



Post Fellowship Reporting - Project Summary

Report Title: Research Expedition of Belize's Biodiversity, Ecosystems, and Factors Affecting their Survival

Name: Bianca Buckelew

Other Team Members:

Program: San Francisco Program

Trip Dates: 11/30/-0001 - 11/30/-0001

Location Visited: Blackbird Caye and Belize City, Belize

Post Fellowship Reporting Template: PFR Template 01

Project Summary: As global warming becomes one of our world's most pressing issues, I felt compelled to research the behavior of existing species and their environments in Belize. Belize is known for its lush jungles and coral reefs and these environments are the homes for a diversity of fish, mammals, and plants. As a result, our impact upon the environments is crucial in understanding the danger these fish, mammals, and plants face. I, along with Oceanic Society and local research biologists, explored the current behavior of howler monkeys, manatees, dolphins, and the fish of coral reefs. In order to understand their behavior we measured other crucial factors that may be influencing their actions. We measured salinity, air and water temperature, turbidity, depth, ocean floor type, and existence of boats in the area. Our findings indicated that corals were bleaching at above 84 degrees, manatees were surfacing and leaving their sanctuaries with the presence of boats, and dolphins were remaining close to mangroves (which are disappearing as humans continue to build resorts). As a result of this research expedition, I gained a better understanding of the intricacies of our environments and actions and I learned that conservation must be at the heart of education in order to preserve our wildlife and world.

Career Impact: • Increased understanding of the biodiversity in jungles and coral reefs

- Provided with skills to research marine life
- Participated in authentic research of dolphins and manatees
- Gained new perspective on global warming and its effect on wildlife
- Gained new activities and strategies on how to integrate biodiversity, conservation, ecosystem interdependence, and global warming into science standards and curriculum

Classroom/Community Impact:• Inspired teachers to continue their own education and to connect it with student learning

- Encouraged students to recognize the importance of recycling and composting
- Increased relevance of science to real world issues and life
- Created new curriculum in response to science standards regarding ecosystems and their species

Open Response: • A power point presentation of species in Belize, their environments, and what endangers them

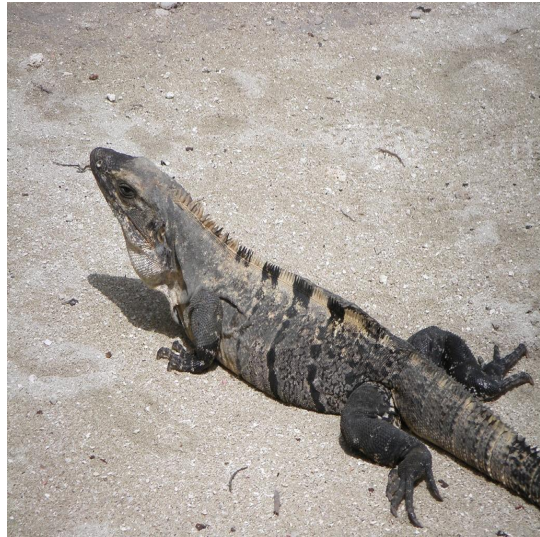
- Fourth grade curricular unit on ecosystems
- Student group working toward increasing awareness around global warming

Quote: Exploring Belize's biodiversity and ecosystems enabled me to connect real world problems, like global warming, to science in the classroom.

Photos:



Oceanic Society's Research Station in Belize



Local Iguana (One of Many)



Traveling Dolphins



Manatee Mom and Calf



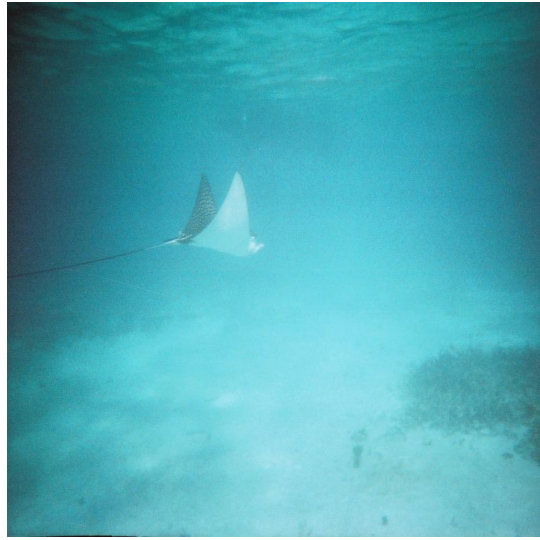
Howler Monkey in the Jungle



Breathtaking View of Natural Wonders



Exploring the Coral Reefs



Spotted Eagle Ray