


A REVIEW OF SEA TURTLE HATCHERIES IN BANGLADESH

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Two species of sea turtle have been recorded to nest regularly in Bangladesh, olive ridley turtles in greater numbers than green turtles, with additional reports of rare nesting events by hawksbill turtles and a single nesting event by a leatherback turtle (Islam, 2002a). Nesting occurs on the mainland of Cox’s Bazar district, including Bordal, Inani, Kochopia and Monkhali beaches of Teknaf Peninsula, and coastal islands in Cox’s Bazar and Chittagong districts. including Hatiya, Kutubdia, Moheshkali, Sandweep, Sonadia and St. Martin’s Islands (Islam 2002a, 2002b; Hossain *et al.* 2013a, 2013b). Nesting also occurs on additional areas of the Bangladesh coastline and islands in the Sundarbans mangrove forest (Islam, pers.comm.), but has not yet been published.

Sea turtles that nest in Bangladesh are included in Schedule-I of the Bangladesh Wildlife Act (Preservation and Protection) of 2012. Historically, nests and hatchlings on island and mainland beaches have been threatened by poaching of eggs for consumption by communities in the Chittagong Hill Tracts, predation of nests by wild dogs (Islam, 2002a) and monitor lizards (Islam, 2002b), disorientation caused by beachside lighting, and man-made obstructions on nesting beaches, and alteration of the nesting beach by stands of *Casuarina* sp. (Islam *et al.*, 2011). In contrast to other locations (cf. India, Pakistan and Sri Lanka; this issue of IOTN) both governmental (GO) and non-governmental (NGO) organisations, including Centre for Advanced Research in Natural Resources & Management (CARINAM) (Rashid & Islam, 1999), Center for National Resource Studies (CNRS), Coastal and Wetlands Biodiversity Management Practices (CWBMP), MarineLife Alliance (MLA) and Sundarbans Management Project (SMP), have previously operated hatcheries in Bangladesh to reduce the loss of turtle nests to poaching and predation (Hossain *et al.* 2013a, 2013b). The NGO MarineLife Alliance has been the sole operator of sea turtle hatcheries in Bangladesh since 2013, with up to 33 hatcheries in five areas on the southwestern coast (Figure 1; Islam, pers.comm.) in any given year. MarineLife Alliance has either relocated turtle nests to...
a position within 5-10m of the original nest location or to a more distant hatchery. The short-distance relocation of eggs on the nesting beach resulted in a hatch success of 92% (+5.2 SD) for 43 olive ridley turtle nests in 2009/10 (Islam et al., 2011). Reports of nests relocated to hatcheries also demonstrate a high hatch success of ~85% from 17,852 eggs (132 olive ridley and four green turtle nests) in 1996 (Islam et al., 1999), ~88% from 31,853 olive ridley eggs (260 nests) (Islam & Mollah, 2015), and 76% from 738 olive ridley and green turtle nests in 2016 (Islam, pers.comm.). Apart from this limited data available on number of eggs and/or nests collected and hatch success, there is a paucity of information about hatcheries in Bangladesh. However, the hatching success reported above indicate that practices used in collection, transport, and incubation of eggs in hatcheries in the past have been successful and should be continued. It would be helpful for other hatcheries in the region if relevant protocols could be published or otherwise shared. Potential areas for future work in Bangladesh include a comparison of hatching sex ratios among those in situ and or relocated to hatcheries or elsewhere on the beach, and monitoring of environmental conditions within nests in these locations.

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Literature cited


