

Showdown at Caddo Lake

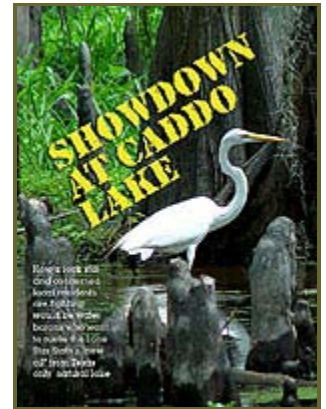
By Maryalice Davis

How a rock star and concerned citizens are fighting would-be water barons who want to rustle "new oil" from Texas's only natural lake

A LONE GREEN HERON vanishes into moss-draped bald cypresses as the pontoon boat quietly rounds another bend. Passengers fall silent as their guide points out the bird and then recalls a wondrous winter moment when a migrating whooping crane passed low overhead, huge wings beating.

Before resuming patter that mixes bits of biology, botany, history and colorful swampland mythology, the guide—one of several who show visitors around this east Texas wonder—mutters a statement that sounds like a holy vow: "This lake must remain untouched."

But swampy, shaded Caddo is already touched by 21st century woes. Heavy metals taint the lake's abundant aquatic life. Mercury pollution is the subject of government health warnings and a lawsuit filed against nearby coal-burning power plants. Equally threatening to the lake's future as a renowned wildlife habitat is an oncoming economic whirlwind: the water-sales boom. Caddo Lake finds itself a test case in a marketing plan that would make water the "new oil" in the Lone Star State. Would-be water barons, some of them veteran oil and gas marketers, are hustling to reap profits from selling water to thirsty urban centers. East Texas rivers, aquifers and even prized Caddo Lake stand increasingly at risk as drier western regions of the state begin to covet their water.



The lake is the glistening jewel of the rain-rich swath of eastern Texas known as the Piney Woods. Although Texans revere as precious the 200 major reservoirs dotting their mostly arid state, only Caddo Lake—a labyrinthine complex of bayous, bogs, sloughs, ponds, oxbows, ditches, channels, backwaters and wallows that sprawl across 30,000 acres on the Texas/Louisiana border—was formed without human design.

Although Caddo is rarely more than 4 feet deep, it ranks among the state's most biologically rich lakes. Its wetlands shelter reclusive alligators, more than 200 species of bird, a dozen types of turtle, about 70 fish species and 50 species of mammal. Thousands of birds traveling the Mississippi Flyway between Canada and South America congregate at the lake. Black bears, plentiful until the 1920s, unseen in the 1990s, may be making a comeback.



In 1993, Caddo Lake joined 17 other U.S. sites on a list of world-class wetlands created under an international treaty signed in Ramsar, Iran, in 1971. The Ramsar Convention, now adopted by some 90 nations, is the only international accord dedicated to the worldwide protection of an ecosystem type—wetlands. Caddo is on the list because of its biological diversity, importance to migrating birds and unique status among disappearing Mississippi Basin wetlands.

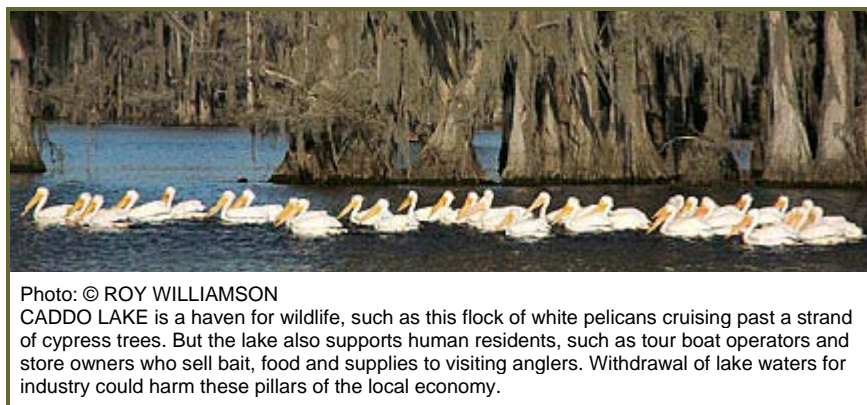
This international status has helped spawn conservation projects like an 8,000-acre state wildlife management area and the popular 480-acre Caddo Lake State Park. Nearby lies the 7,100-acre Caddo Lake National Wildlife Refuge, created in 2000 and the future site of the Ramsar Wetland Science and Visitors Center, planned by Caddo Lake Institute. A major lake advocate and supporter of scientific research and public education, the institute is the creation of Don Henley of the Eagles rock group, who grew up near the lake, and his attorney, Dwight Shellman.

