Marine Turtle Newsletter 112:14, © 2006

Marine Turtle Newsletter

Hawksbill Turtles on the Pacific Coast of Costa Rica

Alexander Gaos, Randall Arauz & Ingrid Yañez

Asociación Programa Restauración de Tortugas Marinas -PRETOMA-, Apdo. 1203-1100 Tibás, Costa Rica. (E-mail: <u>info@tortugamarina.org</u>)

The hawksbill turtle (*Eretmochelys imbricata*) is endangered throughout its range and the status of this species is of highest concern in the Pacific (NMFS 1998). Confirmed nesting and/or in water observations of hawksbill turtles on the Pacific coast of Costa Rica are extremely rare and in most cases anecdotal, having been reported by local inhabitants. In this note we summarize observations of hawksbill nesting between 1996 and 2005 at beaches monitored by PRETOMA along the Pacific Coast of Costa Rica.

In 1996 PRETOMA staff recorded two hawksbill nests at Punta Banco (8° 21'30N, 83° 08'17W), although the females were not observed (Table 1). In 2002, at this same site, two female hawksbill turtles were observed and measured although only one was recorded laying. All clutches laid a this site were relocated to a hatchery.

In 1999, two clutches were recorded at Cana Blanca (8° 17'00N, 83° 01'47W), one of which was observed and the female measured (Table 1). In 2001 a further clutch was recorded at this site, although the female not observed.

In 2005, PRETOMA staff recorded two clutches laid at Playa Caletas (9° 44'36N, 85° 14'36W). In both instances females were observed and measured (Table 1). One month later one of these individuals was recorded again although failed to nest. All of the clutches laid at this site were moved to a hatchery.

In addition to recording nesting activity, on 3rd November 2005, at Punta Banco, a live female hawksbill became entangled in the hand line of a local fisherman. After a short rest on the beach the turtle made its way back to sea unassisted.

A total of three dead hawksbill turtles have been registered by PRETOMA staff since 2000. On 27th April 2005, the carcass of a hawksbill turtle was found at Playa Ario, the subsequent beach to the south of Playa Caletas (no morphometric data available). A dead hawksbill turtle was found at San Miguel (9° 48'44N, 85° 18'44W) on August 13th 2004 (CCL 60.5cm, CCW 55) and another in October of 2000 (no morphometric data available).

Although there have been few hawksbill nesting events reported along the Pacific coast of Costa Rica, it is important to note that in the past there have been few sea turtle conservation projects in the region. Additionally, the olive ridley (*Lepidochelys olivacea*) is the most predominant sea

turtle found nesting along the Pacific coast of Costa Rica and has tracks very similar to those of the hawksbill. Considering that many of the documented nesting events reported by PRETOMA indicate that only track marks are encountered and the actual turtle is not, as is most likely the case with other olive ridley based projects as well, thus it is possible that some hawksbill nesting events are mistakenly reported as olive ridley events.

The fact that most sea turtle conservation project that exist today on the Pacific coast of Costa Rica have not been functioning for more than a few years, leading to a lack of baseline data, it makes it difficult to estimate the current state of Eastern Pacific hawksbill populations when compared to historical numbers. In any case, it is apparent that hawksbill turtles are rare in the Eastern Pacific. This is most likely in at least part due to the traditional unsustainable collection of eggs for human consumption, capture by industrial fishing operations and the use of hawksbill shells for items such as jewelry and adornments.

Beach	Year	Event Date	Nest(s) Laid	CCL	CCW	Clutch size	Hatch Success (%)
Punta Banco	1996	1st November	1	Not obs.	Not obs.	103	95.15
Punta Banco	1996	2nd December	1	Not obs.	Not obs.	106	Unavailable
Caña Blanca	1999	9th August	1	Not obs.	Not obs.	171	70.08
Caña Blanca	1999	27th August	1	91cm	82cm	183	40.98
Caña Blanca	2001	20th November	1	Not obs.	Not obs.	114	Unavailable
Punta Banco	2002	16th July	0	72cm	65cm	-	-
Punta Banco	2002	19th July	1	as above	as above	124	96.77
Punta Banco	2002	15th October	0	63cm	61.5cm	-	-
Playa Caletas	2005	15th July	1	78cm	69cm	127	100
Playa Caletas	2005	18th July	1	71cm	62.5cm	103	86.41
Playa Caletas	2005	16th August	0	as above	as above	-	-

Table 1. Beach, year, event date, nests laid, total number of eggs, hatchlings produced and hatching success for each of the hawksbill nesting events recorded by PRETOMA

NATIONAL MARINE FISHERIES SERVICE & U.S. FISH & WILDLIFE SERVICE. 1998. Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle (*Eretmochelys imbricata*). National Marine Fisheries Service, Silver Spring, MD.