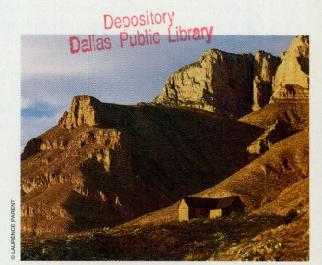




Government Publications Texas State Documents

JAN 3 1 1995



- FRONDS OF PALMETTO Located in the Ottine swamp at the convergence of three ecological regions, diversity is the hallmark of Palmetto State Park. Lush stands of dwarf palmettos give the park its name, and hiking and photography are popular activities. by Fanet R. Edwards
- BEST STATE PARK FISHING HOLES, PART III 14 In the last instalment of our three-part series, we'll visit parks located on the shores of major reservoirs of 800 to 1,000 surface acres or larger, where fishing opportunities run the full spectrum. by Jim Cox
- LONG-BILLED CURLEW This largest American shore-PAGE 28 bird, a member of the sandpiper family, uses its long, curved bill to probe the sand for a meal. by Robert Bunch
- GARDENING FOR WILDLIFE With the Texas Wildscapes Program, homeowners can reduce the time and money spent on lawn maintenance and create wildlife habitat at the same time. in Elaine Acker Albright
- THE PRETTIEST SPOT IN TEXAS? Once a massive reef in an inland sea, the Guadalupe Mountains are the centerpiece of a spectacular national park. Wilderness reigns here. There are no roads through the park, but there are some 80 miles of hiking trails visitors can use to explore the mountains and canyons. by Joe Crisp
- TWANG OF BEAUTY Stalking big carp, tilapia, buffalo and gar with a bow and arrow can be an actionpacked sport, and bowfishing is increasing in popularity. by Buddy Gough

COVERS

Front El Capitan towers over Guadalupe Mountains National Park. See story on page 28. Photo © Vince Gravel. Canon T-90 camera, Canon 80-200mm lens, f16 at 1/125 second, Fuji 50 film.

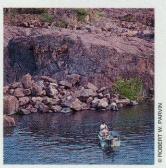
Inside Front A Louisiana iris, one of many beautiful lowland plants at Palmetto State Park. See story on page 4. Photo © Rusty Yates. Canon EOS-1 camera, Canon 100mm 2.8 macro lens, f/22 at 1/2 second, Fujichrome Velvia film.

Inside Back Bowfishermen use spotlights to find carp and gar on Lake Graham. See story on page 42. Photo © Robert Liles, Canon F1 camera, Canon 200mm 2.8 lens, f2.8 at 1/60 second, Fuji 100 film.

Back Long-billed curlews are easy to spot along Texas beaches. See story on page 22. Photo @ Robert Bunch. Nikon F3 camera, Nikkor 300mm 2.8 lens with TC 1.4 converter, f5.6 at 1/500 second, Fuji 100 film.



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AT ISSUE

As we climbed Guadalupe Peak we had snow up to our calves. I'll never forget walking up through the fog and out into the sunlight above the clouds. Nor will I forget the incredible feeling of accomplishment in placing my name in the book as one who had reached, on his own feet, the highest point in Texas.

Then I learned about Shorty Powers.

Shorty is a paraplegic who has no use of his body below the waist. He and a friend were hit head-on at the age of 17 by a drunken driver traveling in excess of 100 miles per hour. A few weeks before three friends and I made our climb to the summit, Shorty and five of his friends—all paraplegics—had made the same climb by crawling and dragging their wheelchairs behind them. The six of them began their ascent on a Monday morning at 8 a.m. in defiance of warnings not to attempt it. Five days later, at 7:22 p.m. on Friday, three of the original climbers reached the summit with their wheelchairs.

In the years following that climb, Shorty founded a unique organization called POINT, an acronym for Paraplegics on Independent Nature Tours. POINT's mission is to encourage disabled people to become more involved in the outdoors. Through a wide range of activities including hunting, fishing, sailing, scuba diving and canoeing, the newly disabled in particular are given an alternative to bitterness, self pity and despair. Shorty and his pals today are responsible for ensuring that huncreds of disabled children have the chance to experience the adventure and challenge of the wild and to know that its secrets and wonders are accessible to them in spite of their handicaps.

As I gaze on the magnificent imagery of the Guadalupes presented to you on these pages, I think of Shorty Powers and his friends, and I am humbled.

-Andrew Sansom Executive Director



In August . .

Our August issue will take you on a hiking trip along the state's newest trail park, the Caprock Trail near Quitaque. Then we'll go diving among the colorful coral formations of the Stetson Bank in the Gulf of Mexico, and also learn how to take underwater photos. Also in August, Lockhart and Lake Houston State Parks, fire ants, aquaculture and prickly pear.

July 1994, Vol. 52, No. 7

TEXAS PARKS WILDLIFE

Dedicated to the conservation and

enjoyment of Texas wildlife, parks,

waters and all outdoors.

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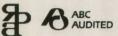
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Historical Lapse

The Rio Grande issue (April) was excellent. I did note, however, one common but large historical lapse. At the end of the Civil War, Grant dispatched Sheridan and 50,000 veterans to the Mexican border to assist in "persuading" the French to leave. Grant thought fondly of Mexico, and always had viewed the Mexican War as one of open U.S. aggression.

The reason these 1865 efforts are largely ignored by both Southern and Mexican historians is rather obvious. However, in a larger context, I think it was an extremely important phase of American history. At the time, the English essentially had written off Canada, which was going to be easily conquered by the Union Army. Instead of claiming all of North America, the Federal army ignored Canada, threw the French out of Mexico and, except for Reconstruction, essentially disbanded. Victorious armies usually do not behave in this fashion.

> Phil Killien Seattle, Washington

Crawfish

We enjoyed the informative article about crawfish in the March issue. Regarding the letter in the May issue from Mr. Teinert, he is correct that the fresher the crawfish the better. They should be cooked as soon as possible after delivery.

However, under "Boiled Crawfish" in Tony Chacheres' cookbook it says, "The purging of crawfish in cold salted water has been found to be useless other than to place the animal under unnecessary stress."

Researchers from Texas A&M as well as L.S.U. say that to purge crawfish they must be kept in large aerated tanks of fresh water for 12 to 48 hours after being caught. This is sometimes called "fresh water deveining." Many crawfish farms in Texas do this because the crawfish will survive longer during transit. They also are said to taste better. With these "purged" crawfish no salt is necessary; you need only spray the entire sack off well with a water hose before they are emptied into the pot and cooked. I



can assure you they taste great since we eat them at least once a week.

Texas A&M also has found that crawfish are high in protein, low in fat and sodium. We are crawfish suppliers in the Brazosport area, and your readers can call us at 409-548-7826 if they have any questions.

Leanne and Lyn Buck Sweeney

Border Population

The April issue of *Texas Parks & Wildlife* is another gem. My compliments to all those who helped create it.

A sobering footnote can be added. As demographers have pointed out. the population of the U.S.-Mexico border region—that is, the counties and municipalities contiguous with the International Boundaryincreased 830 percent between 1930 and 1990. That 1990 population, essentially 500 years in the making, will double again within 22 years. The stresses upon this terribly arid land will be unprecedented. Unless in-stream use can be successfully argued for as a beneficial use, the Rio Grande/Rio Bravo essentially will cease to exist below El Paso, except during episodic flooding.

Can there be any clearer connection between excessive population growth and environmental destruction?

Glen Kaye Santa Fe, New Mexico

A Complaint from "Sportsman's Paradise"

We really enjoy your magazine. The photography and articles about places and events in Texas are excellent.

Texas Parks & Wildlife magazine welcomes letters to the editor. Please include your name, address and daytime telephone number. Our address is 3000 South IH 35, Suite 120, Austin, Texas 78704. Our fax number is 512-707-1913. We reserve the right to edit letters for length and clarity.

The sad part about your publication, however, is your need to satisfy the hunting contingency. We really do not enjoy seeing photos of dead animals, nor do our children. You may claim that hunting is necessary to control animal populations, as if it were the only alternative. If you really respected and cared for our fellow animals you might initiate a birth control program that will maintain the quality of life for the animals and remove the "necessity" of a violent injury or death. You even could make a sport out of this program.

The bottom line is we feel we must eliminate as much violence in our lives as possible. We no longer can accept your magazine into our home. There are so many hunting magazines out there. It is a shame that there are so few magazines about Texas's parks and wildlife. Perhaps you could begin a new publication that eliminates the needless killing.

Tom Neale Shreveport, Louisiana

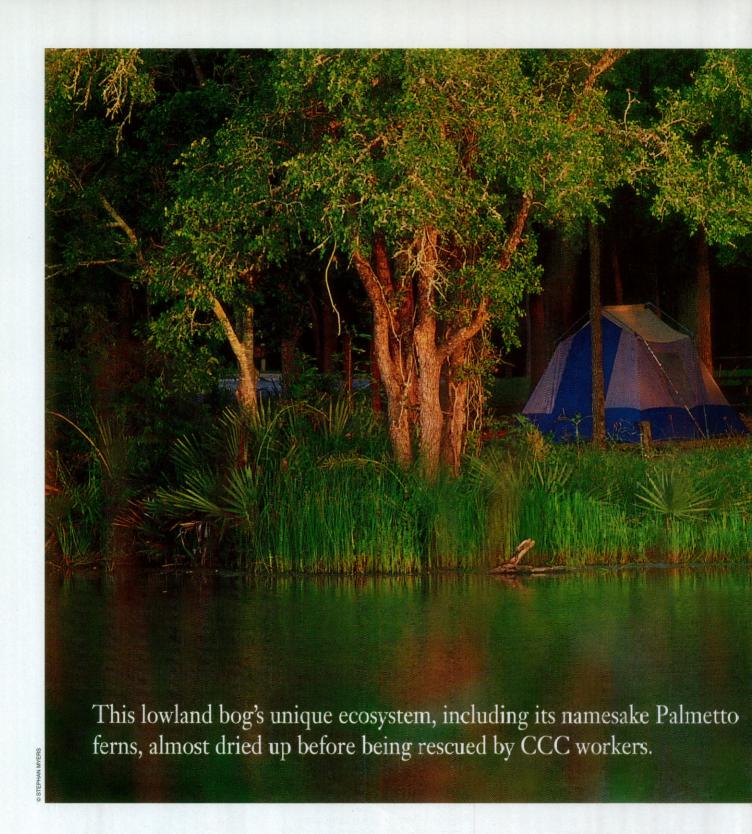
First Fish

This photo was taken at our place in Leon County near Centerville. The fish was caught from our pond by our nephew, John W. Davis III, age five, of Newton.

We think the photo shows the ultimate ecstasy of a five-year-old showing his first catch.

Charles and Julia Finch Pasadena





Editor's Note: Friday the 13th of May was a bad day for Falmetto State Park. A tornado skipped through the park, taking down numerous trees and knocking out power. The twister missed any facilities needed by visitors. Staff from Palmetto and other parks set to work cleaning up fallen trees and the park reopened after just a few weeks. If you have any questions or concerns about a visit to Palmetto, call 210-672-3266. For reservations, call 512-389-8900.



Campites are available near the park's oxbow lake, above, which is fed by an artesian well. Dwarf palmettos and duckweed-covered bogs give the park a lush, tropical look in the summer, right.

Palmetto

LUXURIANT SUBTROPICAL VEGETATION lies hidden in the pre-dawn swampland. As the sun begins to rise, shafts of light cleave the humid air to reveal the fanlike pleats of palmetto fronds. Life begins to stir and the primeval bog awakens.

Palmetto State Park lies along the edge of an area originally known as the Ottine swamp, a lush contrast to the rolling post oak savannah woodlands that surround it in northern Gonzales County. Thousands of years ago, waters from what later became the San Marcos River cut a path through ancient Carrizo sand-



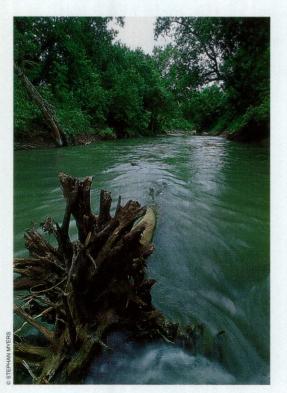
stone, leaving shelflike terraces. The rapid current gradually left new sediments along these terraces across a wide, deep valley.

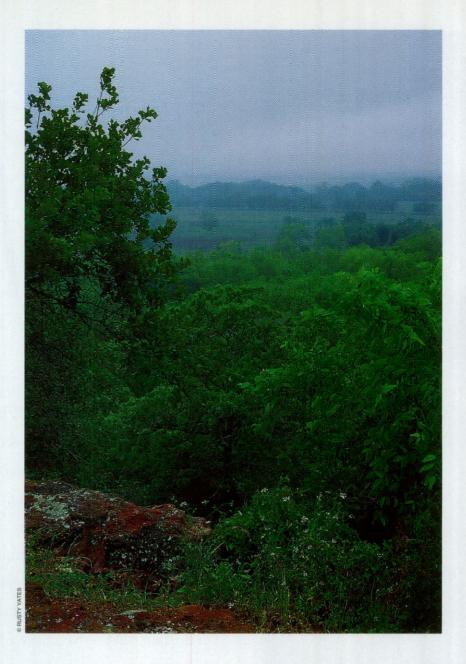
by Janet R. Edwards

ith time, the river sank below the land surface. Yet thermal sulphur springs, occasional floods and runoff from heavy thunderstorms kept terraces at higher elevations moist. Along the edge of the floodplain, water could seep up through cracks in the underlying bedrock. Natural gas escaped in the same way, creating mud boils and peculiar mounds like miniature volcanoes, some of them five feet tall and 30 feet wide.

Plants and animals flourished some 12,000 years ago in the mild, wet climate that prevailed in this region and across much of what now is Central Texas. Some species began to migrate westward along river corridors. Peat bogs, swamplands and dense forests developed, supporting a rich diversity of life.

But reduced rainfall and higher tem-





The San Marcos River flows swiftly past the park following a rain, left. The park's woodlands harbor a variety of birds and mammais.

peratures gracually changed the environment, isolating the Ottine swamp and creating a subtropical oasis. One plant that followed the winding path of the San Marcos River and began to thrive in the Ottine was the dwarf palmetto, which lends the park its name. Lush colonies of this striking plant still grow in profusion here, with fronds that

seem to rise in greeting like fingers on an open hand.

The swamp's unusual vegetation and warm sulphur springs, which promised relief to victims of polio and traumatic injuries, have drawn visitors from throughout the state since the early 1900s. To satisfy popular demand, the San Antonio and Aransas Pass Railroads even provided weekend excursions to the area. Aware of the swamp's unique features and vulnerability, the Texas State Parks Board acquired 263 acres bordering the San Marcos River in 1933 and named it Palmetto State Park. One

year later, the Civilian Conservation Corps (Company 873) set up camp near the village of Ottine and began construction of the CCC Refectory, a handsome outdoor pavilion built from native sandstone.

Sadly, the mud cones at the site eventually subsided and disappeared due to a gradual decline in ground water pressure. Eventually, extensive waterwell drilling and pumping for agricultural and other uses began to threaten

CCC workers built this outdoor pavilion from native sandstone in the 1930s.

the entire palmetto ecosystem. Helping to offset this moisture loss are a large water storage tower and a hydraulic pump near the Palmetto Trail built by CCC companies 886 and 1823 in the 1930s. Driven by the force of a column of water from an artesian well below, the pump needs no electrical power to move water to a cistern atop the tower and into the surrounding swampland. Other CCC facilities still in use today include walkways, sandstone picnic tables, grills and a rock entrance.

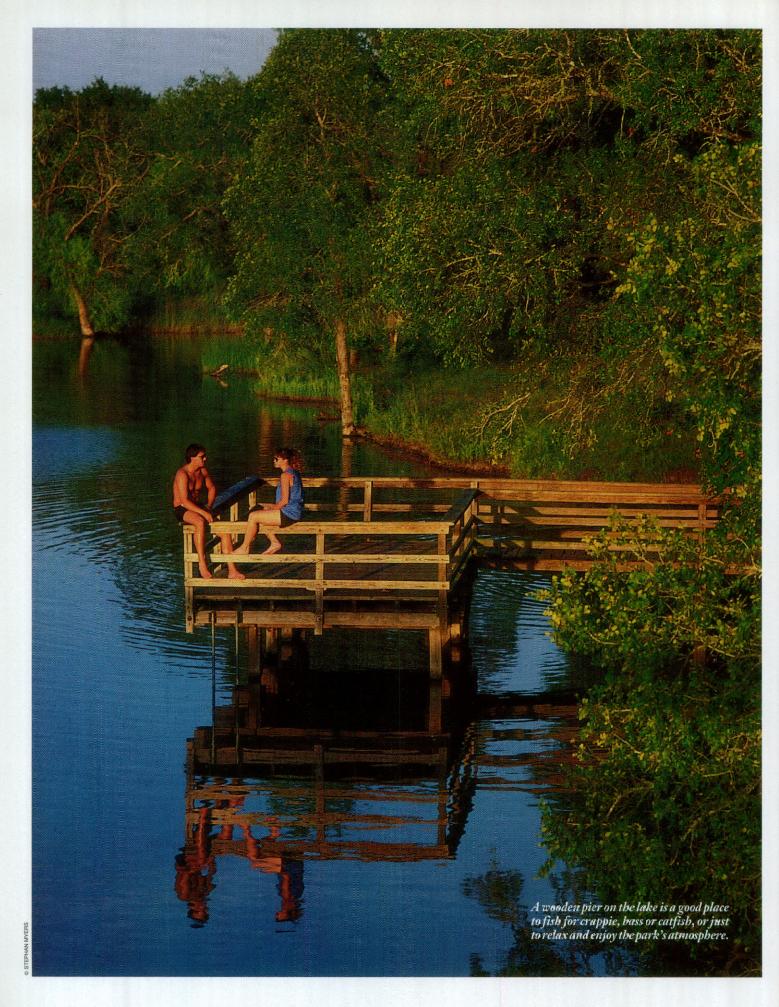
As sunlight penetrates the overstory, early rising birders take to the Palmetto and River Nature Trails with binoculars and field guides in hand. The park is habitat for almost 250 native and migrant bird species, including the redbellied woodpecker, hermit thrush, Inca dove, Carolina chickadee and American coot.

