



Photo: John Herrick

The Florida Shorebird Alliance: Partnering to monitor shorebirds

Naomi Avissar, Shorebird Partnership Coordinator

Florida Shorebird Alliance

Florida Fish & Wildlife Conservation Commission (FWC)



Today's outline

- Florida Shorebird Alliance
- Monitoring protocols & database
- AMOY update from Florida - 2013



Photo: Jack Rogers



Today's outline

- Florida Shorebird Alliance



Photo: Jack Rogers



20 shorebird & seabird species nest in Florida

Snowy Plover



Maxis Gomez/GVISIONS.ORG

American Oystercatcher



Photo by Jack Rogers

Killdeer



Photo by Jack Rogers

Willet



Photo by Jack Rogers

Wilson's Plover



Photo by Mia McPherson

Black-necked Stilt



Photo by Jack Rogers



Seabirds nesting in Florida

Black Skimmer



Photo by Jack Rogers

Brown Pelican



Photo by Jack Rogers

Laughing Gull



Photo by Jack Rogers

Least Tern



Photo by Jack Rogers

Caspian Tern



Photo by James Shadle

Royal Tern



Photo by Mia McPherson

Bridled Tern



unknown

Sandwich Tern



Photo by Jack Rogers

Gull-billed Tern



Photo by James Shadle

Roseate Tern



Photo by Ricardo Zambrano



More seabirds (*Dry Tortugas only*)

Brown Noddy
Anous stolidus



Photo: Judd Patterson

Magnificent Frigatebird
Fregata magnificens



Photo: Judd Patterson

Masked Booby
Sula dactylatra



Photo: Chris Burney

Sooty Tern
Onychoprion fuscatus



Photo: Chris Burney



They nest on ground and rooftops!



Threats

On beaches

- Predators – native & non-native (pets)
- Human disturbance
- Beach raking & engineering
- Habitat loss



On rooftops

- Avian predators
- Human disturbance (e.g., AC repairs)
- Chick mortality (chicks fall off roofs)



Photo: Dave Kandz



Numerous conservation needs...

- Many protected species
- Over 1200 miles of coastline
- Many threats...



Photo: John Herrick

Protecting shorebirds requires teamwork!



