



Audubon OF FLORIDA

Audubon of Florida's Gulf Coast Ecosystem / Florida Coastal Islands Sanctuaries Program

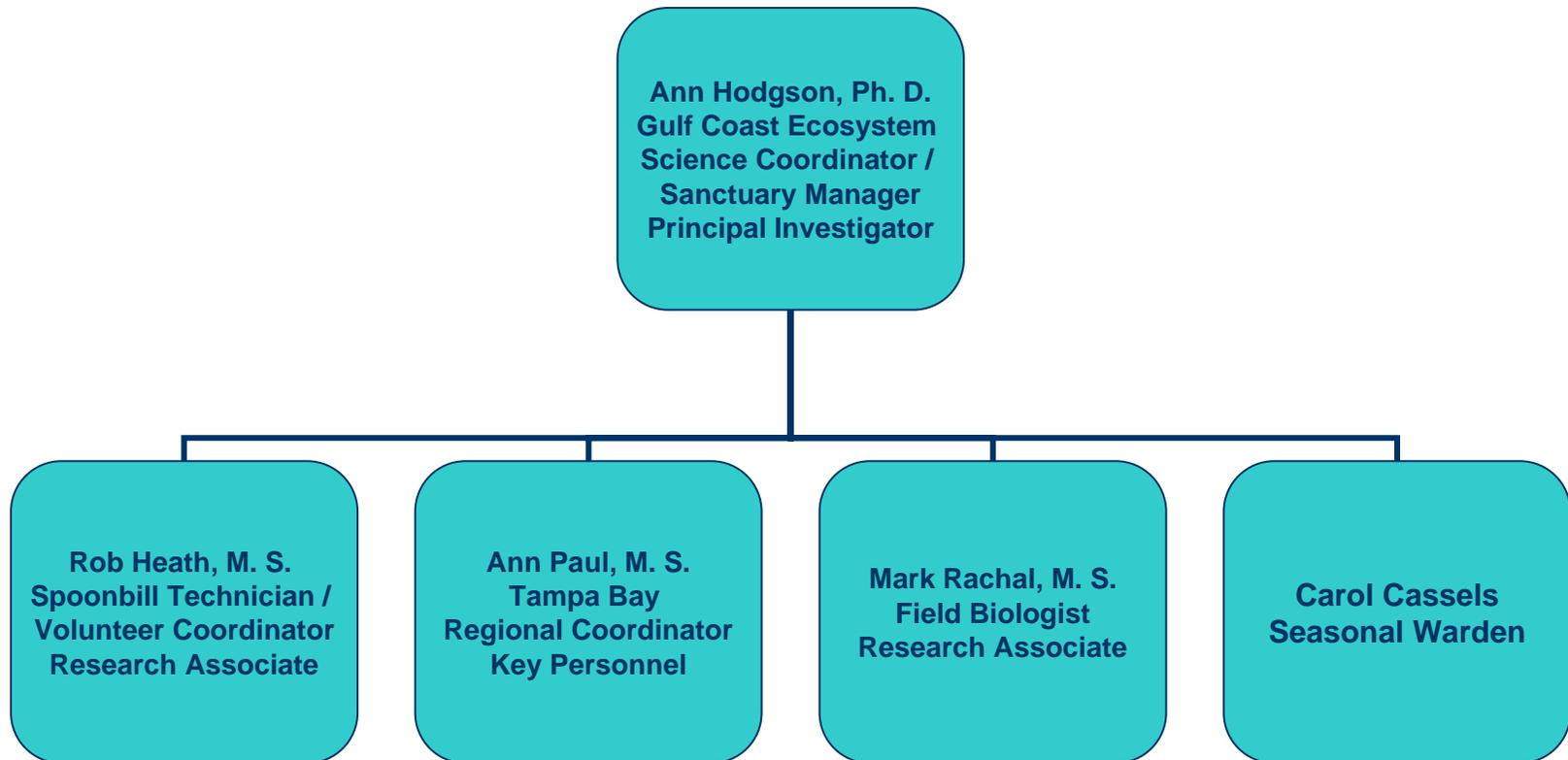
Partnerships for Colonial
Waterbird Management and
Conservation Policy Initiatives

Program Overview

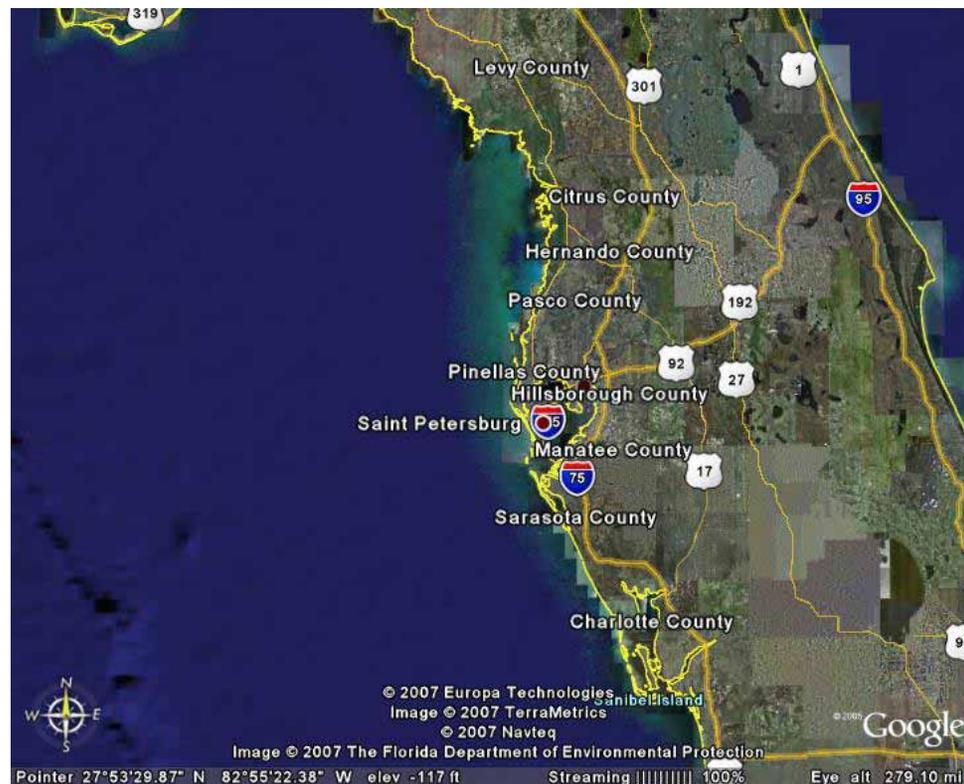
- Gulf Coast Ecosystem / Florida Coastal Islands Sanctuaries Program
 - Manage thirty species of colonial waterbirds nesting on Florida's Gulf Coast and historic Palm Beach County sanctuaries.
 - Approximately 100,000 birds / 50,000 pairs, the highest diversity of these species in Florida.
 - Nesting colony protection is critical for successful reproduction.
 - Post, monitor, survey, manage, & patrol 115 local colonies & coordinate with colony management agencies & volunteers.
- Annual Program Activities
 - Nesting protection: spring & summer nesting season - Posting, planning, coordination.
 - Comprehensive colony protection & project management, restoration projects – throughout year.
 - Conservation and policy initiatives – throughout year.



