

20 Years of Nesting Marine Turtles: Trends and Continuing Questions

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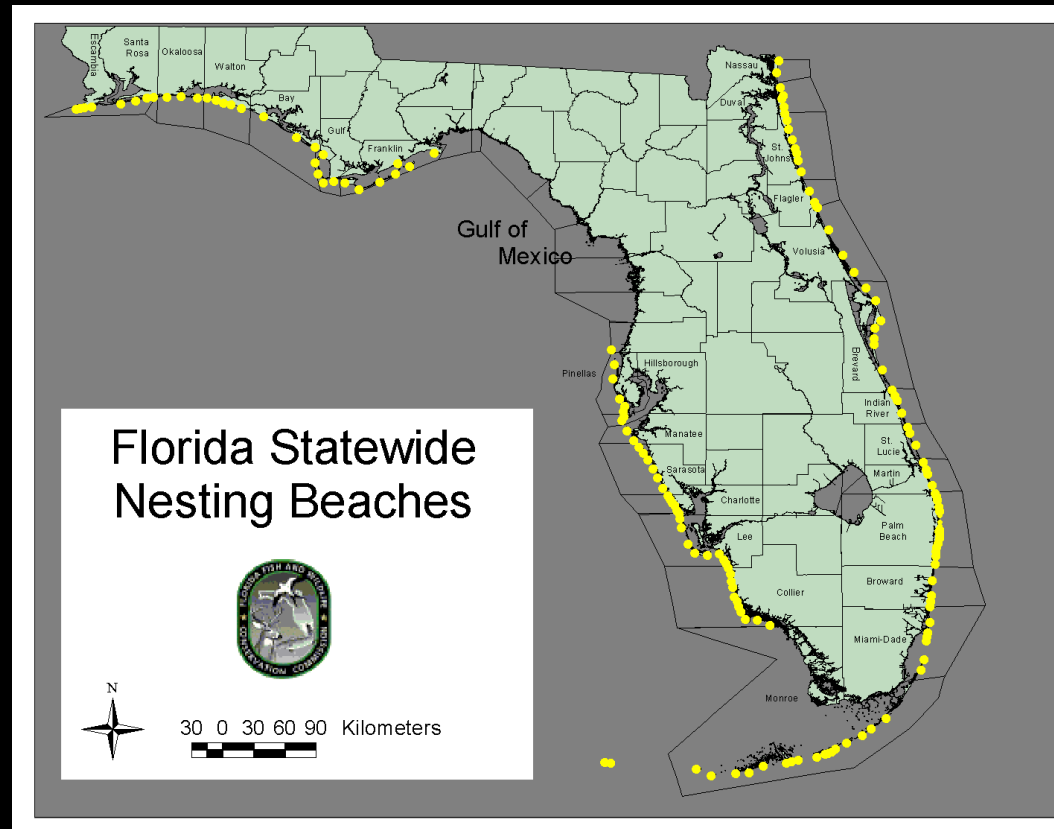


Leigh @ underwater.com

How is this data utilized?

- US Fish and Wildlife Service (USFWS) [Federal]
- Florida Fish and Wildlife Conservation Commission (FWC) [State]
- St Johns County [Local]

- 190 State Nesting Beaches 1,324 km
- 33 Index nesting Beaches 410.8 km



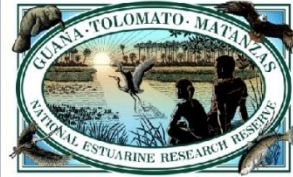
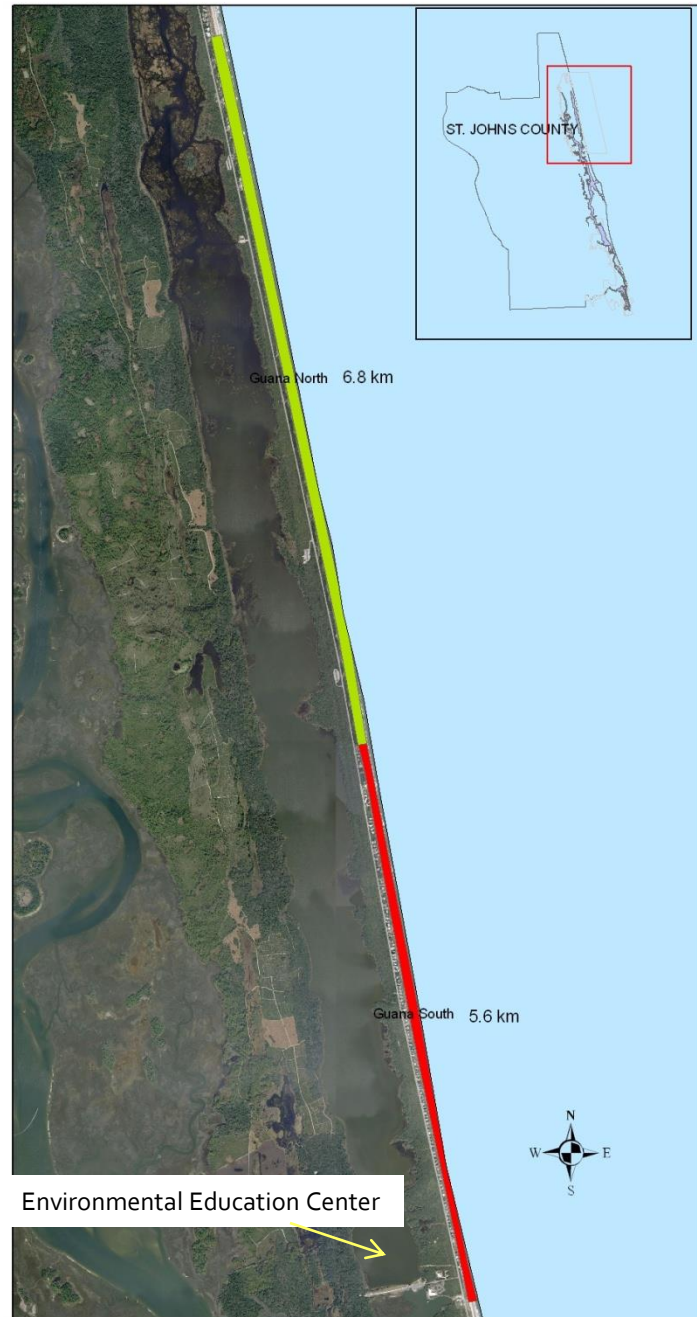
GTM NERR Survey Site