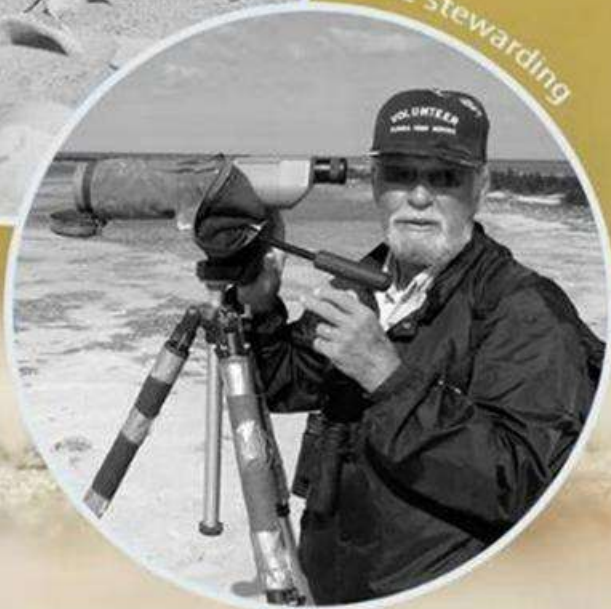
posting important sites



survey and monitoring



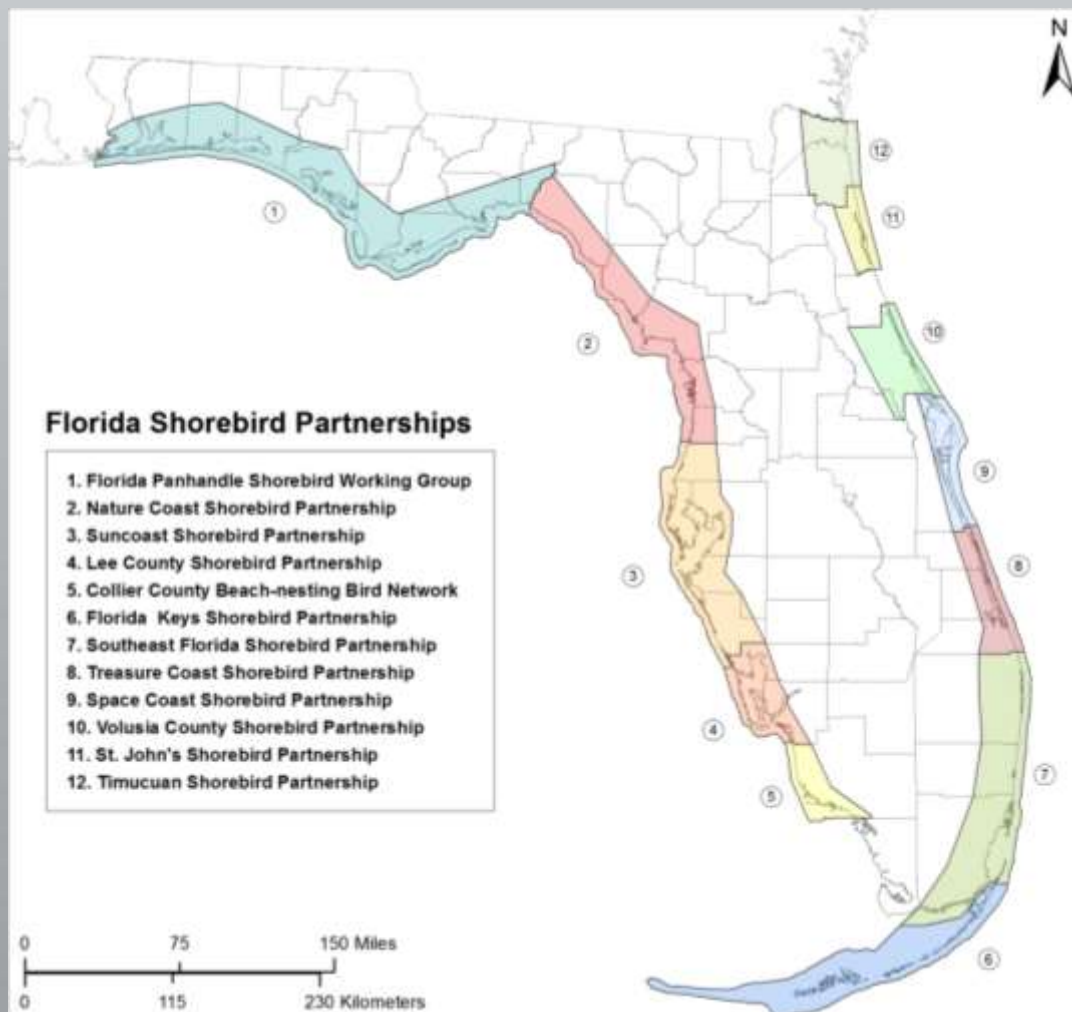
site stewarding