Audubon of Florida's Florida Coastal Islands Sanctuaries Program Research Staff



Gulf Coast Ecosystem Region – Levy County to Charlotte County, ~350 miles of the Florida Gulf Coast.





Florida Coastal Islands Sanctuaries Program has conducted colonial waterbird research for >75 years throughout Florida.

- Based in Tampa, Florida
- 75 years of colonial waterbird and beach-nesting bird protection on the Gulf Coast and east coast of Florida
- National/international research publications
- IBA publication synthesized FCISP research findings
- FCISP conducts scientific research to establish wise use programs for natural resources:
 - Research
 - Management
 - Policy



Conservation Issue Leadership



- Florida Coastal Islands Sanctuaries Program provides science-based research for conservation policy development.
- We work with government, public and private partners to establish viable conservation strategies statewide.



FCISP Field Research



- Professional science staff
- Conduct terrestrial and aquatic research programs



Partners



- All Gulf Coast Ecosystem Audubon Societies
- US Fish & Wildlife Service
- Florida Fish & Wildlife Conservation Commission
- Florida Department of Environmental Protection Aquatic Preserves
- County Environmental Lands Programs and Parks Departments
- Tampa Bay Estuary Program
- Sarasota Bay Estuary Program
- Charlotte Harbor Estuary Program
- Florida Parks Department
- Cities (Clearwater, St. Petersburg, Safety Harbor, Belleair Beach, Treasure Island, Tampa, Sarasota, etc.)
- Tampa and Clearwater Marine Aquaria
- Southwest Florida Water Management District
- Tampa Port Authority
- Manatee County Port Authority
- Other cooperators

Florida's Colonially Nesting and Beach-nesting Species

Species	FWC Listing*	WatchList^	Species	FWC Listing*	WatchList^
Brown Pelican	SSC		White Ibis	SSC	
Double-crested Cormorant			Glossy Ibis		
Anhinga			Roseate Spoonbill	SSC	
Least Bittern			Wood Stork	E	
Great Blue Heron			Snowy Plover	T	WL
Great Egret			Wilson's Plover		
Snowy Egret	SSC		American Oystercatcher	SSC	
Little Blue Heron	SSC		Willet		WL
Tricolored Heron	SSC		Laughing Gull		
Reddish Egret	SSC	WL	Gull-billed Tern		
Cattle Egret			Caspian Tern		
Green Heron			Royal Tern		
Black-crowned Night-Heron			Sandwich Tern		
Yellow-crowned Night-Heron			Least Tern	T	
			Black Skimmer	SSC	

*Florida Fish & Wildlife Conservation Commission: E = Endangered, T = Threatened, SSC = Species of Special Concern; ^Partners in Flight "WatchList" species

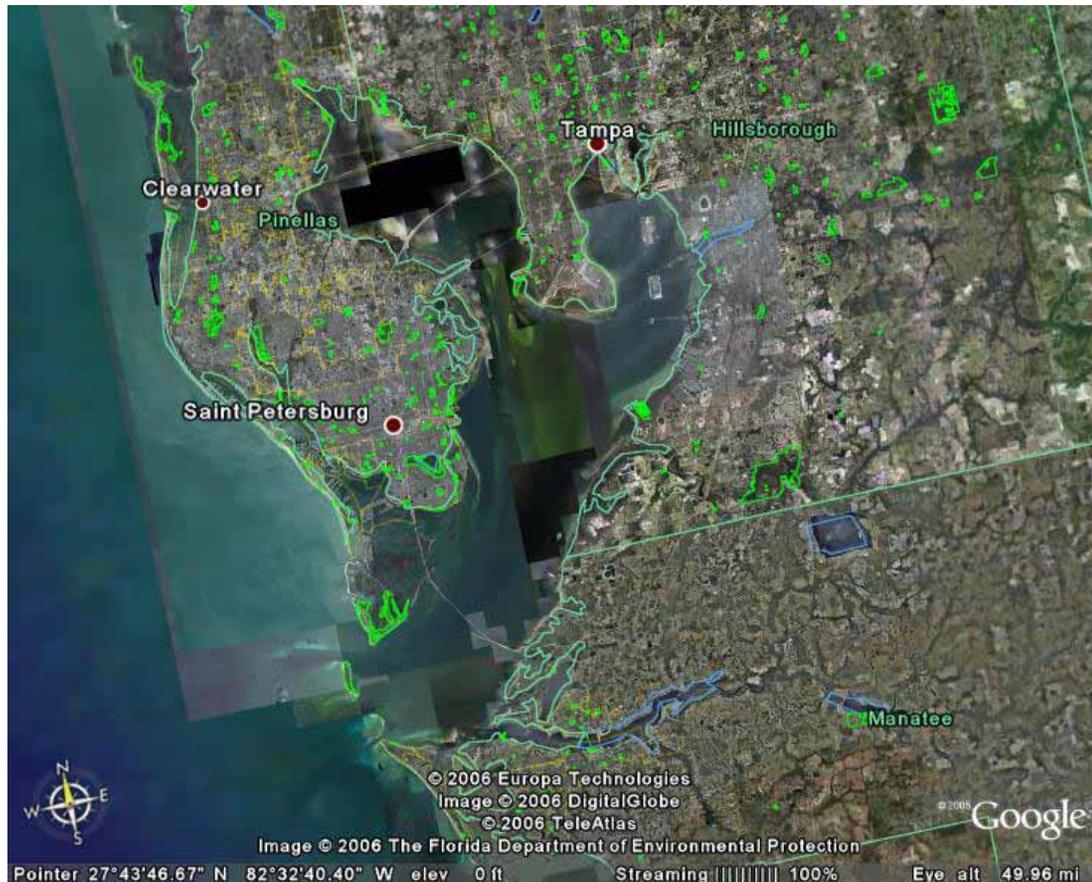
Implementation



- Species Management: Post, patrol and monitor colonies
- Environmental Education/Outreach: training workshops for agency staff & volunteers, data on each colony to agency biological staff, enhance public awareness of colonies & volunteer participation, distribute boater's guides, colony literature/information
- Habitat & Ecosystem management: remove non-native invasive plants from colonies, stabilize shorelines, conduct entangling line cleanups, remove mammalian predators



