

# Protecting New Jersey's Migratory Shorebirds: Combining Science with Stewardship



Species shown: Red Knots,  
Ruddy Turnstones, Horseshoe  
Crabs, etc.

**By Jenny R. Isaacs, Class of 2012.**

Final Presentation given May 2012, in  
completion of Master of Sustainability  
Studies at Ramapo College of NJ.

# The Jersey Shore: Shorebird Rest Stop

- The Delaware Bay presents a major geographic obstacle to migration along the Atlantic flyway; birds may temporarily halt their migration in NJ to fuel up and wait for favorable winds.
- A depository of horseshoe crab eggs, the Bay serves as a major migratory stopover site/critical feeding area for several species of shorebird that traverse thousands of miles annually; including Red Knots (Endangered), Ruddy Turnstones, Semi-palmated Sandpipers, Dunlin, Dowitchers, Curlews, Willet, Whimbrel, and Sanderling.
- Cape May County is one of the top five most popular bird watching destinations in the United States.
- 40% of the Red Knot habitat/shore feeding areas are currently protected.

# The Red Knot

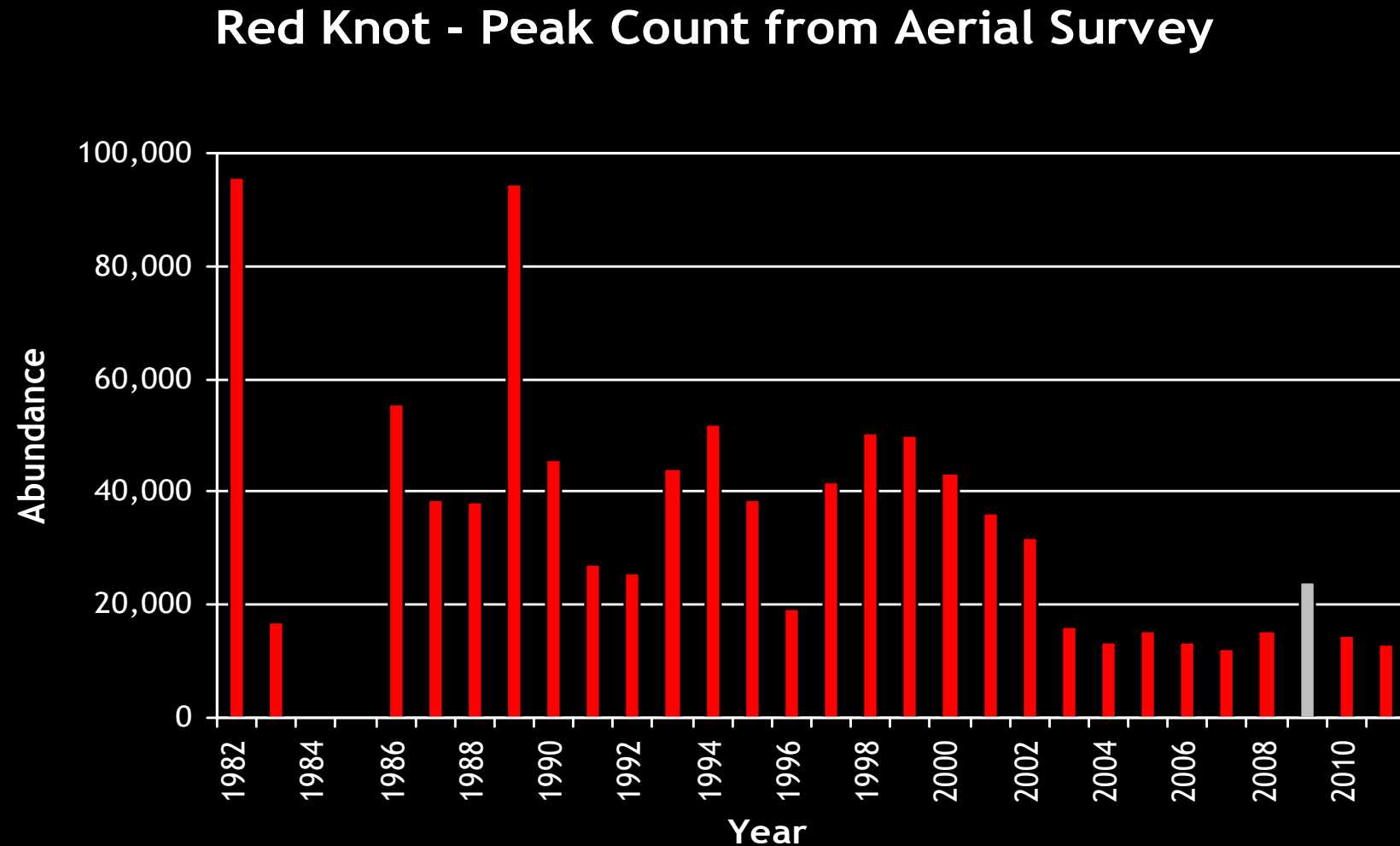


Birds have two weeks to double their body weight on crab eggs during their northern migration



# PROBLEM: Rufa in Trouble

## Data presents a story of failure



\*2009 peak from ground count, Mispillion Harbor, DE 5-26-09, Source: NJ and DE Divisions of Fish & Wildlife

# SOLUTION: Stewardship Model of Conservation



**Stewardship**

a posture of responsibility for and proactive engagement within the larger ecosystem

**Science**

**THESIS: Conservation Science is worthless unless people use knowledge to make more sustainable choices**

# Cape May County: Stewardship Model of Conservation in Practice



2011 Shorebird Stewards

Dick Veitch

# “VOLUNTARY AVOIDANCE”

## An Inclusive Approach to Conservation

*Beaches stay open: a win-win for people and species*

Everyone can play a positive role in the ecosystem



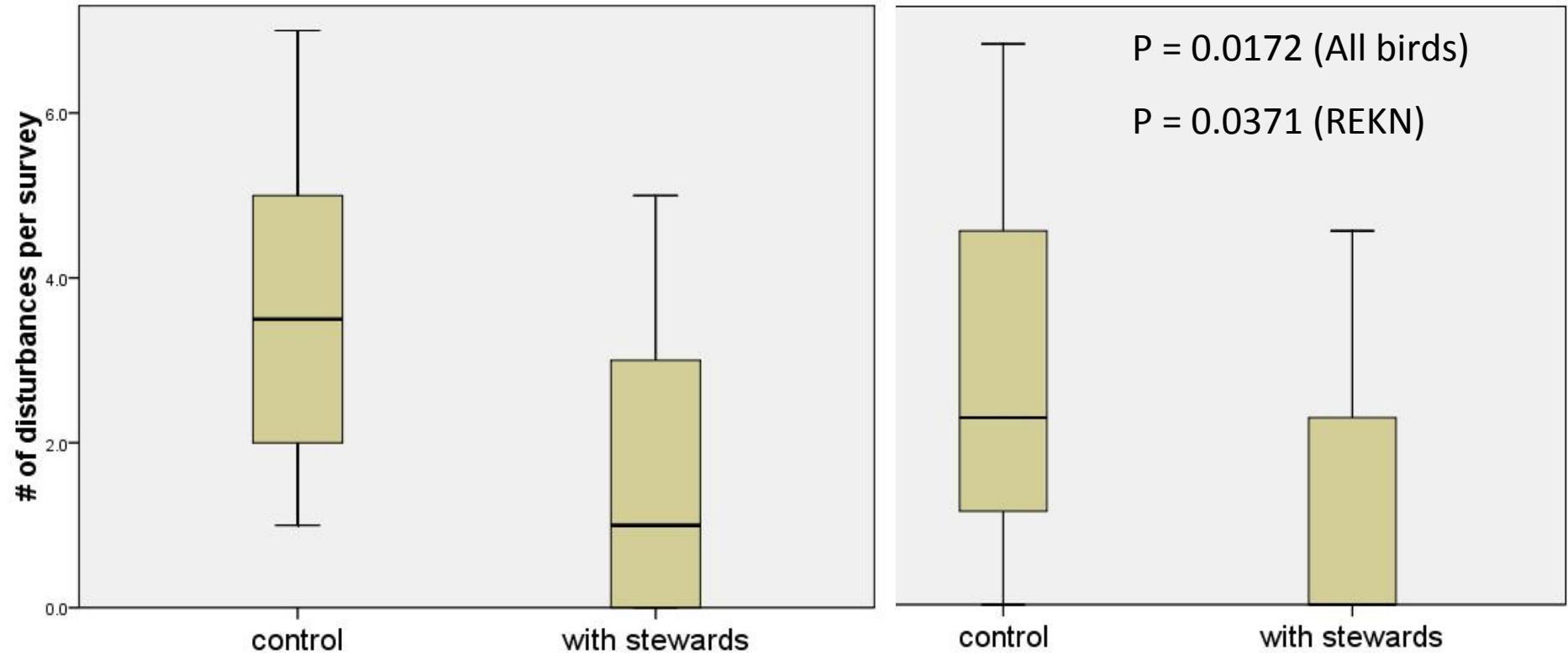
Avalon NJ: Fall Shorebird Stewardship Program/Study, November 2011, 3 weeks. J.Isaacs: Site Coordinator; Dr. Niles: Head of Study, CWF; Dr. Joanna Burger: Rutgers University