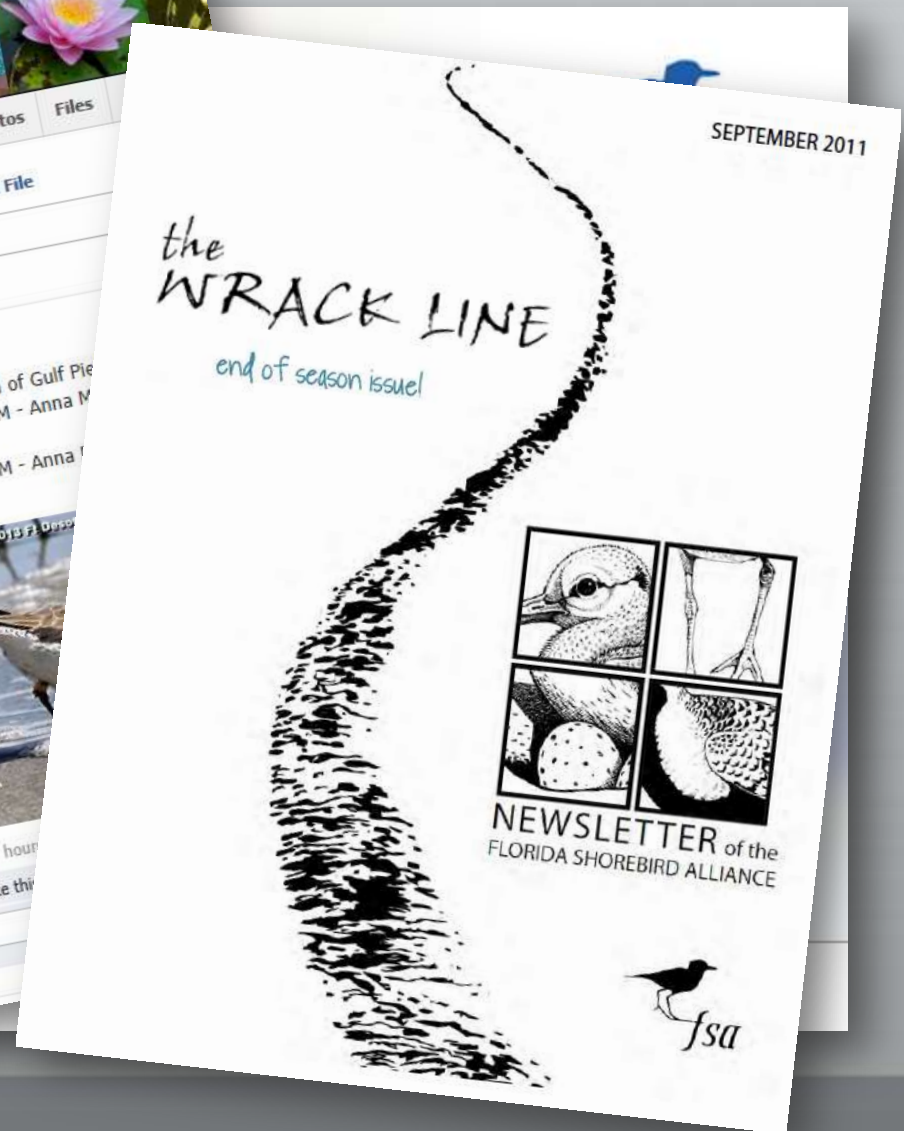
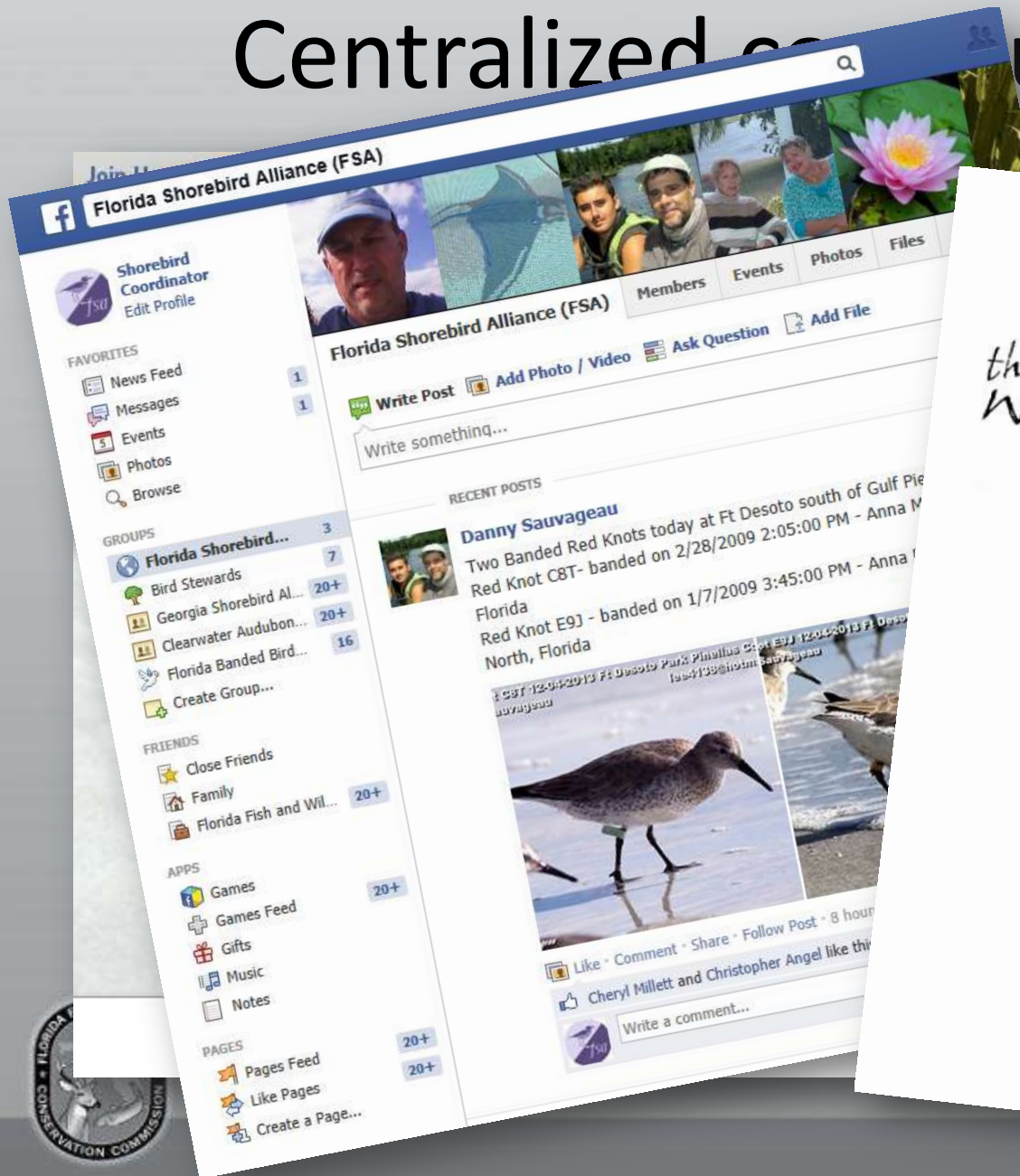
FLORIDA **SHOREBIRD** ALLIANCE
www.flshorebirdalliance.org