Pinellas County coastline and Tampa Bay



Pinellas County Coastal Bird Colonies

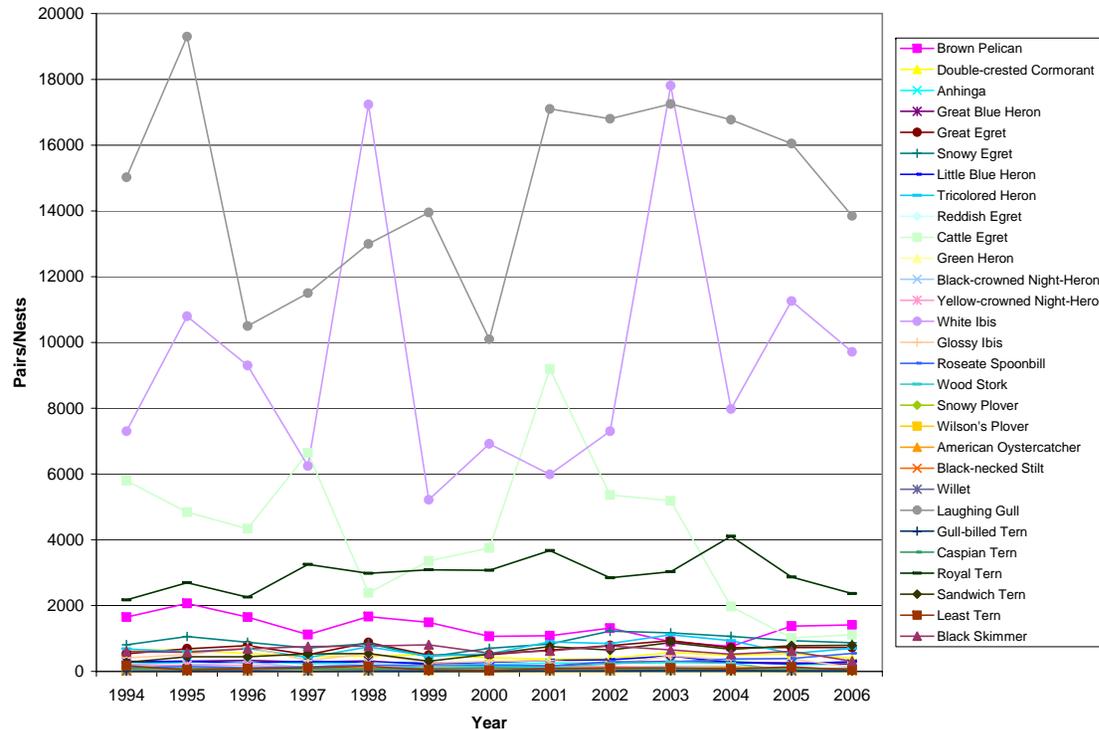


Beach-nesting Birds Nesting Schedule for the Tampa Bay Region

Species	State Listing Status	Onset Of Nesting	Incubation Days	Hatch Date	Age At First Flight Days	Fledge Date
Snowy Plover	T	April 1-May 30	26-32	April 27-July 2	28-32	May 25-Aug 4
Wilson's Plover		April 1-May 30	23-25	April 24-June 25	21	May 15-July 16
American Oystercatcher	SSC	March 20-May 30	24-28	April 13-June 27	35	May 18-Aug 2
Willet		March 25-May 30	22-29	April 16-June 28	28	May 14-Aug 3
Laughing Gull		May 7-May 30	20	May 27-June 20	35	July 1-July 25
Caspian Tern		May 7-May 30	20-22	May 27-June 22	30-35	June 26-July 27
Royal Tern		May 1-May 15	28-35	May 29-June 19	28-35	June 26-July 24
Sandwich Tern		May 5-May 15	21-29	May 26-June 13	28-32	May 23-July 15
Gull-billed Tern		May 7-May 30	22-23	May 29-June 22	28-35	June 26-July 26
Least Tern	T	May 1-May 30	20-25	May 21-June 24	19-20	June 9-July 14
Black Skimmer	SSC	May 10 to June 30	21-23	May 31-July 23	23-25	June 23-Aug 17

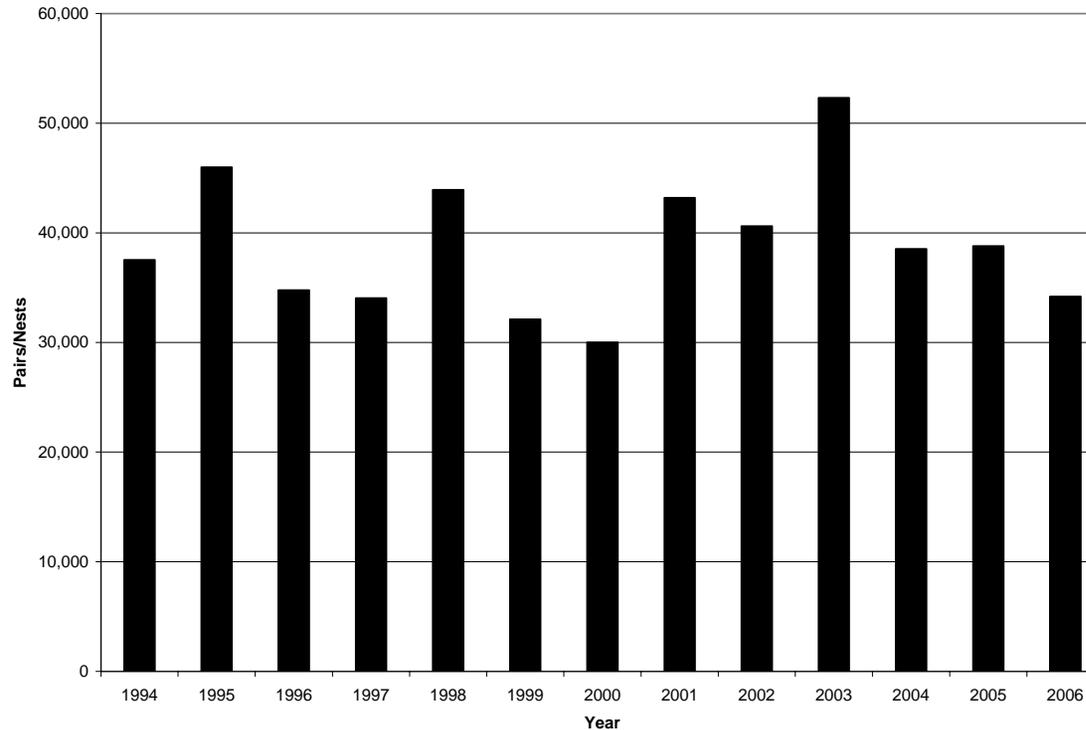


Breeding colonial waterbird species of the Tampa Bay system, 1994-2006: Annual population estimates (*breeding pairs*) by species (John's Pass south to Egmont Key).





