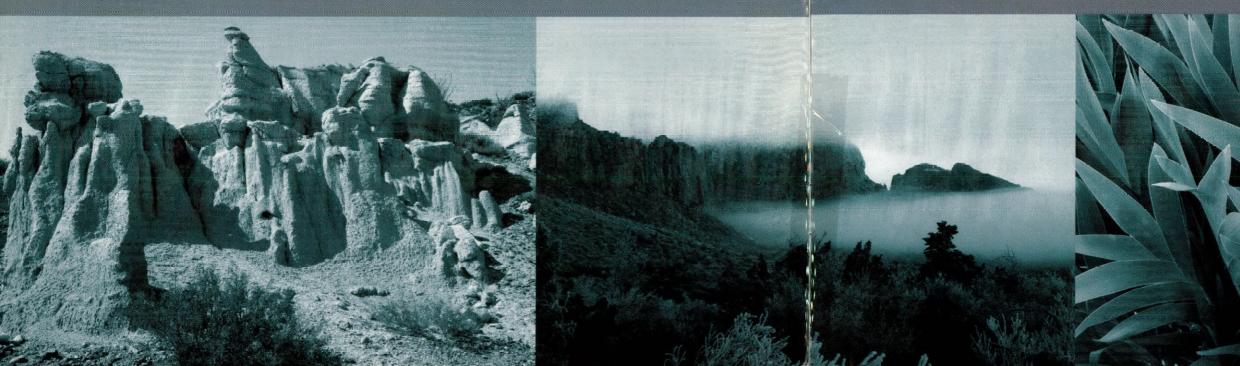


PARKS AND WILDLIFF FOUNDATION OF T E X A S

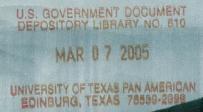
Proud Sponsor and Official Vehicle of Parks and Wildlife Foundation of Texas TUNDRA

Built for Texas. (In other words, it's bigger and better.)

Like everything in our state, the Texas Edition Tundra Double Cab is big. Bigger and wider in fact than Ford F-150. As for better, Tundra boasts more standard power and torque than F-150. Plus, we've built it tough enough for Texas with 20" custom wheels, stainless steel running boards, a stainless steel exhaust tip and custom floor mats. To see the biggest and best Toyota truck ever, visit your Toyota dealer today.



(9)





moving forward >

Features

32 Outsmarted by Turkeys By Rick Bass

Sometimes even the desire to hunt is not enough.

36 Deer World By Russell A. Graves

TPWD's Kerr Wildlife Management Area has become the epicenter of white-tailed deer research.

40 A Cave with a Past By Rob McCorkle

A former speakeasy and bandit hideaway, Longhorn Cavern offers visitors a wealth of treats for the eye and the ear.

50 Gear Guide 2004 By Gibbs Milliken

Our resident gadget guru gives you his expert opinion on the best gear of the year.

COVER STORY

The Case of the Missing Cans By Michael Furtman

Although still few and far between, canvasbacks are on the upswing.

CONTENTS DECEMBER 2004

For the latest information on parks and wildlife, visit the department's Web site: <www.tpwd.state.tx.us> You'll find a link to the magazine's Web site on the department's home page.

Departments

6 At Issue By Robert L. Cook8 Mail Call

Join the dialogue with *Texas Parks* & *Wildlife* readers.

10 Scout The latest conservation news and events

10 WILD LEARNING By Page Fullerton Habitat evaluation competition

gives youths a hands-on conservation education.

12 SECRETS OF THE GAMBEL'S QUAIL By E.Dan Klepper A two-year study examines,

for the first time, this muchsought-after bird's reproductive success and true distribution in the Trans-Pecos.

14 A GIFT AS BIG AS TEXAS

Share the outdoors experience with the Texas Parks Pass gift certificate.

14 TEXAS READER By Charles J. Lohrmann

Unexpected images — like an insouciant armadillo or a ravenous great blue heron create a compelling collection of wildlife photographs in *Texas Wildlife Portfolio*.

15 SKILL BUILDER *By Barbara Redrigues* A few tricks to help y**ou** become a fancy-pantis camp cook.

17 FIELD TEST By Gibbs Milliken

Anglers on the move need one of these rods and reels designed to travel.

20 Three Days in the Field A HILL COUNTRY DOUBLEHEADER By Dan Oko Following in the lootsteps of Bud Priddy, fly-fishing on the Nueces and Frio rivers.

48 Legend, Lore & Legacy ANSON JONES By Rob McCorkle

How a reluctant politician helped get Texas annexed.

5/ Getaways Your state parks offer endless activities for December.

55 Sights & Sounds Take a minute to find out why the TPWD television and radio programs are so popular all across Texas.

64 Parting Shot By Therese Tusa

Covers

FRONT: This solitary canvasback paddles up a wake on his own power. Read more about canvasbacks on page 24. Photo © Dale Spartas.

BACK: Longhorn Caverns has been luring visitors into its depths for generations. Find out why on page 40. Photo by Earl Nottingham.

This page: Gambel's Quail sports its unique topknot. Read about the latest quail research on page 12. Photo © Kathy Adams Clark/KAC Productions



DECEMBER 2004, VOL. 62, NO. 12

GOVERNOR OF TEXAS Rick Perry

COMMISSION

Joseph B.C. Fitzsimons, Chairman San Antonio Alvin L. Henry, Vice Chairman Houston J. Robert Brown El Paso Ned S. Holmes Houston Peter M. Holt San Antonio Philip Montgomery Dallas John D. Parker Lufkin Donato D. Ramos Laredo Mark E. Watson, Jr. San Antonio Lee M. Bass. Chairman Emeritus Fort Worth

> Executive Director Robert L. Cook Communications Director Lydia Saldaña

MAGAZINE STAFF: Randy Brudnicki Publisher Robert Macias Editorial Director Charles J. Lohrmann Managing Editor Mark Mahorsky Art Director Earl Nottingham Chief Photographer Bill Reaves Photography Editor Susanne Harm Circulation Director Ana Kirk Business Manager Lori Buckner Office Manager Gibbs Milliken Product Editor Robyn Gammill Copy Editor Peter Williams Design Assistant Jennifer McCutcheon Editorial Assistant Chad Whited Circulation Assistant

CONTRIBUTING WRITERS:

Larry Bozka, Saltwater; Henry Chappell, Hunting; Larry D. Hodge, Freshwater

CONTRIBUTING PHOTOGRAPHERS: Grady Allen, Wyman Meinzer, Earl Nottingham and David J. Sams

EDITORIAL OFFICES: 3000 South IH 35, Suite 120, Austin, Texas 78704 Phone: (512) 912-7000 Fax: (512) 707-1913 E-mail: magazine@tpwd.state.tx.us

ADVERTISING SALES OFFICES: STONEWALLACE COMMUNICATIONS, INC.: 3000 S. IH 35, Suite 120, Austin, Texas 78704 Fax: (512) 707-1913 Jim Stone, Advertising Director (512) 912-7007, E-mail: jim.stone@tpwd.state.tx.us;

Leigh Anne Way, Outdoor Marketplace Manager, (512) 912-7003, E-mail: leighanne.way@tpwd.state.tx.us

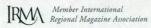
> THE NOYD GROUP: 2145 Crooks Ave., Suite 10, Troy, Michigan 48084 Fax: (248) 637-6452 Ron Noyd, Automotive Category (248) 643-7240; E-mail: rnoyd@attglobal.net

Texas Parks & Wildlife magazine (ISSN 0040-4586) is published monthly 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 nor concurrence with advertising claims. Copyright © 2004 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: \$19.95/year; foreign subscription rate: \$27.95/year. POSTMASTER: If undeliverable, please send notices by form 3579 to *Texas Parks & Wildlife* magazine, P. O. Box 5504, Harlan, IA 51593. Periodicals Postage Paid at Austin, Texas with additional mailing offices.

Texas Parks & Wildlife magazine is edited to inform readers, and to stimulate their enjoyment of the Texas outdoors. It reflects the many viewpoints of contributing readers, writers, photographers and illustrators. Only articles written by agency employees will always represent policies of Texas Parks and Wildlife Department.

SUBSCRIPTION INQUIRIES ONLY, PLEASE. PHONE: (800) 937-9393 7 a.m.-11 p.m. Monday-Friday, 8 a.m.-6 p.m. weekends



ABC

In the Field

MICHAEL FURTMAN describes himself on his

Web site <www.michaelfurtman.com>, "Except when I'm forced to sit at the old computer, my life revolves around the outdoors. I'm an unabashed environmentalist hunter, wilderness canoeist, angler, and, we'l, just an all-around

outdoor bum. I've written zillions of magazine articles, quite a number of books and sold a bunch of photographs, all of which have focused on natural history, the environment, outdoor recreation or conservation." If you're a reader of Ducks Unlimited, Field & Stream or Sports Afield, you know his work. In this issue, Michael writes about canvasback ducks.



is another regular contrib-

RUSSELL GRAVES

utor to this magazine with a Web site, <www.russellgraves.com>, that's worth a regular visit. The site emphasizes Russell's photography, but he's made a name for himself as a writer as well, contributing articles on fly-fishing, white-tailed dee- hunting and even travel. When he's not out making photographs, he's an award winning teacher and was named Texas Agriscience Teacher



of the Year in 2003. One of his noted projects is the Black-tailed Prairie Dog Research Project in which his students have conducted exhaustive research into the effects of prairie dogs on rangelands. In this issue, he writes about the standard-setting deer research that TPWD biologists are conducting at the Kerr Wildlife Management Area near Kerrville.

RICK BASS was born in Fort Worth and spent his early life in Houston before escaping to U-ah to study weldlife science and geology at Utah State University. He's the author of 18 books of fiction and non-fiction, including a nevel The Hermit's Story. His first short story collection. The Watch, won the 1988 PEN/Nelson Algren Award in 1988. He now lives and works in Montana's Yaak Valley. A Bloomsbury Review article about Bass describes him as "characteristically Southwestern

in independence, his restlessness, his humor, his vitality, his sunny outlook, his distrust of unchallenged authority and his disclaim for affectation and pretense." In this issue, he takes us along on a hunting trip during which he explores the motivation to hunt and the forces that draw him into the pursuit. As well as the quirky reasons why we all sometimes fall short of our goals.



AT ISSUE

FROM THE PEN OF ROBERT L. COOK

Along about this time of year, with the holiday season and all the friends and family, football games and a thousand good reasons to be outdoors, I wonder, "Where did the year go?" It passes so fast; there is so much to do. So I pause to reflect on our accomplishments of 2004, and I ask myself, "Did we do enough?"

First, we exceeded what I hoped to accomplish on the most critical conservation issue in Texas — water. We have been successful in raising the awareness of the importance of water for fish and wildlife and outdoor recreation in the minds of Texans, and especially in the minds of our constituents who hunt, fish, boat, hike, bike, camp, swim and who appreciate the great outdoors of Texas. Along with lots of help from our partners in conservation, we successfully initiated an understanding of the critical value and importance of good range and habitat management on private land in Texas — and its positive impact on the quality and quantity of water through fil-

tration into the soil, aquifer recharge, rejuvenation of springs and instream flow in our creeks and rivers. An abundant supply of water for fish and wildlife and for all Texans is the single most important conservation issue of the century. Our efforts to keep water issues front and center in the mind of Texans will continue in 2005 with a documentary airing on PBS in February, the water-focused edition of the magazine in July and several other initiatives.

Along with our freshwater fishermen and the Texas Parks and Wildlife Foundation, we successfully kicked off the process to replace the 75-year-old fish hatchery at Jasper with the new East Texas Regional Fish Hatchery. The foundation received partnership proposals from seven different communities, river authorities and corporations across East Texas. The Jasper County partnership proposal, which included the city, county, Lower Neches Valley Authority, the Corps of Engineers and Temple-Inland land, valued at approximately \$28 million over the 50-year life of the program, was recommended by the foundation to our commission. This new fish hatchery will annually provide millions of fingerling bass and catfish for lakes throughout Texas, ensuring that Texans will have excellent fishing for decades to come. supply of water for fish and wildlife and for all Texans is the single most important conservation issue of the century

An abundant

In June 2004, we celebrated the graduation of 36 Game Warden Cadets and strategically assigned them to duty stations across the state. In September, we funded and selected another class of 40 game warden cadets who will begin their rigorous six-month training and education program in January 2005, which will increase our force of field game wardens to more than 500 for the first time in almost 20 years.

In 2004, we celebrated the grand opening of our wonderful facilities at the World Birding Center Headquarters near Mission, and significant progress at our Sheldon Lake Environmental Learning Center in Houston. We made critical purchases of land to conserve Houston toad habitat while at the same time enlarging Bastrop State Park. We continued our successful efforts and partnerships to re-establish the wild turkey in East Texas and the desert bighorn sheep in West Texas. Finally, with the full cooperation and support of our constituents, we successfully implemented a fee increase for hunting, fishing, boating licenses, and increased our park fees to pay for conservation in Texas. Conservation of our natural resources in Texas truly is a "user-pay, user-benefit" program. These are just a few of our accomplishments, none of which could have been achieved without the support, involvement and hard work of our constituents and the citizens of Texas.

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.



MAN'S BEST FRIEND

At Gander Mountain we guarantee three things: Low onces: Great gear. And geople who are passionate about hunting, fishing, and camping. We're an outdoors store that knows you can't campullage inexperience. Call 800-282-5993 for a location near your

Texas Gander Mountain Locations

00 . 7-0+74

fishing

Amarillo - (806) 354-9095 Corsicana - (903) 874-2500 Houston - (832) 237-7900

Over Eighty Stores in Fourteen States WE LIVE OUTDOORS

www.GanderMountain.com 1-800-282-5993

live Mai

Mailcall

PICKS, PANS AND PROBES FROM OUR READERS

FOREWORD

When I was growing up, we would always spend Christmas Eve at my grandparents' farm in New Caney. With four kids crammed into the backseat of a '65 Mercury Comet, the holiday cheer was sometimes in short supply as we made the 50-mile trip from Houston.

Once we arrived in "the country," the sibling disputes would melt away as we

carried our still-hot food past throngs of relatives on the porch and into the tiny, yet bustling, kitchen. Grandma would take a break from biscuit-making to hug all the new arrivals, and the air in the room would briefly become powdery white as each back-pat from Grandma's hands would send up a puff of flour.

As soon as the greetings were over, I would sprint the IOO yards to the pond behind the house. Although only about 30 yards in diameter, at the time, the pond seemed to me a world of limitless possibility. In truth, the options boiled downed to I) fishing for the monster catfish that was rumored to patrol its depths or 2) shooting anything unlucky enough to slither, fly or hop anywhere near the pond.

After a couple of hours at the pond, someone would call my cousins and me in for dinner. After dinner, the epicenter of fun shifted to the long gravel road where we built a bonfire. There, at least one small crisis would usually ensue. Someone would inevitably launch a roman candle into the plowed-under cornfield and start a small fire. Or one of my cousins would hold onto a bottle rocket a little too long. For the most part, the emergencies were small enough to be taken care of with a first aid kit or a garden hose.

Finally, we would be beckoned again for the main event: the presents! It was a disorganized affair, leading to piles of paper and the occasional switched gift, but for me, it was always an exciting warmup for Christmas morning back at home.

I was reminded of those long-ago days by a handwritten letter we received from an 81-year-old reader who reminisced about Dan Klepper but made a point of mentioning that she occasionally disagreed with him. She writes the way my grandmother talked, forthright, but tempered by modesty. Have a look at her letter on this page.

Also in this issue, find a great gadget for the outdoors enthusiast on your gift list in our "Gear Guide" (page 50). If the shopping, the traffic and the chatty in-laws from Tucson are driving you batty, escape to the underground at Longhorn Cavern (page 40). And if you want to understand why the hunting is so good this year, "Deer World" (page 36) is a must-read.

As we begin a new year, I encourage all of you to drop me a line from time to time. Feel free to just say hi, or tell me what you liked or didn't like about the last issue, or describe what you had for lunch. The point is to keep the lines of communication open. You can reach me directly at: robert.macias@tpwd.state.tx.us.

Happy holidays!

Robert macias

ROBERT MACIAS, Editorial Director



REMEMBERING KLEPPER

My daughter gave me the September issue of *Texas Parks & Wildlife* magazine, and I have to say I enjoyed the article about Dan Klepper (and



I did not always agree with Dan. There was one particular time when he suggested that he could go up any dry creek bed and hunt. I think he mellowed on that idea. Even when I disagreed with him, I kept up with him, and was really sad to hear he passed away.

> A Loyal Reader Comfort

the article by E. Dan Klepper). I'm an oldtimer and I've received the San Antonio Express-News for years. I did not always agree with Dan. There was one particular time when he suggested that he could go up any dry creek bed and hunt. This was years and years ago, and I think he mellowed on that idea. Even when I disagreed with him, I kept up with him, and was really sad to hear he passed away. You don't find those kind any more. My husband was a hunter and he hunted all over the state. He knew the Trans-Pecos region well. We had a dear friend, also now gone, who had ranches one was the KC Ranch and the other was the Walker Wells Ranch. Our

bunch hunted those places for years. Good luck to E. Dan Klepper. I wish him the best in the world.

> A LOYAL READER Comfort

WIMBERLEY BIRDERS

Thank you and Thad Sitton for your recent coverage of our Garland L. Parise Pineywoods Purgatory. The GLPPP is a big fundraiser for Lufkin and the Lions Club has done a fantastic job in promoting it. Mr. Sitton painted a

MAIL CALL

wonderful picture of our East Texas countryside (from the saddle of a bicycle is a great way to see it!) and our culture. His memories of past events stirred our own memories and intrigued others who've never visited our Pineywoods. We hope some of your readers will want more information on this great ride (we think it's the BEST ride!) please visit the website at <www.pineywoodspurgatory.com> . There's a special link to Garland L. Parise, the founder of the ride, by his daughter, Ashley Parise, which gives more details about the work behind the original planning of the ride. We appreciate your notice of our community and hope you'll return!

Keep on pedaling!

SALLY JO PARISE Lufkin

TP&W MAGAZINE GOES GLOBAL

layton Williams once told me when on a hunting trip to another country, always take a little of home with you-especially when you go to Africa. He thought a moment and then added, Modesta and I always take peanut butter.

As I write this, my wife Barb and myself are in a bush camp in the Moyowosi Game Reserve in northwestern Tanzania. Leaving our first home in Midland, Texas, last April, we have been tending to the business side of African Professional Hunters (a startup safari company) as well as doing some professional hunting myself.

Well, we didn't take Clavtie's advice, but a client we hunted in the Selous Game Reserve back in August left the September issue of TP&W. Let me tell you, we have read and re-read that

issue, especially E. Dan's treatise on the Trans-Pecos. How we now wish we had brought at least a years worth of your magazine - a lot of home!!!

Just two and a half long months now and we'll be back to our second home in Wimberley, in time for Christmas and then late winter's transition to spring before we return to Africa. Africa may have stolen our heart, but Texas is in our bones.

> CAP HORNING Tanzania, Africa

PS: After traveling southeast along the southern shoreline of Lake Victoria, then south through the Serengeti and Ngorongoro Crater, we stopped to buy some groceries at the village of Mtowa Mbo (Mosquito Creek) near Lake Manyara. There, we met a young man that begged us for anything in English and from the U.S. Imagine his surprise and delight when I handed him that issue of TP&W. You have another convert!

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, 3000 South I-35, Suite 120, Austin, TX 78704. Or, fax us at 512-707-1913. E-mail us at <magazine@tpwd.state.tx.us>. Subscribe at <tpwmagazine.com>. Letters designated by this symbol were delivered to us via e-mail. We reserve the right to edit letters for length and clarity.

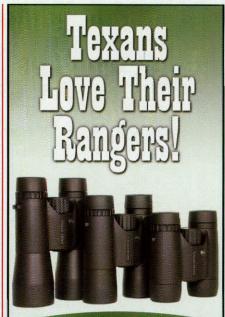




Concan • Garner State Park • Reagan Wells Sabinal • Utopia • Uvald

rustic retreat, or B&B.

Visit our website today at www.thcrr.com or call (800) 210-0380



Eagle Optics Ranger Platinum Class You'll experience a lifetime of satisfaction & performance.

> Guaranteed. Starting at \$349.00

Your source for a full line of biroculars and spotting scopes from all major manufacturers

EAGLE OI 800-289-1132 www.eagleoptics.com Call today for your FREE catalog and comprehensive optics buying guide!



NEWS AND VIEWS IN THE TEXAS OUTDOORS

WILD LEARNING

WHEP acquaints youth with valuable wiidlife management skills.



Managing habitat for wildlife plays an important role in successful farming, so 4-H helps train students through WHEP.

