

Title:

Monitoring of Green (*Chelonia mydas*) and Hawksbill (*Eretmochelys imbricata*) Sea Turtles at a Near Shore Foraging Area in the Commonwealth of the Northern Mariana Islands using an Indigenous Approach Committee

Dr. Chris Lepczyk (Committee Chair)

Dr. Melissa Snover (Outside Committee member)

Dr. Greg Bruland (Committee member)

Abstract:

In the Western Pacific Ocean, both hawksbill (*Eretmochelys imbricata*) and green (*Chelonia mydas*) sea turtles have experienced substantial declines, especially due to human exploitation by direct capture in hunting practices. Severe overharvest in the Pacific has been attributed to the loss of traditional restrictions that had limited the numbers of turtles taken by island residents, loss of the spiritual significance of sea turtles, increase in access to remote nesting beaches by indigenous fishermen outfitted with modern equipment (i.e. spear guns, outboard motors, SCUBA), and inadequate regulations and lack of enforcement. Within the Western Pacific Ocean, one region of apparent particular importance for foraging hawksbill and green turtle populations is the Commonwealth of the Northern Mariana Islands (CNMI). CNMI not only harbors what appears to be an important subpopulation, but also has been a location of unknown levels of human exploitation. Given the limited amount of information available on sea turtles in the CNMI, it is critical to begin assessing the population dynamics of these species to provide a basis for recovery efforts throughout the region. The goal of this project was to create a data baseline for immature foraging hawksbill and green sea turtle populations in Saipan, Tinian, and Rota CNMI using mark-recapture. The objectives of this study were: 1) to provide a preliminary description for hawksbill turtle population structure and size class composition in a coastal foraging habitat area of Saipan; 2) to determine size class composition for green turtles in coastal foraging areas of Saipan, Rota, and Tinian; and, 3) to describe an indigenous method for capturing sea turtles in near shore waters.