

Nest Success

National Geographic takes note of pelican preservation effort

SCOTT T. WALTER IS EARNING HIS PH.D. the hard way, spending four months a year beneath the blazing sun on barrier islands in the Gulf of Mexico. He is studying the nesting grounds of Louisiana's state bird, the brown pelican. His efforts caught the attention of *National Geographic* magazine, which plans to include an article about his work in its August issue.

Walter said his job is both challenging and rewarding. Befuddled brown pelican chicks snap at him with their hooked beaks as he helps tag and relocate them to potential nesting grounds. For three weeks, he feeds them fish by hand, sling-ing hundreds of pounds of pogy into their gaping mouths.

After Hurricane Katrina laid waste to the Louisiana coast, funding began to flow from Washington, D.C., to learn more about the impact of hurricanes on coastal saltwater ecosystems. The University of Louisiana at Lafayette, in collaboration with the U.S. Fish and Wildlife Service and the Louisiana Department of Wildlife and Fisheries, began a \$200,000, multi-year study in 2006 to explore ways to help ensure the survival of brown pelicans in an environment vulnerable to powerful storms. Dr. Paul Leberg, a biology professor, directs the ecology and conservation research aspects of the study.

Walter works on the Isles Dernieres, "the last islands," Louisiana's western-most barrier island chain, about 75 miles southwest of New Orleans. "Almost half of all the brown pelicans in Louisiana are nesting in my study site, so if a really strong hurricane comes over that region . . . that could wipe out a large portion of the Louisiana population," he said.

Of the four islands, only two are nesting grounds. Brown pelicans built about 5,500 nests last year on Raccoon Island and another 500 on Wine Island. Walter is trying out two management techniques

to encourage the birds to spread out a bit: moving young, still flightless birds to Whiskey Island; and setting out pelican decoys on Trinity Island, hoping to attract adult couples looking for a suitable place to nest.

The study seeks to answer an important question: Will adult birds make their nests on the island where they were born, or the island where they first took flight?

"Brown pelicans have strong fledg-site fidelity," explained Walter. They have a tendency to return to the area where they "fledged," that is, left the nest. Walter is moving the young birds about six miles from their birthplace; the study will reveal whether translocation is an effective way to create new coastal colonies.

Until now, biologists have studied pelicans

from the air. Walter says his work is "on a finer scale." He and an assistant comb the islands' beaches, monitoring 300 nests and documenting them with digital photos.

"It's a very laborious process of using photo plots. To see into the colony, I drag around this enormous ladder all summer. I have stakes in the sand, so I know exactly where to put the ladder, so that my photos line up every time I'm surveying the nests."

The study is now in its third year. So far, Walter has helped place identification tags on 1,000 birds; 500 more will be tagged this season. Each of the birds

is banded and has a blood sample taken. This year, the researchers achieved a biological first, determining the gender of the birds through those samples.

Twice a week, Walter looks for the banded birds, recording their movement patterns. "The survey will tell us whether there are any differences in movement patterns by gender."

Because brown pelicans take three years to reach reproductive maturity, the researchers won't be able to fully measure the success of their efforts until next year, when the first batch of translocated birds returns to the area to nest.

Walter is on track to earn his doctorate in May 2011, so he'll be able to see the project through to its conclusion. He says he hopes all the hours spent in the Gulf will pay off for the brown pelican.

"These islands are being degraded rapidly, so the sooner we can establish more populations, the more likely it will be that we have a total population of birds that is more spread out and less susceptible to any one storm." ■



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Scott T. Walter holds a nine-week-old chick.

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