Diamondback Terrapin Populations of Northeast Florida

By

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General range map but there are many gaps.

7 subspecies; 5 in FL; 3 endemic to FL

Need for statewide/rangewide surveys was determined at the 2004 meeting when DTWG began.

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Extreme color variation

Sexual dimorphism

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- Diet includes marine invertebrates such as snails, clams, mussels, crabs, barnacles, and worms
- Fish bones probably due to carrion feeding
- Periwinkles (*Littorina irrorata*) – South Carolina
- Dwarf Surf Clams (*Mulinia lateralis*) and small crabs (*Armases* sp.) – Northeast Florida
- Mudsnails (*Nassarius obsoletus*) – NY

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Aggregating behavior causes one terrapin to follow others into traps and nets

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- Mating aggregations in March – April
- Females travel to favored nesting areas up to 4 miles from daily range
- They nest from early May through July
- May deposit more than one nest per season

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Terrapin crawls and nests

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- Hatching and emergence commence in July
- Mean emergence period is 68.9 days
- ~ 16 % of nests hatch
- Hatchlings seek the marsh rather than open water

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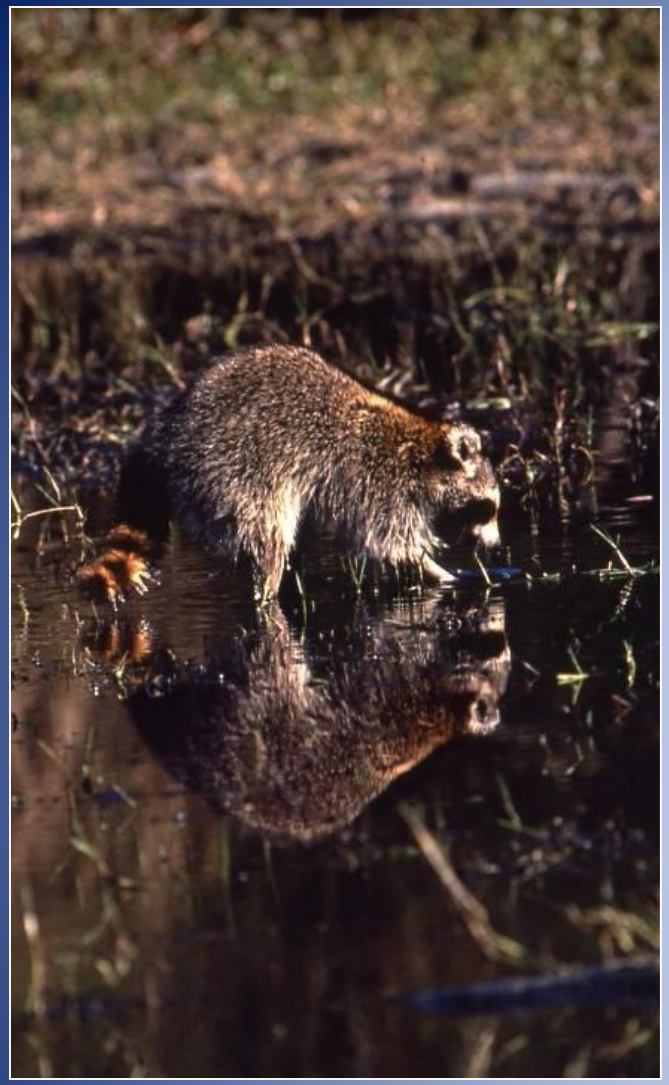

Over 80% of nests are destroyed by nest predators

Raccoons

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- Crows and grackles – early in nesting season
- Ghost crabs – eggs early, hatchlings late
- Fire ants – after other predators or at hatching
- Others – rats, foxes, gulls

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Methods - Surveying for presence (w/o need to capture)

- Look for sandy beaches and woody shrubs from the boat.

