



Piping Plover Surveying & Monitoring

Project Status

Project Year: 2013-Present **Status:** Ongoing

Category: Migratory Bird

Location: Caminada Headland, Port Fourchon, La

Project Partners: Coastal Protection and Restoration Authority, U. S. Fish and Wildlife Service, LA Department of Wildlife and Fisheries

Background and Problem Addressed:

Currently in construction, the Caminada Headland Beach and Dune Restoration Project in Lafourche Parish, Louisiana is designed to protect and preserve the structural integrity of the barrier shoreline and provide for restoration of geologic and ecosystem processes such as longshore transport and overwash. Benefits of restoring the headlands Gulf shoreline would protect and sustain significant and unique coastal habitats important to the threatened and endangered populations of Piping Plover and the many other birds found along Louisiana's shorelines.

The Gulf of Mexico is a key wintering area for the nation's population of Piping Plover. Data from the International Piping Plover Survey, conducted every five years since 1991, indicate that 73-93% of all wintering plovers counted have been on the shores of the Gulf of Mexico. Little is known about habitat requirements of these birds particularly during the winter season. Furthermore, little is known about impacts associated with construction during and after beach and barrier island restoration projects on avian populations. This project provides an opportunity to determine impacts associated with the Caminada Headland Beach and Dune Restoration Project on Piping Plover and a select suite of other North American shorebirds and the benthic communities they rely on.



Over the last two decades, numerous barrier island restoration projects have been undertaken through the Coastal Wetlands Planning, Protection, Restoration Program, the Coastal Impact Assessment Program, the State of Louisiana, and others. Our understanding the impacts during construction and the perceived positive impacts for birds after construction are poorly understood or documented. While the focus of this project addresses impacts during the active restoration phase, the hope is to continue this work after restoration is complete and document the perceived positive implications to both nesting and wintering North American shorebirds.



Project Description:

In January 2013, the Barataria-Terrebonne National Estuary Program worked in collaboration with the Coastal Protection and Restoration Authority to begin monitoring the distribution and abundance of Piping Plover during construction activities associated with the Caminada Headland Beach and Dune Restoration Project. Numerous surveys have been completed since that time and continue to this day. These surveys occur biweekly through the migratory and wintering seasons (July through May) when most of the North American population of Piping Plover is overwintering along the north gulf. Surveyors cover all available habitats from the gulf beach-front to the back-bay shoreline, including mud flats. Coordinates, number of individuals, and color band combination data are collected from each bird to help assess the influence of short-term habitat changes on Piping Plover habitat utilization.

Shoreline restoration projects have become larger, leading to increased construction duration. These increased durations mean longer possible disturbances throughout multiple nesting and wintering seasons. Results of this project will help in development of best management practices (BMP's) available to the State and the many agencies and organizations that conduct restoration for construction activities. This research will help regulators better assess actual shorebird use and possible impacts of construction activities.

CCMP Action Items Addressed:

Preservation and Restoration of Barrier Islands (Ecological Management #5)

Protection of Habitat for Migratory and Resident Birds (Ecological Management #15)

