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National Audubon Society



Coastal Bird Conservation Program



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Coastal Bird Conservation Program

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Coastal Bird Conservation Program



The Coastal Bird Conservation Program is part of National Audubon Society's Science Division, based in Ivyland, Pennsylvania.

Coastal Bird Conservation Program

The Science Division includes:

- **The Important Bird Areas (IBA) Program**
- **Christmas Bird Count**
- **Audubon WatchList**
- **International Program**
- **Birds and Agriculture**
- **Audubon at Home**
- **Seabird Restoration**
- **Coastal Bird Conservation**

Coastal Bird Conservation Program



CBCP Office and staff in Duxbury, MA

Launched in 2003, the Coastal Bird Conservation Program is a field-based, science-driven National Audubon Society initiative, to enhance or establish coastal bird conservation efforts state by state.

Coastal Bird Conservation Program



Least Tern with hatchling

The goal of the Coastal Bird Conservation Program is to protect and conserve populations of threatened coastal birds in North America.

Coastal Bird Conservation Program

The CBCP species priorities are derived from:

- US Endangered Species List**
- US Shorebird Conservation Plan**
- North American Waterbird Conservation Plan**
- Audubon WatchList**
- Other national and regional plans**

Coastal Bird Conservation Program

The initial focus of the CBCP are species of beach-nesting birds and includes:

- Piping, Snowy and Wilson's Plovers**
- Roseate, Least and Gull-billed Terns**
- American Oystercatcher**
- Black Skimmer**

Coastal Bird Conservation Program

Pending new funding the future work of the CBCP will include migratory shorebirds and colonial waterbirds, including species such as:

- Red Knot, Mountain Plover, Long-billed Curlew, and Buff-breasted Sandpiper**
- Reddish Egret**
- Whooping and Sandhill Cranes (SE races)**
- Black and Yellow Rails**

Coastal Bird Conservation Program

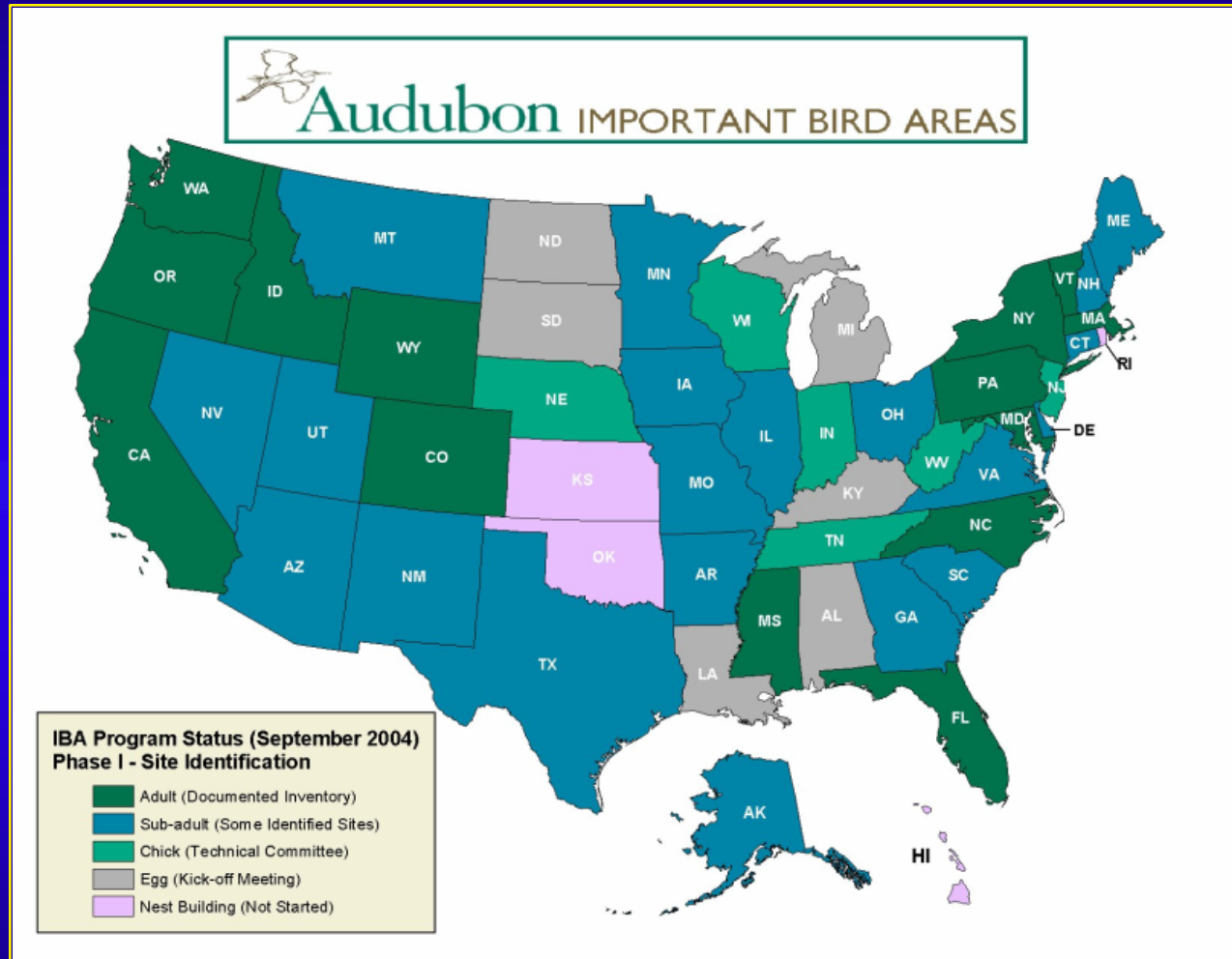
Current geographic focus:

