

National Audubon Society

Margo Zdravkovic



Coastal Bird Conservation Program

Coastal Bird Conservation Program



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

Coastal Bird Conservation Program



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

Focus:

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



Coastal Bird Conservation Program

Focus:



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

Coastal Bird Conservation Program

Focus:

- To promote 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 priority species are derived from:

- U.S. Endangered Species List
- U.S. Shorebird Conservation Plan
- North American Waterbird Conservation Plan
- Audubon WatchList



Coastal Bird Conservation Program

The initial species focus of the CBCP are beach-nesting birds, including:

- Piping, Snowy and Wilson's Plover
- Roseate, Least and Gull-billed Tern
- American Oystercatcher
- Black Skimmer



Coastal Bird Conservation Program

Within priority regions and states, the CBCP establishes cooperative efforts with all partners that have significant oversight or existing operations which concern coastal birds and coastal habitats, particularly:

- National Wildlife Refuge System
- National Parks and Seashores
- US Military Bases
- US Army Corps of Engineers
- State Wildlife Agencies
- State Park Departments
- State and Local Audubon Chapters



CBCP Methods:

- **Work with all concerned partners to assess conservation needs specific to each state or area**
- **Consult all available sources of existing information to obtain accurate breeding data on all surveyed and monitored areas**
- **Use current satellite imagery and aerial photographs to identify all possible beach-nesting bird habitat within a survey area**

CBCP Field Methods:

- Coordinate and conduct beach-nesting bird surveying and monitoring.**
- Provide training materials such as resource manuals and census guidelines.**
- Provide onsite field training for partners, coordinators, and volunteers.**
- Provide highly trained field assistants at specific sites as needed.**

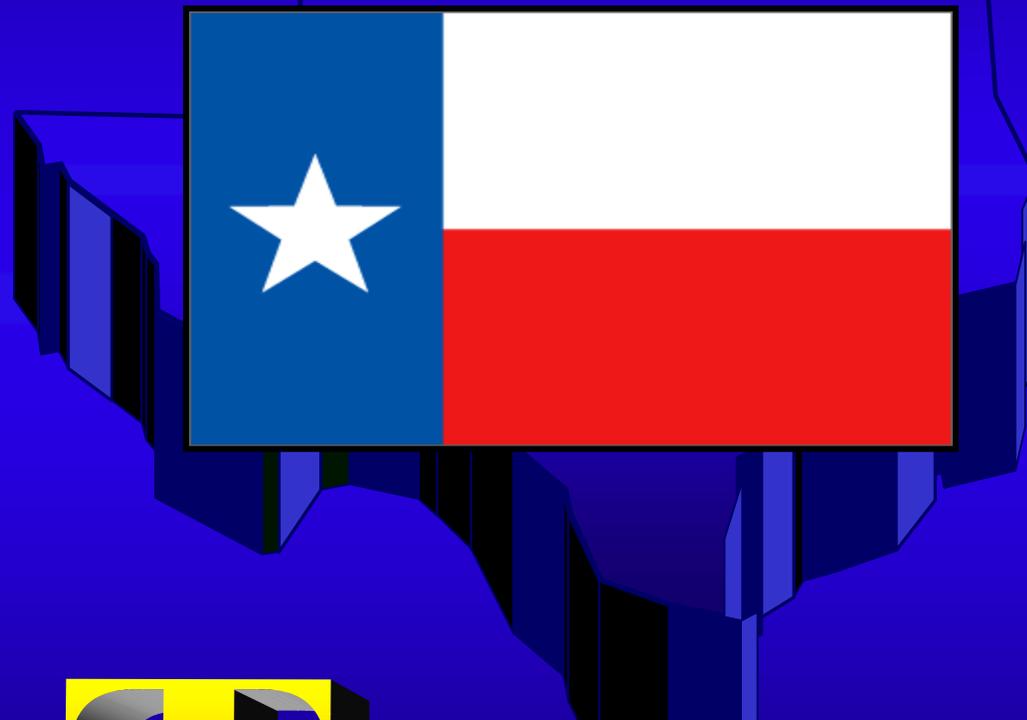
CBCP Field Methods:

Following the U.S. Shorebird Conservation Plan which cites that *highest confidence is placed in population estimates obtained from a dedicated census effort*, (Brown *et al* 2001), the CBCP conducts exact pair counts of breeding, beach-nesting birds for all areas surveyed.



Coastal Bird Conservation Program

2003-2004



Texas

Texas 2003 and 2004 Field Seasons

Focus:

- Identify all breeding plover habitat
- Conduct the first comprehensive census of breeding plovers on the Texas coast.