Guana North = 6.8 km (4.2 miles)
State Conservation and Recreational Lands



Guana South = 5.6 km (3.5 miles)
Low Density Residential Housing



GTM Nesting Beaches

- | Beach_Name | |
|---|-------------|
|  | Guana North |
|  | Guana South |

Environmental Education Center

Current Extant Marine Turtles

Loggerhead
(*Caretta caretta*)



Elizabeth Friedman

Threatened

Atlantic Green
(*Chelonia mydas*)



Petteri Viliakainen

Endangered

Leatherback
(*Dermochelys coriacea*)



AP Photo

Endangered

Hawksbill
(*Eretmochelys imbricata*)



Adrienne McCracken

Endangered

Kemp's Ridley
(*Lepidochelys kempii*)



Endangered

Olive Ridley
(*Lepidochelys olivacea*)



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Endangered

Flatback
(*Natator depressus*)



Doug Perrine/seapics.com

Endangered

Pacific Black
(*Chelonia agassizi* ??)

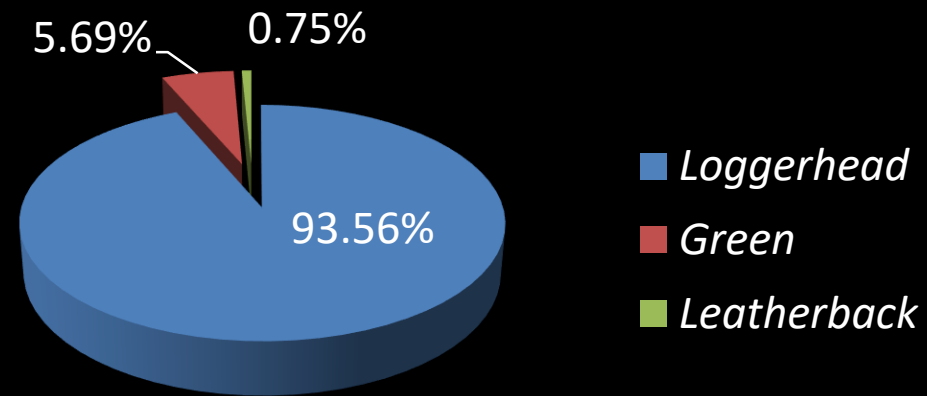


Endangered

Florida's Marine Turtle Nesting Composition



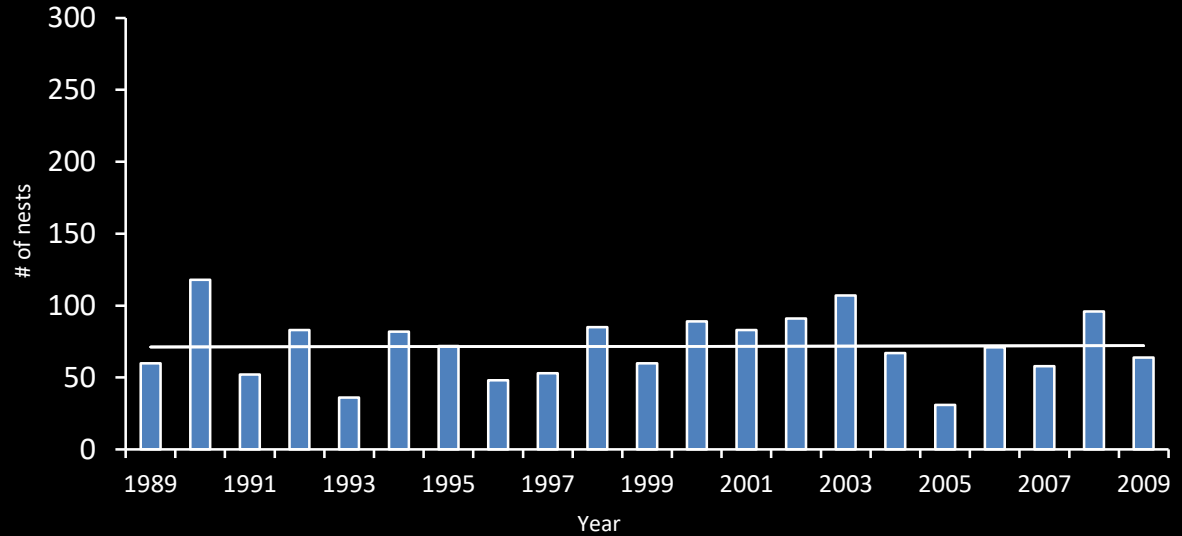
Elizabeth Friedman



Florida Fish and Wildlife Conservation Commission (FWC) State Nesting Beach Survey (SNBS)

GTM NERR Loggerhead Nesting 1989-2009

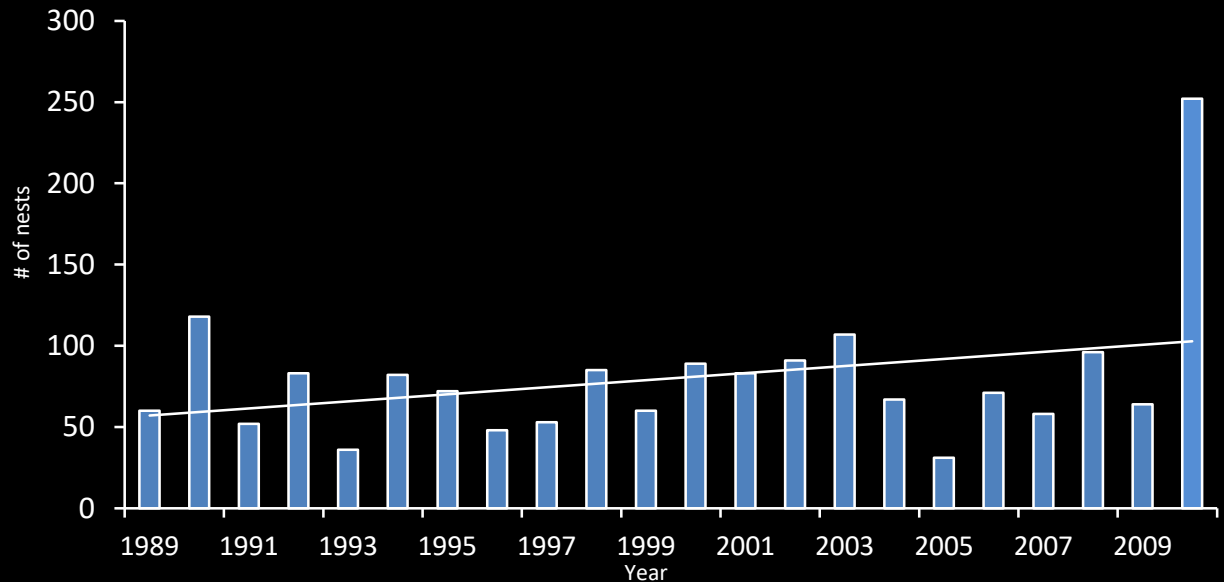
- Mean 71.7 (1989-2009)
- Min 31 (2005)
- Max 118 (1990)



Caretta caretta nesting at the GTM NERR 1989-2009.

GTM NERR Loggerhead Nesting 1989-2010

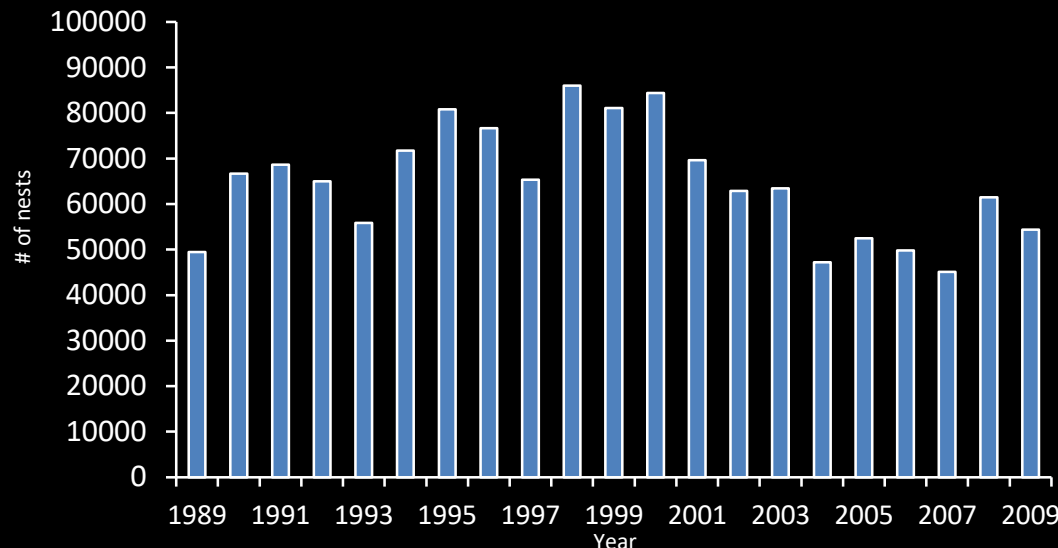
- Max 252 (2010)
- 2x previous Max
- 3x previous Mean