Breeding birds of the Tampa Bay system, 1994-2006: Total annual population estimates (*breeding pairs*).





American Oystercatcher Research



Adult AMOY are regularly disturbed by recreational boaters

Adult AMOY driven
off the nest by a
boater

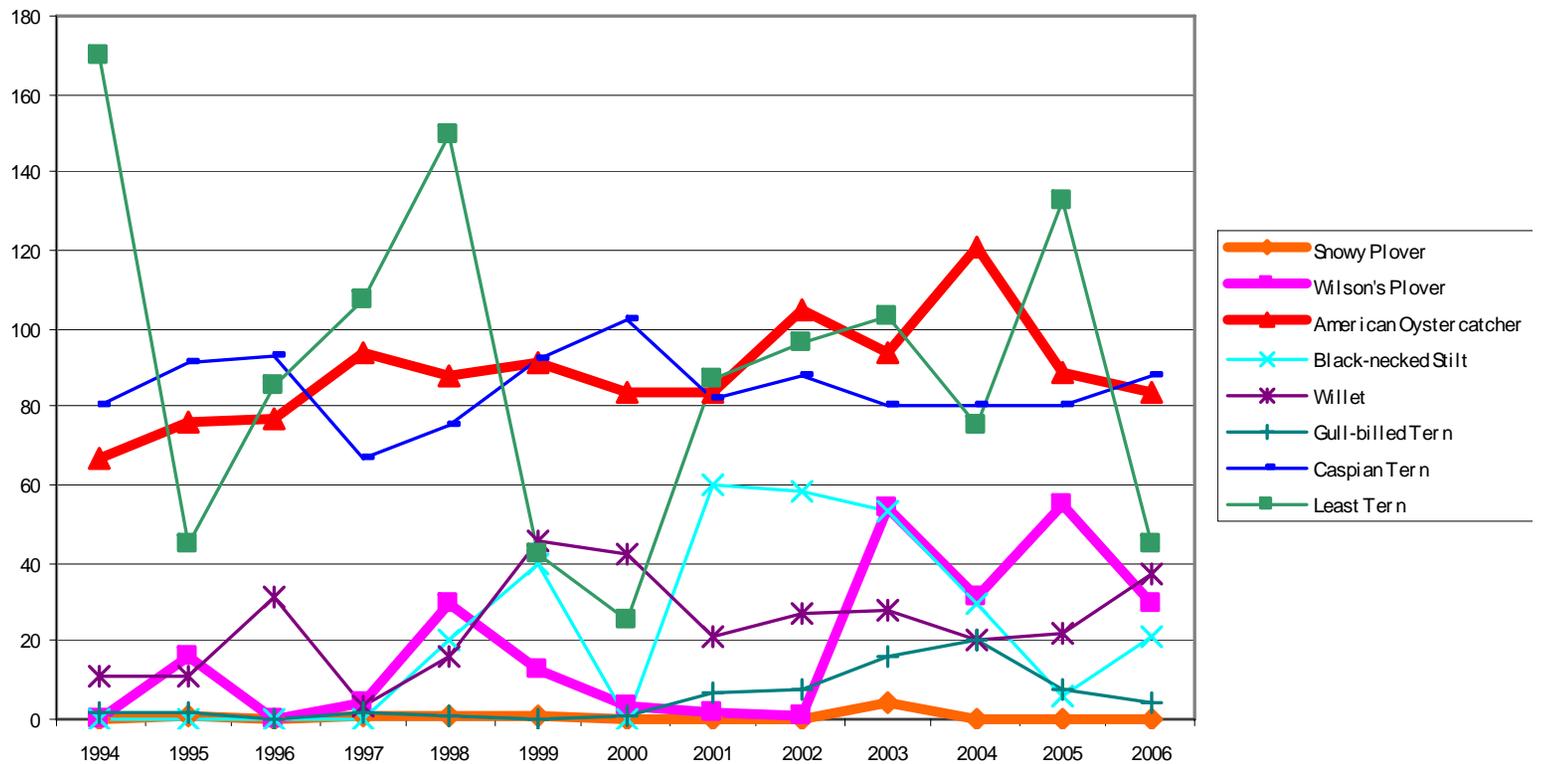


AMOY survey results 2006

Colony Name	Pairs/Nests			Bay Region	County
	AMOY	SNPL	WIPL		
Cross Florida Barge Canal Islands	20		11	Gulf of Mexico	Citrus
Anclote Bar	2	8	22	St. Joseph Sound	Pinellas
Anclote River Mouth Spoil Island	1			Anclote River	Pinellas
South Anclote Bar	1	2		St. Joseph Sound	Pinellas
Three Rooker Island	2		2	St. Joseph Sound	Pinellas
St. Joseph Sound Marker 28	1			St. Joseph Sound	Pinellas
St. Joseph Sound Marker 26	1			St. Joseph Sound	Pinellas
Ozona Spoil East	1			St. Joseph Sound	Pinellas
Clearwater Harbor I-25	3			Clearwater Harbor	Pinellas
Belleair Beach Bird Island	1			Clearwater Harbor	Pinellas
Indian Rocks Beach Bird Island	1			Clearwater Harbor	Pinellas
Darling Key, Marker 20, Boca Ciega Bay	1			Boca Ciega Bay	Pinellas
Little Bird Key NWR	1			Boca Ciega Bay	Pinellas
Egmont Key NWR & State Park	3			Tampa Bay mouth	Pinellas
Tampa Port Authority Spoil Island 2D	35			Hillsborough Bay	Hillsborough
Alafia Bank Bird Colony	16			Hillsborough Bay	Hillsborough
Tampa Port Authority Spoil Island 3D	15			Hillsborough Bay	Hillsborough
Apollo Beach & Fishhook Spoil	7			Hillsborough Bay	Hillsborough
Passage Key NWR	1			Tampa Bay mouth	Hillsborough
Port Manatee Key	5		30	East Tampa Bay	Manatee
Skiers Island	1			Sarasota Bay	Sarasota
Pelican Cove Point	1			Sarasota Bay	Sarasota
Little Sarasota Bay Marker 34	1			Sarasota Bay	Sarasota
Blackburn Bay Marker 20	1			Sarasota Bay	Sarasota
Total	122	10	65		



AMOY, WIPL, SNPL breeding census 1994-2006, Tampa Bay, FL





Anclothe River, St. Joseph Sound & Clearwater Harbor





Clearwater Harbor ICWW – small mangrove and dredge material islands.



