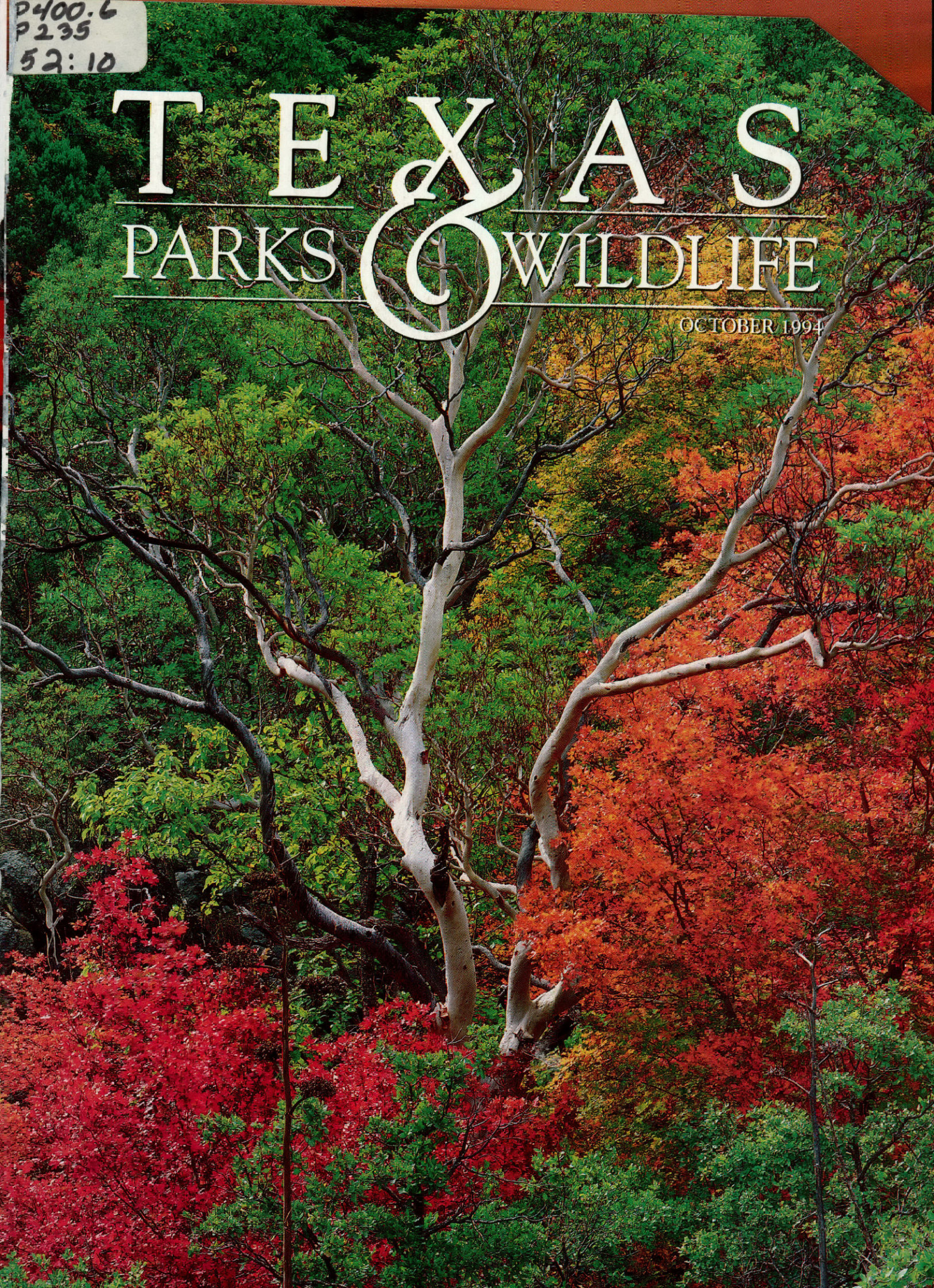


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TEXAS PARKS & WILDLIFE

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AT ISSUE

October 1994, Vol. 52, No. 10

TEXAS PARKS & WILDLIFE

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enjoyment of Texas wildlife, parks,
waters and all outdoors.*

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On Independence Day this summer, we celebrated the 60th anniversary of Caddo Lake State Park. At ceremonies organized by Superintendent Tommy Pritchard and Harrison County Commissioner Buddy Powers, we heard stories from a member of the Civilian Conservation Corps who helped build the park during the New Deal. We also honored Fred and Lucille Dahmer for their work in helping to protect the area, and said Happy Birthday to America.

We had driven most of the night from Dallas on a bus with a group of the Caddo Lake Scholars featured in Sue Gold's piece about Don Henley. The Scholars and I had shared the excitement of listening to Henley's music at Texas Stadium the night of July 3, along with the rest of his original band, The Eagles. On the way back to Marshall in the wee hours of the morning, I talked with the students about their work in the Caddo Lake area and about career opportunities in conservation. The Scholars Program is just one of the many dimensions of Don Henley's commitment and contributions to Caddo. It is exemplary of the numerous initiatives emerging out of the growing interest in this unique region and the equally unique partnerships formed to protect it.

The most unusual of these is an extraordinary joint venture between Congressman Jim Chapman and Texas Parks and Wildlife. In an unprecedented partnership between a U. S. Representative and a state agency, significant funding has been secured to strengthen conservation throughout the Caddo Lake watershed and, equally important, to begin development of a new regional economy based on nature tourism and the lake's remarkable biological assets.

With the support of local leaders such as Powers, Cypress Valley Navigation District Chair Duke DeWare of Jefferson and businessman Rusty Howell of Marshall, efforts to protect Caddo Lake have increased. At the same time, as you will read in Mary-Love Bigony's article in this issue, the partnership is firmly committed to a new and sustainable prosperity that seeks to capitalize on the internationally significant cultural and natural resources waiting to be explored.

Thankfully, we at Parks and Wildlife now can depend on an expanding circle of such partners who share our abiding commitment to the heritage of Texas, to its youth, and to the public interest. Elsewhere in this issue for example, you will learn of our collaboration with the Lower Colorado River Authority and the leadership of its general manager, Mark Rose, whose vision has made the exciting Colorado River Trail a reality. Like Don Henley, Texas will be a better place because he was here.

This thought entered my mind as we prepared to bury a time capsule on July 4th at Caddo Lake State Park. I reached into my pocket and added my ticket to the Eagles concert to the collection of mementos to be examined in 100 years—an artifact from our time and a symbol of one who cared about the future of Texas.

—Andrew Sansom, Executive Director

In November...

Next month we'll visit one of the gems of the Hill Country, Inks Lake State Park, where activities include fishing, geological studies, hiking, camping, water sports and golf. Also in November: Twin Buttes Reservoir in West Texas, Alibates Flint National Monument in the Panhandle, the End Hunger Network, and more.



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TEXAS PARKS & WILDLIFE

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6 THE CANTANKEROUS COLORADO Join four amateur river rats on a two-day fishing trip down the lower Colorado. The lesson: while such an outing has many rewards, it requires far more planning than does a trip to the local bass lake. *by Jim Cox*

18 BIRDING WITH THE PROS Texas has more bird species than does any other state, so it's only fitting that we also have some of the best guided bird tours. A guided tour offers many advantages: bird identification, ecological interpretation and freedom from logistics such as meals, lodging and transportation. *by Kristi G. Streiffert*

24 BLUES ON THE RUN Blue quail hunting on the Black Gap Wildlife Management Area isn't like hunting bobwhites. This is "park and run" hunting—drive around until you see a covey flush, then get out and hunt. Other tips: hunt near water, hunt with a partner to avoid losing birds in this rugged landscape, and keep track of where you find coveys, since they tend to locate in the same general area year after year. *by Larry D. Hodge*

28 GLORY DAYS FOR CADDO As Caddo Lake State Park enters its seventh decade, this remote spot deep in East Texas finds itself in the spotlight. Making news over the past year have been an addition of 7,000 acres to create a wildlife management area adjacent to the park, ecotourism initiatives and recognition as a "Wetlands of International Importance." *by Mary-Love Bigony*

42 ANCIENT ANGLER Weighing up to 200 pounds, the alligator snapping turtle was one of the first creatures to lure fish with an imitation worm—its tongue. *by Charles Mann*



© ROBERT PARVIN

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COVERS

Front Photographers willing to backpack into remote areas may be rewarded with striking shots such as this madrone tree backed by bigtooth maples in the McKittrick Canyon area of Guadalupe Mountains National Park. See Picture This on page 40. Photo © Laurence Parent. Linhof Technika camera, Nikkor 360mm lens, f4.5 at 2 seconds, Fuji Velvia 50 film.



© GRADY ALLEN

PAGE 18

Back Largemouth and Guadalupe bass are abundant in the Colorado River below Austin. See story on page 6. Photo © Robert W. Parvin, Contax camera, Zeiss 65mm macro lens, f11 at 1/125 second, Kodachrome 64 film.



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DEPARTMENTS

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40 PICTURE THIS Hiking and backpacking photos. *by Laurence Parent*

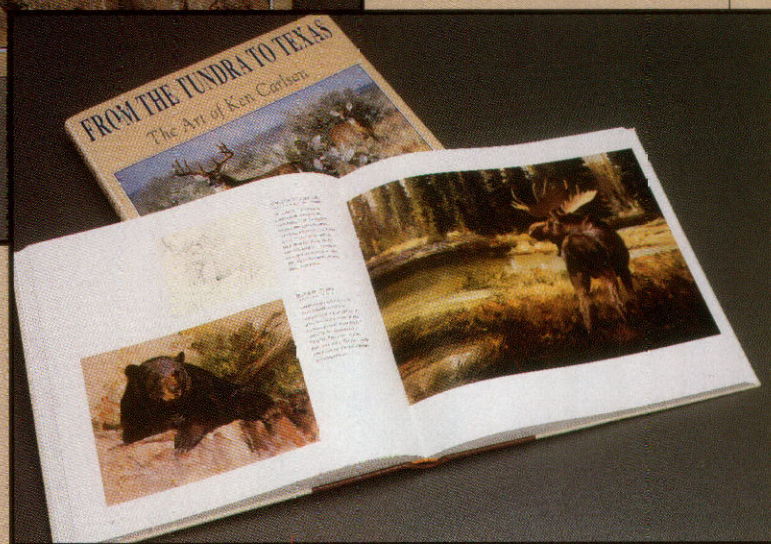
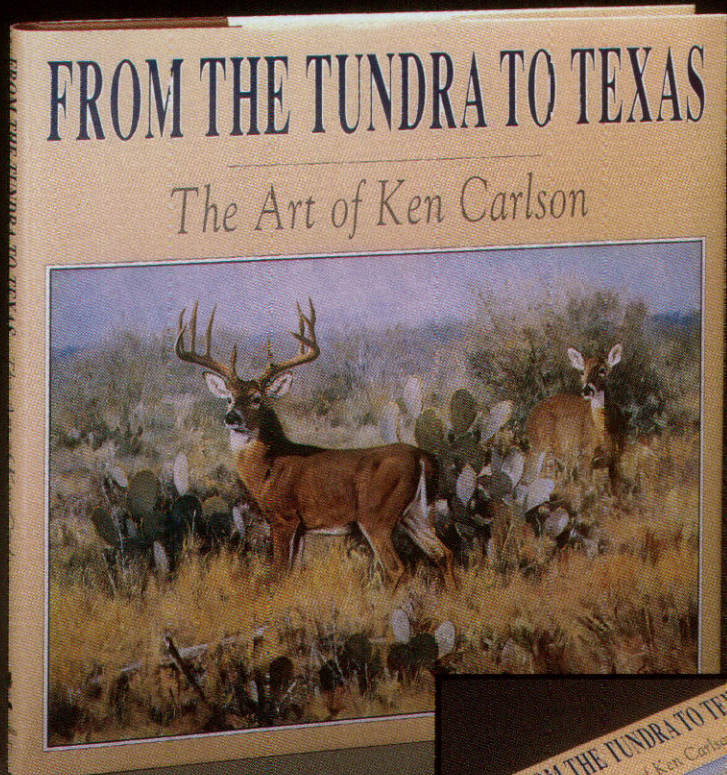
46 WOODS & WATERS Crossed sticks improve shooting accuracy. *by Larry L. Weisbuhn*

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50 STATE OF NATURE ReLeaf for McKinney Falls State Park. *by Diana Meyer*

55 PARTING SHOT

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The spectacular work of one of the finest wildlife artists today is beautifully presented in this 180 page full-color book. *From The Tundra To Texas* is filled with 144 paintings and sketches by Ken Carlson, with personal commentary by the artist. A special Deluxe Limited Edition Book (*small inset above*), is also available featuring leather and linen binding, matching linen slipcase, a matching signed and numbered "Pearls of the Mountain" print by Ken Carlson, image size 6³/₈" x 9". Plus, each special Limited Edition Book is signed and numbered by the artist. Trade Edition Price: \$60. Limited Edition Price: \$200.

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Cover Lines and Ads

Thank you for not printing all over the front cover of my *Texas Parks & Wildlife*. And thanks for no ad on the inside back cover.

Celia G. Frame
Mitchell, Georgia

■ Thanks for noticing that we pulled the cover lines off copies that are mailed to subscribers. We received so many comments and complaints from subscribers that we now print two versions of the cover each month. One with cover lines, single-issue price and the Universal Product Code goes out for newsstand sales. The version without goes to subscribers. It costs us a bit more, but we do our best to please the customer.

As for ads, this fall *Texas Parks & Wildlife* magazine started down the road to financial independence from state funding. After a period of time we will receive no funding from the Texas Parks and Wildlife Department and will pay all our expenses with the money we bring in. This includes printing, postage, freelance stories and photos, office space, salaries and employee benefits. Our advertisers will help us bring you the magazine each month without having to raise subscription rates through the ceiling. As we seek out new advertisers we will strive to carry ads that will be of service to our readers, be they hunter/fisherman, birder, camper or someone in need of a new truck to get wherever it is they need to go in the Texas outdoors.

Ohio Magazine?

I noticed the return address on your subscription cards and the one for renewal notices is Marion, Ohio. What gives? Why am I sending my money to a bunch of Yankees? Are we sending Texas jobs to Ohio?

Forrest Graves
Houston

■ We moved circulation fulfillment from within the Texas Parks and Wildlife

Department to an outside contractor in late July. Fulfillment Corporation of America (FCA) of Marion, Ohio, was the low bidder among more than 40 companies that were given an opportunity to bid, most of which were Texas companies. No Texas company bid on our job. Moving circulation functions outside the agency is part of a plan to achieve budgetary independence from the Texas Parks and Wildlife Department.

Fire Ants

Regarding "Burning Question" in the August issue, since the fire ant invasion here, animals that once were plentiful that are no longer to be found include gophers, toads and terrapins. Also, no scorpions and this year no honey bees. Fire ants are making an ecological impact.

T.R. Hunn
Rhome

■ Mrs. Ollie Newman of Moody also wrote to us about the fire ant article. She said she uses chlorine bleach on fire ant mounds: "Believe it or not, there were never any more ants."

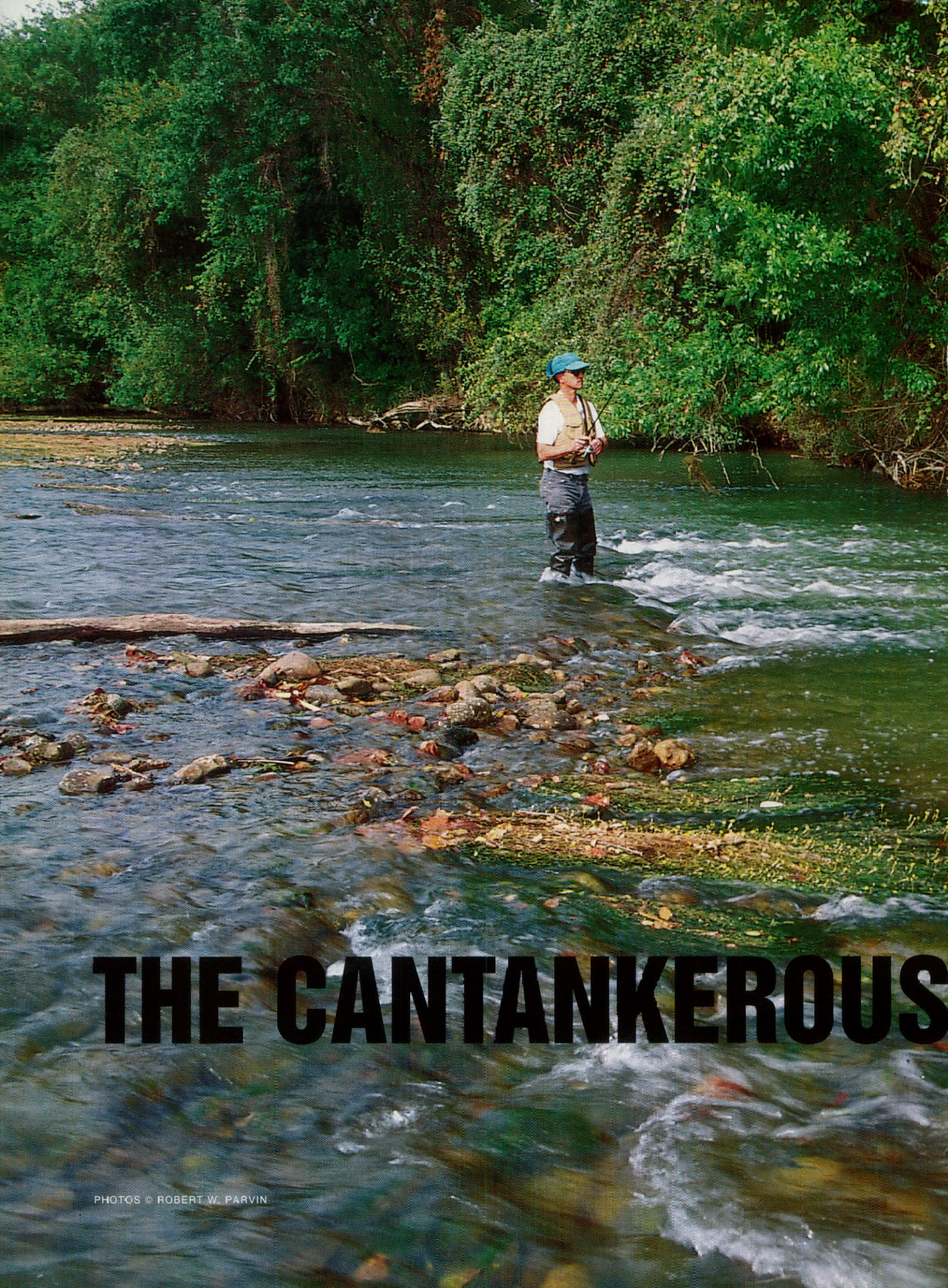
Homesick Texan

Thank you for bringing me monthly reports on my birthplace and home for 42 years. I enjoyed the article about wasps in the June issue. We have wasps in New England, but I don't miss the copperheads, rattlesnakes and scorpions. What I do miss are the state parks. They are by far the best, especially the ones in the Hill Country.