- To identify and prioritize coastal bird conservation work at the most critical areas on the U.S. coast, Mississippi River watershed and the Great Lakes



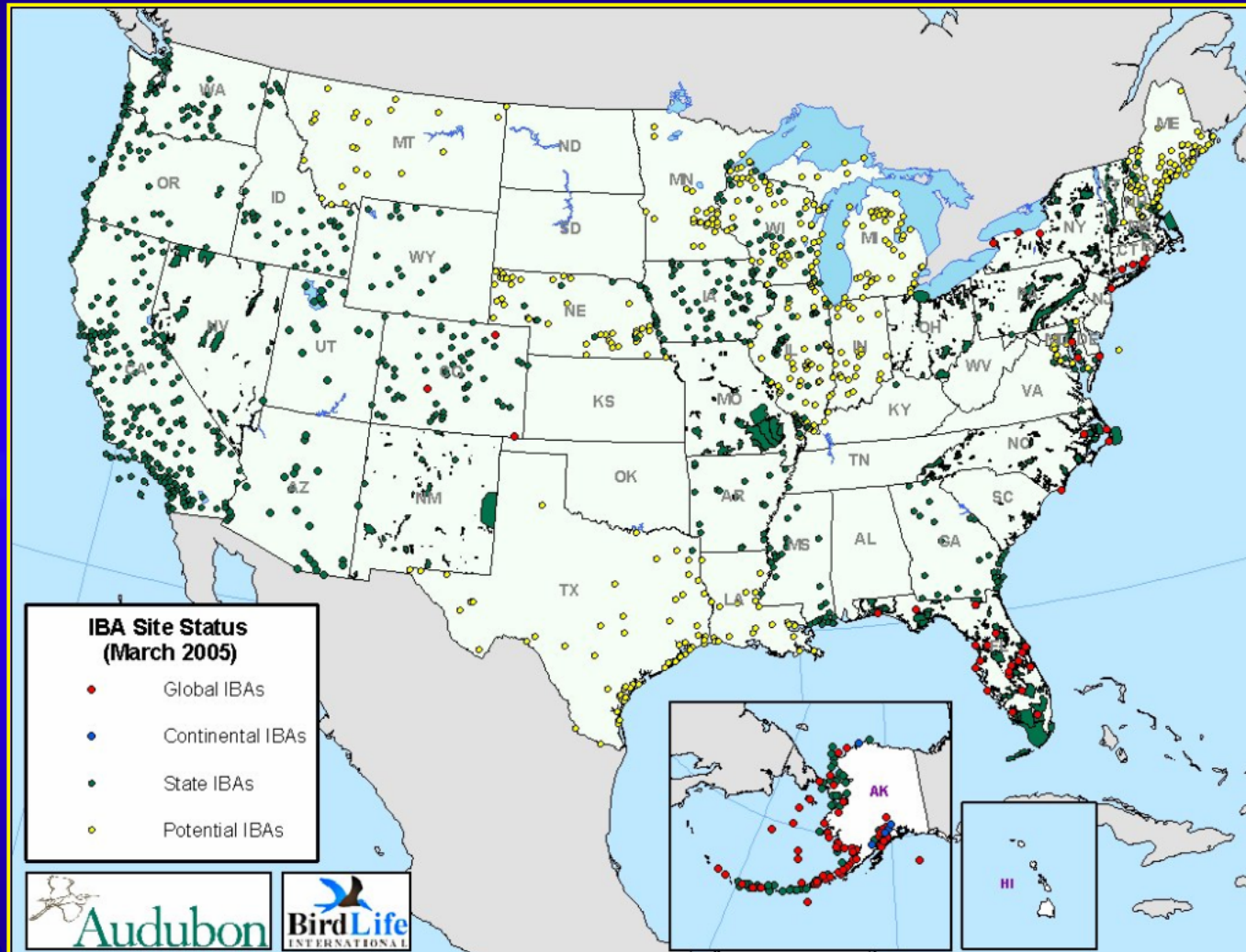
Piping Plover with 2-week old chick

Important Bird Areas Program



IBA programs in the USA as of 2005

Important Bird Areas Program



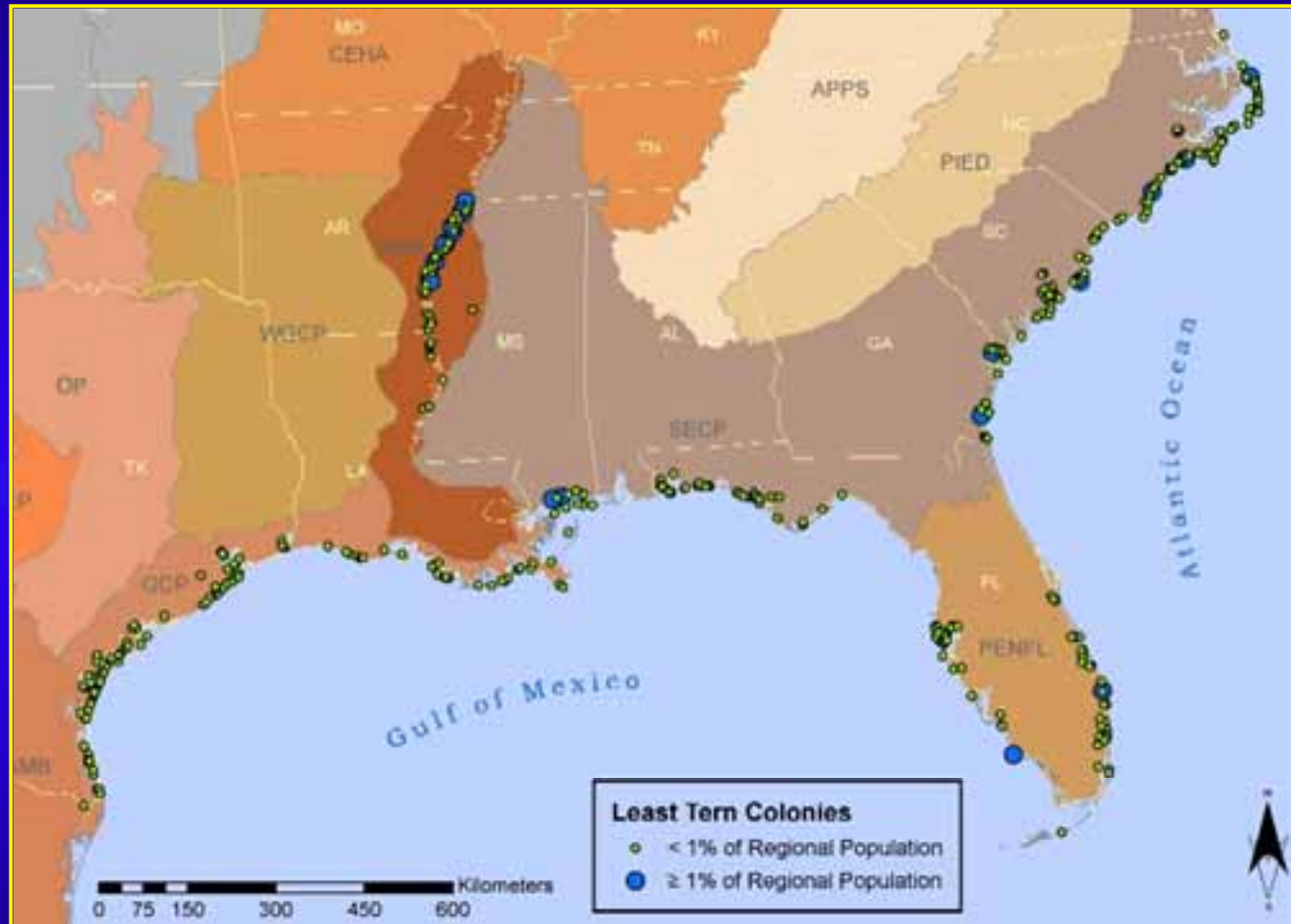
