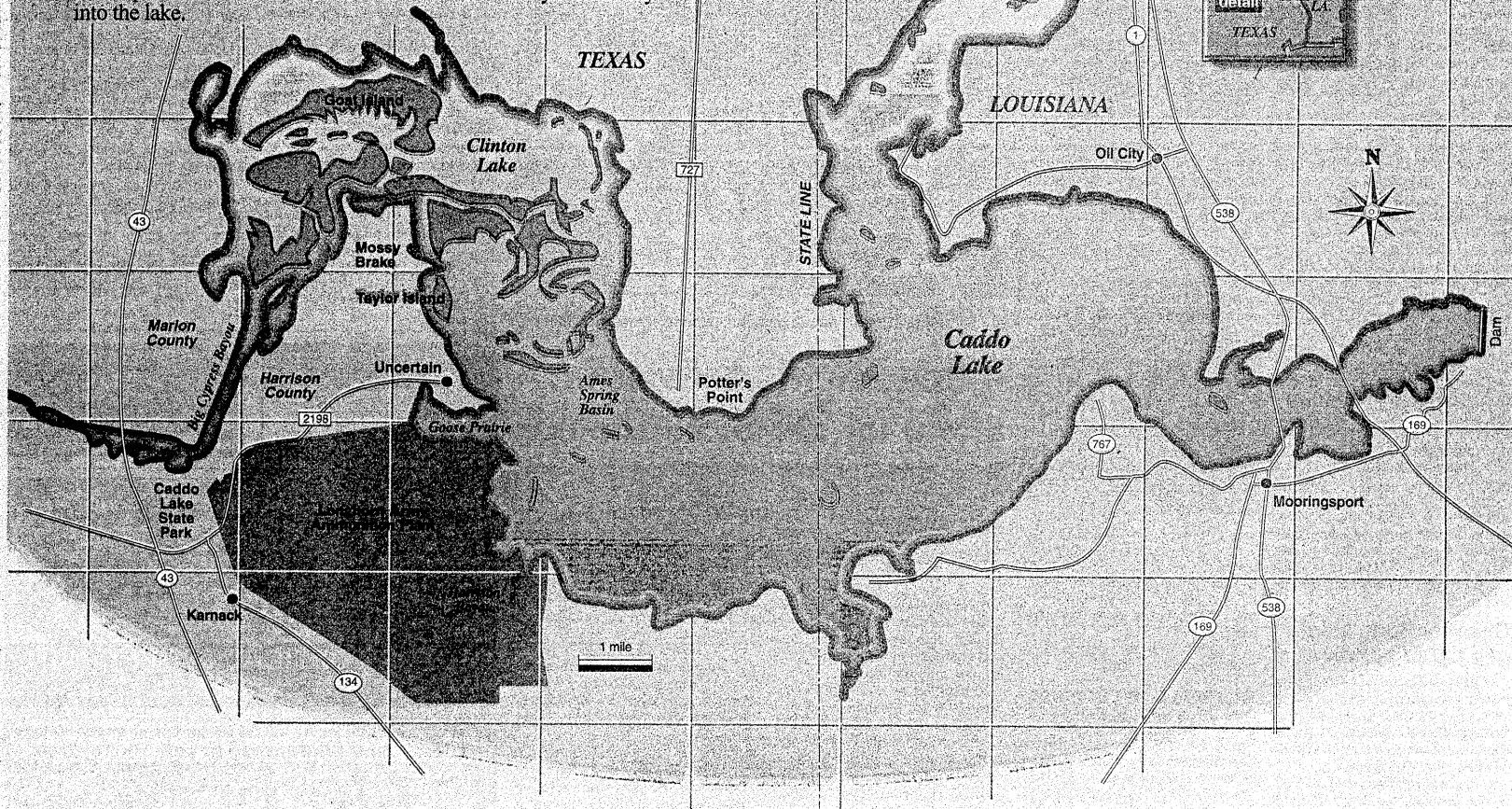


Caddo Lake

An Ark-La-Tex treasure

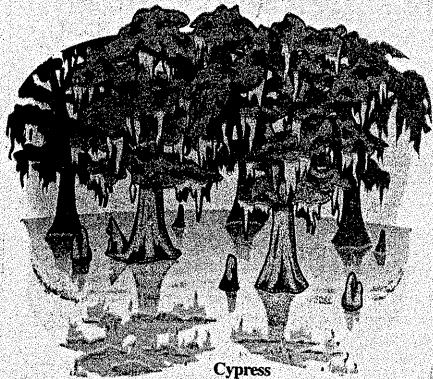
This internationally recognized wetland faces environmental threats as it grows in stature as a draw for ecotourists. A closed military ammunition plant on the lake's shore is an EPA Superfund site, a fish-consumption warning exists on the Texas side because of mercury contamination, and a proposed poultry-processing plant, if built, would produce treated wastewater that would eventually find its way into the lake.



About the lake

The oldest living cypress trees on Caddo have been aged at more than 400 years, with most being located on the upper end of the lake. They are often grouped according to age, correlating with historical water levels. On the Louisiana side, however, many of the cypress were cut to build oil production platforms. The first offshore drilling operations ever were conducted there.

One of the most unique wetland areas is along Harrison Bayou, totaling about 1,200 acres near Kamack. It features one of the most undisturbed bald cypress stands in Texas, and also has the national champion blueberry hawthorne tree and a national champion hickory, and a former state champion flowering dogwood.