The folks up here don't understand how I could leave Texas, but you go where the job sends you nowadays. At least I still own land on Inks Lake.

Ginny Durost
Attleboro, Maine

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 CANTANKEROUS

PHOTOS © ROBERT W. PARVIN



COLORADO

Article by Jim Cox
Photos by Robert Parvin

A two-day fishing trip down the Colorado River can be glorious, but beware the pitfalls.

A late-summer 1993 float trip down the Lower Colorado River by four not-too-river-wise individuals had all the characteristics of a botched military operation.

Two balky outboard motors, a disabled trolling motor, a couple of near-turnovers of overloaded flatbottom boats, a vandalized tow vehicle and assorted other perils, ranging from fire ants to heat exhaustion, dogged this two-day expedition between Smithville and La Grange.

But now, soothed by the balm of time, we four amateur river rats can look back upon this rather snakebit fishing-camping effort as a classic in the context of lessons learned the hard way. The message here to those who would sample the delights of Colorado River angling is that assaulting a long stretch (about 36 miles in this case) requires far more

planning than the typical weekend trip to a local bass lake.

The Assault

Optimism was rife at dawn when we launched our three boats at the Loop 230 (Old State Highway 71) ramp at Smithville. An apparently gentle current, fishy looking greenish water and an overcast sky had our hopes for a productive trip soaring. We even remained blasé when Austin freelance photojournalist Bob Parvin's 7½-horse outboard refused to run more than five minutes without stalling. After all, we reasoned, the five-horse Johnson on Houston *Chronicle* outdoor writer Shannon Tompkins's boat, the *King Willie*, appeared to be clicking right along with a healthy *pocketa-pocketa-pocketa* sound, and Roy Frye's 1958-vintage Evinrude was being its reliable self. In a pinch, we figured, one of the healthy motors could tow Parvin's

ailing craft to the takeout point at La Grange if necessary.

Once under way, Tompkins and your correspondent took the lead in the load-stressed *King Willie*, confident that our angling moxie would put Parvin and Frye, a Texas Parks and Wildlife Department Resource Protection Division biologist, to shame while producing fish for photos.

We drifted down this watery corridor, walled off from civilization by dense stands of willow, water oak, sycamore, pecan and tangled bottomland vines. High rock and clay bluffs marked bends where currents became somewhat swift, while long straight-

Shannon Tompkins, outdoor writer of the Houston Chronicle, prepares to fire up the vessel King Willie, after probing driftwood piles for bass near a railroad bridge between Smithville and LaGrange, below.





At left, the author tussles with a 19-inch Colorado River largemouth bass that bit a plastic worm a few miles downstream from Utley. Fall and spring are prime times to fish the river, when water levels are low.

aways along shallow flats showed us that the water was remarkably clear in spite of the high flow, and we watched schools of shad, buffalo, carp and occasionally bass swimming along the riverbed.

We soon noticed, however, that the bass weren't biting, at least where our lures were concerned. We also noticed that the summertime water release rate from upstream dams tended to whisk us too rapidly past many alluring holes around fallen willows, driftwood piles and deep cutbanks. Tompkins's transom-mounted troll motor often was overpowered by the current as the boat's keel-less front end tried to do figure-eights in the swirling waters. We constantly had to keep a lookout for "strainers," or overhanging limbs that could snag tackle or, worse, knock an unwary fisherman from his boat.

We were four frustrated anglers when we tethered our boats to some overhanging willow limbs and broke for lunch in the shade.

Camp Eagle

Our float trip resumed with what was the visual highlight of the day: a mature bald eagle left its perch on a dead tree and flew across the river only 100 yards or so away, then made a sweeping turn back across the channel, giving us a good look at its white head and tail feathers gleaming in the sun.

By midafternoon, a couple of Guadalupe bass and a two-pound largemouth had struck spinnerbaits, perhaps

in self-defense. At least we had some evidence of the existence of fish in that stretch of river.

Getting a few bites lifted our spirits, and we also were pleased to note that the river offered any number of islands that would be excellent campsites. As mentioned elsewhere, most lands along the Lower Colorado are privately owned. So anytime you step onto the bank you probably are trespassing. Islands, however, are in the public domain. In that stretch of river there

were islands ranging in size from a few square yards to a couple of acres. We chose a long, narrow island topped by a clump of willows and featuring plenty of smooth, sandy areas for pitching tents.

In spite of the muggy weather, cooking and camping on the island was pleasant, partly due to dry weather keeping mosquito populations in check. Fire ants also were not a problem if you kept away from the trees and vegetated areas.

In fact, we felt at peace with the world after a dip in the river and a hearty, macho meal of fajitas and guacamole. As we prepared to turn in, the soothing night sounds of flowing water and hooting barred owls made us wonder if our experience was much different from that of Native Americans who might have lingered here a couple of hundred years ago to camp and fish.

Breaking Camp

The next morning, after restoring our



Island camping spots like the one above are abundant along most stretches of the Colorado River below Austin. Virtually all shoreline areas, however, are private property, so be sure not to trespass when selecting a campsite



The angler above uses a paddle to find the deepest channel of the river near the State Highway 71 bridge crossing at LaGrange. Robert McCurdy, below, whose work with the Clean Clear Colorado organization was instrumental in the stream's cleanup, flyfishes a shallow shoal. While much of the river is accessible only by boat, many areas are fished most effectively by wading.



camp area to almost pristine condition, we set forth to fish the remaining 10 miles or so of river. Either the fishing or our techniques failed to improve, because strikes remained scarce.

Meanwhile, *King Willie's* motor developed a cough, and Tompkins found he had to pump the gas line bulb constantly to keep the motor running. "It's the carburetor," said Tompkins, pulling the starter rope for the umpteenth time, sweat dripping off his nose. His motor troubles were to lead to another breakdown as we approached the swiftest area so far encountered. A midriver hump of rocks created a choppy area of standing waves, with no easy side channels available as alternate routes. The *King Willie's* motor died at the moment of truth, and Tompkins was a few seconds late in his efforts to unlock the trolling motor. A grinding crunch made us wince as the boat bounced downstream. The bolts securing the trolling motor to its bracket were sheared, rendering



the device pretty near useless for the rest of the trip.

The La Grange boat ramp was a welcome sight, probably due more to the hot weather than physical effort. Those of us who had fished the river in the past knew in our hearts that the poor fishing was an aberration. A more limited two-person expedition two months later in mid-October proved that it was. A six-hour run between Utley and Bastrop produced a score or more bass, including two solid four-pound largemouths, several in the three-pound class and dozens of Guadalupes, the largest close to 2½ pounds. The lustily biting bass hit a variety of lures, but four-inch plastic worms tossed near fallen trees in the deeper holes proved to be the hottest combination. The variation in fishing success perhaps had less to do with our skill than seasonal changes

on the river. This brings us to a list of Universal Truths governing Colorado River float trips.

Rules del Rio

1. Plan your fishing trips for spring or fall. Flow rates in the summer (roughly May through September) are high because the Lower Colorado River Authority supplies irrigation waters for rice farming during that period. While summer fishing can be good, many of the hotspots are difficult to find, and the fish tend to be scattered. And, as mentioned previously, it's difficult to fish an

area effectively when the boat is hurtling downstream too fast. The prime time probably is from mid-October to mid-November, when the flow through Longhorn Dam in Austin is reduced to 100-200 cubic feet per second, and the flow at downstream gauges is generally under 1,000 cfs. During this time the river is reduced to a series of deep narrows connected by long stretches of slackwater flats. Even with a flatbottom boat or canoe, many areas require getting out and dragging the boat across shallow spots. Skip areas where you can see the bottom, fishing instead the deep, shaded areas with submerged rockpiles, driftwood, willow overhangs or other debris that offer fish-holding structure. By December, the first major cold fronts have chilled the shallow river to the point that bass are less active. By March and April, however, warm weather again rejuvenates fishing that remains good in the low-water configuration until irrigation releases resume.

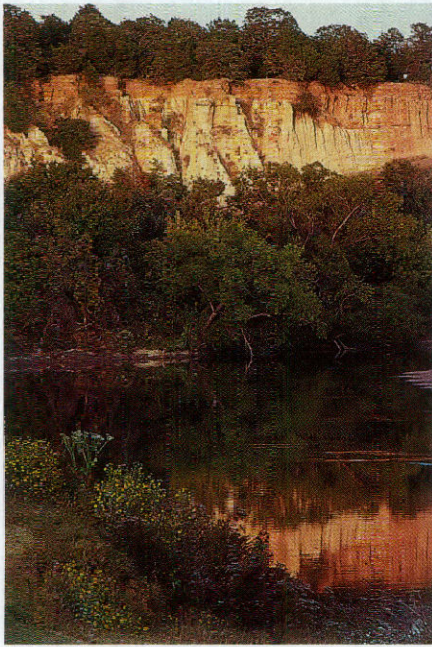
2. Be sure you have the right equipment. The best craft for river fishing is a 12- or 14-foot flatbottom aluminum boat, or a canoe, if you don't mind putting up with its skittish behavior in the current. Five- to 10-horse-

power motors are plenty, even for a relatively long trip, but be sure to bring along extra gasoline, shear pins and perhaps a spare propeller. A strong, front-mounted trolling motor can make a tremendous difference, allowing you to skirt obstructions and fish backwater eddies and pockets in the willow jungles. Bring plenty of rope and an anchor, tools and paddles in case of mechanical failures. A long aluminum push-pole with a hook on one end is another handy gadget for river fishing.

3. Prepare for river camping as though you were entering a primitive area, because a campsite halfway between access points such as Smithville and La Grange may be hours away from help in case of emergency. And boating on the river at night could be an unpleasant and potentially dangerous proposition. Be sure you have the important basics, including plenty of water, first aid kit, insect and sunburn protection, plenty of warm clothing and light sources such as lanterns and flashlights. Take a pair of waders, especially during low-flow periods, or at least an extra pair or two of old sneakers, because the need to pull the boat across shallow areas is almost a certainty. Don't forget a pair



An overnight float trip down the Colorado requires plenty of gear, right, including tools, first aid kit, sun protection, personal flotation devices, plenty of water, spare propellers and fishing tackle.



High bluffs, a jungle of riparian vegetation and deer, swirling waters make a trip down the Lower Colorado a delight, whether you pick up a fishing roa or not.

of binoculars, because you never know what kinds of interesting wildlife will appear at a distance. And when you leave, cover your campfire and restore the area to at least as clean a condition as you found it.

4. Don't overdo it on fishing equipment. Too many rods and tackle boxes take up valuable space. Bring plenty of "snagless" lures such as spinnerbaits, jigs with weed guards and Texas-rigged plastic worms. The lures that work in your favorite bass lake will be fine for largemouths and Guadalupe in the Colorado, especially long-bodied Rapala-type crankbaits and topwaters. Flyfishing also is great on the river, especially if you employ weedless cork or deer-hair poppers that you can toss right up against, or onto, the bank.

Don't feel that you are relegating yourself to small fish when you fish the river. Largemouths over five pounds and Guadalupe up to three pounds are available. Look for largemouths in the slower backwaters and eddies; Guadalupe in swifter areas, especial-

Continued on page 15 . . .

The Lower Colorado— A Classic Cleanup

A gentle bend in the river compresses the wide channel into the confines of a deeper cut-bank, swirling the greenish waters into a narrow, curving chute before opening again in a merrily burbling riffle over multicolored rocks.

An angler, wading gingerly on the slippery rocks, casts a propeller-tailed topwater lure athwart the current, dropping it close to the vegetated bank. The plug leaves a trail of bubbles as the angler twitches it into the main-stream.

A flash of green almost too quick to follow flashes up from the depths, slashing the ersatz shad and just as quickly disappearing. Equally abrupt is the jump, wherein the two-pound dynamo somersaults on the surface before diving again to the depths.

Guiding the fish away from a tangle of driftwood, the angler herds the tiring Guadalupe bass into the shallows. Admiring the vertically barred upper body and horizontal belly stripes that characterize the Guadalupe, he frees the hook and watches the finny warrior retreat into the depths.

Observing the dancing waters cleave the Lower Colorado's rocky channels and gravel bars, one almost could be deceived into believing he is standing ankle-deep in a Rocky Mountain trout stream. This is far from true, both in terms of distance and substance. This is no pristine, snowmelt-fed stream, but rather a working river whose appearance tends to belie the fact that much of its water, especially during low-flow periods, is supplied by discharges from wastewater treatment plants.

As distasteful as it may sound, this river, as well as almost all other Texas rivers, serves as the repository for wastewater, albeit well-treated. Perhaps this condition is to be tolerated rather

If you live in Austin you should plan to enjoy the cleaned-up Colorado River. After all, your tax dollars paid for it.

than criticized in this era of environmental compromise; after all, the quality of the effluent has markedly improved and the river has rebounded from what it used to be.

"The river was pretty bad 10 years ago," said Lower Colorado River Authority biologist Doyle Mosier of Austin. "It was degraded by overloaded sewage treatment facilities, a condition that was caused by Austin's tremendous growth at that time." Mosier said the situation hit an all-time low in 1983-84, when discharges, both normal and accidental, combined with drought conditions to degrade water quality. "There were isolated fish kills, aquatic weeds choked off much of the channel and parts of the river even smelled bad."

Cities downstream from Austin were so outraged at the river's condition that lawsuits were filed and an organization called the Clear Clean Colorado River Association was formed. Under the leadership of Robert McCurdy, the CCC lobbied the Texas Water Commission to force Austin to correct the situation. (See "A Clear Victory," *Texas Parks & Wildlife*, June 1991.)

The big turnaround came in 1986 and 1987, when bond programs financed construction of the City of Austin's South Austin Regional Sewage

Treatment Plant and expansion and upgrading of the Walnut Creek and Govalle plants. At the same time, the troubled Williamson Creek facility, which formerly discharged effluent into Williamson and Onion Creeks that flow into the Colorado, was closed. The Williamson Creek plant's closing had such a dramatic effect on Onion Creek that TPWD officials reopened the creek in McKinney Falls State Park to swimming in summer 1993.

Improvements in discharge water quality around the turn of the 1990s coincided with higher than average rainfall, which helped clean the river. "By the time the next dry spell came along, the plants were doing such a good job the low flows were no longer a problem," Mosier said. He added that the City of Bastrop upgraded its treatment plant in the mid-1980s, and discharges from other downstream cities also are not considered a problem.

Currently one of the most obvious manifestations of pollution, other than the occasional styrofoam and plastic debris, is thousands of discarded automobile and truck tires scattered on the bottom of the river. The sheer numbers and widespread location of the tires would suggest that they were not washed into the river as "nonpoint source" pollution, but rather the product of moonlight dumpings. While old tires are not a direct threat to water quality, it is nonetheless distressing that a product now being recycled on a major scale still is being dumped into waterways.

Any future changes in water quality on the Colorado will be more thoroughly documented because of the LCRA's River Watch Network, the largest volunteer river monitoring program in the state with approximately 500 participants. The volunteers, mostly high school students, take weekly samples in the river and its tributaries throughout

the LCRA's jurisdiction. The nine sets of tests determine levels of dissolved oxygen, biochemical oxygen demand, nitrate and phosphate content, total dissolved solids, pH values, fecal coliform, chloride and water temperature.

LCRA officials said the River Watch program has attracted widespread interest outside the river area, and has been instrumental in the passage of water quality ordinances, including a ban on the use of detergents containing phosphates now in effect in Austin and several downstream cities.

The cleaner and clearer Colorado, as one might expect, is providing an improved environment for aquatic life, from insect larvae to fishes. Fish abundance has been quantified, not by unsubstantiated reports from fishermen but scientific sampling. As part of an instream flow evaluation of the river, Mosier and biologists from the TPWD's Resource Protection Division cooperated in electrofishing surveys of the river. Overall, the biologists were impressed with the quality of the fish community. The presence of multiple species of darters as well as sensitive fishes such as speckled chubs and blue suckers was an indicator that water quality has indeed improved. Of interest to fishermen were numbers of Guadalupe and largemouth bass, flathead and channel catfish.

