COMMUNITY-BASED CONSERVATION OF MARINE TURTLES ON TETEPARE ISLAND, SOLOMON ISLANDS

Allan Bero¹, Hobete Aku¹, John Read², Katherine Moseby², Gillian Goby¹, Eleanor Sterling³, and Michael Esbach³

² Ecological Horizons, Adelaide, Australia

Tetepare Island, the largest uninhabited island in the South Pacific, is an icon of Solomon Islands biodiversity and conservation management. In response to destructive logging threats, displaced landowners formed the Tetepare Descendants' Association (TDA) with the core objective of conserving natural resources for the use of future generations. TDA's flagship conservation program is focused on monitoring and conserving marine turtles, particularly greens (*Chelonia mydas*), hawksbills (*Eretmochelys imbricata*), and leatherbacks (*Dermochelys coriacea*), in both their foraging and nesting environments. Through this monitoring, TDA seeks to gain a better understanding of the demographic characteristics, distribution, and population status of globally endangered sea turtles around Tetepare. By strengthening and expanding existing community-based monitoring programs, this project also seeks to empower local communities to manage their resources, laying the foundation for long-term marine turtle conservation. In addition, by linking this community-based effort to nearby islands, this project is able to catalyze partnerships that can cope with local economic and social challenges to sea turtle conservation. Results from this study will improve our overall understanding of sea turtles in the greater Pacific region, and contribute to the development of an effective management plan to protect sea turtles and their ecosystems around the island.

U.S. NAVY ENVIRONMENTAL COMPLIANCE AND CONSERVATION EFFORTS FOR SEA TURTLES IN THE ATLANTIC AND GULF OF MEXICO

Danielle M. Buonantony¹, Richard. J. Nissen², David T. MacDuffee², Keith A. Jenkins³, Anurag Kumar⁴, and Andrew DiMatteo⁴

² U.S. Fleet Forces Command, Norfolk, VA, USA

³ U.S. Navy Marine Mammal Program San Diego, CA, USA

Environmental stewardship is an integral part of the Navy's mission. It protects and preserves the capabilities of training areas, ensures operational flexibility, and sustains the resources and public support needed to carry out the Navy's mission. The Navy is responsible for compliance with a suite of environmental and natural resources laws and regulations that apply to the marine environment, and in particular, to sea turtles. To comply with these mandates, the Navy works closely with regulatory agencies and must be able to properly evaluate the impacts of at-sea training activities on protected species. In order to institute efforts to minimize these impacts there must be: 1) the best available data on the density and distribution of the species in question; 2) the criteria necessary to assess impacts; and 3) the creation of the practical mitigation measures. To meet these objectives, the Navy developed the Navy Marine Species Density Database (NMSDD) which documents density estimates for all sea turtle populations where the Navy primarily trains in the Atlantic Ocean and Gulf of Mexico. The Navy also established an initial set of

¹ Tetepare Descendants' Association, Munda, Solomon Islands

³ Center for Biodiversity and Conservation, American Museum of Natural History, New York, NY, USA

¹ Chief of Naval Operations, Washington, D.C., USA

⁴ Naval Facilities Engineering Command Atlantic, Norfolk, VA, USA

quantitative criteria for assessing acoustic impact to sea turtles from sonar and explosives. These data are utilized in regulatory compliance documents to support quantitative modeling and qualitative assessments of the potential impacts of a variety of Navy stressors on sea turtles and their habitats, including but not limited to the use of sonar, explosives, and military expended materials. Additionally, the Navy employs mitigation measures both at-sea and on Navy installations to minimize the impacts of Navy activities on sea turtles and to promote conservation of their populations. Some of these measures include monitoring sea turtle nests on Navy beaches during the nesting season, having trained lookouts to observe mitigation zones during at-sea training activities to minimize potential effects to sea turtles, and conducting or funding sea turtle research to reduce knowledge gaps. The Navy continues to be a leader in environmental stewardship and utilize the best technology and techniques to improve our compliance and conservation efforts with respect to sea turtle populations. However, deficiencies in the amount or quality of data available, as well as access to research, can significantly limit the Navy's ability to assess and mitigate impacts. As a result, the Navy plans to improve partnerships with international, federal, state, and local agencies; public and private organizations; and academic institutions by engaging stakeholders to maximize our effectiveness in addressing environmental issues.

NESTING OF LEATHERBACKS AT COSTA RICA NORTH CARIBBEAN COAST

Didiher Chacón-Chaverri¹, Didiher A. Chacón-Vargas¹, Luis Fonseca-Lopez¹, and Vanessa Lizano²

1 WIDECAST, Costa Rica

The project was developed in the north Caribbean coast of Costa Rica, particularly on Pacuare and Moín Beaches. The objective was the protection and monitoring of sea turtle nesting on these locations. These places have very strong and particular threats over the nests, nesting females and habitat. The poaching of eggs, the hunting specifically over green and hawksbill and the impact of ocean erosion, expressed as loss of sand, excess of organic matter deposited on beach and coastal floods were the most important impacts over the nesting critical habitats. Both places show a nesting over 2000 nests of leatherback, green and hawksbill turtles. Monitoring and conservation patrols, hatcheries, alternative livelihoods and environmental education were some of the activities developed to reduce the impacts and increase the number of hatchlings getting the water.

COMMUNITY BASED SEA TURTLE CONSERVANCY IN SOUTHEASTERN PUERTO RICO: PROYECTO ATMAR A STORY OF SUCCESS.

Luis A. Crespo¹, Carlos E. Diez², and ATMAR volunteeers¹

Proyecto ATMAR, Maunabo, Puerto Rico

Since 2001 and through the ATMAR Project, community volunteers in the coastal town of Maunabo southeast of the island of Puerto Rico have worked to assist in the conservation of sea turtles. This project is a story of success in community-based turtle conservation. Organized and run by community volunteers who are committed to stop the poaching of nests and turtles, ATMAR Project is the oldest of its kind in Puerto Rico and has become a model for other coastal communities on the island. It has worked continuously for 12 years and has helped other communities to get organized and to work for the same purpose. More than 65 volunteers have been involved with the project, and several thousand people have

² Ecopareadero, Limón, Costa Rica

² Puerto Rico Department of Natural Resources, San Juan, Puerto Rico