I-25 sanctuary



Eroding ICWW island



Typical shorebird roosting and foraging habitats – small mangrove islets, oyster bars, and mudflats.





**White Ibis nesting in seagrapes (*Cocoloba uvifera*)
at 3 Rooker Island, Pinellas County, FL.**



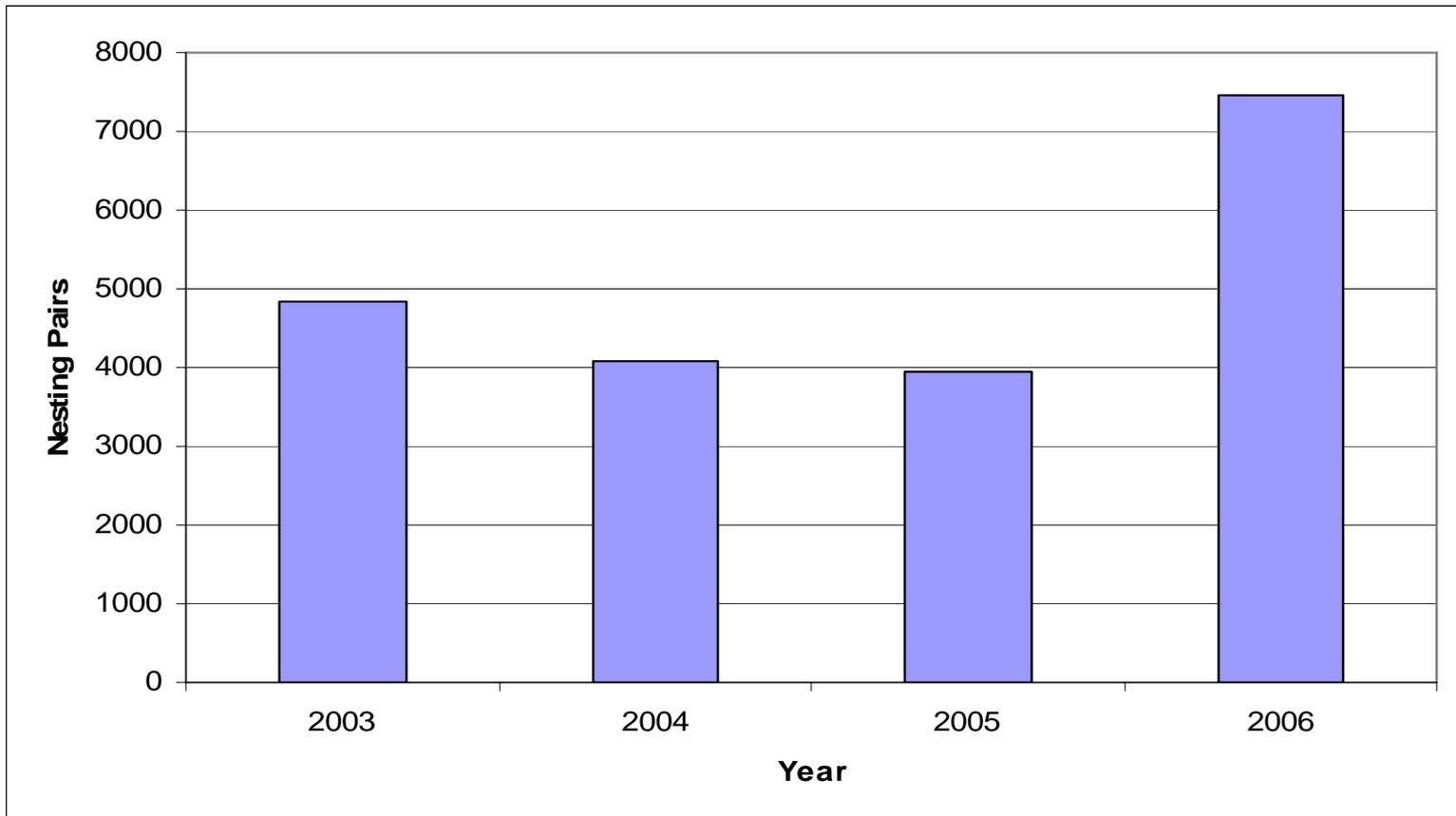


Green Heron nests low in mangroves – nests are vulnerable to disturbance from fishing and small watercraft recreation.