"As someone who has fished the river for years and as a biologist, I watched water quality in the Colorado River decline and then improve," said

Roy Kleinsasser, a TPWD biologist who worked on the instream flow study. "From a fish community standpoint, all signs point to the river being in good shape.

"Of the indicator species on which we focused, all were present in substantial numbers and showed no distributional limitations that could be attributed to water quality," he said. "The river is beautiful right now. Among my favorite afternoons is to float the Colorado and flyfish for Guadalupe bass. Most won't be large, but they hit a bass bug or popper readily and fight well."

Following the joint LCRA-TPWD instream flow study, new flow levels are being instituted to protect the river's aquatic communities further. "As a result of the study, maintenance flows that will help conserve water quality as well as fish habitat have been committed to by the LCRA," said Dr. Randy Moss, who coordinated the study for TPWD. "Beginning at Austin, streamflows have been guaranteed downstream to the coast." For example, there are target flows for the reach near Bastrop, different monthly flows near Eagle Lake, and still another set of target flows at Egypt, all recognizing the differing needs in each reach, Moss said. Of course, there also are provisions during a sustained drought to provide the minimum flows necessary to preserve water quality, but to restrict releases from the Highland Lakes until normal weather returns.



A great blue heron vacates its perch on a driftwood pile at our approach. The isolated nature of the Colorado makes it an excellent place to view wildlife, including an occasional bald eagle.

Getting There is the Hardest Part

Imagine floating down a 30-mile stretch of clearwater river, catching fish in scenic surroundings while encountering no other anglers and, in fact, noticing few signs of civilization along the way.

Are we talking about some obscure national park stream in the Smoky Mountains or Idaho?

Perhaps surprisingly to most Texas anglers, the Lower Colorado River downstream from Austin answers just this description.

Spilling through Longhorn Dam in Austin, this section of the Colorado begins an almost 300-mile journey to the Gulf of Mexico, uninterrupted by reservoirs. There are four low-water dams, however, that could pose a hazard for unwary boaters. They are located near Del Valle just below Austin, Garwood, Lane City below Wharton and Bay City. The river's narrow floodplain cuts a winding path through blackland farms southeast of Austin, Bastrop County's Lost Pines, the Post Oak belt in Fayette and Colorado Counties and the Coastal Plains west of Houston before pushing sluggishly past the jetties at Matagorda into the Gulf.

This literally is a "new" Colorado River, because its waters are vastly cleaner and clearer than they were a decade ago. A costly cleanup of the City of Austin's wastewater treatment facilities during the 1980s turned the sometimes turbid and weed-laden stream into one that is swimmable and eminently fishable.

The question, however, remains, "If the Colorado is so good, why don't more people fish there?" The answer is one word. Access.

Almost all the river's banks are on private land, and public access is limited to a handful of road crossings and county and city parks. While the distances between some access points in the 50 river miles below Austin are

Access points have been scarce along the Lower Colorado's 300-mile course to the Gulf, but the LCRA promises that help is on the way.

manageable, other stretches are more daunting for all but the most dedicated anglers and canoeists. For example, there is no access along the 38 river miles between Smithville and La Grange. Likewise, the 42-mile run between La Grange and Columbus is devoid of launching spots. It doesn't get any better, access-wise, downstream from Columbus.

Considering the investment in time and equipment necessary to run a shuttle between widespread put-in and take-out points, it's easy to see why so few anglers are willing to tackle these distances. Given the current popularity of freshwater fishing, it may stretch credibility to declare a major fishery underutilized. But many river experts attest that the Lower Colorado's recreational potential has barely been tapped.

This dearth of access is not exclusive to the Colorado, as many of the state's other "public" rivers and streams may get relatively lit-

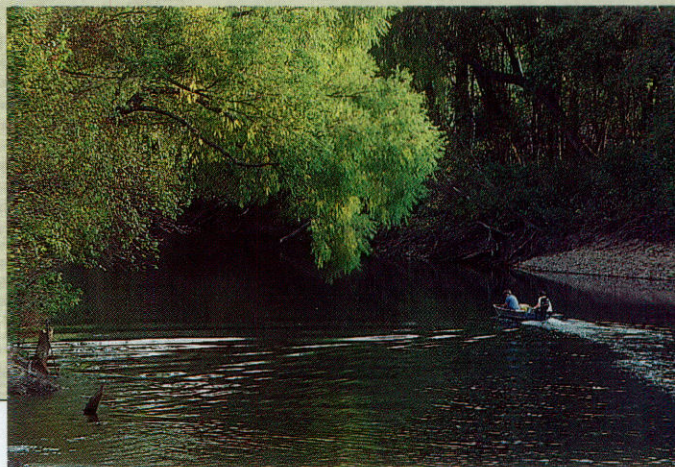
Boating on the Colorado River can be pleasant, but don't take the family bass boat. Aluminum flatbottom boats like the one at right are the most popular craft for fishing, since they have ample space and can be dragged across rocky riffles.

tle public use because their banks are privately owned. Even under that scenario, however, it's remarkable that neither the state nor the federal government owns a square foot of river-side property on the Lower Colorado, except for 10 Texas Parks and Wildlife Department boat ramps, located mainly at bridge crossing rights-of-way, and a few Lower Colorado River Authority (LCRA) facilities.

The LCRA has entered into agreements with Colorado County (Columbus) and La Grange to build and operate new park facilities along the river, using monies from the state's Local Parks, Recreation and Open Space Fund, accrued through taxes on sporting goods and administered by the TPWD. The three projects total approximately \$1 million, with half paid by the parks fund and the rest by the LCRA.

These facilities represent improved access points in cities where some access already existed, but the problem of lengthy stretches of river with no public access points remains. In an attempt to address that issue, the LCRA is pursuing acquisition of new primitive camping sites between existing parks, according to Kirk Cowan of the LCRA's Land Resources Division in Austin. One of the sites, near Plum between Smithville and La Grange, will be opened in the near future, Cowan said. A second site between La Grange and Columbus still is being negotiated, he said.

The TPWD recently took steps to keep a closer lookout on the Lower Colorado by hiring two "river game



wardens,” to patrol the river. Supervisor Sam Center of Eagle Lake said Victor Gonzales, stationed at Bastrop (512-303-1080), and Mike Weiss at La Grange (409-247-4944) are available to assist prospective river users in addition to enforcing laws along the entire 300-mile stretch. “River game wardens have made a great contribution in the crowded Guadalupe River area around New Braunfels, and I think the same will happen on the Colorado as more people discover what a great recreational resource it is,” said Center.

The LCRA has produced an excellent handbook, “The Lower Colorado River Guide,” to provide prospective river visitors information on access points, park facilities and other tips. Printed on water-resistant paper, the 36-page publication is priced at \$5. To obtain a copy, contact LCRA Land Resources Division, P.O. Box 220, Austin, Texas 78767, or call toll-free 1-800-PRO-LCRA.

For a more detailed report on the status of the entire Lower Colorado River from San Saba County to the Gulf, the LCRA offers a 40-page color booklet entitled “The State of the River 1993.” The booklet includes information on water quality, pollution, flooding and water uses. The report is free as long as copies are available from the LCRA’s Corporate Communications office at the above address and toll-free number.

Daily information on water release rates can be obtained by calling the LCRA’s recorded message center in Austin, 512-473-3333.

For more information about LCRA’s Colorado River Trail program and publications, including detailed fishing and boating maps of the Highland Lakes and the Colorado River, please contact LCRA’s Land Resources Division at:

LCRA Land Resources Division
P. O. Box 220
Austin, Texas 78767-0220
(800) 776-5272, ext. 4083
(512) 473-4083



... Continued from page 12

ly just above and below riffles. Keep in mind that striped bass, escapes from stocked reservoirs farther upstream, are in the river and can be huge. Also likely to be seen or caught are freshwater drum or gaspergou (which sometimes hit bass lures), channel and flathead catfish and alligator gar in the 100-pound-plus class.

If you like to use live bait, try tossing lightly weighted crawfish or minnows into the deeper holes. After setting up camp, you can use throwlines or do some night rod-and-reel fishing in the light of a lantern with traditional catfish baits to produce some excellent frying pan fare. The department’s water body records had five Colorado River entries at the time of this writing, for white bass (5.56 pounds), striped bass (35 pounds), smallmouth buffalo (38 pounds), grass carp (37 pounds) and redear sunfish (2.8 pounds). The record white bass, caught by Austinite David Cordill below Longhorn Dam in 1977, was the International Game Fish Association’s all-tackle world record until 1989 and remains the world record in the eight-pound line class. Conspicuous in their absence are records for largemouth and Guadalupe bass, all catfish species and freshwater drum. Needless to say, getting into the record

The Colorado is not just for the bass angler. This trotliner was proud to show off his overnight catch of flathead and channel catfish and freshwater drum.

book in these open species categories would not be at all difficult on the Lower Colorado.

5. Be security conscious. Leaving a vehicle at an isolated boat ramp overnight can be a problem, as we learned upon returning to Smithville. One car left near the ramp suffered some minor vandalism damage. When planning an overnight trip, try to arrange with a nearby business establishment to leave vehicles and trailers in a secure, or at least well-traveled, area. Leaving vehicles in public park areas for day trips is not as likely to be a problem. Tell friends or family your plans, especially your put-in and take-out points and estimated time of arrival at take-out. A cellular telephone, if available, would be an excellent appliance to have along, especially on an extended trip. Keep in mind that it takes all day to fish a 10- or 12-mile stretch of river thoroughly, and even then a considerable amount of motoring is required. This is especially true during the low-flow period of fall through spring, when narrow rapid and shallow flat areas require “lining” the boat through the hazard areas. ★



© STEPHAN MYERS

“It’s not static like a museum. It’s living and constantly changing. Birds are nesting, fish are spawning and butterflies are propagating inside the pyramid,” said Steve Dinjar of Galveston’s Moody Gardens tropical rainforest under glass. “We didn’t think that would happen for the first couple of years.”

Representing plant and animal species from Asia, Africa and the Americas, this replicated rainforest opened in March 1993. The walk-through was bright, with the top of the pyramid clearly visible. Plants were a neatly manicured collection of individually situated species. Now the trees form a canopy that blocks much of the sun. Vegetation leans over the walkways and vines climb into rock

Rainforest Under Glass

A little bit of the Amazon Basin in Galveston

crevices. Military macaws perch on branches and butterflies flutter among the greenery.

Rising 10 stories with a one-acre base, this \$13 million glass pyramid, designed to withstand gale-force winds, overlooks Offatts Bayou. It is part of a 142-acre garden complex dedicated to therapy, education, research and recreation. In 1982, philanthropist Robert L. Moody’s son suffered a head injury in an automobile accident. Rather than accept the grim prognosis, the Moody’s searched for ways to

rehabilitate their son. The key was therapeutic horticulture and horseback riding, so the Moody Foundation selected the site of the present complex and opened the Hope Therapy Center. The rainforest not only is enjoyed by the public, it also is part of the therapy for people ages two to 82 who have head injuries, strokes, burns, or cerebral palsy and for children who have been abused.

“There’s nothing magic about a horse. It’s a tool to keep people interested in pursuing tedious

therapies,” said Dinjar. “The setting is not clinical. It’s a beautiful garden. When a girl in a wheelchair gets on a horse and realizes she’s in control, it creates a tremendous sense of empowerment. Wheelchair-bound youth who are responsible for planting seeds and raising and harvesting plants learn nurturing and responsibility.”

In every part of the complex, there is something to learn. In a wading pool at the entrance to the pyramid, flamingos stand on one leg, beaks tucked under their wings. Videos tell the story of the rainforest, the earth’s oldest continuous ecosystem, and how they prevent flooding, erosion and drought and help maintain the earth’s climate. Covering seven percent of the earth’s land

mass, tropical rainforests are home to half the world's animal species.

Inside, volunteer guides point out an autograph tree. It works like a bulletin board for South American natives. Using sticks, they can write on the leaves, creating indelible messages for those who pass by. Long, straight bamboo stalks from Asia elicit a warning. If there is no bamboo, there will be no pandas. A red ginger bloom is a reminder that many of the products we take for granted, such as spices, coffee beans, shampoo, rubber and furniture polish, come from the rainforest. So do many of our medications.

Galveston's rainforest assists researchers in collecting medicinal plants that might be used in cancer treatment or to heal cuts and burns. "We find and grow plants and supply tissue for

scientists and researchers," said Horticultural Exhibits Manager Gary Outenreath. "We've been to Panama collecting items for the exhibit. We're going to Peru with a 75-year-old shaman who will show us the plants his people use for healing. A lot of it might be superstitious, but some of it can work. You start by finding out what chemicals are in the plants."

Another project going on in the pyramid is a Texas A & M University study on the use of beneficial insects, rather than chemicals, for pest control. For example, butterfly reproduction damages plants, but a remedy is a tiny wasp, called trichogramma, which lays its eggs on butterfly eggs. If the wasps fail to contain the butterfly growth, a bacteria called *Bacillus thuringiensis* starves the creatures. Lady beetles are used for soft-bodied insects like aphids. Two species of spider mite predators control spider mites.

Several new exhibits were added to the rainforest in August: poison arrow frogs, tarantulas, reptiles, an actual Cuna Indian canoe and a collection of animal medicine dolls.

Balancing an ecosystem is no simple task. "We release 15 or 16 different kinds of organisms on a regular basis to control insects," said Outenreath. "We're constantly monitoring things visually. If we haven't seen a particular insect before, we watch it because it could be a problem. Then we direct the A & M people to it. They can tell if the bad ones are gaining or losing momentum."

Controlling temperature also is essential to species survival. The pyramid's climate control system, called Q-Com, simulates a rainforest climate. It is warm and wet, with an average temperature of 75 degrees, humidity between 75 and 90 percent and 60 to 400 inches of rain per year, depending on location. If it gets too hot inside, vents at the top of the pyramid open to let in cooler air. When the vents opened last winter, the lifespan of the butterflies that were near the top was shortened by their exposure to the cold.

Humans, though, are more adaptable than butterflies. For those used to Texas heat and Gulf Coast humidity, perspiration is hardly noticeable until you move

into the cave or stand next to a waterfall. Then the cool breeze is jarring, but welcome.

Also in the Moody Gardens complex is Palm Beach, a pool area with imported white sand where the children's discovery section requires that adults be escorted by a child. Besides swimming, there are volleyball courts, jogging trails, cruises and dancing on an 1800s-era paddlewheel boat and an IMAX 3-D theater.

To get to Moody Gardens, take I-45 south to Galveston and exit at 61st Street. Turn right on Stewart Road, then right on Jones Drive to Hope Boulevard. The rainforest is open 10 a.m. to 10 p.m. daily and Palm Beach is open 10 a.m. to 7 p.m. from Memorial Day through Labor Day. For additional information, call 1-800-582-4673.

by *Christina Leimer*

Christina Leimer is a freelance writer living in Houston.

The glass pyramid, left, houses a tropical rainforest complete with plants, trees, birds and butterflies. Inside, several paths meander through the dense foliage, below, which includes orchids, bromeliads and ferns.



© STEPHAN MYERS

National Parks Showcased In New AAA Travel Guide

America's vast and diverse national parks are detailed in a new American Automobile Association book, the "AAA Guide to the National Parks."

The 320-page softcover book includes color photos, maps, entry fees, weather, accommodations, attractions, activities, advisories and a chart listing visitor centers. From hiking to biking, rock climbing to rafting, there is pertinent information about each of the 50 national parks, including their history and natural wonders.

Co-published by Macmillan Publishing Co., the guide is available at bookstores and participating AAA clubs for \$15.

Birding with

FOLLOWING DIEHARD BIRDERS ACROSS
SOUTH TEXAS IS MORE LIKE A TRIATHLON
THAN A STROLL IN THE PARK.

Day 1: We rendezvous at a motel in Kingsville. Then the 10 of us pile into a van and head for an out-of-the-way seafood restaurant. Along the 10-mile route, we stop first at an underpass to watch cave swallows dive for insects; then, in the approaching dusk, we peer at black-bellied whistling ducks on a sunset-colored marsh. With the last of the light, we admire a white-tailed hawk. Then, finally, onward to avocado and tomato salad, crabcakes, fried scallops and shrimp....

For four days last spring, I could iden-

tify every bird I observed. I found myself at birding "hotspots" others travel from as far away as Australia and England to visit. I saw rare species that would make any birder in the world drool. And I ate great food along the way.

But I had a lot of help.

I was on a professional birding tour. Texas boasts the most exciting array of bird species in the U.S. and, because of this, it probably can lay claim to having the most and best-guided bird tours.



BILL REAVES

Birders on professionally guided tours can enjoy the trip without worrying about logistics. They also benefit from the guides' expertise in bird identification and ecological interpretation. Guided tours of brookery islands, above, are popular during the spring nesting season. Captain Ted Appell, on the right in the photo, assists birders aboard the Skimmer with identifications. Appell is known worldwide for his whooping crane tours in the winter.

the Pros

by Kristi G. Streiffert



BILL REAVES

Some tour-takers seek the Lucifer and blue-throated hummingbirds of Big Bend. Others pursue the spotted owls, Steller's jays, plain titmice, and Grace's and Virginia's warblers of the Guadalupe Mountains. Still others dive into the tropical plethora of the lower Rio Grande Valley. No matter what birders seek, a birding tour awaits.

Day 2: The bright lime leaves of honey mesquite assault my 6 a.m. eyes. At least eight cactus wrens echo ratchety! ratchety!

from their perches atop massive prickly pear cacti. Sleepiness forgotten, 19 sets of field glasses swing toward lark sparrows, then over to golden-fronted woodpeckers, then down to a Sprague's pipit.

