

# PADDLEFISH

Experiment

## HELP SAVE THIS PREHISTORIC TEXAN.

When you see an American paddlefish, you're looking at a creature older than dinosaurs.

The oldest surviving fish species in North America, paddlefish have lived in the Caddo Lake watershed—as well as other rivers and bayous of the Mississippi River Basin—for more than 300 million years. But you'll rarely find them in Texas rivers anymore.

Once common in this area, these prehistoric fish began to disappear after changes were made to the watershed, including construction of the Lake O' The Pines dam in 1959.

You can help bring them back.



#### THE PADDLEFISH EXPERIMENT

In early 2014, the U.S. Fish and Wildlife Service and the Caddo Lake Institute will release 25-50 paddlefish into Caddo Lake and Big Cypress Bayou.

Each two- to three-foot long fish will have an implanted radio transmitter. Radio signals will be unique, tracked by towers placed along the watershed. As part of the experiment, you can follow the paddlefish on *caddolakeinstitute.us/paddlefish\_project.html*. Results of this experiment will determine whether restoration of the flow regimes will provide a favorable habitat for the paddlefish. If successful, the experiment will lead to a watershed-wide reintroduction of up to 10,000 juvenile paddlefish. The Paddlefish Project is important to the ecology of Caddo Lake and Big Cypress Bayou and can be a boon to the region's tourism economy. An educational component will include teacher professional development, middle and high school student activities and curricula, and adult volunteer opportunities. Schools, scout troops, and other groups will be invited to adopt and track their own paddlefish to learn about its movement and habitat. The overarching theme, "Habitat Restoration and Conservation," will raise students' awareness of the environment and the impact of humans on nature, especially on water and fish and wildlife habitats.

#### MEET THE PADDLEFISH

Common in Big Cypress Bayou and Caddo Lake until the mid-1900s, paddlefish now are rarely found here or in any Texas river.

#### Scientific Name: polrodon spathula Texas Status: threatened Length: up to 7 feet long Weight: up to 200 pounds Lifespan: up to 30 years

#### Physical Characteristics.

~ SMOOTH, TOUGH, SHARK-LIKE SKIN ~ SKELETON MADE ENTIRELY OF CARTILAGE, EXCEPT JAWBONE

### Feeding Habits.

- ~ FILTER FEEDS
- ~ PADDLE ACTS AS A SENSOR, DETECTING FOOD IN WATER
- ~ GILLS CAPTURE PLANKTON
- ~ SWIMS OPEN-MOUTHED

#### Reproduction and Care of Young:

- ~ SPAWN IN SPRING DURING PERIODS OF HIGH WATER FLOW
- ~ FEMALES LAY EGGS ON SUBMERGED GRAVEL AND COBBLE BARS
- ~ YOUNG HATCH AND DRIFT DOWNSTREAM TO DEEPER, SLOW WATER POOLS

#### JOIN THE PROJECT

Since 2004, Caddo Lake Institute (CLI) and its partners have led an effort to restore freshwater flows in Big Cypress and Caddo Lake to improve habitat for fish and wildlife and create favorable conditions for reintroduction of paddlefish into the watershed. This work has led to recommendations for changes to water release patterns from Lake O' The Pines and an agreement by the U.S. Army Corps of Engineers and the Northeast Texas Municipal Water District to provide new release patterns to support paddlefish reintroduction. Concurrently, spawning beds for paddlefish and other fish were constructed by the Corps of Engineers. For more information about the Paddlefish Experiment, visit caddolakeinstitute.us or follow us: facebook.com/caddolakeinstitute.

Schools interested in the education component should contact the Collins Academy at mgannon@collinsacademy.com or (903) 665-2900.

You can be a part of paddlefish restoration. Please make a tax-deductible donation online at *caddolakeinstitute.us/donate.html* 

#### MAJOR PROJECT PARTNERS

U.S. ARMY CORPS OF ENGINEERS U.S. FISH AND WILDLIFE SERVICE NORTHEAST TEXAS MUNICIPAL WATER DISTRICT TEXAS PARKS AND WILDLIFE DEPARTMENT LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES HOLLOMON PRICE FOUNDATION CYNTHIA AND GEORGE MITCHELL FOUNDATION THE NATURE CONSERVANCY COLLINS ACADEMY JEFFERSONIAN INSTITUTE MEADOWS FOUNDATION SKILES FOUNDATION