Three students from the Denton County 4-H Club represented Texas at the rational 4-H Wildlife Habitat Evaluation Program invitational in Blacksburg, Virginia, last summer. Ted Hatch, 15, of Denton, Elliot Holtzman, 18, of Highland Village, and Michael Schwind, 14, of Sanger, brought home a 5th-place prize for their rural wildlife management plan and came in 14th overall.

'For our first time, we can't complain," says Diana Schwind, the team's coach. "The whole thing was a phenomenal learning experience."

To earn the privilege cf going to the nationals, the students previously triumphed over 18 other teams from all over Texas. In that effort, they were assisted by a fourth student, Travis Kuehler, 13, of Copper Canyon, (Kuehler was unable to participate in the nationals because the rules require all participants to be at least 14.)

The Wildlife Habitat Evaluation Program, also known as WHEP, offers hands-on experience in wildlife management skills for students ages 9 to 19 throughout the country.

The program was founded in 1978 as the Tennessee Agriculture Extension Service's Wildlife Judging program. Competitively evaluating wildlife habitat instills in participants the fundamentals of wildlife ecology through applied habitat evaluation and manipulation and collaboration with professional biologists, teachers, farmers and ranchers, parents and volunteers. WHEP also promotes education about wildlife and fisheries habitat management, which gives upcoming generations a better understanding of the benefits of effective land management.

Although 4-H clubs are most commonly associated with agriculture,

The Wildlife Habitat Evaluation Program, also known as WHEP, offers hands-on experience in wildlife management skills for students, ages 8 to 19, throughout the country.

properly managing habitat for wildlife can play a crucial role in a farmer's job and income and in the farming industry itself. Well-managed land means higher crop productivity, better habitat and, therefore, more wildlife.

The state and national wildlife habitat evaluation contests consist of five major parts: identifying best wildlife management practices for different land types; matching wildlife foods with the appropriate species; ranking habitat suitability for a given species with aerial photographs; writing a wildlife management plan and writing an urban wildlife plan.

To prepare for the competitions, the Denton County team visited several parks and wildlife management areas and held mock contests.

For more information about the Wildlife Habitat Evaluation Program and efforts to educate future generations about the importance of wildlife management skills, call your county extension agent or 4-H coordinator. Visit the program's official Web site at <www.whep.org>.

- Page Fullerton

Retire in the Hill Country Acreage Homesites on Canyon Lake

LAKEVIEW

LAKESIDE

RIVERVIEW

HILLTOP

Surprisingly Affordable WOODED Starting at \$34,900

A unique community surrounded by the pristine Canyon Lake on three sides and the Guadalupe River offering jaw dropping panoramic views. Build your home on a variety of 1-10 acre homesites with a wide array of amenities to indulge your pursuits including a private park, hiking, biking and abundant wildlife. Call for your private preview. 1-888-263-9658 ext.22795

Obtain the Property Report required by Federal law and read it before signing anything. No federal agency has judged the merits or value, if any, of this property. This material shall not constitute a valid offer in any state where prior registration is required or where state registration recuirements have not been met.







Secrets of the Gambel's Quail

For a two-year study, biologists tracked the elusive birds in the most remote and inaccessible regions of the Trans-Pecos — even when the trail led to a rattlesnake's belly.

Texans can now look forward to perusing a wealth of new information about one of the prettiest little galliform birds in the state — the Gambel's quail. The Gambel's is a favorite of both birdwatchers and artists due to its distinctive head plumage, called a topknot. The bird inhabits the Sonoran Desert of Arizona and Sonora, Mexico, and its range extends into neighboring states. But in Texas it is found only in the most remote and inaccessible regions of the Trans-Fecos, making it a very difficult bird for Texans to enjoy. In fact, until recently, the bird and its habits have remained a mystery to state biologists.

"We didn't know anything about the bird in Texas," says wildlife biologist and TFWD Natural Resource Specialist Mike Sullins. "So when we began our study of them we had to start at the baseline with a descriptive research approach." The study, the first of its kind for the Gambel's quail in Texas, is a two-year project designed to determine the status, distribution and ecology of the bird in its Trans-Pecos environs. It's been hard work for Sullins, along with several graduate students from Sul Ross State University, but their efforts have paid off by providing new revelations about the bird's food habits, range and susceptibility to predation.

"Most of the food items I've found are not in any reference manuals. This makes deciphering what they eat real detective work," says Sullins. "For example, the quail love to load up on the seeds of desert spike. I was surprised about that because it didn't seem like the seeds of this annual forb were big enough for them to bother eating. But I kept finding crops full of these little black seeds and then, one day, I saw a covey of quail snatching the desert spike pods, chewing them up, eating the tiny seeds, and then spitting out what was left of the pods."

The birds, like most desert dwellers, are resourceful and persevering. "The



"It is susceptible to extended drought and poorly timed rainfall causing its population to drop to fairly low numbers. But it also recovers pretty quickly."

Gambel's quail is a boom or bust bird," explains Sullins. "It is susceptible to extended drought and poorly timed rainfall causing its population to drop to fairly low numbers. But it also recovers pretty quickly." Adjusting to the vagaries of West Texas weather is a real advantage considering this quail's range. Sullins has essentially redrawn, in great detail, what was once defined as a vague shadow of the quail's haunt. "Historically, the only information we have had on Texas distribution has been minimal." Sullins says. "But since our surveys, we have been able to define their range from the southernmost bend of the Rio Grande River in Big Bend National Park westward all the way to El Paso." Sullins also discovered one additional slice of Texas range for the bird that begins in Van Horn and extends through

the rough brushy draws of the Sierra Diablo Mountains all the way northward to the agricultural fields of Del City. "The birds are scarce, but they are there."

That statement could be said of most of the birds in Sullins' study, but not all of them. Sullins and his crew have tried to keep radio collars on at least 50 of the 500plus birds banded in the study at any given time. But following a signal through the dense, thorny habitat can be a real challenge. While the radio signal may be heard clearly, the bird is often nowhere in sight. And the birds' natural predators have been anything but helpful.

"Migrating Cooper's hawks have just hammered our birds every spring and fall," says Sullins. "We have lost about 50 to 80 percent of radio-collared birds to the Cooper's every season." Bobcats and gray foxes also eat the birds. Often these predators will leave distinctive calling cards. "You can tell if the predator was a hawk because they will grab the little radio transmitter antenna and peel it back, stripping the rubber off and turning it into a little wire curlicue," explains Sullins. "The fox, on the other hand, will bend the antenna in a right angle when it chews on the collar, and often caches the bird remains underground. Bobcats will usually leave teeth marks from its carnassials, or shredding teeth, on the radio collar and defecate right next to the kill."

But the most unusual tracking experience involved a rattlesnake. "One afternoon we followed a live signal to a pack rat burrow," says Sullins. "Quail sometimes will hide in these burrows if they are trying to avoid you. Also, a pack rat will sometimes collect a transmitter from a dead bird and take it into its burrow. So we dug down about four feet but didn't find anything even though the signal stayed strong. We came back the next week and followed the same live signal to another pack rat nest. Dug down and still couldn't find anything. Third time we came back and tracked the signal to some dense brush. We pulled the brush back and uncovered two rattlesnakes all wrapped up together in some low branches." We then stuck the antennae down amidst the bundle of rattlers and the radio signal came in loud and clear. "I figured there was no way I was going to try and retrieve the bird and its radio collar from inside a rattlesnake belly," says Sullins. So he and his crew left, came back the next week, followed the signal another one hundred yards downriver, and found the radio collar in a small pile of snake droppings.

- E. Dan Klepper





uctual size

BLUEBONNET RING

A flower from Kirk Root's popular collection of bluebonnets. This 14kt gold original-design ring features round brilliant-cut natural sapphires with full-cut diamonds and tsavorite garnet leaves. Very comfortable to wear and a complement to Kirk's bluebonnet pendants, brooches, and bracelets.

RG-016 Bluebonnet Ring ...\$1800

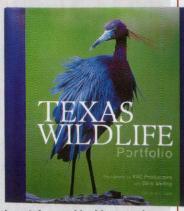


TEXAS READER

Texas Wildlife Portfolio

THE TITLE PAGE PHOTOGRAPH IS THE ONE I KEEP COMING BACK TO: It's an insouciant, slit-eyed armadillo returning the camera's gaze with an uncharacteristically smug coun-

tenance. Our nine-banded friend appears to be glancing up while taking a drink. But regardless of what the animal is doing or what's going on in its scaly head, I feel safe saying you have not enjoyed this perspective on an armadillo before. And the same is true for many of the creatures captured in *Texas Wildlife Portfolic*, photography by KAC Productions and Dave Welling (KAC Productions/FarCountry Press, 120 pages, S24.95 hardcover). Like the armadillo, many of the birds, mammals, amphibians, reptiles and insects are caught at an unexpected moment — like the great blue heron gulping down a fish larger than its head — and provide an unusual and memorable image. But there's nothing cute or anthropocentric about the photographs. The



images — many created by photographers who have had work featured in this magazine — present amazingly crisp, saturated colors and stunning detail. All of the images offer sharp documentary quality, but there are many that transcend to deliver the interpretive power of art with the precise attention to detail of the scientist.

Certificate

000001

- Charles J. Lohrmann



A Gift as Big as Texas

Buy a year of outdoor fun — at a bargain price.

For the outdoors enthusiast on your holiday gift list, consider the Texas State Parks Pass gift certificate. The lucky recipient will receive: unlimited visits to more than 120 state parks; discount coupons for camping and merchandise, and a quarterly e-newsletter. If you order before December 31, 2004, you'll also receive a free Texas state parks holiday tree ornament — complete with a gift box and card. You'll get all this — plus the pride of knowing that you're supporting Texas state parks — for only \$60. The limited-edition ornaments which feature a collage of state parks and historic sites, have been popular with park visitors and collectors alike since they debuted in 2002. To order the gift certificate and the free ornament, call (512) 389-8900 or point your Web browser to <www.tpwd.state.tx.us/products>. The site also features a list of state park stores that offer in addition to souvenirs, a large selection of books, coffee mugs, posters, stuffed animals and more.

SKILL BUILDER / BY BARBARA RODRIGUEZ

Fancy Pants Camp Cooking

You, too, can work wonders with a cast iron skillet, aluminum foil and a plastic tablecloth.

First, you'll need a few supplies

Buy two cheap plastic laundry baskets (\$2.50 each at Target), one for cooking gear, another for food. Carry all your gear and food to and from the cooking and washing zone in the baskets.

Keep snack foods in a lidded plastic box. Cookies and chips stay fresh, dry and out of the hands of raccoons (or kids).

A plastic tablecloth eliminates the need to scrub a soiled picnic table and sponges off nicely. But if you're truly in need of *élan*, bring a fabric cloth to throw over the plastic one. The only drawback is that if you forget and leave the fabric cloth out

Ode to the cast iron skillet





overnight it will be soggy with the morning dew, whereas a plastic one can be toweled off quickly.

A bouquet of flowers on the table makes you feel you are dining al fresco in Tuscany. You can't pick wildflowers in the state park, so bring your own bouquet and vase from home.

Finally, since I've already revealed how truly soft I am as a camper: cloth napkins don't blow away, create less garbage and look elegant. And, unless you're six or really sloppy one napkin per person can be reused throughout a weekend.

Ode to The Cast Iron Skillet

Cooking over a campfire can be a testy thing. Timing is everything. If you want to have everything to the table and hot at the same time, follow these steps:

I) Get your fire started at least 45 minutes before you're ready to cook. If the grill sits high enough, gentle flames are OK; evenly hot coals work best with a low grate. Cooling coals are very bad indeed. At Fort Richardson State Park,

A bouquet of flowers on the table makes you feel you are dining al fresco in Tuscany. You can't pick wildflowers in the state park, so bring your own bouquet and vase from home.

I initially opted to cook at both the grill and the campfire, but there were too many steps between the two. Eventually I went straight for the campfire pit, which had a built-in iron grate that swings down over the pit. It was perfect for a cast iron skillet, if not my back.

2) As foods are ready, remove them to a double layer of aluminum foil, fold up a nice tidy packet and keep warm to the side of your fire. When you're ready to serve, scoop all the foil packets into a towel and to the table for serving.

The Gear

The single most indispensable piece of gear for campfire cooking is the cast iron skillet. With a skillet, one goodsized saucepan, a spatula, wooden spoon, two good knifes (chef and paring), aluminum foil, a cutting board and a French coffee press, you have all the gear you need to cook a feast.

The Menu

Nothing could be easier than buying fajita fixings already prepared — presliced meat, peppers and onions shrink-wrapped together. Mix up some salt, pepper, cumin, chile powder and red chile flakes to carry along in a baggie. Pack the cooler with tortillas, tomatoes, avocadoes, and a baggie of chopped chile peppers, garlic, onions, cilantro leaves and a teaspoon of salt and a coarse grind or two of pepper.

To start dinner, toss your tortillas one at a time into a stoking hot skillet till they begin to puff up, flip with a spatula and count to six, and repeat. Stack the hot tortillas between sheets of foil till you've heated all you want. If you bring a bag of pre-shredded cheese you can melt a handful on top of each of the last few tortillas folding each in half as the cheese melts. Voila! You've got appetizers—quesadillas. Keep the other tortillas in the foil close enough to the fire to stay warm.

Toss your fajita meat and veggies into the skillet with a few pinches of the seasoning mixture and assign someone to stir occasionally as you prepare the pico de gallo tableside (coarsely chop tomatoes and avocado and mix with the onions, garlic, cilantro and hot-pepper mix). The same dinner plan works equally well with sausages (baggie the prepped green pepper and onion slices) with a freshly made side salad of tomatoes and avocado.

For breakfast fill the tortillas with scrambled eggs, onions, tomatoes and cheese. If you have to have toast, make it in the skillet by swishing in butter and sopping it up with slices of bread, quickly flipping the bread slices several times until they're grilled. Wrap in foil to keep warm while you scramble the eggs.

The saucepan is for boiling potatoes that you will slice and fry the next morning with the eggs. More important, it is for boiling water to pour into the French coffee press, the absolutely easiest way to make gourmet campfire coffee. Because I am a true coffee sissy, I also travel with half-and-half in the cooler. With a thermal pitcher you can enjoy hot coffee all day.

For an impressive feast, serve everything with a sideboard of good cheeses, French bread and grapes, and sliced tomatoes. Scramble extra eggs and cheese in the morning and make egg sandwiches to carry along for lunch.

Travel Rods and Reels

Now it's easier to take your fishing gear along.

As more anglers travel to exotic destinations, they are increasingly turning to compact rods and reels that can be easily carried in a suitcase. Manufacturers are scrambling to develop and build multi-section rods that perform virtually as well as onepiece rods and still meet new air regulations on luggage.

Among the top rods we tested is the three-piece, 7-foot G. Loomis Escape Casting Rod. The action is fast and crisp with enough stiffness to throw large baits and handle aggressive species like peacock bass and inshore jacks. It has all the premium features, including an exposed section of the blank under your trigger finger for sensing even the slightest take of deep-running lures. Fit this rod with a precision-made Swedish Abu-Garcia Mörrum Reel, and experienced anglers will instantly sense its easy handling combination of ultra-smooth casting and retrieving characteristics. Many consider the Mörrum to be the finest reel ever made in the Ambassadeur Series. (\$270, Escape Casting Rod, Model ETR84-3MC-14, G. Loomis, (800) 456-6647, www.gloomis.com) (\$ 249.99, Mörrum Reel, Model 6600CL, Pure Fishing, (877) 777-3850. <www.purefishing.com>)

If you prefer spin fishing, the 7-foot Fenwick Eagle GT Rod has a snappy medium-light action capable of throwing tiny I/8ounce lures good distances even with 30-pound test (10-lb diameter in mono) Stren Super Braid line. It has a cork-over reel seat for a comfortable grip and breaks down into four sections to take airborne or stow in your backpack. The reel is the top-of-theline Shimano Stella with 14 anti-rust ball bearings for ultrasmooth operation. This combo is an outstanding choice for travelers fishing a wide range of conditions and species. (\$64.95, Fenwick Eagle, #EGT70SML-4, Fenwick, (877) 336-7637, www. fenwickfishing.com) (\$499.99, Stella 2500FA Reel, Shimano, Inc., (800) 274-4626, <www.shimano.com>)(\$12.99, 125 Yards 30 lb., Stren Super Braid, Pure Fishing)

Spincasters will find the Bass Pro Micro-Lite Pack Rod great for casting from and to the tight spots. This 6-foot medium action 4-piece design features a wide cork pistol grip and positive twistlock reel seat. Add the **Omega ZO3 Reel**, the most advanced and well-constructed spincast currently available, and you have an inexpensive compact outfit for fishing the most challenging places on your outback travels. (\$39.99, Micro-Lite Rod, #ML60MC-4, Bass Pro Shops, (800) 227-7776, <www.basspro.com>) (\$49.95, Omega ZO3 Reel, Zebco, (918) 836-5581, <www.zebco.com>)

True excellence is not an overstatement when describing the new 9-foot, 8 wt. G. Loomis Cross Current GLX Fly Rod. The product of research and extensive testing by some of the world's best fly fishers, it incorporates numerous innovative features like solid titanium guides that resist damage by bending and springing back into place, a unique swell-forward handle design and an extremely fast action for handling big flies and windy conditions. The rod is built on a translucent olive-green 4piece high-modulus blank that is light in the hand with enough



Top: G. Loomis Escape casting rod with Abu-Garcia Mörrum reel; second from top: Fenwick Eagle GT rod and Shimano Stella reel; third from top: BassPro Micro-Lite Pack Rod and Omega ZO3 Reel; bottom: G. Loomis Cross Current GLX fly rod with Scientific Angler's System 2LA reel.

spine to put lots of line in the air over great distances. Completing this outfit is the new **Scientific Anglers' System 2LA Reel** which has a light open frame, extra-fast retrieve, smooth disc drag and a nicely audible outgoing click that adds to the thrill of a strong running fish. (\$635, Cross Current GLX Fly Rod, # FRI088-4CCGLX, G. Loomis) (\$ 254.95, System 2 LA Reel, #LA890, 3M Scientific Anglers', 800-364-3577, <www.3m.com/us/home_leisure/scianglers >)

Regardless of the type of rod and reel you plan to take traveling, always carry a backup and spare spools of line for different conditions. These simple precautions just might save the trip in case an outfit is damaged or the line is lost to one or more big fish. * **DODGE RAM LONESTAR EDITION.** Hunting legend, Keith Warren doesn't go anywhere without his Magnum. That's because his HEMI[®] Magnum[®] V8 Dodge Ram Lonestar has proven to be a reliable companion—perhaps even his best friend. Visit your Texas Dodge dealer.

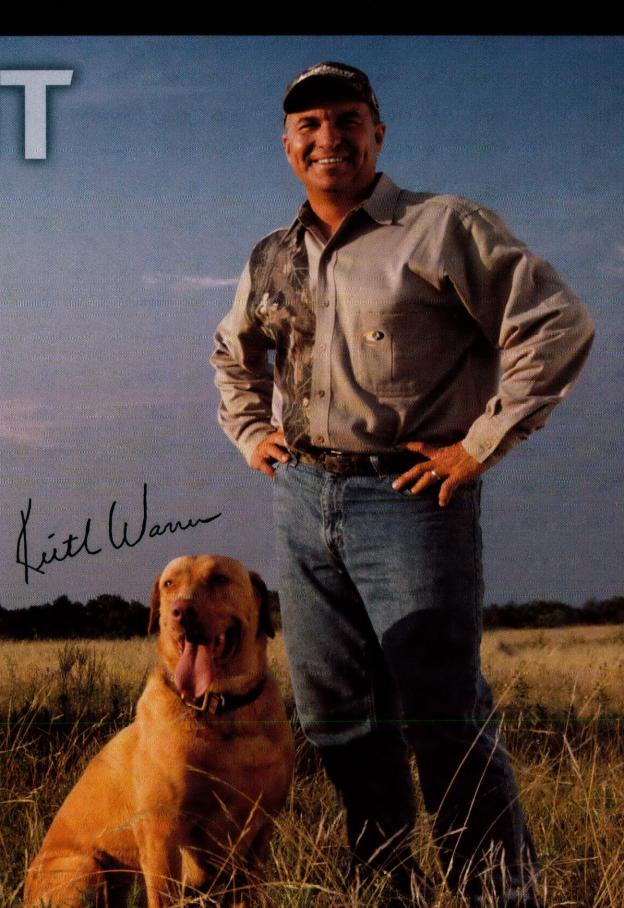
DOM EOO

THE TRUCK H UNT ENDSHERE.