"If you have an interest in natural history, and have thought about focusing on birds, these tours would interest you," said John Arvin, a leader for Field Guides, Inc. "We have all levels of birders with us on these trips, from rank novices to some who are as exper-

rienced as the guides."

And the guides' expertise is considerable. The guide on my trip could hear the song of a Cassin's sparrow while driving 30 miles per hour (followed by fast braking of the van and an en-masse trot across a brushy field to locate the elusive singer.) Tour leader Bob Sundstrom, a representative of Victor Emanuel Nature Tours, also can mimic the call of the ferruginous pygmy-owl, pick out a masked duck at what seemed

a half-mile away and lead his followers to the perch of a groove-billed ani.

There are many advantages to taking a guided tour of the birds of Texas. To some it might seem too easy, but I found it gratifying to be confident with the identification of every bird we encountered. This eliminated the frustration of doubt and freed the observers to enjoy new birds.

The leader also provided interpretation, enabling us to put what we saw into context. The vermilion flycatchers we observed performed a delightful ballet as they sang. We might not have understood its courtship significance if Bob hadn't explained.

In addition to bird identification and ecological interpretation, guides know where to look for the birds. "Our tour participants value the help from the leader in locating birds; even if they are from Texas, birdwatchers often don't know exactly where to look or what to look for when they get there," Arvin pointed out.

Day 3: After an hour's drive, we arrive at a place characterized by sandy soil and live oak groves. Bob expects to find the ferruginous pygmy-owl, a rare sight for birders in the U.S., and begins imitating its

toot...toot call. Before long we have three telescopes aimed at the roosting owl, which was sheltered in an oak about 20 yards away. All the participants slap each other on the back and grin.

We've gotten to know each other quite well by now. One couple, a chemist and a college professor, coordinated this trip with their teenagers' spring break. There are two other couples, one in their 60s, the other



© BILL REAVES



© GRADY ALLEN



© GRADY ALLEN

Most commonly seen in Florida Bay, magnificent frigatebirds, top, are summer transients along the Texas coast and casual winter visitors. The scissor-tailed flycatcher, left, is seen throughout most of the state in the spring and summer while the pyrrhuloxia, above, is a Mexican bird found in West and South Texas.

in their 80s. The single woman on the trip is a college professor on spring break, too. Completing the group is a man whose wife gave him the tour for his birthday.

To pry us away from the owl, Bob hints at more exciting birds nearby. His tape recording of its song lures in a northern beardless-tyrannulet—the tiniest flycatcher in North America. Then we slip deeper into the woods in search of the tropical parula. For one woman, this will be the 981st bird species on her life list. Bob finds six bright males flitting about high in the oak canopy. After we look our fill, we realize hunger set in quite some time ago. “Time for lunch, everybody,” calls Bob, and begins to dispense the picnic stored in the back of the van.

All the headaches of trip logistics belong exclusively to the guide. Participants enjoy fine lodging, food and transportation—all without paying the slightest attention to details. “Group



© DAVID J. SAMS

The King Ranch in South Texas, below, is a popular birding spot. Tour guide Victor Emanuel, center in blue cap, uses a tape to attract birds to within viewing range. Bentsen-Rio Grande Valley State Park, above, offers guided bird and nature walks.



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Birding Tours Based in Texas

(Many others conduct tours in Texas but are based elsewhere.)

Big Bend Birding Expeditions
P.O. Box 507
Terlingua, Texas 79852
915-371-2356

Field Guides Incorporated
P.O. Box 160723
Austin, Texas 78716-0723
512-327-4953

Victor Emanuel Nature Tours
P.O. Box 33008
Austin, Texas 78764
1-800-328-8368

The Nature Conservancy of Texas
P.O. Box 1440
San Antonio, Texas 78295-1440
210-224-8774

Whooping crane tours:
Rockport-Fulton Chamber of
Commerce
P.O. Box 1055
Rockport, Texas 78382
1-800-242-0071

There are birding activities throughout the year for Texas Conservation Passport holders. These activities are listed in the "Outdoor Datebook" section of *Texas Parks & Wildlife*, and passport holders receive a quarterly newsletter. The Texas Conservation Passport is available for \$25 at most state parks, Parks and Wildlife offices, Whole Earth Provision Co. locations in Austin, Houston and Dallas and REI in Austin and Dallas.



© GRADY ALLEN

The Harris' hawk, above, might be seen on a birding tour in the Edwards Plateau. Among the most popular tours in the state are trips to see endangered whooping cranes on their wintering grounds, below. Texas has more bird species than any other state as well as the most and best-guided birding tours.

travel is more efficient than individual travel, too," said Arvin. "Tour operators negotiate lower group rates; an individual traveling to identical accommodations and dining at the same restaurants probably would end up spending about the same amount of money as the tour participants, without the expert guide."

Day 4: Today is a complete change of pace; we head over to Rockport for a boat trip out to see whooping cranes. We make several stops along the way, though. Bob cannot resist good birds. We break beside the highway to watch a Swainson's hawk; we stop at a wetland near Corpus Christi to watch reddish egrets dance; we pull off into a Mustang Island parking lot to view sandwich terns and laughing gulls.

The afternoon's boat trip produces pelicans, skimmers, loons and bottlenose dolphins. (We observed at least 16 animals other than birds on this tour, including javelinas, raccoons, dung beetles and swallow-tail butterflies; and we identified 18 different wildflowers.)

Finally, the captain cuts the motor and we drift near two male whooping cranes



© GRADY ALLEN

feeding on crabs. We linger near them for at least 20 minutes. I sit cross-legged on the deck and lean my forehead against the rail, never taking my eyes off the white cranes.

Many books have been written about finding and identifying the birds of Texas, yet it may take years of apprenticeship before a new birdwatcher is able to track down even a small percentage of the nearly 600 species found in the state. A birding tour is one special way for amateurs to exponentially improve their skills and experience. For master birders, a tour provides a relaxing route to even more expertise.

The day after the tour: I clutch my bird checklist to help me sort out the jumble of memories from the trip. The moist Gulf breeze, open grasslands, brushy pastures and dark oak forests...feathers, hoots and screeches, an artist's palette of vivid colors... new friends, barbecue, tired eyes. The species count: nine species of egrets and herons, 21 ducks and geese, 12 birds of prey, 22 shorebirds, seven flycatchers,



© DAVID J. SAMS

six wrens, 11 sparrows... a breathtaking 154 in all. No wonder the memories run together. ★

Former Texan Kristi Streiffert is a freelance writer in Arlington, Virginia.

The Aransas National Wildlife Refuge, above, is an outstanding spot for birding tours. In addition to whooping cranes in the winter, the refuge hosts pelicans, roseate spoonbills, warblers, hummingbirds, waterfowl and a wealth of other species.

Birder Profile

Texas birders don't hesitate to spend big bucks on their avian pursuits.

When a Texas birder looks in the mirror, the person looking back is likely to be of retirement age, wealthier than average and willing to spend money freely on birdwatching trips.

A survey that was conducted by Texas A&M University graduate student Jason A. Leifester during fall 1993 revealed that Texas birders spend a surprising amount of time and money on their hobby. In fact, the 700-plus birders who were surveyed took an average of 25 birding trips during the year prior to the survey. They traveled almost 3,000 miles and spent more than \$3,350. Most of their expenses were related

to food, lodging, transportation and guided tours.

Almost half the respondents had a Texas Conservation Passport, a Texas Parks and Wildlife Department annual permit that allows free annual entry to parks and wildlife management areas and various guided activities, including birding tours. Many of those surveyed belonged to as many as six birding or conservation organizations.

The average age of birders in the study was 56, more than a third were retired and just over half were males. They resided largely in urban areas, with almost half living in cities of 250,000 or more residents. They are a well-educated group, with about 75 percent having bachelors degrees and 40 percent with graduate degrees.

Leifester said birders tended to be self-taught or were introduced to bird-

ing by friends, and their spouses were their most frequent birding companions. The most frequently cited reasons for going birding were a personal fascination with birds and a desire to be close to nature.

Leifester said although the survey averages indicate a majority of birders are in the older age group, the sport is practiced by a broad spectrum of Texans. "Although birders tend to take numerous trips and spend a lot of money on their hobby, these are not necessary elements for enjoying one of the fastest growing outdoor pastimes," he said.

The survey was conducted with the assistance of the TPWD's Non-game Program, Texas Agricultural Experiment Station and Dr. Clark E. Adams of Texas A&M University's Department of Wildlife and Fishery Sciences.

BLUES ON THE RUN

*Want to combine hunting with aerobics?
Try chasing blue quail across the Black Gap's badlands.*

by Larry D. Hodge

Scanning the Big Bend countryside for a likely looking campsite, I almost ignored the cloud of birds lifting off the hilltop to my left. There were so many I assumed they were black-birds, but another glance seconds later triggered a full-scale emergency stop: at least a hundred birds were skimming over the creosote bush in that drooped-wing glide that can mean only one thing—quail.

Bailing out of the car, I grabbed my shotgun and began round one of a four-day "park and run" blue quail hunt on the Black Gap Wildlife Management Area south of Marathon. By the time I picked one of the designated campsites a couple of hours later, I had six scaled quail in the gamebag and at least that many puncture wounds in my shins from lechuguilla thorns. I had a healthy respect for the fleet-footed birds, having experienced some of the most exciting wingshooting a Texas scattergunner could ask for. And I hadn't even unpacked the car yet.

I figured it couldn't get any better than that.

I was wrong.

Consider:

- The first covey flushed at dawn the next morning, when I rattled

the coffeepot. There were eight more that day.

- In four days I managed to bag 28 birds. Almost all came from coveys that flushed when I drove by on the extensive area road system.

- Even the hawks help you hunt. While resting in the shade one afternoon, I watched a hawk dive-bomb a talus slope above a dry wash. Quail erupted from among the rocks. I dashed across the draw and clawed my way up the steep hillside. Sure enough, birds still in hiding began to push the panic button as I made my noisy approach. Final score: me 5, hawk zip.

- Returning a month later to the same spot where the hawk had struck out, I flushed the same covey. They scattered among grass and rocks on a saddle between two points. In 15 minutes I

got 10 birds out of an area no larger than 20 feet by 30 feet. And at least 60 birds remained in the covey.

Bonnie McKinney, a biology field worker for the Texas Parks and Wildlife Department, has lived on the Black Gap WMA with her husband the past 12 years. An avid quail hunter, she probably knows more about chasing Black Gap blues than anyone else. Her insights into scaled quail behavior are invaluable to anyone planning a hunt on the area.

"Hunting blues isn't like hunting bobwhites," she explained. "They move out a lot earlier in the morning than bobwhites. They start calling at first light, then go to water. The best hunting is usually between 7:30 and 9:30 in the morning, after they've watered and are out feeding. They feed all over—on top,

Caliche roads winding through the Black Gap's thorny habitat are the hunter's highway for locating coveys of blue quail. Blues prefer to run instead of fly, but once the coveys are dispersed the birds can be flushed by hunters on foot.





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Blue quail, above, sometimes are seen perched on cacti or fenceposts, but hunters usually see them scurrying through the low brush instead of escaping through the air.

ground again. How they flush is one important factor in your hunting success, especially if you don't have a dog. If you can, break the covey up before the birds flush. "If the whole covey flies and lands together, they will run," McKinney advised. The only thing to do in this case is to run as fast as you can to the spot where they landed, ignoring the catclaw, lechuguilla, prickly pear and dog pear perforating your hide. You may get a fleeting shot at a blue legging it through the undergrowth.

Shoot a quail on the ground? Isn't that un-Texan or un-sporting? McKinney thought so when she first moved to the Black Gap. "I was raised in Virginia,

and when I moved down here I was mortified to see people shoot birds on the ground," she said. But after chasing a few coveys several hundred yards and finally losing them with nary a flush, hunters learn that blues would rather run than fly, and any shot you can get, you'd better take.

However, sometimes blues will stick tight and flush when pushed, and this is when the hunting gets hotter than the Big Bend sun. The second key factor in hunting success is where they land. Again, careful observation will put more birds in your gamebag. "If the covey lands in separate bunches, they will stick," McKinney explained. "The birds are lost and will stay put. You may hear

them using locational calls, trying to get the covey back together. That's when you will get good singles shooting." The type of terrain and vegetation where the quail land is important. "Blues hold real well when they land in areas with a lot of chino grass," she said. The speedy runners also become stickers when they land on a talus slope strewn with lots of boulders. The climb up to them may be tough, but it's well worth it.

The hunter who stalks blues holding tight on a steep slope covered with rocks and bunches of chino grass walks through a minefield. You never know when a bird is going to explode beneath you. Several times I had unseen quail flush no more than six inches from my boot. In such cramped quarters, you often will have to wait for birds to fly some distance away before you shoot. Most shots will be at 15 yards or closer. And shooting one just makes the others stick tighter. You have to walk each one up and you often flush another while walking to retrieve a downed bird. Hunting with a partner increases the bag and helps avoid lost birds; while one retrieves, the other can be the shooter. Shooting doubles in cover for which these birds are so excellently camouflaged is futile because you will lose both birds.

When hunting slopes where a bunch of quail are holding tight, don't give up after one or two passes through the area. Work your way methodically past every bush, clump of grass and rock. Fully half the quail I shot on two trips to Black Gap were taken after I thought I had covered an area thoroughly. Many times I flushed quail that I had walked by once or twice. Apparently I had passed just a foot or two outside their danger zone. Make noise, stomp your foot and be ready. "They are big, but they fly fast," McKinney said. "That often will cause you to shoot behind them. They don't get up as high as a bobwhite, but I think they are just as fast if not faster."

Hunting with a dog solves a lot of these problems but raises a few others. "I don't quail hunt without a dog," McKinney said. "It's so easy to lose a quail out here when you knock it down."

down in the draws, on talus slopes, scattered out in boulder piles. During the middle of the day they will loaf under bushes until about 3 p.m. Then they'll go to water about 4:30 or 5."

If all those references to water got your attention, you've picked up a key to hunting blue quail on the Black Gap, where the average annual rainfall is about eight inches. "Hunting will be good around water early in the morning and late in the evening if there has been no rain," McKinney said. Rainwater collects in hollows in the rocks and scatters the birds. Otherwise, prime hunting areas center around the numerous "guzzlers" on the area. These are artificial water sources that attract and concentrate quail and other wildlife. Their locations are marked on a map you can pick up when you check in.

For hunters without dogs, McKinney recommends the "park and run" technique. "By the time December is over, we've had a lot of hunters, and the birds are really wild," she said. "Then in January the birds gather in big coveys of 80 to 100 birds. They are so wild they will flush when a car goes by on a road maybe 200 yards away. Most people just drive around until they see a covey flush, then get out and hunt."

When a covey does flush, watch the birds carefully until they all are on the



KELLEYGRAPHICS

DEBUNKING BLUE QUAIL MYTHS

Before heading out to Black Gap, I talked to several people who had hunted blue quail. "Take high-brass shells with number 6 shot," one told me. "Better use a full choke," another said. "These quail just won't fly, but they'll run you to death," said a third.

I was so psyched I took not only a shotgun with screw-in chokes but also, just in case a modern full choke was not enough, a Model 97 Winchester with 30-inch full-choked barrel equivalent to extra full when used with today's tighter-patterning loads. However, I balked when it came to shelling out for high-brass loads. I did take some low-brass 6s, but I also took along plenty of light target loads of 7 $\frac{1}{2}$ s.

So what worked best? Every quail I shot fell to light loads of 7 $\frac{1}{2}$ s. When flushed onto steep hillsides and then walked up, the quail held so tight that the modified choke I started out with was quickly changed to an improved cylinder and, finally, skeet choke. Many shots were no longer than 10 yards on these close-flushing birds. And

flush they did. Out of three limits of quail, exactly two birds were shot on the ground.

Ground-shooting quail probably is what led people to think that full chokes and larger shot are required. Bushes partly screened the two quail I shot on the ground and deflected much of the shot, and both had to be chased down. Of 43 quail shot on the wing, however, 38 fell dead. Used on flying quail in the clear at close range, the 7 $\frac{1}{2}$ s were more than adequate.

As for running myself to death pursuing fleeing quail, I quickly learned that the most productive hunting resulted from driving the roads until a covey flushed or ran across the road, then going after them. Not once did I walk up a covey I had not seen already. With 106,000 acres to cover, the lesson is obvious: to survive, drive. When you see quail, remember to pull your vehicle to the side of the road to avoid blocking it. It may be some time before you return to your vehicle. Also, be aware that area regulations prohibit loaded firearms in vehicles (shells in either the chamber or magazine) or shooting from, along or across a designated road.

The tendency of quail to scatter out in boulder piles means that using two or three dogs can produce more quail, since you are less likely to walk over a hidden bird while retrieving another. Dogs also are good at following running coveys, something that may go against the grain if they've been trained on bobwhites. "Dogs need to do a lot of ground trailing on blue quail," McKinney said. "Dogs trained on bobwhites may not do well at first. Running birds confuse them. But it doesn't take a smart dog long to figure out what these blues are doing."

If you plan to hunt the Black Gap with a dog, McKinney warned, be aware that conditions are quite different from those you will find in bobwhite country. "You can't use a big, wide-ranging dog," she said.

Conditions are hot, rocky and prickly. (Conventional wisdom states that everything in the Big Bend country stinks, bites, sticks or stings. Not true. Some things bite and stink; others stick and sting.)