Day hikers, bikers and photographers soon follow beneath oaks, hackberries, cedar elms and pecan trees that in the spring shelter clusters of colorful spiderwort, red buckeye, orchids and a variety of wildflowers.

"We attract around 135,000 visitors every year," said Mark Abolafia-Rosenzweig, park superintendent. "About 90 percent come for the day to



LAURENCE PAREN

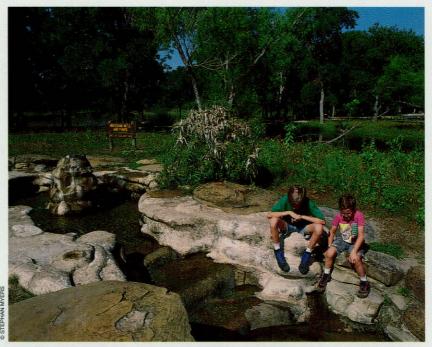


take a walk, picnic or watch birds. However, scientists from universities all over the state and country have come to study the palmetto ecosystem. In addition to birds, we have more than 350 species of animals and 600 species of plants. The plants here are not unique, but it is extremely unusual to find such a variety growing in one location at or near the fringe of their habitat range. Although the park is located within the Post Oak Savannah ecological region, the Blackland Prairies and Coastal Plains also interconnect here. For example, the Palmetto palm is primarily a southern plant found along the Gulf Coast. The big hickory trees seen here usually grow farther north, and you won't find the prickly pear growing much farther east.

"Part of the diversity is created by slight changes in elevation, since varying amounts of moisture create different habitats: a low area will stay wet longer, a higher area will dry out quickly. Botanists visit not only because of the opportunity to observe so many different species in one location, but also to explore other reasons why these fringes exist."

In early summer, blush-orange trumpet creeper blossoms beg to be touched, as do the tart mustang grapes. But reflect carefully before you reach. Poison ivy grows throughout the park. With a bit of practice, visitors can learn to distinguish poison ivy from harmless lookalikes such as virginia creeper and box elder that often share the same habitat. (See *Texas Parks & Wildlife*, July 1993.)

n ponds and lagoons along park trails and walkways, green tree frogs and Gulf Coast toads swim among the duckweed, while mosquito fish and sailfin mollies move in and out of shadows beneath mats of native arrowleaf



An arresian well built by CCC workers in the 1930s helps offset moisture loss from excessive water-well drilling and pumping for agriculture. Water from the well drives a pump that moves water to a cistern and into the surrounding swamplanas.

PALMETTO STATE PARK

Location Six miles southeast of Luling on U. S. 183, then southwest on Park Road 11 for two miles. Or, north of Gonzales 12 miles on U. S. 183, then southwest on Park Road 11 for two miles.

Facilities 19 campsites with electricity and water, 18 campsites with water only (outlets every 100 feet); restrooms with showers, two playgrounds; oxbow fishing lake (fed by artesian well), San Marcos River Access (at low-water bridge crossing); Palmetto and River Nature Trails (eight-page brochure describing more than 35 notable plant species and geological features is available at park headquarters); picnic sites are available on a first-come, first-served basis; Refectory/Pavilion available for large groups with advance reservations (use of kitchen facilities extra).

Special activities Stop-over point for Texas Water Safari (canoe race) held second weekend in June; no canoe rentals or equipment available, must provide own portage.

For more information Contact Palmettc State Park, Route 5, Box 201. Gonzales, Texas 78629-0118. To make reservations at Palmettc or any other state park call 512-389-8900.



and water primrose. Ground skinks and green anoles dart from leaf to limb, while pygmy mice and eastern cottontail rabbits forage among shoots of tender foliage. White-tailed deer, raccoons and armadillos may wander by in search of food.

As the noonday sun beats down from above, thoughts turn to ice chests and picnic baskets. There are plenty of grassy, shady spots to spread a feast, but day-use visitors often seek the CCC Refectory. Choosing a table in the spacious pavilion or venturing out onto the

open patio that overlooks the San Marcos River, the lunch crowd can enjoy the fellowship, then frolic on the nearby playground. Others may get together in the enclosed, air-conditioned dining room (reserved in advance for an additional fee) where a full kitchen can accommodate large groups.

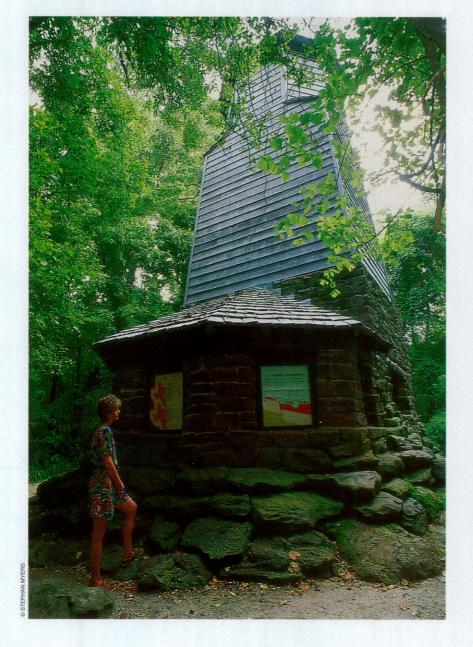
The refreshing sight and rippling sound of the river rushing past may lure summer visitors to take a dip or launch a canoe in the park's oxbow lake. At an average depth of six feet, the lake is perfect for floating, sunning or splashing.

The San Marcos River also is teeming with young swimmers in the heat of a summer afternoon, but the sometimes stiff current calls for keeping a careful eye on inexperienced bathers or boaters.

"I like swimming in the river," said Michael Najar, age nine, of Llano. "And you know, I had a funner time here than I did down at the coast, because there isn't any broken glass here to worry about."

But not everyone who visits the park has relaxation or recreation in mind. Scout groups and members of other clubs often are seen working on park maintenance and conservation projects.

"Because of budget restrictions, all the parks are looking for new ways to get things done and keep our parks well maintained," said Abolafia-Rosenzweig. "For any group interested in helping, we offer discounts or free camping in exchange for projects such as erosion prevention or correction, litter control and basic maintenance of picnic grounds,



Exhibits at the CCC-built water tower, left, describe the area's geology and formation of the bogs. Yellow huisache daisy blooms, above, brighten the park in spring and early summer.



PALMETTO EARTH DAY PHOTO CONTEST

Bill Leidner of Mission used multiple exposures to take his photo called "South Texas Nights," which won the grand prize in Palmetto State Park's annual Earth Day photo contest.

Leidner composed the photo using a Pentax LX on La Estrella Ranch, north of Rio Grande City in Starr County. The moon exposure was shot with a 500 mm lens, 1/125 second at %. He made another exposure with an 18-28mm zoom set at 18 mm., photographing the stars at £4 for 20 minutes, and then shooting the foreground at f8 for five minutes using a flash to light up the foreground.

Leidner's hard work earned harn a Tenba Voyager Aqua System Camera bag, donated to the Palmetto contest by Capitol Camera in Austin. Five other entrants won prizes that included a \$50 Wal-Mart gift certificate, Kodak film, a camera bag, tripod and a Texas Conservation Passport donated by the employees at Palmetto. There were 38 entrants this year.

This is the third year of the Earth Day contest featuring nature, wildlife and people in nature. Photos co not have to be taken at Falmetto State Park. Next year's deadline is 5 p.m. April 17, 1995, with the winners announced April 22. Contact Palmette for more details about the Earth Day photo contest.

campsites and trail routes. We're eager to consider any good project idea that a group might come up with.

"Our goals for these groups, particularly those involving your gpeople, are for them to come and experience the outdoors and to uncerstand why this swampland has been set aside to be protected. In this way, we hope they I develop the idea that parks are important places and will give us the future support we'll need to keep them going."

By late afternoon, overnight visitors begin making camp. Most of Palmetto's 37 designated campsites are shady, and all provide a lantern hanging post, picnic table, cooking grill and nearby restrooms with hot showers. As slanted rays of sur light fall across the swamp, fishermen cast for crappie, bass or catfish from the grass-covered bank or the lake's wooden pier, while laughter drifts across the water's tranquil surface from nearby campsites.

When the last glow of twilight fades over the treeline, Ereflies create a luminous fairyland. Crickets sing while katydids chirp from tree to tree, a fitting serenade for a peaceful evening at Palmetto State Fark.

Janet R. Edwards is a freeiance writer based in Corpus Christi.

Small Boats for Big Bass

Alaskans and Texans have something more in common than a propensity for wide open spaces. The kayak, a small, double-bowed craft favored by Nanook in his quest for leviathans of the frigid northern waters, also has long been favored among West Texas fishermen after the smaller, though no less prized, largemouth bass.

However, while the original kayak was made of sealskin and whale bone, the Texas version is much more likely to be of molded fiberglass. And, while the northern mariners wouldn't think twice about paddling their fragile boats into the open sea, Texas kavaks very seldom venture more than a short swim (or wade) from shore.

How the kayak found its way to West Texas isn't documented, but Van Waterhouse, a San Angelo dental ceramist, probably was one of the first to use one for fishing.

"My brother ordered a canvas kavak kit from a mail order house and I helped him put it together back in the mid-1950s," Waterhouse said. "Although we took quite a few spontaneous swims before becoming proficient with it, the word got around pretty fast and several other local fishermen soon were ordering the kits and putting them together."

Henry Lancaster, owner of LamPro Marine in San Angelo, said he remembers the canvas kayaks of those days, as some of the more innovative fishermen brought their boats to him for improvement.

"A few local fishermen were making canvas kayaks and bringing them to us to fiberglass so

they would last longer," he said. "What we would end up with was mostly a mess that was too heavy to be much good."

Lancaster said his company built its first mold and turned out a pure fiberglass kayak in 1955. He added that the original models were not much different from today's version, except that the boat is a little narrower. "We made those first models a little over three feet wide in order to be steadier in the water for inexperienced boaters," he said. "However, our buyers complained that the extreme width hindered their paddling efforts."

Although the company turns out several different models of kayak, their basic design and best seller is 10 feet long, 34 inches wide, 12 inches deep and weighs a meager 40 pounds.

"Actually, the weight is the kayak's big selling point," Lancaster said. "Since a lot of our fishermen fish the rivers or the upper reaches of lakes where there are no boat ramps, almost anyone can pick one up and walk down to the water with it."

As the scores of West Texans who fish from a kayak will attest, portability is the primary reason for owning one. Although all appreciate the small boat's agility in moving around thick brush in extremely shallow water in search of spawning bass, the fact that it is readily handled by a single fisherman is its selling point. However, many of the various

Kayaks, right, are small and light enough for one person to carry a short distance to the water, but big enough to handle plenty of fishing gear.

manufacturers who have jumped on the popularity of the small boat concept have lost track of its original appeal. In contrast to the modern bass boats, whose beauty is measured in flash and speed, the kayak is ugly.

For most purposes, a boat loses its portability if it requires a trailer to haul it from place to place or if it takes more than one person to launch it. In all but a few models, these two conditions eliminate most small boats of the pontoon and tri-hull designs.

The kayak, or even a small aluminum jon boat, can be loaded easily into the back of a pickup or tied on top of a car and put into the water by a single fisherman. To make the job even easier, there are several innovations on the market involving wheels and skids that attach to the boats for easy loading and unloading.

One craft, called the "Porta-Bote" by its manufacturer, comes in lengths up to 12 feet, can hold two fishermen, their gear and a motor up to 50 pounds and folds up into a bundle only four inches wide weighing 69 pounds. Made of extremely tough plastic and an ingenious system of leakproofhinges, the Porta-Bote can be stored behind the couch, then unfolded and ready for the water in 10 minutes.

As is the case with nearly anything, the cost of the portable boats varies from cheap to ridiculous, depending upon the number of frills. The simple eight-foot fiberglass kayaks still can be pur-



chased for less than \$250, although the price can go as high as \$1,400. The tri-hulls and pontoon varieties begin at about \$500 and go to around \$1,500. Porta-Bote comes in several sizes and models from eight to 12 feet, with the most expensive model less than \$1,000.

The few warnings associated with kavaks and other "miniboats" all involve the little crafts' instability. Most kayak fishermen who have spent any time on the water admit to unexpected dunkings and look skeptically at anyone who says they never have been dumped from their kayak. One of these stalwart anglers is Burkie Harlow, a San Angelo garage owner. He recalls being thrown from his watery bronc while fishing an early spring bass tournament on Twin Buttes Reservoir.

"I'm a firm believer that a kayak is programmed to overturn as soon as you paddle into water over your head," he said. "I was dabbling some salt cedars in about three feet of water and everything was fine. However, I had to cross a hole with water about 10 feet deep. As soon as I got right in the middle, the kayak rolled over like a poodle in a dog show and pitched me out, along with my rods and tackle."

Harlow said the chilly bath wasn't the end of the "kayak curse," however. As soon as he began floundering around in the water, a boatload of his friends happened by to fill out the second half of the hex.

"I could have drowned for all the good those guys did," he said. "While I was trying to salvage any part of my gear, they just whooped and hollered like fools."

As Harlow discovered, besides the unmerciful ridicule to be borne by those who let their kayak have the upper hand, it is virtually impossible to reboard one of the light boats from water more than knee-deep. Sometimes this means a long, cold walk back to the bank while suffering the catcalls of those who once were considered friends.

The foremost item of safety aboard a kayak or any of the small boats is a Personal Flotation Device (PFD). Since time is essential in any small-boat crisis, the PFD should be worn at all times the angler is on the water and not used for a seat cushion.

Except for a few situations with some very old craft, the small boats are buoyant and can keep an angler's head above water if he stays with the boat. Anglers should have respect for the small boat's size and never get into open water. Ideally, the small boats should be used only in water shallow enough that the user can touch bottom if capsized.

by Bud McDonald

Hunting Fatalities Low for 1993

Hunter education officials of the Texas Parks and Wildlife Department believe progress is being made in firearms-related hunting safety. During 1993, six people died in hunting accidents. While tragic, this total ties an all-time low for fatalities that was set the previous year, and it is well below the 28-year average of just over 17 fatalities per vear.

Non-fatal accidents also were down, with the 53 reported being four fewer than 1992 and below the long-term average of 58.71.

"Hunting is a relatively safe sport compared to swimming, hiking, fishing and certainly hang gliding, rock climbing and



bungee jumping," said Steve Hall, education director for the TPWD. "However, even one accident represents a tragedy that could have been avoided through common sense and knowledge of gun safety practices."

Hall believes the accident rate could decline dramatically if adults took a more active role in huntereducation. Texas's hunter education course is required of every Texas hunter born on or after September 2, 1971. For more information call toll-free 1-8(*)-253-4536, or 512-389-4999.

Duck Hunting Prospects Finally Looking Up

Ducks and duck hunters have experienced some lean years recently, but at least some encouraging news is emanating from the northern nesting areas.

Brian Sullivan, waterfowl program_eader for the Texas Farks and Wildlife Department, said heavy rainfall last summer and snows during the winter in northMallards, above, still are less abundant than they were a balfcentury ago, but biologists hope favorable nesting conditions in Canada and the Northern U.S. will help boost their populations

central United States and the Canadian prairies created wetland habitat that boosted nesting success for several species of ducks. "Snowfall was above normal in most of the practie duck production areas, which should be providing plenty of ponds for nesting," said Sullivan. "Also, studies indicate that duck nesting success in Conservation Reserve Program (CRP) fields is higher than in other habitats because of lower nest predation rates." The CRP is a federal program that pays farmers to take erodable farmlands out of production and plant certain vegetative cover such as grasses.

"It probably will take several years of good habitat conditions to increase populations of some ducks, such as mallards and pintails, to former levels," Sullivan said, "But I'm optimistic about the potential for duck numbers to increase this year."

Part Three STATE

by Jim Cox

State parks make great base camps for some of Texas's finest big-reservoir angling.

> n the May and June issues, we explored fishing opportunities in state parks where small lakes and streams are the drawing card. This final instalment will take a look at state parks that are situated on the shores of major reservoirs.

We arbitrarily have classified lakes of 800 to 1,000 surface acres or larger as "major" because these water bodies generally offer unrestricted boating access and have the species of fish most fishermen seek.

Anglers familiar with big Texas reservoirs will notice immediately that state parks are situated on the shores of some of the state's most revered public fishing waters. What freshwater angler worth his or her salt hasn't heard of Lakes Livingston, Texoma, Whitney, Caddo, Choke Canyon, Bob Sandlin, Falcon, Amistad and Possum Kingdom? A state park is on the shores of each. And there are other reservoirs that may not yet be household names, but whose fisheries appear destined for greatness. These include Ray Roberts near Denton and Joe Pool south of Grand Prairie. Cooper Lake in Northeast Texas near Sulphur Springs already is open for fishing, but park facilities won't be ready until this fall or later.



Atlanta State Park, left, is an excellent place to combine camping with fishing on a large reservoir. Wright Patman Reservoir, located in the northeast corner of the state, is known for producing good catches of channel catfish, crappie and white bass.

In all, at least 27 state parks offer access to large reservoirs. As one might expect, fishing opportunities run the full spectrum, from catching saltwater redfish at Fairfield or Colorado City, to striped bass at Texoma and Whitney, to chain pickerel at Caddo, white bass at Livingston and largemouth bass in sccres of traditional hotspots.

Because of the large number of reservoirs, we have divided the state into regions to perhaps make it easier for you to select a nearby lake and park.

To reserve campsites at these or any other state parks, call 512-389-8900.

North/Central

Anglers in the Dallas/Fort Worth area have never had it so good, so close. Five large lakes with shoreline state parks are located within reasonable driving distance of the Metroplex, and two of the closest are rising stars on the sport fishing scene.