Coastal Bird Conservation Program



Texas Breeding Plovers



Snowy Plover: *Charadrius alexandrinus*

Snowy Plover: Conservation Status

- **Total U.S. population -18,000 indiv. birds**
- **U.S. Shorebird Conservation Plan listing-
(highly imperiled)**
- **State -listed in 7 states**
- **Southeastern population under consideration
for federal listing**
- **Pacific Coast pop. - federally threatened status**



Wilson's Plover: *Charadrius wilsonia*

Wilson's Plover: Conservation Status

- **Total U.S. population – approx. 6000 indiv. birds**
- **U.S. Shorebird Conservation Plan listing-
(species of high concern)**
- **Audubon Watchlist designation – (high priority)**
- **State-listed in 5 states**
- **No federally listed status**

Increased development and recreational use of beaches has resulted in the destruction of breeding and wintering habitat for all beach-nesting species.



Texas 2003 and 2004 Field Seasons



New Data Collected: plover abundance and distribution



Each breeding pair and nest was recorded by GPS, for use in creating a plover nesting site map.



Data was collected on over 350 plover nests

New data collected:



nesting microhabitat



nest chronology and hatching success



breeding biology



nest predation

New data collected: breeding plover habitat use



Barrier islands & gulf beaches



Mainland bay/lagoon/river mouth



Artificially-created sites



Coastal & inland saline lakes

ORV damage to nesting habitat documented



scarred algal flats



ATV damage barrier island dunes



coastal bay vegetation damage



plover nest disturbance



ORV impacts: Plover and tern young and adults

Coastal Bird Conservation Program

**2004 Texas breeding
plover census results:**



CBCP Texas 2004 Breeding Plover Census Results:



With the help of our Texas partners, the CBCP coordinated and conducted the first comprehensive breeding plover census of the Texas coast surveying over 1840 km²

Total plover pairs located:

Snowy Plover - 481 pairs
Wilson's Plover - 892 pairs

CBCP Texas 2004 Breeding Plover Census Results:

- In 2004 the Texas coast supported over 30 percent of the total estimated U.S. population of breeding Wilson's Plovers.**
- The Texas coast supported over 65 percent of the estimated U.S. gulf coast population of breeding Snowy Plovers in 2004.**

CBCP Texas 2004 Breeding Plover Distribution:

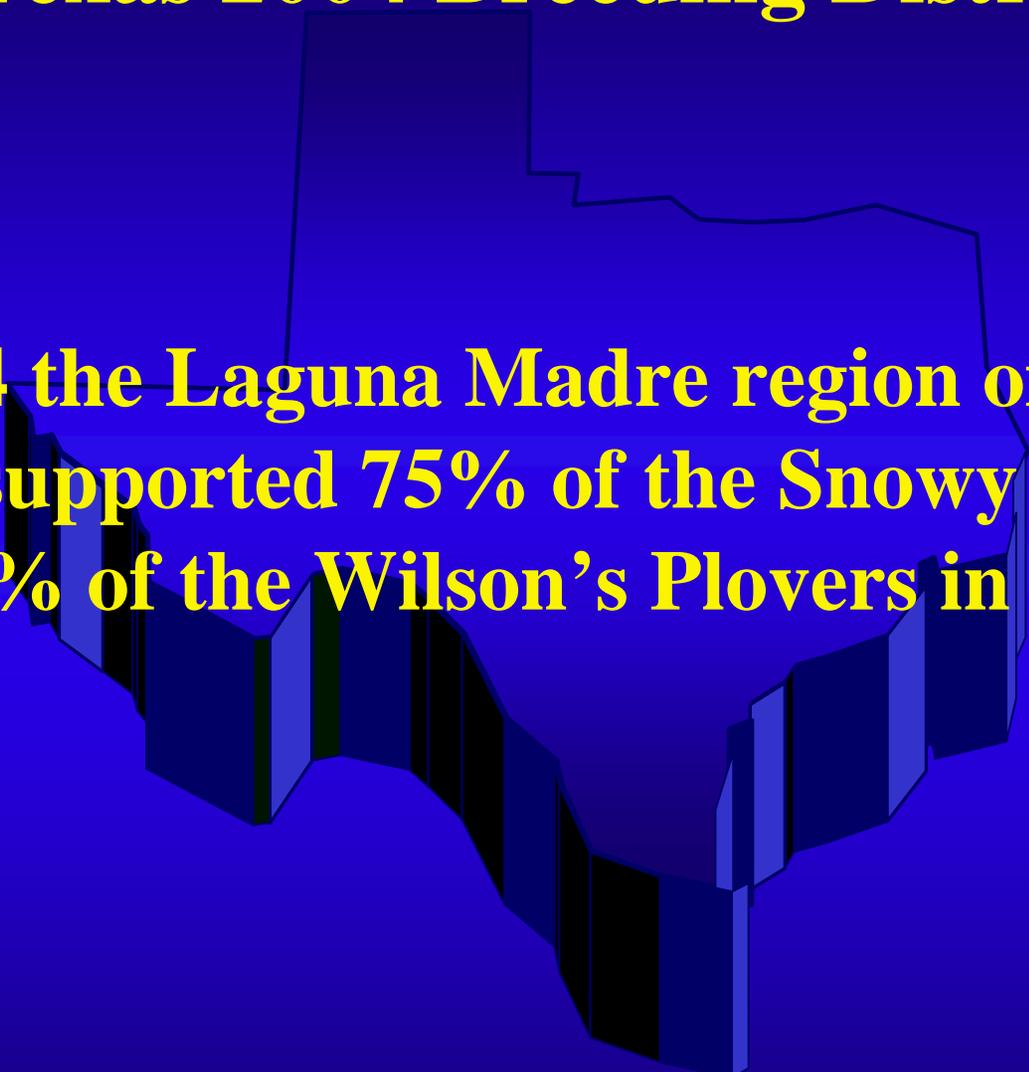


- **Snowy and Wilson's Plovers** pairs decrease in number, from the central to north Texas coast.

- **Snowy Plover** pair numbers decrease more sharply than **Wilson's Plovers** from the central to the north coast.

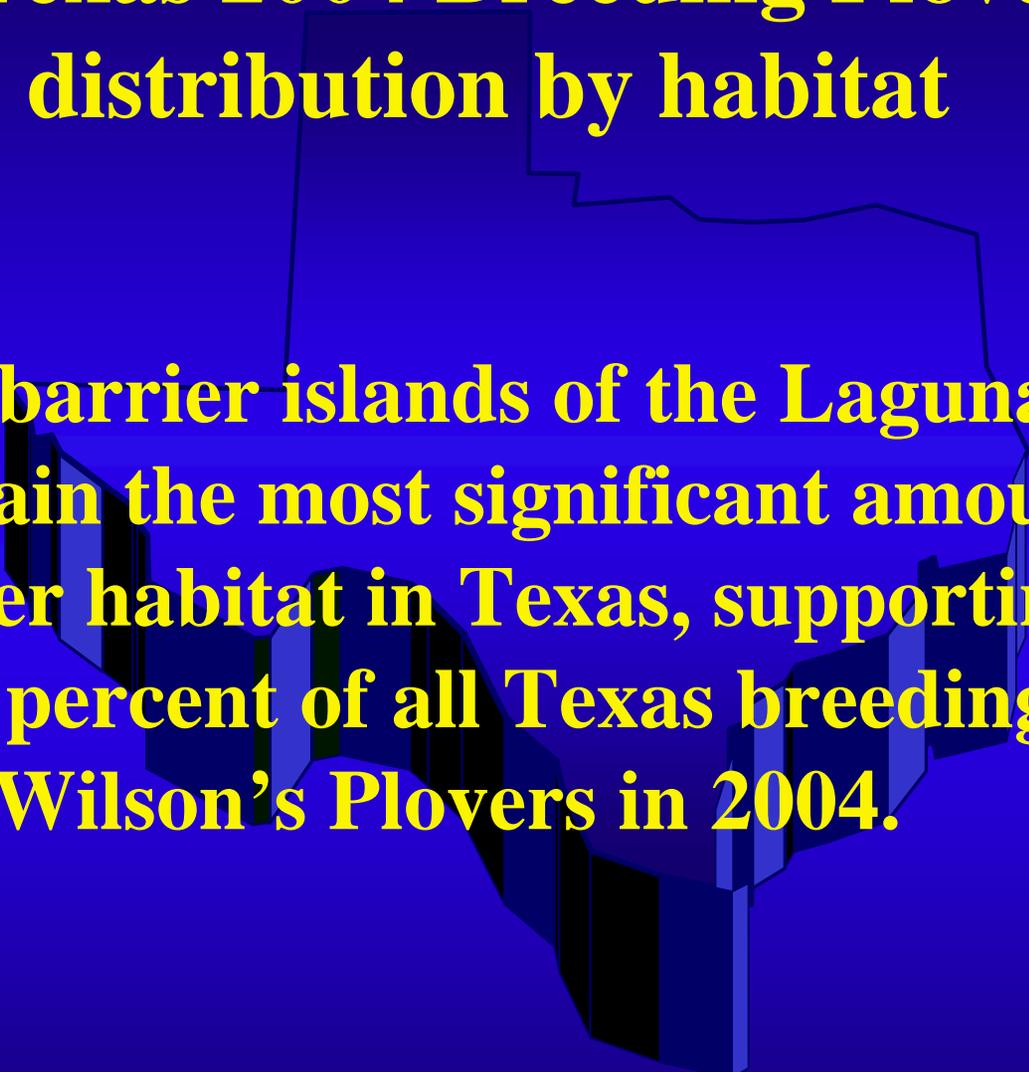
CBCP Texas 2004 Breeding Distribution:

In 2004 the Laguna Madre region of Texas supported 75% of the Snowy Plovers and 71% of the Wilson's Plovers in the state.