"Luz, my German shorthair, was raised here and knows how to get around," McKinney said. "She doesn't need boots, but dogs from the outside do, or the rocks and the dog pear will cripple them." McKinney

GUZZLERS: A Black Gap Success Story

What do blue quail have in common with desert bighorn sheep? Nothing, physically, but gastronomically it's another story. Both survive in desert habitat, where rainfall averages eight inches per year, because

of an innovation developed on their behalf by the Texas Parks and Wildlife Department—the guzzler, a watering device.

Actually, the guzzler is as old as the first bucket used to catch runoff from a roof. It's the application that is unusual. Scattered throughout the Black Gap WMA are galvanized metal roofs without a house under them. Each V-shaped "roof" is about 20 feet by 24 feet and channels water to the center, from whence it runs into a galvanized box with inlet and outlet. Rainwater on the roof sinks to the bottom of the box, which when full drains into a thousand-gallon tank set

downslope. A small watering trough no more than 16 inches square is fed from the tank and is kept full by a float valve.

"The guzzlers are a real plus for the quail, because they never run out of water," said Bonnie McKinney. "They are designed to stay full on eight inches of rainfall a year. And if a guzzler should run low, we haul water to it."

McKinney said the guzzlers, which were developed on the Black Gap and Sierra Diablo WMAs for desert bighorn sheep, are a boon for all area wildlife. "With the guzzlers, we can create habitat," she said. "Songbirds, doves, quail, deer—all kinds of wildlife use them."



GLEN MILLS



© LARRY HODGE

Pursuing blue quail across tough Black Gap terrain requires protective clothing and considerable stamina. As on all department WMAs, blaze-orange clothing is required of hunters for safety purposes.

also pointed out that hidden conditions threaten dogs. “People don’t realize that because the black rock here really holds the heat, the ground temperature may be 40 degrees hotter than the air temperature, which can be 70 or 80 degrees in January or February. You need to carry water for your dogs and give them a sip every half hour or so. Also, carry tweezers (for removing thorns) and a snakebite kit. We have a lot of rattlesnakes here, and they sometimes come out on warm winter days. A couple of days before Christmas last year, Luz and I encountered a big diamondback.”

Hunting with a dog frees you to cover ground most people never see. “Quail are scattered over the whole area,” McKinney pointed out. “Most people hunt near the main roads, but I like to get into those areas that are just big blank spaces on the map, away from all the roads and campsites.” Hunters who push on all the way to the Rio Grande, 18 miles from headquarters, may reap a bonus. “There are a few Gambel’s quail down by the river and they are legal to take as part of the daily bag,” McKinney said.

For the most productive hunting, McKinney said to keep another characteristic of blue quail in mind. “Coveys tend to locate in the same general area year after year. I’ve banded quail and then trapped them two years in a row

in the same area.” Pick up a map of the area when you check in, and each time you flush a covey, mark its location on the map. On your next trip, you can concentrate on those areas you know quail frequent.

That knowledge helped me bag almost as many quail in two days on my second trip to Black Gap as I did in four days the first time out. The little red circles on the map marking where I found coveys on trip one guided me to places that produced again on trip two.

One of the best spots was near a guzzler not far off the main road down to the Rio Grande. The red circle on the map told me I had spotted a large covey nearby in January. Yet nothing moved in the February sun as I honked the car horn, slammed the door, and yelled a couple of times. Nothing—until the sound echoed from a cliff behind me and rumbled down the canyon. A blue-gray cloud thundered from the brush along the side of the draw opposite the guzzler, split, and landed in two ragged bunches on the steep side of a hill.

Skewered on a sotol stalk and roasted over a campfire, five of those quail provided a delicious ending to a perfect day. ★

Freelance writer Larry D. Hodge of Mason will return to the Black Gap WMA at the earliest opportunity—wearing thorn-proof shin guards.

HUNTING WMAs

The \$35 Annual Public Hunting Permit is your passport to unlimited hunting (subject to season and bag limits, of course) on 97 public hunting areas totaling almost 840,000 acres. Some wildlife management areas also offer hunts on designated days for specific species by purchase of a Regular Permit, usually \$6, or by special drawing. You also must have a current Texas hunting license. Non-hunting sidekicks who want to enjoy the outdoors on a WMA can purchase a Limited Use Permit for \$10. Access on some WMAs is restricted to certain time periods.

Purchasing the Annual Public Hunting Permit (called a Type II Permit in the past) entitles you to receive a book detailing the hunting opportunities for the current year on all the wildlife management areas in Texas. The book contains fairly detailed maps of each area.

Keep the following special regulations in mind when hunting on public lands in Texas, and read the public hunting book carefully for others.

- You may drive only on designated roads and camp only in designated campsites.

- You may not use an all-terrain vehicle (ATV) on a public hunting area unless you are disabled and have a physician’s letter stating that you qualify for a handicapped parking sticker.

- You may not hunt from a motor vehicle unless you are disabled.

- You may not possess a loaded weapon within a motor vehicle or designated campsite. A loaded weapon is defined as one with a shell anywhere in the gun. A gun with an empty chamber but with shells in the magazine is considered loaded.

- You may not discharge a firearm on, along or across a designated road.

- In general, you must wear visibly a minimum of 400 square inches of hunter orange with hunter orange headwear while on the area. See the WMA book for exceptions.

- You may hunt only the game species designated for each area. Nongame species, including poisonous snakes, or game species not listed for that area, are not legal.



GLORY DAYS FOR CADDO

by Mary-Love Bigony

Sixty years ago last summer, a group of young men arrived at a remote spot on Big Cypress Bayou deep in East Texas. The site was newly dedicated Caddo Lake State Park, and over the next four years the young men—members of the Civilian Conservation Corps—would build a variety of facilities using the native stone and timber they found abundant in the area.

Today, Caddo Lake and the state park on its upper end feel no less remote than they must have to those CCC workers in 1934. Thick pine and hardwood forests enfold visitors as they enter the park. Cypress trees draped with silky strands of Spanish moss tower overhead. The park offers tantalizing glimpses of Caddo Lake, one of the largest inland cypress swamps in the South. This intricate maze of bayous and sloughs has been described with words such as “mysterious” and “haunting.” Even the name of the nearest town—Uncertain—adds to the lake’s mystique.

Land acquisitions, ecotourism initiatives and a new wetlands designation are bringing Caddo Lake State Park and Wildlife Management Area into the national spotlight as a unique ecological resource.

A

s Caddo Lake State Park enters its seventh decade, it is far from settling into old-age complacency. In the fall of 1992, the park was expanded by some 7,000 acres. Now known as Caddo Lake State Park and Wildlife Management Area,

this 7,500-acre area will ensure protection of the sensitive wetlands and its natural and cultural resources.

The lake and park are at the vanguard of plans to develop ecotourism in the region. After the financially promising but environmentally threatening Daingerfield Reach proposal fell through in 1992 (see "Close Call for Caddo," *Texas Parks & Wildlife*, July 1993), Congressman Jim Chapman of Sulphur Springs pledged to seek other

means of economic development for the Cypress Basin. Chapman and the Texas Parks and Wildlife Department jointly developed a proposal that Executive Director Andrew Sansom and Chapman announced on October 22, 1993. "The key to the proposal," Sansom said at the time, "is sustainable development, which relies on ecotourism as a basis to promote environmental initiatives."

Also last fall, Caddo Lake was the subject of one of the most significant



environmental news stories of 1993. In October, the 23-mile-long waterway was designated a "Wetlands of International Importance" by the Ramsar Convention, a multi-national ecological agreement. Caddo Lake is only the 13th site in the United States to earn such a distinction from the Ramsar Convention, named for the city in Iran where the treaty was finalized in 1971. About the same time, the lake received a Priority I rating by the U.S. Fish and Wildlife Service, the highest classification for wetlands.

Singer Don Henley, a long-time conservationist and native of nearby Linden, also focused attention on the area. Henley established the Caddo Lake Scholars Program, a consortium of scientists and professors from universities in East Texas and Louisiana who are dedicated to preserving the lake's ecosystem.

"The world has discovered our secret," proclaimed the newsletter of the Greater Caddo Lake Association last spring. And indeed, an unprecedented number of state and federal officials have visited the park and lake over the past two years, as have average citizens curious about this "newly discovered" lake. But despite the increased attention, the park remains a secluded getaway and a good base of operations for Caddo Lake outings.

Much of the park's character comes from the moss-draped baldcypress trees.

Moss-draped baldcypress trees bring autumn colors to the lake, left. Unlike most coniferous trees, baldcypresses shed their leaves in the fall. A concessionaire offers boat tours of the lake, right, leaving from the park.



Raccoons are among the many wildlife species that make their home near the lake. River otters and beavers also are seen.

Bulging, fluted bases support trunks eight feet in diameter that rise 100 feet or more toward the sky. These trees, remnants of a species once found throughout the prehistoric forests of North America, are closely related to the giant redwoods of California. Baldcypress trees flourish in areas that

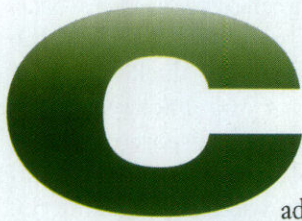
are too wet for most other trees. Unlike other conifers, the baldcypress sheds its leaves in the fall, hence the "bald" in its name. The National Biological Survey is conducting growth studies on the cypress trees in the park and so far, the oldest one they've found is 450 years old. Future plans call for an exhibit showing a cypress time-line.

In addition to the baldcypress trees, pines form a canopy over much of the park along with hardwoods such as oaks, hickories and walnut trees. Beneath the shady overstory are thick stands of ferns, sumacs and buckeyes. The American beautyberry sports large clusters of purple berries in the fall, and sweetgums and red maples bathe the park in autumn colors. In the spring, redbud and flowering dogwood trees give the park a bright and lively look. Redbud trees usually bloom during the first two weeks of March, and the dogwoods bloom a few weeks after that.

A good place to learn about the plants and trees of the area is on the shady, 3/4-mile Caddo Forest Trail. A guide booklet available from the park headquarters contains numbered descriptions that correspond to numbered posts on plants and trees along



the trail. An excellent cross-section of the park's vegetation, which includes cypress swamps, hardwood bottomlands and pine woodlands, can be seen along the trail. A slightly more strenuous 1½-mile hiking trail branches off from the Caddo Forest Trail and provides additional opportunities for nature study and photography.



Caddo Lake, the only naturally formed lake in Texas, is the drawing card for most visitors to the park. The Caddo Indians believed the lake was created after the Great Spirit appeared to a Caddo chieftain in a dream and warned him of impending danger. The chief moved his people to higher ground, so the legend goes, and soon the rains began. The earth trembled, a huge gap opened and water rushed in to form the lake.

Appealing as the story is, Caddo actually was created by a logjam on the Red River that blocked a portion of the river channel for nearly 200 years, forcing water to back into the tributaries along the Red River drainage. The U.S. Army Corps of Engineers used dynamite to clear the logjam in the 1870s, and in 1914 they built a concrete weir to keep the lake from draining.

Although no longer "natural" in the strict sense of the word, Caddo Lake nevertheless has a primitive atmosphere distinctly different from other East Texas lakes. The ever-present baldcypress trees cast moody shadows, and cypress "knees" poke up through the water's surface like gnomes guarding the lake. Channels or "boat roads" with colorful names such as Whangdoodle Pass and Hog Wallow wind around the lake.

Caddo's diverse fish population includes paddlefish, chain pickerel, alli-

gator gar and a variety of bass species—largemouth, white and Kentucky spotted. The lake's largemouth bass record is 16.01 pounds. Crappie, catfish and sunfish (bream) are other popular game species. Each spring, the Greater Caddo Lake Association hosts a bream tournament. With an entry fee of just \$5, people of all ages and abilities enter, and there are trophies for teens and preteens.

The park has a double-T fishing pier on Saw Mill Pond, just off Big Cypress Bayou. Anglers with boats can launch from the park's double concrete ramp. Since the Texas side of the lake and the Louisiana side have different fishing regulations, pay attention to border markers in the middle of the lake that designate the state line.

But you don't have to fish to enjoy

Cypress groves such as this are found throughout the lake's 32,000 acres of channels and bayous. The trees are hundreds of years old and grow in areas that are too wet for most trees.

Caddo Lake. The sights and sounds are appealing to all the senses, and people enjoy exploring the lake and its boat roads. These channels can be good places to get a look at some of the area's wildlife. Alligators lurk in the lake's dark waters, although they seldom are seen. River otters and beavers live in this watery domain, and waterfowl are abundant in the fall. Neotropical migratory songbirds use the woodlands in the spring and summer. Squirrels and white-tailed deer are seen often. A long-awaited bird checklist will be available soon.

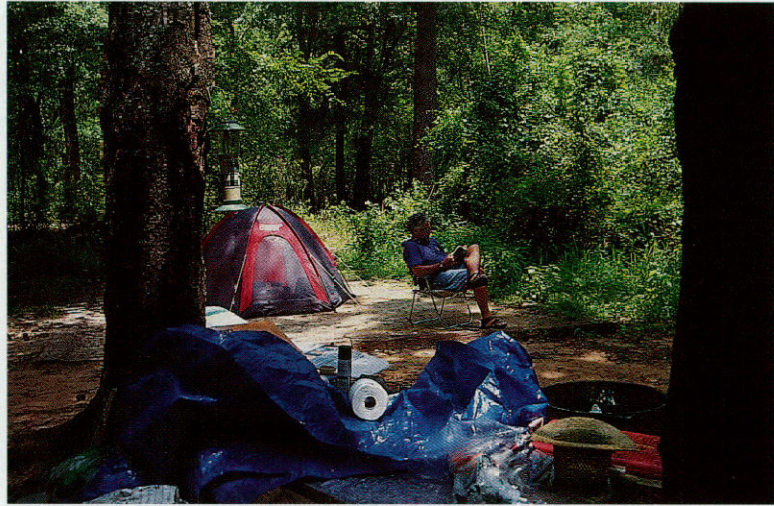
Many of the lake's swampy areas are



© RICHARD STOCKTON

accessible only by canoe. Canoe rentals are available in the park, and pontoon boat tours of the lake leave from the canoe rental station. Call 903-679-3743 for information. Boats may be rented from private facilities in Uncertain. Parks superintendent Tom Pritchard said many people enjoy the lake's blooming aquatic vegetation and make spring-time trips just to see the water lilies and lotus blossoms. "We have everything

Wooded campsites offer seclusion and a quiet place for relaxing with a book. The park has a variety of camping facilities.



© GRADY ALLEN



© LAURENCE PARENT

Photographers as well as fishermen use the wooden pier at the park's Saw Mill Pond.

from real small lotus plants to ones that are three feet across,” said Pritchard. “Sometimes the vegetation looks thick enough to get out and walk on.” Pritchard warns boaters to keep their motors clear of the aquatic vegetation.

Pritchard advises newcomers to Caddo—and even repeat visitors—to get a map of the lake before starting out. Maps are available from the park concessionaire at the canoe rental station, or from the store just outside the park entrance. “The lake itself is approximately 32,500 acres, not counting the upper bayou waters and backwater

cypress ponds,” said Pritchard. “And once you get out there it all looks the same. An old-timer once told me that if he’s in one of the backwater ponds on a starless night, he finds a piece of dry ground, builds a fire and waits until the sun comes up. He doesn’t try to find his way back in the dark.”

Campers enjoy bicycling through the park’s thick woodlands, right. Gray moss clinging to leafless cypress limbs creates a stark winter scene, below. Caddo’s bald-cypress trees are closely related to the giant redwoods of California.



© LAURENCE PARENT





© GRADY ALLEN

Returning to the park after a day on the lake, visitors might retire to a campsite, screened shelter or cabin. The park has tent campsites with water; back-in sites with water, electricity and sanitary dump stations; and pull-through sites with water, electricity and sewage connections. A few campsites are on the water and several more are across the road with a good view of the water. There also is an overflow camping area.

The park's nine cabins were built by CCC workers from the richly colored iron ore stone native to this part of East Texas. Complete with stove, refrigerator and air conditioning, the cabins are furnished with everything except cooking and eating utensils. A group facility adjacent to the cabins—also built with iron ore stone—contains banquet tables and chairs to accommodate 100 people. There are no cooking facilities. The eight screened shelters each have a picnic table, electrical outlet and interior light.

More people than ever are interested in visiting Caddo Lake State Park, thanks to recent news coverage of the park and lake. Pritchard said campsites are much easier to get on weeknights—Sunday through Thursday—than on weekends. Call 512-389-8900



© RICHARD STOCKTON

A belted kingfisher, top, is one of dozens of bird species in the park. A bird checklist will be available soon. Boaters enjoy exploring the lake's intricate maze of channels or "boat roads," left. It's a good idea to take along a map of the lake because it's easy to get lost.



© RICHARD REYNOLDS

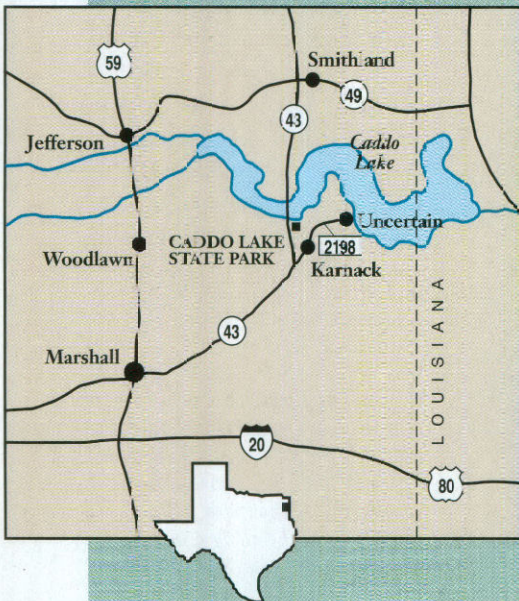
to reserve campsites. The park has two peak seasons: March 1 through July 4, and the end of September through Thanksgiving. Campers who can visit at times other than these have a better shot at getting reservations. Summer can be hot at Caddo Lake, but Pritchard said the nights cool off after the third week in September.