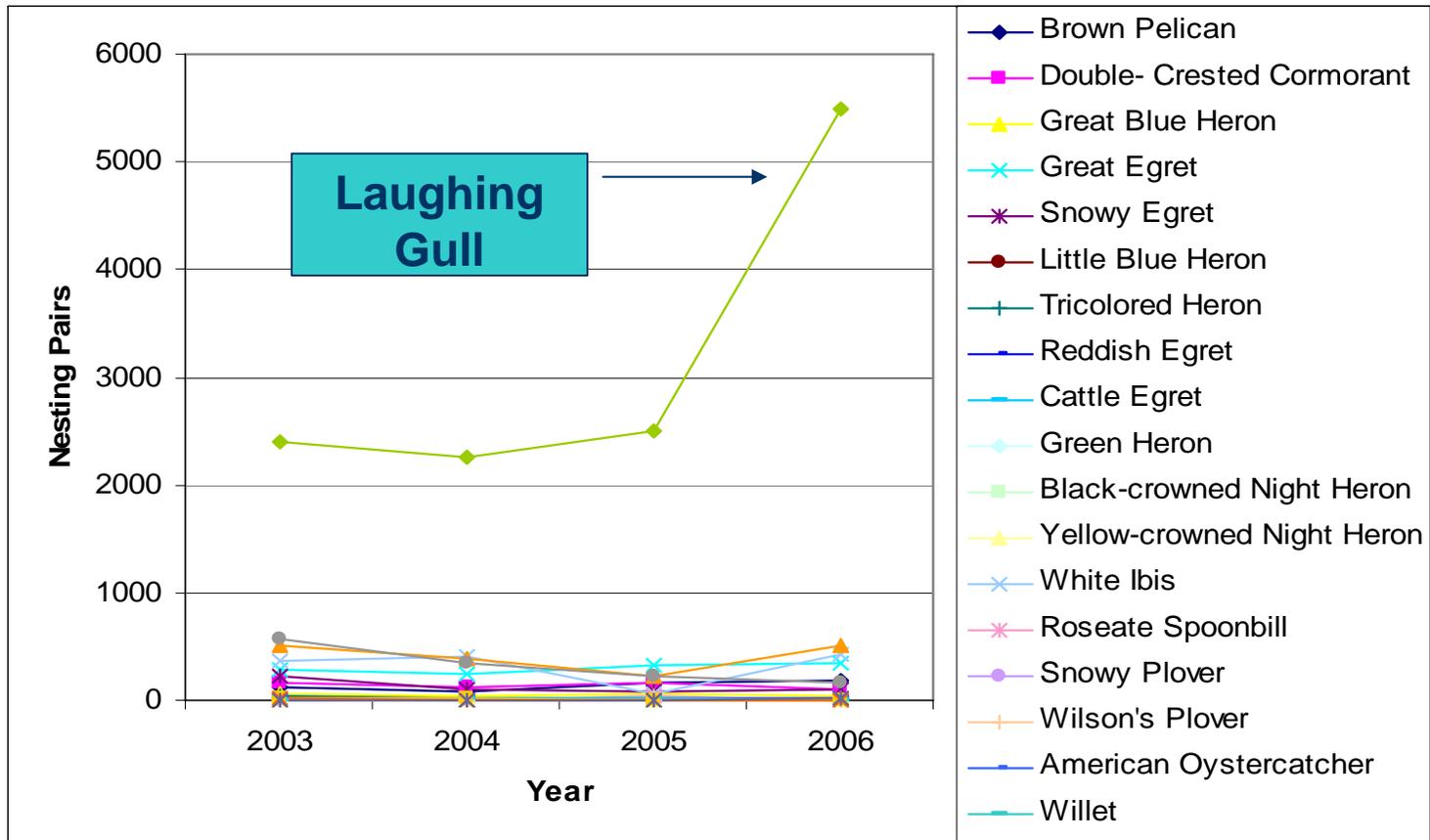


Total Pairs Breeding census 2003-2006, Clearwater, FL

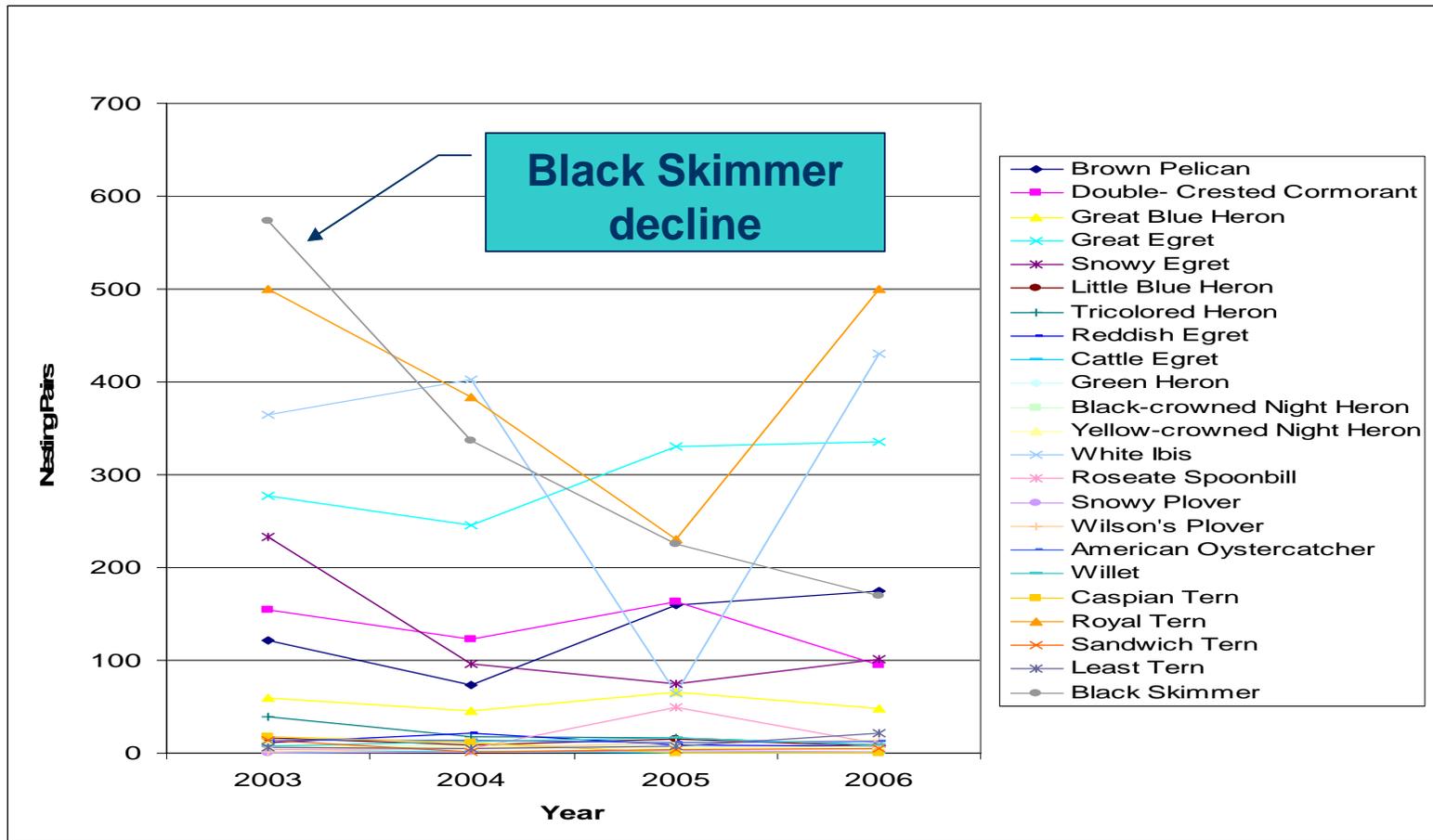




Breeding census 2003-2006, Clearwater, FL

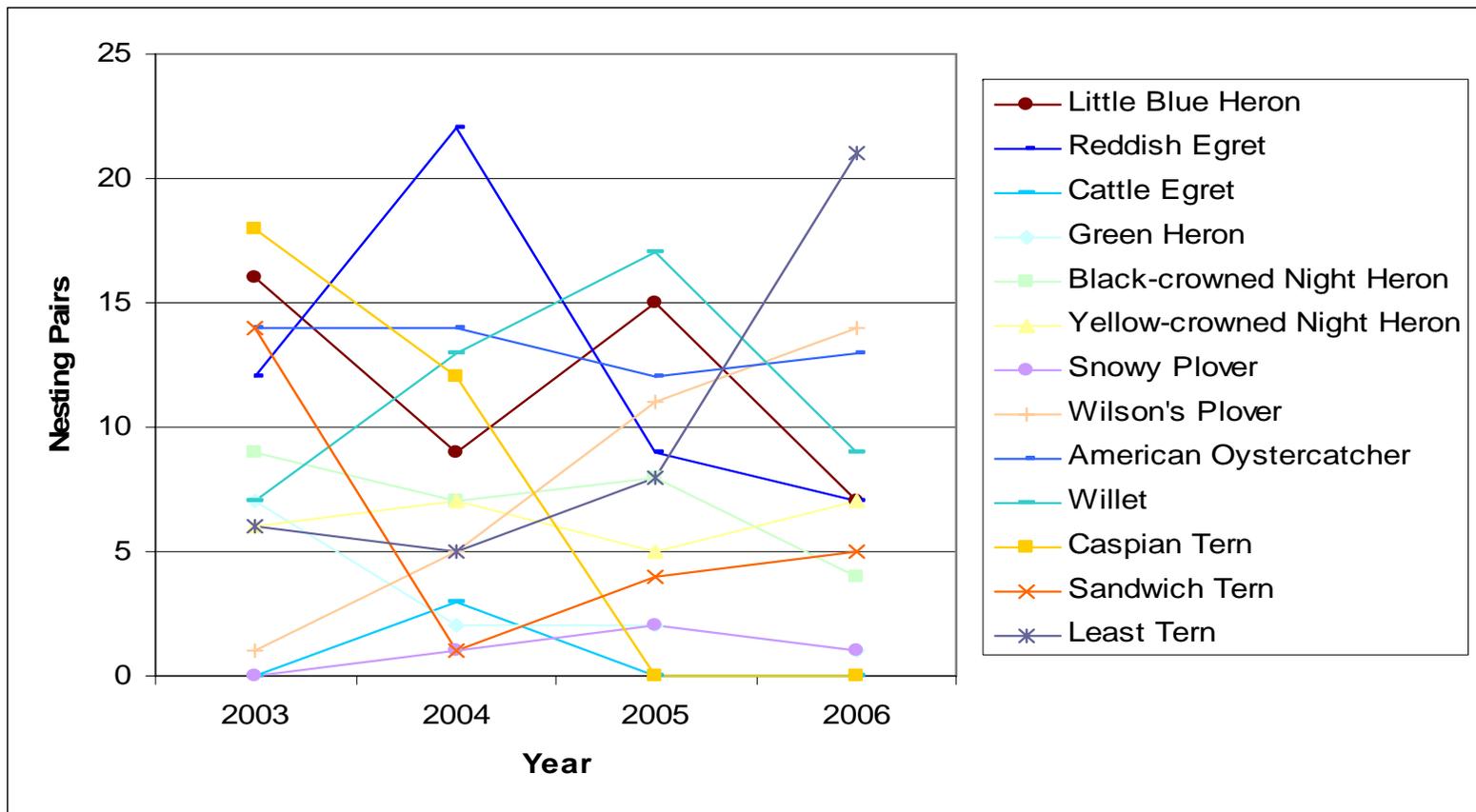


Breeding census 2003-2006, Clearwater, FL