Some Texas anglers may not have heard much about Ray Roberts Reservoir, since it's a relatively new lake whose debut was subject to more pratfalls than a Red Skelton routine. A 1988 flood filled the lake a couple of years ahead of schedule, before boat ramps, roads and parking lots were completed by the U.S. Army Corps of Engineers. A second deluge in 1991 forced closure of the lake, and access problems persisted until opening of Isle du Bois State Park in 1993. While weather-related problems may have taken some of the luster from the 30.000-acre lake's initial exposure, fishing reports have remained consistently encouraging.

The fertile reservoir is expected to blossom into a top-notch largemouth bass lake. To protect the fishery from overharvest, a three-per-day bag limit and 18-inch minimum length limit is in effect.

To reach the park from Dallas or Fort Worth, take Interstate Highway 35W north and turn east on FM 455 at Sanger. The telephone number is 817-686-2148.

Even handier to most Metroplex dwellers is Joe Pool Reservoir, located near Cedar Hill, just south of Grand Prairie. Opened amid considerable fanfare in August 1989, the lake was an immediate hit with anglers, especially bass and crappie fishermen. TPWD biologists were so impressed with the potential of Poel to produce quality



GLEN MILLS

largemouths, they recommended a 14-to 21-inch slot limit that now is in effect. Under this limit, bass between 14 and 21 inches may not be retained, and you can retain only one longer than 21 inches per day. Fishing for crappie and cat-fish also is reported to be outstanding at loe Pool.

This 7,450-acre lake probably has the most recreational facilities per mile of shoreline than any reservoir in the state, with Cedar Hill State Park spanning 7.5 miles of the lake's eastern shoreline, and Trinity River Authority parklands on the western side. The state park's 354 campsites are the most of any park, and anglers en oy 10 boat launching lanes and two fishing jetties. The main access to the park is via FM 1382, Belt Line Road and Mansfield Road. The park's number is 214-291-3900.

One of the finest lakes in Texas in terms of variety is Lake Whitney near Hillsboro. This is reflected in lake records for 11 different species caught by anglers on the 23,500-acre reservoir, including the current state record smallmouth bass weighing 7.72 pounds. Whitney in fact is a showcase lake for smallmouths and another introduced fish, striped bass. Throw in betterthan-average largemouth bass fishing and a strong crappie population and you can see why biologists and anglers consider Whitney, one of the state's oldest major reservoirs, an all-star. Lake Whitney State Park, situated on the lake's eastern shoreline just west of Whitney, has 950 acres of camping and Visitors to Lake Bob Sandlin State Park can fish Lake Bob Sandlin, left, or drive a short distance to lakes Cypress Springs, Monticello or Welsh, all of which offer good fishing. The park is located southwest of Mount Pleasant in Northeast Texas.

other recreational facilities. Their number is 817-694-3793.

To the north of the D/FW area is a reservoir that is considerably larger than Whitney, but in many ways similar in terms of fishing variety. Lake Texoma on the Texas-Oklahoma border also is widely known as a hotbed for striped bass fishing and, like Whitney, it has a burgeoning population of hard-fighting smallmouth bass (See "Big On Texoma," Texas Parks & Wildlife, October 1993). The 89,000-acre reservoir on the Red River offers opportunity for all sorts of water-oriented recreation, and Eisenhower State Park has the facilities for enjoyment of the bounty. In addition to the usual camping facilities, it has scenic overlooks, hiking trails and a swimming area. The number is 903-465-1956.

Just 25 miles north of downtown Dallas is Lake Lewisville, a reservoir that traditionally has been known for water skiing and recreational pursuits other than fishing. However, the department has targeted Lewisville for regular stockings of striped bass, and the lake's good forage base and water quality could make for an outstanding fishery in the next few years, according to Roger McCabe of Waco, the TPWD's head of stocking programs. Stockings of Florida largemouth bass in 1990 and 1993 also may pay dividends, especially because of recent high water levels that created more fish habitat and water fertility. Lake Lewisville State Park is an excellent spot for a camping and fishing trip, situated on a peninsula on the lake's eastern shoreline. Its 720 acres contain plenty of campsites, including screened shelters and boat ramps. The park is on Hackberry Road, three miles west of FM 424, north of The Colony. The number is 214-292-1442.

East/Northeast

If you're tired of the bass boat bumper-

cars routine on Lake Fork, you probably should schedule a trip to the new Cooper Reservoir and Cooper Lake State Park. Cooper is one of the newest and potentially finest bass fishing lakes in the state, and the state park, expected to open this fall, will offer some 3,000 acres of shoreline facilities in two units. Cooper is located less than 40 miles north of Lake Fork, near the town of Cooper in Delta and Hopkins Counties. While it may never exceed Fork for trophy bass fishing (what lake could?), Cooper nonetheless has the fertile water and flooded timber and brush that should make an outstanding fishery. Massive stockings of Florida largemouths (almost 2 million fingerlings in 1992) jump-started bass populations, and anglers already are catching large numbers of small- and medium-sized bass. Two boat ramps, one near the dam and the other in the lake's upper end, are open for fishing access to the 19,000acre lake. A daily limit of three bass and minimum length limit of 18 inches is in effect to maintain a quality fishery. Call the TPWD toll-free 1-800-792-1112 for more details about the park and its opening date.

If you don't want to be locked into fishing for just one or two kinds of fish, then Fairfield Lake and Fairfield Lake State Park may be what you're looking for. You can fish for introduced redfish, hybrid striped bass, largemouth bass and catfish, or even try your hand at bowfishing for the delicious, albeit unwelcome, African import, tilapia. The stocking of saltwater redfish no longer is considered experimental, as Fairfield produces excellent fishing for reds in the 10- to 15-pound class. The lake record is a 23-pounder caught in January 1993. Hybrid stripers often are caught by redfish anglers while trolling or drifting with live bait. Largemouth bass fishing also is excellent, with aquatic vegetation and shoreline reed beds providing habitat. Fairfield is one of the most attractive park and lake combinations in Texas, with pine and hardwood shorelines and clear water that is kept warmer than normal because of circulation through a generating plant across the lake from the park. The park

is located just east of Fairfield in Freestone County. The number is 903-389-4514.

If ever a state park were located with anglers in mind, it's Lake Bob Sandlin State Park near Mount Pleasant. The park is on the shores of 9,460-acre Lake Bob Sandlin, one of East Texas's finest largemouth bass fisheries. The park also is within a couple of miles of Lakes Cypress Springs and Monticello, and only 15 miles from Lake Welsh, a power plant lake southeast of Mount Pleasant. The Sandlin lake record for largemouth bass is 14.3 pounds, and each of the other three nearby lakes has produced fish over 12, including a 15.23pounder from Welsh, caught in 1983, according to TPWD biologist Fred Janssen of Marshall. Park facilities include campsites and screened shelters, a boat ramp and all the other amenities for a family outing. It is located a short distance south of Interstate Highway 30, and can be reached from the Dallas-Fort Worth area by taking State Highway 37 south off I-30, then turning left on FM 21. The park's number is 903-572-5531.

Much has been written about Caddo Lake, the swampy, cypress-filled reservoir on the Texas-Louisiana border (See "Close Call For Caddo," Texas Parks & Wildlife, July 1993). Caddo Lake State Park is the perfect headquarters for sampling the delights of this unique fishing spot. The shallow lake has been improving as a largemouth bass producer, and it also offers catfish, crappie, sunfish and chain pickerel. Pickerel, relatives of northern pike, are small but hard-striking fish that generate excitement during winter and early spring, hitting spinners and topwater lures. Janssen said Big Cypress Bayou adjacent to the park also has some of the best fishing for spotted bass to be found in East Texas. The park is located in Harrison County, 15 miles northeast of Marshall. From Marshall, take State Highway 43 north and turn east on FM 2198. The number is 903-679-3351.

You can't get much farther northeast in Texas than Atlanta State Park on the shores of Wright Patman Reservoir. Patman's 20,300 acres offer

a brand of fishing that appeals to those who want to have fun and put some fish in the frying pan. Janssen said the lake has an unbelievable number of channel catfish, mostly good frying size, along with strong populations of crappie and white bass. "Patman is a fertile lake with fluctuating water levels, which may cause it to be only a fair largemouth bass lake," said Janssen, "but you can hardly put a hook in the water without catching a catfish." The park is situated on the south shore of the lake. From Atlanta, take State Highway 77 west and turn right on FM 96. The number is 903-796-6476.

Pine and hardwood forests provide the backdrop for fishing at Martin Creek Lake in Rusk County southeast of Longview. The 5,000-acre power

One of the prettiest state park and reservoir combinations in Texas is Inks Lake State Park and lake northwest of Austin. One of the Highland Lakes chain of reservoirs, Inks Lake, below, has clear water and shoreline of granite bills to make fishing for largemouth, Guadalupe and striped bass a special treat.

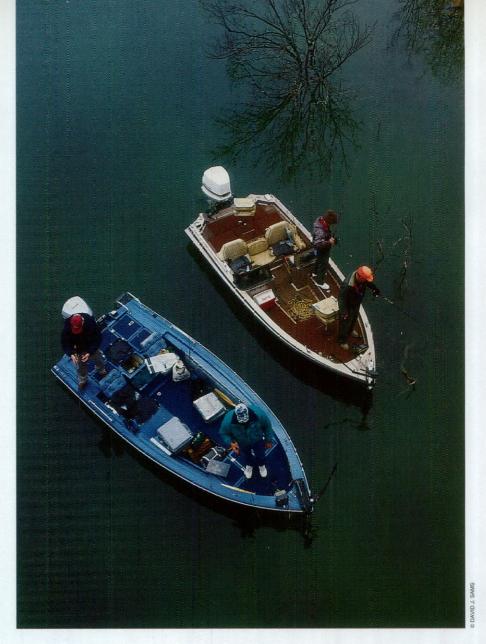


State parks on major reservoirs offer plenty of boat launching and docking facilities, so owners of bass boats, right, and other larger-sized craft can easily get on the water for a day of fishing. Most of the parks also have fishing piers for those without boats.

plant cooling lake has had a turbulent history, with pollution by selenium from power plant operations causing closure of the area for fishing in the early 1980s. The problem apparently has abated since then, but a health advisory still is in effect recommending limited consumption of fish. Be sure to check posted advisories before retaining fish to eat. The pollution apparently had no lasting effects on fish populations, according to TPWD biologist Paul Seidensticker of Jasper, who said the lake is "literally full of largemouth bass." He said electroshocking surveys in fall 1992 turned up as many bass as he had seen in more than 20 vears of survey work in the region. It also has strong populations of crappie, catfish and bluegill, redear and redbreast sunfish. The lake is full of the exotic aquatic weed hydrilla, making fishing tough in the summer and fall when the weeds are thickest. Seidensticker said. Martin Creek Lake State Park has 60 multi-use campsites, 21 screened shelters and other facilities for fishermen, including a boat ramp and fishing pier. From Interstate Highway 20, take State Highway 149 south, turn right on State Highway 43 and left on County Road 2183. The number is 903-836-4336.

Southeast

No list of legencary East Texas fishing lakes would be complete without Lake Livingston. The big (84,000-acre) reservoir located about 75 miles northeast of Houston has produced good fishing for more than a quarter-century. In addition to largemouth bass, crappie and catfish, the lake has been stocked with striped bass. And the Trinity River above the lake is renowned as one of the best, if not the best, white bass fisheries in Texas. Anglers catch large numbers of whites, including



many in the two- to three-pound class, each spring. Lake Livingston State Park is one of the state's larger units, with 2½ miles of lake frontage and almost 150 campsites. A big plus for fishing is the fact that much of the park shoreline is bulkheaded, offering excellent access to river and creek channels for bank fishermen. To reach the park, take FM 1988 out of Livingston, then go west on FM 3126. The number is 409-365-2201.

Lake Somerville barely qualifies as being in Southeast Texas, located roughly halfway between Austin and Houston, not far south of Bryan. The sometimes murky reservoir has had ups and downs both for fishing and water levels during the past couple of decades. Fishing happens to be on the upswing right now because of two straight years of springtime floods, one of which was serious enough to close the Nails Creek and Birch Creek Units of Lake Somerville State Park for a brief period in 1992. TPWD fisherv technician Bill Johnson of Bryan said the floods vastly expanded largemouth bass spawning habitat, and the lake now is heavily populated with one- and two-year-old largemouths, as well as increased numbers of catfish crappie and white bass. Hybrid stripec bass, a traditional mainstay at Somerville, also continue to thrive in the 11,000-acre lake (See "School Days," Texas Parks & Wildlife, March 1993). Somerville is best fished from a boat, as the sloping shoreline is not always conducive to bank fishing. Both the Nails Creek Unit in the lake's upper end, and Birch Creek in the lower end, have camping, boat ramps and other amenities. The number for Nails Creek is 409-289-2392; Birch Creek is 409-535-7763.

B. A. Steinhagen Reservoir is anything but a familiar name to most anglers, even though it's big (13,000 acres) and has pretty good fishing and beautiful surroundings. Perhaps overshadowed by mega-lakes Sam Rayburn and Toledo Bend just a short drive north and east, Steinhagen nevertheless provides superb white bass and hybrid striped bass fishing in the spring, better-than-average crappie and plenty of catfish, according to TPWD biologist Paul Seidensticker of Jasper. Heavy stands of hydrilla and water hyacinth can make fishing and boating a challenge at times, but reasonably good numbers of largemouth bass are sequestered in the weeds, especially around Martin Dies, Jr. State Park, Seidensticker said. Two lighted fishing piers extend into fairly deep water and are sufficiently free of weeds to offer good fishing for crappie and white bass. Seidensticker said if you have a boat, a trip up the lake to the Angelina-Neches Scientific Area is worthwhile to view one of the state's finest stands of bottomland hardwood trees and abundant wildlife. The state park is located 12 miles west of Jasper off U.S. Highway 190. The number is 409-384-5231.

A spot to keep in mind for the future, especially if you live in the Houston area, is Lake Houston State Park on Lake Houston. At press time the park site was under development and open for day use only on weekends. When completed, the park will provide access to the San Jacinto River in the reservoir's upper reaches.

Central

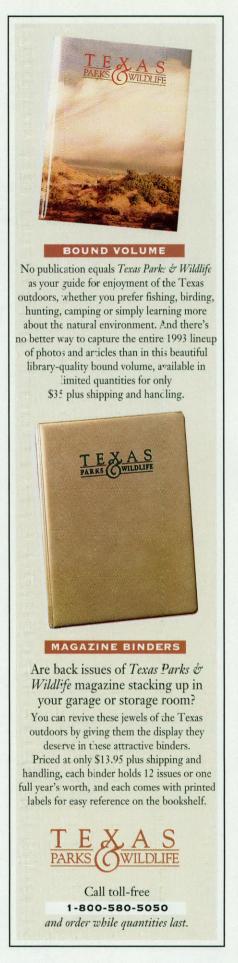
The Highland Lakes on the Colorado River in Central Texas are widely known for pleasing scenery and good fishing. Inks Lake is an 800-acre jewel that offers both. The lake's deep, rocky channels harbor large numbers of striped

and hybrid striped bass. Striper fishing can be fabulous in the lake's upper end, below the Lake Buchanan Dam, during the spring spawning period. Largemouth and Guadalupe bass are numerous in shoreline and vegetated slough areas. Guadalupes, recently named State Fish by the Texas Legislature, are worth fishing for at Inks. Although small (a three-pounder is trophy-sized), the hard-fighting bass will strike a variety of lures, especially crawfish-imitating jigs and crankbaits. Inks Lake State Park has post-oak-shaded campsites, a fishing pier and boat ramp. The park is located about nine miles west of Burnet off State Highway 29. The number is 512-793-2223.

Anglers with big-bass fever should put Lake Bastrop on their short list. The 900-acre power plant reservoir in the Lost Pines region of Bastrop County is one of the lakes earmarked by the TPWD as a quality bass fishery. This means massive annual stockings of Florida-strain largemouths and restrictive regulations aimed at getting optimum numbers of larger fish. Now in effect is a slot limit under which anglers must release bass between 14 and 21 inches in length. They may retain three bass per day shorter than 14 inches, but only one per day over 21 inches. The maximum number is three per day of any legal length. There currently is not a state park at Lake Bastrop, and access is controlled by the Lower Colorado River Authority at its North Shore Park. However, a major state park is being planned for the lake's south shore. Fortunately, Bastrop and Buescher State Parks are located just across State Highway 21 south of the lake, giving camper-anglers an excellent nearby place to stay, with campsites and CCCbuilt cabins under the shade of pine trees. To reach Lake Bastrop's North Shore Park, take State Highway 95 north from Bastrop and turn right onto FM 1441. The number there is 512-321-3307. The number for Bastrop State Park is 512-321-2101, and Buescher is 512-237-2241.

South

Fishing holes are relatively scarce in the southern part of Texas, but at least



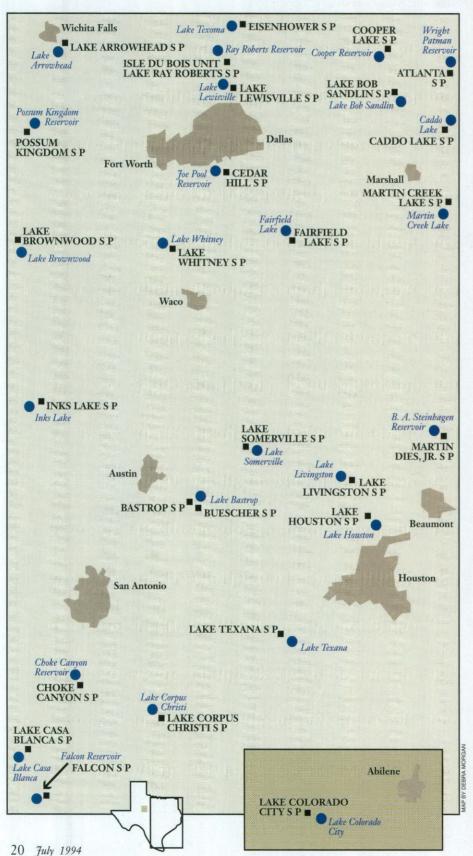
four reservoirs south of San Antonio offer excellent fishing along with state park camping. Choke Canyon Reservoir, located near Three Rivers about halfway between San Antonio and Corpus Christi, has a reputation of being a bit

perplexing to newcomers. Having flooded thousands of acres of timber and brush, the lake simply has so much habitat it's difficult to decide where to fish. But experienced fishermen and biologists know there's no shortage of fish,

especially bass and catfish, in this 27,000acre lake. Choke qualifies as a bona fide trophy bass lake, having produced a 14.66-pounder in May 1991 and literally hundreds of 10-pound-plus fish through the years. It also is one of the finest catfish lakes in the state for trotliners and rod-and-reel anglers who bait areas with soured grain. Choke Canyon State Park offers fine camping facilities in both the larger Calliham unit and the South Shore unit near the dam. Wildlife is a big drawing card at Calliham, with deer, turkeys and javelinas abundant in the park and alligators lurking in the lake's shoreline weeds. The number at Calliham is 512-786-3868, and South Shore is 512-786-3538.