Fans of Caddo Lake State Park and Wildlife Management Area are eagerly awaiting news about the 7,000 acres

added to the park. "We are doing a management plan for the area in conjunction with a watershed management plan that Congress has funded for the whole Cypress Basin," said Jim Neal,

New reinforced with a dam, Caddo no longer is "natural" in the strict sense. But it remains the state's only naturally formed lake. Thick aquatic vegetation brings springtime color to the lake, above.

CADDO LAKE STATE PARK AND WILDLIFE MANAGEMENT AREA



REDFORD/ARNDT

Location Fifteen miles northeast of Marshall on State Highway 43, then east on FM 2198 for one mile to Park Road 2.

Facilities Tent campsites with water; back-in campsites with water, electricity and sanitary dump station available; pull-through campsites with water, electricity and sewage connection; screened shelters; cabins; group recreation hall; picnic areas with tables, grills and drinking water.

For park information Call 903-679-3351 or write Caddo Lake State Park and Wildlife Management Area, Route 2, Box 15, Karnack, Texas 75661.

For reservations Call 512-389-8900.

For canoe rentals and pontoon boat tours Call 903-679-3743.

TPWD special representative for East Texas. "We held a series of open-house meetings in the area last fall, and one of the major points people made was the need for more access to Caddo Lake." Neal said the management plan should be completed by the summer of 1995.



“We’re working very closely with Congressman Chapman’s office on ideas to promote ecotourism and sustainable development in the area,” said Neal. Among the possibilities are an environmental education/interpretive/visitor center for the area, additional lake access for canoeists and

boaters, additional trails and enhanced camping opportunities. “There’s a long history of traditional use such as hunting and fishing, and we want to continue to have those uses,” said Neal.

Caddo Lake State Park and Wildlife Management Area combines the wisdom of age and the enthusiasm of

youth. The past is represented by the sturdy craftsmanship of the Civilian Conservation Corps and traditional outdoor recreation. The future will be a balancing act between protection of the resources and increasing demands for access to one of Texas’s treasures. The lake itself seems timeless. ★



“The concepts for the 21st century will be ‘renewability’ and ‘sustainability.’”

DON HENLEY

His name may be synonymous with hit records, but Don Henley never has forgotten his Texas roots. The Grammy-winning singer, who recently reunited with the '70s supergroup Eagles, grew up in the Northeast Texas town of Linden, caught his first fish in Caddo Lake and spent four years in Texas colleges before moving to Los Angeles to pursue his music career.

As his career flourished, so did his love for the land and nature. Inspired by his father, who farmed part-time and took him fishing, Henley often has found himself in the middle of conservation fights during the past two decades. He has worked with hundreds of organizations over the years to preserve land and protect wildlife, but rarely has sought publicity for these crusades, choosing instead to become a quiet and influential ally rather than use environmental issues to gain notoriety.

However, in the past few years his environmental work has been anything but low-key. In 1990, he founded the Walden Woods Project to stop development of the land Henry David Thoreau made famous in his writings. Using a huge publicity campaign to gain awareness for the issue, Henley raised more than \$10 million and stopped two major projects from destroying the area. The battle also paved the way for Henley to return to Texas and get involved with Caddo Lake.

“Growing up near Caddo Lake enhanced my love for the outdoors and

by Sue Gold

the creatures that live in nature, so that is probably one influence that steered me toward founding the Walden Woods Project,” Henley explained. “But through my work on the Walden Woods Project, I’ve gained a great deal of technical skill and political knowledge that has enabled me to go back to my home and help preserve what is valuable there. So I’ve come full circle.”

While the battle to stop the U.S. Army Corps of Engineers from building a barge canal through Caddo Lake seems to be over, Henley maintains his interest in the lake and has developed an educational program to focus new attention on it. The Caddo Lake Scholars Program and Caddo Lake Scholars Honors Program kicked off last year, enabling students to research various aspects of the lake for school credit and monetary awards, which come out of Henley’s pocket. Among the first schools to be involved were East Texas Baptist University, Wiley College and Stephen F. Austin State University, where Henley studied for two years.

“I’ve always been an advocate of education and these are respected institutions near the lake,” he said. “It’s a logical choice, because one way to save any ecosystem is by increasing knowledge about it. So we wanted to get students interested in this great living laboratory they have in their own backyard and give them credit for studying it.”

The program received such high praise from local, state and federal officials that almost a dozen colleges and universities now are involved, as well as primary and secondary schools. A wetlands intern candidates training program also has been initiated to teach technical skills to students and teachers so they can become resource managers. “This will be an ongoing project I hope will serve as a model that can be implemented all over the world. It’s an enormous undertaking that is still in the formative stages that needs to be nursed along for a couple of years. Then, if the enthusiasm and funding are still there, it will run itself.”

Besides working with local schools, Henley has been talking with officials in the area to try to improve the Caddo Lake ecosystem. “The Texas Parks and Wildlife Department has been a powerful ally in all of this and they are doing a tremendous job of preserving the best of what is left in Texas,” Henley said. “The Texas Parks and Wildlife Department, the Texas Nature Conservancy, U. S. Fish and Wildlife Service, Governor Ann Richards, Representative Paul Sadler, U. S. Congressman Jim Chapman and some other officials are becoming champions of natural resources in Texas. They are practicing an inclusive form of government, and we need more of that all over the country. Environmental awareness has been slow in getting to Texas, but now the time has come,” he continued. “Texans are beginning to learn

that a healthy economy can be sustained only if natural resources are sustained. Balance is the key.”

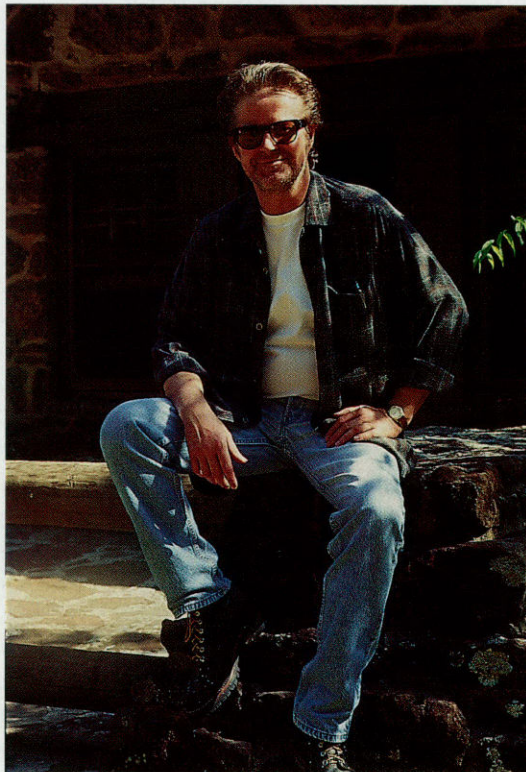
Henley always has had strong emotional ties to Caddo Lake, but he has renewed respect for the area since becoming involved in the recent battle. “This lake and the area surrounding it make up the type of ecosystem that is fast disappearing in the United States,” he said. “It’s a breeding ground and a resting area for certain rare and endangered species of migratory birds and waterfowl. It is home to the American bald eagle and the American alligator. It’s also a very important archeological site because the Caddo Indians once lived there. I’m appreciating the lake now on a much broader scope than I did when I was a child.”

While Henley has lived in Southern California and Colorado for the past 24 years, he said he never forgot his roots and returns as much as possible. “I keep up with what’s going on in that part of the country and I go back fairly often now. In fact, my fiancée and I are probably going to move back to Texas sometime this year. I’ve been spending a lot of time at the lake and now I’m learning a lot of things I didn’t know about it, even though I grew up fishing there,” he said.

Besides his involvement with Caddo Lake, Henley recently joined the fight to preserve Austin’s Barton Springs. “I didn’t start any of these battles. I simply came in and tried to assist the people who were fighting them,” he explained. “I first laid eyes on Barton Springs in the 1960s. It is another beautiful, unique natural area that is in danger of being ruined forever. I just do what I can. I’m not as involved with Barton Springs as I am with Caddo Lake, but what happens in Texas is important to me. All too often good citizens are misled about the virtues of projects that turn out to be environmentally

detrimental and provide only a short-term gain, if any, for the economy of the region. We have already had far too many ‘boom and bust’ cycles in Texas because people don’t think long-term.

“Unfortunately, in many parts of Texas, the old frontier mentality still lingers,” he continued. “Some people are still caught up in the delusion there



business. I am a businessman. The question is: what kind of businesses are we talking about? Some communities are so desperate for economic growth that they sometimes invite irresponsible industry. Any industry should be a good neighbor to its community. There must be some thought given to corporate responsibility. Otherwise, in terms of the environment, we often kill the goose that laid the golden egg. Texas has been through some tough economic times, but the answer to creating jobs and reviving the Texas economy is not to continue to overbuild and overdevelop. That’s one of the things that got Texas into trouble in the first place. Now, when people are looking for a community in which to locate, they are concerned more than ever with the *quality* of life. The concepts for the 21st century will be ‘renewability’ and ‘sustainability.’”

Henley admits these and other projects are part of the reason he hasn’t recorded a new album in more than four years. But his songs always have reflected social and political issues and Henley said the past few years have given him a lot to write about. “Working on these projects enriches my life in many ways. I learn things every day that will possibly end up in the music,” he explained.

“I’ve come back to where I grew up with a new appreciation, and I’m trying to make it a better place,” Henley concluded. “One of my heroes was Wallace Stegner, and he said ‘A true culture hero is an individual who transcends his culture without abandoning it. Someone who leaves for a while in search of opportunity and enlargement but never forgets where he left his heart.’ I’d like to think that’s what I’m trying to do.” ★

Sue Gold is a Los Angeles-based freelance writer who writes about music and environmental issues.

Hiking and Backpacking Photos

Article and Photos by Laurence Parent

Although many of my best photos have been taken within 100 yards of a road or parking lot, many others have required more effort. I've taken photos after an easy half-mile walk on a smooth, level trail, as well as on overnight backpacking trips through rugged, mountainous country.

For short, easy hikes, the volume of camera equipment and the method of carrying it is not too vital. However, with longer trips both factors "weigh" in quickly. An over-the-shoulder camera bag works fine on short walks, but becomes uncomfortable and awkward on extended hikes. For the majority of 35mm camera users, a heavy-duty day pack works well for day hikes. Its size would depend on the amount of photo equipment carried, plus food, water, rain

gear and other necessities.

A standard day pack should suffice if the camera equipment is carried in individual cases and padded with sweaters or other clothing, rather than allowed to rattle around loose. Specialty day packs made for camera equipment contain built-in foam padding and dividers, but they are expensive and probably unnecessary for all but the most active photographers. For small camera outfits, fanny packs often will suffice and are very comfortable.

Regardless of what kind of pack is used, weight is the critical consideration on longer hikes. For 35mm users, one camera body with a wide-angle, a normal and a moderate telephoto lens should cover most situations. A good quality zoom lens often will replace sev-

eral fixed focal length lenses. Accessories probably should include a cable release, extra batteries and polarizing and warming filters. Film isn't heavy, so don't short yourself on it.

To me, a tripod is probably the most important accessory. Unfortunately, a "lightweight, rigid" tripod doesn't exist. Generally, the heavier and larger a tripod is, the more solid and stable a platform it provides for your camera. I would recommend buying as heavy a tripod as you are willing to carry—but don't get one so ponderous that you end up leaving it in the car.

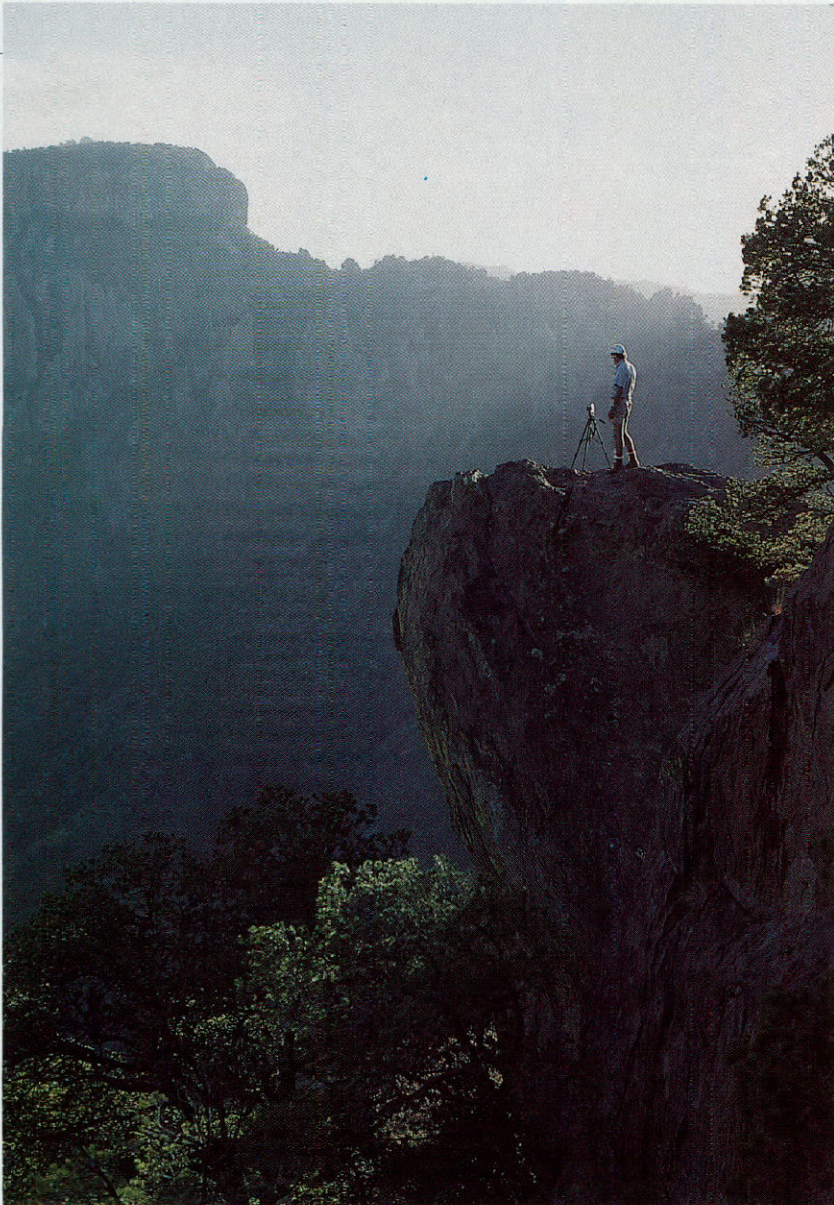
I usually work with a 4x5 camera—a large, heavy piece of equipment that uses large, heavy lenses and requires a large, heavy tripod. Because the equipment weighs so much, I use a frame backpack even on the shortest hikes with my 4x5. With a frame pack, most of the weight rides on your hips rather than on your shoulders. My pack weighs between 40 and 45 pounds when fully loaded with my 4x5, tripod and minimal 35mm equipment. Without a frame pack, my shoulders would be screaming in minutes. Instead, I rub bruises onto my hip bones over the course of a day, uncomfortable but bearable.

Weight becomes critical on overnight backpacks. When a tent, sleeping bag, food, clothing, stove and other items are loaded into a pack, it becomes heavy even before the camera equipment is added. Limiting the number of lenses and accessories, plus carrying a smaller tripod, will help hold the weight down to a manageable level when only 35mm equipment is used. When my pack is loaded with camping gear along with



PHOTOS © LAURENCE PARENT

Spectacular photo opportunities await the backpacker in Guadalupe Mountains National Park, left. Autumn is an especially scenic season.



The Lost Mine Trail, above, is one of several good trails for photos in Big Bend National Park. A tripod is one of the photographer's most important accessories, so buy the heaviest one you are willing to carry. On an overnight backpacking trip, the camera equipment must be carried along with the standard camping gear, below, so consider limiting the number of lenses and accessories and taking a smaller tripod.



easier to get lost or trip and fall at night, and I've encountered nocturnal animals such as bears and rattlesnakes. If you try it, it's best to be an experienced hiker and not go alone. Each hiker should carry a good flashlight with fresh batteries and a small backup light, along with rain gear and extra clothing. Start back as soon as the sun sets; often you can get a mile or two down the trail before it gets really dark.

If you do backpack overnight with your camera equipment, try to pick campsites with good scenic potential. The best light of the day for photos is usually at sunrise and sunset, so you might as well camp where you can take advantage of it easily.

In Big Bend National Park, great trails for photos include the South and East Rim trails of the Chisos Mountains, the Lost Mine Trail, the Marufo Vega Trail above Boquillas Canyon and the Mariscal Canyon Rim Trail. If you hike on trails along the Rio Grande, be sure not to leave valuable items in unattended cars.

The Rancherías Trail at nearby Big Bend Ranch State Natural Area travels through dramatic desert and canyon country. The high country trails of the Guadalupe Mountains offer spectacular photo opportunities and the coolest summer nights in Texas. Unfortunately, the lack of water in the Guadalupe high country requires you to carry all of your water, limiting trip length.

To get photos in these and many other beautiful areas of Texas, you have to hike or backpack. If you are making the effort to visit these places, be sure to take your camera. Even a compact 35mm point-and-shoot camera often gives excellent results without adding much weight to your pack. After the trip, your photos will make the sweat and exertion worthwhile. ★

Laurence Parent is an Austin-based writer and photographer and a regular contributor to this magazine.

the 4x5 and 35mm equipment, it can weigh 60 to 70 pounds, not a prescription for a fun trip.