FSA local partnerships



Centralized communications



FSA monitoring program

- How does it work?
 - Develop protocols & data repository
 - Recruit partners
 - Train monitoring volunteers
 - Local partnerships provide in-field training & mentoring
 - Annual webinars on protocol & data entry
 - Provide support (helpdesk)
 - Data Quality Control



Today's outline

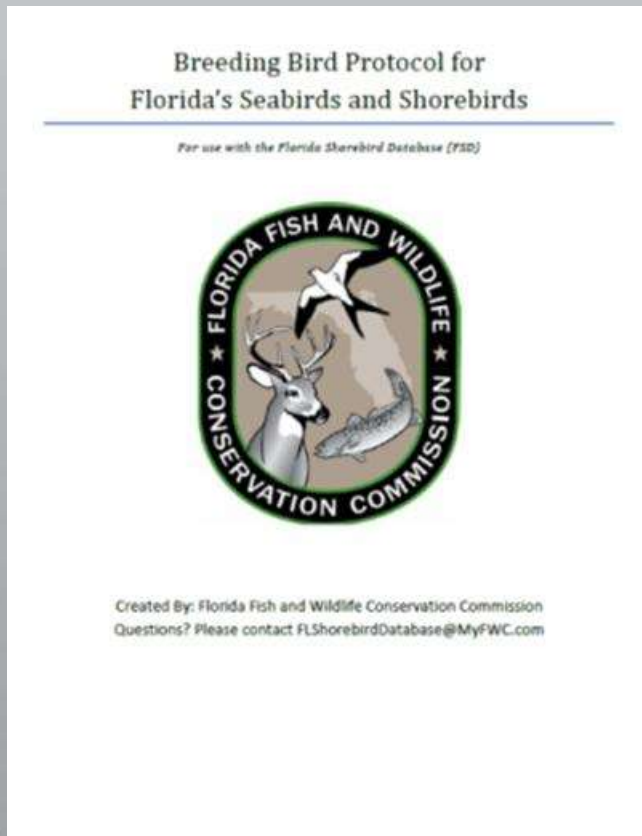
- Florida Shorebird Alliance
- Monitoring protocols & database



