

# Imperiled Salt Marsh Birds of the Florida Gulf Coast

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March 9, 2021



# Imperiled Salt Marsh Avian Species



- Eastern black rail – federally Threatened
- seaside sparrow (Scott's, Wakulla) – state Threatened
- marsh wren (Marian's) – state Threatened

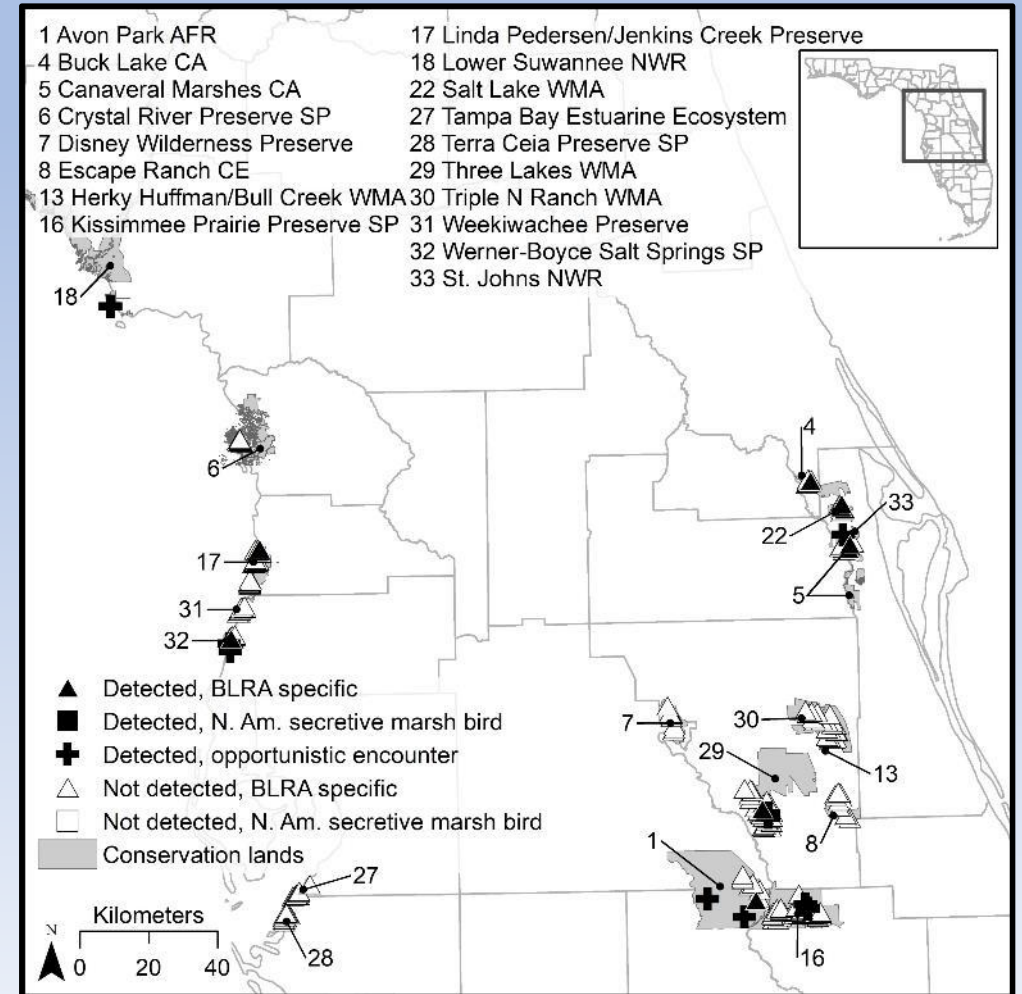
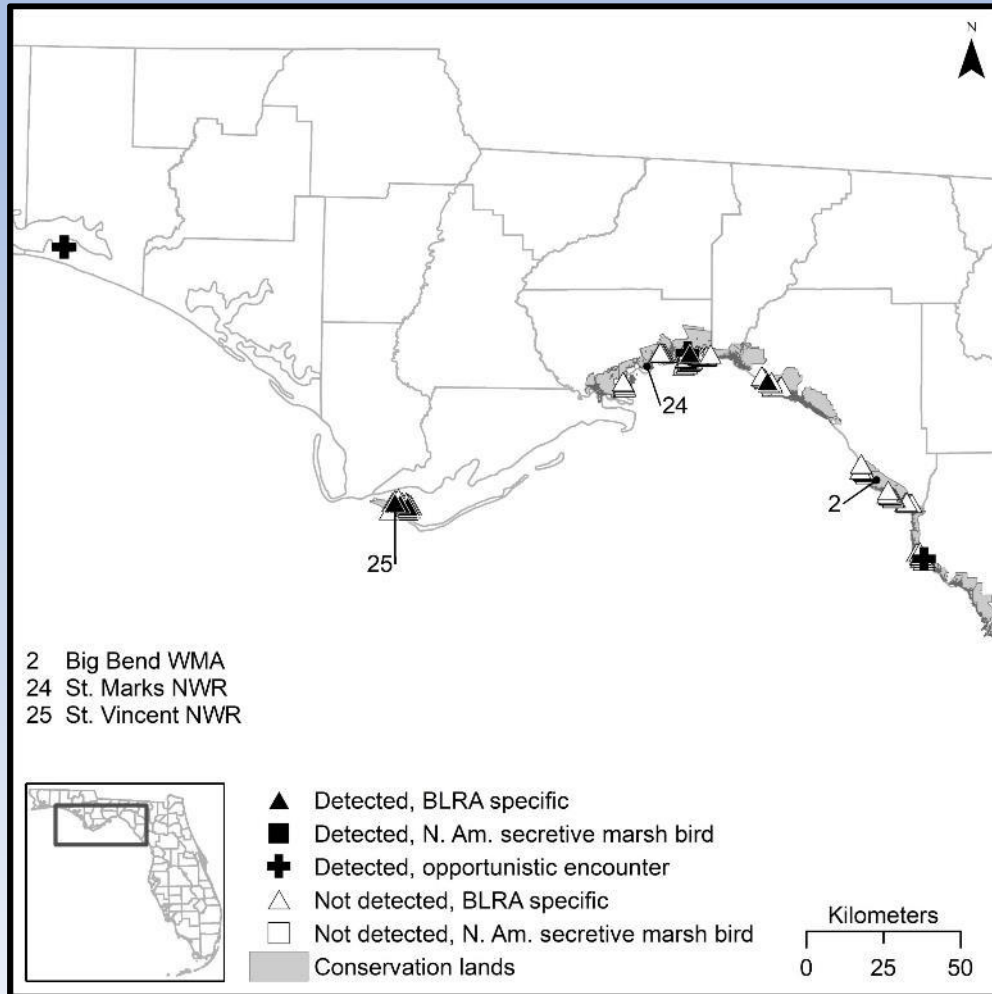