Caretta caretta nesting at the GTM NERR 1989-2010.

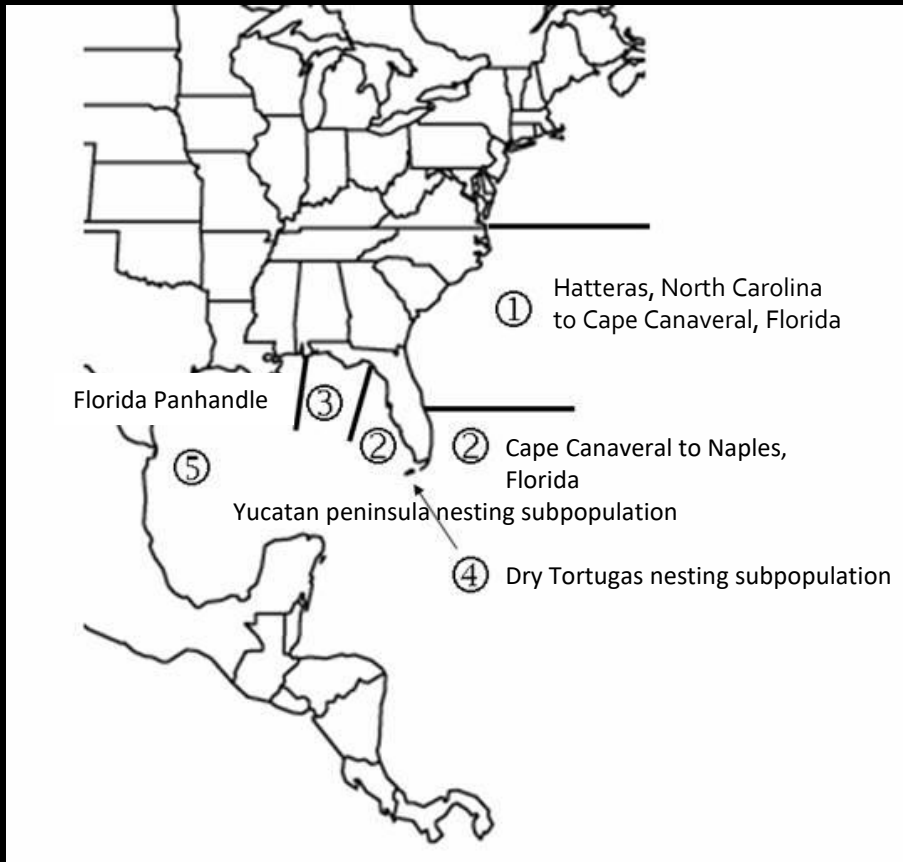
Loggerhead Florida Statewide Nesting 1989-2009

- Mean 64,658.7 (1989-2009)
- Min 45,085 (2007)
- Max 85,988 (1998)

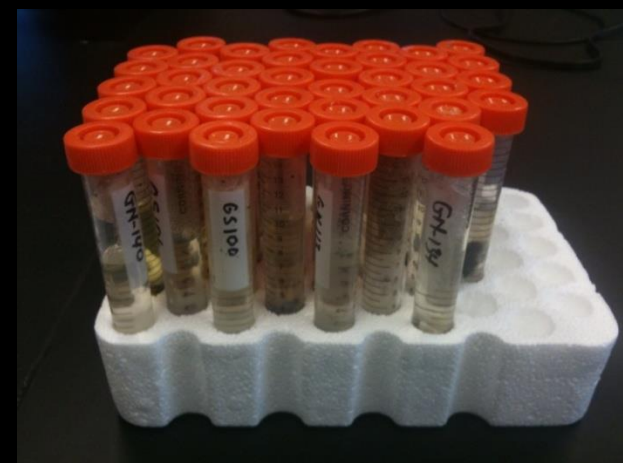


Loggerhead (*Caretta caretta*) number of nests documented in Florida from 1987-2009. Florida Fish and wildlife Conservation Commission (FWC) State Nesting Beach Survey (SNBS)