Just a few dozen miles down the Nueces River from Choke Canvon Dam is Lake Corpus Christi, one of the Coastal Bend's best-kept secrets. This 19,000-acre water supply reservoir offers a surprising variety of fishing, but its proximity to the coast may cause many anglers to overlook it. Fishery technician Revnaldo Cardona of Mathis said the lake has a good largemouth bass population, and recent stockings of hybrid striped bass are beginning to pay off in fishing action. He said local anglers borrow the tried-and-true saltwater method of following feeding seagulls to locate schools of hybrids and white bass. Fishing for catfish and crappie is seasonally good, Cardona said, especially for the latter when the lake rises and inundates willow trees and brush. Lake Corpus Christi State Park has camping facilities, boat ramps and two fishing piers. It is 35 miles north of Corpus Christi. From Mathis, go west on FM 1068. The number is 512-547-2635.

The coastal prairie between Houston and Corpus Christi is a flat, mostly treeless agricultural region dominated by rice, cotton and grain sorghum. But Lake Texana State Park near Edna is a shady oasis where live oaks surround spacious campgrounds and line the shores of 11,000-acre Lake Texana. Because of its rather isolated location, and also because of the proximity of the coast (Lavaca Bay is only 15 miles to the south), Lake Texana may not be all that familiar to freshwater fishermen, except for





Lake Whitney offers a wide variety of sport fish, including striped, white, largemouth and smallmouth bass, crappie and catfish. Lake Whitney State Park, left, has complete facilities for camping, picnicking and fishing. It is located west of

local residents. But its shallow, sometimes murky waters contain excellent fish habitat in the form of flooded timber and aquatic weeds such as hydrilla, coentail and water hyacinth, according to Cardona. The lake has good populations of largemouth bass, eatfish and sunfish, and facilities include two fishing piers and boat ramps. The park entrance is on State Highway 111 about six miles east of Edna. The number is 512-782-5718.

Legendary Falcon Reservoir on the Texas-Mexico border has been turning out super largemouth bass fishing for decades, and indications are it may be getting even better. Florida largemouths obviously have done well at Falcon. The lake record 15-pounder (caught, incidentally during the same month, May 1991, as the 14.65-pounder at Choke Canyon) is just one of many weighing in the teens. Even first-time visitors to Falcon State Park can reasonably expect success if they have a boat and the normal amount of skill Most Falcon bass are caught in shallow water around visible brush structure such as flooded willows, blackbrush and mesquite. It's a great off-season destination, since the weather usually is mild in winter and the bass usually become active starting in January. Later in the soring, Falcon anglers sometimes haul their boats to San Ygnacio in the lake's upper end and run up the river for some of the finest white bass fishing in the state. Also, striped bass and catfish are abundant, according to biologist Jimmy Dean of San Antonio, Falcon State Park is located near the cam, which is about 80 miles south of Laredo off U.S. Highway 83. The park's telephone number is 210-848-5327.

West

Eesides having the cutest name, Possum Kingdom Reservoir definitely is one of the most attractive big lakes in Texas. With deep, clear water and rocky, mesquite- and juniper-covered shorelines, the old lake nestled in the Palo Pinto Mountains retains much of its beauty despite considerable shoreline development. And from all accounts. the fishing never has been better. Largemouth, smallmouth, white and striped bass fishing all are seasonally excellent, with crappie, catfish and sunfish thrown in for spice. As an example. the lake has produced a largemouth weighing 16.02 pounds, a smallmouth of almost 61/2 pounds and a 311/2bound striper. Possum Kingdom State Park's 1,724 acres include campsites, six cabins, a store. boat ramps, lighted fishing pier and other recreational facilities. The park is located in Palo Pinto County about 10 miles west of Graford. From Graford, take State Highway 245 west and turn left on State Highway 16. The number is 817-549-1803.

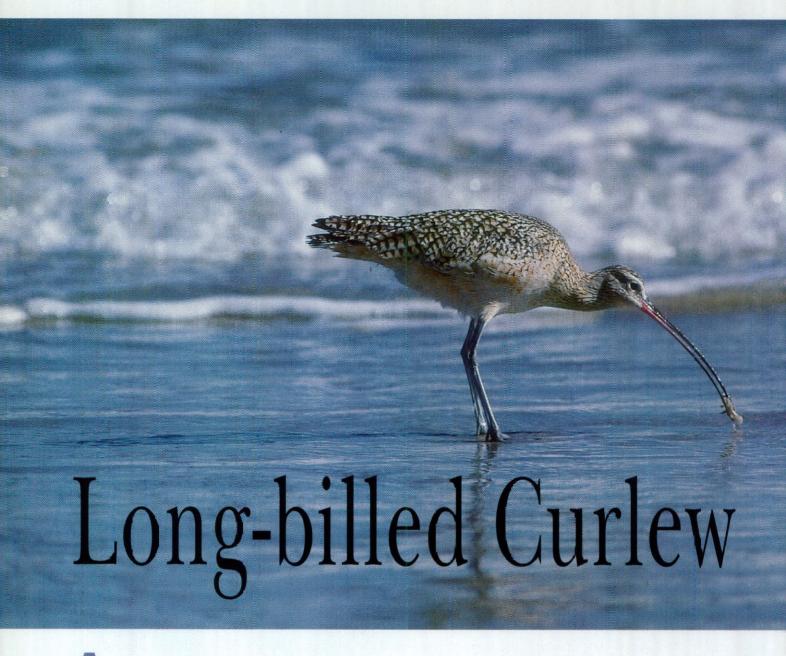
If you haven't fished Lake Brownwood in five years or more, that's too long. This is because, in the opinion of former TPWD biologist Roy Bamberg of Abilene, Brownwood's largemouth bass fishing has improved more during the past five years than

that of any lake of comparable size in the state. This is attributable partly to weather, with five years of high springtime water levels boosting fish spawning and survival, but also because of a special experiment on largemouth bass length limits. Brownwood was one of the first lakes to have a 14-inch minimum length limit on bass, and that minimum was increased to 16 inches in September 1992. Bamberg said angler interview and electroshocking surveys showed there now are more and bigger largemouths than ever before in the 7,300-acre lake, and a bumper crop of white bass as well. Lake Brownwood State Park is a beautiful facility with campsites, 17 cabins, screened shelters and other amenities including a lighted fishing pier. Their number is 915-784-5223.

Laredo residents have a good fishing spot and nice state park to visit right in their back yard. Lake Casa Blanca is 1,100 acres of fine bass, crappie and catfishing, and the park offers picnicking, fishing piers and a boat ramp. Lake Casa Blanca State Park was acquired from Webb County and opened as a state park in 1991. So far, only a few sites are available for overnight camping, but plans call for extensive campsite development in the future (See "Laredo's Secret," Texas Parks & Wildlife, April 1992). The park is located off U.S. Highway 59 on the east side of Laredo. Their number is 210-725-3826.

West Texas anglers don't have to travel to Fairfield in East Texas to catch redfish in a freshwater lake. The popular saltwater fish have been stocked in Lake Colorado City on a fairly regular basis since 1981, including 1993, according to TPWD biologist John Dennis of San Angelo. The warm waters of the 1,600-acre power plant cooling reservoir have provided good habitat for the

Continued on page 52



nyone who has spent much time on Texas beaches observing the amazing variety of bird life probably has noticed the long-billed curlew. It would be difficult to miss. A large, distinctive-looking, and very appropriately named bird, the curlew sports a prodigiously long, sicklelike curving bill that can be more than eight inches long. In fact, the bird is sometimes referred to as a "sickle bill."

On frequent visits to Padre and Mustang Islands I have watched with fascination as this large, stately bird patrols the surf, occasionally plunging the full length of its bill into the sand to snare a tasty crustacean.

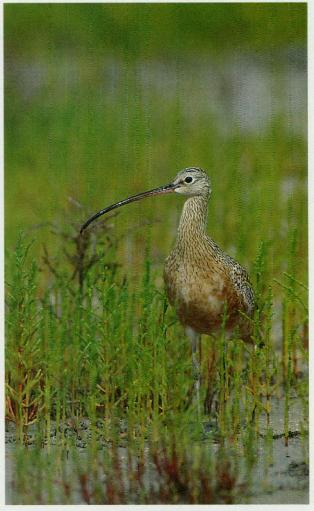
These interesting migratory birds, the largest American shorebird, are members of the sandpiper family. They are a buffy cream color on the breast and flanks with irregular dark brown markings on the back and wings. There are narrow brown streaks on the head, neck and sides of the breast. In flight, a fash of cinnamon shows in the wing linings. Their wingspan can stretch a yard or more and they may weigh up to 1½ pounds.

Long-billed curlews range from southern Canada through western North America to Central America. In Texas they can be found during much of the year, either spending the winter here or migrating through in the spring and fall. Biologists believe the largest remaining population winters in Texas on the lower Laguna Madre.

Although classified as a shorebird, the long-billed curlew really is more a bird of the prairies and great plains. In the last century they ranged much farther east, but the arrival of Anglo settlers and cultivation of the prairies for agriculture greatly reduced their habitat. During Audubon's time, curlews were reported in flocks of thousands east of the Mississippi River, ranging into Michigan and Illinois. Today they are listed by bird experts as rare or casual in the East.



It's easy to spot these coastal visitors as they probe the surf with their curved beaks for a meal of crustaceans.



The appropriately named long-billed curlew spends winters on the Texas coast and migrates torough the state in spring and fall. They breed on remnant prairies in southwestern Canada and the central and western United States.

Long-billed curlews prefer open, grassy meadows, prairies and open beaches where they use their specially adapted bills to forage for insects, worms, snails and small crustaceans. Fiddler crabs are a primary food source along the Texas coast. These crabs live under the sand ir curving burrows, and the bill of the curlew seems especially adapted for proping these burrows. It is assumed that the birds locate the crabs by sound. Curlews usually forage singly or in small groups, moving to prairie grasses, sandy islands or tidal flats at dusk where they roost with other shorebirds.

Newadays, curlews breed mostly on

remnant prairies in southwestern Canada and the central and western United States. They usually lay four or five eggs in a slight depression on the ground lined with grasses. While the female sits on the nest, the male remains nearby to distract predators. Sometimes groups of males will team up to harass a potential predator. Two females have been known to share the same nest. These shared nests may hold as many as eight eggs. In the past, curlews bred in Texas on grassy Panhandle prairies and along the coast, but biologists now believe their production is declining.

Like all shorebirds, the long-billed curlew now is protected, but in the past they were hunted. A close relative, the Eskimo curlew, was hunted nearly to extinct or. Past market hunting and a continuing loss of habitat have resulted in declining populations of the curlew.

The U.S. Fish & Wildlife Service has classified the long-billed curiew in Federal Category II, an indication that the population may be declining and in need of further protection. The best guarantee against further decline is to preserve as much as possible of the remaining prairies and grasslands the curlew needs for nesting

Robert Bunch is a freelance photographer living in Dallas.

Gardening

How much time do you spend mowing your yard? By participating in the Texas Parks and Wildlife Department's Texas Wildscapes Program, you can convert your traditional, manicured lawn into a low-maintenance, wildlifefriendly habitat. "Since we emphasize reducing lawn size and planting native plant species, it not only improves habitat, it's less expensive and easier to maintain," said Matt Wagner of the department's Nongame Program. "Many native plants are hardy and drought-resistant, so they need little or no watering and care. Less lawn means less mowing, plus the joy of seeing wildlife at your back door."

Wildscapes is one of the first major projects of the department's recently expanded Nongame and Urban Program. In 1993, the agency hired urban wildlife biologists for major metropolitan areas. The move reflects an awareness that 82 percent of Texans now live in nine metropolitan areas, according to census data. Wagner envisions individual wildscapes that involve both public and private properties. By following the department's suggestions, you can create a beautiful, easy-to-care-for landscape for your home, school, community park,

church, or business and enjoy the company of many wildlife species year around.

The Wildscapes program is modeled after the National Wildlife Federation's Backyard Wildlife Habitat program, which began in 1973 as a way to acknowledge the efforts of those who already were gardening for wildlife and to encourage others to consider a new land-

No. 1900

scape. "The Federation is concerned that as we become more urban and rely on television for our information about nature, we're losing contact with the real world," said Craig Tufts, program director. "We need to be able to reach out and touch the real thing."

Tufts emphasizes that even small properties can become valuable habitats. "My own yard, Habitat #2364, is less than a quarter acre," he said. "But six years of work, including the planting of over 300 shrubs, trees and flowers, has provided habitats for many feeding and nesting birds. My kids enjoy going on critter hunts, discovering insects and spiders, surprising turtles and frogs, and watching cottontail rabbits grow bigger on the clover in our lawn."

According to Wagner, the habitat does not even have to be a yard. "Even apartment balconies can qualify as a Wildscape if people provide a bird feeder, some water and plants," said Wagner. "If you provide food, water and cover, you'll have wildlife at your back door."

You can begin creating your own habitat by ordering the Texas Wildscapes information packet from Texas Parks and Wildlife. The \$15 pack-



for Wildlife

by Elaine Acker Albright

et includes: booklets on butterfly and hummingbird gardening written by staff biologist Noreen Damude; Craig Tufts's book, "The Backyard Naturalist;" a color brochure on ornamental trees produced by the Native Plant Society of Texas; information on feeders; nest box dimensions; lists of native plants; and an application form.

After receiving the information, you can analyze your existing space and identify positive elements such as plants that provide food (seeds, nuts, and fruits, which feed both squirrels and birds) or shelter (dense shrubbery provides an important protective cover). If they do not pose a hazard, dying trees should be left standing to provide a nesting area

for woodpeckers, bees, birds or flying squirrels.

You also should make note of possible improvements such as adding water or nesting sites. Water sources can be as simple as a birdbath or as elaborate as a pond. Bird houses can be purchased commercially, or constructed easily from inexpensive materials to accommodate several species of birds or even squirrels and bats.

After designing your habitat, submit the completed application form and a rough sketch of your yard to the Texas Wildscapes Program. The department will review your application, and upon approval, you will receive a certificate of achievement and a decorative green and white sign to designate the site. The Wildscapes application fee not only pays for the program, it helps support nongame education, management and research throughout Texas.

Urban sprawl affects more and more natural habitats every year, and research and habitat restoration is critical to the survival of many species. "Most of us are looking for something in our lives that will make a difference," said Tufts. "Urban America is simplifying the ecosystem. We want to encourage people to look beyond the bird feeder in the habitat mix and focus on biodiversity. When the program began, there was a strong, although not exclusive, emphasis on birds. But with the popu-



Elements of a successful backyard habitat include plants that provide food, plants that provide shelter, and a water source, left. Use native plants when possible, as they require less water and are more disease-resistant than nonnatives. A purple finch, above left, and a hackberry butterfly, far left, are among the creatures a backyard habitat can attract.

larity of butterfly gardening and water gardening, there also are opportunities to attract reptiles and amphibians."

Since 1974, the National Wildlife Federation has certified 450 Texas sites. In comparison, South Carolina leads the country with more than 1,000 registered habitats. Tufts attributes South Carolina's success to an active local partnership with garden clubs, a philosophy the Texas Parks and Wildlife Department is mirroring as it works with gardeners, native plant clubs, schools and city park departments. Since its inauguration a few months ago, the Texas Wildscapes Program already has certified nearly 400 sites.

"Local agencies can provide specific regional information," said Tufts. "What works in Tucson won't work in Corpus Christi or New York City. Look at Texas. It has 10 or 11 physiographic regions, all with different needs. The information has to be much more specific than we can provide."

"That's where our program comes in," said Matt Wagner. "We can provide information that is tailored to fit each of the regions in the state, whether it's El Paso, Brownsville or Beaumont. In each case, we provide a recommended list of plants tailored to each

of the ecoregions in the state."

Valuable regional information also is available from local nature stores and native plant growers. Martha Henschen and Jim Powell own the Chickadee Nature Store in Houston. "We have a unique opportunity to guide our customers, not only in plantings, but with the selection and placement of feeders and birdbaths, and maintenance," said Henschen.

Her own yard, situated in the middle of urban Houston, includes a 15- by 30-foot pond, which occasionally hosts a green heron. "In the deeper areas of the pond, I planted water lilies," said Henschen. "I also grow spider lilies in pots in the water. If you don't put the lilies in pots, they tend to run all over the pond. Around the edges, I planted sedges, cardinal flower, four different species ofiris, and pickerel weed." The deepest part of the pond is 24 to 27 inches deep, while the rest of the pond is one-foot deep or shallower. Birds prefer shallow water for drinking and bathing, and you can create a shallow area by adding gravel or large stones to one section of the pond. To attract birds, the water should be no



more than two or three inches deep so the birds can see the bottom.