GRAB LIFE BY THE HORNS





Days in the Field / By Dan Oko

DESTINATION: CAMP WOOD

A Hill Country Doubleheader Following in Bud Priddy's footsteps on the Nueces and Frio rivers

Standing waist deep in the crystal headwaters of the Nueces River, you have to watch your step. Simply put, the water is just *that* clear, like tap water in a glass, and what looks like a drop of a foot or two can leave you soaked up to your neck. That's the lesson my guide, Aaron Riggins, is trying to impart as I move slowly upstream, casting back towards the shore, sinking a modified clauser into the current, hoping that yet another bass will take my fly. I'm feeling with my feet for the edge of the shelf, not really trusting my eyes, and not wanting to break my rhythm. Breathing in the surprisingly crisp August morning air, I strip the streamer towards me in short yanks that I've been assured will make the lure dance like an injured minnow.

Everything else Riggins, a lanky 30-year-old from Uvalde who hung out his outfitting shingle last year, has told me is true. From the fly I use to the proper presentation to the likely spots where hard-fighting black bass lie, I'm trying to soak up as much knowledge as Riggins is willing to proffer. We're just outside of Camp Wood, the small town where the late, legendary guidebook author and physician Bud Priddy grew up. Even though I've never been here before, it feels like a bit of a Hill Country homecoming. It doesn't hurt that the fish are biting, especially the "Guads," as the Texas natives are known locally, the Lone Star's best answer to the feisty brook trout prized by transplanted Yankees like me. We're fishing catch-and-release, and I couldn't agree more that sight casting to fish and bringing them to hand is the epitome of success. "To me, this is what fishing is all about," Riggins says in his distinct South Texas drawl.

Glancing upstream, I notice some likely bass-hiding structure, including submerged gray boulders close to shore and overhanging branches of a few pecan trees, so I begin to shuffle against the current. But before I make it even a yard, I begin to slide down the rocky bottom of the Nueces and water soaks my cotton T-shirt up to my chest. The cool water and gentle flow isn't a genuine nuisance in the midday heat, but I'm not convinced that I'll be able to cast if I'm standing up to my armpits in the river. So I back-track and look for a shallow tongue to carry me where I want to go. When I get there, the bass strike over and over. After weeks of catching about a dozen panfish for every bass I summon, I'm casting to a new tune.

Now on my second day on the Nueces, the perch-bass ratio is running one to one. When the breeze ceases ruffling the water's surface, I can see them coming - black bass and largemouth - one after the other. When hooked, the sleek green torpedoes dive, then in desperation, break the water's surface. I try to work them efficiently, pulling them swiftly into my orbit and letting them go no worse for the wear, I hope. I can see how Priddy, whose Fly-Fishing the Hill Country remains an invaluable resource, got bit by the fishing bug, and why Riggins believes there might be money to be made guiding here. When we finish pounding water in Edwards County, we visit Priddy's grave outside Camp Wood. I'm tickled to see the same poppers that adorn the pages of his book are etched into his tombstone. After paying our respects, we follow Highway 55 south along the river into Uvalde county, where we continue wading in Priddy's footsteps.

Casting into, Camp Wood's Past

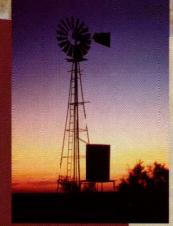
Located on a bend in the Nueces, Camp Wood may not exist strictly because of fishing. But it's one of the reasons that the town

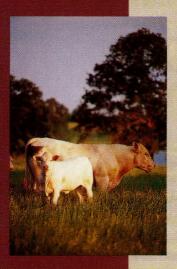
A Hill Country homecoming: The Nueces is one of the rivers fished by Bud Priddy, the legendary guidebook author who hailed from Camp Wood.



and surrounding communities along the river are reaping Texas' tourism benefits. The area's earliest inhabitants, obviously, were Native Americans, while the first European settlers were Franciscan clergymen who established the short-lived San Lorenzo de la Santa Cruz Mission nearby with the help of Lipan Apache. The missionaries lasted from 1762 until 1769, and were replaced eventually by federal troops, who didn't last long either. In 1857, the U.S. Army established Camp Wood, a fort to protect the early San Antonio-El Paso road from Indian raids. When federal troops left

Hunt, fish or just relax.





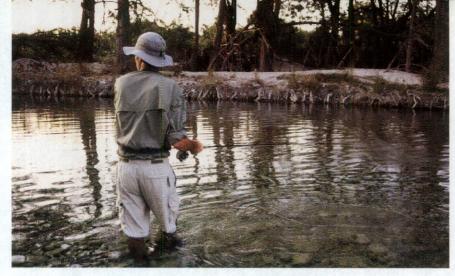
It's your place.

Away from the city and away from the stress. With clear blue skies and wide open spaces. Aren't you glad you worked with Texas AgFinance?

Texas AgFinance makes recreational property loans.

Texas AgFinance

1-800-950-8563 www.TexasAgFinance.com Your Farm and Ranch Lending Expert



Texas in 1861, most Camp Wood soldiers also departed. Across from my river-front accommodation, a marker commemorates 29-year-old Confederate hero Private Frank Marshall, who died that same year after a battle in New Mexico.

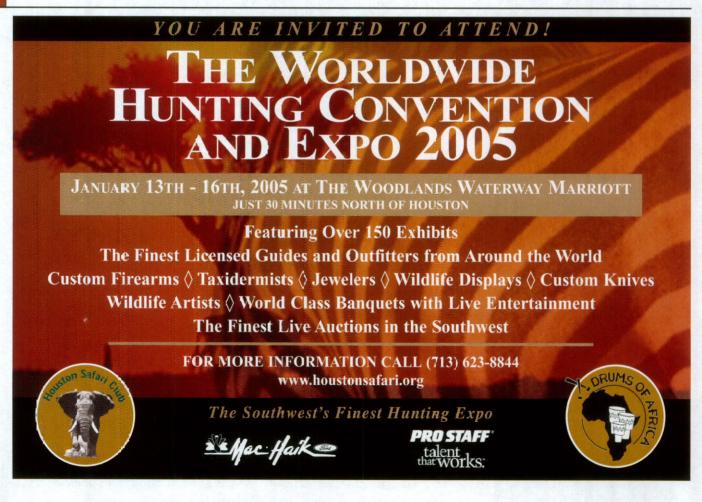
For two nights, I stay at the Mill Wheel, on the Nueces on the edge of Camp Wood. The owner. Sue Fryce, grew up in the town; her older siblings went to school with Bud Priddy, who she remembers only dimly, but ever so fondly. She brings an old elementary school annual so Riggins and I can see a photo of Priddy, his sister and her brothers. Fryce also shows off a photo of her mother standing by the old mill near the slough that enters the Nueces adjoining her property. The wheel is gone now, but her 12 acres above the river remain enchanting. There's a sprawling oak in front of the yellow cottage where I stay, and it's just a 10-minute walk and five-minute bushwhack to the water's edge. An old-timer on a four-wheeler riding the gravel track on the opposite bank tells me that there are big bass lurking near the mouth of the slough, but warns that the last "rise" — when the river flooded in July might have pushed them out.

On my first day in Camp Wood, I spot some fish patrolling the bend near the channel, but my retrieve is off and the biggest fish I catch is a 13-inch channel cat, who does me the unlikely service of



Guide Aaron Riggins, sight casting, "This is what fishing is all about," left; Bud Priddy's grave is adorned by his favorite poppers, above; Garner State Park, opposite page.

rising to my black woolly bugger. The bass pass uninterested, however, and I vow that when I connect with Riggins the following day, I will get him to solve the mystery of how to entice bass to strike a fly. Riggins is well qualified for the job, as earlier this year he was one of the winners in the San Antonio-based Alamo Fly Fishers' annual one-fly contest, named for Bud Priddy. The memorial contest has gone on for five years, and when it earns money, the group uses any extra cash to pay for stocking more bass in the Nueces River. Using the same streamer he loaned me, the modified clauser I'm now using, Riggins caught nearly 193 fish in a 12-hour stretch.





Hot on the Frio

GRIFFIS

A

My hook-up rate never approaches what Riggins achieved during the Bud Friddy One Fly Contest, but my guide does help me improve my retrieve, and the success that follows leaves me brimming with confidence. By the time Riggins and I make our way over the hills to Garner State Park, the most visited park in the Texas system and reportedly the most popular state park in the nation, I'm reluctant to leave the Nueces. A hatch of midges is coming off the Rio Frio when we arrive, but between tubers and anglers, the stretch of water running through Garner is too hammered to y eld anything but a couple of undersized panfish to a fly.

The following morning, my third and final day of fishing I have to reckon with

discerning the nature of yet another river. In the parlance of anglers, the broad, clearwatered Nueces is known as a freestone river due to its loose gravel bottom; the Frio has more limestone, and the pecan bottoms compete with cypress along the banks. The fish, apparently, are more selective on the Frio as well, and Riggins, sensing my frustration, makes an executive call: He drives us to a private access reserved for paying clients, where I catch my fill.

Heading home, I'm as ebullient as any angler who has finished while daylight still shines. As I chase the Hill Country Wildlife Trail back home, I reflect on my days fishing these unspoiled streams. You can peer into their depths, but they still hold surprises – and as long as we respect them, they'll yield fish by the dozen. *

The Texas Capitol Ornament 2004 Capitel Ornamen STATE CAPITO Orders may be placed by calling Austin residents: 305-8406 or visit us on the web at: www.TexasCapitolGiftshop.com

Ninth in the series of annual collectible ornaments, the 2004 edition depicts the impressive Interior Dome of the Texas Capitol rotunda. Layered in 24k gold, the ornament reflects the highly detailed coffering that surrounds Texas' beloved Lone Star. The ornament is presented in a handsome velour-lined gift box. The cost is \$16.00 (plus S&H). Proceeds support Capitol preservation and education projects.

www.TexasCapitolGiftshop.com







The Case of the Missing Cans

Canvasbacks have faced hard times but are making a comeback this season By Michael Furtman



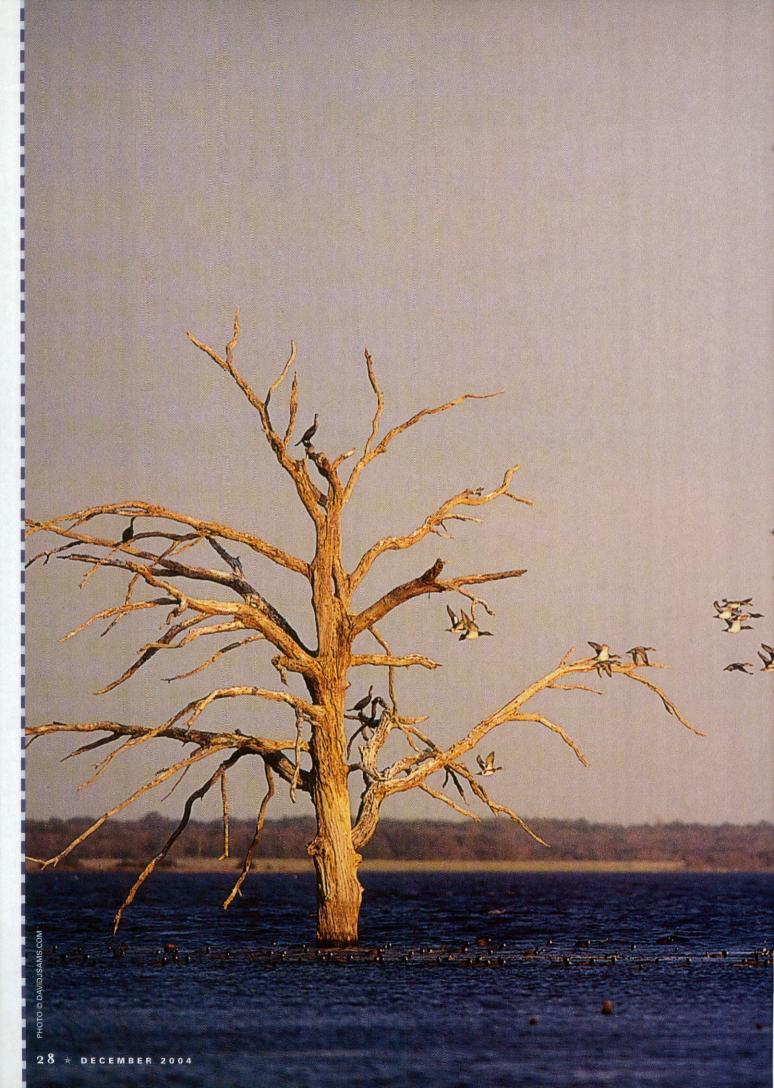
They came, barrel-chested, across the marsh, flying low, beating into the fierce wind as if they felt it not at all. Even this shallow marsh sported tiny whitecaps, flecks of foam tossed by the wind, whitening the air like snowflakes.

"Cans," whispered my duck blind partner, "And there are drakes!" In seconds, the birds closed the gap, spotted our decoys, and swung toward us on short, pointed wings. Shannon and I rose and fired as one, and when we paused, we were amazed to see two drakes belly up in the marsh, black legs waving. Wigeon, my black lab, fairly flew across the water, fetching each handsome drake canvasback in turn.

For much of my adult life, canvasbacks have been off-limits. Found only in North America, the canvasback has never been a particularly numerous duck, and in fact, was on the "Blue List" (species that may be of concern) from 1975 to 1981 and was a "Species of Concern" in 1982 and 1986. However, from a 1994 population of 525,000, the canvasback breeding population increased to 770,000 in 1995 and 849,000 in 1996, well above the 540,000 long-term goal set by the North American Waterfowl Management Plan, which allowed for duck seasons that allowed one can in the bag. But for reasons we'll explore, they have generally faced harder times than most species, and consequently, the season for canvasbacks has been more often closed than open. Even when legal, the daily limit never exceeds one.

Of course, that wasn't always true, and Texas was once home to clouds of wintering cans, a population that now largely stops at Catahoula Lake in central Louisiana.

Consider the reports of Forest McNeir, one-time market hunter in southwestern Chambers County, in and around Lake Surprise and Galveston Bay. Lake Surprise, a shallow body of water on the north side of East Bay, is about six miles from the tip of Smith's Point. About a mile and a half long, this 4-foot-deep lake was once filled to the brim with wild celery, a favorite food of the noble canvasback.





In 1897, McNeir and his brother were hired by Galveston banker Colonel W.L. Moody, to run his hunting camp on Lake Surprise. And it was here that McNeir reported what is now but a Texas memory – untold thousands of canvasback. On a cold mid-December morning, McNeir and one John Scales took 300 shotgun shells and headed to the lightly iced lake:

"It began to get rough out in the middle, and they (canvasbacks) took a notion they wanted to be up in the east end of the lake around the small islands. To get there they had to pass the end of our island. We didn't shoot into the front end of the big bunches as they dived for our decoys, but we tore into the back end, and shot all the scattering ducks that came along.

"I never got my pump gun fully loaded again after the first round. The ducks came so thick and fast that lots of them got past us while reloading. Our shells lasted forty-five minutes. When we quit shooting all the rushes around our skiff had shed their ice and were standing up from the heat of those 300 rounds of black powder. We picked up 192 fat canvasbacks, worth big money in the New York market for the Christmas holidays. And we got them there."

McNeir reports that he'd get 10 cents for teal, 12 and a half cents for spoonbills, 15 cents for "middle-sized" ducks, 20 cents for mallards, and a whopping 50 cents for canvasbacks. Packed in barrels around a central cylinder of ice, the Texas cans were shipped to markets all over the north.

It may be hard to imagine a canvasback hunt like that today, but former TPWD Assistant Waterfowl Program Manager Steve Cordts points out that today's waterfowler can still find Texas a good place to hunt cans.

"On average, about 10,000 cans are harvested in Texas," says Cordts. "In fact, of all the states in the Central Flyway, Texas usually ranks first in canvasback harvest, followed by North Dakota."

And where are those cans taken? From 1991 to 2000, Shelby and Sabine were the top two harvest counties, with 870 and 826 canvasbacks per year. The statewide average is 6,487 cans per year, but this includes years of closed seasons. The best two regions are East-Central Texas and the Gulf Coast.

A Diver Unlike Any Other

Though commonly called "diving ducks," canvasbacks and their relatives are more properly named "pochards," and all share some common characteristics, such as heavy bodies and short wings. With legs set farther back on their bodies than on dabblers, they are poor walkers and rarely seen on land. However, this leg position makes them superior divers, propelled by their large feet. Because they are stout birds with small wings, they cannot leap into flight as do the puddle ducks, but must run along the water's surface to gain enough momentum to take flight. Consequently, they are uncomfortable on small bodies of water.

Like dabblers, diving duck hens have a strong homing instinct, perhaps strongest in the canvasback. Males, however, do not return to their natal home, but follow their hen. Pair selection takes place in winter. Males generally stay with their hen until incubation begins, then depart to larger marshes where they undergo their molt. Diver hens molt while they are raising their brood. The molt process takes about three weeks, and during this time they replace their flight feathers, leaving them temporarily flightless. A second molt occurs more gradually during the fall and winter, during which both sexes replace body feathers, and the male gets his gaudier breeding plumage.

Few ducks are as distinctive in appearance as is the dramatic canvasback, with its reddish head and long, sloping bill and forehead. The canvasback has long been a favorite of hunters because it is a fast flier, clocked at more than 70 miles per hour; it is rare (the least numerous of all our diving ducks); and it is delicious table fare.

The drake's startling red eye sets off its rusty-red, sloping head, while the female's eye is black. Both sexes have gray feet and black bills. Drakes in breeding plumage — which is often attained by late October — have a broad black chest and neck, as well as a black rump. His breast, however, is white, as are his flanks and sides. Although from a distance and in bright light, even his back appears white, actually the back is a delicate weave of gray and white, which spawned this duck's name: Early hunters thought this pattern looked like the weave of canvas. Except for the primaries, even the wing feathers of the nuptial-plumaged drake are white.

As with many other species of ducks, the prairie pothole and parkland region is the breeding home to the majority of canvasbacks, but some do breed in the subarctic on river deltas, and a few in Alaska. They typically winter on the Atlantic, the Gulf or Texas coasts, although a few cans winter on the Pacific coast.

Canvasback hens have a strong homing instinct largely independent of spring water conditions. Smaller marshes are preferred as nest sites, especially those rimmed with cattails or rushes. Hens build their nests amid the tall vegetation on floating mats in water up to 2 feet in depth.

Canvasback clutch sizes average about nine, and the eggs are large, gray-olive and smooth. A redhead hen often dumps eggs in canvasback nests and even rolls the canvasback eggs out of the nest to replace them with hers. Drakes stay with the hens until the egg lay-

ing begins, and canvasbacks are somewhat less territorial than other ducks. Like the wood duck, the canvasback drake will tolerate others of his species nearby, and instead focuses his defense on the female. Wherever she is, the "territory" is, and so it is mobile in nature.

After about 24 days, the eggs hatch, and canvasback hens lead the ducklings to water. These broods are more mobile than some of other species, and frequently move from wetland to wetland. At eight weeks, the ducklings are feathered, and by 60 days of age, they are ready to fly.

Never numerous, canvasback populations have been in trouble during most of the last half of the 20th century. They seem particu-

HOTO © GARYKRAMER

larly prone to the double assault of drought combined with increased wetland drainage on the prairies. They also have suffered from the northward movement of raccoons, a predator that easily hunts the floating vegetative mats that for ages protected canvasback hens. Raccoons were never recorded in most of the prairie pothole region until the 1950s, and since then have prospered thanks to the changes to the landscape wrought by man. Today raccoons present a serious predation problem not just for canvasback, but many other duck species as well. Hunting restrictions or closures of some sort for canvasbacks have been in place most years since 1960.

While other species of ducks have prospered in recent years thanks to conservation measures and wet conditions in the breeding grounds, canvasbacks have fared less well. Although their numbers, too, have responded to these better conditions, perhaps the real restriction is the fact that this is not an adaptable species. For instance, canvasbacks are fairly restricted in diet, and many of their historic migration and winter areas have been adversely affected by pollution, limiting the nutritional assets canvasbacks can utilize, and possibly affecting their reproduction. They have been called the "calendar" duck, because migration timing is more rigid, as are the stops along the way. But many of

their once famous migration and wintering areas - like Lake Surprise - are either no more or are so altered that the canvasback no longer finds them attractive. Yet they are reluctant to try new areas. By feeding or wintering in compromised areas, the hens return north in poor condition for breeding.

The good news, however, is that due to the exceptionally good water conditions of the 1990s, and some restoration work on canvasback migration stops north of Texas, even the canvasback population grew enough to again allow limited hunting. The long-term Canvasback population average for the traditional survey region from 1955-98 is 556,000. To be included in the hunting bag, the population needs to be a minimum of 500,000 based on the May breeding pair surveys.

The good news, however, is that due to the exceptionally good water conditions of the 1990s and some restoration work on canvasback migration stops north of lexas, even the grew enough to again allow limited hunting.