IBAs in the USA as of March 2005

Important Bird Areas Program

As of August 2005:

- **1,800 IBAs identified (Current goal 3,000)**
- **800 IBAs expected at Global level**
- **46 of 50 states with IBA programs**
- **The CBCP works with the IBA Program to focus on regional and global level IBAs in the Western Hemisphere that are critical to coastal birds.**

Important Bird Areas Program



So Least Tern colonies mapped in SE Waterbird Conservation Plan by Audubon North Carolina

Coastal Bird Conservation Program

Focus at IBAs:



- To increase conservation work in the field with population surveys, regular monitoring, posting, and fencing of critical nesting and wintering sites.

Coastal Bird Conservation Program

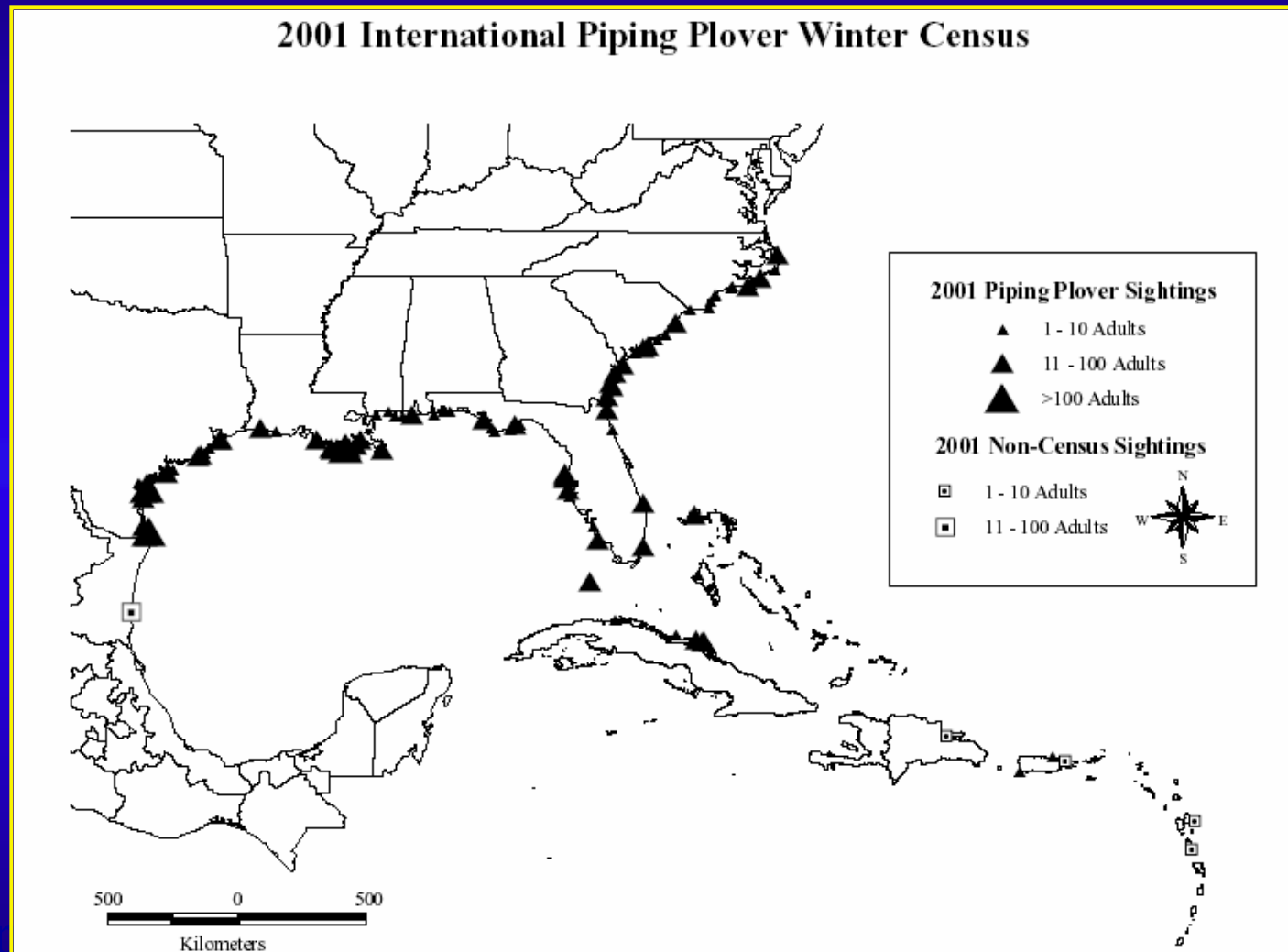
Focus at regional US level:

- The CBCP focuses its field program on regions or sites supporting the largest populations of priority species



Wintering Piping Plover

Coastal Bird Conservation Program



Wintering Piping Plovers 2001

Coastal Bird Conservation Program

Since 2003 the CBCP has annually surveyed and monitored:

- **Breeding Snowy and Wilson's Plovers on the Gulf coast**
- **Breeding and wintering Piping Plovers on the North Carolina coast**
- **Color-banded Piping Plovers wintering from North Carolina to Texas**



Color-banded Piping Plover

Coastal Bird Conservation Program

Within regions and states, the CBCB works with all partners who have significant oversight or operations affecting coastal birds and coastal habitats:

- National Wildlife Refuge System**
- National Parks and Seashores**
- US Military Bases**
- US Army Corps of Engineers**
- State Wildlife Agencies**
- State Park Departments**
- Audubon state and local chapters**

Coastal Bird Conservation Program

Focus: Priority habitats and sites:

- The CBCP promotes long-term protection strategies with property owners and land managers to conserve threatened coastal bird populations and their habitats



Coastal Bird Conservation Program

The CBCP aims to work with every possible partner within Audubon to achieve its coastal bird conservation goals:

- Colleagues within Audubon Science**
- Dozens of State Audubon Societies**
- Hundreds of Audubon chapters in the Western Hemisphere**
- Thousands of IBA property owners**

Coastal Bird Conservation Program



The CBCP works with Audubon North Carolina's Sidney Maddock on the Outer Banks

CBCP: North Carolina

- North Carolina's breeding Piping Plovers increased from an all-time low of 20 pairs in 2004 to 37 pairs in 2005.**
- North Carolina is also important to migratory and wintering Piping Plovers, including the rarest Great Lakes Population**
- North Carolina is also important to breeding American Oystercatchers, Least Terns, Wilson's Plovers, and Black Skimmers**

CBCP: North Carolina: Threats



Off-road vehicles impact plovers and habitat on much of the Outer Banks

CBCP: North Carolina : Threats



Habitat design and alteration following major storms (Hurricane Isabel)

CBCP: North Carolina: Threats



Unleashed dogs can harm beach-nesting birds

CBCP: North Carolina: Protection



Predator exclosures are used to boost nesting productivity of plovers

CBCP: Wintering Piping Plovers



Piping Plovers winter from North Carolina to Texas in the United States

CBCP: Wintering Piping Plovers



**New England and Great Lakes Piping Plovers
winter primarily from North Carolina to
Mississippi**

CBCP: Wintering Piping Plovers



Marco Is. on south Florida's Gulf Coast hosts wintering Piping Plovers from 4 subpopulations