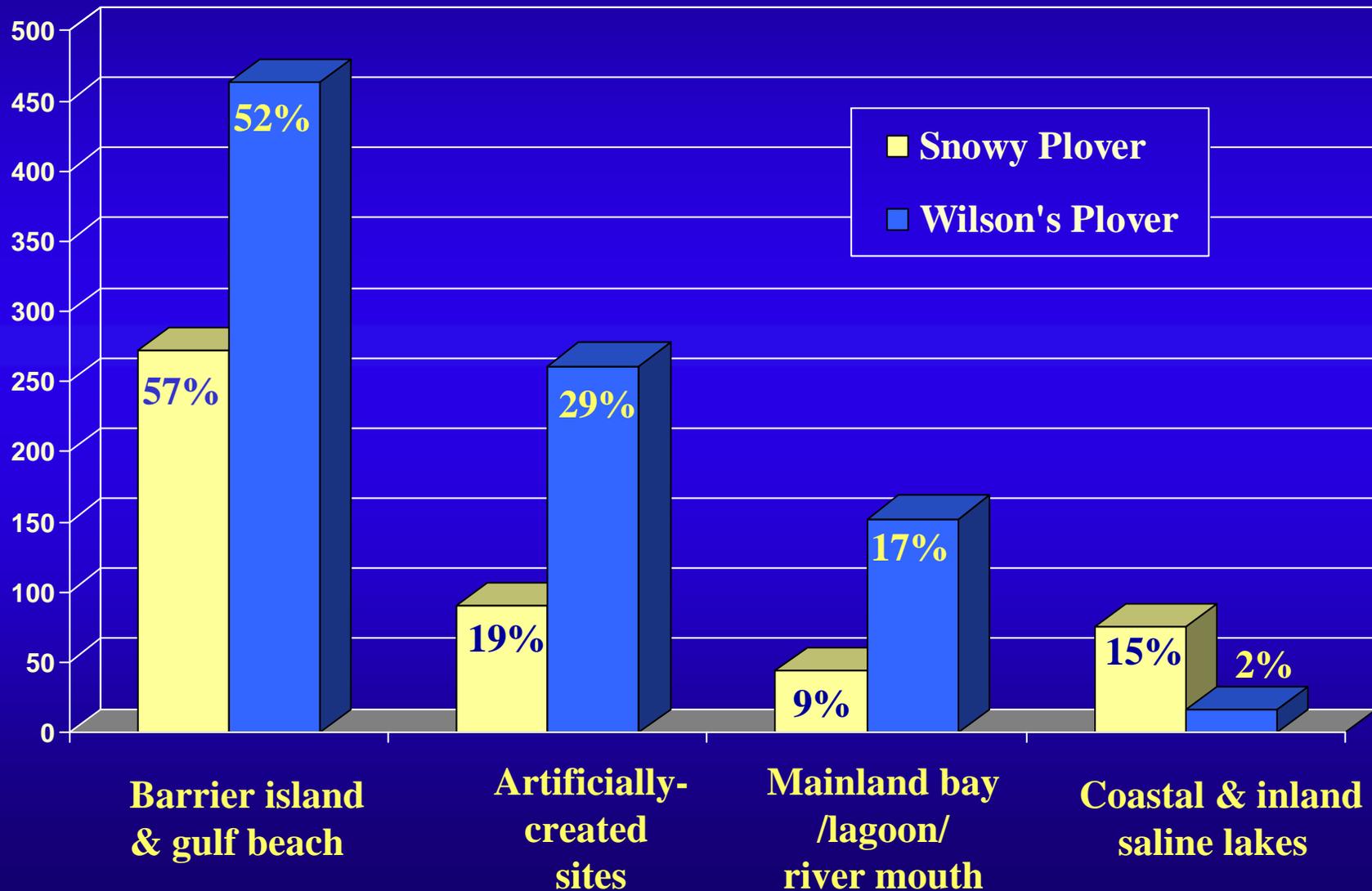
CBCP Texas 2004 Breeding Plover Census Results: distribution by habitat

The barrier islands of the Laguna Madre contain the most significant amounts of plover habitat in Texas, supporting over fifty percent of all Texas breeding Snowy and Wilson's Plovers in 2004.



2004 Snowy and Wilson's Plover Breeding Pair Distribution by Habitat – Coastal Texas

Pairs



Texas Important Bird Areas



- IBAs in Texas are currently under selection
- 2003-04 CBCP surveys identified nesting habitat and located previously undocumented numbers of breeding plovers in Texas
- CBCP surveyed sites with high concentrations of breeding plovers will qualify for state and global IBA designation

Census Results:

The U.S. Fish and Wildlife Service in the lower Laguna Madre region, plans implementation of protective fencing to restrict ORV use at critical nesting and wintering sites on refuge property.