*Understanding the Population structure of Loggerhead Sea Turtles
(Caretta caretta) Nesting in the Southeastern United States Inferred
from Mitochondrial DNA sequences and microsatellite Loci.
Brian M. Shamblin UGA*

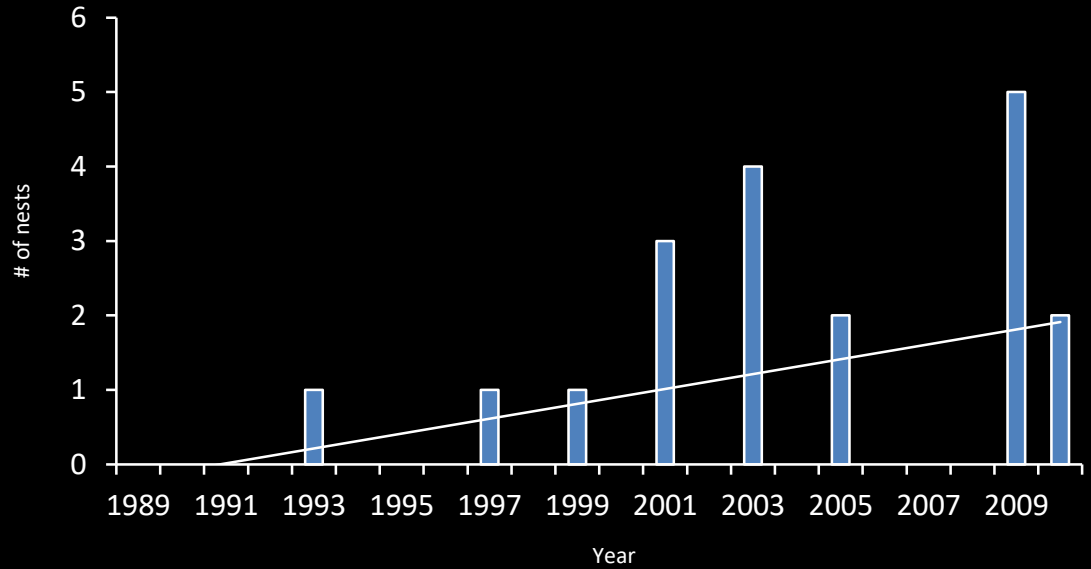


National Oceanic atmospheric administration National Marine Fisheries service



Leatherback GTM NERR nesting 1989-2010

- Mean .9
- Min 0
- Max 5 (2009)



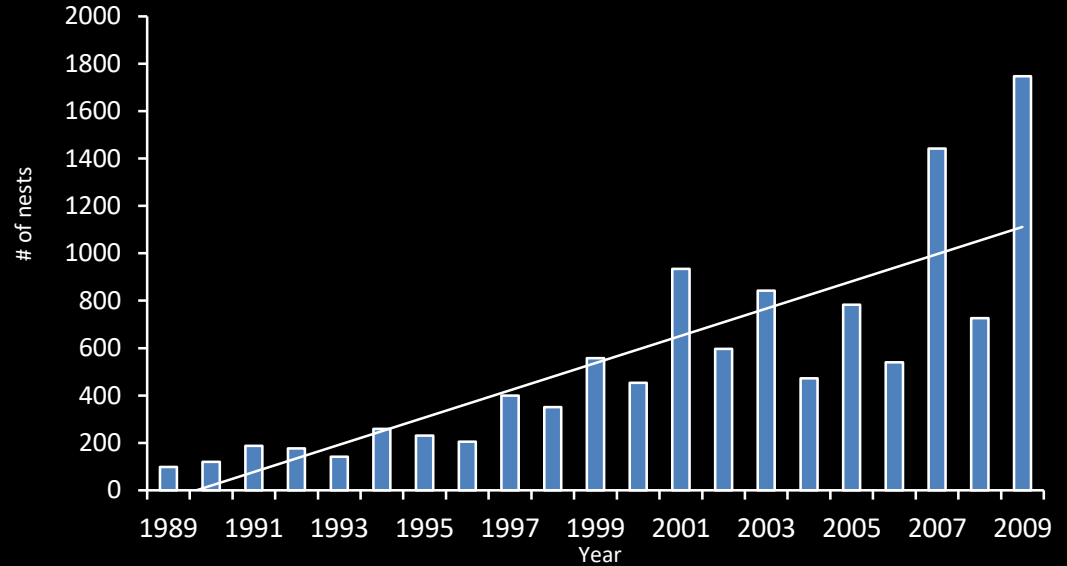
Leatherback (*Dermochelys coriacea*) number of nests documented at the GTM NERR from 1989-2010



Guillaume Feuillet

Leatherback Florida Statewide Nesting 1989-2009

- Mean 536.5
- Min 98 (1989)
- Max 1,747 (2009)