# What is a black rail?

- Smallest rail species in North America
  - Size of a chunky sparrow
- Relatively rare, but can be locally abundant
- Found in salt, brackish and fresh water marshes
- Secretive, rarely seen, occasionally heard
- Ground or near-ground nester, large clutches
- Precocial chicks
- Timing of nesting – varies across areas of the state
  - Big Bend – courtship/calling starts in **April**, nests on ground by early May, season lasts through **August**
- Adult flightless molt period in **August-September**



# Black rail distribution



From Schwarzer et al. (*Accepted*) – Data collected by FWC, Avian Research and Conservation Institute and Center for Conservation Biology



# Black rail habitat in the Big Bend

## **Black rail habitat** – tidal high marsh

- saltmarsh cordgrass (*Spartina patens*), black needlerush (*Juncus roemerianus*), sand cordgrass (*S. bakeri*)
- Needs thick canopy cover (tends to run instead of fly)
- Very low water levels (0-3 cm), with only minimal tidal inundation
- Prefers area with microtopographic variation



# Projects: Past, Present, Future

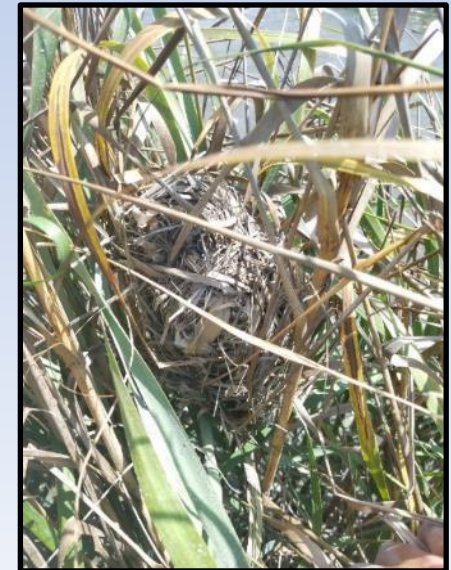
- Distribution surveys (2016-2017, 2020)
  - Primarily for listing process
  - South Florida covered more thoroughly in 2020
- BLRA local surveys (ongoing)
- Habitat improvement and restoration
  - Removal of encroaching woody veg
  - Ghost forest mapping
- NOAA Firebird project (BLRA, YERA, MODU)
  - Examine beneficial use prescribed fire for these spp.
  - Gulf-wide
  - FWC in supporting role – advisory and contributing data
  - 4 years up front, possible extension to 8



