

DRY TORTUGAS EXPEDITION

Bird Banding in the Dry Tortugas

*In May 2005, Dalia Amor Conde carried Wings WorldQuest Flag #3 on an expedition to study the population of sooty terns (*Sterna fuscata*) that migrate through the Florida Keys' Dry Tortugas National Park in the Gulf of Mexico. The most remote of the islands of the Florida Keys, Dry Tortugas is famous for its ancient shipwrecks, loggerhead turtles, and the hundreds of birds that stop on their migratory return from the tropics to North America.*



Dalia Amor Conde holds Wings WorldQuest Flag #3 in the Bush Key study area for the sooty tern near Fort Jefferson in Dry Tortugas National Park.

Working with Fernando, who is studying the population dynamics of sooty terns and the possible effects of global warming on these populations, afforded Dalia an opportunity to learn different field-study techniques in one of the most fascinating areas in the Americas.

WORKING IN THE FIELD

Soon after arriving on Dry Tortugas, Dalia and Fernando captured sooty tern chicks that were present on the study plot. The plot is located on Bush Key, one of the seven coral reefs that make up Dry Tortugas. Banding the chicks, marking them on the head, and observing adults feeding the chicks allowed the researchers to assess paternity relationships and to observe behavioral patterns.

By using telescopes, Dalia and Fernando were also able to identify and record information about adult sooty terns inside and outside the study plot by checking previously applied bands.

Dalia, who regularly studies rainforest deforestation and wildlife issues in southeast Africa, participated in a very different expedition during her 2005 field season. She joined her husband, Fernando Colchero, and a research team working under Sonny Bass to continue a 45-year database begun by Bill and Betty Robertson concerning the sooty tern.



WHO
Dalia Amor Conde

WHAT
Banding sooty terns in Dry Tortugas National Park

WHERE
Dry Tortugas, Florida Keys, United States

WHY
To participate in the long-term field study of population dynamics of sooty terns

PROJECT FINDINGS: A SHIFT IN THE NESTING SEASON OF SOOTY TERNS

According to data that has been collected over a 45-year period, sooty terns have shifted their breeding season to earlier in the year. The result is a nesting season that occurs four months earlier than originally recorded. Is this due to ocean warming or availability of resources? So far, the Bush Key's sooty terns are the only colony in the region to have shown this shift.

Sonny and Fernando believe the shift may be due to local weather conditions. Analyzing the database to discover if there is any correlation between the number of hurricanes and the warming dynamics in the Gulf of Mexico, they are also studying the population history of the capture and the recapture of individual sooty terns to observe their effect on the nesting season.

ADVICE FOR JOINING AN EXPEDITION

One of the best ways to join an expedition is to be a volunteer. Once chosen, you will have the opportunity to learn from experienced team members, and you can begin planning your own future projects and expeditions.



The sooty tern colony, with Fort Jefferson in the background



Banding and weighing a sooty tern chick