In Texas, cans are most often seen on some of the big reservoirs, such as Sam Rayburn and Toledo Bend. And they are still present on coastal marshes, though not numerous. Matt Nelson, manager of TPWD's Mad Island Wildlife Management Area near Bay City, sees cans regularly.

We have two ponds on our WMA that attract cans, although the numbers have been down the last two winters," says Nelson. "Our one main isolated 120-acre lake has sago pondweed, a favorite canvasback food, and in a typical winter, we'll winter about 200 cans."

Nelson also flies the midwinter aerial survey.

"A fair number of cans – maybe 300 or 400 – winter in the area around Laguna Largo."

Barry Wilson of Ducks Unlimited, biological leader for the Gulf Coast Joint Venture (part of the North American Waterfowl Management Plan), says Texas cans are most likely to be found in two types of areas - big reservoirs and river deltas.

"In recent years there have been some pretty high numbers of cans on the (Pineywoods) reservoirs. In 1999, some 10,000 were estimated to be wintering there."

Still, the coast is the most important wintering area, he reports.

"The coastal zone is more likely to have the largest numbers, such as off the Guadalupe Delta, and some in the LaBahia Grande wetland at Laguna Atascosa National Wildlife Refuge and in locations on the Chenier Plain, such as the J.D. Murphree WMA. The McFadden National Wildlife Refuge gets inconsistent, but fairly large - in the thousands - numbers of cans in some years. While those numbers fluctuate, the coastal zone winters as many as 26,000 canvasback."

No one will ever know just how many canvasbacks once wintered on Texas coastal marshes. Given the large numbers killed by early market hunters like McNeir, it certainly was substantial. But changes came to the marsh with the creation of the Gulf Intercoastal Waterway, which allowed saline water to flow into once freshwater marshes, killing the foods that canvasbacks and other ducks need.

Even McNeir saw the changes.

"In 1900, Lake Surprise filled with salt water," wrote McNeir, "that killed all the wild celery. All that great marsh where I hunted as a boy has been fenced and posted and today is dotted with oil wells, tanks, and drilling rigs. The ducks are gone, the oil has come and still the world goes round and round."

The world indeed does continue round and round. And ducks continue to migrate to Texas from their breeding grounds in the north - but to a very different world than that which spun just a cen-



tury ago. Thanks to the hard work of TPWD and its partners such as the U.S. Fish and Wildlife Service and Ducks Unlimited, the noble canvasback can still find a seasonal home in this grand state.

Today's coast isn't nearly as inviting to canvasbacks as it once was, but efforts are underway to reverse that. Although not geared specifically toward cans, habitat restoration efforts, such as the Texas Prairie Wetlands Project, through which the TPWD, Ducks Unlimited and other partners work with private landowners to restore, enhance and create shallow-water wetlands throughout 28 coastal counties, will provide critical wintering areas for ducks of all kinds. Restoration work on public lands also contributes wintering habitat in important canvasback areas, like the Hynes Bay and Buffalo Marsh impoundment improvements completed in 1999 on the Guadalupe Delta WMA. Together, these public and private wetland projects keep the Gulf Coast attractive to all wildlife, including canvasbacks.

Less adaptable than other species, perhaps the canvasback is the best indicator of the health of our marshlands. Should they fail to come, we will know that we failed them.

For now, on gray and blustery winter days, flocks of canvasbacks still sweep in on short, rapid wings across those marshlands that have been saved or restored, the drakes' bright white backs a startling contrast to the somber skies. AMS.

May it always be so. 🖈

CON



Illustration by Scott Goto

SOMETIMES EVEN THE DESIRE TO HUNT IS NOT ENOUGH.

Nothing much happened to me on this year's deer hunt. As the land ties us together, linking us and our newer stories to our elder relatives and their older stories of past hunts, so, too, does our quarry link car-up-on-jacks way the big us. And yet as we age, that chemical within us that once used to make us want so badly to shoot a deer or turkey has waned considerably.

It never waned in Old Granddad - he was a prodigious deerkller all the way to the end, shooting two bucks in the autumn before his death, despite the stroke that had nearly killed him a few years earlier, at the age of 80 (and chain-smoking all the way down) but it's been several years since Uncle Jimmy (despite his own stroke, he can still shoot the bull's eye) or my father have killed a deer. They just flat don't want to any more.

They still go out into the hills, carrying a rifle - as if waiting for the inspiration, the need. the desire, to return - like retired farmers going out and looking up at the sky for rain, is how I think of it, even though the farmer no longer has any crops planted - but the feeling, urge or need, never returns, for they observe the deer, watch antlered bucks slipping through the cedar, but never shoot any more.

Perhaps they imagine that it the missing desire, is like the deer used to be, and it is that desire they are searching for when they go out on their walks, rather than searching for the deer themselves. Perhaps they imagine that that long-ago desire is like a deer itself, seeking to elude them, always moving away quietly; though perhaps not, for they never seem disappointed when they do not find that desire, but instead, accepting, and even refreshed. Perhaps they simply keep going out from habit.

I notice it in myself, too, more and more each year. More and more, each year, I do not shoot deer that in the old days I would have shot. I have killed dozens of deer, have rarely missed, but now it seems as if they are almost all slipping away from me, escaping like sand through my outstretched fingers, flowing away, and I do not mind. I, too, am content to wander the hills with my rifle in hand - Old Granddad's ancient .270, rebored after the First World War - and to walk quietly, and take in the world's scent, and to listen, and to just see what happens.

It rained like stink on this year's hunt. Not the frequent Hill Country fog and mist, nor one of the brief, yet powerful, thunderstorms created by the crashing of cold fronts into humid southeast Gulf weather systems, but instead, a cold and steady toad-strangler, for day upon day and night upon night.

Still, we had come to hunt, and so on opening morning, I patched my falling-apart old boots with duct tape, and we each departed for our favorite places, our nooks and niches, where we might or might not be able to stay dry, or close to dry. We were curious, maybe even mildly anxious, to see what the land would bring us this year. There were seven of us - my father, Uncle Jimmy, myself, my brother B.J. and my cousins Rick, Randy and Russell.

Nothing happened all that first morning. No one shot any deer, no one saw any deer. I sat for hours in my camouflage rain suit beneath a big oak, the rain dripping hypnotically onto my head and shoulders, lulling me into a motionless trance. I waited and waited, believing as a hunter always believes, that at any moment a nice buck was going to come walking past.

The only thing remotely like that occurred just before I was about to stand up and stretch and walk squish-booty back to

camp for lunch. A thoroughly drenched raccoon came trundling through the tall grass, head down and rump tipped way up in that ones have of walking.

He was heading straight for my tree, and it was easy to see that he had but one idea on his mind, to get out

of that miserable rain, and that he had no idea I was already sitting under his big tree.

I was perfectly still and perfectly camouflaged. He kept coming on, 30 feet, 20 feet, 10 feet - stopping now and again briefly to snuffle at some rich scent beneath the rotting autumn leaves.

Finally he was right at the tip of my boots - I could have nudged him if I wanted - and, not knowing what etiquette demanded - clearing my throat seemed like too human of a thing to do - I instead merely wiggled my toes, which were less than a foot away from him.

He was so cool. He didn't blow up like a ball of dynamite, all heart-stricken and wall-eyed, the way I would have.

Instead, he froze, reared up on his hind legs (his front paws clasped in front of him as if begging pardon for some illconsidered intrusion), peered at me only briefly, as if to be absolutely certain of what he was seeing, but not looking too long - as if believing that staring, too, would be rude - and then, seemingly without regret, he dropped back down to all fours and ambled back off into the steady rain.

Nothing else happened all day, but it was a fine way to spend a rainy morning, and a fine thing to see, and to remember.

I day two, I almost made a kill.

Once again, I sat quietly, watching and waiting, but saw nothing; and growing chilled and miserable, I rose and began walking, not really hunting but just slogging, moving through the dripping cedar as if in a dream. From time to time, I would remember that I was supposed to be hunting, and would resume skulking and scouting, tiptoeing and paying attention to shadows and wind direction, faint noises near and far, hoof prints and the like - but somehow, it was mortally tiring in the steady rain like that, and soon enough, I would slip back into the straight-ahead plod, the slog-o-rama.

Until I heard the turkeys, that is. They gobbled only once, sounding very far away, and - though I had never heard turkeys gobble in a driving rain before — they sounded very wet and very unhappy, feeble and dispirited: dejected with the world. I could see them in my mind's eye, marching single file, feathers sodden, trudging as if on the way back from some country funeral, their once-iridescent, shimmering feathers now drooping and rain-blackened. So familiar am I with the lay of this land that it seemed to me that even from that one little distant outburst of squabble-gobble - one lone gobbler lifting his voice, perhaps, to protest the steady drenching - I was pretty sure where they were.

In my mind, I was exactly sure - I imagined I could see the tree they were marching past, half a mile away - and all the previous raintorpor vanished from me immediately, and the full blood of the hunt returned, this, perhaps, was the thing the older guys and I had been out wandering in the fields in search of. I galloped through the woods, wet cedar fronds swatting me in the face and knotty oak limbs smacking my forehead as I rushed toward the place where I

thought I could best lay in wait to ambush them, if they came wandering my way, taking the path I had assigned to them in my imagination, and which, with every bit of my hunter's fire, hunter's force, I was now trying to will them to take, praying they would take. And while all this energy was being dispensed, this desire, I was, at the same time, trying to balance the negative capability of not thinking about them taking that route, and indeed, not thinking about them at all, in order to reduce the risk of alerting their keen senses to the mere heat, the nearby resonance, of my rising, clamant desire.

I was down in what we call the hollow (aka Panther Hollow, also sometimes Turkey Hollow), near where the fence divides our property from the next: cleaving the creek in two, in places, as the ancient rusting barbed wire and drill-blasted metal fence posts zigzag back and forth across the meander of the shallow, narrow creek, down in that dark hollow of hickory and oak where nobody ever goes.

I could hear the turkeys coming right down the fenceline, as I'd hoped and believed they would. I adjusted my camo, and hunkered behind a cedar, motionless. It was raining hard on all of us, and surely with their bedraggled, down-tipped heads, they would not notice me, but would pass right by me, close enough for me to almost reach out and grab one by the neck, if I desired.

I didn't move a muscle — I emptied my mind of desire and became the rain itself — but somehow, they sensed or saw me, for

And after they had hurried off into the woods, and I rose to leave, I looked down at my soggy boots and saw then what surely each of them had been seeing: the solid band of duct tape, as brilliant as the gleaming aluminum fuselage of an airplane, with which I had repaired my old sole-flapping boots that morning; and I laughed, marveling at how it must have leapt out at them, back there in the dark hollow, shiny as a new beer can on that gloomy day, and at the luck of those turkeys, and how they just weren t meant to be gotten, that day.

I heard the first telltale "putt!," the sound of me being busted, and then a quick scrambling, followed by a thumpy, screechy, bass cello or guitar sound, as that lead bird hopped nimbly over the fence and detoured onto the other land, traveling away from me now at a 90-degree angle.

No problem. They had to be walking single-file — the trail through the dense cedar, and along that old fence, was too narrow for them to do anything but that — and if the lead one scooched away, well, not to worry, I'd take the number-two bird, or even number three or four or five. I remained motionless, confident in my hiding spot, and waited.

But once more I heard the little alarm peep, from not 15 yards away, just on the other side of a big cedar, followed by that same guitar-twanging sound of a turkey vaulting over the fence.

Again, I remained squint-eyed and motionless — they couldn't possibly see me — but this time, through the dense screening of cedar, I thought I saw the airborne head of a gobbler, bright blue in the rain, as he fluttered over that low fence like a gymnast mounting or dismounting the parallel bars, or even taking low preliminary leaps on a trampoline — a little 3- or 4-foot leap in which he ascended, wings still tucked to his side and legs paddling the air heroically — just enough of a bound to clear that fence — and then descended, on the other side, the safe side, as he watched me — or the precise place where I was hiding — all the while. The third turkey vaulted the fence in the same spot, in this same manner, as did the fourth and then the fifth. I continued to refuse to believe they were seeing me, even though as each one floated over that top strand of fence, I could see the beady eye of each lone jumper fixed on me — or where I was hiding — with an eerie intensity, scowling stern as a judge.

Maybe the number six bird will be different, I told myself — trying to pretend that with all their fretful and concurrent gobbling and purring and putting and fussing, they weren't broadcasting the word to each and all: 5-foot-7- inch Caucasian male/blue eyes/balding/gap-toothed/kind of lecherous-looking/I2 o'clock sharp, I5 yards out — but at that same fence-side place, the number six bird made his little vault, and I thought, maybe number seven will keep on coming on, but there was no number seven, only absence after that.

I could see them, scattered here and there, wandering confused and nervous, unsure of what to do next, and trying to regroup: a blue head here, a long beard behind a cedar there; long drumstick legs,

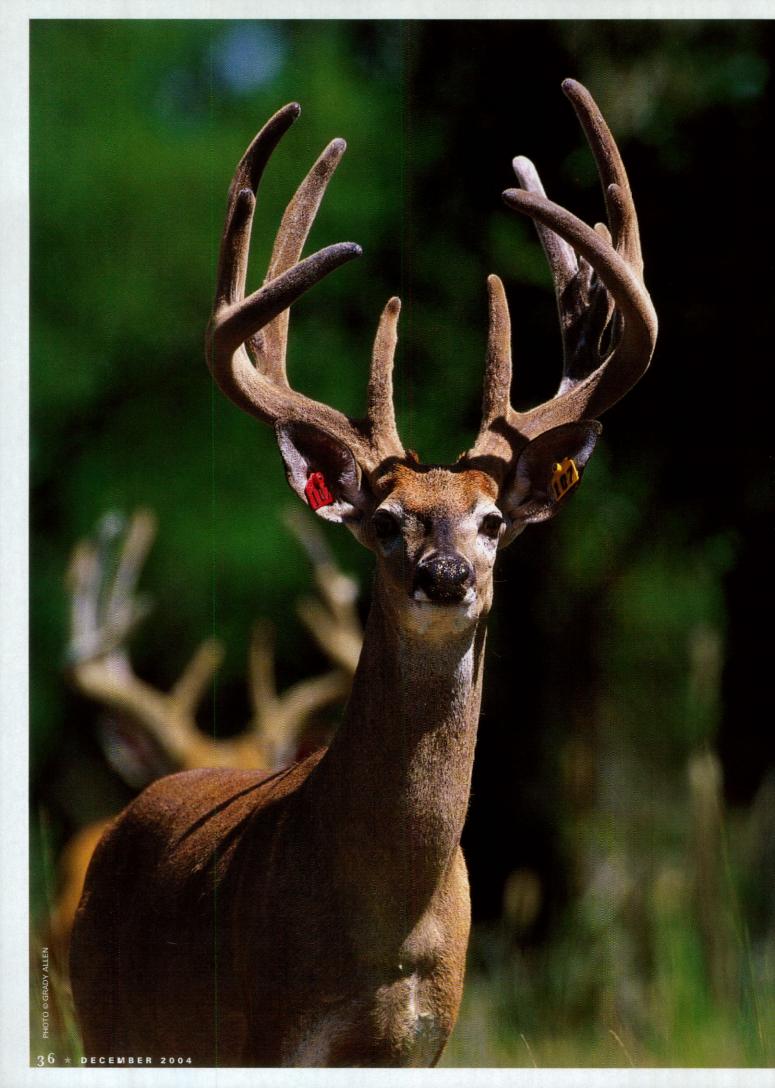


the scuttling silhouette of a body, a snakelike head peering out from behind an oak tree before putting and ducking back behind the tree.

In the old days, I would have been agonized at so near a miss, and at the unfairness of an invisible boundary — would have howled at the arbitrary nature of luck — but this day, I just sat there in the rain and watched them, and smiled at how incredibly close it had been, and at the waning of desire, though not pleasure.

And after they had hurried off into the woods, and I rose to leave, I looked down at my soggy boots and saw then what surely each of them had been seeing: the solid band of duct tape, as brilliant as the gleaming aluminum fuselage of an airplane, with which I had repaired my old sole-flapping boots that morning; and I laughed, marveling at how it must have leapt out at them, back there in the dark hollow, shiny as a new beer can on that gloomy day, and at the luck of those turkeys and how they just weren't meant to be gotten, that day.

I was just pleased to have wanted one. To have wanted one pretty badly. \bigstar



D | E | E | R | W | O | R | L | D

TPWD biologists at Kerr Wildlife Management Area have helped make Texas the epicenter of white-tailed deer research.

By Russell A. Graves

P OR TEXAS DEER HUNTERS, these are the good old days. Of all the game species in the state, white-tailed deer are the most biologically successful. From an estimated population of 232,000 in 1938, white-tailed deer now flourish. Currently, the Texas deer herd numbers about 4 million animals and holding steady, and 529,854 hunters harvested 436,942 deer during a generous two-month-long season last year. A productive, healthy deer herd in Texas is a boon to small-town businesses across the state. More than 500,000 hunters make an enormous impact on the Texas economy. In 2001 (the last year that data were collected), the economic impact of deer hunting in the state was just more than \$690 million.

As a result of contemporary management strategies, Texas ranks fifth in the nation in the number of Boone & Crockett class, trophy white-tailed bucks recorded, and the state is a premier destination for whitetail hunters nationwide. During the last 25 years, the number of Boone & Crockett record book entries (196) from Texas surpassed, by 20 animals, all the entries from 1892 to 1979 combined.

Much of the phenomenal growth of Texas white-tailed deer populations can be attributed to the Donnie E. Harmel Whitetailed Deer Research Facility at the Kerr Wildlife Management Area. Situated 10 miles from the town of Hunt at the edge of the Hill Country on the Guadalupe River, this WMA is the birthplace of deer research by the Texas Parks and Wildlife Department. The lessons learned here have improved the quantity and quality of deer not only in our state, but also nationwide.

When I visited the Kerr WMA, I was greeted at headquarters by TPWD biologist Bill Armstrong, an affable man with an encyclopedic knowledge of the area and the deer research conducted on the premises.

"Our main research focus here at the Kerr Wildlife Management Area is to promote healthy land with a healthy deer herd," explained Armstrong. "One of the key things we've learned over the years is that you can manage for both a healthy piece of land and a healthy deer herd through management of the ecosystem. By using a combination of fire, livestock grazing, deer numbers and controlling the deer and cattle's use of the range, we can maintain a healthy habitat for a number of species."

The Kerr WMA is a study in land reclamation. Purchased in 1950, the original 6,493 acres were severely overgrazed by deer and domestic livestock and lacked substantial plant diversity. Through prescribed burning, brush control and improved grazing systems, managers at the Kerr WMA encourage healthy plant growth and demonstrate the compatibility of domestic livestock with wildlife. By holistically managing livestock, wildlife and the rangelands as parts of an interconnected system, weaning weights of calves at Kerr WMA have increased an average of 130 pounds



since 1968, while the field-dressed weights of white-tailed deer have shown a substantial increase as well.

Since 1977, some 50,000 people have toured the WMA and learned of the Kerr's ecosystem approach to managing the land. With ranchers and land managers implementing the lessons learned at Kerr over the past quarter-century, Texas deer lands have been the most productive in history. A side benefit of the rangeland work is that researchers in the area can study the effects of land management practices on encangered species such as the black-capped vireo, the golden-cheeked warbler and the Tobusch fishhook cactus.

In 1973, the Texas Parks and Wildlife Department constructed a 16-acre research facility to study white-tailed deer physiclogy with an emphasis on the roles of genetics and nutrition on antler size. Since antler size is an important indicator of a buck's age, this study helps achieve the primary goal of creating a stable age distribution in the deer population. Some of the first findings remain groundbreaking work 30 years later, and still set the pace for deer research nationwide.

Once the research facility was built, biologists collected deer from across the state to stock it. For the first seven bucks collected, five to seven does were isolated in a pen with each buck. These first deer created the genetic foundation for the research that has been conducted during the past 30 years. Today, every deer at the facility traces its lineage to those early penned deer.

Every October, each of the 3CC or so deer at the facility is weighed, the bucks' antler mass measured and blood crawn from selected deer to gather DNA information. The research, funded by the Wildlife Division of the Texas Parks and Wildlife Department through the sale of hunting licenses, seeks answers to the mysteries associated with antler growth. Among the many broad research areas, the WMA's eight staff members and various university researchers look at which factors contribute to whitetailed deer antler formation and the effects of nutrition on antler formation and body development. Also, the researchers look at the influence of genetics on antler characteristics and if spike-antlered yearlings have the same potential for antler development as forked-antlered deer of the same age.

"These facilities help us isolate genetic age and nutritional traits that impact antler and body development," adds Armstrong, as a group of white-tailed bucks run by us, and between protein feeders at the facility. Each of the bucks has a colored tag in its ear that helps researchers identify its age and lineage.

