

# Turtle Tales

— Frontline, May 26, 2000

---

One of the most eagerly awaited events in the wildlife calendar of the country is the mass nesting of tens of thousands of Olive Ridley Sea Turtles on the coasts of Orissa. This spectacular event, which has become immensely popular, draws a lot of media attention. However, in other parts of India, there are several nesting grounds of quite a few other turtle species that do not quite draw the attention that they deserve. Perhaps the most significant of these 'neglected' areas are the remote islands of the Andaman and Nicobar (A&N) in the Bay of Bengal.

The Orissa coast may be unmatched for the sheer numbers of nesting Olive Ridleys, but the unique features of the turtle nesting grounds in the Andaman and Nicobar Islands are the many species of turtles that nest here and the spectacular beauty and landscape of the beaches and the islands themselves.

All eight species of sea turtles that are found in the oceans of the world are threatened and have been listed in the Red Data Book of endangered animals of the International Union for the Conservation of Nature (IUCN). The Andaman & Nicobar Islands are considered the best nesting sites in India for three of these species: the Giant Leatherback (*Dermochelys coriacea*), the Green Sea Turtle (*Chelonia mydas*) and the Hawksbill (*Eretmochelys imbricata*). Additionally the Olive Ridley (*Lepdochelys olivacea*) also nest here in substantial numbers.

Perhaps, the most comprehensive study of turtles on these islands is 'The Status and Ecology of Sea Turtles in the Andaman and Nicobar Islands' by Satish Bhaskar of the Madras Crocodile Bank Trust (MCBT), published in 1993. Bhaskar's study, conducted over a decade and a half, has interesting and critical information on the turtles of the islands.

In the islands, tribal populations such as the Great Andamanese, the Onge and the Nicobarese have traditionally hunted turtles. The small numbers of these tribal people and the fact that they resorted only to subsistence level hunting meant that the turtle species were not threatened. In fact, experts believe that the existence of tribal

reserves, into which the entry of non tribals is restricted, has saved several populations of sea turtles from extinction. For instance, the only known nesting sites of the Giant Leatherback Turtle are on uninhabited islands or in tribal reserves.

However, there are indications that the turtle population in the islands is declining rapidly owing to a variety of factors: increased pollution of the ocean waters, deaths caused by turtles being ensnared in fishing nets, continued hunting of turtles for meat, destruction of turtle nests and large-scale destruction of the beaches where they nest.

One of the most destructive influences are dogs, which were brought to the islands around 1860 by the British and which are now to be seen in many parts of the islands. Dogs regularly dig up turtle nests and destroy the eggs. They pick up turtle hatchlings as they head back to the sea after hatching; the canines have also been seen to harass the nesting adults, causing them extreme stress and on many occasions even leading to the abandonment of the nest. The problem, reported from all over the islands, is reaching serious proportions.

The human population in the islands too has increased rapidly in the last few decades – from 50,000 in 1950 to an estimated four lakh today – owing to large-scale immigration from mainland India. The expansion of human settlements has reduced and even eliminated nesting at several locations. Additionally, it has resulted in large-scale mining of sand from beaches for use in the construction industry. Houses were traditionally built with timber, but residents of the islands now opt for concrete structures and the beaches are the only source of sand.

Despite the fact that beach sand, which is very fine and has a high salt content, is unsuitable for use in construction and structures built with it have to undergo major repairs within a decade, it continues to be used. In 1995-96, about 70,000 to 80,000 cu. m. of sand was mined; the figures for 1997-98 were estimated to be about 1,57,000 cu. m. As a result, the beaches, many of which are important turtle nesting sites have been destroyed.

A visit to the beaches around Port Blair offers telling evidence of erosion and ingress by the sea. Narrow strips of sand are all that remain of the beach and several trees lie toppled over the shore. The scene is much the same at the beaches of Corbyn's Cove, Wandoor and Chidiyatapu, all of which are less than an hour's drive from Port Blair. At these sites, there is no more sand

to be mined and the operations have moved further afield to more remote beaches.

