Notes

RELEASE OF A HAWKSBILL TURTLE CAUGHT LIVE IN A GHOST NET- AN OUTCOME OF CITIZEN SCIENCE INITIATIVES AT CAR NICOBAR, ANDAMAN AND NICOBAR ARCHIPELAGO

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The issue of sea turtles becoming entangled in abandoned ghost nets has been reported across the world and is now a threat to sea turtles in some regions, including the Indian Ocean (Wilcox *et al.,* 2013; Stelfox & Hudgins, 2015; Tyabji & Patankar, 2017; Stelfox *et al.,* 2020). The issue of ghost nets and their potential impact on sea turtles has previously been reported in the Andaman Islands but not elsewhere in the Andaman and Nicobar archipelago (Tyabji & Patankar, 2017).

In the Nicobar Islands, Car Nicobar is a small island inhabited by tribal groups who depend on marine fishing activities for their livelihood and subsistence needs (Kiruba-Sankar *et al.,* 2020, 2023a). During fishing operations on the forenoon of 1st April 2024, in the coastal waters off Teetop village of Car Nicobar, some tribal Nicobarese fishers spotted a live sea turtle trapped in a floating ghost net (Figures 1 and 2). As part of the citizen science initiatives implemented in Car Nicobar, the tribal fishers were aware of the ecological significance of sea turtles and the need for their conservation (Nicobar Times, 2023, 2024). They approached the ghost net and removed the entangled turtle by cutting the net, then released the sea turtle after it was freed. Examination of videos and photos identified the turtle as a juvenile hawksbill turtle (*Eretmochelys imbricata*) (Figure 3). In a video shared by the fishers, the authors of this observation could see a decomposing dead turtle also entangled in the net, however, we could not identify the species.

Hawksbill turtles are recognized as keystone species in coral reef and seagrass ecosystems (Patel *et al.,* 2022). The Andaman and Nicobar Islands are home to nesting and foraging populations of hawksbill turtles (Bhaskar, 1979, Swaminathan *et al.,* 2017). Sea turtles in the area may be legally caught for local consumption by tribal

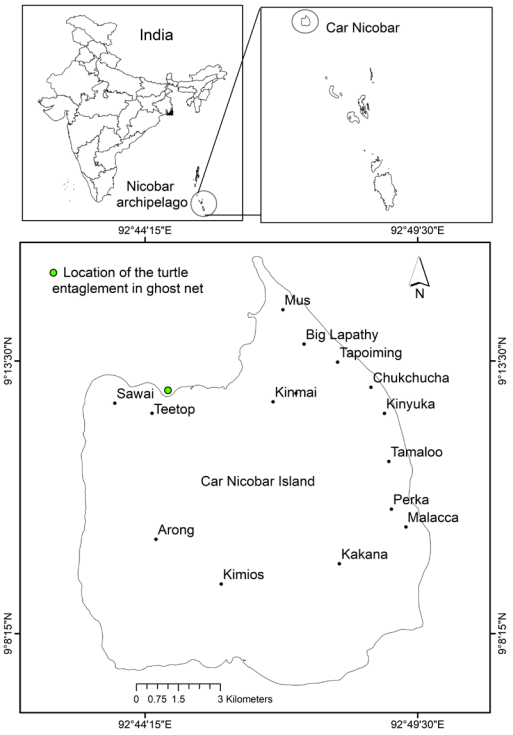

Figure 1. Location of ghost gear at Car Nicobar.

communities (Kiruba-Sankar *et al.,* 2023b).

Understanding the dynamics of sea turtle abundance in the Car Nicobar coastal waters has been the primary focus of the collaborative program launched by ICAR-Central Island Agricultural Research Institute, Port Blair, and the Department of Science and Technology, New Delhi. A series of awareness programs supported the citizen science initiatives on sea turtle monitoring (Nicobar Times, 2023, 2024) which led to the report of

Figure 2. Juvenile hawksbill turtle entangled in ghost gear at Car Nicobar. (Photo credit: Junaid Khan)

Figure 3. Juvenile hawksbill turtle freed from ghost gear at Car Nicobar. (Photo credit: Junaid Khan)

this turtle entangled in a ghost net.

Abandoned fishing gear remains a hazard to marine wildlife in the coastal waters of Car Nicobar Island (Kiruba-Sankar *et al.,* 2023c). In the future, more knowledge about the detrimental impacts of abandoned fishing gear on vulnerable marine animals, like sea turtles, should be facilitated through interactions with the local communities. To stop future occurrences of entanglement, the local tribes could also be involved in recovering abandoned fishing gear from Car Nicobar's waters.

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JUVENILE GREEN TURTLE STRANDED AT THIKKODI BEACH, KERALA, INDIA

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In the coastal regions of Kerala, India, olive ridley turtles (*Lepidochelys olivacea*) nest at low densities along the sandy shores while olive ridley, green (*Chelonia mydas*) and hawksbill (*Eretmochelys imbricata*) turtles forage in the state's waters. Sea turtles in Kerala face significant threats, including habitat loss, pollution, climate change and accidental capture in fishing gear (Bhupathy, 2007).

A dead juvenile green turtle (Figure 1 and 2) was found stranded on Thikkodi beach, Kolavipalam, Calicut, Kerala, on 11th December 2023. The stranding location was ~10km from the known nesting beach of olive ridley turtles at Kolavipalam Beach, Kerala. The stranded turtle was in a relatively fresh condition when found, and weighed 32kg (Delta Digital Scales, max 200kg capacity).

The northern Indian Ocean subpopulation of green turtles was recently assessed as Vulnerable on the IUCN Red List (Mancini *et al*., 2019). In India, all species of sea turtle are included in Schedule-I part (2) of the Indian Wildlife (Protection) Act, 1972. There is one other

Figure 1. Dorsal View of the Stranded Juvenile Green Turtle. (Photo credit: Ramya Abhijith)