Photo: Jack Rogers



Florida's *Breeding Bird Protocol*

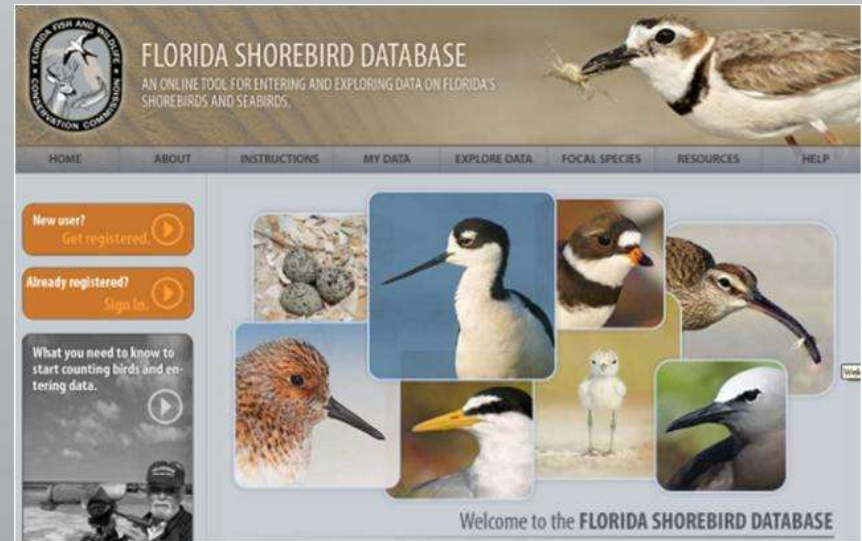


- Provides for consistent data collection and reporting
- Explains terms and methods
- Provides biological background
- Contains all data sheets
- Available online at:
www.FLShorebirdDatabase.org



Florida Shorebird Database (FSD)


- Based on protocol
 - Online forms match paper forms
- Online, real-time
- Google map interface
- Route-based system




www.flshorebirddatabase.org



Training tools



FLORIDA SHOREBIRD DATABASE
AN ONLINE TOOL FOR ENTERING AND EXPLORING DATA ON FLORIDA'S SHOREBIRDS AND SEABIRDS.



HOME ABOUT INSTRUCTIONS MY DATA EXPLORE DATA FOCAL SPECIES **RESOURCES** HELP

RESOURCES
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[Training Videos](#)

Breeding Bird Resources
[Monitoring Overview](#)
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RESOURCES - Florida Shorebird Database (FSD)

FSD Data Entry Training Videos:

- [Video 1: Establishing new sites \(colonial and solitary\)](#)
- [Video 2: Adding existing sites \(colonial and solitary\) to your profile](#)
- [Video 3: Reporting single site visits \(colonial and solitary\)](#)
- [Video 4: Establishing new routes, adding existing routes, and adding sites to a route](#)
- [Video 5: Reporting route surveys](#)

RESOURCES - Breeding Birds

Breeding Bird Monitoring Overview: [Presentation](#) | [Video](#)

Breeding Bird Protocol: [View](#) | [Download](#)

Datasheets: [All Datasheets](#) | [Routes](#) | [Solitary Nests](#) | [Colonial Nests](#) | [Chicks/Young](#) | [Rooftops](#)



What are we monitoring?

- **Nesting activity** of focal species
 - *Pre-nesting birds*
 - *Nest locations & outcomes (plus optional details)*
 - *Chick sightings (by age class)*



When are we monitoring?

- Monthly count windows:
 - March 18-24
 - April 15-21
 - May 13-19
 - June 10-16
 - July 8-14
 - August 5-11
- More frequent (~weekly) checks on active sites



Photo: Charlette Roman



Where are we monitoring?

- Coastal areas:
 - Beaches
 - Barrier islands
 - Spoil islands
 - Oyster bars
- Open areas with sand or gravel
 - Gravel rooftops
 - Other artificial habitat (e.g., landfills)



How are we monitoring?

Step 1: Conduct surveys

Rooftops: Check historic sites for birds...



Routes: Survey routes and report all breeding activity



Step 2: Report location of nests, chicks



Step 3: Report site status & details



Pied oystercatcher– broken wing display
(Photo: Clare M./ 10000birds.com)

- **Pre-/potential nesting**
- **Active**
 - Nest with eggs/nestlings
 - Adult incubating, brooding, or “broken wing”
- **No Longer Active**
 - *What was the outcome?*
 - Did at least one chick leave the nest? If not, cause of nest loss?
- **Optional info**
 - *Disturbance, wrack, etc.*



Step 4: Report banded birds

- Note color, position, codes of bands/ flags
- Take GPS location & photo if possible
- Report on FSD forms
- Report to researchers - see directory on FSA website:



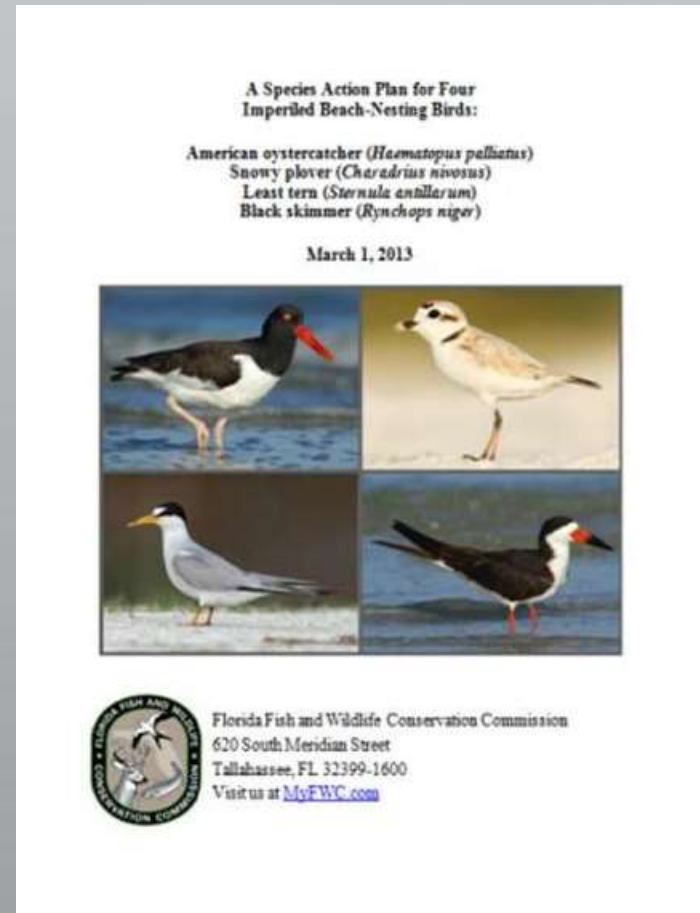
Photo: Pat Leary

www.flshorebirdalliance.org/resources-pages/bands.html



What does partner data tell us?

- Breeding & chick-rearing locations (real-time)
- Disturbances & threats
- Changes in abundance, distribution, productivity, and population trends over time
- Progress towards recovery goals



Non-nesting Protocol coming soon!

- Field-tested over past 5 years
- Now in final review; to be released Jan. 2014
- FSD component to be launched winter 2015
 - Same accounts/routes as breeding surveys



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Photo: Jack Rogers



2013 AMOY update – Partner data

- FSA partners reported 186 AMOY nests statewide
 - 67 nests hatched
 - 23 nests fledged chicks
- 53 *pre-/potential* nesting sites



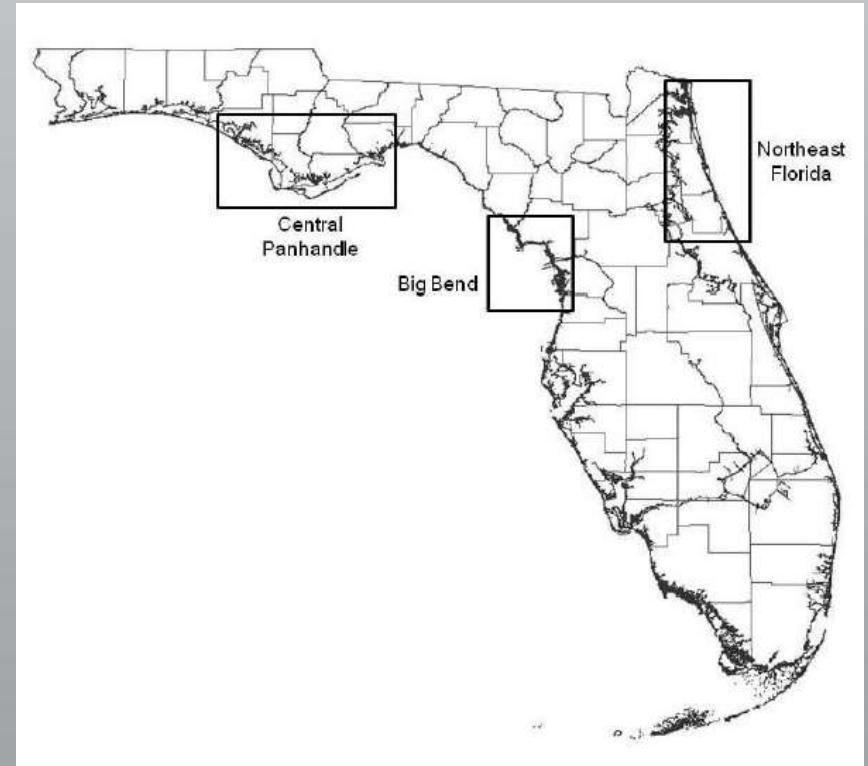
Map: Jeanne Baker



2013 AMOY update –

Brush & Schwarzer breeding report

- Surveyed study areas every 7-14 days
- Banded 7 adults & 10 chicks
- Resighted 38 individuals 117 times
- Tracked 54-62 breeding pairs and monitored 70 nests