If you're just beginning to garden for wildlife. Henschen's advice is to read. "Butterfly Gardening for the South" by Geyata Ajilvsgi is thorough, wellresearched, and especially suited for novices. "Native Texas Plants: Landscaping Region by Region" by Sally and Andy Wascwski provides detailed recommendations for every vegetational region of Texas. Color photographs illustrate Texas's diverse selection of ground covers, grasses, annuals, biennials, perennials, shrubs, ornamental trees, conifers, shade trees, vines, and water and bog plants. More than 20 diagrams suggest specific designs for various regions. The book also includes a list of organizations dedicated to native plants, an extensive bibliography, and a list of public native landscapes statewide where you can view many species of plants suitable for your own yarc.



"Locate a native plant nursery where you can feel confident you're getting good advice and good plants," said Henschen. "I like to emphasize native plants because they provide a natural balance in the ecosystem." Native plants are more resistant to diseases and require less water than nonnatives. And it is important to obtain healthy plants from nurseries, because digging plants in the wild usually is illegal and the plants rarely survive.

Some native enthusiasts prefer to gather seeds. Collecting seeds along the highway is not illegal as long as the species is not endangered, and it is the responsibility of the gatherer to know the species. "Seed collecting is fun and can become a kind of addiction," said Henschen. If you do gather seeds, never take more than a few seeds from a single population. This will preserve the plant's natural habitat and will prevent depletion of the resource.

Dorothy Mattiza is a native plant grower who owns Gunsight Mountain Ranch and Nursery in Tarpley. She specializes in container-grown native plants indigenous to the Hill Country and other regions of Texas. "Sterile lawns appeal to sparrows, cockroaches and mice," said Mattiza. "But Texas is so rich in flora; we have 5,000 flowering plants that attract both resident and migrant species all year long."

Mattiza warns that creating a habitat may require a change in attitude to handle things traditionally considered "undesirable." "You can't run for the poison every time you see an insect, squash every caterpillar, or grab the hoe every time you see a snake," said Mattiza.

She also emphasizes that excessive pesticide use has a negative effect on the entire food chain, including beneficial species such as lizards and ladybugs, and on the birds that prey on them. "Wasps and spiders are important, too," she added. "People need to know that only two spiders are harmful—the brown recluse and the black widow-and you're more likely to find those in the garage than in the garden." Mattiza suggests purchasing a snake guide book and teaching children how to react to snakes.

Educating children is an important aspect of both the Texas Wildscapes and Backyard Wildlife Habitat programs, whose staffs hope to work more closely with schools to create demonstration gardens. Demonstration sites currently are being developed at Sheldon Wildlife Management Area in Houston,

and at Cedar Hill State Park south of Grand Prairie. Additional sites are planned in other cities to allow the public to observe the habitat firsthand. The joy of experiencing nature with your children or grandchildren, however, is as close as your own back yard.

Peggy Pinson, who received her Backyard Wildlife Habitat certification from both the Wildscapes Program and National Wildlife Federation in 1993, originally created her habitat for bees, hummingbirds and butterflies. The Longview resident's yard now hosts nesting rabbits and a flying squirrel, which she spoils with peanuts. "I love it," said Pinson. "People don't stop and smell the roses anymore. My grandchildren come over and we sit, drink mint tea and watch the animals. We just have a typical yard in an urban neighborhood, but we're doing everything we can to help the wildlife."

Elaine Acker Albright is a Houston freelance writer who shares her backyard with gray squirrels, raccoons, opossums and more than 15 species of birds.

FOR MORE INFORMATION

If a Wildscape habitat is in your future, you can begin by requesting more information from one or all of the resources listed below.

For more information on the Texas Parks and Wildlife Department's Texas Wildscapes Program, write: Nongame and Urban Program, 4200 Smith School Road, Austin, Texas 78744, or call 1-800-792-1112

For more information on the National Wildlife Federation's Backyard Wildlife Habitat Program, write: 1400 Sixteenth Street, N.W., Washington, D.C. 20036-2266, or call 1-800-432-6564.

If you enclose a self-addressed, stamped envelope, The Chickadee Nature Store will send you a bibliography and a list of plantings that attract wildlife, including a specialized list for butterflies and humming birds. You also can order "Butterfly Gardening for the South," by Geyata Ajilvsgi (\$34.95, hardcover, plus \$2 shipping and handling) or "Native Texas Plants: Landscaping Region by Region" by Sally Wasowski (\$27.95, softcover, plus \$2 shipping and handling). Write: The Chickadee Nature Store, 1330-R Wirt Road, Houston, Texas 77055, or call 713-956-2670.

The Native Plant Society of Texas is a nonprofit organization dedicated to education, research, conservation and preservation. Recent publications include "100 Texas Wildflowers," written by Dorothy Mattiza (\$9.95 including shipping and handling), and "Texas Natives" (\$3 including shipping and handling), a guide to selecting, planting and maintaining 32 species of ornamental trees. Both publications are illustrated with color photographs. To place an order or to request membership information, write: P.O. Box 891, Georgetown, Texas 78627.

Dorothy Mattiza and the Gunsight Mountain Ranch and Nursery can be reached at Box 86, Tarpley, Texas 78883, 210-562-3225.



McKittrick Canyon and the surrounding Guadalupe Mountains are long on scenery and short on crowds.

made history in the Guadalupe Mountains-sort of.

While changing campsites at isolated Dog Canyon, I accidentally left my lantern hanging on an alligator juniper tree. During the day, while I was hiking, picnickers apparently took the lantern. When I reported it to the ranger that afternoon, he took an uncommon interest. It was, he said, the first such incident at Dog Canyon.

A dubious distinction, maybe, but that's how it is in the Guadalupe Mountains. This majestic national park, just 40 miles from Carlsbad, New Mexico, is so overlooked that a missing lantern makes news.

But a lantern is a small price to pay for the wonders of the Guadalupes. This least visited of all national parks is an isolated outpost of wilderness thrusting upward from the rolling rangeland of West Texas. Within its boundaries are some of Texas's finest hiking trails, and a bevy of birds found nowhere else in the state.

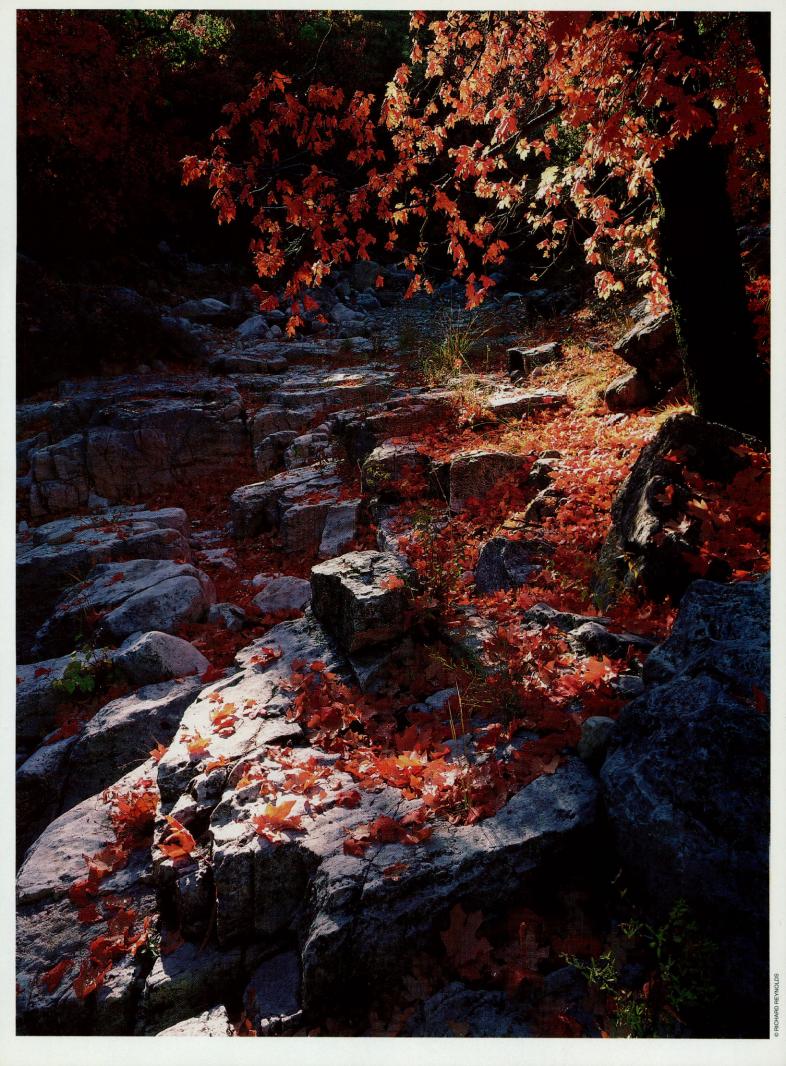
As you approach from the south on State Highway 54, the Guadalupe Mountains first appear on the horizon not far out of Van Horn. Rising from the rugged Chihuahuan Desert, they dominate the skyline for miles. The desert landscape hardly would suggest that these mountains once were a massive reef in an inland sea. The sea long since has receded and most of the ancient reef is underground, but it is exposed in lofty grandeur at this spot on the Texas-New Mexico border.

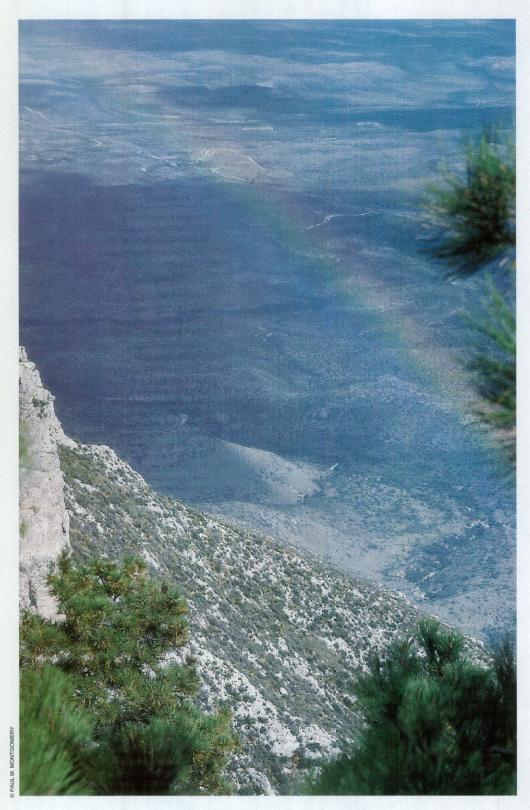


Previous page: Looking down on El Capitan Peak at sunset from Guadalupe Peak.



pleasant all day.





A mountain: thunderstorm brings showers and a rainbow to the Guadalupe Mountains.

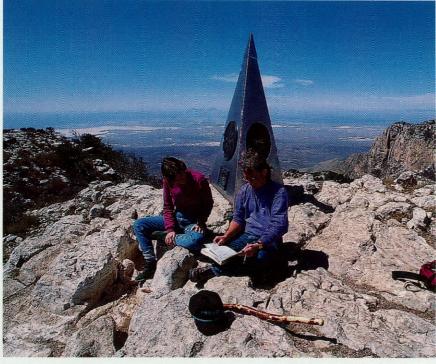
he Guadalupe Mountains were a sacred site for the Mescalero Apaches long before any white man ever saw them. For white settlers, the mountain range was just the "high place" on the Butterfield Stage route. In 1948, it lost out to Big Bend as Texas's first national park, but in 1972 it was added to the National Park System.

The National Park Service thus has preserved some of the region that was so revered by the Mescaleros. More than half the park's 86,415 acres is designated wilderness area. There are no roads through the park; if you want to see it, you have to go on foot or horseback.

Two campgrounds are accessible by road, Pine Springs and Dog Canyon. Pine Springs, near the main entrance, is the most frequently used. In spite of the inviting name, shade is scarce. Summer temperatures are hot during the day, but thanks to the 5,840-foot elevation, nights are cool. Pine Springs is the trailhead for numerous hikes, including the strenuous walk to the top of 8,749-foot Guadalupe Peak, Texas's tallest mountain.

With 80 miles of trails in the park, hiking is rewarding. Most of the trails start out under blistering sun and scrubby shade, but if you persist you soon will climb into the high country, where fresh breezes and tall pines provide relief from the heat. Vegetation can change with each turn of the trail. Hardy hikers who reach the "bowl," a forest of Douglas firs, ponderosa pines and aspens at 8,000 feet, enjoy an experience

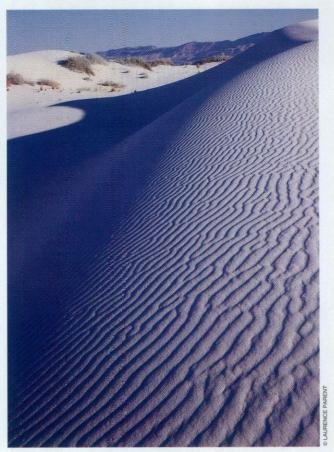




Douglas f:rs grow tall beneath Hunter Peak, above. The bike to the top of 8,749-foot Guadalupe Peak, left, is strenuous, but the view is spectacular. The metal pyramid commemorates the postal service and airlines.

unmatched in Texas.

Elevation is not the only factor that lends variety to the Guadalupe landscape. Occasional water transforms the desert into an unexpected oasis. Smith Spring, for example, can be reached by a 2.3-mile trail that begins at Frijole Ranch The trail winds through a hostile landscape of desert plants, but just when you are thirsty and exhausted and ready to turn back, you hear the sound of flowing water. A bend in the trail



Shimmering white gypsum dunes lie at the western flanks of the Guadalupe Mountains.

takes you into a shady sanctuary where the only sound is a spring bubbling up from the mountainside.

uch springs long have been gathering places for life in the Guadalupe Mountains. A century ago, you might have come upon a band of Mescaleros drawing water from this spring. Today, you are likely to see birds and perhaps some of the park's many mule deer.

The perennial flow of McKittrick Creek is responsible for what has been called the most beautiful spot in Texas. McKittrick Canyon can be explored by an easy, seven-mile trail that begins at the McKittrick visitor center. It is 2.5

Missing Some Issues?

Believe it or not, there are a few TEXAS PARKS & WILDLIFE subscribers who have kept every issue since the inaugural one published in December 1942. Your collection may not go back that far, but if it's missing some issues you still can fill the gaps by calling toll-free 1-800-937-9393.

Here a few examples of back issues that contain articles and photos that are just as interesting now as they were when first published.

March/April 1986

The special hard-cover Sesquicentennial issue celebrates Texas' 150th birthday with essays and photos chronicling the changes in land, wildlife, waters and people during the state's first century and a half. - \$3

Diving in the Desert... Spring Power - Wimberley's Cypress Creek... Texas Swimming Holes... Daingerfield State Park... Life on the Lomas - The Threatened Texas Tortoise — \$5

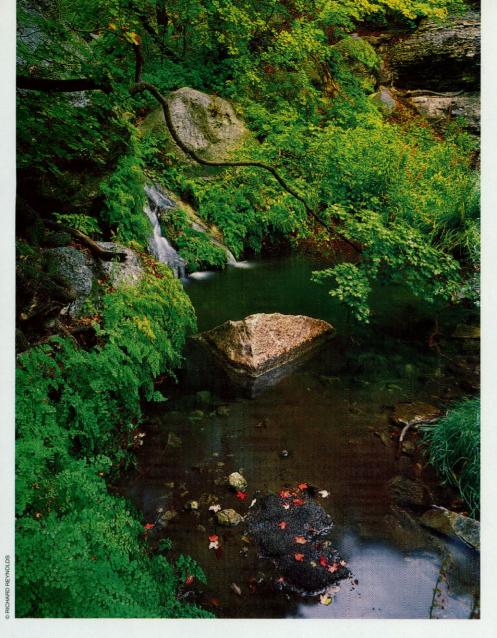


December 1992

This 96-page Golden Anniversary issue salutes our 50 years of publication with an essay by the renowned writer John Graves and pictures from the state's foremost nature photographers. — \$8

May 1993

Springtime Pyrotechnics - The Beauty of Spring Storms... Neotropical Birds in Trouble... Gorman Falls... Colorado Bend State Park... Backyard Camping — \$5





miles to Pratt Cabin, a stone cottage built in the 1930s by Wallace Pratt, a rancher who donated much of this land to the National Park Service. From Pratt Cabin, the trail winds deep into the canyon among towering pines and sheer rock walls. As you stop to admire a waterfall, or look up at the towering rock walls, you may forget you are in Texas.

The park is home to nearly 300 bird species, many of them Rocky Mountain varieties found nowhere else in Texas. We quickly added Say's phoebe, the phainopepla, acorn woodpecker, common titmouse and western tanager to our lists. My wife practically was attacked by a broad-tailed humming bird one day when she was wearing a shirt the same color as the blooming flowers of the cholla cactus.

Dog Canyon, the park's other campground, is accessible by road, but you can't get there on a Texas highway. You have to go northeast on US 62-180 into New Mexico, past Carlsbad, then turn to the southwest on a road that goes nowhere but Dog Canyon. It is a 53mile trip, one way. You are not totally cut off from civilization when you leave 62-180, however. Tiny Queens, New Mexico offers a store, restaurant and gas station, and Sitting Bull Falls makes for a pleasant side trip.

We had no idea what to expect as we approached Dog Canyon. We only knew that, after driving 53 miles to get

Lush vegetation surrounds Smith Spring, above, which can be reached by a 2.5mile trail. Stone ruins, left, remain as a monument to the Butterfield Stage Route Station that was established in 1858 at what now is the town of Pine Springs.

there, we were going to spend at least one night. We were not disappointed. The shady campground stands at the foot of an imposing wall of mountains, and the 6,300-foot elevation keeps temperatures pleasant all day. There was no problem getting a campsite —only one of the 15 spots was occupied.

Trails from the Dog Canyon campground lead to Lost Peak, the Bowl, McKittrick Canyon, Bush Mountain and Pine Springs. From a vast meadow of undulating, waist-high prairie grass a living reminder of what the area was like before ranching—the trail turns to the left as it enters a genuine wilderness area, where chances are good you won't see another hiker.

