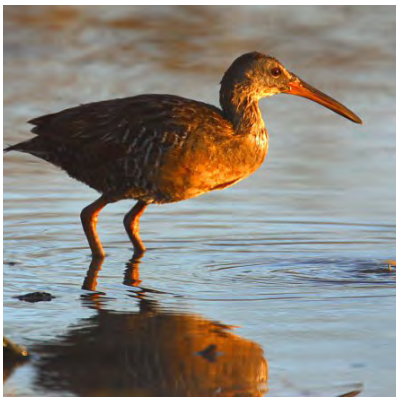

Enduring effects of hurricanes and additive human threats for five avian species of greatest conservation need in the Florida Keys

Introduction:
Hurricanes are the most disruptive natural disturbance encountered by species of the sub-tropical Florida Keys, which experienced significant damage from four hurricanes in 2005. This project will determine how the storms' impacts on hardwood vegetation will affect abundance of five species: reddish egret (*Egretta rufescens*); Cuban yellow warbler (*Dendroica petechia gundlachi*); black-whiskered vireo (*Vireo altiloquus*); mangrove clapper rail (*Rallus longirostris insularum*); and white-crowned pigeon (*Patagioenas leucocephala*,WCPI).

Objectives:

- Replicate surveys of five target species to estimate abundance of nesting pairs and compare with pre-hurricane levels
- Gather survival data on adult WCPIs and determine size and vegetation composition of summer activity ranges
- Band 350-500 nestling WCPIs per summer and solicit returns from hunters in the Caribbean to determine migration pathways and wintering destinations

Approach:
Point counts noted sight and song of five target species in 30-minute segments from a boat at 108 mangrove islands in the FL Keys. WCPIs were also surveyed by flight-line counts, counting males during morning departures from nesting colonies.

Radio track up to 49 VHF-tagged WCPIs. Triangulations and direct observation were used to construct activity range boundaries and the proportions of habitats within circular buffers.

Affixed WCPI nestlings with U.S. Fish and Wildlife Service aluminum bands. In a previous, smaller-scale project, recovery rates in the Caribbean ranged from 3-6 percent.

Benefits:
Demonstrate the effects of hurricanes to hardwood vegetation as breeding habitat of five species as well as foraging range size, survival and productivity of the white-crowned pigeon.

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