But the lake's future seems, at best, uncertain—which, oddly enough, is also the name of the lake's population center. Betty Holder, who runs the Caddo Lake Grocery, a two-table hotbed of barbecue and bass-fishing yarns, is also mayor of Uncertain, a town of fewer than 200 residents. She and other elected officials of the tiny burg have thrown themselves into an international effort to safeguard the lake. "Our lake is not real healthy right now," the mayor says. "But if we don't suck all the water out and make it a mud hole, it will rejuvenate and be healthy some day."

"We're not on the critical list yet," says Roy Darville, head of the East Texas Baptist University Biology Department, who has studied the lake for a decade, "but the trends are moving in the wrong direction." Mercury and other heavy metals in lake sediments concentrate as they move up the food chain, Darville adds, describing the life-threatening process called biomagnification. The Texas Department of Health has warned area residents and visitors against frequent consumption of lake fish. Decreasing oxygen levels in the water are another problem.

The biggest new threat is commercial drawing of water from the lake and its tributaries. "We're afraid that there's not going to be enough water left for basic survival of the lake," says Shellman, president of the Caddo Lake Institute. "It's become clear over the past couple of years that Caddo Lake, in fact much of east Texas, has become ripe for aggressive transbasin water marketing schemes by the City of Marshall and others."

Marshall, located about 25 miles southwest of the lake, is seeking to sell to businesses outside the basin millions of gallons of water that presently flow into Caddo. Lake supporters contend that current state law requires consideration of environmental impacts in advance of such major sales. Conservationists recently won a court ruling that requires a review of the environmental impacts, but their opponents have appealed.



The Caddo case could create a key precedent in Texas's rapidly evolving water-marketing business, says Myron Hess, an attorney for NWF Gulf States Natural Resource Center, in Austin. The center is not a party to the suit but monitors the case. "When you start looking at Texas's big water basins, most of the water is already spoken for—anyone granted new water rights gets the leftovers," he says. "The good news is

that a lot of people aren't using those old water rights. But the more they can market, the more they're going to use."

Environmental constraints on proposed water sales could help protect Caddo Lake and Texas rivers, but conservationists also are attempting another tactic in the new water wars: applying to the state for water rights that the applicants would dedicate to river protection rather than to commercial use. However, an effort to use this strategy to protect the San Marcos and Guadalupe Rivers and the Guadalupe estuary in south-central Texas suffered a serious setback recently when the state environmental regulatory board rejected the application. That decision is now on appeal. The legislature then imposed a moratorium on granting new river-protection water rights. While less draconian than legislation initially proposed by water-sales interests, the moratorium left the outlook for such rights at best cloudy. Nonetheless, Caddo advocates have applied for a similar permit in their watershed.

The fight over the water that feeds Caddo Lake is particularly intense because of the lake's rich wildlife and its status as home of an ancient culture. Visible nearby are 2,000-year-old mounds and other artifacts of the Caddo Indians, whose word for friendship, *tejas*, gave the state its name.

The Caddoans believed their lake was formed by earthquake, and its creation is sometimes attributed to the New Madrid (Missouri) tremors of 1811–12. But most scientists believe the lake formed about 1800, when a natural logjam called the Great Raft backed the Red River into Cypress Bayou, yielding a navigable lake. By the Civil War era, steamboat travel linking Caddo Lake to Mississippi River mercantilism had made Jefferson, Texas, an elegant hub.

