A rare case of egg oozing from a deceased gravid Olive ridley turtle

Olive ridleys are considered the most abundant of the sea turtles (Pritchard, 1997) and found throughout the world. They are found primarily in the tropical regions of the Pacific, Indian, and Atlantic oceans. They are found all along the coast of India, including the Lakshadweep and Andaman & Nicobar Islands. Despite being the most abundant of all the sea turtles found globally, their numbers have been declining in the past few years, due to which they are currently categorized as Endangered on the IUCN Red List (IUCN, 2002). Olive ridley turtles are also listed in the Appendix I of CITES (Convention on International Trade in Endangered Species of Flora and Fauna) and thereby international trade of these turtles and their products are prohibited. All five species are included in Schedule I of the Indian Wild Life (Protection)

Act 1972, and thereby hunting of the turtles or damaging the eggs are strictly prohibited. Large mass nesting aggregations of this species over one lakh female occur in the coastal belt of Odisha in India, Costa Rica and Mexico in the eastern Pacific (Pritchard, 1997). Marine turtles are protected in Odisha under the state's Marine Fisheries Regulation Act which prohibit all mechanized fishing within 5 km of the coast and within 20 km of the Gahirmatha coast.

The nesting season of Olive ridley turtles along Maharashtra is from October to March with reports of sporadic nesting along the entire coast. They are known to nest along the coast of Maharashtra such as beach of Palshet, Ratnagiri (Katkar, 1991), Backbay, Juhu Chowpati, Girgoan Chowpati, Governor's Gate, Shivaji Park to Mahim, Juhu to Versova Mud Island, Gorai, Marve, Manori, Worli and Vashi Creek in Mumbai, Alibag, Dahanu, and in Ratnagiri (Giri and Chaturvedi, 2006). In Maharashtra Ratnagiri has the major nesting site followed by the Sindhudurg and Raigad. The major nesting was reported from Velas beach, Anjarle, (Ratnagiri), Dabholi-Wayangani, Achara Wayangani, (Sindhudurg). There are reports of accidental stranding and inadvertent landings of marine turtles along the Maharashtra coast but a majority of such instances have not been properly documented (Sundaram & Josekutty, 2009). A female turtle releases 100-150 eggs at a time, burying them deep in sand pits at beaches. It takes around 45 to 55 days for the eggs to hatch. On 22nd February 2024, we observed a moribund gravid Olive ridley turtle (carapace length: 105-110 cm, carapace width: 60-65 cm and weight approximate: 45-50 kg) stranded at Budal rocky shore (17º 24' 24" N 73º 10' 23" E) located just 50 km away from the nearest nesting site - Anjarle beach (17º 50' 28"N 73º 05' 30"E). The 17 eggs were oozed out in the tidal pool from this turtle. It seems that turtle might have come near to the shore for nesting and could have been trapped on the rocky shore due to the force of high waves splashing that resulted in multiple injuries on the body. There was no mark of entanglement of turtle in fishing gear or being struck by boat or cargo vessel. Due to decomposition subsequently gases produce bulged body abruptly, which pop-up the shell (a process where the outer layers of the shell break down, revealing the intricate structure within.) on the stranded Olive ridley. This is first instance of stranding of gravid Olive ridley turtle oozing egg due to decomposition observed along Maharashtra coast or along Indian coast. The observation of eggs oozing from a dead gravid Olive ridley turtle along the Maharashtra coast holds significant implications for understanding the decomposition process of stranded turtles, enhancing conservation efforts, and guiding future monitoring and research initiatives in the region. The Marine Fishing Regulation Acts (MFRAs) (1981) of Maharashtra have a provision for regulating fishing and conservation measures for the sea turtles in the territorial waters. These include the prohibition in operation of trawl net by mechanized fishing vessels from the seashore to 5 fathoms and 10 fathoms depth zones in specified areas; prohibition in fishing by mechanized fishing vessels of any type with more than 6-cylinder engines within the territorial waters up to 22 km; prohibition in operation of trawl gear by mechanized fishing vessels is prohibited between 6 pm and 6

am. Awareness programme on sea turtle conservation among fishers is important. Incentive schemes should be announced to protect the endangered sea turtle species. The annual Turtle Festival attracts more than 3000 tourists a year giving new income opportunities for the villagers. Raising public awareness could decrease threats and in the same time create positive actions such as rescuing, rehabilitating, and releasing the stranded sea turtles. There have been reports of stranded turtles in this area of Maharashtra. Enhancing the conservation efforts of citizen science groups and volunteers, along with implementing effective monitoring for deceased turtles and collecting relevant data, would help reveal the actual extent of strandings aiding in a better understanding of their occurrence and the challenges they encounter.

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