Cypress trees

With much of the area being heavily logged, Harrison Bayou received protection in the early 1940s when much of the surrounding land was bought by the government for construction of the Longhorn Ordnance Works — now known as the Longhorn Army Ammunition Plant.

Health warnings

In late 1995, the Texas Department of Health issued a mercury advisory for the Texas side of Caddo Lake and Big Cypress Creek, one of its major tributaries.

People were cautioned not to eat more than two meals (8-ounce portions for adults, 4 ounces for children) per month of largemouth bass and freshwater drum from any of the affected waters. No such warnings have been issued for the Louisiana side of Caddo, though the state's Department of Environmental Quality continues to test fish there.

Organic mercury in fish or other foods enters the bloodstream easily and goes rapidly to other parts of the body, including the brain.

Excessive amounts of methylmercury can harm the brain and nervous system, with young children being particularly sensitive. The brain and nervous system in a developing fetus can be permanently damaged if the mother eats fish or other foods containing high levels of mercury.

Sources: Texas Department of Health, Caddo was... A short history of Caddo Lake. Times newspaper.

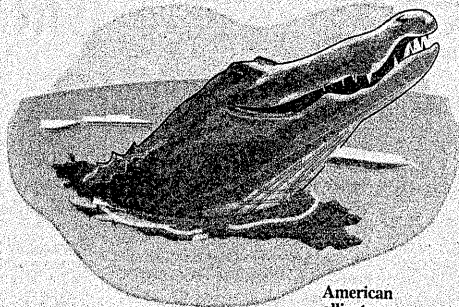
At 32,500 acres, Caddo is the largest naturally formed lake in Texas (it is actually a border lake, about half of which is located in Louisiana). Legend holds that it was created by a great earthquake, but it was more likely formed between the late 1700s

and 1830, when high water levels were attributed to a natural log jam on the Red River known as the "Great Raft." The dam was constructed by the Corps of Engineers in 1914, permanently impounding the lake.

Wildlife

Caddo supports several rare wildlife species, along with 45 species of game and nongame fish. The lake has an excellent chain pickerel fishery, and produces many trophy bass each year from its population of fast-growing Florida-strain largemouths, which were stocked by the Texas Parks and Wildlife Department. Bald eagles are frequently seen, along with the American alligator and alligator snapping turtle. It is also home for a large number of wood ducks, one of America's most beautiful waterfowl. They nest there, and use the lake year-round.

Caddo is heavily used by neotropical songbirds that migrate there from the rain forests of South and Central America, nesting in and around the flooded cypress and adjacent pine and hardwood forests.



American alligator



Bald eagle

Plant life

Caddo has among the greatest diversity of flora and fauna of any lake in Texas. It has the largest inland stand of bald cypress in the state, and supports several rare plant and wildlife species, including the yellow lady slipper, which is like a wild orchid. Other plants in the lake include: duckweed, the gritty feeling plant that grows just under the surface of the water; water lilies, which have large flowers; and American lotus, a large flowering plant, which is known locally as Yonqupin.

Environmental conservation

With help from the Texas Nature Conservancy in the early 1990s, an additional 7,000 wetland acres were put into public ownership on the upper end of Caddo. Adjacent to the existing Caddo Lake State Park near Kamack, the expanded Caddo Lake State Park and Wildlife Management Area is one of only 15 sites in the United States to be designated as a "wetland of international importance" under the worldwide Ramsar Treaty.

Don Henley of Eagles fame grew up near Caddo, and fished the lake regularly as a youngster. He has been instrumental in helping to preserve it, establishing the Caddo Lake Institute and Scholar's Program to provide opportunities for study in the unique wetland area and to educate the public on the value of such ecosystems.



Henley

Yellow lady slipper



Industrial threat

What is seen by many as the latest environmental threat to Caddo Lake is a proposal by Pilgrim's Pride (see map at top) to build a poultry processing plant near the town of Pittsburg in East Texas. After an evidentiary hearing, the Texas Natural Resources Conservation Commission is expected to rule on the company's permit application later this year. There is concern that the discharge of some 2.5 million gallons of waste water per day into Big Cypress Creek — water that flows into nearby Lake O' the Pines and eventually into Caddo — could threaten the municipal water supplies of communities using these two reservoirs.

The Longhorn Army Ammunition Plant (see map at top) at Kamack, Texas, has been declared a federal Superfund site, and cleanup efforts are now under way there. At present, the focus is on one of the landfills, where trichloroethylene (TCE) has migrated through the groundwater to nearby Harrison Bayou. It is one of Caddo's many tributaries, but the TCE has apparently not reached the lake. Testing at other sites within the plant grounds have found additional groundwater contamination.

1 Mercury is an element that occurs naturally in the environment in several forms. It can combine with other elements such as chlorine, carbon or oxygen to form mercury compounds — called organic mercury if they contain carbon. All forms are poisonous. The type found in fish is the organic form, and is called methylmercury.

2 When mercury enters the water, it settles to the bottom and mixes with the sediment. Here it can be changed into methylmercury.

3 It enters the food chain as small aquatic plants and animals absorb it in the sediment, and are then eaten by small fish, which in turn are eaten by larger and larger fish and eventually humans.

4 At each step, the concentration of mercury increases, with older predatory fish usually showing the greatest amounts of methylmercury. Texas found largemouth bass and freshwater drum to contain the highest levels. The average for 13 other species tested was relatively low, with catfish, crappie and carp containing the lowest levels of mercury.