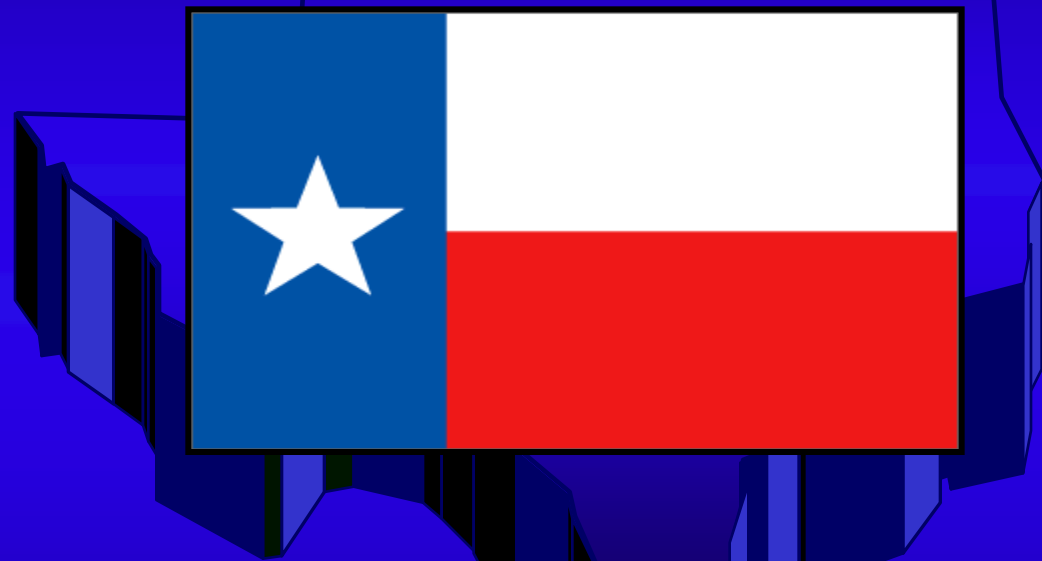
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Beach-nesting bird conservation benefits other endangered species

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2003-2005



Texas

CBCP: Texas



- In 2003 the CBCP launched its first major field project on the south Texas coast; to survey breeding Snowy and Wilson's Plovers.
- In 2004 and 2005, the CBCP field program expanded to include the central Texas coast



Snowy Plover: *Charadrius alexandrinus*

Snowy Plover: Conservation Status

- **Total US population : 18,000 individual birds**
- **US Shorebird Conservation Plan: Highly Imperiled**
- **Audubon WatchList: Globally Threatened**
- **State Endangered or Threatened in 7 states**
- **Federally Threatened: Pacific Coast population**



Wilson's Plover: *Charadrius wilsonia*

Wilson's Plover: Conservation Status

- **World population: 6000+ birds (low confidence)**
- **US Shorebird Conservation Plan: Species of High Concern**
- **Audubon WatchList: High Priority**
- **Threatened or High Concern in 5 states**
- **No federally-listed status**



© 2004 Sidney Maddock

Prior to the comprehensive CBCP surveys very little was known about the Gulf coast population of Wilson's Plovers.



The Wilson's Plover has not been the focus of comprehensive research in more than 15 years.

Ever increasing development and recreation on and near beaches have resulted in the continued degradation of breeding and wintering habitat for these and other beach-nesting species.





South Padre Island, Texas

Texas beaches are legally designated as highways.

Texas 2003-2005 Field Seasons

CBCP Provided:

- Training materials such as resource manuals and census guidelines
- Onsite field training for coordinators, interns, and volunteers
- Highly-trained field assistants at specific sites as needed

Partners and Support:

Laguna Atascosa and Santa Ana National Wildlife Refuges and Padre Island National Seashore continue to provide critical support each year during the 5-month-long plover breeding season.

Partners and Support: Housing



Partners and Support: Field Vehicles





In south Texas CBCP staff surveyed 480 square miles primarily on foot



To survey a single linear mile, we often covered over 5 square miles of habitat.

Habitats Surveyed:



Seemingly endless dunes



vast algal mud flats



continuous coastal bays and inlets



very large and unexplored interior salt lakes



and very dense black mangrove inlets



and quicksand muck to slow you down



And other little things...



like another blown trailer tire



or a stuck ATV



Nor did we let the locals intimidate us



Snowy Plover Nest

**Just to find this...perfect little snowy plover
nest or**



Wilson's Plover nest



Each nest was recorded by GPS to create comprehensive plover nesting site maps.



All nests and surrounding habitats were photographed.



