

Dugongs, *Dugong dugon* (Family: Sirenia) and Humans: the fisher's perspective

Ranil P. Nanayakkara^{1,2,3}, Ruvinda K. de Mel¹, Surendranie J. Cabral¹ & H.M.J.C.B Herath^{1,4,5}

¹BEAR (Biodiversity Education And Research), Sri Lanka.

²Department of Zoology, University of Kelaniya, Kelaniya, Sri Lanka.

³IUCN Sirenia Specialist Group Regional member (Indian Ocean)

⁴Postgraduate Institute of Science (PGIS), University of Peradeniya, Peradeniya, Sri Lanka.

⁵Department of Biology and Ecology, Faculty of Medicine, South Asian Institute of technology and Medicine (SAITM), Malabe, Sri Lanka

*Corresponding Author's E-mail: ranil_n@hotmail.com

ABSTRACT

The dugong (*Dugong dugon*, Muller 1776) is a mammal considered Vulnerable globally and Endangered locally. In Sri Lanka, dugongs are found in calm shallow waters of the Northwest, North and east coast viz., from Kalpitiya to Jaffna with sporadic reports from the east coast. It is one of the least known mammals occurring in the Sri Lankan seas and there exists large gaps in the scientific knowledge of this animal. The fishermen of the north and east coasts of the island are the people who come into direct contact with these animals in their day to day lives. Therefore, ethnobiological studies in indigenous communities have been conducted regarding the knowledge, perceptions and beliefs of these individuals toward the dugongs are invaluable when assessing the threats faced by these animals and formulating conservation plans. A standardized questionnaire was used to collect data from fishermen inhabiting the north and east coasts of the island. The questions were structured to extract and assess the local knowledge on the biological and ecological aspects of the dugongs while simultaneously gathering details of the backgrounds of the fishermen. 185 fishermen were interviewed. 100% of the interviewed fishermen said that their parents and grandparents had been fishermen themselves. 92.44% of the fishermen said they could correctly identify a dugong from a dolphin while 7.56% replied in the negative. 100% of the fishermen responded saying that they knew of seagrass beds and 100% again said that they are important. 100% said that they fish in seagrass areas as well. Furthermore, 100% knew of seagrass beds off the coasts of their villages. There is a correlation between the knowledge of the fishermen with the number of years of experience in fishing. This indigenous knowledge can be used to identify the threats and conserve the dugong population. In fact the fishing community can be used to conserve the endangered dugong population by positively changing their knowledge, attitudes and practices.

Keywords: *Dugong dugon*, fishermen, North and East coasts, Sri Lanka