

STRANDING OF A GREEN SEA TURTLE ON SASIHITLU BEACH, KARNATAKA, INDIA

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A sea turtle carcass was found stranded on 4th September 2024 at Sasihitlu Beach (13.066° N, 74.778° E) in Dakshina Kannada district on the southern coast of Karnataka, India (Figure 1). Measurements of the carapace, plastron, and tail were taken with a flexible one metre measuring tape following Bolten (1999). Based on morphometric data (Table 1) and internal examination during necropsy, the turtle was identified as an adult female (Figure 2).

The dead turtle was necropsied by the Forest Department, and the report indicated that the turtle's death resulted from fatal head trauma, potentially caused by a collision with a fishing vessel. Intensive near-shore fishing operations (predominantly trawling and purse seines) are common across the coasts of port cities Mangalore (Dakshina Kannada district) and Udupi (Udupi district) (Naik *et al.*, 2015) and previous records of green sea turtle strandings along the Karwar city coast have implicated fishery-related activities as the primary cause of mortality (Naik *et al.*, 2015; Pujar *et al.*, 2022). This green sea turtle stranding represents one of the largest individuals recorded along this coastline and is the first report of stranding of the species from the Dakshina Kannada district in recent years.

The necropsy also revealed the presence of vitellogenic follicles, suggesting that the turtle was preparing to breed, with nesting sites for green turtles along this coastline or nearby islands proposed by Sharath (2002, 2006). Another dead adult female green sea turtle was documented on 25th March 2024 at Hoode Beach, Udupi (13.2345° N; 74.4149° E) (Shettigar, unpubl data). The

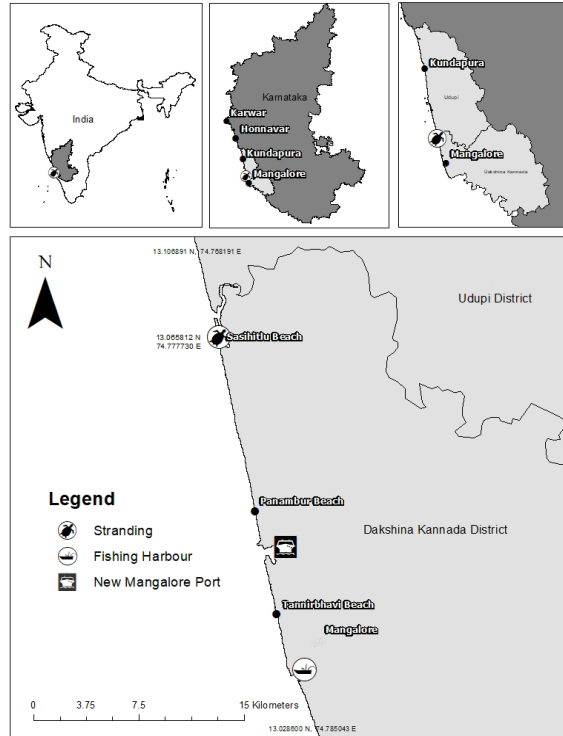


Figure 1. Location of stranded adult green turtle at Sasihitlu Beach. (Map generated using ArcGIS 10.4)



Figure 2. Adult female green sea turtle stranded at Sasihitlu Beach, Dakshina Kannada. (Photo credit: Thejaswini Shettigar)

Table 1. Morphometric data of a stranded adult green turtle at Sasihitlu Beach.

Morphometric	Measurement (cm)
Curved carapace length	104
Curved carapace width	101
Plastron length	89
Plastron Width	81
Total tail length	20

necropsy report revealed trauma along with oviducal eggs, which further supports the possibility of nesting grounds off the southern coast of Karnataka. Green sea turtles have been occasionally observed offshore of the south Karnataka (Udupi and Dakshina Kannada districts) coast by fishers (Shettigar, unpubl data), yet no nesting sites have been recorded along these beaches and the potential occurrence of nesting requires beach surveys for verification. The presence of partially digested jellyfish in the gastrointestinal tract of the green turtle described in this note indicates jellyfish were a dietary item, as has been previously documented in adult green turtles (Stokes *et al.*, 2019)

Between April 2023 and September 2024, 20 green, 52 olive ridley, and four hawksbill turtle strandings were recorded along the coast of Dakshina Kannada and Udupi districts (Shettigar, unpubl data). Historically, turtle strandings in the region often have been neglected or undocumented. This note demonstrates the value of examining stranded sea turtles to collect data about distribution, diet, and breeding status of foraging and potentially nesting turtles.

Literature cited:

Bolten, A.B. 1999. Techniques for measuring sea turtles. In:

Research and Management Techniques for the Conservation of Sea Turtles. (eds. Eckert, K.L., K.A. Bjorndal, F.A. Abreu-Grobois & M. Donnelly). IUCN/SSC Marine Turtle Specialist Group Publication No. 4. Pp. 110-114.

Naik, U.G., S. Haragi, J. Rathod & R. Durgekar. 2015. Stranding of green turtle *Chelonia mydas* on the coast of Karwar. *Indian Ocean Turtle Newsletter* 22: 29.

Pujar, S.S., J. Rathod, S. Haragi & S. Kadapa. 2022. Stranding of sea turtles on the coast of Karwar, India. *Indian Ocean Turtle Newsletter* 35: 10-11.

Sharath, B.K. 2002. Status survey of sea turtles along the Karnataka coast, India. A Government of India/UNDP project report. Karnataka, Dept Biosciences, University of Mysore.

Stokes, H.J., J.A. Mortimer, G.C. Hays, R.K.F. Unsworth, J-L. Laloë & N. Esteban. 2019. Green turtle diet is dominated by seagrass in the Western Indian Ocean except amongst gravid females. *Marine Biology* 166: 135. DOI: 10.1007/s00227-019-3584-3.

Sharath, B.K. 2006. Sea turtles along the Karnataka coast. In: *Marine Turtles of the Indian Subcontinent* (eds. Shanker, K. & B.C. Choudhury). Pp. 141-146. Universities Press: Hyderabad, India.