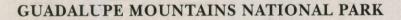
The Lost Peak trail climbs more than

1,400 feet to the edge of the high country. When you reach the top, you are standing on the edge of a vast, pine-covered plateau. The trail beckons you onward, but we were tired, and still had a long way to go back to camp.

On the way back we stopped to watch a western tanager, colorful as a lollipop, playing among the branches of a dead tree. Brilliant against a blue sky, it was a perfect symbol of the special qualities of the Guadalupe Mountains—spectacular, beautiful and unique in Texas.

It was well worth the price of a lantern.

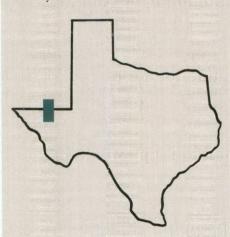
Joe Crisp is a minister and freelance writer living in Victoria.



Location 50 miles north of Van Horn on State Highway 54; 55 miles southwest of Carlsbad on US 62-180. 115 miles from El Paso. 170 miles from Midland.

Fees No entrance fee. Camping fees at Pine Springs and Dog Canyon.

Camping Two campgrounds accessible by road, P.ne Springs and Dog Canyon. Both have water and flush toi-



lets. Pine Springs has 20 tent sites and 18 RV sites, no hookups. Dog Canyon has 15 tent sites and some RV sites. Camping is permitted at several backcountry camping sites. Wood and charcoal fires are not permitted in any campground.

Open Year around.

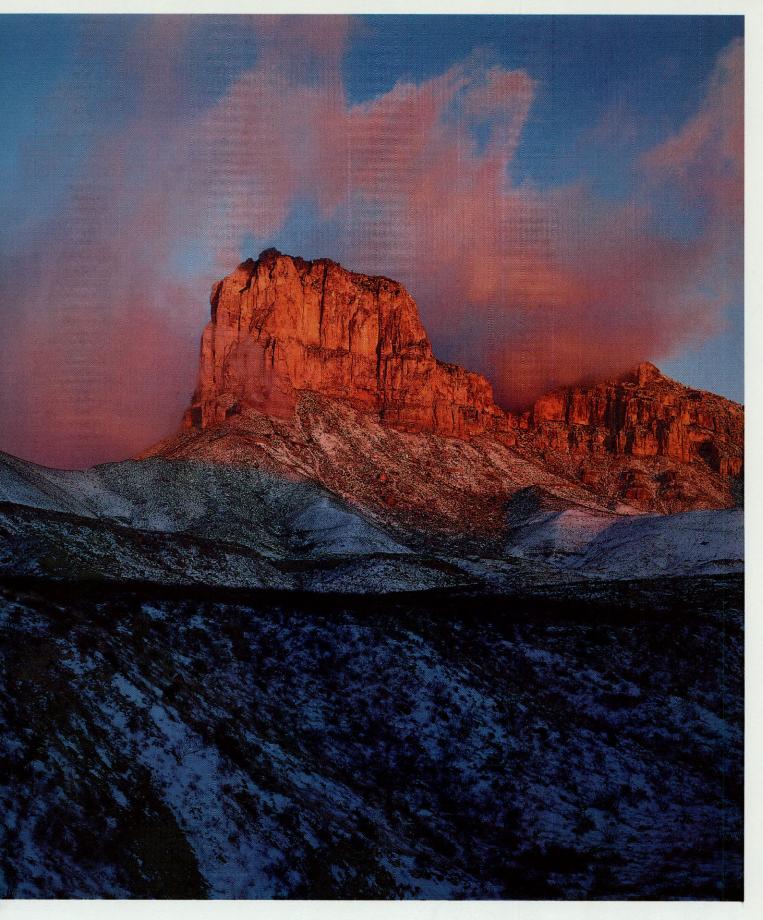
Hiking More than 80 miles of hiking trails. Trails range from a few hours to all day. Guided hikes into McKittrick Canyon are offered every day.

Visitor Center Main visitor center is at Pine Springs. A visitor center is also located at McKittrick Canyon.

Climate Warm in summer, with pleasant nights. Winters can be cold, with occasional snow. Guadalupe Pass is famous for high winds, especially during the spring.

For information Call 915-828-3351





 $\label{lem:condition} \textit{El Capitan}, \textit{the national park's most recognizable landmark}, \textit{glows in the reflection of the rising sun} \;.$

INDIAN LODGE

From the high terrace you can watch the colors of dawn change from soft violet to brill:ant gold, finally spilling over the ridge to create patterns of light and shadow on the 60-year-old adobe walls of Indian Lodge. Only the whisper of an early morning breeze and the chatter of birds in Keesey Canyon break the stillness of your surroundings.

This view encompasses juniper-peppered slopes rising on each side of the valley where oaks along the creek form a curving band of green. On beyond, the break between the ridges offers a glimpse of Limpia Canyon, and above it all rises the spacious dome of the West Texas sky. Except for one or two small park structures, the lodge's isolation seems complete.

Later this covered terrace makes a great place to experience the drama of a summer thunderstorm or the pastel reflections on giant cumulus clouds as the sun sinks low behind you. It also provides a bird's-eye view of the heated swimming pool with valley and mountains beyond.

You might call Indian Lodge in Davis Mountains State Park one of Texas's best-kept secretsexcept when you discover that weekend reservations often must be made weeks in advance, especially over holidays. Although located some 200 miles east of El Paso and about 150 miles southwest of Midlanc/Odessa, the lodge, with its 39 guest rooms, has become a favorite destination for families, artists, photographers, bird watchers, astronomers and anyone else trying to escape urban life.

Indian Lodge presents a taste of the Old West with a touch of Mexico. In the original section, adobe walls are 18 to 22 inches

thick. The 15 guest rooms are furnished with hand-carved cedar furniture, embellished with Southwestern Indian motifs. "These pieces were built by Civilian Conservation Corps craftsmen in Bastrop State Park and shipped to the Davis Mountains," said Angela Ernhart, assistant lodge manager. "Each room also has a fireplace, now decorative only, and some have traditional adobe-beamed ceilings lined with reeds from the Rio Grande near Big Bend."

In the lobby adjacent to the balcony terrace, two huge fire-places anchor each end of the 27-foot by 40-foot room. Ponderosa pine trunks that support the 10-inch ceiling beams come from near the Davis Mountains Scenic Loop.

The CCC at Fort Davis built the original lodge, beginning construction in 1933. Architect Bill Caldwell selected the rambling pueblos of New Mexico as his theme. Adobe blocks were molded on site, just as they had been for cavalry buildings at nearby Fort Davis in the 1880s. In 1967, a restaurant, 24 additional rooms and a swimming pool were added, all designed to blend with the original structure.

CCC workers also cut the five-mile scenic Skyline Drive in switchbacks up the slope of Davis Mountain. From overlooks along this road, visitors have a spectacular view that includes Mt. Locke and the McDonald Observatory, 13 miles distant, and old Fort Davis on the town side of the ridge. A hiking trail, with views of desert cacti and wildflowers in season, also climbs this mountain and leads down to the restored fort.

"One astronomy group went up to the top of Skyline Drive at sunset with their telescopes and stayed until sunrise," Ernhart said. Sometimes they go to nearby Prude Ranch, which has an area that is very dark and is set aside for that purpose. McDonald NO ANTITY NO ANT

Observatory, atop Mt. Locke at 6,800 feet, has "night sky as dark as any in the continental United States," the brochure states. The observatory's Visitors' Center helds star parties where you can look through eight-inch and 14-inch telescopes.

"We have a lot of birding groups that come to the lodge, especially in spring and fall when migratory birds come through," Ernhart said. "Sightings of the indigenous Montezuma quail also are very special." The oaks and junipers along Keesey creek resound with the calls of whitewinged doves in summer. Barn swallows that build their mud nests on the undersides of eaves find haven in the lodge's nooks and crannies.

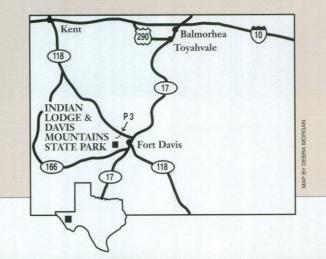
Special events take place throughout the year, often with dinners prepared at the lodge's Black Bear Restaurant. Last fall they served an Oktoberfest meal outdoors on the patio. At a Halloween party in the lobby, entertainment was provided by Jerry Wiant with a wash tub, fiddle and guitar. December brings the Posada and a breakfast for children to meet Santa and Mrs.

INDIAN LODGE

Indian Lodge is located in the 1,869-acre Davis Mountains State Park, four miles northwest of Fort Davis via Texas Highway 118. It can be reached from Interstate 10 via State Highway 118 from Kent or via State Highway 17 at Balmorhea.

The lodge has 39 guest

rooms, 15 of them in the original section. Rates are \$55 a night, double, in the new section and \$60-\$85, double in the original section. Each additional person is \$10 per night. For reservations, call the lodge at 915-426-3969 or write to Indian Lodge, Davis Mountains State Park, Box 786, Fort Davis, Texas 79734.

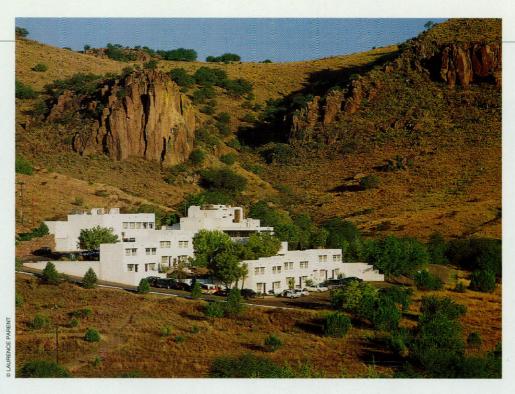


Nestled in the footbills of the scenic Davis Mountains of the Trans-Pecos is Indian Lodge, right, a full-service hotel operated by the Texas Parks and Wildlife Department. Its airy rooms with heavy wood furniture, left, and rugged surroundings make it one of the state's most popular park facilities.

Santa. St. Valentine's Day, Mardi Gras and St. Patrick's Day also call for special celebrations.

Probably the most unusual events are the lodge's "mystery weekends," an idea borrowed from New England inns by former manager Michael Crevier. Guests act out clues from a script, and on Saturday night the group solves the mystery. Several of these have been scheduled throughout the year. The lodge's new manager, Jerry Cooper, plans to continue this trend. "We will be scheduling all these events and probably adding some new ones, too," he said.

If you enjoy sightseeing, you



can visit the restored buildings of Fort Davis National Historic Site, as well as the town that grew up beside it. Or take the 74-mile Scenic Loop that makes a complete circle of mountains rising to Mt. Livermore's 8,382 feet (the second-highest mountain in Texas). It also includes a look at

McDonald Observatory, with a turnoff that takes you to he top.

For a few days' escape in a m le-high climate, Indian Lodge offers impressive scenery, rooms with a western flair, good food and a variety of things to see and dc. Or, for those who prefer to do nothing but relax, the high

terrace overlooking the valley serves as an ideal location. From that vantage point, Indian Lodge can enfold you in a feeling of serenity and uncluttered space. It has lured visitors to this mountain setting for more than a halfcentury.

by Ann P. White

Village Creek State Park Open For Camping

Village Creek State Park, featuring Big Thicket scenery and access to wild and unspoiled Village Creek, now is open for visitation on a full-time basis.

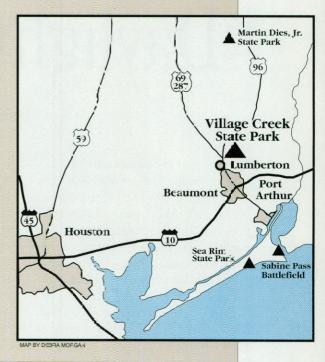
Located on the eastern edge of Lumberton in Hardin County, the park is only 10 miles from Beaumont and 90 miles east of Houston.

Superintendent John Parker said opening of the 1,000-acre park should make Village Creek, already a favorite with canoeists, even more popular for float trips through the thick hardwood bottomland. "Village Creek is one of the few remaining streams in East Texas that has no dams and, because of flooding, the shoreline has very little development," he said.

Canoeists have several options for using the park for float trips. They can put in upstream from the park at any of three road crossings. A downstream take-out point is on the Neches River in the Big Thicke: Preserve.

Facilities include 25 campsites with water and electricity, 17 walk-in tent sites, 15 primitive campsites, group picnic pavilion, group facility with kitchen, 10 miles of hiking trails and a canoe laurching area.

For information, call the park at 409-755-7322. To reserve facilities, call 512-389-8900.





Daylight Flash

by Leroy Williamson

or daylight pictures that sparkle, try using flash as your fill or main light, even when the sur is shining brightly. With today's smart cameras, on-board metering systems can balance the daylight/flash combination to provide correct exposure automatically both for ambient and flash light sources.

Why would anyone want to use a flash when there is plenty of light for pictures without it? There are many daylight photographic situations when a flash not only makes a picture better, but getting a good picture without a flash would be impossible. Contrasty lighting situations can be controlled with flash, subjects in heavy shade become brilliant when flash is used, and fill flash can lighten shadows, providing a more pleasing picture.

For years, I have made it a rule to take the flash off the camera for good flash pictures. But, as you know, there are exceptions to every rule, and using the flash on-camera in daylight works

well in many situations. Even though there are times when an off-camera flash would provide better lighting, for the sake of convenience and ease of use, a flash mounted directly to the camera might be preferred, with results that are more than satisfactory.

In the past, using fill flash in daylight was severely limited. With a top flash sync shutter speed of 1/60 second on older cameras, two immediate problems were encountered. Often the 1/50 second shutter speed was not fast enough to stop the action being photographed. The other problem was even more serious. A compulsory slow shutter speed required a small aperture in bright daylight, thereby limiting the range of the flash to extremely short distances and making flash impractical. Also, with older cameras, the photographer had to determine the proper exposure to balance the flash with ambient light.

Today's technology makes flash sync speeds of up to 1/250 second common. In addition, the metering systems and small computers built into modern cameras make it easy to mix flash and daylight, automatically getting the correct exposure for each and resulting in some of the most pleasing pictures you can imagine.

It's possible to use the sun as your main light, letting the flash fill shadows. Or you can make your flash the main light and let the sun become the fill. For dramatic backgrounds with dark skies, a one-stop underexposure for the available light can be programmed, while the camera provides correct flash exposure on the foreground.

Many of today's cameras have totally automatic operation when a flash is attached. Even though the flash is on, the camera's computerized exposure system determines whether or when the flash will fire. Of course, there are overrides, making it possible for the photographer to assure flash at the touch of a button.

With the fast fine-grained films now available, gone are the days when your flash ran out of light at 15 or 20 feet. Depending upon lens aperture, maximum effective flash distances easily can extend to 100 feet or more. For example, a camera loaded with ISO-400 film and a maximum lens aperture of f/2.8 will have an effective flash distance of 130 feet when equipped with a

The white-winged dove on the opposite page was in shade, but the camera's meter read the bright sky behind the bird. Compensating for the shade with a oneor two-stop increase would make the sky go white. This photo was taken with a flash, so the camera's exposure system read the ambient light as well as the light from the flash. In the photo at right, the bee's eye reflects a catch-light from the flash. The dark background is lightened slightly by the flash, and lighting on the bee is excellent.

powerful shoe-mount flash.

When to use daylight fill flash is a matter of personal preference. If the camera and flash are operating in the totally automatic mode, the flash will fire only when the metering system detects contrasty or low-light situations. Personally, I prefer to make the decision when to use fill flash, rather than leaving the choice up to the camera.

Fill flash works great on people (and animals), making shadows lighter and putting a sparkling catch-light in the eye. Actually, the catch-light in the eye is a reflection of the flash, but it does add a nice touch to the photo. When photographing people wearing hats or caps, fill flash will light the shadow area, revealing bright eyes rather than the black shadow and no eyes beneath the brim of a non-flash-filled photo.

One culprit of the shoe-mount flash is our old enemy, red-eye. Red-eye is a result of the flash and lens being too close together and the subject looking directly at the camera. Some shoemount flashes are tall enough (providing greater separation between lens and flash) that red-eye is unlikely. However, to be on the safe side, have your subject not look directly at the cam-

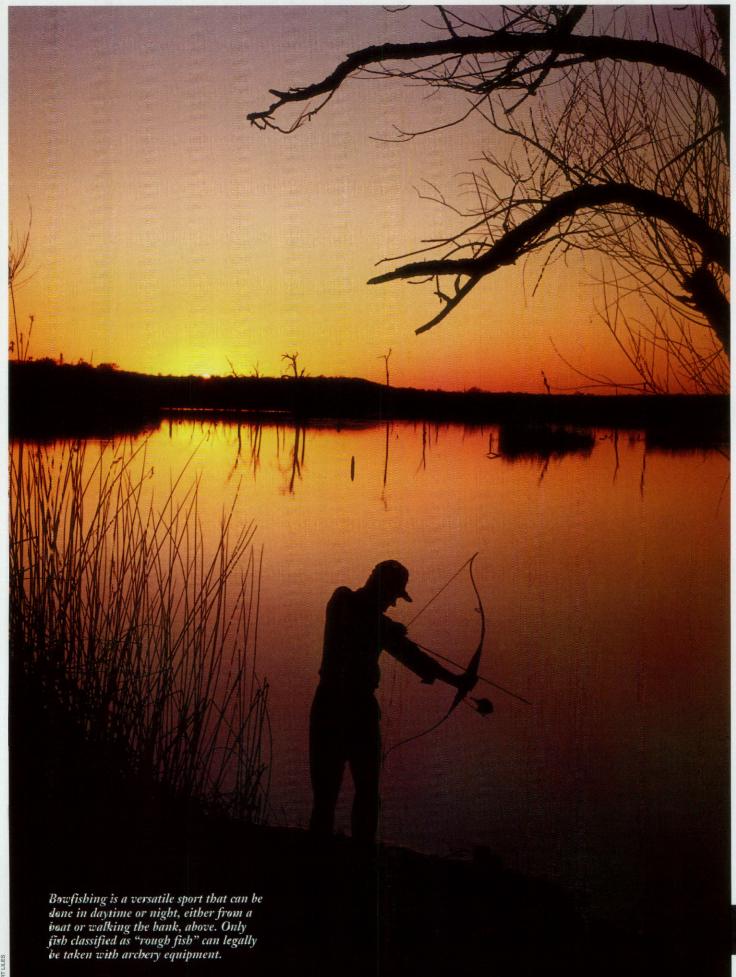
Another time to use fill flash is when your subject is in the shade and the background is brightly lit. Fill flash in this case will provide adequate light for the shaded area and balance the subjectbackground exposure to provide a more pleasing photo.