Map: Brush & Schwarzer



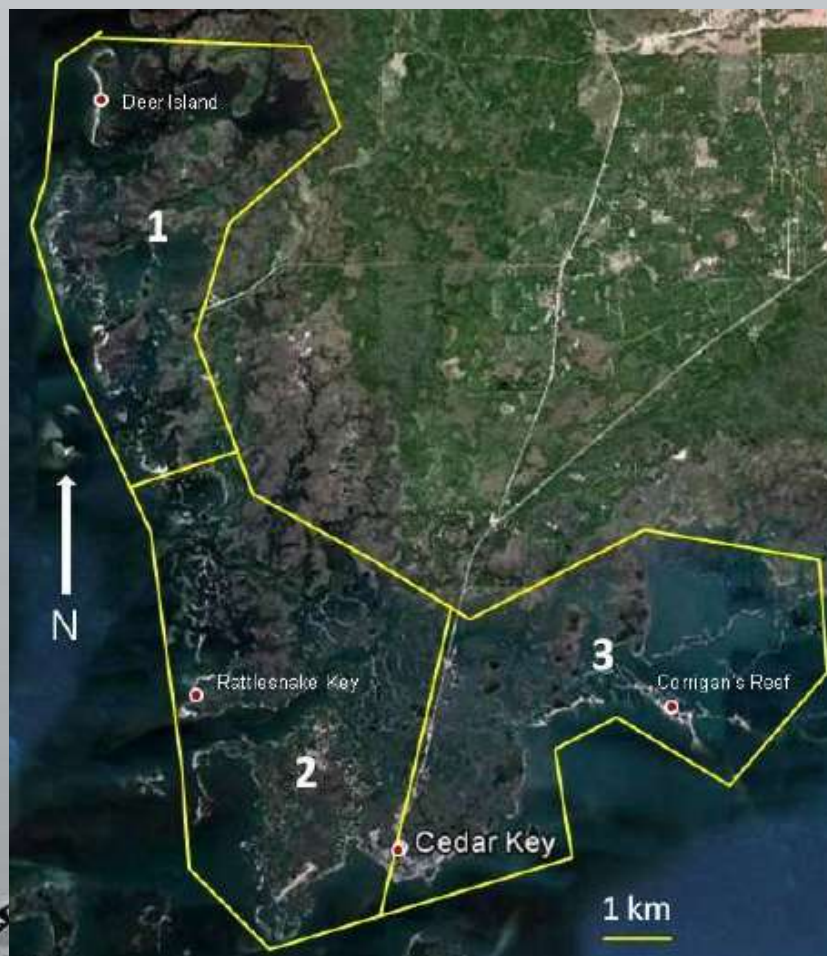
2013 AMOY update – Brush & Schwarzer breeding report

- Low reproductive success in 2013:
 - 22% of monitored nests hatched
 - Most nests failed due to coyotes (panhandle) and overwash (NEFL & Big Bend)
 - 9 chicks fledged (productivity=0.23 fledged chicks per breeding pair; 0.18 fledged chicks per active nest)



Photo: FWRI

2013 AMOY update – Cedar Key wintering project (I)



- FWC researchers & Peter Frederick (UF)
- Phase I (10/11 – 2/12)
 - 6 “blitz” airboat surveys
 - 3 night surveys to find roosts
 - Microhabitat sampling
- Roosting habitat is limiting factor
- Manuscript in progress



2013 AMOY update – Cedar Key wintering project (II)

- Phase II: Restoration
 - NFWF awarded funding!
 - Stabilize 2 existing high-use roosts (support ~90% of the area AMOY) using derelict clam bags.
 - Reduce erosion, increase bar elevation/area, and attract colonization by oysters.
 - Monitor sediment dynamics & AMOY use of roosts following restoration.
- For more info: Janell.Brush@myfwc.com



Questions?



Photo: Jack Rogers

Contact us at shorebird@myfwc.com or 863-370-6305

www.FLShorebirdAlliance.org
www.FLShorebirdDatabase.org