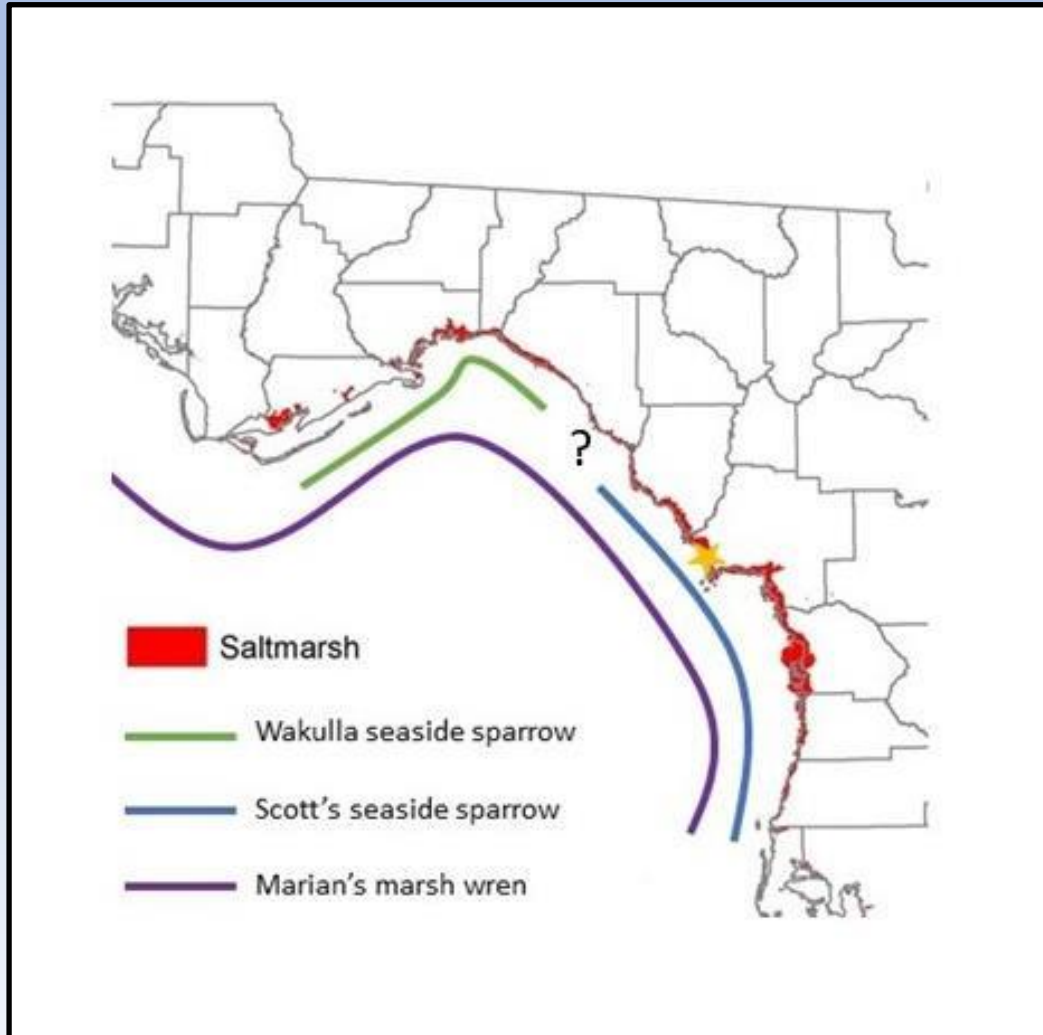


# Salt marsh songbirds

- Both species salt marsh obligates in FL
- Breeding season: April-August
- Sparrows:
  - Low to mid-level vegetation
  - Open cup nest
- Wrens:
  - Prefers tall vegetation
  - Nest balls with multiple “dummy” nests
- Both prefer to be distant from uplands, shrubs, perches



# Salt marsh songbird distribution



- Confusion over the ranges of the two sparrow subspecies
- Debate about sparrow taxonomy



# Black rail habitat in the Big Bend

**Seaside sparrow** – tidal high and low marsh

- saltmarsh cordgrass (*Spartina patens*), black needlerush (*Juncus roemerianus*), smooth cordgrass (*Spartina alterniflora*)



**Marsh wren** – tidal high and low marsh, predominantly creek and pond edges in tall vegetation

- smooth cordgrass, sawgrass (*Cladium jamaicense*)



# Projects: Past, Present and Future

- Local surveys (2016-ongoing)
- Florida Gulf coast SESP genetics (2016-?, Carolyn Enloe)
- Marshbird, mammals and prescribed fire (2020-2024)
  - Florida Gulf Coast
  - SESP, MAWR, CLRA + marsh rice rats, mink, other meso-mammals
- Habitat improvement and restoration
  - Ghost forest mapping