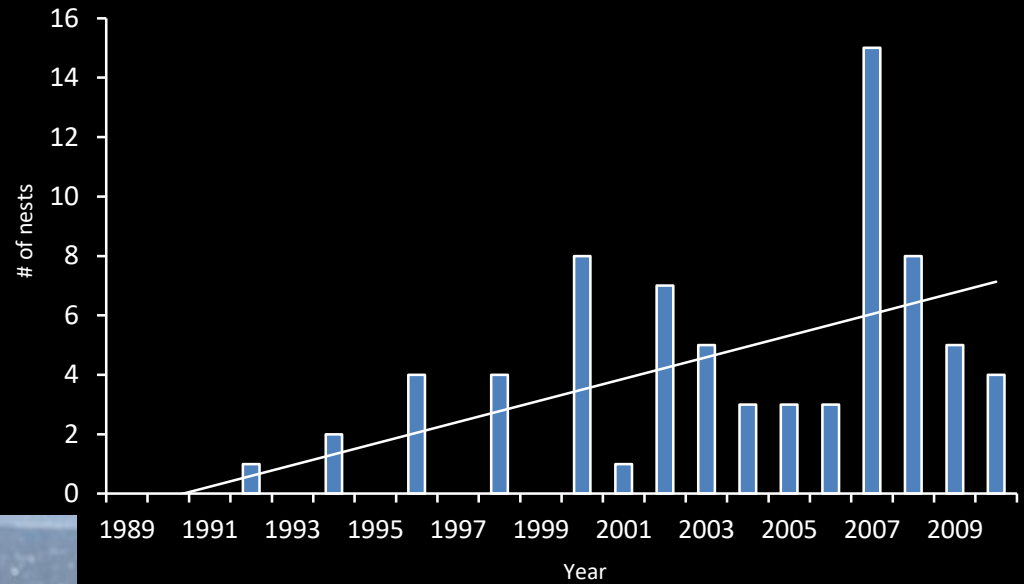
Loggerhead (*Dermochelyeys coriacea*) number of nests documented in Florida from 1987-2009. Florida Fish and wildlife Conservation Commission (FWC) State Nesting Beach Survey (SNBS)



Guillaume Feuillet

Atlantic Green GTM NERR Nesting 1989-2010

- Mean 3.3
- Min 0
- Max 15 (2007)



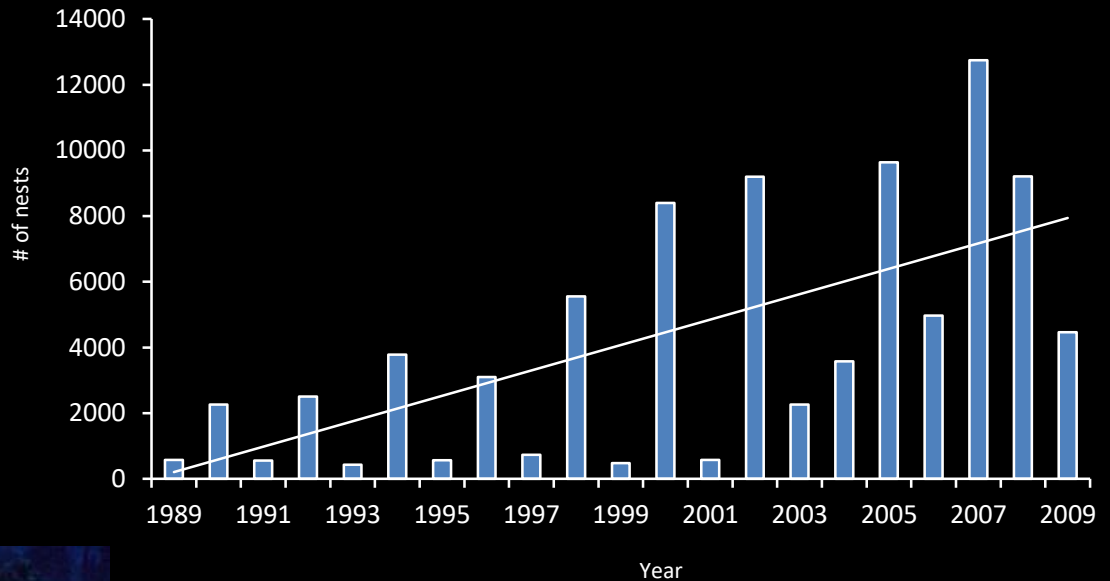
Atlantic Green Turtle (*Chelonia mydas*) number of nests documented at the GTMNERR from 1989-2010