Although I will backpack overnight with my 4x5 equipment when it's required, I don't especially enjoy it and try to find other ways to get the photos. To avoid carrying such a heavy pack, I often hike to my photo location, shoot until sunset and hike out in the dark. Likewise, I sometimes begin hiking at 3 a.m. or 4 a.m. so I can be at the desired location for sunrise. Although this greatly reduces the weight of the pack, it has its own hazards. It's



Ancient Angler

by Charles Mann

Anyone who fishes in Texas probably is familiar with how a worm-shaped lure wiggled in front of a game fish usually gets results. What most people don't know is that the art of angling with a lure was pioneered long before a human ever picked up a fishing pole. The pioneer is the alligator snapping turtle, a huge freshwater inhabitant whose range includes the eastern portion of Texas. Capturing its prey by manipulating a "lure" is just one of the fascinating characteristics of this seldom seen creature.

Most turtles take an active role in seeking out and capturing food, but the alligator snapper often takes a more sedentary approach. When the turtle is hungry, it positions itself on the muddy bottom and remains completely motionless. Soon it slowly opens its jaws to reveal a drab gray mouth lining with a pale pink appendage. Suddenly, this appendage begins to wriggle frantically and becomes a more vivid pink. To a passing fish this pink object resembles a struggling worm in a harmless gray hole. Unable to resist temptation, the fish rushes in to grab the "worm." As soon as it does, the alligator snapper shuts its powerful jaws. After it has swallowed its catch, the armored angler resumes its fishing position and patiently awaits another "strike."

Fishing with a worm imitation is nothing new to alligator snapping turtles; they've been doing it for millions of years.

The alligator snapper inhabits lakes, rivers and bayous of the southeastern United States. Generally uncommon throughout its range, it is rare in Texas, where the largest numbers are found in deep parts of the Sabine River and its tributaries. It is an ancient reptile, with fossil records dating back to the late Tertiary Period (10 to 20 million years ago). In appearance, an alligator snapper is a less-than-beautiful creature with a massive body that is too big to be drawn into its shell. Its shell is a drab, brown-black color with three prominent ridges running down the center. The shell usually has a thick coating of dark green algae adhering to it. The turtle has a grotesquely large head with small, beady eyes, a large parrotlike beak, and many small protrusions on its neck. A long, thick tail with projections resembling the ridges on an alligator's back completes this rather unattractive package. It is, however, not the purpose of this turtle to win a beauty contest; it is designed to be a camouflaged predator and its

ungainly appearance allows the alligator snapper to blend in perfectly with the muddy, debris-cluttered lake and river bottoms in which it dwells.

Many people confuse the alligator snapping turtle with its smaller relative, the common snapping turtle. Although the turtles look superficially similar, there are subtle differences. The common snapper has a fairly smooth carapace (the top part of a turtle's shell) with no prominent ridges. The alligator snapper has a much more massive head in proportion to its body and its jaw also has a more noticeable hook with a more conspicuous overbite. The most unmistakable distinction between the two species, however, is the maximum size.

Although a very large common snapper may weigh in at a respectable 40 to 50 pounds, an alligator snapper may continue to grow until its weight exceeds 200 pounds. One of the largest alligator snappers currently alive was collected in Texas and now weighs more than 230 pounds. This specimen, now living at the Toronto zoo, has a shell the size of a washtub (some 30 inches in



© A. B. SHELDON

Here's a close-up look at the pinkish appendage on the alligator snapping turtle's tongue. The reptile wiggles this "artificial worm" to entice small fish into striking distance of their Law-like beak.

length and more than 25 inches in width). Its head alone is almost 10 inches wide, the size of a dinner plate. These dimensions make the alligator snapper one of the largest turtles in the world. Only a rare species of soft-shell turtle from Asia, the mammoth Galapagos tortoise and a couple of species of sea turtles can grow larger. There are sporadic reports from fairly reliable sources of alligator snappers weighing between 300 and 400 pounds.

The remoteness of the alligator snapper's habitat makes it difficult to accurately gauge the true maximum size of this immense turtle, although they probably grow bigger in captivity than in the wild. An interesting aspect of the size of this animal is that the largest specimens collected have been in the extreme northern portions of their range. This suggests that perhaps alligator snappers move steadily upstream along major river systems throughout their lifespan, gradually increasing in size as they migrate. Judging by their fairly slow growth rate, an alligator snap-



© TODD FINK/ONBREAK IMAGERY

Ungainly and ugly out of the water, alligator snapping turtles are beautifully adapted to a camouflaged existence in their murky aquatic habitats.



© A. B. SHELDAN

per weighing more than 200 pounds may well be close to 100 years old. A specimen named Wiley, brought to a Chicago zoo when it already weighed 130 pounds, lived for nearly 45 more years, eventually attaining a weight of more than 250 pounds.

A female alligator snapping turtle crawls out of her deep-water home between late April and June and digs a shallow nest near the water's edge. There she deposits between 25 and 50 eggs, which she then covers with a layer of dirt. Her maternal obligations complete, the female returns to the water, never to see or care for her offspring. After about three months, the leathery, one- to two-inch eggs hatch, and miniature versions of adult turtles make their way to the water, where they remain throughout their life.

Making it to the water does not ensure survival, however, as the immature turtles are vulnerable to a wide array of predators. Fish, birds, bullfrogs, snakes, raccoons, other turtles and even

large water beetles are a threat during the first years of an alligator snapping turtle's life. Once it reaches a weight of about 10 pounds, however, few predators would consider tackling such a well-armored and potentially dangerous quarry. And the only predators with the capacity to attack an adult alligator snapper would be a large alligator and, of course, man.

The alligator snapping turtle never was an abundant species, and extensive trapping for food in the last half century depleted its numbers to a dangerously low level. In many portions of its range, the species has been almost entirely eradicated by trappers who either are ignorant or uncaring of the turtle's plight. Only in the past several years have many states begun to protect this unique reptile. Texas recently listed the alligator snapping turtle as a threatened species and has made it illegal to possess or sell them in the state. Perhaps these laws will allow the species to rebound to a normal level.

Alligator snappers resemble common snapping turtles, which are common throughout most of Texas. However, alligator snappers grow much larger and have three prominent ridges running down the length of their shell.

Several zoos, including the Houston Zoo, have expressed interest in breeding this rare turtle, something seldom achieved in captivity. A successful captive breeding program could provide specimens to other zoos and eliminate the need for collecting specimens from the wild. Because only a handful of studies exist, there still is much to be learned about this fascinating turtle.

Yet its mysterious, unexplored nature is part of what makes the alligator snapping turtle so intriguing. It is compelling to imagine an algae-covered, century-old behemoth weighing perhaps an eighth of a ton fishing patiently in the murky depths of Texas backwaters. ★

Charles Mann is a freelance writer living in Houston.

Steady, Now

Something as simple as a pair of crossed sticks can improve a rifle shooter's long-range accuracy in the field.

The buffalo hunter looked for a rock or bush upon which to rest the heavy, large-bore Sharps rifle. Tall prairie grasses prevented his getting into his normal prone shooting position. Finally he sat down, took the two arrows handed him by a companion and crossed them. With the rifle resting solidly where the two shafts crossed, and held steady by his hand, he was able to fire accurately at the distant target.

Whether or not the use of crossed sticks as shooting rests actually came about that way has been lost in history, but certainly it could have.

Anyone who shoots a firearm, be it a rifle or handgun, knows you can shoot more accurately from a solid rest than off-hand. Stir in the excitement of seeing a big-racked whitetail to short-circuit the nerves, and a solid rifle rest becomes even more important. Unfortunately, there is not always a handy solid rest available when hunting. For this reason many experienced hunters use any one of a variety of "rests" or supports to help them shoot more accurately. I suspect more than a few innovative Texas

hunters have used their high-crowned western hats to support their rifle or handgun barrel when shooting at a distant target. Getting a solid rest before shooting simply makes good sense, even if you have to use your favorite hat.

Today there are many different types of firearm rests available. All provide excellent service to the dedicated hunter and shooter. The Shooter's Walking Stick can help the hunter traverse difficult terrain and provide a strong, portable rest from which to shoot. Made of fiberglass-reinforced nylon, it has a hook that can be adjusted to various heights.

The Harris Bipod is perhaps one of the best known commer-

cial supports for shooting rifles and handguns. The metal bipod attaches to the rifle's front sling stud. When the telescoping legs are not in use, they can be folded under the barrel. Then, when needed, they simply are pulled down and extended to give the shooter the needed elevation.

A recent innovation in shooting supports uses the basic design of the buffalo hunter of years gone by. John Underwood of North Carolina took the crossed shooting sticks one step further by creating a set of sticks that can be broken down quickly into 12-inch sections and carried in a pouch at one's side until they are needed. The tubes that form the individual sticks have a strong elastic cord running through them which, when taken from the pouch, quickly aligns the sections into place to form the crossed sticks, which are jointed near one end.

These and other commercial

rests or supports work well in the field, but you also can build your own crossed shooting sticks with a minimum of effort or expense. All it takes is a little spare time in addition to two wooden dowels, an electric drill, one cotter pin, one small washer, a pair of pliers and a can of dull-colored spray paint.

The two wooden dowels should be 1/2-inch in diameter and 40 inches long. The dowels and a 1/8-inch by 1 1/2-inch cotter pin should be available from your local builders' supply store, as should a can of spray paint in either brown or green. Back home, drill a hole, using an electric drill with a 1/8-inch bit, through the center of each dowel, two inches from one end. Align the two holes so you can place the cotter pin through both of them, placing the small washer between the dowels. Push the cotter pin through the first hole, through the washer and through

Shooting sticks, right, can help hunters shoot more accurately in the field by providing a rest for a variety of shooting positions. They can be purchased or constructed economically at home.



© EARL NOTTINGHAM



ROBERT L. COOK

A group of inmates clears brush along a fence line at the Chaparral Wildlife Management Area in South Texas. Officials said the convicts accounted for more than \$1 million worth of labor at the Chaparral and the Engeling WMA in Anderson County during the summer.

the second hole and, with the pliers, spread and bend the two sides of the cotter pin back against the dowel. After a couple of quick coats of spray paint, you have your own custom-made set of crossed shooting sticks.

The beauty of such a set of crossed shooting sticks is that they are adjustable to nearly any height, simply by spreading the legs apart or bringing them back together. Not only will you find the shooting sticks useful in serving as a gun support or rest, but they also come in handy to support your binoculars when glassing game for long periods of time. I also have used my crossed shooting sticks to aim a camera with a long lens or a spotting scope.

Whether you choose a com-

mercial model or build your own custom-made crossed shooting sticks, remember to make them an everyday part of your hunting gear.

by Larry L. Weiskubn

Formerly a biologist with the Texas Parks and Wildlife Department, Larry L. Weiskubn currently writes for a number of national hunting and shooting publications.

Contacts

Harris Bipod
Harris Engineering, Inc.
Dept. TPW
Barlow, Kentucky 42024

Shooter's Walking Stick
MTM Molded Products Co.
Dept. TPW
P.O. Box 14117
Dayton, Ohio 45413

Collapsible Shooting Sticks
Underwood Rests
Dept. TPW
Rt. 3, Box 564
Mocksville, North Carolina
27028

Prison Inmates Spruce Up Wildlife Management Areas

About 600 convicts from state prisons were sent to camp this past summer, but the daily routine didn't include volleyball or horseback riding.

Instead, the inmates mended fences, cleared trails and performed a number of other habitat-related tasks at two Texas Parks and Wildlife Department wildlife management areas.

Officials estimated that by summer's end the crews performed more than \$1 million worth of work at the Engeling WMA in Anderson County and the Chaparral WMA in Dimmit and LaSalle Counties.

"Not only was the work they did worth that much in labor costs, the work they accomplished couldn't have been done otherwise," said Bob Cook, TPWD wildlife branch chief. "We simply didn't have the money or personnel to do it." Cook said the Texas Department of Criminal Justice provided

temporary housing, food, tools and staff supervision during the project.

At the Engeling area, crews cleared fence lines and repaired boundary and cross fences, stacked brush, cleared nature trails and did maintenance work on buildings and vehicles. They also made day trips to work at nearby Richland Creek WMA and the Tyler Management and Research Station.

Cook said TPWD and TDCJ officials are discussing plans to expand the program to additional management areas in 1995.

Youth Fishing Program Set By TPW Foundation

The Texas Parks and Wildlife Foundation has launched a new youth fishing program called KIDFISH, which is aimed at exposing more Texas youngsters to the sport of fishing while raising funds for angling-related projects.

The goal is to establish a community fishing program and KIDFISH event in every Texas city where interest exists. All events are open to children 16 and younger, and all fishing gear is provided. "We are hoping that sponsorships will raise about \$5,000 during each event," said Jody Jackson of Austin, executive director of KIDFISH. "The money will go to expand the urban and community fishing programs, fisheries enhancement and angler education."

Jackson said the children do not have to solicit sponsorships to participate in the tournaments, which are named "Casting Out for Kids."

For more information or to set up an event, call Jackson at 512-918-9497.

OUTDOOR DATEBOOK

OCTOBER

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

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

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

Oct.: ***** Bird banding observation each Wednesday, Friday and Saturday, Davis Mountains State Park near Fort Davis, 915-426-3337

Oct.: Special events each Saturday, Stephen F. Austin State Park near Sealy, 409-885-3613.

Oct. 1-2: Texas Wildlife Expo '94, Texas Parks and Wildlife Department headquarters in Austin, 1-800-792-1112.

Oct. 1: Opening of archery hunting season for deer and turkey, and East Texas squirrel season

Oct. 1: "Starlight Run," Texas State Railroad, Rusk, 1-800-442-8951.

Oct. 1: ***** Campfire cooking contest, Penn Farm Agricultural History Center at Cedar Hill State Park on Joe Pool Reservoir, 214-291-3900 or 291-6505

Oct. 1: ***** Bus tour of Fort Leaton and Big Bend Ranch State Natural Area, 915-424-3327

Oct. 1: ***** Restoration ecology workshop, part two, Honey Creek State Natural Area near Bulverde, 210-438-2656

Oct. 1: ***** Hawk watch, Candy Cain Abshier WMA at Smith Point, 409-736-2540

Oct. 1-2: 21st Annual Fall Festival, Jordan-Bachman Pioneer Farm in Austin, 512-837-4503

Oct. 1, 15: ***** Bat flight observation, Devil's Sinkhole State Natural Area near Bracketville, 210-563-2342

Oct. 1, 22: ***** Birdwatching tour, Lake Brownwood State Park near Brownwood, 915-784-5223

Oct. 5, 12: ***** Cave tour and bat flight observa-

***** The activities marked with this symbol are available to people who have a Texas Conservation Passport, which may be purchased for \$25 at most state parks, Parks and Wildlife offices, Whole Earth Provision Co. locations in Austin, Houston and Dallas and REI in Austin and Dallas.



GLEN MILLS

Air rifle target shooting is just one of many activities planned for Texas Wildlife Expo '94 in Austin on October 1-2.

Creek WMA near Crockett, 409-831-2246

Oct. 22: ***** "A Walk on the Wild Side," M. O. Neasloney WMA near Luling, 210-424-3407 or 875-9230

Oct. 22: ***** "Autumn Art," Cedar Hill State Park at Joe Pool Reservoir, 214-291-3900 or 291-6505

Oct. 23: ***** Beachcombing and shelling tour, Matagorda Island State Park & WMA, 512-983-2215

Oct. 23-28: ***** Biosphere reserve ecotour, El Cielo Biosphere Reserve in Mexico, 512-389-4901

Oct. 29: Statewide quail hunting season opens

Oct. 29: ***** Migratory bird tour, Peach Point WMA near Bay City, 512-576-0022

Oct. 29: ***** "Ducks at Dark," Ray Roberts Lake WMA near Denton, 817-637-2290

Oct. 29: ***** Photography tour, Caddo Lake WMA, 903-679-3743

Oct. 29: ***** Wildflower and native plant tour, Eisenhower State Park at Lake Texoma, 903-465-1956

Oct. 29: ***** Nature tour, Lake Tawakoni State Park, 903-425-2332

Oct. 29: ***** "Fall photos of Fairfield," Fairfield Lake State Park at Fairfield, 903-389-2216

Oct. 29: ***** "Fat Tire Fandango," Fairfield Lake State Park at Fairfield, 903-389-4514

Oct. 29: ***** "Bears of Texas," Martin Dies, Jr., State Park at Steinhagen Reservoir, 409-383-0144

Oct. 29: ***** Birdwatching and nature walk, Cooper Lake WMA near Sulphur Springs, 903-884-3833

Oct. 29-30: Fall Orienteering Meet, Bastrop State Park at Bastrop, 512-303-0493 or 713-484-1391

tion, Kickapoo Cavern State Natural Area near Uvalde, 210-563-2342

Oct. 6, 13: ***** Bat flight observation and interpretation at Green Cave, Kickapoo Cavern State Natural Area near Uvalde, 210-563-2342

Oct. 8: ***** Aquatic ecology tour, Honey Creek State Natural Area near Bulverde, 210-438-2656

Oct. 8: ***** Fall bird hike ride, Matagorda Island State Park & WMA, 512-983-2215

Oct. 8: ***** Birding walk and hatchery tour with slide show, GCCA/CPL Marine Development Center at Corpus Christi, 512-339-7784

Oct. 8, 22: ***** Bus tour, Big Bend Ranch State Natural Area, 915-371-2548

Oct. 8, 22: ***** Boating ecotour, Caddo Lake State Park & WMA, 903-677-3743

Oct. 8, 22: ***** Birdwatching, Choque Canyon State Park Callhart Unit near Three Rivers, 512-786-3858

Oct. 9: ***** Photography tour, Matagorda Island State Park & WMA, 512-983-2215

Oct. 9: ***** Flintknapping workshop, Sebastopol House State Historical Park at Seguin, 210-379-4833

Oct. 11, 25: ***** "Discover South Texas Wilderness Areas," Bentsen-Rio Grande Valley State Park & Las Palomas WMA, 210-585-1107 or 585-3902

Oct. 14: ***** Bus tour, Big Bend Ranch State Natural Area, 915-424-3234

Oct. 14: "Murder of the disORIENTED Express," Texas State Railroad, Palestine, 903-729-6066.