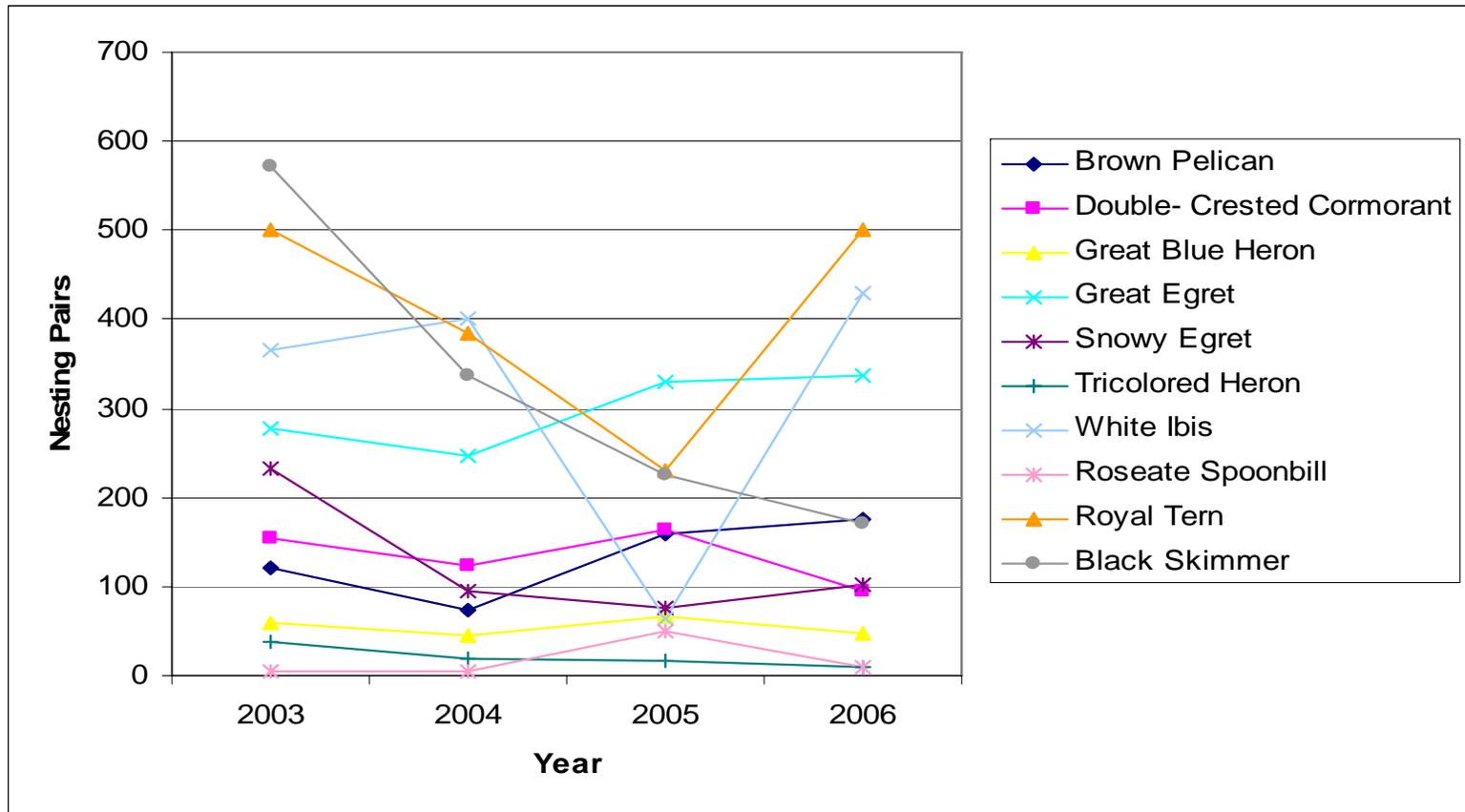


Breeding census 2003-2006, Clearwater, FL





Breeding census 2003-2006, Clearwater, FL



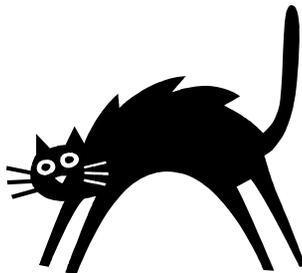


Beach-nesting shorebird protection is labor-intensive!





