

## **Escudo de Veraguas Island**

ESCUDO DE VERAGUAS ISLAND: ANOTHER IMPORTANT NESTING SITE FOR THE HAWKSBILL TURTLE (*ERETMOCHELYS IMBRICATA*) IN THE NGÖBE-BUGLÉ AUTONOMOUS REGION, BOCAS DEL TORO, PANAMA

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### **Abstract**

In the Bocas del Toro region of Panama, there exist several important nesting beaches for hawksbill (*Eretmochelys imbricata*) and leatherback (*Dermochelys coriacea*) turtles. Most notable of these is Chiriquí Beach, located in the autonomous indigenous region of the Ngöbe-Buglé. This area was once described by Dr Archie Carr as the most important hawksbill nesting beach in the Caribbean, and today it remains a major nesting site for this species, in addition to hosting a regionally significant leatherback population.

Sea turtles have historically played an important role in the economy of the region; for several centuries hawksbills were hunted extensively in the area, and in the 20<sup>th</sup> Century, the harvest supported the international tortoiseshell market, as well as local demand for hawksbill products. These hunting pressures were presumably the reason for the substantial decline in hawksbill nesting observed at Chiriquí Beach in the 1980's and 1990's. In 2003, a long-term project for the investigation and recovery of the hawksbill population was established in collaboration with the local Ngöbe communities. Several locations were chosen for inclusion in the project, including Chiriquí Beach, Escudo de Veraguas Island, and the Zapatilla Cays in Bastimentos Island National Marine Park. These areas were selected as historically they supported hawksbill nesting populations.

## 28th Annual Symposium on Sea Turtle Biology and Conservation

Escudo de Veraguas, which lies 14 km off the coast of Chiriquí Beach, is an important center for artesanal fishing activities conducted by members of local indigenous communities. The surrounding reefs provide feeding habitat for hawksbills and green turtles; and green turtles migrate through the area en route to nest in Tortuguero, Costa Rica. The island has 12 beaches that are used by nesting hawksbills, varying in length from small pocket beaches to 2 km. Because of the remoteness of the island, nesting surveys were conducted once every 15 days. All nests were marked and the locations recorded using GPS. Nest surveys conducted from 2003 to 2007 documented a minimum of 20 – 87 hawksbill nests per year. In addition, 5 – 10 leatherback nests and 2 – 5 green turtle nests have been recorded annually.

The major threats to the continued survival of hawksbills nesting at Escudo are direct capture of adult and juvenile turtles in local waters by harpoon fishers and divers, illegal collection of eggs, erosion and predation. These factors threaten the success of the project, but it is hoped that with continued efforts aimed specifically at increasing the awareness of local fishermen to the impacts of their activities on hawksbills in the region, that positive results can be obtained.

The monitoring results reveal the significance of Escudo de Veraguas as a nesting site for hawksbill turtles. They also justify the continued monitoring of the island and support calls by research personnel for improved protection endeavors by Panamanian authorities to reduce in-water capture of turtles and illegal take of eggs from nesting beaches. Legislation has recently been proposed to designate Escudo de Veraguas as a Natural Monument Protected Area which would benefit sea turtle conservation and indigenous communities under constant pressure to develop the island.