

Breeding population status of sea turtles in Kachchh, Jamnagar and Junagadh coasts of Gujarat State, India

S.F. Wesley Sunderraj, Justus Joshua, V. Vijaya Kumar, J. Sesh Serebiah, I.L. Patel, A. Saravana Kumar, and Nischal M. Joshi

Gujarat Institute of Desert Ecology, India

Gujarat state is situated in the Northwestern frontier of India and has the longest coastline covering 1600 km and contributing 22% of the total coastline (7100 km) of India. However four endangered marine turtle species (*Dermochelys coriacea*, *Chelonia mydas*, *Lepidochelys olivacea* and *Eretmochelys imbricata*) are believed to occur in Gujarat coast, the information available on their breeding status and distribution is scant. Rapid industrial and maritime related developments along the coast poses severe threat to coastal ecology. Therefore under GOI – UNDP Sea Turtle Project an intensive status survey was conducted along the potential coastline of three districts (Kachchh, Jamnagar and Junagadh) of the state. During this study only nests of olive ridleys and green turtles were found. Out of 664 nests recorded, Green turtle nests contributed 69%

(459 nests). Irrespective of species, the estimated overall nest density for the entire stretch was 1.82 nests/km. Among the districts, Jamnagar coast showed high nest density for both the (olive ridley 0.81 nests/km and green 3 nests/km) species compared to other districts. Egg predation by human and animal, spread of oil particles, sand mining and sewage pollution were the major threats identified in the study area. Overall egg predation rate along the coast was 57%. Nests were more prone to animal predation (36%) than human beings. Species specific predation rate showed that, olive ridley nests were under high predation (62%) compared to green turtle (55%) nests. Potential nesting beaches for each coastal district were identified and broad management strategies have been suggested.

Tayrona's National Park: a life opportunity for the sea turtles at the Colombian Atlantic Coast

Fabián Andrés Sánchez Dorado¹, Diego Amorochó², and Jairo Ortega³

¹ WIDECAST - Colombia, Tel. 57 - 2 8214160 Popayán, Departamento del Cauca - Colombia.

² WIDECAST - Colombia.

³ Parque Nacional Natural Tayrona - Colombia.

The evaluation made at the Tayrona's National Park of the 2001 nesting season as well as a beaches description, allowed us to establish *Eretmochelys imbricata* (hawksbill turtle) and *Caretta caretta* (loggerhead turtle) as the main species nesting in the area. There were a total of 22 hawksbill female turtles which laid 17 nests and 7 loggerhead turtles with 3 nests. The clutch size average it was 132. A total of 2 leatherback turtles (*Dermochelys coriacea*) with 2 nests and 1 green turtle (*Chelonia mydas*) showed a sporadic nesting behaviour of these species. This could be related to a migratory journey to Acandí beach in Colombia or towards other areas in Central America. According to these results, the Tayrona Park would be the main nesting place in the northern area of the Colombian Caribbean

for species like loggerhead and hawksbill, despite other beaches considered important in this area. The beaches dynamic, its composition and the alternate use of beaches between species during the season were considered determinant factors in the selection of this area for reproductive processes of the species. However, in this preserved area threats like the stealing of eggs, tourist impacts, incidental catch in fisheries and the transformation of the habitats which affect the normal development of the reproductive process, still continue. This situation makes necessary to start protection campaigns, preservation and research of this area. The present study showed the importance that Tayrona's Park has for the preservation of the sea turtles in the Colombian Central Caribbean.

First nesting activity of the loggerhead sea turtle, *Caretta caretta*, in the Spanish Mediterranean coast

Jesús Tomás¹, J.L. Mons², J.J. Martín², J.J. Bellido², and J.J. Castillo²

¹ Instituto Cavanilles de Biodiversidad y Biología Evolutiva, University of Valencia, Valencia, Spain

² Centro de Recuperación de Especies Marinas Amenazadas. Aula del Mar, Málaga, Spain

INTRODUCTION

In the Mediterranean sea, the loggerhead sea turtle (*Caretta caretta*) nests preferably in the eastern and central basins, whereas in the western basin nesting activity is limited to sporadic emergences. The Spanish Mediterranean waters harbour large stocks of loggerheads, mainly juveniles, in foraging activity (Tomás et al. 2001). It is possible that this species has nested in the Spain's Mediterranean coast in the past. However,

to date, the only nesting evidence reported in these coasts is the finding of a hatchling in a nature reserve at the Ebro River Delta (Llorente et al. 1993), although this possibility has been indicated in other previous studies. The sea turtle nesting season coincide with the tourist high season in the Mediterranean. The continuous development of tourism and the increasing demographic pressure throughout the Spanish Mediterranean littoral zone affects the conservation of these coasts. The environmental consequences caused by these human activities prevent the es-