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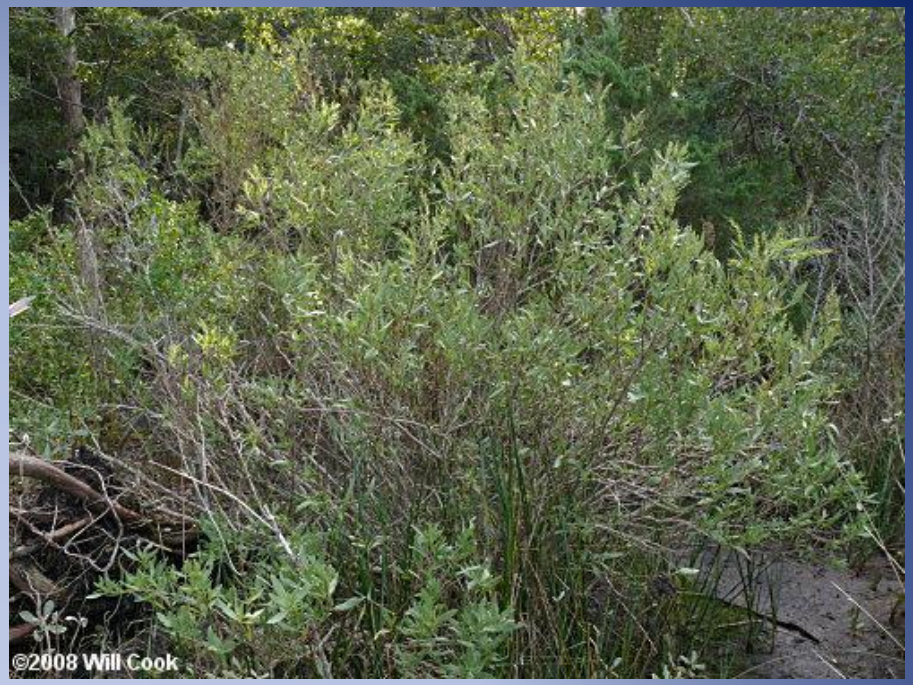

Most typical shrubs are Christmas Berry (*Lycium carolinianum*) and Marsh Elder (*Iva frutescens*)

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Search for and capture any females on the beach

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- Raided nests
- Remains – bones carcasses
- Crawls

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- Counting heads

  - Harden et al. in South Carolina

  - Low tide is best

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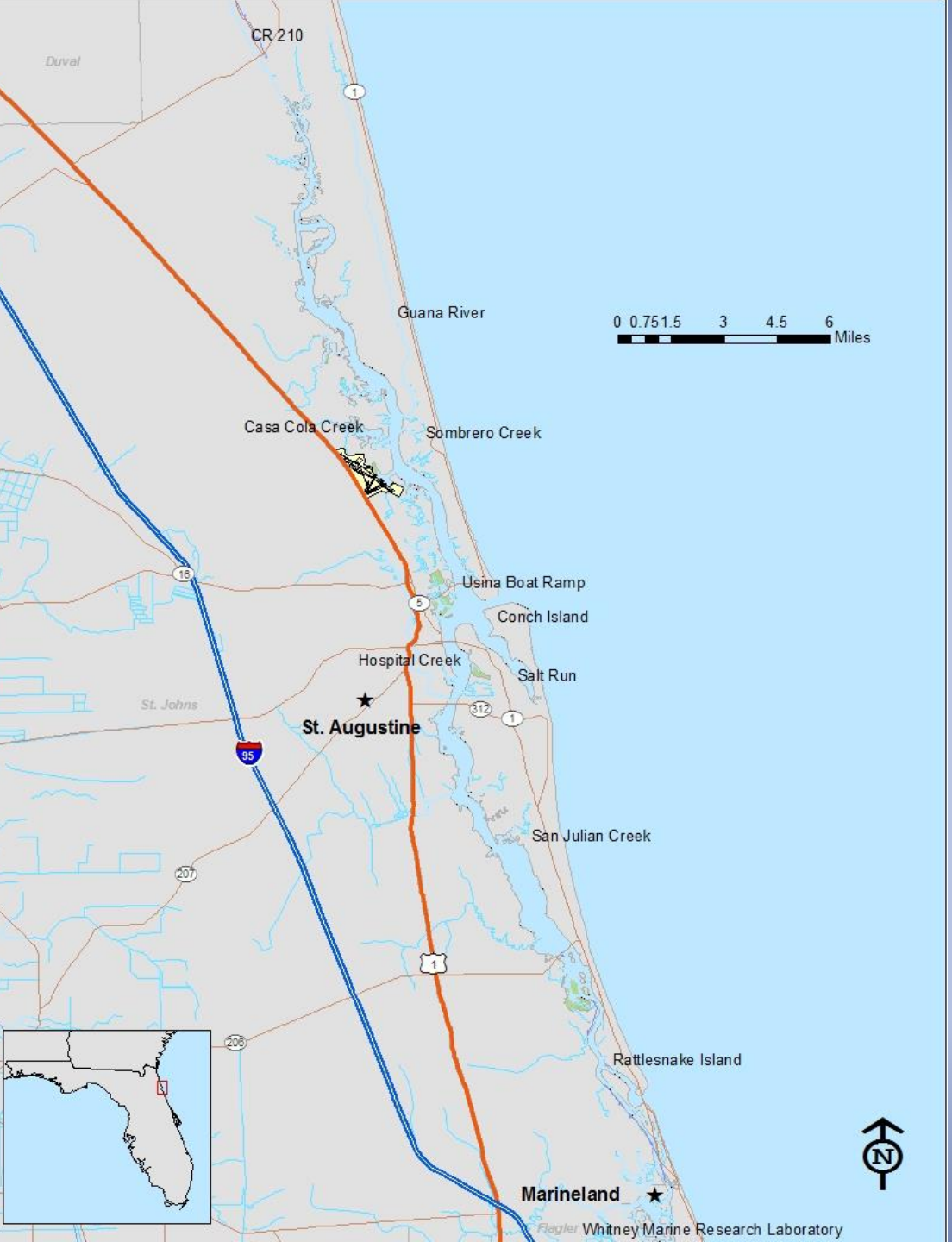