Even though the influence of ciet on body weight and antler development might seem common knowledge now, researchers at the Kerr were the first to establish the scientific correlation. By feeding and breeding deer under controlled conditions in the research facilities, investigators can remove any extrinsic environmental factors that may affect the outcome of their studies.

The Kerr research has demonstrated that a deer's antler size and body condition responds positively to a steady diet of 15 percent protein that's made up of a pelleted ration of peanut and rice hulls cottonseed meal and other cultivated ingredients. Conversely, they found if a buck is fed a lowprotein diet, the deer will not reach its genetic potential for antler size. Through the regime of rangeland management practices that the WMA endorses, landowners can raise the protein level of their rangeland browse and minnic the results of the Kerr research – thus enhancing the quality of deer on their land.

Perhaps one of the most revolutionary findings researchers at the Kerr uncovered is in a study entitled *Spike vs. Fork-Artlered Yearlings* 1974-1994. In the study, deer of the same age were fed identical diets, and their genetic phenotypes were carried through subsequent



On the Kerr WMA, deer are tagged and studied so researchers can sclate genetic, age and nutritional traits that affect body development, above left; The Donnie E. Harmel White-tailed Deer Fesearch Facility, above, at the Kerr WMA.

generations by selective breeding. The study revealed that spike-antlered yearling deer will not grow antlers as large as a forkedantlered deer of the same age, even when fed identical diets.

The "once a spike, always a spike' notion that permeates deer camps isn't technically accurate, although it is pretty close to the absolute truth according to the research conducted at the Kerr WMA. Yearling spikes can grow forked antlers but their overall size is smaller compared to bucks that grow a forked set of antlers at I I/2 years of age. The fact that spike deer never get out of their phenotypical rut and become bucks of any significant size impacted in-thefield regulations being pioneered in a sixcounty region in the Post Oak Savannah east of Austin.

Field Trials

Eob Carroll, TPWD leader for the Oak Prairie Regulatory District, says that in this heavily hunted part of Texas, hunters tend to shoot too many bucks at a young age. The antler restriction regulation is intended to alleviate harvest pressure on the younger bucks. However, hunters prefer to shoot multi-tined bucks and pass on spikes. By passing on the spikes, hunters inadvertently allow them to stay in the herd and breed.

The problem for district leaders was to create a set of regulations that would encourage hunters to pass on young bucks, allowing them to mature, while culling out spikes. At the same time biologists wanted to avoid a moratorium on taking mature bucks or genuine trophy-class deer. Like slot limits on fish, the experimental regulations were designed to limit the number of animals taken in a given age group.

"We looked at the data and it indicated that the TPWD regulations might be inadvertently protecting spike bucks with the one-buck limit," explains Carroll. "The data collected indicated that hunters were harvesting the first buck they saw that had more than spike antlers. We sent a questionnaire to hunters and landowners prior to the first season of the antler restriction regulations. The results showed that 71 percent of the respondents typically passed up a spike buck to harvest a buck with more points."

The experimental antler restrictions, which were enforced last season in Austin, Colorado, Fayette, Lavaca, Lee and Washington counties, changed the historic definition from what Texans are accustomed to calling a legal buck. In these six counties a legal buck is defined as having:

- a hardened antler protruding through the skin, AND:
- at least one unbranched antler; OR
- an inside spread measurement between main beams of 13 inches or greater; OR
- six points or more on one antler.

"The age and antler data collected for the six-county area indicated that 80 percent of the bucks harvested were I I/2- and 2 I/2 year-old deer before we implemented the regulations. We needed to get 3 I/2-year-old and older bucks in the herd and found that the average inside spread of a 3 I/2-year-old buck was I3.2 inches," says Carroll. "Since a I3-inch inside antler spread was about the same as the distance between the tips of buck's ears when in the alert position, we felt like this was a good starting point to get more age in the buck herd. The ear-to-ear distance also helps hunters to judge inside antler spread."

Since implemented this past season, the restrictions reduced the harvest of 1 1/2- and 2 1/2-year-old deer from 80 percent of the animals harvested to 45 percent. Conversely, the harvest of bucks older than 3 1/2 years increased from 20 percent to 55 percent of the six-county harvest total. Carroll says that that progress is significant, as it illustrates how the antler restrictions can limit the harvest of immature bucks and establish a more stable age distribution in the population. He reports that hunters and landowners are supportive.

"Seventy percent of the landowners and hunters surveyed in 2002 supported the antler regulation. Most everything we are hearing from them is very positive. Anecdotal data indicates they are seeing more bucks and older and larger bucks."

Looking to the Future

According to Carroll, the long-term goal of the antler restrictions is to increase the number of older deer in the six-county buck herd while increasing hunter opportunity in one-buck-limit counties. Ultimately, if proven successful, the regulations will allow hunters in one-buck counties to harvest an additional buck, provided it is a spike.

Carroll explains that "by adding a second buck to the bag limit and mandating that it must be a spike, these regulations allow hunters to harvest the poorest quality bucks in the herd while hunting for an older age buck." The harvest logic Carroll touts dovetails with the research the Kerr WMA has been conducting for years.

Back in the educational center at the Kerr headquarters, Armstrong continues laying out facts on the genetic and nutritional influences that make one deer grow larger antlers than another. Throughout the center, mounted antlers from various life stages help explain the antler growth of selected bucks. He shows me how one buck, which started out with spike antlers his first year, only grew to be a small eight-point as he matured to 5 1/2 years old. Then he shows another buck that started his second full year of life as a six-point and eventually grew to an impressive size by his fifth year.

"You can't isolate the genetics of a buck down to one simple gene," explains Armstrong. "You can equate a buck's antlers to a house. All kinds of materials go into building a house. Antlers are the same way: a buck's genetic disposition to phosphorus uptake plays a part in antler growth; his ability to metabolize protein makes a difference; the efficiency at which he digests his food is another factor. There are a million different keys that may unlock a buck's antler growth potential. What we are doing here at the Kerr will shed light on some of those keys and continue to improve the Texas deer herd." ★



The "once a spike, always a spike" notion that permeates deer camps isn't technically accurate, although it is pretty close to the absolute truth according to the Kerr's research.

Extensive rangeland work at Kerr WMA helps researchers understand the effects of land management and feeding practices on deer as well as on other wildlife, above right and below; mounted antlers from various life stages help explain the antler growth of selected bucks, right.







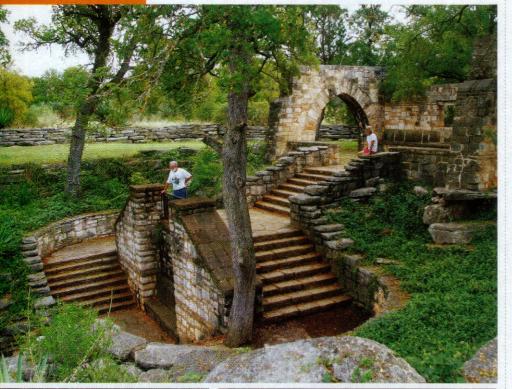
Calle witha

This often-overlooked Hill Country state park is a year-round delight

By Rob McCorkle

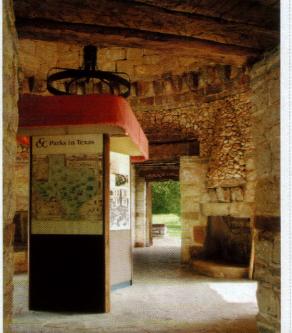
Or centuries, Longhorn Cavern has sheltered man and beast from the elements, been used as a hideout by scofflaws and even served as a subterranean speakeasy for Prohibition era "swells" who, when the cave was in private hands, enjoyed cocktails and danced to the big bands.

> Today, Longhorn Cavern operates as one of Texas' show caves, drawing visitors from throughout the world to view a host of surreal speleothems (rock formations) sprinkled throughout a maze of rooms, tunnels and sinkholes. Perhaps not as well





Distinctive CCC stonework defines the abave-ground entrance to Lorghorn Caverns, top; the same entrance from inside the cave, above; another of the CCC buildings houses the CCC museum right; in-cave performances offer outstanding acoustics for a variety of events, opposite.



known as Cascade, Natural Bridge and Inner Space caverns, which sit not far off busy Interstate 35 in central Texas, Longhorn Cavern serves as the main attraction in a state park occupying 645 acres of classic Texas Hill Country scenery between Marble Falls and Burnet.

When asked what distinguishes Longhorn Cavern from other major Texas caves, Concessions Manager Michelle Devaney explains, "We're easier to tour than Natural Bridge, which is bigger, but we're larger than Inner Space. Once you've gone down our 52 steps, you're on rather level terrain."

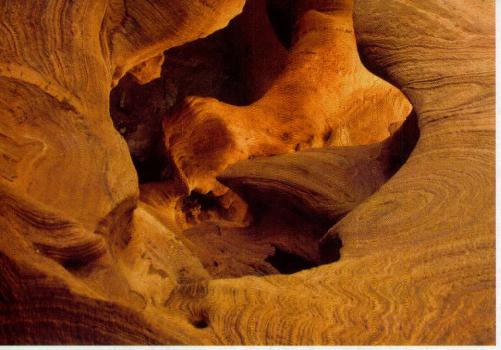
Devaney says 40,000 to 45,000 people a year visit the cavern, many of them schoolchildren on field trips during the fall and spring. She's surprised at how many people have never been underground before and by how many people still don't know about the park and all that it offers.

"People need to realize that, yes, our main attraction is the cave, but that we do have other interesting outbuildings, such as the Civilian Conservation Corps Museum," she points out. "And we have a nature trail with lots of bird life, a deli snack bar and a gift shop with items from around the world."

Longhorn Cavern was created not just by the seepage of surface water, but also by underground lakes that dissolved and eroded rock several million years ago during the downcutting of the Colorado River. Park exhibits explain how very slowmoving underground currents created the cavern when they worked their way through cracks and other openings in Ellenburger Limestone deposited 500 million years ago when the area was covered by a shallow sea. The result of the water's work is a wondrous world of oddshaped formations, domed ceilings, gaping sinkholes, tight crawlways, fascinating rock carvings, rooms of sparkling crystals and alabaster halls of dolomite that looks like exquisite Italian marble.

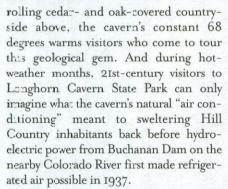
When chill winter winds whip across the







The Rock of a Million Layers, top; a formation resembling a silhouette of Abraham Lincoln, above; and the Eagle's Wing formation, above right.



The cavern's cultural history rivals its natural history. Local legend holds that the Comanche held council meetings in the cavern's largest room, which today is known as the Indian Council Room.

"Cavers" are admonished not to touch active formations — that is, the living stalactites and stalagmites. Early Texas frontier settlers, Confederate soldiers, Wild West outlaws like Sam Bass, Roaring 20s "party animals" and the Civilian Conservation Corps followed over the years.

It took eight years (1934-42) for the CCC "boys" of Company 854 to carve a state park out of the rocky Hill Country terrain and transform the silt-filled cavern into a tourism draw. Using picks, axes, shovels, dynamite and wooden wheelbarrows with iron-rimmed wheels, the 200 laborers removed several tons of river sediment, bat guano and debris deposited over the millennia. Much of the excavated material was used to build Park Road 4, which dips and winds its way the 6 miles from U.S. 281 to the park entrance. In all, the young laborers explored and lit more than 2 miles of the cavern, built limestone rock walls and arches, and erected several park structures.

In the visitor's center snack bar, the boyish faces of the CCC workers stare out from beneath jauntily cocked cowboy hats in a series of vintage photographs. Other vintage CCC images are exhibited inside the state's only CCC Museum, which is housed in the rustic, rock-and-timber administration building. Grainy pictures of soup kitchens and unemployment lines help put the desperate plight of young men during the Great Depression into proper perspective. Be sure to check out the fireplace hearth constructed with large calcite crystals from the cavern that reach to the ceiling and fan out in a band around the top of the room's wall.

The State of Texas acquired the land that Longhorn Cavern State Park occupies from rancher D. G. Sherrard in 1932. The park opened to the public in 1938 and in 1971 was designated a Registered National Landmark. The state park is owned by the Texas Parks and Wildlife Department and operated by concessionaires (Shawn and Michelle Devaney) who also run the popular Vanishing Texas River Cruise on nearby Lake Buchanan. While visiting the park, ask about the Great Escape Package that includes a cave tour, river cruise, accommodations and breakfast, or phone (800) 728-8735.

Though the park offers picnic facilities, a nature trail and three-story rock observation deck with panoramic views of the surrounding countryside — including a good view of Faulkenstein Castle, a private residence built to resemble a medieval Bavarian castle — most park visitors come to Longhorn Cavern State Park to take the guided tour of the cavern. Guided tours cover a mile and a quarter and take just under an hour and a half. Camping is available at nearby Inks Lake State Park.

Visitors access Longhorn Cavern through what is known as the Sam Bass Entrance, one of five cave entrances and the only one open to the general public. Blasted out with dynamite in the 1930s, the main cave entrance lies 36 feet below a picturesque land bridge framed by towering cedar elms and dangling vines. A cut-block rock wall and arches mark the location of stairs leading to the cavern entrance.

Guides such as Al Gerow greet groups of amateur "spelunkers" just outside the gated cavern entrance to give a few pointers about the do's and don'ts inside the cave and a brief orientation about what they'll be seeing within the cave's dank labyrinth of trails and halls of rock. "Cavers" are admonished not to touch active formations - that is, the living stalactites and stalagmites, fragile crystalline formations dangling from the ceiling or rising from the cave floor, formed by dripping water carrying dissolved limestone. He warns parents to keep their children under control lest they get lost or fall into pits and ditches, some 15 feet deep, which parallel many of the paths.

On a recent summer cave tour, Gerow shared his knowledge of geology and cave lore with a group of two-dozen adults and youngsters.

Gerow explains how it took eight years for CCC workers to excavate the cavern that is open to the public today. He says workers filled wheelbarrows by hand, hauling out more than 20,000 cubic yards of dirt, rock and gravel.

The park guide, equipped with a flashlight, leads the way through a series of small rooms, hallways and paths, flipping on lights as he goes to reveal the cave's more noteworthy features. The first stop is Crystal City, where sparkling calcite crystals adorn the walls. As the group exits an area, he turns off the light to reduce the growth of algae that light can produce on the cavern's whiteand-tawny limestone walls.

"We're heading due north," Gerow points out. "Burnet is eight miles ahead of us. We're going under Park Road 4 now."

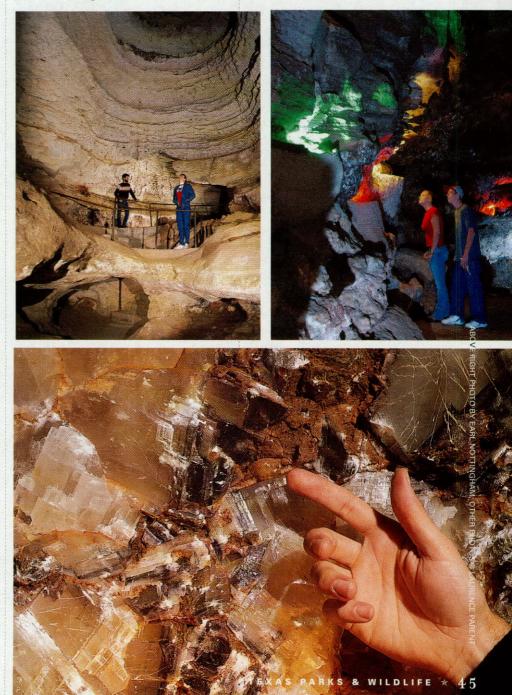
The group passes by the Queen's Watchdog, a smooth dolomite rock shaped like a small dog, which CCC workers found beneath silt in deep recesses of the cave and brought out to display. Next comes the Queen's Throne, an impressive mass of flowstone and one of the largest travertine deposits in the cave.

"Watch your head" and "Keep your children with you," are common instructions from Gerow to tour participants who make their way through sometimesnarrow and often-slippery passageways with low ceilings sporting names like Lumbago Alley. Get hit by a drop of falling water, he tells you, and you've just gotten a lucky "cave kiss."

Cave tours are sprinkled with colorful narratives about who has used Longhorn Cavern during the last 150 years. History records that Confederate troops during the Civil War made gunpowder from guano left behind by the millions of Mexican free-tailed bats that once called the cavern home. He shares a story about a daring rescue by Texas Rangers of a beautiful young San Antonio-area girl who was kidnapped by Comanches and held in the cavern for ransom. You'll find an account of the rescue in a framed newspaper clipping that hangs in the deli snack bar.

One of Longhorn Cavern's most inter-

Shimmering calcite crystals sparkle from the walls of Crystal City, bottom photo; the Rainbow Room dazzles visitors with its colored lights, below right; Many rooms inspire the imagination as they dwarf visitors, below left.





INSIDE STORY ON LONGHORN CAVERN

General: Longhorn Cavern State Park is open year-round and is located almost halfway between Marble Falls and Burnet cff U.S. 281 on Park Road 4 in Burnet County. For tour information, call the park at [512] 756-4680, or point your browser to <www.longhorncaverns.com> or <www.tpwd.state.tx.us>. To learn about all of the Texas state parks, call [800] 792-1112. Fees:

Cave Tour: Adult \$10.95; teen/senior \$9.95; child 6-12, \$5.95

Concert in the Cave: Adult \$12; teen/senior \$11; Texas State Parks Pass holder \$13; child 2 – 12, \$8

Visitor's Center: Opens 9 a.m. daily

Guided Tour Hours:

Dec.– Feb. weekdays 11 a.m., 1 p.m. and 3 p.m.; weekends 10 a.m. to 4 p.m. hourly March-Nov. weekdays 10 a.m.– 4 p.m. hourly; weekends 10 a.m. –5 p.m. hourly **Special Tours:** Reservations required for Wild Cave Tours (\$35 per person) and Geology Tours (\$15 to \$25 depending on program); call toll-free (\$77-441-CAVE)

Suggested Attire: For cave tours, it is recommended visitors wear soft-scled shoes with good grip since the cave floor can be slippery in spots.

esting footnotes in history occurred during Prohibition, in the 1920s, when owner D. G. Sherrard used the cavern as a dance hall, nightchub and restaurant. Patrons paid handsomely to drink bootleg whiskey, dance to live music and eat elegant meals by candlelight in the Indian Council Room and the adjacent Lunch Room. The onset of the Great Depression, however, brought the Texas entrepreneur's enterprise to a screeching halt, according to Gerow, and he sold the property to the state.

The big-band sounds from vesteryear have given way to music concerts, poetry readings and choral presentations that benefit from the excellent natural acoustics of the cave. Longhorn Cavern's twicemonthly "Simple Sounds" concert series has attracted a committed following. Patrons some packing pictic dinners and drinks, are guided to the Indian Council Room, where they sit in metal chairs or at tables (available for an additional fee) to be entertained for a couple of hours. One regular performer, Alton Rex. has ever. recorded "Live from Longhorn Cavern" a CD for sale in the visitor's center. After all evening conterts, hot chocolate and coffee await concert patrons above ground.

Gerow calls the barbershop-style performance by the Hill Country Blenders. 32 guys singing harmony inside the cave. the "neatest program I ve seen." He ranks the annual Christmastime performances — "Caroling Underground" — a close second. This year's holiday performances are scheduled for Dec. 15, 18 and 22

A growing number of couples are opting to take their vows or hold their wedding receptions inside the cavern, which can seat more than 250 celebrants. A warehousestyle service elevator serves as an oversized "dumbwaiter" to raise and lower banquet tables, chairs and food into the cavern.

During the guided tour, Cerow notes

The Queen's Watchdog formation was freed from 12 feet of sediment by CCC workers.

unusual features, such as the black stains on some ceilings that are courtesy of the oil- and dirt-covered feet of millions of Mexican free-tailed bats that once "hung out" in the cavern. The bats have disappeared and cave crickets, daddy longlegs and the occasional scorpion are the only critters readily seen by visitors.

Gerow also likes to point out the route of the intrepid souls who go on the park's three-hour Wild Cave tours, squeezing through tight passageways in the cavern's "basement," an area of the cave 8 feet below the main cave floor carved out of the limestone by swirling waters.

While much of the first hour of the cave trek delivers a multitude of visual treats such as the Attic, Chandelier Room, Waterfall, Wishing Well, Smokehouse and Rock of a Million Layers, the cavern's most amazing sights are still to come.

A stooped-over walk through Lumbago Alley rewards tour participants with entry to the Hall of Marble, a narrow room of super-smooth alabaster walls lit up like a Roman banquet hall. *Ooos* and *ahhhs* are the order of the day here. Next comes the Giant Icicle, a 14foot-long stalactite that protrudes from the cave ceiling like a giant upside-down vanilla ice cream cone.

