Native Fish in the Classroom

Teacher Guide

American Paddlefish (Polyodon spathula)

Louisiana Department of Wildlife and Fisheries and Louisiana Sea Grant College Program
2020 Update Edition

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Contact:
Christopher Conner
Biologist
Louisiana Department of Wildlife and Fisheries
765 Mary Hill Rd
Pineville, LA 71360
Office: (318) 487-5336
Email: cconner@wlf.la.gov

Project Partners

Louisiana Department of Wildlife and Fisheries

Louisiana Sea Grant College Program

St. Landry Parish School System

Louisiana State University, Department of Civil and Environmental Engineering
Louisiana State University

ACKNOWLEDGMENTS

Project Manager

Christopher Conner
Louisiana Department of Wildlife and Fisheries

Publication Team

Primary Authors
Angela Capello
Rachel Somers
Christopher Conner

Contributing Authors
Charlotte Bihm
Nicole Smith
Robby Maxwell

Lesson Plan Development Team
Charlotte Bihm, teacher liaison
Sabrina Ardoin
Tracy Armand
Lyn Murphy
Kathleen Nichols

Editors
Marilyn Barrett-O'Leary
Dianne Lindstedt
Paula Ouder
Rachel Liebman
Robby Maxwell
Christopher Conner
John Dupuis

Formatting
Jessica Schexnayder
Christopher Conner

Technical Advisors

Lance Beecher
Kristi Butler
Bobby Reed
Robby Maxwell
Eric Shanks
Nicole Smith
Paul Smith
John Dupuis

Contributing Ideas and Field Testing

Sabrina Ardoin
Charlotte Bihm
Adam Fredrick
Nick Limberis
Kathleen Nichols
Terry Nichols

Project Concept Development

Pam Blanchard, Ph.D.
Angela Capello

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INTRODUCTION

Native Fish in the Classroom is a multidisciplinary, classroom-based project developed primarily for middle and high school students. The overall goal of the project is to create an active learning environment to assist students in developing an attitude of stewardship toward natural resources and an appreciation for fisheries management practices through the process of rearing Paddlefish.

The following objectives support this goal:

1) Provide students with background information on fisheries management, fish biology, protected species, and aquatic natural resources.
2) Maintain a classroom-based nursery aquarium in which students rear Paddlefish from eggs to fingerlings and learn about the components necessary for fish survival.
3) Learn about freshwater ecological systems by understanding the role of fisheries management and how it benefits the whole freshwater system.

Why Paddlefish?

The Paddlefish is an ideal species to use for studying fish growth and development in the classroom because its life cycle parallels the academic year. Paddlefish fry can grow about 1 inch per week in ideal environmental conditions, and often reach about 4 inches in less than two months. This rapid growth allows students to observe three distinct life stages of the Paddlefish.

Timeline

The project is expected to occupy class time from early March through mid-May. A teacher training workshop is scheduled in the summer for teachers new to the project. Additionally, a January meeting covering the Paddlefish spawn ensures successful preparation for receiving Paddlefish eggs in the spring. In early March, teachers are invited to bring their students to assist with the artificial spawning process at the Booker Fowler Fish Hatchery and bring eggs back to their classrooms.

Once hatched, fry will be reared to fingerling stage by the students in their classroom nursery tank. At the end of the school year, students will join their teacher to release their (hopefully!) 4-6-inch fingerling Paddlefish into a pre-approved public stream, with the required supervision/approval of an LDWF biologist. The hatchery will also have a reserve of Paddlefish fingerlings that will be released into Louisiana streams to help sustain a healthy Paddlefish population, in addition to being used to replace any classroom fingerlings that may die during the school year. The fingerlings raised in the hatchery often grow up to 6 inches or more before being released into the wild.

Expected Benefits

Louisiana students will obtain hands-on, real-science knowledge of the state's native aquatic resources, and ideally will develop a sense of stewardship towards all of Louisiana's natural resources.

Louisiana teachers will gain access to the state's Booker Fowler Fish Hatchery as an outdoor classroom. *Native Fish in the Classroom* will also provide hands-on classroom lessons unique to Louisiana.