Fill flash often is desirable when photographing small subjects with a macro lens. When using a 100mm or 200mm macro lens, an on-camera flash will work fine as long as there is some distance between the camera and subject. However, when focusing at the closer distances, the flash and lens are on different planes, and light from the flash no longer will hit the subject. To properly light close macro subjects, it is necessary to work with the flash off-camera.

If you are looking for better pictures, mount that flash on your camera, even when the sun is shining brightly, and you will get pictures that sparkle.

Leroy Williamson is a freelance writer and photographer based in Bartlett.





n air as clear and sharp as cut crystal, the Choke Canyon cove glowed in colors by Kodachrome.

Vegetation of luminous green framed an aquatic canvas that reflected a sky of brilliant blue and clouds of virgin

It was the kind of scene to give a bass angler palpitations, make him ache to cast a plug right in the middle of the picture.

But get a grip on those goose bumps. The game afloat one hushed morning last August had more to do with Lethal Weapon than any Waltonesque

idvll of angling.

John Steenbeke of San Antonio stood in the bow of his boat, armed and definitely dangerous. He held in his hands the equivalent of rod, reel and fishing line, all configured on a compound bow nocked with a small but wicked-looking harpoon. His stance was so still and intent that he might have been painted onto the colorful background.

Then, without warning, he drew and fired fast enough to rival a gunslinger

in a Peckinpah scene.

The arrow just dimpled the water as it sped beneath the surface. It looked about as innocuous as pitching a pebble into a quiet pond. What followed,

however, was a submarine bomblet blast that sent a geyser of water into

Later in the day the explosions would go nuclear but, for the nonce, Steenbeke was unimpressed. He casually handlined a thrashing fish toward the boat, wrapping loops of braided line around the six-inch diameter, open-face reel on his bow. He soon dropped on the deck a flouncing carp, stuck through and through with the projectile.

According to Steenbeke's rating system, the eight-pound fish was an hors d'oeuvre on a toothpick. He said bowfishermen don't get excited about a carp unless it pushes the 30-pound range. His personal best weighed 31 pounds.

Rather, the middling carp was his opening salvo in demonstrating the action-packed possibilities of bowfishing. Over the next hour or so, the archery instructor and bowfishing guide prowled the shallows of the small cove, loosing arrow after arrow at swimming carp. Snap, zip, boom. Fish after fish.

Needless to say, Steenbeke proved that he doesn't worry about whether the fish will be biting when he heads for one of his favorite lakes. If the water and weather conditions are suitable, he knows he's going to enjoy the kind of action fishermen dream about.

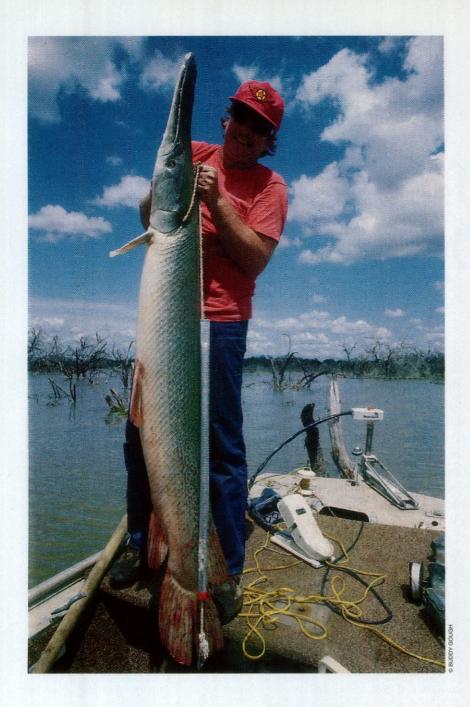
He said it was not unusual for him to release a fishing arrow at swimming targets 100 to 200 times a trip. Nor is it uncommon for his bowfishing clients simply to surrender to fatigue, complaining that their arms are too tired to lift a feather.

Since no game fish can be taken with archery equipment, Steenbeke's targets are limited to rough fish such as carp, buffalo, tilapia and the various species of garfish. Some weekends, he is at Braunig or Calaveras Lakes near San Antonio, zapping large numbers of tilapia, the tastiest of the rough fishes.

More often, he and his clients are after the carp that abound in practically every lake in Texas. They are especially easy pickings when they crowd the shallows during their spring spawning season. They can be seen with their backs out of the water. They can be shot from the shoreline.

They also are easy targets year around in clear-water lakes and rivers of Central Texas. However, Steenbeke showed that the fish readily can be seen in the shallows of stained water lakes such as Choke Canyon and many others in the eastern half of the state. And, that's day or night, too.

Better be ready for action when you fire an arrow at a huge alligator gar.



The first trick is knowing where to look.

"Hunting rough fish is like fishing for bass. You have to find fish-holding structure. Ten percent of the water will hold 90 percent of the fish. When you find rough fish in a certain place, you usually find a lot of them," Steenbeke said. He looks for shallow points in protected coves where there is aquatic forage for the vegetarian carp.

After finding the fish, the next trick is hitting them.

Stalking rough fish with bow and arrow requires an appreciation of how

light refraction distorts the location of a submerged target. A fish is not where it appears to be, and it can't be hit by aiming directly at it. Instead, the fish will be deeper than it looks, and the archer must aim below it. "If the fish looks like it's two feet below the surface, you have to shoot that much below it," Steenbeke said. "With beginners (bowfishermen), I usually put some kind of target on the bottom in shallow water, and have them shoot at it; they get the idea pretty quick."

But, as a climbing sun turned the lake into a steam pit, the archer's patience

with show-and-tell wore out long before his arm.

He had bigger game in mind-alligator gar. With its fearsome teeth and armor-plated hide, the alligator gar is the grizzly bear of bowfishing. This roughest of rough fish grows to 300 pounds or more in the lakes and rivers of Texas. One of the more noteworthy lakes for monsters is Choke Canyon, where a jugline fisherman recently hauled in a 280-pounder. Among bowfishermen, the lake has yielded a 200pounder, just a dozen pounds shy of the state bowfishing record of 212 pounds. Steenbeke said the Lone Star Bowhunters Association keeps a record book for trophy-sized alligator gar. The minimum entry must weigh 50 pounds.

The ultimate game plan on that August day was to hunt down a "book" 'gator gar, preferably one considerably bigger than the 50-pound minimum. Steenbeke said his best so far weighed 138 pounds. "It took five arrows and 30 minutes to get it," he said.

He had planned the Choke Canyon showdown for high noon at the most torrid time of the year. Although some bowfishermen prefer to hunt big gar at night, when they lie near the surface and can be stalked with spotlights, Steenbeke has had good success hunting at midday. The 200-pounder, he noted, was

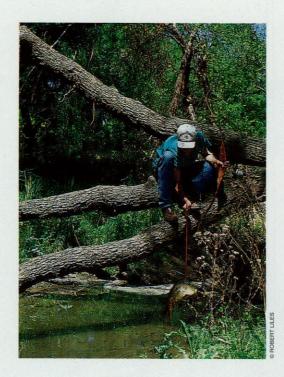
Huge alligator gar like the one in the photo above left can be taken by bowfishermen during the daytime in summer when the big fish lurk in vegetated areas. This one was shot at Choke Canyon Reservoir.

Bowfishing from the bank or other shoreline structures, right, can be productive in the spring when carp move close to the shoreline to spawn. taken in daylight.

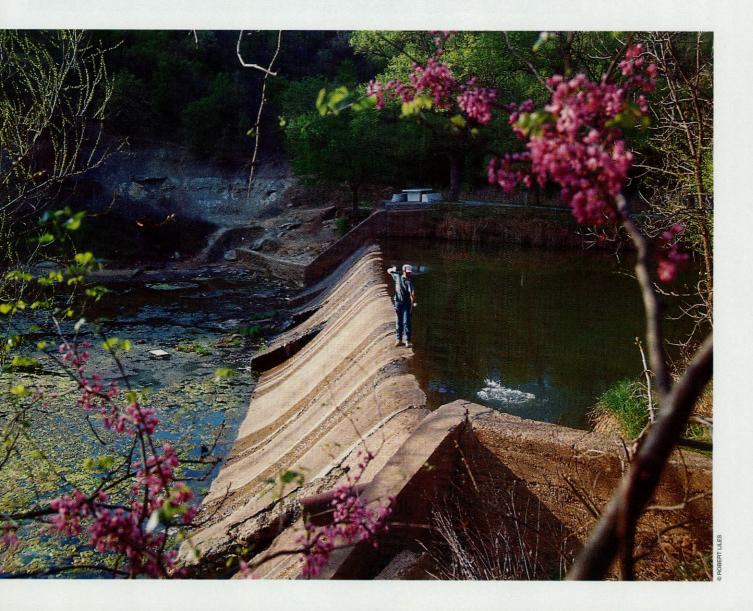
"When it gets really hot and the oxygen level begins to drop on the surface of the water, the gar start rolling on the surface. You can see them from a long way off and move in on them," he said, explaining that the dinosaurlike gar have primitive lungs that allow them to gulp air for oxygen.

When Steenbeke turned his attention to alligator gar, he had a specific area in mind. He had learned from experience that a favored habitat of alligator gar are wide flats, four to six feet deep, near the deeper water of a river or creek channel. He found such a spot about five miles up Choke Canyon's Frio River channel.

Before the lake was impounded, the river-bottom area was a jungle of trees



The bowfisherman at left used a fallen tree as a vantage point for shooting at spawning carp. Standard archery equipment can be converted for bowfishing at moderate expense.





A heavy-duty, closedface spinning reel is the most popular setup for bowfishing, right. The line is attached to the head of a special fishing arrow.

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BOWFISHING FACTS

Popularity

Ken Witt at Bowhunt America in Fort Worth has seen the popularity of bow ishing steadily increase during his 32-year involvement in the sport. He points to the increase in bowfishing tournaments as an example. "We are seeing more tournaments, and more people showing up for them. Some of the bigger team contests now have prizes up to \$7,000 or more."

In addition to archery manufacturers and boat dealers who have a vested interest in the sport, Witt also has noted some unusual promoters of bowfishing. "A lot of lakes want some help with their rough fish populations. That includes many Corps of Engineers lakes. They have biologists who'll help set up bowfishing tournaments, and help powfishermen in a lot of other ways." he said.

Witt also pointed out that bow-

fishing is helped by its year-round potential and the fact that it's suited to all ages.

"You don't need gear with heavy draw weights. A bow with a 20- to 25-pound draw weight will shoot an arrow that will penetrate a carp. A kid eight or nine years old can shoot that kind of bow," he said.

As previously noted, bowfishermen don't even need a poat during the spring spawning seasons for carp and gar. During that time, the fish can be shot from the shorelines of public waters.

Getting Started

A fishing license is the only legal requirement. Gear is a matter of choice and budget. An entry-level bowfishing rig with a draw-weight of 40 to 45 pounds can be bought for about \$112; a good-quality rig with a draw weight heavy enough for alligator gar costs about \$200.

Archers who already have a bow can

festooned with vines. Now the rotting trees looked like skeletons of scarecrows wearing tattered threads. The surrounding water was the color of compost and smelled the same.

The steamy, primeval setting was alive with big alligator gar. They were visible rolling on the surface to gulp air or sometimes throwing geysers of water and gouts of duckweed 10 feet in the air in the act of gobbling a meal of carp. Steenbeke estimated the flat held more than 100 "book" gar, with maybe two dozen in the 100-pound-plus range. They sounded like a herd of rooting hogs.

Hitting one with an arrow was a matter of patiently stalking the flat under troll-motor power until a target surfaced within 10 yards of the boat. When the chance came, it would offer only a two- to three-second window of vulnerability.

A sweaty hour passed before Steenbeke loosed an arrow at a six-foot 'gator gar. It happened in a blur, but it was like shooting a depth charge. The water exploded and the boat bucked as the powerful fish reacted to the arrow. This was the part in the Eye Witness Video where the camera lens spins crazily in blurry images of frantic move-

ment. The nervy part was actually putting the toothy monster into the boat. It was like having an angry six-foot alligator for a fishing partner.

About 30 minutes later, Steenbeke had just pointed out a four-pound carp nibbling on duckweed when an alligator gar bigger than the first shot out of the murk and grabbed the hapless carp.

> Compound bows commonly used for deer hunting, right, are excellent for bowfishing. Below are several styles of fishing arrows, equipped with various types of barbs designed to impale the fish so it can be reeled in after the shot.

It held its victim there at the surface two seconds too long. The arrow flew, the water blew up in a cloud of drenching spray, the boat lurched violently to the side and the race was on.

Pretty awesome.

Buddy Gough, former outdoor editor of the San Antonio Light, now lives in Grapevine.



convert their existing gear easily. They can choose an open-face reel for as little as \$15 or a specially designed Zebco 808 closed-face reel for about \$45. Either can be outfitted with Kevlar line in 150- to 400-pound test. A fiberglass fishing arrow with a good stainless steel point costs \$8 to \$10. An adapter costing about \$7.50 to \$15 completes the rig, according to Witt.

Bowfishing Ecology

The removal of rough fish by bowfishermen is just fine with Phil Durocher, inland fisheries director of the Texas Parks and Wildlife Department. He sees bowfishing as good sport and good ecology. Since rough fish usually are ignored by rod and reel anglers, their numbers in lakes grow unchecked. Removing some of them may actually help a lake's habitat and its gamefish production. This may be especially true for the largest alligator gar.





City Parks: Human Investment, Natural Reward

How coyoupicture cities? Grit, grime and crime? That's often the magacities call to mind: soulless wastelands where the natural environment succumbs to concrete and steel from which everyone wants to escape. But nature and city need not be contradictory terms. Nor does everyone want to escape, at least not permanently.

Most of us live in urban areas, and more of us will do so in the future. Texas already claims three of America's 10 most populated cities, and five more are among the U.S. Census Bureau's list of the 50 fastest growing metropolitan areas. During the last decade, Austin's population swelled by 45 percent, followed by Fort Worth-Arlington, Laredo, Bryan-College Station and Midland. In fact, only 20 percent of Texas's 17 million people live in areas considered rural.

With increasing population, preserving a city's natural environment becomes crucial if it is to remain habitable and sustainable. "A single tree in a city is 15 times more capable of reducing carbon in the atmosphere than a tree in the forest," said Eric Beckers of the Texas Forest Service. "Trees create a much more livable environment. They provide shade that reduces electricity costs, increases property values, attracts wildlife, produces oxygen and sequesters carbon, reduces stormwater runoff and creates a more comfortable and aesthetically pleasing environment."

However, with the rising crime and social unrest of the 1960s. 1970s suburbanization, the 1980s economic crunch and explosive 1990s mer city social problems, the natural environment has been a low priority for cities. Park projects often are first on the budget chopping block and those in existence are left to deteriorate. Urban areas become increasingly blighted when, for every tree planted, four are removed due to old age, disease and accidents.

Like some other U.S. cities such as Portland, Seattle, Berkeley and Minneapolis, Austin has built a national reputation as a "green" city. "City parks are one of Austinites' most cherished assets," said Donna Bowles of Austin's Parks and Recreation Department. "Parks and greenspace give the city its central characteristics. Anytime we get into a tight budget situation, our libraries and parks draw huge numbers of people to city

council to speak out against budget reductions in those areas."

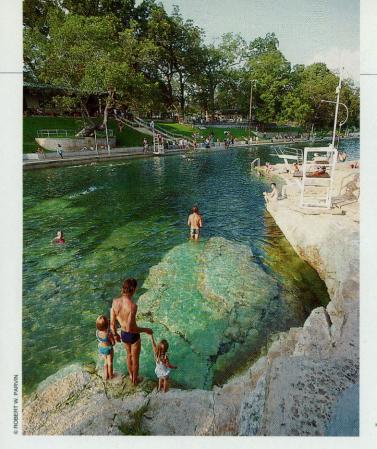
As public interest mounts and governments realize that an environmentally sound, "green" city boosts the local economy, other Texas cities may follow Austin's lead.

In most Texas cities, citizen groups such as The Park People, Keep El Paso Beautiful or Dallas' Save Open Space, work toward maintaining some part of the city's ecology. In every city, people use the parks. A numerical estimate of Texas city park users would be astronomical. In Fort Worth alone, a 1991 survey indicated that 73 percent of residents use urban parks. Combining their numbers with those of tourists accounts for tens of millions of annual park visitations.

"There's a new interest now in central city parks from both the public and government officials," said Dr. Jan Lin, sociologist at the University of Houston. "A lot of dual-income couples without children are moving into the cities. For them, suburban residential locations are no longer important since cultural amenities, rather than the search for a good school system, is their priority. Urban parks are essential because they're civic spaces where community events and traditions display a city's culture. Then there's the issue of



Figure 10 and 10



San Antonio and Austin have used natural resources to create attractive park areas in urban settings. The San Antonio River winds through Brackenridge Park, left, and downtown along the Riverwalk, below left, in one of the state's most heavily visited tourist areas. Barton Springs Pool, above, is one of Austin's signature attractions and the centerpiece of Zilker Park.

providing recreational space in low income areas as part of the effort to solve the social ills of the inner city. And the central city also is an income-generating device, principally through tourism and convention trade."

In fact, city parks and greenspace bring millions of dollars into local economies through tourism, convention trade and shopping. People spend more time and money in pleasant, comfortable surrouncings and are attracted to cities with a cultural identity. Austin's Barton Springs, San Antonio's Riverwalk and El Paso's Franklin Mountains show how a city's natural environment mixes with its culture to create its special flavor.