Human threats to nesting birds.



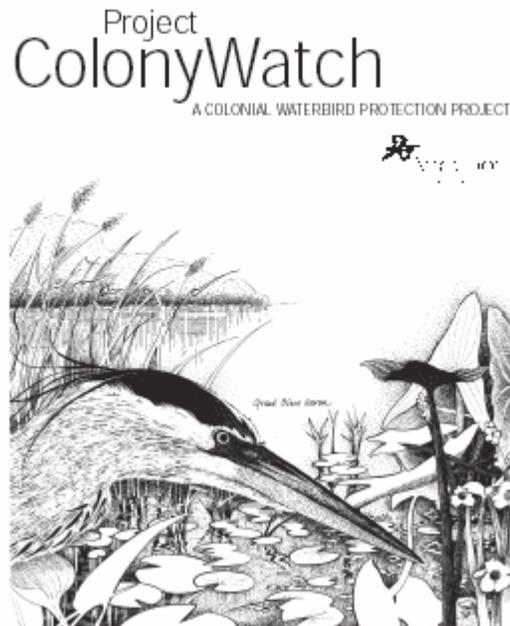


Predatory wildlife threats to nesting birds.





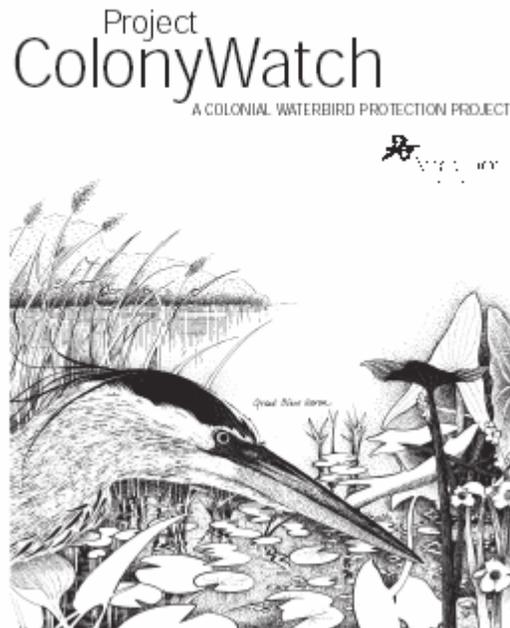
Project ColonyWatch



- Goal: To protect the important breeding colonies of Florida through the involvement of volunteers.
- Birds in colonies are sensitive to disturbance.
- The colonial nesting behavior means that many nesting pairs can be protected at once.
- Local participation creates local expertise, advocacy, and involvement.
- Colonies offer educational opportunities.

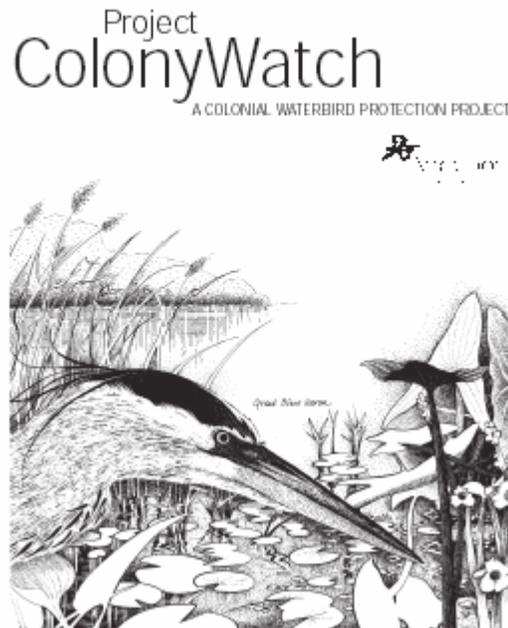


St. Petersburg Audubon Society Activities



- Leadership in organizing the beach-nesting bird committee
- Beach Stewards
- Shell Key volunteerism
- Roof-top colonies protection, recruiting sites, educating owners, rescuing fallen chicks with the chick-a-boom
- Tina Tern booklet for 4th graders

Clearwater Audubon Society Activities



- Clearwater Audubon Society protects, posts, and assists in surveying:
 - 3 Rooker Bar
 - Anclote Bar
 - South Anclote Bar
 - Honeymoon Island.

Roseate Spoonbill Banding Study



- Support Tavernier Science Center roseate spoonbill banding program to identify adult and fledgling behavior and dispersal patterns;
- We banded 364 fledgling chicks in 2006;
- We banded 800 chicks total between 2003-2006.

Roseate Spoonbill research project - Tampa Bay banding study



Roseate Spoonbill research project - Tampa Bay banding study



Roseate spoonbill stage III chick fitted with A/N band, April 2006.



Roseate Spoonbill phenology.





Re-sighting banded Roseate Spoonbills



Monofilament Cleanup October 2006



- Juvenile Brown Pelicans are frequently entangled in fishing tackle.
- Hundreds of Brown Pelicans are saved annually.
- Heightened angler responsibility is needed.

Summary

- Monitoring of nesting colonies guides timely & appropriate management responses.
- Audubon worked with partners, agency staff, & volunteers to increase protection on 22 nesting colonies in Tampa Bay & Pinellas County, nesting habitat for 95+% of the local waterbird population.
- Habitat management activities included non-native species removal, erosion control plantings, fishing line cleanup, mammalian predator control, etc.
- Outreach & coordination activities allow partners to increase expertise and become advocates for protection.



Accomplishments



- Annual Surveys of Gulf Coast Ecosystem nesting colonies.
- Roseate Spoonbill Banding Project - long-term research study.
- AMOY and REEG data analysis and mgmt.
- Education and engagement of managing agencies & citizen scientists.
- Comprehensive conservation and policy initiatives.



Results



- Long-term conservation of viable bird populations, institutions that effectively manage and protect local populations, and a public that understands and supports measures needed to secure habitats.

Looking Forward

- Ecosystem conservation initiatives and colony protection directly involves volunteers, agencies, and the public to protect regional bird colonies and habitat for > 200,000 colonial waterbirds of 30 species, including 14 listed species.

Audubon of Florida Florida Coastal Islands Sanctuaries Program

410 Ware Blvd., Ste. 702

Tampa, FL 33619

813-623-6826 Office

813-623-4086 Fax

813-376-8663 Field Phone



Questions?