Steward educating public, asking for cooperation

# RESULTS of VOLUNTARY AVOIDANCE

## ALL SHOREBIRD SPECIES

## RED KNOTS ONLY



Mann Whitney U-TEST

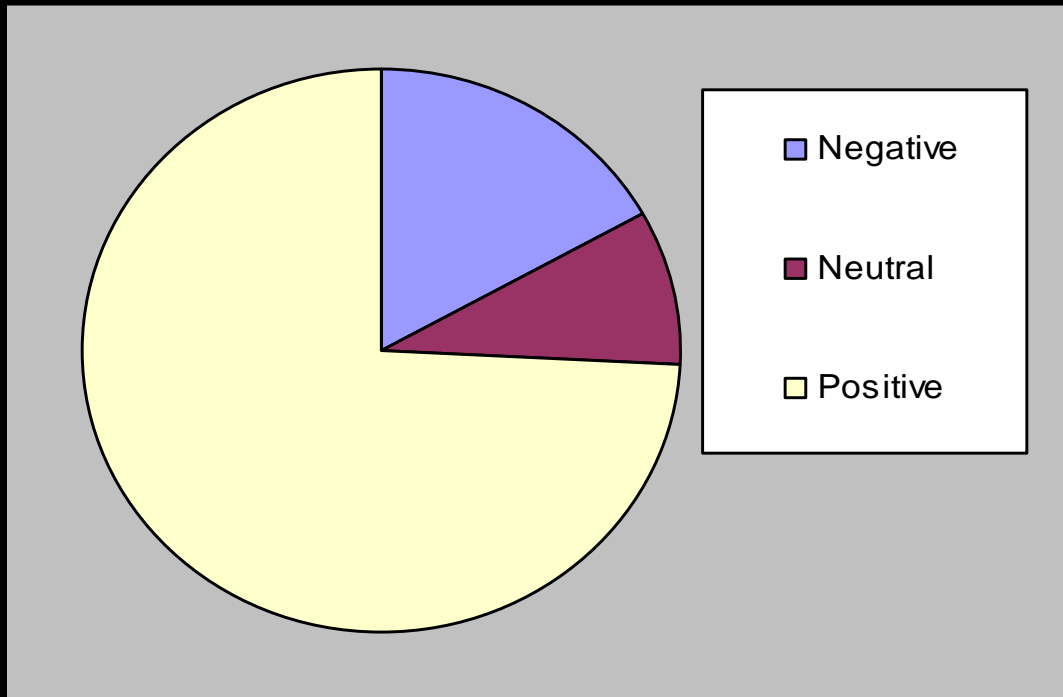
134 Disturbances

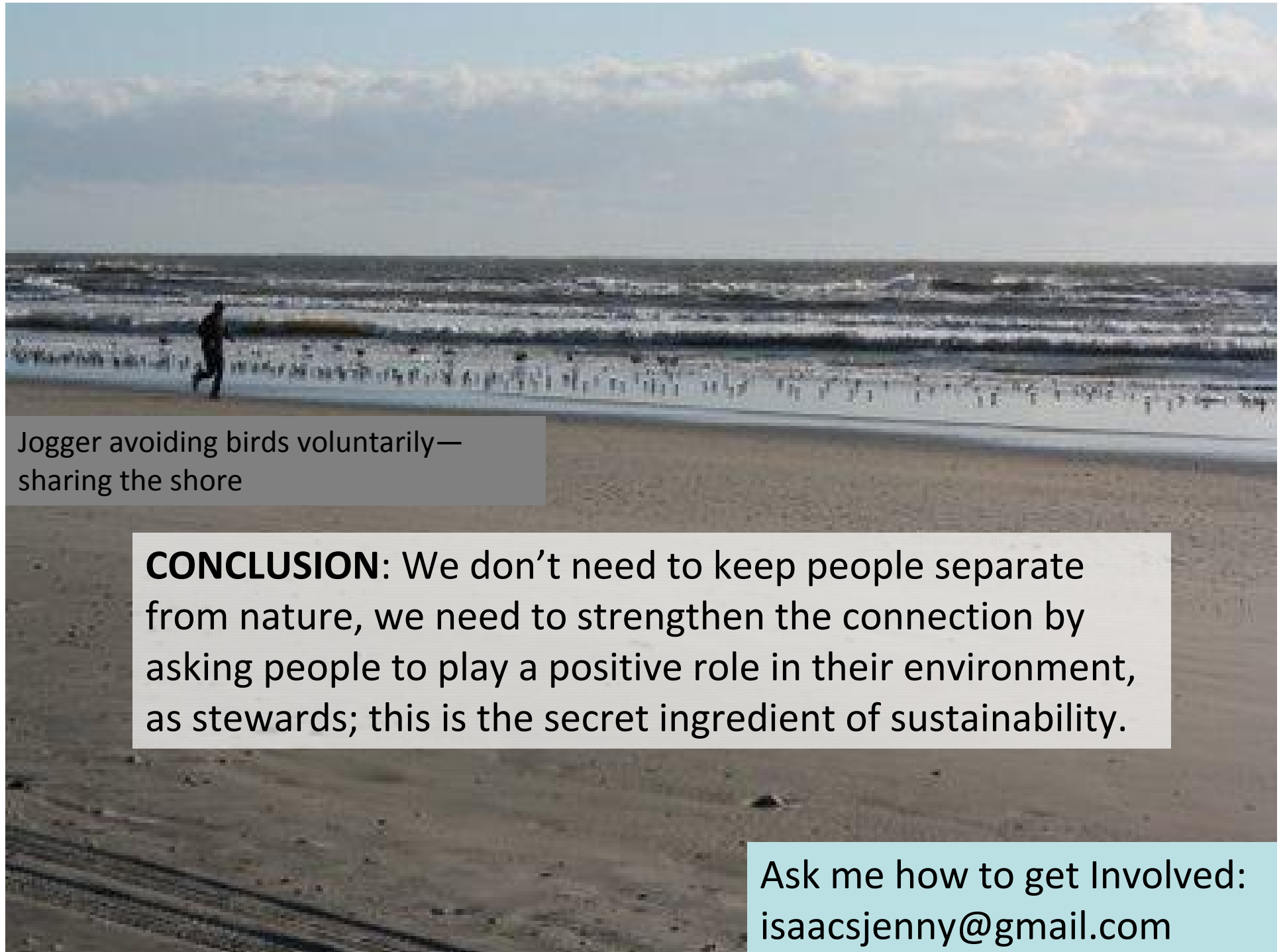
Key finding: Much fewer disturbances with Stewards Present





Public Response to Voluntary Avoidance: GOOD IDEA?  
Survey Results: 135 responses: 17 negative, 9 neutral,  
75 positive (generally)





Jogger avoiding birds voluntarily—  
sharing the shore

**CONCLUSION:** We don't need to keep people separate from nature, we need to strengthen the connection by asking people to play a positive role in their environment, as stewards; this is the secret ingredient of sustainability.

Ask me how to get Involved:  
[isaacsjenny@gmail.com](mailto:isaacsjenny@gmail.com)