Following in rapid succession are some of the cavern's most remarkable rock formations — the Eagle's Wing, Devil's Footstool and Viking's Prow. It was here, Gerow points out, in less than 12 feet of dirt, that CCC workers found the Queen's Watchdog. An active stalactite known as the Skull waits around the next corner. Just past a silhouette of Abraham Lincoln — three quarters of a mile into the cave — comes two flights of slippery, irregular steps leading to the turnaround point in the Pink Room.

Longhorn Cavern tours save the best for last. Near the end of the almost 90minute tour, visitors enter a multihued crystal calcite hallway — the Rainbow Room — dazzling with its red, white and blue highlights. The room empties into the tour's *pièce de résistance*, the Hall of Gems, Nature's own faux diamond mine.

"This is one of the largest crystal rooms that I know," Gerow says. "When the CCC boys dug in here, they thought they'd discovered a diamond mine. But they found out it was worthless. The calcite is so soft you can almost scratch it with a fingernail."

Rest assured that any time of year is the right time to explore this diamond in the rough. \bigstar

HOTOH

2004 E M P L O Y E E RECOGNITION AWARDS

The Texas Parks and Wildlife Department is fortunate to have dedicated employees who give 100% of themselves everyday. Please join us in recognizing our outstanding employees of 2004 who exceeded our expectations in providing outstanding service to the State of Texas. We are very proud of them, and you should be too.



Community Outreach Otis Williams



Conservation Clay Brewer



Customer Service Bonnie Toscano



Innovation David Buckmeier



Leadership Robin Rischers



Natural Quality Service Frances Stiles



Partriership Dr. Karl Cloniriger



Special Achievements Steve Boles

OUTSTANDING TEAMS



License System Falfillment Conversion Team



Barton Warnock Environmental Education Center Maintenance Crew



LEGEND, LORE & Legacy

ANSON JONES

The last president of the Republic looms large in Texas history. By ROB McCORKLE

Last Jan. 18, while the leading edge of a cold front whipped across the Brazos River Valley, a hardy handful of park visitors huddled near a blazing hearth in the parlor of

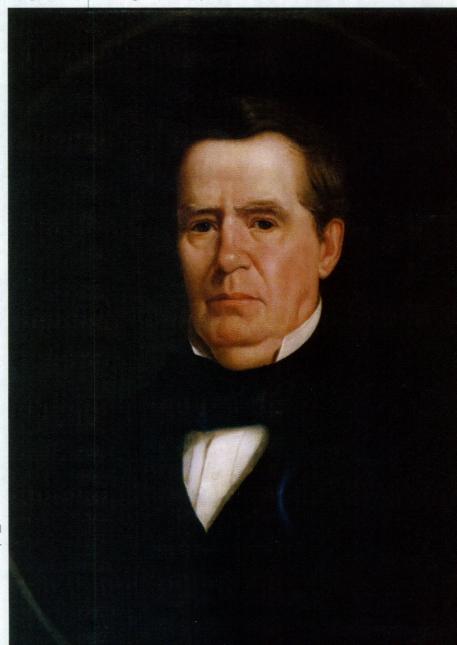
a wood-framed home to celebrate the birthday, life and times of the "Architect of Annexation" and last president of the Republic of Texas, Anson Jones. Directly behind Jones's white two-story house sits a small kitchen, where park interpreters were busy baking a birthday cake in a Dutch oven, using an 1833 recipe from The Frugal American Housewife.

The dogtrot residence built by Anson Jones in 1844 anchors the Barrington Living History Farm at Washington-on-the-Brazos State Historic Site. The 70-acre park replicates the farm where the Massachusetts-born physician, congressman and diplomat raised corn, cotton and tobacco in the mid-19th century. During the 1936 Texas Centennial, the building was moved to its current site from its original location about four miles away. There, a state historic marker announces the Barrington Plantation, where a a bed and breakfast now welcomes guests. It is built on the exact spot of the Jones home, whose original steps have been incorporated into the new establishment.

But, today, the state historic site is hosting its annual Anson Jones' Birthday Celebration at the Barrington Living History Farm. Bill Irwin, who manages the farm, is regaling visitors with stories of Jones' early days in Texas. He arrived from New Orleans amidst a yellow fever epidemic, revived his languishing medical practice and soon found himself the dar-

In the annals of early Texas, one would be hard-pressed to find a more star-crossed or more important public figure than Anson Jones, the "Architect of Annexation" who served first the Republic of Texas, then the state. ling of the Brazoria community. "In 1834," Irwin says, "his diary reads, 'I stayed in Texas. I'm a landowner now; I own my own house and business. I've paid off all my debts and currently have a medical practice worth \$5,000.""

Before Irwin, on a small table, sits one of the few existing photos of a somber-looking Jones, from the 1850s, and several 19th-century apothecary items the doctor might have used during what was called the "Age of Heroic Medicine." Throughout the day, Irwin will alternate stories about 19th-



century medical practices with stories about Jones, the doctor, statesman and reluctant politician born on Jan. 20, 1798, in Great Barrington, Mass.

Most of what is known about Anson Jones, according to Irwin, comes from Jones himself, through his diaries, account books, personal letters, an autobiography and his Republic of Texas presidency correspondence that was published posthumously in book form as *The History of the Republic of Texas*. Unless you're a Texas history scholar or elementary student in Texas public schools — a number of which bear the Jones moniker the name Anson Jones might not ring a bell. But his story is a compelling one.

In the annals of early Texas, one would be hard-pressed to find a more star-crossed or more important public figure than Anson Jones. Though not as well known as Lone Star State icons such as Stephen F. Austin, Gen. Sam Houston or William B. Travis, Jones, the last president of the Republic of Texas (elected in 1844), lived a rather privileged mid-19th century life that was both blessed and cursed.

When the Texas Revolution was brewing, Jones advocated independence from Mexico and later fought in the Battle of San Jacinto in 1836. He was appointed by Houston, the Republic's first president, to the post of Apothecary General of the Texas Army. Jones later became Houston's valued confidante and served in key foreign-relations posts.

After San Jacinto, Jones returned to Brazoria to resume his practice, but first had to evict James Collinsworth from his office,

When the Texas Revolution was brewing, Jones advocated independence from Mexico and later fought in the Battle of San Jacinto in 1836.

challenging him to a duel to achieve that end. The voters of Brazoria elected him to the new Texas Congress, where he pushed for a uniform system of education, an endowment for a university and legislation to regulate medical practice.

In 1838, President Houston appointed Jones Minister to the United States and in a bid to strengthen the new Republic's independence and garner better trade relations with Europe, authorized him to take the Texas proposal for U.S. annexation off the table. By making Texas more economically independent, Houston and Jones hoped to make annexation more appealing to the U.S. Congress. The annexation of Texas was a sensitive subject politically because it involved the expansion of slavery westward. Jones also sought to win recognition of Texas' independence from Mexico.

Jones was elected president of Texas in September 1844, while James K. Polk was elected U.S. president on a platform that called for the annexation of Texas. While Jones held the annexation cards close to his vest, continuing to court Mexico and holding out for the most favorable terms from the U.S., the Texas Congress and the majority of the public misinterpreted Jones' actions as an indication that he favored Texas remaining a sovereign nation. A resentful citizenry burned the Texas president in effigy and made threats to overthrow the government.

On June 4, 1845, after finally securing from Mexico a treaty of recognition for Texas, Jones presented the people of Texas with the option of either having peace with Mexico and remaining independent or being annexed by the United States. The Texas Congress rejected the Mexican treaty, drew up a state constitution and called for a vote on annexation. The constitution and annexation won by an overwhelming margin, and Texas was annexed with favorable terms on Dec. 29, 1845.

"So, in essence, Jones spent his presidency negotiating himself out of a job," Irwin points out. "This was a guy who, ironically, never sought political office, but always sought to serve Texas."

Irwin likes to note that at the Feb. 19, 1846, annexation ceremony in Austin, during which the Texas flag was lowered and the U.S. flag raised, the flagpole snapped in two. Jones, presiding over the ceremony, gave an eloquent speech whose words have proved prophetic.

According to the 1997 book, Anson Jones: Last President of the Republic of Texas, by Jean Flynn, the outgoing president of the republic addressed legacy this way: "The public mind will settle down to proper conclusions. ... and I repose upon the sincere belief that history and posterity will do me no wrong."

While Jones's prescience proved accurate enough, it was his later years as a Texas plantation owner and wannabe U.S. Congressman that proved both frustrating and ultimately deadly. Jones hoped to be elected to the U.S. Senate, but Houston, whom Jones had come to dislike, and Thomas Jefferson Rusk were chosen instead. Jones never got over the snubbing by his fellow Texans. A fall from a horse in 1849 that severely damaged his left arm contributed to Jones's woes, and the pain, often excruciating, would dog him the rest of his life.

After Texas' annexation, Jones returned home to Washington County to write his memoirs, tend to his crops and raise his family. He and his wife, Mary McCrory, had a daughter and three sons. Seeking to raise his family in a better social and educational setting, Jones sold the farm in 1857 and headed to Galveston to rent a house and set up a new medical practice. The family remained behind with five African-American slaves to await his summons to follow him to the island. The message never arrived.

The visitor's center at Washington-on-the-Brazos State Historic Site dedicates considerable space to the last president of the Republic of Texas, where the little that is known about Jones's tragic death unfolds in the "Suicide of Ex-President Anson Jones" exhibit. While spending the night at the old Capitol Hotel in Houston, which had once served as the capitol of the Republic of Texas, he foreshadowed the suicide, telling a visiting friend, "My public career began in this house, and I've been thinking it might close here."

A newspaper article of the Jan. 9, 1858, suicide reports that Jones was "found lying across his bed this morning at half past 8 o'clock, a discharged pistol in his hand and his brains blown out. This is all the particulars of this lamentable affair we have been able to obtain."

Despite Jones's tragic demise, his legacy lives on as the "Architect of Annexation" and in several other notable achievements, chief among them helping to establish the first Masonic Lodge in Texas and the creation of the organization that was the precursor to the Texas Medical Association.

"He was the person who brought Texas into the Union, but to hear it from Sam Houston, it was all his idea," Irwin says with a smile. "Anson Jones is truly one of our forgotten Texas heroes. And very few people, unless you're in the fourth grade (studying Texas history), know or remember him."

Jones (1798-1858) is buried in Glenwood Cemetery in Houston. A statue of the Texas hero stands in the square in the West Texas town of Anson, in Jones County. *

WHETHER YOU'RE ON A TIGHT BUDGET OR YOU HAVE THE URGE TO SPLURGE, OUR RESIDENT GADGET GURU KNOWS WHERE TO FIND THE GOOD STUFE

OUTDOORS ENTHUSIASTS are demanding consumers — they value tradition, yet they also want the latest technology. Manufacturers are stepping up to the plate with many outdoor products that incorporate new technology into traditional styles. Familiar shapes and forms hide the advanced engineering and materials found in a wide range of field equipment.

The use of lighter and stronger materials like titanium is becoming a standard for durability. This non-corrosive metal is found throughout the industry, from knives to cookware to fishing rods. Other outstanding new products offer versatility by combining several functions in one unit. Here's a selection of quality sporting gear you might want to consider adding to your wish list or that of family and friends.

PRODUCT REVIEWS AND PHOTOGRAPHY BY GIBBS MILLIKEN "THE GEAR GUY"

The BUCK TACLITE POCKETKNIFE,

with a partly serrated blade, is a small and convenient liner-lock design. The knife is easily opened with one hand by pressing a thumb stud or centrifugal flip of the wrist. A stainless spring-clip allows attachment to a belt or pocket for security. The tactical design is given warmth with a handle made of polished impregnated wood laminate over stainless steel. (\$55, TacLite Knife, Model 886WD, Buck Knives, (800) 326-2825, <www.buckknives.com>)

> STICKY WEIGHT is soft tungsten putty that is applied to fishing line at any point and in any quantity to sink a lure at the proper rate and level. Use a tiny amount, and the fly or plug will drop slowly in the water column. Use a big glob and it will run deep for working the bottom. Sticky Weight is non-toxic, reusable, and easy to apply with warm fingertips molding it into an elongated non-snag weight. (\$4.99, Sticky Weight 1 oz. packet, Lead Masters, (888) 800-8935, <www.theoriginalstickyweight.com>)



The **LEATHERMAN CHARGE XTI MULTI-TOOL** comes with titanium handles and all locking ∋lements plus interchangeable heads for the most-used screw types. Included is a hook-blade for cleaning game, crimper on the pliers and a host of other features. This heavy-duty 4-inch unit with 54 CM knife steel and an ergonomic grip makes it the new standard for excellence in multitools. (*\$125, Charge Xti, Leatherman, (800) 847-8665, <www.leatherman.com>*)

The **MIOX WATER PURIFIER** represents a revolution in water treatment. Ultralight and compact, it's easy to use with no pumping, maintenance or chemicals required. After pre-filtering water to remove debris and gain clarity, just pour in, shake and press a button. Through a special electronic process, the unit purifies small or large quantities of water without iodine. The system fits in your pocket and provides reliable purification to inactivate viruses and bacteria including Giardia and Cryptosporidium. (\$129.95, *Miox Purifier Kit #356040, MSR Corp., (800) 531-9531, <www.msrcorp.com/filters>*)



Designed by professional photographers for daily wear in the tropics, the khaki PROMASTER VEST has a body of soft, light cotton fabric with mesh panels for good ventilation. Inside and out are numerous pockets to hold items for hands-free work. Epaulets on the shoulders keep camera and binocular straps from slipping off, and travel documents are secure in nylon-lined, zippered pockets. Also shown is the BUZZ-**DFF SHIRT** that repels insects with an odorless, non-toxic impregnation. (\$59.95, Photo Vest, Promaster, <www.prc master.com>) (\$79, Buzz-Off Lite Shirt, Color: Juniper. Men's and women's sizes. Ex Officio, (800) 644-7303, <www.sxofficio.com>)

CANON 8X25 IMAGE STABILIZATION BINOCULARS

are compact and I ghtwe ght. The electronic stabilization reduces hand shake, giving you ultra-sharp images at 8 magnifications. They are great for everyday field use, but the surface finish is slippery. There is a simple fix for this by applying softtextured adhes ve patchas in either came or solid neutral co o : (\$299. 8X25 /S Binoculars, Canon USA, (800) 355-2155. <www.usa.canon.com>,

TEXAS PARKS & WILDLIFE *

Going into backcountry? A sturdy survival knife is an essential. Nothing compares with the rugged foot-long **TRACKER KNIFE** designed by survivalist Tom Brown. It combines a heavy full-tang blade, functional cutting edges and virtually indestructible construction into a versatile wilderness tool that just might save your life. (*\$299, Tracker Knife, Tops Knives, (208) 542-0113, </br>*

G96 LENS CLEANING FLUID

is an excellent procuct to keep eyag asses and optics clean and clear The liquid is applied to a soft lint-free cleth or tissue and, with careful application, quickly removas debris and smears without harming lens surfaces or ceatings. (\$2.60, Lens Cleaning Fluia, G96 Products, (877) 332-0035, <www.g56 com>)



The SLUMBERJACK STOWAWAY ROLL-UP ALUMINUM

TABLE is a compact and convenient way to serve camp coffee and focd. Shown with an ultralight Titanium Cook Set and Cup, the durable tabletop rclls into a tight bundle with the legs and stores in a polyester bag for easy transport. (\$89.99, 47"X27" Stowaway Table, Slumberjack,(800; 233-6283, <www.slumberjack.com>) (\$74.95, Titanium Cook Set, #SCS-020T, \$29.95, Cup #MG-052FH, Snow Peak Inc., (503) 697.3330, <www.snowpeak.com>)



RAY-GUARD WADING BOOTS

not only protect the angler's lower legs from stingrays, but also have a heavy-duty foot and sole to prevent cuts from other underwater hazards. The interior has a comfortable neoprene liner that seals out most sand and shell particles. The onand-off process is easy, with internal liner zippers and external snap-buckles. (\$119.95, Ray-Guard Boots, Everlast Corp., (361) 798-1530, <www.foreverlast.com>)





MIRROLURE SURFACE WALKERS are among the hottest new baits on the Texas Coast. The "He Dog," "She Dog" and others in this series attract redfish and trout like magnets with their dash, flash and high-pitched rattles. When the waters are right and the fish willing, these "walk-the-dog" jerkba ts often produce a good catch. (*\$6.99 each, Surface Walkers, MirrOlure, <www.mirrolure.com>*)

The ISLANDER FR4 BIG GAME FLY

REEL is a classic design with extra backing capacity to handle heavy, long-running fish like tarpon, tuna, jacks and bull reds. Durable enough for many years of reliable service, it has excellent fish-fighting control using an exposed palming rim plus a large cork disc drag. This reel is impeccably made of stainless steel parts and the finest solid aluminum frame and spool fully anodized for protection against saltwater. (\$495, FR4 Fly Reel, Islander, (250) 544-1440, <www.islander.com>)



An OUTBACK LEATHER HAT is a good choice for comfortable head protection. It is designed to fold flat and can be stowed away in carry-on luggage or pack. The perforated crown provides air circulation and the soft leather remembers to pop back into the proper shape of an Australian wide brim hat. (\$34.99, Outback Hat, Minnetonka Moccasin, (800) 299-8447, <www.minnetonka-by-mail.com >)

Blend yourself into the environment using a **HUNTER'S**

SPECIALTIES 5-COLOR CAMOUFLAGE KIT. The set comes in a flat pocket-size case with built-in mirror. Simply apply makeup to your face and hands imitating colors and patterns in the surrounding landscape. After the hunt. remove the paint easily with soap and water or their moist Camo-Off Cleaning Pads. (\$7.99, Camo-Compac #00278, and \$4.95, Camo-Off Pads, Hunter's Specialties, (319) 395-0321, <www.hunterspec.com>)





JUSTIN LIGHTWEIGHT CHUKKA BOOTS are perfect for cay treks. They offer soft comfort and good traction on most su faces, from sandy trails to rocky pathways, plus they serve as great casual wear in the urban jungle. The high-tcp, moccasin-foot design in tan cowh de echoes styles worn for generations to keep irritating sand and debris out of the shaes and away from the feet. (\$99.95, Chukka Boots #970, Justin Brands, (800) 358-7846, <www.justinbrands.com>)

A quality spincast outfit for both novice and advanced anglers is the oscillating spool **DAIWA GOLDCAST REEL** mounted on a 6 1/2-foot **SHAKESPEARE INTREPID ROD** of high-modulus IM-7 graphite. Beautifully finished with a natural cork handle, the 2-piece rod is lightweight, casts and balances nicely with this high-speed ball-bearing reel. (\$45.95, Goldcast GC120 Reel, Bass Pro Shcps, (800) 227-7776, <www.basspro.com. \$24.99, Intrepid Rod, Mcdel: CA4366-2MH, Shakespeare, f800) 334-9105, <www.shakespeare-fishing.com>)

*

The **WINCHESTER LEVER-ACTION 410 SHOTGUN** has the familiar look and feel of ts ancestor, the famous Winchester Model 94 saddle rifle. Whether at home or in the pickup, it is in truth, a modern equivalent for varnint shooting. The barrel hides the interchangeable chokes, and it will take slugs and fine shot. Carried for hunting or target shooting, it is a remarkable innovation on a classic, time-tested design. (\$789, Semi-Fancy Model 9410, Winchester, (800) 333-

HOPPE

Nº YER

Patches .

3288, <www.winchester-gus.com>)

New this year is the 5HP BRIGGS & STRATTON OUT-

BOARD MOTOR in a four-stroke (four-cycle), air-cooled engine that is quiet-running, lightweight (56 pounds), easily portable and ideal for propelling small hunting and fishing craft into backcountry shallow water. It comes ready to run, with prop, gas can and other accessories. The motor is available in either a standard black or Advantage Wetlands camouflage finish. (\$849, Camo Motor, #AA0101–0020–01, Briggs & Stratton, (800) 999-9444, <www.briggsandstratton.com>)



The Hoppe's Premium Gun Cleaning Kit is a universal set for pistols, rifles and shotguns and contains all the necessary cleaning materials and accessories in a traditional wood chest. (\$94.40, Cleaning Kit BUOXH, Hoppes, (800) 962-5757, <www.hoppes.com>)



sights: Sounds

THE FRONT LINE OF NEWS AND VIEWS

LOOK FOR THESE STORIES IN THE COMING WEEKS:

Nov. 28 - Dec. 5: WW II veterans on the Battleship Texas; animal camouflage; Longhorn Cavern State Park; restoring wildlife; relaxing rock walls.

Dec. 5-12: Teaching kids about hunting and conservation; Fulton Mansion; exotic bird smuggling tips on cleaning fish; the sights and sounds of waterfalls.

