Marsh Mat Pilot Project

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MAY
RESEARCH & MANAGEMENT PROJECT
Need to Build Resiliency of Salt Marsh Birds

- Suite of salt marsh birds in steep decline
- Highest concern is “high marsh” nesting species (e.g., Saltmarsh Sparrow, Black Rail)
- Greatest threat assumed to be nest flooding due to sea-level rise
- Urgent need to develop management approaches to increase resiliency of nesting birds
- How can we reduce nest flooding? Create microhabitats of greater elevation?
Develop Viable Management Approaches

**Short-term goal:**
- Pilot test of 1-2 similar approaches that could create microhabitats
- Trouble-shoot implementation
- Achieve success with technique

**Medium-term goal:**
- Measure whether mats reduce nest flooding
- Compare costs, longevity, effectiveness of 1-2 different methods/materials

**Ultimate outcome?**
- Provide an approach that can be scaled up and investigate whether it could work for birds
Project Area

Still TBD, probably in a few NWR from ME to NJ

- Paired sets of mats at each site:
- Each mat is 2m X 3m
- One synthetic (recycled PET plastic) mat
- One natural (coir fiber) mat
- Holes cut (2 / ft2) for plants
- Half of mat is planted with *Spartina* seedlings
Who is doing the work and When are you doing it?

Project lead: Mitch Hartley, ACJV / USFWS
USFWS National Wildlife Refuge System, potentially NPS, NOAA/NERR Network, NYC Parks, states

Starting this summer (2019), likely expanded in 2020, and monitored for a few years probably, maybe longer.

First step of a multi-step effort to develop/evaluate viable approaches to improve nesting habitat
How

Funding is TBD

- Costs per site are minimal
- <$1,000 (possibly <$500)
- Labor to install mats and monitor twice each summer

Not yet being communicated widely
Need to Develop Management Techniques

Immediate and major need to better understand salt marsh bird conservation needs and develop practices that improve nest success and increase resiliency of bird populations and their habitat.