"The convention and tourism industry is one of San Antonio's

economic mainstays," said Ronald Darner, director of San Antonio's Parks and Recreation Department. "Because parks and park-related events are important to our local citizens and are vital to attracting visitors and conventions, a great deal of our attention, planning, maintenance and resources are dedicated to parks."

Bond elections in Austin and Lubbock in the last two years have authorized millions of dollars for rehabilitation and expansion of those cities' parks. In El Paso, where an outdoor amphitheater in McKelligon Canyon is being rehabilitated, a bond election for parks improvements is scheduled for this year. In Houston, plans are underway to revitalize congested Herman Park in the city's museum district. Also being developed is Lubbock's Yellowhouse Canyon Lakes System, a six-mile linear park that eventually will be linked to down-

Besides beautifying our cities and providing low-cost recreation, many city parks also are classrooms. Organized nature walks, bird watching, wildlife identification and introductions to photography and ecology aid the young and the not-so-young in appreciating and understanding the natural world. And if you ask Elizabeth Wade, that's essential. For 30 years she has been feeding the birds and squirrels on the tree-lined median in front of her house.

"People ask me why I spend my money on milo for the birds," said Wade. "It's because we're all part of the natural world and depend on each other. Without nature in the city, how would children ever learn that?"

by Christina Leimer

T-Shirt Sales May Help West Texas Peregrines

A Dallas marketing company will support a research study of peregrine falcons in the lower Big Bend region of the Rio Grande by sharing profits from sales of peregrine T-shirts.

Mars Promotional Service Inc. will pay the Texas Parks and Wildlife Department a 12- to 14-percent royalty on all shirts. Beneficiaries will be the resident nesting American peregrines that may be one of the last wild, unmanipulated populations in the United States. Nongame specialist Bonnie McKinney of the TPWD's Nongame Program has been monitoring the 12 remaining pairs of the subspecies Falco peregrinus anatum for nine years. McKinney said this group of birds has suffered population declines in the past, possibly caused by ingestion of the pesticide DDT.

Current plans are to capture falcons, attach color bands on their legs and monitor their movements. Prey species will be captured and tested for pesticide levels. Professional climbers will scale canyon walls to retrieve egg shells for evidence of thinning that could be caused by pesticide contamination.

The peregrine T-shirts may be ordered by calling toll-free 1-800-441-7105. Texas Conservation Passport holders will receive \$1 off the regular price of \$17.50. The \$25 Conservation Passport is good for one year and provides free entry to most state parks, access to restricted wildlife management areas and special guided tours.

For more information on the peregrine study, write to McKinney at Black Gap Wildlife Management Area, HC 65, Box 433, Alpine, Texas 79830.



OUTDOOR DATEBOOK

JULY

July: ** Lower Edwards Plateau ecosystem tour each Saturday, Honey Creek Stare Natural Area near Bulverde, 210-438-2656

July: ** Bat emergence tour each Thursday and Saturday, Old Tunnel WMA near Fredericksburg, 210-868-7304

July: * Gorman Falls tour each Saturday and Sunday, Colorado Bend State Park near Bend, 915-628-3240

July: ** Wild cave tours each Saturday and Sunday, Colorado Bend State Park near Bend, 915-628-3240

July: ** Nature walks and sunset tales each Saturday except July 2, Big Spring State Park at Big Spring, 915-263-4931

July 2: ★ Brush identification, Cho∢e Canyon State Park Calliham Unit near Three Rivers, 512-786-3868

July 2: * "Talkin' Turkey," Fairield Lake State Park near Fairfield, 903-389-4514

July **2**: ***** "Roosting Waders," Martin Dies, Jr., State Park at Steinhagen Reservoir, 409-383-0144

July 2: * Painted bunting tour, McKinney Falls State Park at Austin, 512-243-1643

July **2**: ***** Hatchery tour, Heart of the Hills Research Station near Ingram, 210-866-3356

July 2: ** Bus tour of Fort Leaten and Big Bend Ranch State Natural Area, 915-229-3613

July **2, 30**: ***** Ecosystem boat tour, Caddo Lake State Park and WMA, 903-679-3743

July **2, 7, 16, 21, 30**: ** Boct tour of coastal marsh, Sea Rim State Park near Sabine Pass, 409-971-2559

July **2, 9, 16, 23, 30**: ** Nature walk, Pedemales Falls State Park in Blanco County, 210-868-7304

July **2, 16, 30**: ** Lost Pines bus tour, Bastrop State Park at Bastrop, 512-321-2101

July 3: * "The Deer of Fairfield Lake," Fairfield Lake State Park near Fairfield, 903-389-4514

July **3-4**: 60th anniversary celebration, Caddo Lake State Park near Karnak, 903-679-3351.

July **3, 10, 17, 24, 31:** ** Birdwatching, Pedernales Falls State Park in Blanco County, 210-868-7304

July **6**: ****** Explore Las Palomas WMA in the Lower Rio Grande Valley, 210-585-1107

July **7**: ****** Fisheries survey techniques, Lake Mineral Wells State Park at Mineral Wells, 817-328-1171

July **7**: ***** Seining demonstration, Lake Mineral Wells State Park at Mineral Wells, 817-328-1171

July 9: * Birdwatching, Pat Mayse WMA near Paris, 903-884-3833

July **9**: * Observation of sinkhole and bat flight, Devil's Sinkhole State Natural Area near Brackettville, 210-563-2342

July 9: ** Birding and hatchery tour with slide show, GCCA/CPL Marine Development Center at Corpus Christi, 512-939-7784

July **9, 23**: ** Birdwatching tour, Caddo Lake State Park and WMA, 903-884-3833

July **9-10**: ** Marbleized painting class, Landmark Inn State Historical Park at Castroville, 210-538-2133

July **9, 17**: ** Marine ecosystem tour, Matagorda Island State Park and WMA, 512-983-2215

July **9, 23**: **★** Bird tour, Balmorhea State Park and Phantom Cave Springs near Balmorhea, 915-375-2370

July 10: * Horseback tour, Hill Country State Natural Area near Bandera, 210-796-3984

July 16: ** Nature walk, Caddo Lake State Park and WMA, 903-884-3833

July 16: * Wildlife track identification, Choke

Canyon State Park Calliham Unit near Three Rivers, 512-786-3868

July 16: ** Penn Farm Agricultural History Center tour, Cedar Hill State Park at Joe Pool Reservoir, 214-291-3900

July **16**: ****** Bus tour, Big 3end Ranch State Natural Area, 915-424-3327

July **16**: ** Star Party Extravaganza, Big Spring State Park at Big Spring, 915-263-4931

July **16**: ** Stargazing, Guadalupe River State Park near Bulverde, 21C-438-2656

July **18-21**: ** Nature Camp 1994, Eisenhower State Park at Lake Texoma, 903-465-1956

July **21, 23**: ** Primitive tour of Kickapoo Cavern, Kickapoo Cavern State Natural Area near Uvalde, 210-563-2342

July 21, 23: * Bat flight and Green Cave interpretation, Kickapoo Cavern State Natural Area near Uvalde, 210-563-2342

July 23: * Indian heritage program, Eisenhower State Park at Lake Texoma, 903-465-1956

July 23: ** "Lena's Believe It or Not!, "Martin Dies, Jr., State Park at Steinhagen Reservoir, 409-383-0144

July **23**: ** Binocular astronomy, Cleburne State Park at Cleburne, 817-645-4215

July 23: * Children's ncture activity, Honey Creek State Natural Area near Bulverde, 210-438-2656

July 23: * Twilight nature hike, Ray Roberts Lake State Park Isle du Bois Unit,817-686-2148

July 23: ** Ride the horse trails with the Randall County Sheriff's Posse, Palo Duro Canyon State Park near Canyon, 806-488-2227

July 23: * Beachcombing and shelling tour, Matagorda Island State Park, 512-983-2215

July **23**: ***** "Canyon Rumblings," Caprock Canyons State Park near Quitague, 806-455-1492

July 30: * Jelly cooking with native plants, Honey

Wildlife track identification skills will be the focus at Choke Canyon. State Park's Callibam Unit on July 16.

Creek Stare Natural Area near Bulverde, 210-438-2656

July 30: ** Bird and nature tour, Lake Tawakoni State Natural Area, 903-425-2332

July 31: * Comanche Warrior Triathlon, B g Spring State Park at Big Spring, 915-263-764

AUGUST

Aug: ** 3at emergerce tour each Thursday and Saturday. Old Tunnel Wildlife Management Area near Fredericksburg, 210-853-7304

Aug: ** Gorman Falls tour each Saturday and Sunday, Colorado Bend Stare Park near Benc, 915-628-3240

Aug: ** Wild cave tours each Saturday and Sunday, Colorado Bend State Park near Bend, \$15-528.3240

Aug: * Lower Edwards Plcteau ecosystem tour, Honey Creek State Matural Area near Bulverde, 210-433-2656

Aug 4, 13, 18, 27: ** Boat tour of coastal marsh, Sea Rim State Park near Sabine Pass, 409-771-2559

Aug. 6: ★ Fishery station tour, Heart of the Hills Fishery Research S-ation near Ingram, 210-866-3356

Learn about the deer of Fairfield Lake at Fairfield Leke State Park on July 3.





Aug. 6: * Bus tour of Fort Leaton and Big Bend Ranch State Natural Area, 915-229-3613

Aug. 6: * "The Lows vs. the Highs," Martin Dies, Jr., State Park at Steinhagen Reservoir, 409-383-0144

Aug. 6: * Nature tour, Caddo Grasslands WMA near Paris. 903-884-3833

Aug. 6: * Wildlife track identification, Choke Canyon State Park Calliham Unit near Three Rivers, 512-786-3868

Aug. 6, 20: * Birdwatching tour, Caddo Lake State Park and WMA, 903-884-3833

Aug. 6, 13, 20, 27: * Nature walk, Pedernales Falls State Park in Blanco County, 210-868-7304

Aug. 7, 14: * Birdwatching, Pedernales Falls State Park in Blanco County, 210-868-7304

Aug. 7, 27: * Marine ecosystem tour, Matagorda Island State Park and WMA, 512-983-2215

Aug. 10: * Exploring Las Palomas WMA in the Lower Rio Grande Valley, 210-585-1107

Aug. 13: * "When the Fish Don't Bite, Bowfish," Fairfield Lake State Park near Fairfield, 903-389-

Aug. 13: * Birding and hatchery tour with slide show, GCCA/CPL Marine Development Center at Corpus Christi, 512-939-7784

Aug. 13: * Ride the horse trails with the Randall County Sheriff's Posse, Palo Duro Canyon State Park near Canyon, 806-488-2227

Aug. 13-14: * "The Natural Approach to Landscape Design and Management," Landmark Inn State Historical Park at Castroville, 210-

Aug. 13, 27: * Lost Pines bus tour, Bastrop State Park at Bastrop, 512-321-2101

Aug. 13, 27: * Ecosystem boat tour, Caddo Lake State Park and WMA, 903-679-3743

Aug. 13, 20, 27: * Alligator nesting tour. James E. Daughtrey WMA at Choke Canyon Reservoir, 512-786-3868

Aug. 14: # Horseback tour, Hill Country State Natural Area near Bandera, 210-796-3984

Aug. 18: * Bird banding observation, Kickapoo Cavern State Natural Area near Uvalde, 210-563-2342

Aug. 18, 20, 25: * Bat flight and interpretation at Green Cave, Kickapoo Cavern State Natural Area near Uvalde, 210-563-2342

Aug. 20: ** Bus tour, Big Bend Ranch State Natural Area, 915-424-3327

Aug. 20: ₩ Primitive cavern tour, Kickapoo Cavern State Natural Area near Uvalde, 210-563-2342

Aug. 20: * "Canyon Rumblings," Caprock Canyons State Park near Quitaque, 806-455-1492

Aug. 20: * Twilight nature hike, Ray Roberts Lake State Park Isle du Bois Unit, 817-686-2148



Observe bird banding at Kickapoo Cavern State Natural Area near Uvalde on August 18.

Aug. 20: * History tour, Fenn Form Agricultural History Center at Cedar Hill State Fark, 214-291-3900

Aug. 20: * Plant walk, Lake Ar owhead State Park near Wichita Fals, 817-528-2211

Aug. 20: * Traditional ccwbcy music concert, Cleburne State Park at Cleburne, 817-645-42 5

Aug. 20, 27: * Bird tour, 3clmorneg Stare Pork and Phantom Cave Springs rear Ba morhec, 915-375-2370

Aug. 27: * Jelly cocking with narive plants. Honey Creek State Natural Area necr Bu verde, 210-438-

Aug. 27: * Bat flight and sinkhole observation. Devil's Sinkhole State Natural Area near Brackettville, 210-563-2342

Aug. 31: All 1993-94 hunting and fishing licenses expire.



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Austin,	Monday	12:00
KLRU, Ch. 18	Saturday	5:00
College Station		
KAMU, Ch. 15	Tuesday	7:30
Corpus Christi	Thursday	7:30
KEDT, Ch. 16	Friday	11:00
Dallas/Ft. Worth		
KERA, Ch. 13	Friday	6:30
Also serving Abilene, Denton, Longview, Marshall, San Angelo, Texarkana, Tyler, Wichita Falls, Sherman		
El Paso		
KCOS, Ch. 13	Sunday	7:00
Harlingen		
KMBH, Ch. 60	Tuesday	8:00
Also serving McAllen, Mission		
Houston		
KUHT, Ch. 8	Monday	7:30
Also serving Beaumont/Port Arthur, Galveston, Texas City, Victoria		
Killeen		
KNCT, Ch. 46	Tuesday	3:00
Also serving Temple		
Lubbock		
KTXT, Ch. 5	Saturday	7:00
Odessa		
KOCV, Ch. 36	Saturday	7:30
Also serving Midland		
San Antonio		
KLRN, Ch. 9	Thursday	12:00
Also serving Laredo		
WACO	0 1	
KCTF, Ch. 34	Sunday	1:00

Programming schedules are subject to change, so check your local listings.

Look for these stories in the coming weeks

JUNE 26-JULY 3: A day in Texas: some of the best moments our cameras have captured; catfish; prehistoric remains at Amistad Reservoir.

JULY 3-10: Disappearing songbird habitat on the Texas coast; the Texas State Railroad; coastal fisheries.

JULY 10-17: Summer camps for youngsters help build new outdoor skills. friendships and self-esteem; aquaculture; the buffalo.

JULY 17-24: The Texas State Aquarium; whooping cranes; on the job with Texas game wardens.

JULY 24-31: Wildlife rehabilitators; oysters; birding in Texas.

reds, which have excellent survival and growth rates, Dennis said. Lake Colorado City State Park offers support for anglers in the form of a boat ramp, two fishing piers (one lighted), a covered fishing barge and plenty of campsites. Assistant superintendent Santos Reyes said you don't necessarily need a boat to catch redfish. Fishermen catch them on cut bait or shrimp while fishing from the bank or piers. Boat anglers often watch for feeding gulls to locate reds chasing schools of shad, Reyes said. The park is located five miles west of Colorado City, or about halfway between Sweetwater and Big Spring. From Interstate Highway 20 just west of Colorado City take FM 2836 south six miles to the park entrance. Their number is 915-728-3931.

First-time visitors to Lake Arrowhead south of Wichita Falls immediately notice a unique feature—13 oil derricks scattered across the 13,500-acre lake. While some might consider the metal towers less than aesthetically pleasing, they nonetheless provide fish-holding structure. Boat anglers enjoy tying up to the derricks to fish for catfish, crappie and bass, according to Lake Arrowhead State Park superintendent Larry Scruggs. The usually murky lake is fairly popular with local bass fishermen, but its main attraction is channel and flathead catfish. Catfishermen catch big strings of channel cats with a locally famous mixture of cheese and dead minnows, Scruggs said. Also, brush has been placed under the fishing pier to attract crappie, and white bass fishing is good, according to TPWD fishery biologist Mark Howell of Wichita Falls. The park has a lakeside concession with boat slips, a boat ramp and camping facilities. To reach the park from Wichita Falls, take U.S. Highway 281 south, then turn east on FM 1954. Their number is 817-528-2211.

NOTE: RESERVATIONS FOR ALL STATE PARK FACILITIES MUST BE MADE BY CALLING 512-389-8900.

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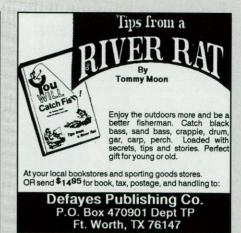


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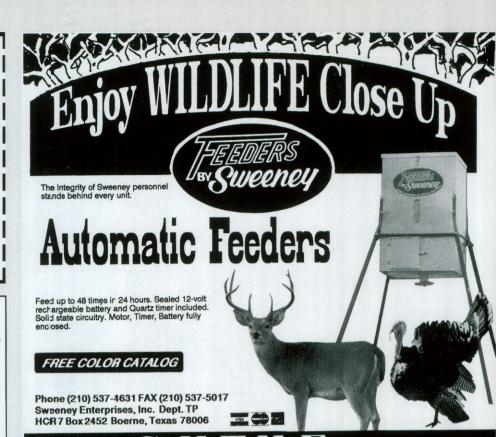
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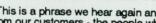
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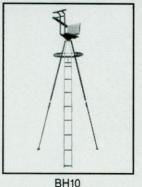


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PARTING SHOT __

The Fawns of Summer

Freelance photographer Tom Browning of Garland was visiting a ranch near Kerrville on an early morning in June when he saw a doe white-tailed deer nudge her fawn into this grassy hiding place. Browning waited at a distance until the doe wandered off, and also until the light was sufficient for a photo. Taking a snapshot of a fawn does no harm, but every summer too many well-meaning folks incorrectly assume that fawns discovered in their resting places are abandoned. Capturing the youngsters is a bad idea for all concerned, and it's illegal. If you're absolutely sure a foundling has been abandoned, call your local game warden and he or she can decide if the animal should be taken to a licensed wildlife rehabilitator.



56 July 1994