Coastal Bird Conservation Program

2005 Season



Louisiana

Louisiana 2005 Field Season: Primary Goals

- **Identify all beach-nesting bird breeding habitat**
- **Conduct the first comprehensive census of beach-nesting birds on the Louisiana coast.**

Louisiana 2005 Census: focal species

- Snowy Plover
- Wilson's Plover
- American Oystercatcher
- Least Tern



CBCP Louisiana 2005

New Data Collected:



New Data Collected: beach-nesting bird abundance and distribution



All breeding pairs and nests were recorded by GPS, for use in creating a breeding habitat site map.

New Data Collected: beach-nester habitat use



**All nests and nesting
habitats were digitally
photographed.**



Data Collected: breeding habitat use



Barrier & delta islands



Mainland gulf beaches



Mitigation & restoration sites



Data Collected: nesting chronology



Snowy Plover chicks



Wilson's Plover chick



Oystercatcher chick



Least Tern nest

ORV damage to nesting habitat documented



Mainland beaches of western Louisiana

Beach Protection and Restoration



Holly Beach, LA

Beach Protection and Restoration



Holly Beach, LA

Successful Beach Protection and Restoration

*Two day old
Snowy Plover
Chick at Holly
Beach, LA, from
one of only two
pairs located in
the state of LA.*



Coastal Bird Conservation Program

A 3D map of Louisiana, rendered in a dark blue color with a slight gradient. The map is shown from an isometric perspective, giving it a three-dimensional appearance. It is centered on the slide, with the title text overlaid on it.

Louisiana 2005 Census Results

LA 2005 Snowy Plover census results:

Snowy Plovers located: 2 breeding pairs



LA 2005 Wilson's Plover census results:

Wilson's Plovers located: 759 breeding pairs



*Newly hatched
Wilson's Plover
chick at Hackberry
Beach, LA*

LA 2005 American Oystercatcher census results:

American Oystercatchers located: 57 breeding pairs



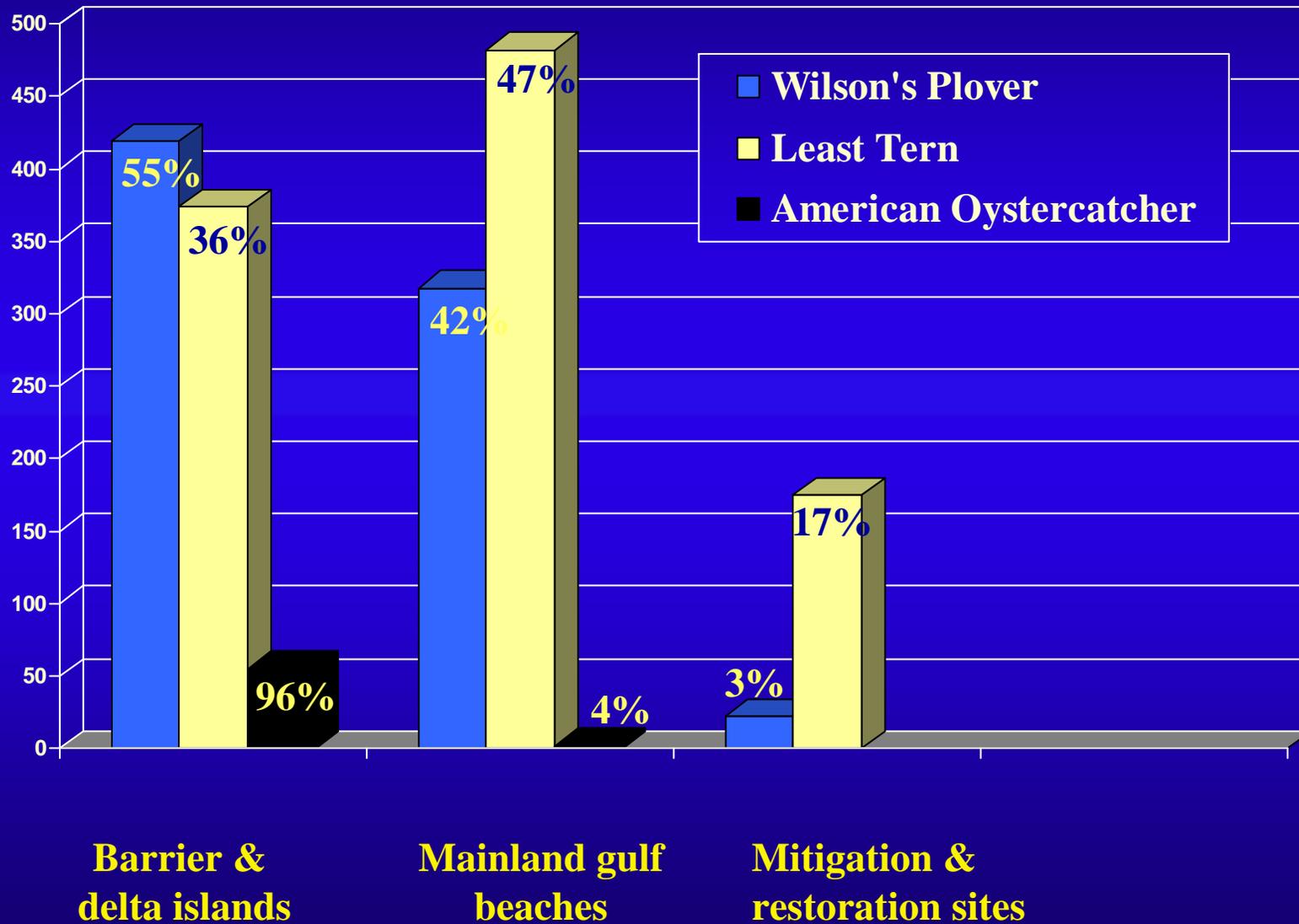
05 Sidney Maddock

LA 2005 Least Tern census results:

Least Terns located: 1031 breeding pairs



2005 Beach-nesting Bird Breeding Pair Distribution by Habitat -Louisiana



2005 LA. Beach Nesting Bird Census Results

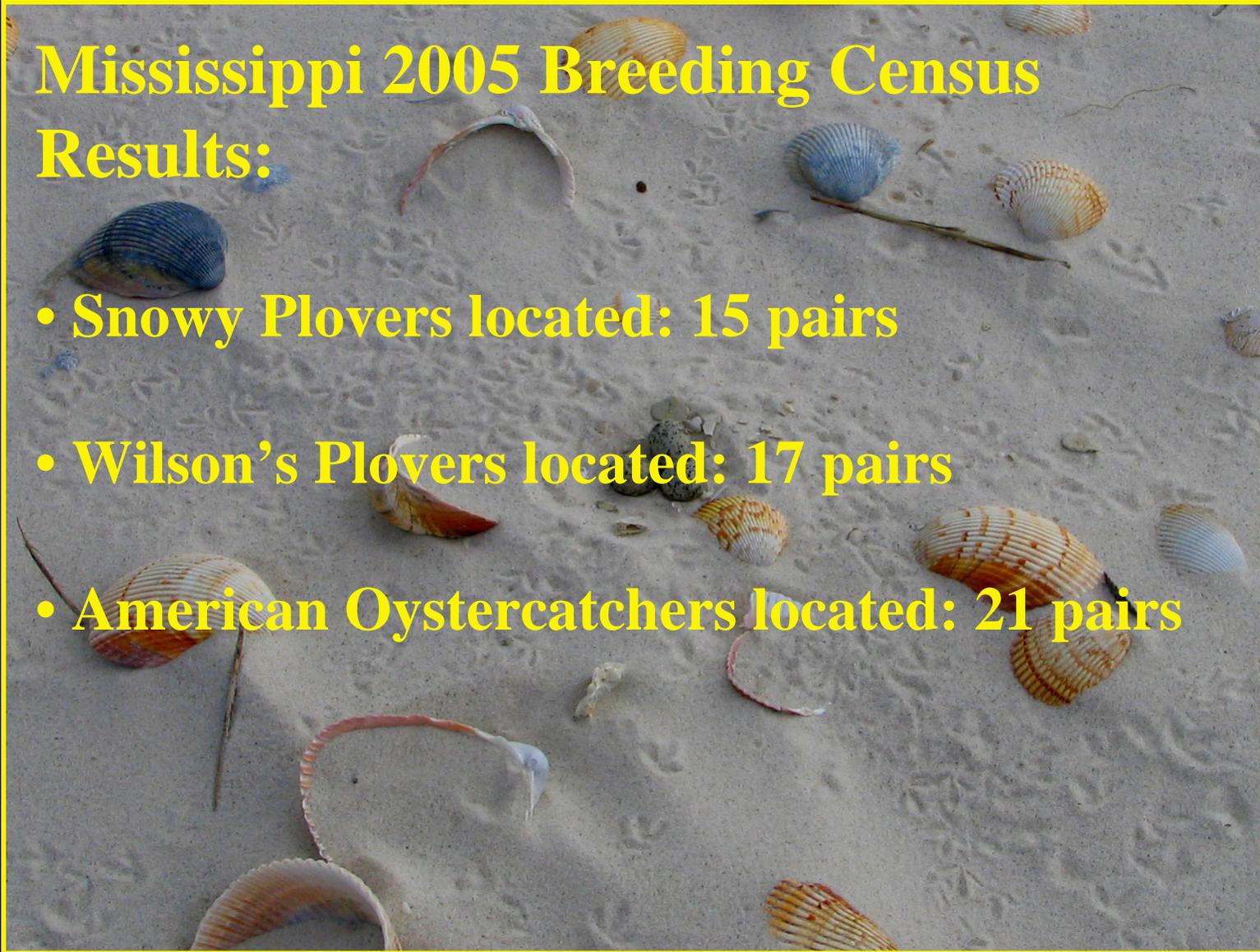


- **First comprehensive beach-nesting bird census of the LA. coast surveying 519 km of coastal habitat**
- **LA. supported 25 percent of the total estimated U.S. population of breeding Wilson's Plovers in 2005.**

Coastal Bird Conservation Program 2005

Mississippi 2005 Breeding Census Results:

- **Snowy Plovers located: 15 pairs**
- **Wilson's Plovers located: 17 pairs**
- **American Oystercatchers located: 21 pairs**



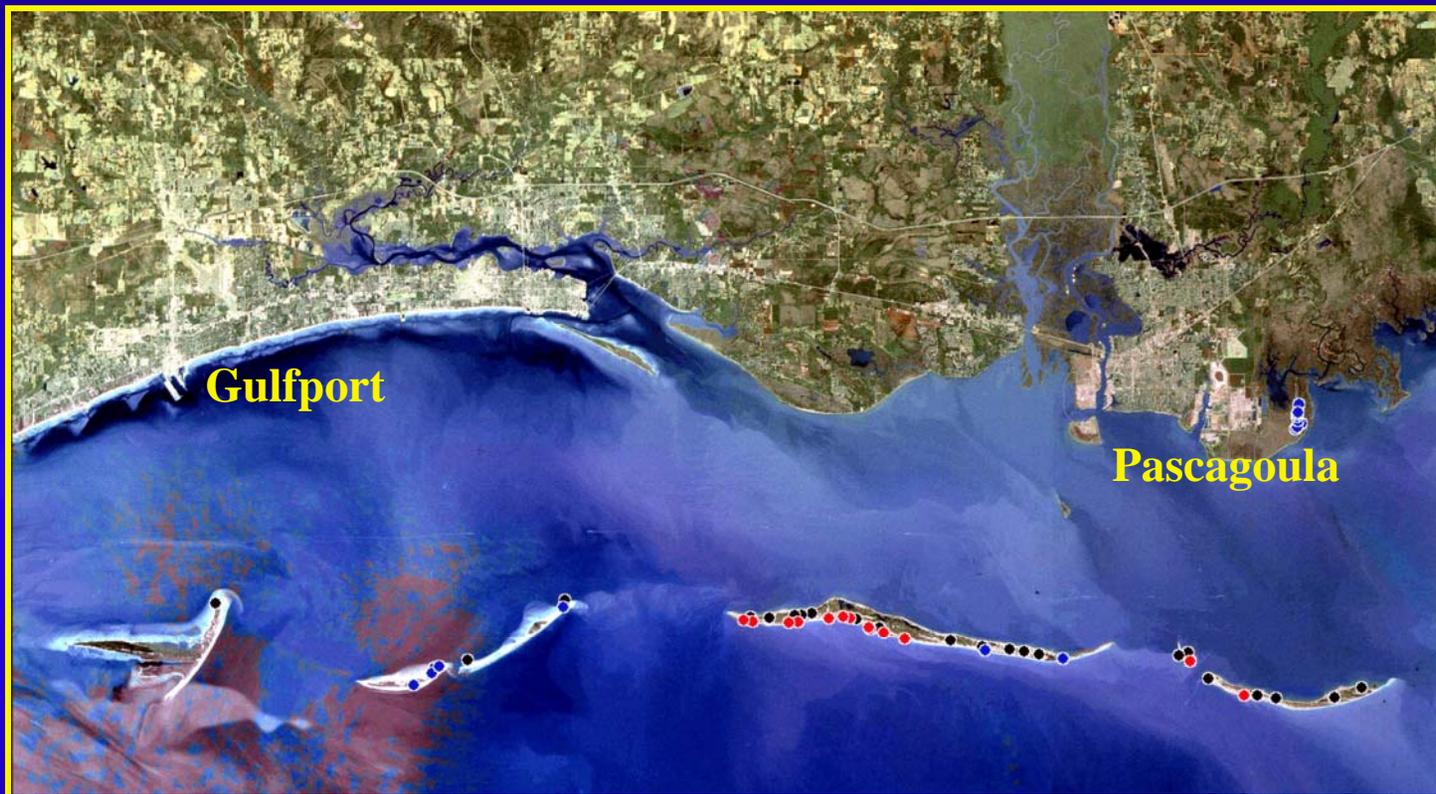
Coastal Bird Conservation Program 2005

All of Mississippi's breeding Snowy Plovers and American Oystercatchers were located on the barrier island habitat of Gulf Islands National Seashore.



