Habitat Use and Foraging Flights of Roseate Spoonbills in Florida Bay

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INTRODUCTION

Roseate spoonbills (Platalea ajaja) have responded to historical changes in hydrology.
- Lower nest success
- Delayed egg-laying
- Shifts in nesting colony distribution

This study will analyze if roseate spoonbill’s foraging behaviors are affected by hydrological conditions.

Preliminary Results

Fig. 1: Roseate spoonbill nest numbers in Florida Bay (including inland colonies Paurotis Pond and Madeira Hammock).

Fig. 2: Map of spoonbill colony locations (red) and nesting regions (blue circles). Arrows indicate primary foraging areas for each region. Dashed lines are speculative.

HYPOTHESES

Hypothesis I – Home range area during the egg stage (“egg laid + 21 days after”) will be smaller than the chick stage (“hatch + 21 days later”).

Hypothesis II – Foraging range and total trip duration during the egg stage will be shorter than the chick stage.

Hypothesis III – Foraging range and total trip distance will not differ between breeding seasons.

METHODS

Fig. 3: From 2006 to 2008, Audubon of Florida Everglades Science Center equipped twenty roseate spoonbills with a satellite transmitter attached with a backpack made of Velcro strips. A sock is placed over the head of the spoonbill to minimize distress.

CONCLUSIONS

Studying the foraging behavior and foraging habitats of roseate spoonbills is crucial for guiding the restoration of the Everglades ecosystem. Using information gathered from this study will inform water management decisions. Future tracking studies can be compared to data presented here and show how roseate spoonbills respond to sea level rise and if they are using new foraging habitats.

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