- Study area – GTMNERR

CR 210 bridge (Palm Valley) in the north to Marineland in the south

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Yellow dots represent all shorelines, tidal creeks, beaches, etc. that we searched on foot

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20 records

11 were raided nests

- Fort Mose
- Kurths Island
- Robinson Creek
- Conch Island
- San Julian Creek
- Sombrero Creek

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4 terrapin remains

- Carcass at Usina ramp
- Carcass at San Julian Creek
- Bones on Kurths Island
- Scute on Guana River shoreline

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4 heads at the surface

- Robinson Creek
- Hospital Creek
- Salt Run/Conch Island
- Sombrero Creek

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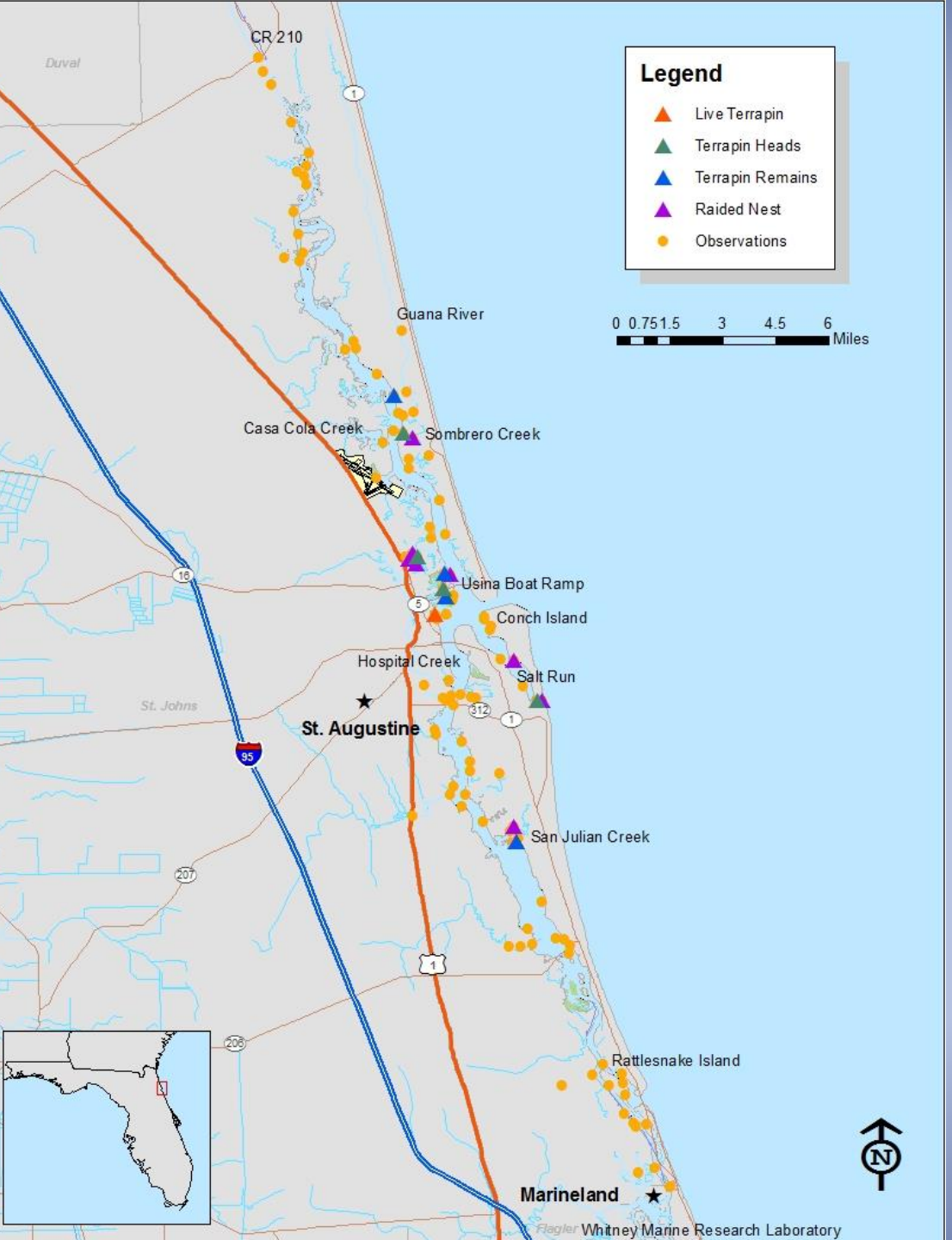