Breeding Wilson's Plovers were found on this same barrier island habitat and on the mainland coastal bay salt panne habitat of Grand Bay National Estuarine Research Reserve.

Coastal Bird Conservation Program Mississippi 2005



Comprehensive breeding census of Snowy Plovers,
Wilson's Plovers and American Oystercatchers
surveying 202 km of MS. coastal habitat

CBCP 2004-2005 Wilson's Plover gulf states breeding survey combined results:

- Combined breeding adults for Mississippi, Louisiana and Texas total 3,336 individuals**
- Most comprehensive breeding population data currently available for these states.**
- This number represents over half of the U.S. Shorebird Conservation Plan, total estimated population of 6000 individuals (Brown *et al.* 2001)**

Coastal Bird Conservation Program 2006



Keep on Growing

*One week old Snowy Plover chick,
South Padre I. TX*

Coastal Bird Conservation Program Louisiana 2006

Begin a two year study to monitor a sample size of Wilson's Plover nests to obtain much needed data on breeding biology (incubation and fledging periods, hatching success, and productivity) for this species.



Coastal Bird Conservation Program Louisiana & Mississippi 2006

- Conduct beach-nesting bird surveys to collect post-Katrina census and habitat data.



Isles Dernieres, LA

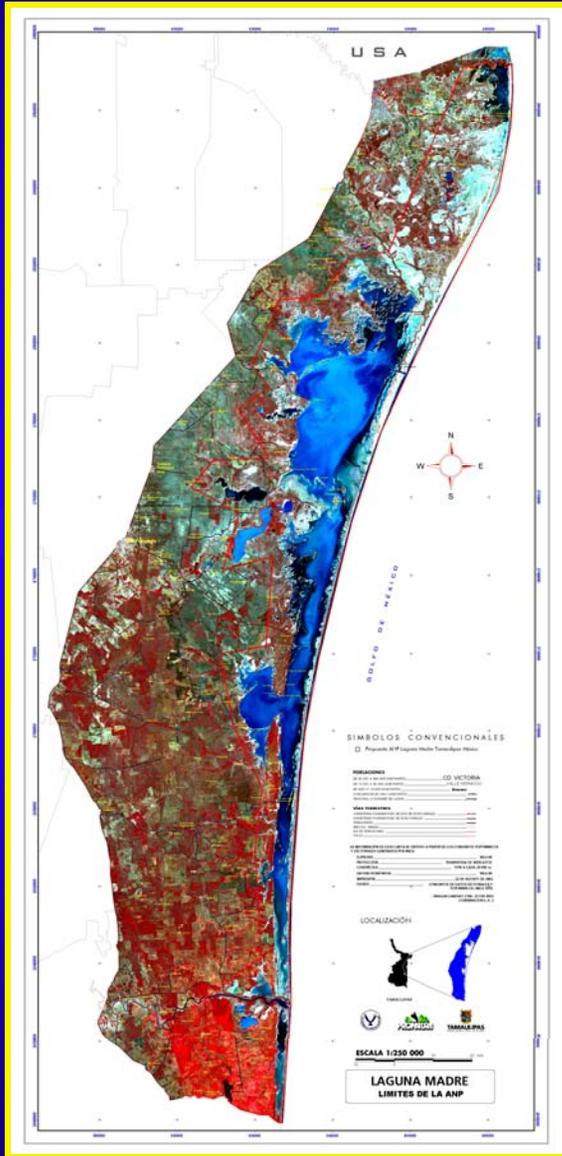


Coastal Bird Conservation Program 2006

- Continue to expand census and monitoring work on the entire U.S. Gulf coast.



Coastal Bird Conservation Program 2006



Laguna Madre of Mexico Tamaulipas region



Mouth of the Rio Grande

Coastal Bird Conservation Program 2006

- Continue to improve the quality of local shorebird conservation



Coastal Bird Conservation Program

The work of the CBCP would not be possible without the support of our funders and partners.

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Audubon Coastal Bird Conservation Program



Scott Hecker: Director

Email - shecker@audubon.org

Phone - 781-934-8905



Margo Zdravkovic:

Field Director

Email - mzdravkovic@audubon.org

Phone - 508-942-8347



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Presentation by :

Margo Zdravkovic

National Audubon Society

Coastal Bird Conservation Program

Field Director

Photo credits:

Margo Zdravkovic

Steve Liptay

Sidney Maddock

Sharyn Hood

David Newstead

Mark Wilson





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***This presentation contains original photos and data.
For use of this information, please contact:
Margo Zdravkovic at mzdravkovic@audubon.org**

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