Photo: Amanda Bryant

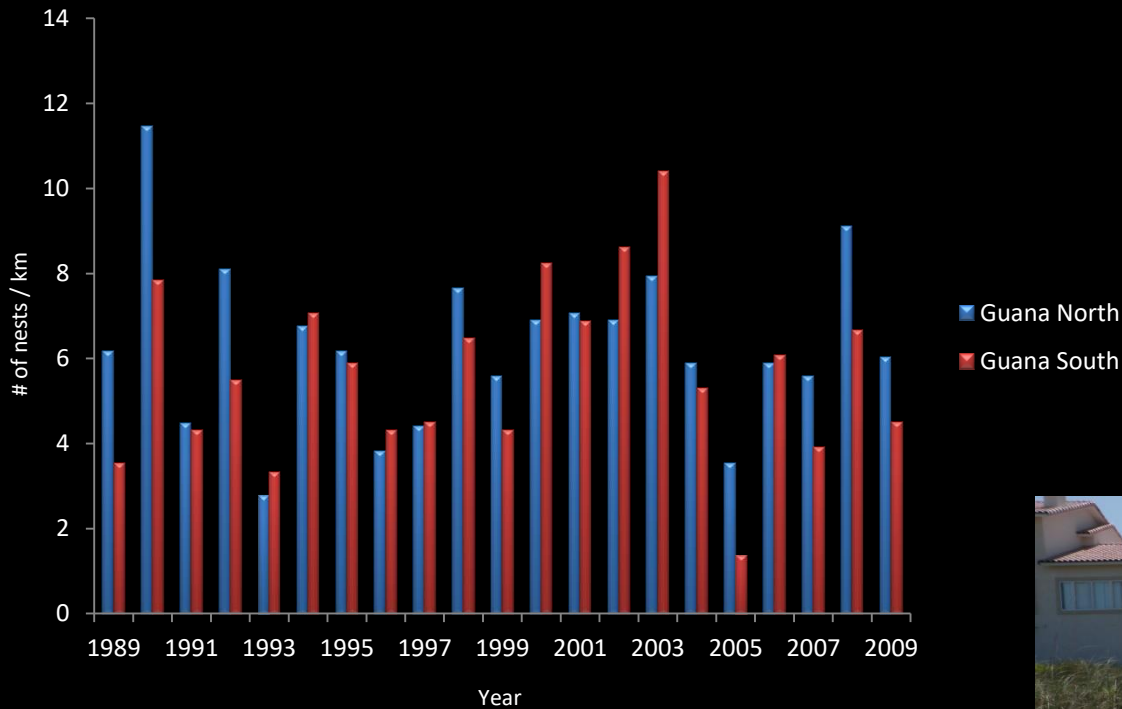
Atlantic Green Florida State Nesting 1989-2010

- Mean 4,077.4
- Min 435 (1993)
- Max 12,751 (2007)



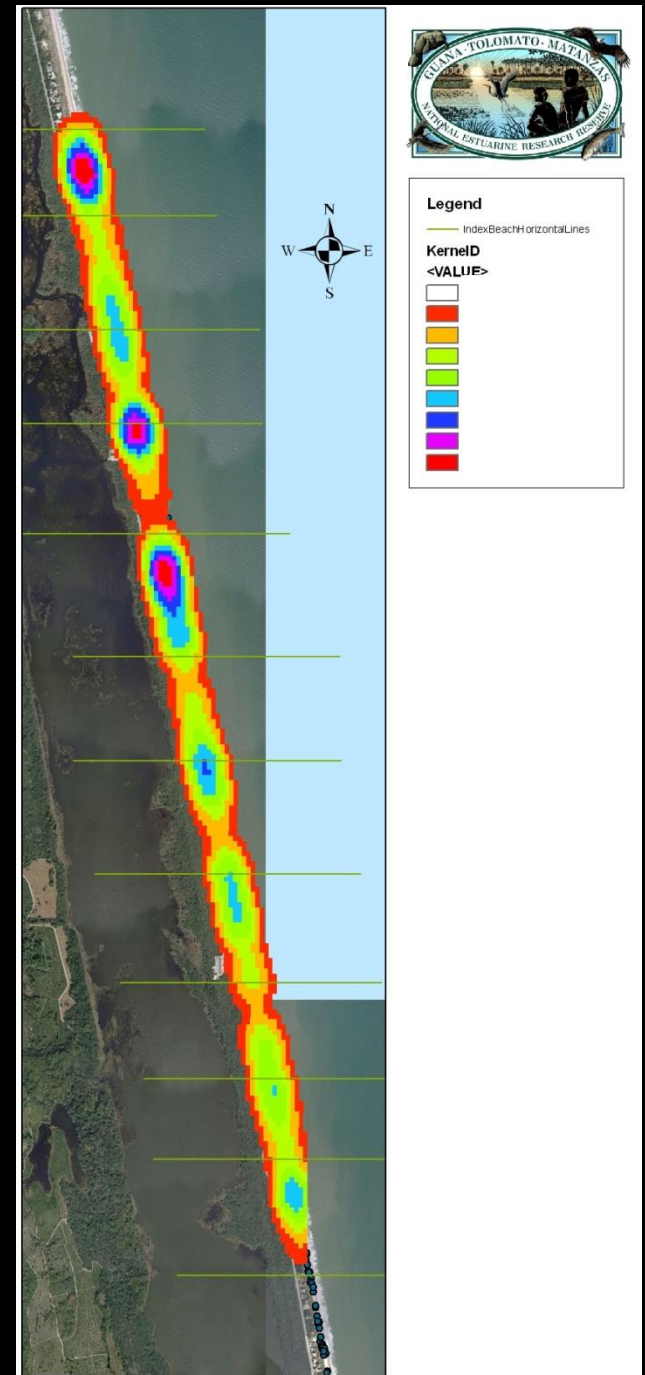
Atlantic Green Turtle (*Chelonia mydas*) number of nests documented from 1987-2009. Florida Fish and wildlife Conservation Commission (FWC) State Nesting Beach Survey (SNBS)