Data collected: actual nest



Data collected: micro-habitat selection (1 m hoop)



Data collected: surrounding habitat selection



Data collected: nesting chronology



Wilson's Chick

Data collected: hatching success



Data collected: nest predation



2 week old Wilson's chick

Data collected: habitat use by young

Texas 2003 and 2004 Field Seasons

**ORV impacts on plover
breeding habitat**

A 3D map of Texas is shown against a blue gradient background. The map is rendered in a dark blue color with a slight shadow effect. A jagged, irregular cutout is made along the southern coastline, representing the impact of Off-Road Vehicle (ORV) activity on plover breeding habitat. The text 'ORV impacts on plover breeding habitat' is overlaid in yellow on the map.



ORV impacts: on actual nesting habitat



ORV impacts: on barrier beach dunes



ORV impacts: on coastal bay habitat



ORV impacts: on plover nests



ORV impacts: on plover and tern young and adults

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Plover Census Results





Snowy and Wilson's Plover 2004 Breeding Pairs

South and Central Texas

**Padre I. National
Seashore: 336 pairs**

Lower Laguna

Madre Region: 544 pairs

**Total pairs located
by the CBCP:**

SnPI -359 WiPI -543

**Approx. habitat area
covered: 480 sq. mi.**

Census Results:

The CBCP also coordinated efforts with partners on the north and central coasts to complete the first ever plover census of the entire Texas coast in 2004.

Total Snowy Plover pairs located : 481

Total Wilson's Plover pairs located: 892



Important Bird Areas

- IBAs in Texas are currently under selection
- 2003-05 CBCP surveys identified nesting habitat and located previously undocumented numbers of breeding plovers in Texas
- CBCP sites with high concentrations of breeding plovers will qualify for IBA designation

Census Results:

Using our report the USFWS has implemented protective fencing to restrict ORV use around critical plover nesting sites on refuge property for the first time.

Texas 2003, 2004, 2005 Field Seasons

Additional breeding birds of note:



**Lesser Nighthawks
American Avocets**



Lesser Nighthawks

Snowy Plover chick





American Avocets



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1 week old Snowy Plover chick

Future: Keep on growing and keep on going!

Coastal Bird Conservation Program Goals

- Implement new CBCP initiatives for the entire Gulf Coast



Coastal Bird Conservation Program Goals

- Provide, train, and/or supervise field staff and volunteers to expand census and monitoring along the rest of the Gulf coast



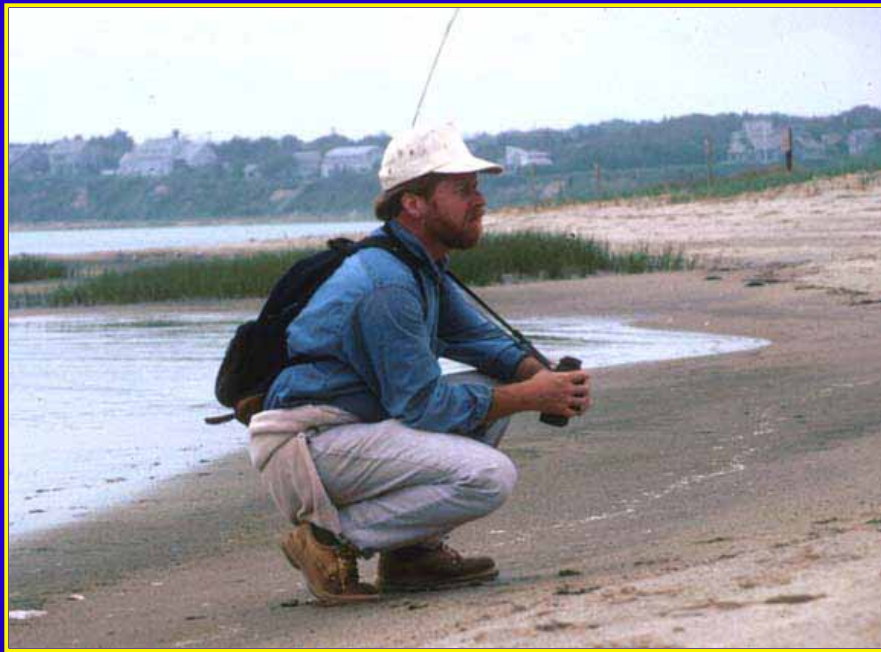
Coastal Bird Conservation Program Goals

- Continue to improve the quality of local shorebird conservation





Audubon Coastal Bird Conservation Program



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