Dec. 12-19:

State parks as teaching tools; history and mystery at Caddo Lake; dangers of exotic plants; encounter the elusive kingfisher; a misty morning.

Dec. 19-26:

Innovative ways of working in state parks; Guadalupe River State Park; tackle box tips; Panhandle game wardens; looking at the Lost Pines.

Dec. 26 - Jan. 2, 2005: Cross-country handcycle trek; Caddoan Mounds State Historic Site; animal defense; trout fishing in Texas; water bugs. See how teachers and students are using state parks as classrooms. Watch the week of Dec. 12-19.

"TEXAS PARKS & WILDLIFE"

S

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

<http://www.tpwd.state.tx.us/tv

AMARILLO: KACV, Ch. 2 / Sun. noon AUSTIN: KLRU, Ch. 18 / Sun. 9 a.m. / Mon. 12:30 p.m. KLRU2, Cable Ch. 20 / Tues. 11 p.m. BRYAN-COLLEGE STATION: KAMU, Ch. 15 / Thurs. 7 p.m. / Sun. 5 p.m., 10:30 p.m. CORPUS CHRISTI: KEDT, Ch. 16 / Sun. 11 a.m. / Fri. 11:30 p.m. DALLAS-FORT WORTH: KERA, Ch. 13 / Sat. 8 a.m.

Also serving Abilene, Denton, Longview, Marshali, San Angelo, Texarkana, Tyler, Wichita Falls, Sherman

EL PASO: KCOS, Ch. 13 / Sat. 3:00 p.m. (rotates with other programs; check listings) HARLINGEN: KMBH, Ch. 60 / Sun. 5 p.m. Also serving McAllen, Mission, Brownsville HOUSTON: KUHT, Ch. 8 / Sat. 3 p.m. / Fri. 1 p.m. Also serving Beaumont/Port Arthur, Galveston, Texas City, Victoria KILLEEN: KNCT, Ch. 46 / Sun. 5 p.m. Also serving Temple LUBBOCK: KTXT, Ch. 5 / Sun. 5:30 p.m. ODESSA-MIDLAND: KOCV, Ch. 36 / Sat. 5 p.m.

SAN ANTONIO & LAREDO: KLRN, Ch. 9 / Friday noon, Sunday 1:30 p.m. WACO: KWBU, Ch. 34 / Sat. 3 p.m.

Check local listings. Times and dates are subject to change, especially during PBS membership drives.



RADIO

1

"PASSPORT TO TEXAS" Your Radio Guide to the Great Texas Outdoors

Join hosts Joel Block and Cecilia Nasti weekdays for a 90-second journey into the Texas Outdoors. Producers: Cecilia Nasti, (512) 389-4667 and Lisa Wheeler, (512) 389-8031. Check this listing for a station near you. Listen Monday-Friday unless indicated otherwise. Or tune in on our Web site:

www.passporttotexas.org

ABILENE: KACU-FM 89.7 / 7:04 a.m., 1:43 p.m., 6 p.m.; KWKC-AM 1340 / 6:30 a.m.

ALPINE: KSRU-AM 1670 / 9 p.m.

AMARILLO: KACV-FM 89.9 / 3:50 p.m. **ATLANTA:** KPYN-AM 900 / 7:30 a.m.

AUSTIN: KVET-AM 1300 / between 5 a.m. and 7 a.m. Sat.; ESPN Radio KWNX-AM 1260 and KQQA-AM 1530 9:20 a.m. Sun.

BEAUMONT: KLVI-AM 560 / 5:20 a.m. BIG SPRING: KBST-AM 1490 / 10:55 a.m.

BONHAM: KFYN-AM 1420 / 10:10 a.m. KFYZ-FM 98.3 / 10:10 a.m. BRADY: KNEL-AM 1490 / 7:20 a.m.:

KNEL-FM 95.3 / 7:20 a.m. BRIDGEPORT: KBOC-FM 98.3 /

11:45 a.m.

BRYAN: KZNE-AM 1150 / 5:40 p.m. CANTON: KVCI-AM 1510 / 8:20 a.m.

CANYON: KWTS-FM 91.1 / noon, 4 p.m., 7 p.m.

CARTHAGE: KGAS-AM 1590 / 6:40 a.m.; KGAS-FM 104.3 / 6:30 a.m. CENTER: KDET-AM 930 / 5:20 p.m.; KQSI-FM 92.5 / 5:20 p.m.

CISCO: KCER-FM 105.9 / 12:05 p.m.

COLUMBUS: KULM-FM 98.3 / 5:20 a.m. COMANCHE: KCOM-AM 1550 / 6:30 a.m.

COMMERCE: KETR-FM 88.9 / 10:15 a.m. **CORPUS CHRISTI:** KEDT-FM 90.3 / 5:33 p.m.; KFTX-FM 97.5 / 5:30 a.m.; KVRT-FM 90.7 / 5:33 p.m.; KLUX-FM 89.5 / throughout the day

SIGHTS & SOUNDS

CROCKETT: KIVY-AM 1290 / 8:15 a.m., KIVY-FM 92.7 / 8:15 a.m.

DENTON: KNTU-FM 88.1 / 10:58 a.m., 3:58 p.m., 11:59 p.m.

DIMMITT: KDHN-AM 1470 / 12:29 p.m.

EAGLE PASS: KINL-FM 92.7 / 3:30 p.m. EASTLAND: KEAS-AM 1590 / 5:50 a.m., 5:50 p.m. KATX-FM 97.7 / 5:50 a.m., 5:50 p.m.

EDNA: KGUL-FM 96.1 / 7:10 a.m.

EL CAMPO: KULP-AM 1390 / 2 p.m.

EL PASO: KTEP-FM 88.5 / 12:15 p.m. Thurs.

FAIRFIELD: KNES-FM 99.1 / 6:47 a.m. FLORESVILLE: KULB-FM 89.7 / 1:30 p.m.

FORT STOCKTON: KFST-AM 860 / 12:55 p.m., KFST-FM 94.3 / 12:55 p.m.

GAINESVILLE: KGAF-AM 1580 / 10 a.m.

GRANBURY: KPIR-AM 1420 / 4:20 p.m. GREENVILLE: KGVL-AM 1400 / 8:10 a.m.

HARLINGEN: KNBH-FM 88.9 / 4:58 p.m.; KHID-FM 88.1 / 4:58 p.m.

HENDERSON: KZQX-FM 104.7 / 10:20 a.m., 4:20 p.m.

HEREFORD: KPAN-AM 860 / 2:50 p.m.; KPAN-FM 106.3 / 2:50 p.m.

HILLSBORO: KHBR-AM 1560 / 9:30 a.m.

HOUSTON: KILT-AM 610 / between 4 a.m. and 7 a.m. Thur.-Sun.

HUNTSVILLE: KSHU-FM 90.5 / 12:05 p.m., 5:05 p.m.

JACKSONVILLE: KEBE-AM 1400 / 7:15 a.m.

JUNCTION: KMBL-AM 1450 / 6:40 a.m., 3:30 p.m., KOOK-FM 93.5 / 6:40 a.m., 3:30 p.m.

KERRVILLE: KRNH-FM 92.3 / 5:31 a.m., 12:57 p.m., 7:35 p.m.; KMBL-AM 1450 / 5:49 a.m., 12:49 p.m., 5:49 p.m.; KERV-AM 1230 / 5:49 a.m., 12:49 p.m., 5:49 p.m.; KRVL-FM 94.3 / 5:49 a.m., 12:49 p.m., 5:49 p.m.

LA GRANGE: KBUK-FM 104.9 / 12:30 p.m.; KVLG-AM 1570 / 12:30 p.m.

LAMPASAS: KCYL-FM 102 / 7:10 a.m.; KCYY-AM 1450 / 7:10 a.m.

LAREDO: KHOY-FM 88.1 / 2 p.m. LEVELLAND: KLVT-AM 1230 /

12:05 p.m.

LLANO: KITY-FM 102.9 /throughout the day

LUBBOCK: KJTV-AM 950 / 6:45 a.m.

LUFKIN: KUEZ-FM 100.1 / 10:40 a.m.; KYBI-FM 101.9 / 10:30 a.m.

MADISONVILLE: KMVL-AM 1220 / 7:45 a.m.; KMVL-FM 100.5 / 7:45 a.m.

MARSHALL: KCUL-FM 92.3 / 6:12 a.m.; KMHT-FM 103.9 / 6:35 a.m.; KMHT-AM 1450 / 6:35 a.m.

MESQUITE: KEOM-FM 88.5 / 5:30 a.m., 2:30 p.m., 8:30 p.m. Mon.-Thu.; 5:30 a.m., 2:30 p.m. Fri.)

MEXIA: KRQX-AM 1590 / 3:15 p.m.; KYCX-FM 104.9 / 3:15 p.m. MINEOLA: KMOO-FM 99.9 / 5:10 p.m. MONAHANS: KLBO-AM 1330 / 6 a.m., noon, 3 p.m.

NACOGDOCHES: KSAU-FM 90.1 / 2:45 p.m.

NEW BRAUNFELS: KGNB-AM 1420 / 6:52 a.m.

ODESSA: KCRS-AM 550 / 6:05 a.m., 5:50 p.m., KOCV-FM 91.3 / 7:37 a.m. PECOS: KIUN-AM 1400 / 10:30 a.m.

PLAINVIEW: KVOP-AM 1090 / 7:49 a.m.

PLEASANTON: KBUC-FM 95.7 / noon Sat.

ROCKDALE: KRXT-FM 98.5 / 5:05 a.m., 5:50 a.m., 8:50 p.m.

SAN ANGELO: KGKL-AM 960 / throughout the day

SAN ANTONIO: KSTX-FM 89.1 / 9:04 p.m.

SEGUIN: KWED-AM 1580 / 7:55 a.m. **SONORA:** KHOS-FM 92.1 /10:13 a.m.; KYXX-FM 94.3 / 2:15 p.m.

STEPHENVILLE: KSTV-FM 93.1 / between 5 a.m. and 7 a.m.

SULPHUR SPRINGS: KSST-AM 1230 / 2:50 a.m., 11:50 a.m.

SWEETWATER: KXOX-FM 96.7 / 7:20 a.m.; KXOX-AM 1240 / 7:20 a.m.

TEMPLE: KTEM-AM 1400 / 10:20 a.m. **TEXARKANA:** KTXK-FM 91.5 / 8 p.m.

VICTORIA: KTXN-FM 98.7 / 6:50 a.m.; KZAM-FM 104.7 / 7:10 a.m.

WICHITA FALLS: KWFS-AM 1290 / 6:15 a.m., 7:45 a.m.

waco: KBBW-AM 1010 / 5-7 a.m., 1-3 p.m., 5-7 p.m.

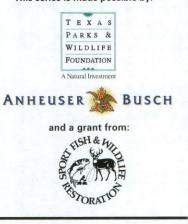
AUSTIN AMERICAN-STATESMAN'S INSIDE LINE: (512) 416-5700 category 6287 (NATR)

BEDFORD: K-Meadow, Meadow Creek Elementary / noon

VIRTUAL RADIO eTUNZ: <www.etunz.net>/:20 every hour.

THE TEXAS NEWS CENTER.COM </br><www.texasnewscenter.com>

"Passport to Texas" is available at no cost to stations across the state. For information fax (512) 389-4450 or write to 4200 Smith School Road, Austin, Texas 78744, e-mail <info@passporttotexas.org>. This series is made possible by:





FREE Information! Circle the numbers on the reader service card that correspond to advertisers that interest you. Then mail the postage-paid card, and we'll do the rest

 C. Kirk Root Designs, pgs.12, 13, 14, 15,16,23, 800-299-5475, www.kirkrootdesigns.com

2. Capitol Gift Shop, pg.23, 888-678-5556, www.CapitolGiftshop.com

3. Eagle Optics, pg.9, 800-289-1132, www.eagleoptics.com

4. Gander Mountain, pg.7, 800-282-5993, www.GanderMountain.com

5. Houston Safari Club, pg.22, 713-623-8844, www.houstonsafari.org

 Mystic Shores at Canyon Lake, pg.11, 888-263-9658, ext. 22795

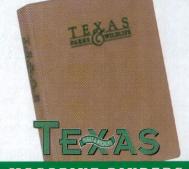
7. Southwest Texas ACA, cover 3, 800-663-2846, www.swtaca.com

8. Spin-Cast Wildlife Feeders, pg. 61, 800-950-7087, www.spincastfeeders.com

9. Texas AgFinance, pg. 21, 800-950-8563, www.TexasAgFinance.com

10. Texas Hill Country River Region, pg. 9, 800-210-0380, www.therr.com

GET IT TOGETHER



MAGAZINE BINDERS

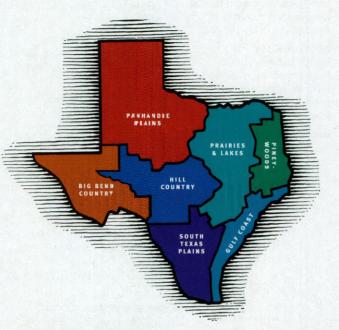
Psst — this is your *Texas Parks & Wildlife* magazine collection speaking... and we'd just like you to know we're tired of lying on top of each other, getting all dusty and scrunched up!

So get it together — one of these nifty binders will hold twelve of us — that's a whole year's worth — in perfect order! Each well-crafted, durable binder is only \$10, or order three for only \$25. Please add \$5 shipping and handling per order.

Please, credit card orders only; call 512-912-7000 with your MasterCard, VISA or Discover card handy. Order today!



FROM BIG BEND TO THE BIG THICKET AND THE RED TO THE RIO GRANDE





BIG BEND COUNTRY

DECEMBER: Desert Garden Tour, Barton Warnock Environmental Education Center, Terlingua, available by reservation only to groups of six or more, (432) 424-3327

DECEMBER: Bouldering Tours, Hueco Tanks SHS, El Paso, every Wednesday through Sunday, by prior arrangement, reservations required, (915) 849-6684

DECEMBER: Hiking Tours, Hueco Tanks SHS, El Paso, every Wednesday through Sunday, by prior arrangement, reservations required, (915) 849-6684

DECEMBER: Pictograph Tours, Hueco Tanks SHS, El Paso, every Wednesday through Sunday, by prior arrangement, reservations required, (915) 849-6684

DECEMBER: Full Moon in the Dunes, Monahans Sandhills SP, Monahans, reservations required, (866) 6CAMELS

DECEMBER: Texas Camel Treks, Monahans Sandhills SP, Monahans, reservations required, (866) 6CAMELS

DECEMBER: Fate Bell Cave

For more detailed information on outdoor getaways across the state, visit <http://www.tpwd.state.tx.us > and click on "TPWD Events" in the center light blue area entitled "In the Parks."

Dwelling, Seminole Canyon SP&HS, Comstock, every Wednesday through Sunday, tours are subject to cance ation, (432) 292-4464

DECEMBER: White Shamah Tour, Seminole Canyon SP&HS, Comstock, every Saturday, (432) 525-9907

DECEMBER 4, 31: Madrid Falls Tour, Big Bend Ranch SP, Presidio, reservations required (432) 229-3416

DECEMBER 5: Holiday Victorian Tea, Magoffin Home SHS, El Paso, advance ticket purchase requ red, (915) 533-5147

DECEMBER 11: Solitatio Tour, Big Bend Ranch SP. Presidio, reservations required, (432) 229-3413

DECEMBER 11: Stories of Spirits, Magoffin Home SHS, El Paso, reservations encouraged, (915) 533-5147

DECEMBER 12: Christmas on the Border, Barton Warnock Environmental Education Center, Terlingua, (432) 424-3327

DECEMBER 16: Posada del

Fortin, Fort Leaton SHS, Presidio, (432) 229-3613

DECEMBER 16-20, 23-24: Santa at the Tramway, Wyler Aerial Tramway SP, El Paso, (915) 562-9899

DECEMBER 19: Birding Tours, Hueco Tanks SHS, El Paso, also available Wednesday through Sunday by advance request, subject to guide availability, reservations required, (915) 849-6684



GULF COAST

DECEMBER 1-31: Yuletide Texas, Battleship Texas SHS, LaPorte, (281) 479-2431

DECEMBER: Weekend Nature Programs, Brazos Bend SP, Needville, every Saturday and Sunday, (979) 553-5101 **DECEMBER:** Aquarium and Hatchery Tours, Sea Center Texas, Lake Jackson, every Tuesday through Sunday, (979) 292-0100

DECEMBER 1-JANUARY 2:

Christmas Season at the Fulton Mansion, Fulton Mansion SHS, Fulton, (361) 729-0386

DECEMBER 4: Pearl Harbor Ceremony, Battleship Texas SHS, LaPorte, (281) 479-2431

DECEMBER 4: A Simple Christmas, Brazos Bend SP, Needville, (979) 553-5101

DECEMBER 4: Lone Star Legacy Candlelight Christmas, Varner-Hogg Plantation SHS, West Columbia, (979) 345-4656

DECEMBER 4, 11: Bay Walk, Galveston Island SP, Galveston, (409) 737-1222

DECEMBER 4, 11: Exploring Sea Life, Galveston Island SP, Galveston, (409) 737-1222

DECEMBER 4, 11, 17, 18, 25: Story Time, Sea Center Texas, Lake Jackson, (979) 292-0100

DECEMBER 5: Bird-Watching Hikes, Brazos Bend SP, Needville, (979) 553-5101

DECEMBER 5: Bird Walk, Galveston Island SP, Galveston, (409) 737-1222

DECEMBER 10: Friday Morning Bird Watching Hikes, Brazos Bend SP, Needville, (979) 553-5101

DECEMBER 10: Nighttime Wildlife Tour, Matagorda Island SP&WMA, Port O'Connor, reservations required, (361) 983-2215

DECEMBER 11: 21st Annual Candlelight Christmas Carol, Fulton Mansion SHS, Fulton, (361) 729-0386

DECEMBER 11, 26: Beachcombing and Shelling Tour, Matagorda Island SP&WMA, Port O'Connor, reservations required, (361) 983-2215

DECEMBER 12: History Tour, Matagorda Island SP&WMA, Port, reservations required, (361) 983-2215

DECEMBER 24: Whooping Crane Bus/Van Tour, Matagorda Island SP&WMA, Port O'Connor, reservations required, (361) 983-2215

DECEMBER 24-26: Site Closure, Sea Center Texas, Lake Jackson, (979) 292-0100



HILL COUNTRY

DECEMBER: Gorman Falls Tour, Colorado Bend SP, Bend, every Saturday and Sunday weather permitting, (325) 628-3240

DECEMBER: Walking Wild Cave Tour, Colorado Bend SP, Bend, every Saturday and Sunday weather permitting, reservations recommended, (325) 628-3240

DECEMBER: Wild Cave Tour, Longhorn Cavern SP, Burnet, every Saturday, reservations required, (877) 441-2283 or (512) 756-4680

DECEMBER 4: Crawling Wild Cave Exploration, Colorado Bend SP, Bend, reservations required, (325) 628-3240

DECEMBER 7: 63rd Anniversary of Pearl Harbor, Admiral Nimitz SHS-National Museum of the Pacific War, Fredericksburg, (830) 997-4379

DECEMBER 11: Hike, Pedernales Falls SP, Johnson City, reservations required, (830) 868-7304 **DECEMBER 11, 12:** Guided Hikes, Bright Leaf SNA, Austin, (512) 243-1643

DECEMBER 11, 18: Interpretive Walk, Honey Creek SNA, Spring Branch, (830) 438-2656

DECEMBER 15, 18, 22: Caroling in the Cave, Longhorn Cavern SP, Burnet, reservations required, (877) 441-2283 or (512) 756-4680

DECEMBER 18: Trail Project, Enchanted Rock SNA, Fredericksburg, reservations recommended for large groups at trailproject@hotmail.com, (325) 247-3903

DECEMBER 19: 36th Annual Tree Lighting, Lyndon B. Johnson SP&HS, Stonewall, (830) 644-2252



PANHANDLE PLAINS

DECEMBER 4: Dutch Oven Cooking, Caprock Canyon SP, Quitaque, (806) 455-1492

DECEMBER 4: Bison Seminar, San Angelo SP, San Angelo, (325) 494-4757

DECEMBER 11: Children's Visit With Victorian Santa, Fort Richardson SP&HS & Lost Creek Reservoir State Trailway, Jacksboro. 2-4:30 p.m. (940) 567-3506

DECEMBER 11: Kids Fishing Day, Fort Richardson SP&HS & Lost Creek Reservoir State Trailway, Jacksboro. 10 a.m.noon (940) 567-3506



PINEYWOODS

DECEMBER: All About

Alligators, Huntsville SP, Huntsville, every Saturday, (936) 295-5644

DECEMBER: Guided Nature Hikes, Huntsville SP, Huntsville, every Saturday, (936) 295-5644

