

# CHANDELEUR ISLAND ECOLOGY

## FISHERIES & SEAGRASSES



### FISHERIES

Chandeleur Island provides essential nursery and foraging habitat to multiple species of marine fish and shellfish. These species include Red Snapper, Red Drum, Spotted Sea Trout, Tarpon, Lemon Sharks, Blue Crabs, and several species of Penaeid Shrimp.



### SEAGRASSES

The leeward side of Chandeleur Island is home to the most expansive seagrass beds in the northern Gulf of Mexico: 5,194 acres. Species observed in these seagrass beds include Shoal Grass (*Halodule wrightii*), Star Grass (*Halophila engelmannii*), Widgeon Grass (*Ruppia maritima*), Manatee Grass (*Syringodium filiforme*) and Turtle Grass (*Thalassia testudinum*).

NORTH  
CHANDELEUR  
ISLAND

CHANDELEUR  
SOUND

NEW HARBOR  
ISLAND

KATRINA CUT

SOUTH  
CHANDELEUR  
ISLAND

## FISHERIES & SEAGRASSES

The Gulf of Mexico coast is world-renowned for its recreational and commercial fisheries. Chandeleur Island is an integral part of the Gulf's abundant fish and shellfish resources. The island provides aquatic habitat and nursery grounds for near threatened, threatened and/or endangered species such as Lemon Sharks (*Negaprion brevirostris*) and Gulf Sturgeon (*Acipenser oxyrinchus desotoi*). Other noteworthy finfish species that inhabit the immediate area around the island are the Tarpon (*Megalops atlanticus*) the Spotted Seatrout (*Cynoscion nebulosus*), and various species of snapper.

Seagrasses, or submerged aquatic vegetation, play a vital role in the nearshore marine ecosystem. The vast seagrass beds on the leeward side of Chandeleur Island are made up of five species of seagrasses, making it the most diverse assemblage of marine seagrasses in the Northern Gulf of Mexico as well as the only marine seagrass beds in Louisiana waters. As primary producers, they cycle nutrients into and out of the water column and convert sunlight into a net energy input to the system. These seagrasses provide habitat for a diverse assemblage of invertebrates and fish that attract a large number of dolphins throughout the year. Dolphins from both the Mississippi River Delta and the Mississippi Breton Sound Estuary Stocks utilize the Chandeleur Islands and their seagrass meadows. They serve as forage for herbivorous aquatic organisms such as sea turtles and the occasional manatee that wanders into the area. Their root systems help to preserve the seafloor around the island by anchoring vital sediments in place. They also provide shelter and essential nursery habitat for juvenile fish and shrimp.



### TARPON

*Photo credit: Jeff Deblieux*



### LEMON SHARK

*Photo credit: Todd Baker, CPRA*

### TURTLE GRASS

*Photo credit: LA Dept. of Wildlife & Fisheries*