Oct. 15: ***** Migratory bird tour, Guadalupe Delta WMA near Victoria, 512-576-0022

Oct. 15: ***** Bird tour, Matagorda Island State Park & WMA, 512-983-2215

Oct. 15: ***** Native prairie walking tour, Culp Branch Native Prairie at Ray Roberts Lake WMA, 817-637-2250

Oct. 15: ***** Birdwatching and nature tour, Wood

Fish Hatchery at San Marcos, 512-353-0572

Oct. 15: ***** Flintknapping workshop, Guadalupe River State Park near Bulverde, 210-438-2656

Oct. 15: ***** Bus tour of Barton Wrnack Environmental Center and Big Bend Ranch State Natural Area, 915-424-3327

Oct. 15: ***** History tour, Penn Farm Agricultural History Center at Cedar Hill State Park on Joe Pool Reservoir, 214-291-3900

Oct. 15: ***** "Forest Wildlife of the Autumn Night," Engaling WMA, Anderson County, 903-928-2251

Oct. 15, 22, 29: ***** Lower Edwards Plateau ecosystem tour, Honey Creek State Natural Area near Bulverde, 210-438-2656

Oct. 16, 23: ***** Artists' and photographers' outing, Honey Creek State Natural Area near Bulverde, 210-438-2656

Oct. 21-23: ***** Desert survival workshop, Big Bend Ranch State Natural Area, 915-424-3327

Oct. 22: ***** Migratory bird tour, Mad Island WMA in Matagorda County, 512-576-0022

Oct. 22: ***** "Ajajam Party-Ducks Only!" Alabama

GLEN MILLS



NOVEMBER

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

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

Nov. 3-6: First Annual "Tropical Birds of the Border" Festival sponsored by the Harlingen Area Chamber of Commerce at Texas State Technical College in Harlingen. 1-800-531-7346

Nov. 3-7, 9-12: * Photography seminar, Big Bend Ranch State Natural Area, 915-229-3416

Nov. 5: Opening of general hunting season for white-tailed deer and turkeys in North Texas

Nov. 5: * "Edible Plants in Winter," Richland Creek WMA in Anderson County, 903-389-2216

Nov. 5: * Crappie survey demonstration, Lake Arrowhead State Park near Wichita Falls, 817-528-2211

Nov. 5: * Campfire cooking contest, Cedar Hill State Park at Joe Pool Reservoir, 214-291-3900 or 214-291-6505

Nov. 5, 12: * Wildflower and native plant tour, Honey Creek State Natural Area near Bulverde, 210-438-2656

Nov. 5, 19: * Boating ecotour, Caddo Lake State Park and WMA, 903-679-3743

Nov. 6, 19: * Whooping crane tour, Matagorda Island State Park and WMA, 512-983-2215

Nov. 8, 22: * "Discover South Texas Wilderness Areas," Bentsen-Rio Grande Valley State Park and Las Palomas WMA, 210-585-1107 or 210-585-0902

Nov. 12: Opening of general hunting season for white-tailed deer and turkey in South Texas

Nov. 12: * Mountain bike ride, Choke Canyon State Park North Shore Unit near Three Rivers, 512-786-3868

Nov. 12: * Flyfishing clinic, A.E. Wood State Fish Hatchery at San Marcos, 512-353-0572

Nov. 12: * Birding walk and hatchery tour with slide show, GCCA/CPL Marine Development Center at Corpus Christi, 512-939-7784

Nov. 12: * Beachcombing and shelling tour, Matagorda Island State Park and WMA, 512-983-2215

Nov. 12, 26: * Bus tour, Big Bend Ranch State Natural Area, 915-371-2548

Nov. 12, 19, 26: * Bald eagle boat tour, Fairfield Lake State Park near Fairfield, 903-389-4514

Nov. 13: * Nature photography, Eisenhower State Park at Lake Texoma, 903-465-1956

Nov. 18: * Bus tour, Big Bend Ranch State Natural Area, 915-424-3234

Nov. 18-20: * "Rock Art of Big Bend," Big Bend Ranch State Natural Area, 915-424-3327

Nov. 19: * History tour, Penn Farm Agricultural History Center at Cedar Hill State Park, 214-291-3900

Nov. 19: * Bus tour of Barton Warnock Environmental Center, Big Bend Ranch State Natural Area, 915-424-3327

Nov. 19, 26: * Lower Edwards Plateau ecosystem tour, Honey Creek State Natural Area near Bulverde, 210-438-2656

Nov. 26: * Birdwatching and nature walk, Cooper Lake WMA near Sulphur Springs, 903-884-3833

Nov. 26: * Autumn art, Cedar Hill State Park at Joe Pool Reservoir, 214-291-3900 or 214-291-6505

Nov. 26: * Nature tour, Lake Tawakoni State Park, 903-425-2332



Texas Conservation Passport holders can watch the evening bat flight at Kickapoo Cavern State Natural Area on October 6 and 13.

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College Station KAMU, Ch. 15	Tuesday	7:30
Corpus Christi KEDT, Ch. 16	Thursday Friday	7:30 11:00
Dallas/Ft. Worth KERA, Ch. 13	Saturday	1:00
<i>Also serving Abilene, Denton, Longview, Marshall, San Angelo, Texarkana, Tyler, Wichita Falls, Sherman</i>		
El Paso KCOS, Ch. 13	Tuesday	10:00
Harlingen KMBH, Ch. 60	Tuesday	8:00
<i>Also serving McAllen, Mission</i>		
Houston KUHT, Ch. 8	Monday	7:30
<i>Also serving Beaumont/Port Arthur, Galveston, Texas City, Victoria</i>		
Killeen KNCT, Ch. 46	Tuesday	3:00
<i>Also serving Temple</i>		
Lubbock KTXT, Ch. 5	Saturday	7:00
Odessa KOCV, Ch. 36	Saturday	7:30
<i>Also serving Midland</i>		
San Antonio KLRN, Ch. 9	Thursday	12:00
<i>Also serving Laredo</i>		

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

Look for these stories in the coming weeks

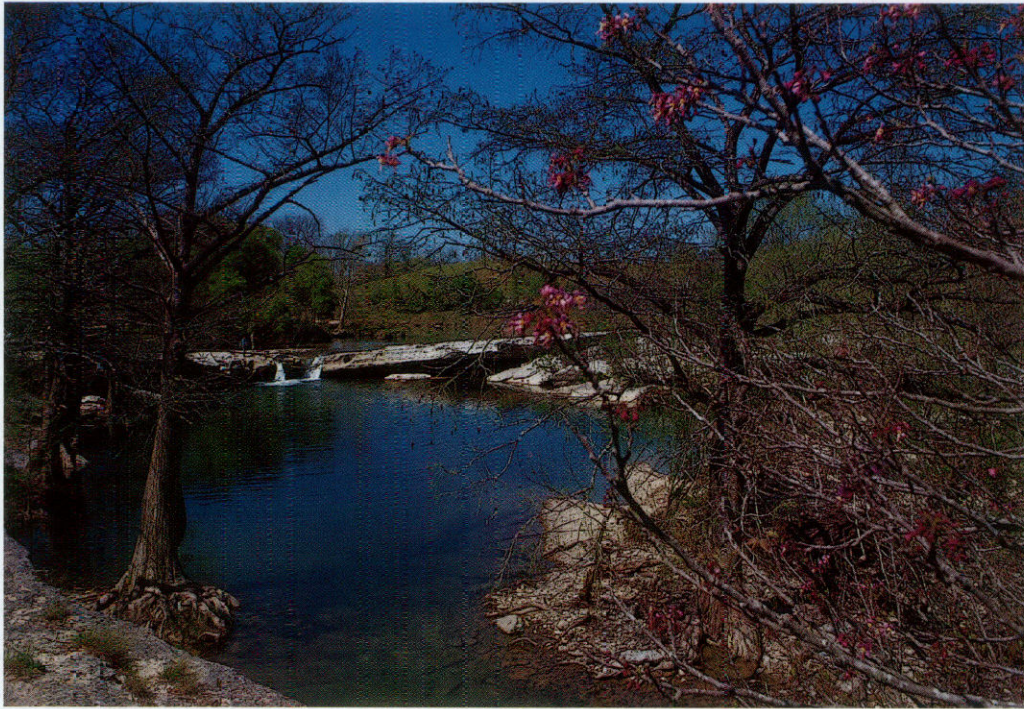
OCTOBER 30–NOVEMBER 6: Sailing in Texas; skipping stones; international bird smuggling.

NOVEMBER 6–13: Survival training in the Chihuahuan Desert of West Texas; turkey calling; aquaculture.

NOVEMBER 13–20: West Texas game wardens; binoculars; the underwater world of the San Marcos River.

NOVEMBER 20–27: Central Texas swimming holes and efforts to protect them; Rio Grande turkeys; Amistad National Recreation Area

NOVEMBER 27–DECEMBER 4: Vanishing heritage along the Texas/Mexico border; the Marfa Lights; East Texas heritage and culture.



BILL REAVES

so close to a large city," Ochs said. "People have to drive a long way to get to most state parks."

Located at the confluence of Onion and Williamson Creeks, the park is home to white-tailed deer, bobcats, coyotes, rabbits, rock squirrels, raccoons and more than 100 species of birds. Visitors can fish or swim in the creek, which has cleaner water now than it did a decade ago when pollution from wastewater discharges was a problem. A rock shelter used by Native Americans centuries ago is nestled in the bank of Onion Creek.

Campsites, picnic areas, group pavilions, a bike and nature trail and headquarters with interpretive displays are available to the almost 400,000 people who visit the park annually.

ReLeaf officials believe the loss of trees is a severe global problem, as destruction of old-growth ecosystems, removal of trees in cities and tropical deforestation have resulted in an unprecedented loss. This is believed to be a factor in such environmental changes as global warming and declining air quality. Trees provide shade, increase property values, clean the air of carbon dioxide and other pollutants and provide food and shelter for wildlife.

"ReLeaf" On the Way For McKinney Falls

Two sparkling waterfalls are prime attractions at McKinney Falls State Park just south of Austin on Onion Creek. But the 643-acre park's trees are just as spectacular, with 500-year-old baldcypresses lining the creek banks while oaks, mesquites, pecar, Texas persimmon and a host of other species grow in the upland areas.

The natural beauty of the park and its proximity to Austin inspired the Austin Jaycees and the Austin ReLeaf organization to hold their third annual "TreeAthlon" there on Sunday, October 9, from noon to dusk.

More than 2,000 people are expected to help plant trees, raise public awareness about the importance of trees and raise money for "TreeFolks-Austin ReLeaf," an umbrella organization for various tree-planting groups and a local affiliate of "Global ReLeaf." The event also

will feature a five-kilometer fun walk, music by local bands, booths with information about trees and the environment, and concessions. Literature to help visitors identify various tree species also will be available, according to David Wojtasczyk, chairman of the event for the Jaycees. "The TreeAthlon is a time to give back what we have taken from nature for so long," Wojtasczyk said, noting that the Capitol City has lost an estimated four trees for every one that has

been planted since 1982.

Ned Ochs, superintendent at McKinney Falls for the past four years, said the park still has not been discovered by many Texans, and especially Austin residents. "Some days I'm still amazed at how this beautiful and peaceful park with all its wildlife can be

McKinney Falls State Park, right and above, will be the site of an October 9 event planned to raise awareness about the importance of trees. The third annual "TreeAthlon," sponsored by the Austin Jaycees and Austin ReLeaf, will feature tree planting, a fun walk, music by local bands, information booths and concessions.



McKinney Falls State Park is located 13 miles southeast of the State Capitol. Take U.S. Highway 183 (Lockhart Highway) south and turn right on Scenic Loop Road. The park entrance is two miles west of Highway 183. For more information about the tree planting event, call the park at 512-243-1643. To reserve park campsites or other facilities, call 512-389-8900.

by Diana Meyer

Austin resident Diana Meyer is public relations coordinator for TreeAthlon.

SWTSU Corrals "Tortoise Ranch"

Researchers at Southwest Texas State University at San Marcos have set up a corral-sized enclosure for a disease study of Texas tortoises.

The Texas Parks and Wildlife Department provided a \$2,000 grant for the university to build the quarter-acre "ranch" on a university-owned research site.

Some Texas tortoise populations apparently are being affected by an upper respiratory disease syndrome that has reduced tortoise numbers in other states, including the endangered gopher tortoise in Florida.

Dr. Larry McKinney, director of the TPWD's Resource Protection Division, said collectors who pick up tortoises from the wild may be spreading the illness by putting the reptiles in contact with captive tortoises that may be infected.

Tortoises brought into the San Marcos facility will be tested and, if free of disease, they will be returned to the wild. "It's illegal to remove Texas tortoises from the wild to keep as pets, because they are listed by the state as a threatened species," said McKinney. "But if anyone has a tortoise, we wish they'd bring it in for testing."

Dr. Francis Rose of SWTSU, who has been studying the species since 1970, said he has had as many as 20 of the reptiles in the past, and the new enclosure potentially will house up to 100. The ranch is covered with oak trees and cactus, and a nesting area is planned that will be kept free of fire ants.

For more information on the tortoise project, call Rose at 512-245-2178.

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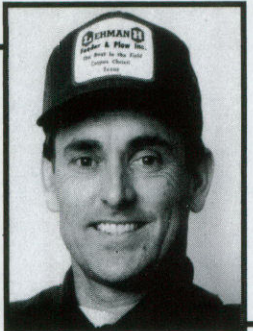
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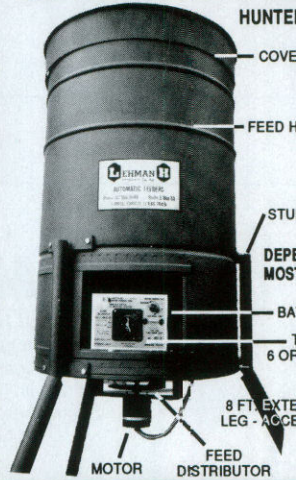
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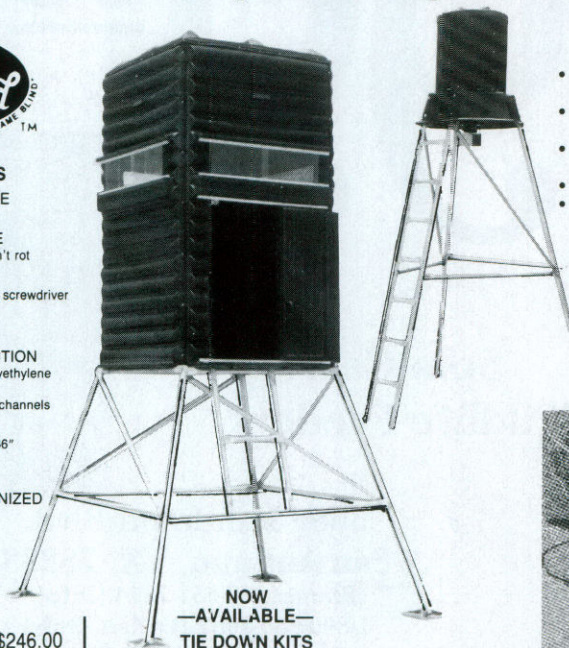
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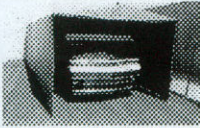
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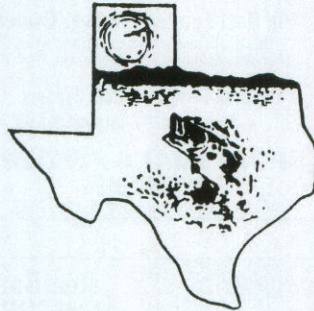
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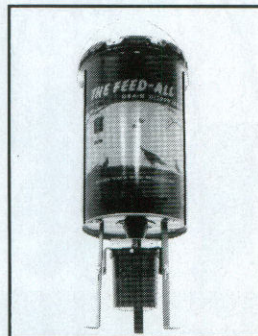
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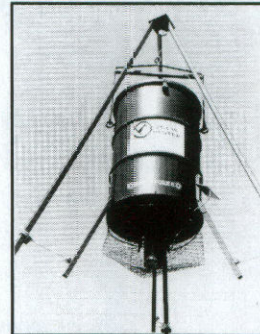
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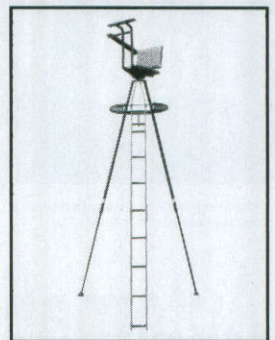
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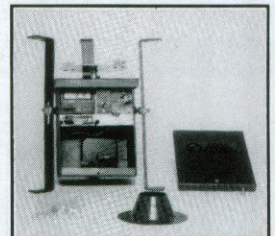
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