DECEMBER: Saturday Evening Programs, Martin Dies, Jr. SP, Jasper, every Saturday, (409) 384-5231

DECEMBER: Walk on the Wildside, Martin Dies, Jr. SP, Jasper, every Sunday, (409) 384-5231

DECEMBER 1-20: Candlelight Christmas Dinner, Starr Family Home SHS, Marshall, reservations required, (903) 935-3044

DECEMBER 4, 11, 18: Victorian Christmas Train, Texas State Railroad SP, Rusk, reservations required, (800) 442-8951

DECEMBER 11: Pioneer Tools, Toys and Games, Mission Tejas SP, Grapeland, (936) 687-2394

DECEMBER 12: Archeology Tour, Mission Tejas SP, Grapeland, (936) 687-2394

DECEMBER 18: Floating the Forks, Martin Dies, Jr. SP, Jasper, reservations required, (409) 384-5231



PRAIRIES & LAKES

DECEMBER: Group History Tours, Monument Hill & Kreische Brewery SHS, LaGrange, reservations required, (979) 968-5658

DECEMBER: Exhibit: Love's Messenger: Courtship in the Victorian Age, Sebastopol House SHS, Seguin, every Friday through Sunday, (830) 379-4833

DECEMBER 4: Caroling Through Penn Farm, Cedar Hill SP, Cedar Hill, call to confirm, (972) 291-5940. (972) 291-3900 DECEMBER 4-5, 11-12, 18-91, 26: Kriesche Brewery Tours, Monument Hill & Kreische Brewery SHS, LaGrange, (979) 968-5658

DECEMBER 5, 12: Kreische House Tour, Monument Hill & Kreische Brewery SHS, LaGrange, (979) 968-5658

DECEMBER 5, 10-11, 17-18: Trail of Lights, Monument Hill & Kreische Brewery SHS, LaGrange, (979) 968-5658

DECEMBER 10-11: Candlelight Christmas, Barrington Living History Farm, Washington-onthe-Brazos SHS, Washington, (936) 878-2213

DECEMBER 10-12: Cross Timbers Cowboy Campfire Christmas, Lake Mineral Wells SP & Trailway, Mineral Wells, (940) 328-1171

DECEMBER 11: Old Fashioned Christmas for Children, Sam Bell Maxey House SHS, Paris, reservations required, (903) 785-5716

DECEMBER 11: Caroling Hayride, Stephen F. Austin SP, San Felipe, (979) 885-3613

DECEMBER 11: Pancake Breakfast With Santa, Stephen F. Austin SP, San Felipe, (979) 885-3613

DECEMBER 11-12: 2004 Tour of Homes, Sebastopol House SHS, Seguin, tickets available at Gifts & Gourmet at (830) 379-1242, (830) 379-4833

DECEMBER 18: Penn Farm Tour, Cedar Hill SP, Cedar, call to confirm, (972) 291-5940. (972) 291-3900



SOUTH TEXAS PLAINS

DECEMBER: World Birding Center Bird Walk, Bentsen-Rio Grande Valley SP, Mission, every Wednesday and Sunday, reservations required, (956) 585-1107

DECEMBER: World Birding Center Interpretive Tram Tours, Bentsen-Rio Grande Valley SP, Mission, every Friday, Saturday and Sunday, reservations required, (956) 585-1107

DECEMBER 1-31: History in Lights, Goliad SP, Goliad, (361) 645-3405

DECEMBER 4: Christmas Concert, Goliad SP, Goliad, (361) 645-3405

DECEMBER 4: Hike the Canyon, Government Canyon SNA, San Antonio, required reservations, Government Canyon SNA is currently unopened to public access, except for this special interpretive event, (210) 688-2208

DECEMBER 4-5: Youth Deer Antlerless Hunts, Chaparral WMA, Artesia Wells, by special drawn permit only, (830) 676-3413

DECEMBER 4, 18: World Birding Center Discover Bird-Watching, Bentsen-Rio Grande Valley SP, Mission, reservations required, (956) 585-1107 **DECEMBER 7-9:** Gun Deer Management Hunts, Chaparral WMA, Artesia Wells, by special drawn permit only, (830) 676-3413

DECEMBER 12: Virgin of Guadalupe Mass, Goliad SP, Goliad, (361) 645-3405

DECEMBER 13-17: Gun Deer Either Sex Hunts, Chaparral WMA, Artesia Wells, (830) 676-3413

DECEMBER 28-30: Youth Gun Deer Either Sex Hunts,

Chaparral WMA, Artesia Wells, by special drawn permit only, (830) 676-3413

SP	State Park	
SHS	State Historical Site	
SNA	State Natural Area	
WMA	Wildlife	
	Management Area	
SFH	State Fish Hatchery	

Restricted Access to State Parks During Hunting Season

A NUMBER OF STATE PARKS WILL OFFER SPECIAL PERMIT HUNTING TH'S FALL AND WINTER. As in the past, the specially controlled public hunts are scheduled for Monday through Friday, a slow time at most parks during fall and winter. Most parks will be open or Saturdays and Sundays for camping, fishing, picnicking and similar activities.

The following schedule lists the times and dates when public access is restricted. Call the park of your choice directly to make sure it will be open on the day you want to visit. Or call Texas Parks and Wildlife Department's information line, (800) 792-1112 between 8 a.m. and 5 p.m. Monday – Friday.

DEC. 1-3: Caprock Canyons SP & Trailway (806) 455-1492

*DEC. 1-3 : San Angelo SP (325) 949-4757

*DEC. 3-5, 17-19, DEC. 31-JAN. 2: Matagorda Island SP & WMA (361) 983-2215

DEC. 3-10, 12-17: Garner SP (830) 232-6132

DEC. 3-10, 12-17: Honey Creek SNA (830) 438-2656

*DEC. 4-5, 11: Martin Dies, Jr. SP (409) 384-5231

*DEC. 4-19: Cooper Lake SP/South Sulphur Unit (903) 945-5256 DEC. 5-8, 10-15: Kickapoo Cavern SP (830) 563-2342

DEC. 5-10: Fairfield Lake SP (903) 389-4514

DEC. 5-10, 12-17: Seminole Canyon SP & HS (432) 292-4464

DEC. 6-9, 13-16: Hill Country SNA (830) 796-4413

DEC. 6-10: Brazos Bend SP (979) 553-5101

DEC. 6-10, 12-17: Guadalupe River SP (830) 438-2656

DEC. 6-10: Lake Bob Sandlin SP (903) 572-5531

DEC. 6-10, *29-31: Lake Houston SP (281) 354-6881 DEC. 7-8, 28-30: Huntsville SP (936) 295-5644

DEC. 7-9, 14-16: Atlanta SP (903) 796-6476

DEC. 7-10, 14-17, 27-30 Colorado Bend SP (325) 628-3240

*DEC. 8-10, 15-17, 29-31: Inks Lake SP (512) 793-2223

*DEC. 8-10, 15-17, 29-31: Longhorn Cavern SP (877) 441-2283 or (512) 756-4680

DEC. 9-11, 12-14: Big Bend Ranch SP (432) 229-341

DEC. 12-17: Fort Boggy SP (903) 344-1116 *DEC. 14-16, 27-29: Lake Mineral Wells SP & Trailway (940) 328-1171

*DEC. 18-19: Lake Somerville SP & Trailway/Birch Creek Unit (979) 535-7763

*DEC. 18-19: Lake Somerville SP & Trailway/Nails Creek Unit (979) 535-7763

DEC. 19-22, 27-30: Possum Kingdom SP (940) 549-1803

DEC. 20-22: Lost Maples SNA (830) 966-3413

* Partial Restriction: Call for details

GOODS AND SERVICES FOR THE OUTDOOR ENTHUSIAST



HOLIDAY GIFT IDEAS

beadwork/jewelry designs, all skill levels!

Men's gifts, Texas flags & Maps

Rustic home accessories

www.twelvegauge.com

Choose from thousands of

www.beadcoop.com

Tis the season to be Texan! Y'alls Texas Store has hundreds of unique gifts on our Catalog Web site,

yalls.com



Texas Christmas Ornaments, Texas Food Boxes, Salses, Jellies, Candies, Lone Star Pecan Pralines, T-shirts, Caps, Golf Balls, Cutting Boards, Texas Flag Jackets, Texas Flag Afghans, Clocks, Desk Sets, and much more!

www.yalls.com or call 713-681-9591



Pand Crafted, Personalized Boet Jacks and Coaster Sets P.O. Box 126, Uvalde, TX 78802 Visa/Mastercard. Cal to order a Free Brochure Toll Free (888 301-1967 - www.crawjazks.com



TEXMEXGOURMET.COM One-stop shopping for Tex-Mex Gourmet Foods. Select a gift box or choose from our assortment of authentic award-winning Tex-Mex salsas, dips, dressings, enchiladas, tamales, chili, and more to create the ultimate Tex-Mex Gourmet gift, shipped with care to everyone on your list! (888) 345-8467 • tex mexgourmet.com

Toll Free (877) 465-6563 **TEXAS COMFORT** Large Flag Throw \$49 - 48"x68' Small Throw \$30 - 35"x48 Flag Pillow \$15 LOCATED IN THE HOUSTON GALLERIA 800.989.8377 XASTERRITORIES!





- Texas Stars ~ Hides Western Iron ~ Texas Gifts 866-48-HAPPY Shop our website or visit our showroom in Hempstead, Tx



PRODUCTS & SERVICES

Vantage PRO Wireless Weather Station LETS YOU KEEP AN EYE ON **CRITICAL WEATHER CONDITIONS.**

- · Earometric Pressure. Current, each of last 24 hours and trend.
- Temperature. Current and each of last 24 hours. Wind chill and heat index.
- · Humidity & Dew Point. Current and each of last 24 hours.
- Fain. Last 15 minutes and last 24 hours, days, months, and years. Last 24 storms.
- · Fain Rate. Current and each of last 24 minutes.
- · Wind Speed. Current, 10-minute average, and averages for each of last 24 hours.
- Wind Direction. Current and last 24 hours, days, and months. · Optional Sensors. UV and solar radiation, evapotranspira-
- tion, soil moisture, leaf wetness. Highs & Lows. Last 24 hours,
 - days, months, and years. · Alarms, Highs and lows,
 - Average wind speed. Storm warning and clearing. Flash flood and 24-hour rain.
 - **On-screen graphing.** Last 24 hours, days, months, or years.
 - Scrolling Ticker-Tape. For details on forecast and current conditions.

All this—and more—in a station that's easy to set up and fun to use. Optional data logger and PC software. Cabled station just \$495. Or go wireless for \$595! Order now, or ask for your FREE catalog.





The latest *poop* on Spin-Cast Wildlife Feeders of Texas....

MK-1 Control

Unit (shown)

Now Available - 6V/12V Remote Control A Custom Designed Spin-Cast <u>Exclusive</u> is designed to have minimum battery drain and is effective at approximately 100 to 150 yards. Distance will vary depending upon type of barrel you use and terrain in the area. Receiver easily mounts on metal frame and plugs into the Spin-Cast Control Unit. (FCC approved) \$149 25

> Spin-Cast Wildlife Feeders of Texas 5680 Randolph Blvd San Antonio TX 78233

Phone: 210-653-7514 {Info} 210-653-3641 {Fax} 1-800-950-7087 or 8087 {Toll free for orders} www.spincastfeeders.com spincast@spincastfeeders.com Free Catalog Available



6

MK-2 Control

Unit (not shown)

Limited Time Offer on MK-6 and MK-6Solar Control Unit. Feeds up to 4 times a day for 3, 6 or 9 seconds. The MK-6 Control Unit (shown) is



furnished with a 6 volt 23 ampere alkaline Energizer battery. The MK-6Solar Control

Unit (not shown) is furnished with a 6 volt 5 ampere rechargeable battery and a 6 volt solar panel.





GAME FEEDERS • FEEDERS-many types capacity-5 gal up to 85 gal feeder • CONTROLLERS- Digital, 24 hr quartz clock, photocell CHARGERS-solar, 115 volt rotein BATTERIES-6 volt or 12 volt • ACCESSORIES- funnels, varment guards, leg kits, etc. Repairs-(all major brands) • Warranty- 3 years • FREE CATALOG (281)-261-0803 www.magnumhunting.com 219 Brand Lane, Stafford, TX 7747

Cabela's Inc. We are looking to buy highquality horns, skins and mounts of all wild game including African and North American big-game animals, for display in our retail stores

Also looking for old hunting and fishing photos, rods, reels, lures, wooden ammo boxes, sporting signs, decoys, antique traps, snowshoes - almost anything old and outdoor-related.

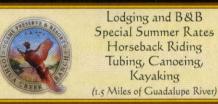
Please send photos and prices to: Mark Dowse, One Cabela Dr. Sidney, NE 69160

Sporting Art. Originals & Prints. Cowan, Dearman, Crowe, Barnes, Booth. Your Texas Sporting Art Headquarters. www.sloanegallery.com

Guided Texas Panhandle Pheasant Hunting. December 4th – January 2nd. www.panhandlequalityhunts.com (806) 364-1855

Joshua Greek Ranch On the Guadalupe River in the Texas Hill Country 830-537-5090 830-537-4766 (fax) P.O. Box 1946 Boerne, Texas 78006 Web Site: www.joshuacreek.com

Wing Shooting & Deer Hunting Fly Fishing Sporting Clays Casual and Fine Dining Conferencing



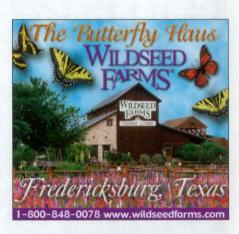


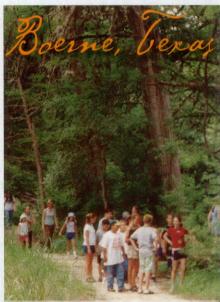


Kayaking

TOURISM

The Trailhead for Your Weekend Getaway. A Web site with Texas events and attractions information. www.TheTexasTrails.com





In the Hill Country-near San Antonio Home to the Cibolo Nature Center BIRDING•TRAILS•EDUCATION CENTER **DINOSAUR TRACKWAY** 888.842.8080 · cibolo.org

* Historic Accommodations of Texas (HAT)



includes the state's finest historic bed & breakfast inns, country inns, guesthouses ard distinctive hotels. The HAT seal of

approval means that the property is not only heautiful but unique, sparkling clean and also is full of Texas charm. For a full listing of HAT accormccations, visit us at www.hat.org or call (30C) HAT-0368.

HISTORIC ACCOMMODATIONS OF TEXAS

BIG BEND - ME	XICO GETAWAY
The Gage Hotel Marathon, Texas (800) 884-GAGE www.gagehotel.com	Villa Del Rio Del Rio, Texas (800) 995-1887 www.villadelrio.com

AUSTIN

* The Mansion at Judges' Hill is a lovely, award winning historic 48 room inn located ir. downtown Austin. Come wrap yourself in luxury. Yeu can afford to with rooms and suites that range from \$55 - \$369. www.judgeshill.com (800) 311-1619

BELLVILLE

* Texas Ranch Life. Restored historic Texas homes on I,400-acre ranch between Bellvi le & Chappell Hill. Weekenc rental incluces bass fishing, trail and chuckwagor. rides, cutting, kird/covote/raccoon hunting and cow works available. (866) TEXASAL

www.texasranchlite.com

BRENHAM

- * Mariposa Ranch. Cabirs fireplaces, Jacuzzis for two dinners, carriage rides, "Enchanted Evening" packages. - Southern Living www.maricosaranch.com (877) 647-4774

COMFORT

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

FREDERICKSBURG

- * The Full Moon Inn. Quiet, peaceful, fireplaces whirlpco :ubs, full breakfast, weddings & reunions www.fullmooninn.com (800) 997-1124 www.texas-wedding.com
- * Palo Alto Creek Farm. Landmark historic German-Texas farmstead on the creek. Anzient oaks, abundant wildlife, Hill Country tranquility. Beautifully renovated log cabin, barn, farmhouse all with private spa theracy rooms. (80)) 997-0089
 - www.paloa tocreekfarm.com

* Settler's Crossing Bed and Breakfast Private historic log cabins and cottages spreac ever 35 park-like acres, just minutes from town. (803) 874-1020

www.settlerscrossing.com



THE FULL MOON INN FREDERICKSBURG, TEXAS

GRUENE

romantic B&B, next door to Gruene Hall

HUNTSVILLE

home. Peaceful atmosphere on 3 wooded

KINGSLAND

century railroad resort on Lake LBJ. Hotel

NEW BRAUNFELS

* Castle Avalon. Romantic bed and break-

★ Historic Kuebler-Waldrip Haus &

haven near Gruene, rivers. Getaways,

luxurious rooms, Jacuzzis. Delicious

Danville Schoolhouse. 43-acre deer

reunions, weddings, corporate retreats. 1)

fast surrounded by 160 acres of Texas Hill

* The Antlers Hotel. Turn-of-the-

suites, cabins and cabooses. www.theantlers.com

acres adjoining park, superb bird watching!

★ The Whistler B&B. 1859 Victorian

(830) 629-2641

(800) 404-2834

(800) 383-0007

(877) 885-4780

(800) 299-8372

and overlooking the Guadalupe River ...

* Gruene Mansion Inn. Premier

a little Texas Magic.

www.GrueneMansionInn.com

www.thewhistlerbnb.com

THIS MONTH'S INNSIDER CHOICE is the The Full Moon Inn.

A full service, romantic bed & breakfast minutes from 3 wineries, Wildseed Farms, Trade Days, Luckenbach Dance Hall and Fredericksburg, Texas. We do weddings, parties, reunions, car shows, bike rallies, etc. First class, full catering service always available.



Fredericksburg, TX 78624 (800) 997-1124 www.fullmooninn.com or www.texas-wedding.com

The Full Moon Inn

3234 Luckenbach Road

ACCOMMODATIONS

Fredericksburg — Sunday House Inn & Suites.

www.SundayHouseInn.com (888) 900-0058

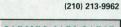
Kerrville — Best Western Sunday House Inn.

www.BestWesternKerrville.com (888) 900-8914

Centerville. Across from Fort Boggy State Park. R/V Park, Camping, Bathhouse, Furnished Cabins, Fishing, Hiking.

(903) 536-5414

Bandera. Lake Hiawatha Guest House. www.virtualcities.com/tx/lakehiawathaguesthouse.htm





Trail rides, stocked fishing pond, camp fires, Golf carts to explore the ranch in, Body massages after a days ride. Cabins have fire places, whirlpool tubs, large porches and much more. 40 minutes West of Fort Worth, TX. After im #133.04982 After 5 pm, 817.304.096

Kerrville - Turtle Creek Lodge. Sleeps two to 18, creek swimming, fishing, peaceful. Children, pets welcome. www.turtlecreeklodge.com

(210) 828-0377

Rio Frio Lodging. Private vacation homes & cabins in the Hill Country, near Lost Maples & Garner State Parks. Birding & nature tours. Come hike, bike or kayak. www.FrioLodging.com

(830) 966-2320

Round Top vacation rental. Minutes from Fayette Lake. Newly restored 4/2 farmhouse. 18 rolling acres. Large stocked pond. Huge porch, patios, beautiful views. www.bootstraptexas.com (866) 464-BOOT

Apache Ranch — Lovelady, Texas. Corporate, church & family retreats. Best hunting & fishing in Texas. www.apacheranch.net (936) 642-2289







Texas Historic Home. Five rooms all with private baths and a three-room Tuscan Suite in downtown Amarillo. - Come back to a simpler time.

Kerrville — Holiday Inn Express Hotel & Suites. www.kerrvillemotel.com

(800) 404-4125

www.kueblerwaldrip.com

Country.

breakfasts.

www.castleavalon.com

ROCKPOR



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



ACCOMMODATIONS

rillo TX (806) 374-0237 www.TheGalbraithHouse.com

PARTINGSHOT

It was just after sunrise in Brazos Bend State Park when Therese Tusa snapped this image of a frost-tinged leaf. She remembers the sound of frost crunching as she gat down on her knees to get closer to the lowgrowing vine. For this type of close-up work, she says it's helpful f whatever is behind the subject is far away — that makes it easier to blur the background. Also, she advises beginners to make sure the camera back is parallel to the subject to improve your chances of getting a shot like this.



Hunt on Your Own Ranch



We Can Make It a Reality

Southwest Texas ACA can make your dream of land ownership a reality. Whether you're interested in a South Texas trophy ranch, a Hill Country getaway or a sprawling West Texas spread, look no further than Southwest Texas ACA.

> **Purchase • Refinance • Improvements** For all your real estate financing needs



Your Agricultural Credit Association





OFFICES: Devine • Edinburg • Hondo • Laredo • Marfa • Pleasanton • San Antonio • Sonora • Uvalde

www.swtaca.com

1-800-663-2846