Government water policy then altered the area's fate. In the 1870s, the U.S. Army Corps of Engineers cleared the Red River logjam near Shreveport, Louisiana, lowering water levels in Cypress Bayou and leaving Jefferson landlocked. The boom fizzled. A century later, proposals to dig a barge canal through the lake galvanized environmentalists such as Henley. He and his fellow Eagles held concerts to raise money to found Caddo Lake Institute and support the landscape of his boyhood.

Jefferson now specializes in nostalgia, and a small paddle wheeler, the Graceful Ghost, plies Caddo alongside the occasional pontoon boat or rental canoe. Maps and markers for "boat roads" help boaters find their way through mazelike waterways, for without care a visitor can spend a chilly night lost among screech owls and knobby, centuries-old bald cypresses.



Photo: © ROY WILLIAMSON
SPANISH MOSS drips in ghostly tatters from cypress trees at Caddo Lake (above), a complex of bayous, ponds, bogs and other wetlands sprawling across 30,000 acres in east Texas.

Home to great egrets, squirrel tree frogs and fragrant water lilies, Caddo is the state's only natural lake. A proposal to sell water from the lake for industrial use threatens Caddo and the people and wildlife that it supports.

Amateur historian and author of the slim volume *Caddo Lake*, the late Fred Dahmer wrote in the 1980s that first-time visitors "often literally gasp" when they see the lake's beauty. Now they also may gasp at the sweeping threats to the lake. "It's a scary mix, but there is still time to save Caddo if we get busy," says NWF lawyer Hess. "It's really too beautiful to lose. At night you're serenaded by tree frogs. Then you get on the water, and you are treated to the beauty of egrets and herons gliding through the cypress trees, set off against a carpet of bright green duckweed."

Biologist Darville echoes that sentiment. "I love Caddo. It's my favorite place on Earth. And I want it to be there when my kids have kids and they have kids."

Lake defender Henley calls Caddo Lake central to his spiritual life, and a visitor sitting at a lakeside dock can understand why. Watching butterflies skim wild violets and a hawk take flight from a treetop, the lake seems full of magic, its future both important and, as the local folks say, uncertain.

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NWF Takes Action

Protecting Texas Waters

NWF launched the Texas Living Waters Project in 2001 to advocate development of a state water policy that permanently protects Texas rivers, coastal bays and wetlands, such as those in Caddo Lake, that depend on river flows. NWF's Gulf States office has been an active supporter of the Caddo Lake Institute's application for a river-protection permit in proceedings before the Texas Commission on Environmental Quality (TCEQ). Although unable to stop recent legislation establishing a moratorium on new river-protection permits, NWF and its allies helped to improve the final bill. One result: A new study commission will make recommendations for river-protection measures next year. NWF also is fighting state efforts to ignore pollution in Caddo Lake. NWF has asked the federal Environmental Protection Agency to disapprove TCEQ's proposal to redefine as clean a portion of the lake previously classified as impaired under the Clean Water Act.

Big Lakes Are Hard to Find

The Lone Star State is not alone in its paucity of large bodies of water. Exclusive of the Great Lakes and Great Salt Lake, the United States is studded with only 245 lakes larger than 10 square miles in surface area, and these lakes are found in only 23 states. Texas neighbor Oklahoma has no natural lakes larger than 10 square miles, while Louisiana, with which Texas shares Caddo, boasts ten. Minnesota heads the list of states with lakes of more than 10 square miles—it has 40 of them among its more than 12,000 natural lakes of all sizes. The largest natural lake in the lower 48 states (aside from the "greats") is Lake of the Woods, which covers 1,485 square miles along the Minnesota/Ontario border. It is more than twice the size of the next-largest Lower 48 natural lake, Florida's Okeechobee. The deepest natural lake in the Lower 48 (and seventh deepest in the world) is Oregon's Crater, which is 1,943 feet deep.