1 live terrapin

- Hospital Creek
- She was in the process of nesting and laid 3 eggs

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Data from others

- Group of 6 photographed last April at the Conch House
- Raided nest and remains on Conch Island
- 2 heads in Casa Cola
- ~ 15 adults in a creek west of Rattlesnake Island

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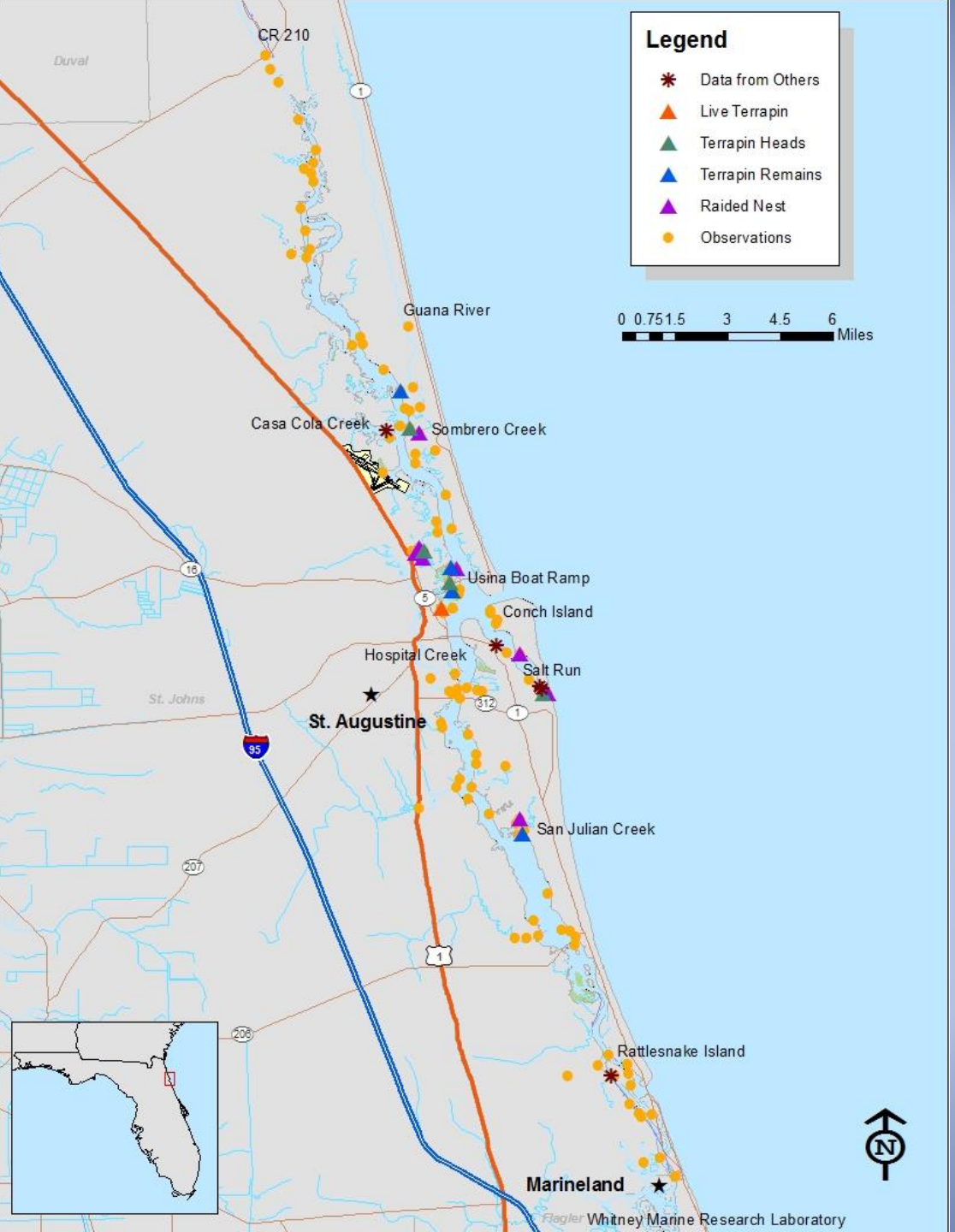