Comparative means of nesting per km for state conservation and recreation nesting areas and low density single family residential nesting areas of the GTMNERR



Determining Nest site Fidelity of the GTM NERR by Loggerhead sea Turtles

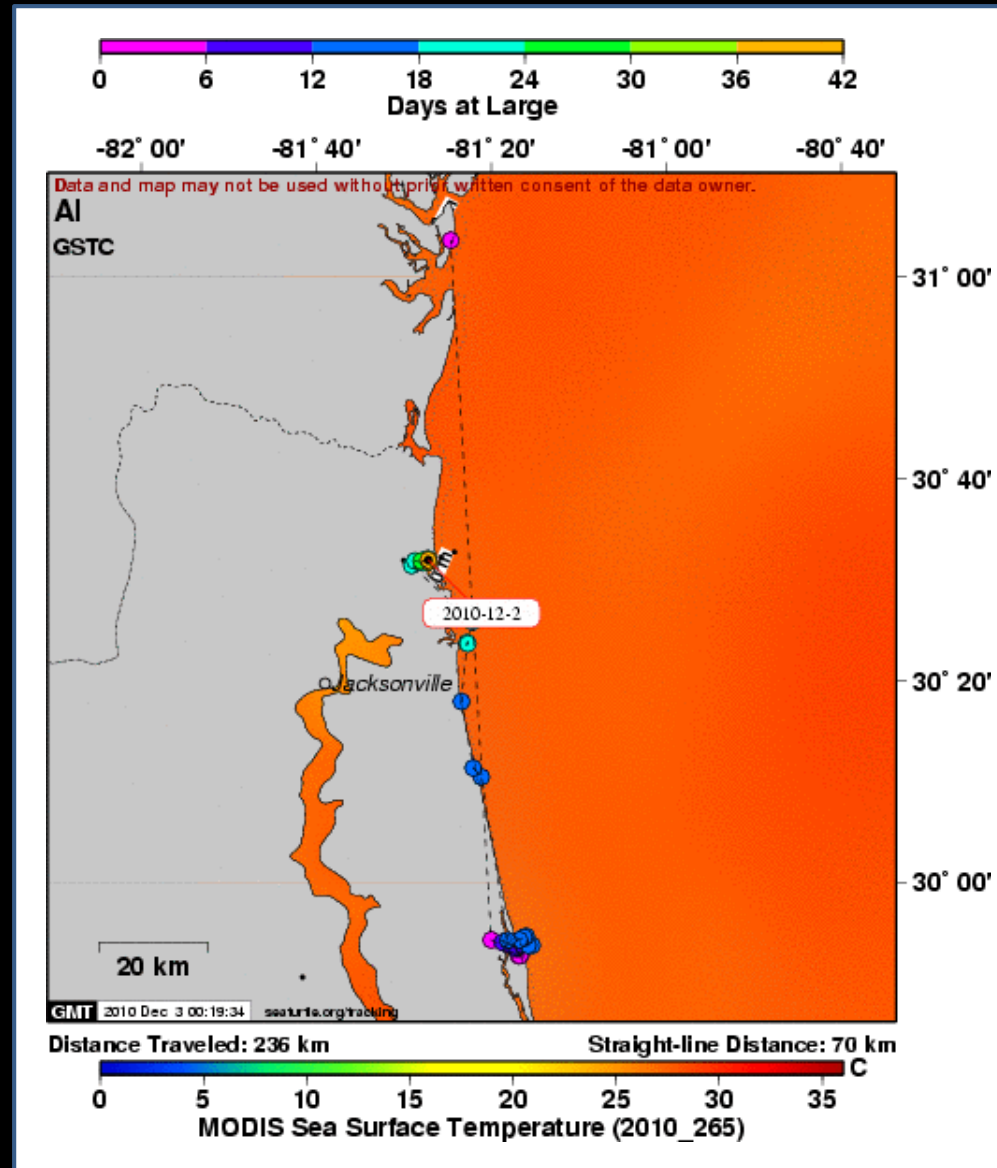
- Bathymetry
- Shoreline Profile
- Lighting Photometric



Neritic-Stage Green Sea Turtle Tagging and Satellite Tracking to Determine In-Water Movements Within the Estuarine and Nearshore Waters of Northeast Florida



The Walt Disney World Animal Programs



Acknowledgments

Volunteers



Friends of the Reserve Adopt a Nest Funds



Florida's Sea Turtle License Plate Sea Turtle Conservancy



Questions?

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