In the tiny settlement of Shoal Bay 19 (SB19), about 20 km. to the north of Port Blair, sand mining over the last decade has systematically destroyed the beach, which was a turtle nesting site. Seawater now moves further into the settlement areas and has caused extensive damage to the paddy crop. In a few other areas, the destruction of the beaches has led to increased erosion and ruined plantation crops such as coconut and areca; roads have been washed away in some places.

Such destruction of beaches poses a serious threat to turtles in the islands. The beaches at Corbyn's Cove, Wandoor, Chidiyatapu and SB19 were important turtle nesting sites. Rev. Corbyn (after whom the beach is named) had observed in 1860 that there was 'a large sandy beach' at the site; today Corbyn's Cove is promoted as a tourist spot, and there is little of that or the turtle nesting habitat there.

The case of the Cuthbert Bay Turtle Sanctuary in Middle Andaman, one of the more important turtle nesting sites in the islands is somewhat ironic. On the one hand, it is promoted as a tourist destination for its scenic beauty and nesting turtles. On the other hand a part of this beach has been handed over to contractors for sand mining, which affects the turtles and defeats the very purpose of establishing the sanctuary and promoting tourism.\* The establishment of a fisherman's colony here and the proliferation of dogs have added to the problem.

The beach at Wandoor, on the boundary of what is now the Mahatma Gandhi Marine National Park, was heavily mined for sand 15-20 years ago. Even the mangroves that protected the land from sea erosion were indiscriminately destroyed. Today there is little that remains of the beach. Sea erosion has increased and now threatens the road that runs along the waterfront. This is a common experience in the islands and so is the response: the people recently constructed a 'sea retaining wall' to check the erosion – a function that was hitherto provided for free by the beach sand and the mangroves. Ironically, this wall too is a concrete structure, built using sand mined from some other beach nearby.

A huge trade in turtle eggs and meat continues across the world and the fishing and trawling industry too has taken a heavy toll. Amongst the worst sufferers have been the Olive Riddleys. Dr. Indraneil Das,

---

\*Mining of sand from this beach has now been completely stopped.

Chairperson of the IUCN South Asian Reptile and Amphibian Specialist Group estimates that 30,000 Ridelys were consumed annually in the state of Kerala alone. More recently, in 1998, an equal number of dead Ridelys were washed onto the Orissa coast; the turtles had drowned after being ensnared in trawling nets. The fat, meat and cartilage of the Green Sea Turtle are used to make soup and other delicacies; its flippers are hacked to make shoes for protection against sharp coral. Parts of the Hawksbill Turtle are used to make turtle shell products such as combs, cigar cases, boxes and various ornaments. Large numbers of these species continue to be slaughtered for these purposes. In Tamil Nadu, the carapace of the Giant Leatherback is used to extract oil that is applied on wooden boats to prevent leaks. The oil is also believed to have medicinal properties, principally in the cure of asthma.

The threat to turtles from all these factors must be dealt with urgently. Solutions are needed on many fronts: an alternative medium for construction must be conceived; the dog menace must be controlled; and measures must be initiated to prevent the killing of turtles by the islanders, particularly the fisherfolk. There have, in recent times, been some positive moves in this direction. The Andaman Public Works Division, the largest consumer of beach sand, and the Tourism Department have indicated a willingness to minimise the use of sand in their construction work and, where possible, opt for alternative construction materials such as timber, which is abundantly available. Non Governmental Organisations too have been collaborating with the Directorate of Education in an attempt to spread environmental awareness and sensitivity among the people of the islands.

The needs of wildlife conservation and those of human communities have always appeared to be in conflict. In the Andaman and Nicobar Islands, however, the opposite is proving to be true: the destruction of the beaches which the turtles use for nesting, threatens the survival of not only one of nature's most magnificent creatures. The human communities that depend directly on this environment are also being forced to pay a heavy price – ecological and economic. Sensible conservation policies must be evolved in order to ensure that for once, there will be no losers, only winners.