Most records near heavily used St. Augustine

Located no communal nesting areas

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Shoreline hardening in St. Augustine and extensive oyster shell deposition throughout the GTMNERR limit potential nesting habitat

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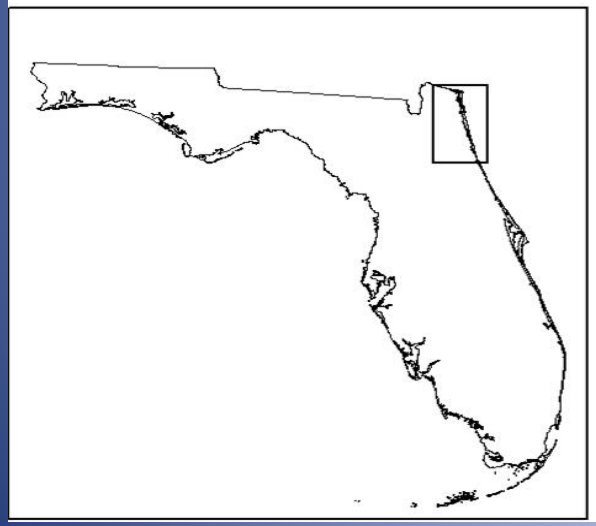
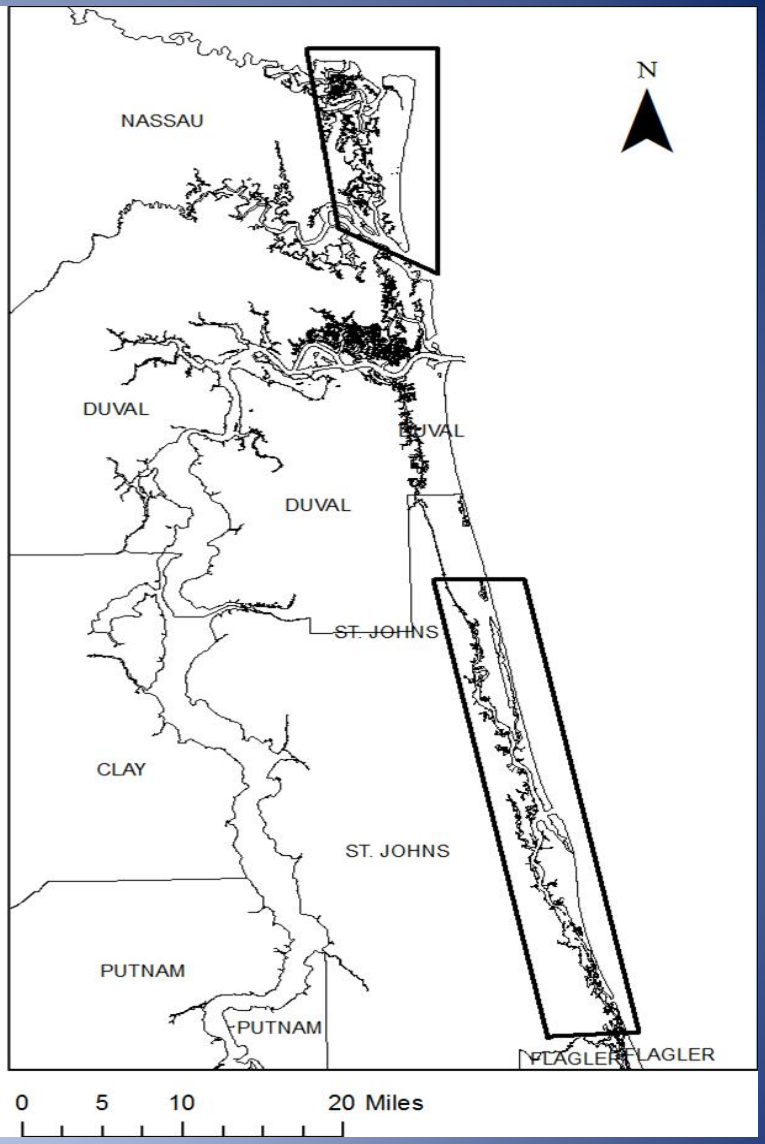
Plans for summer 2014 to connect the dots in northeastern Florida.





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Diamondback Terrapin Working Group

- www.dtwg.org

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