

Analysis of the stomach contents of dugongs (*Dugong dugon*) from the Gulf of Mannar, Sri Lanka

V. Pahalawattaarachchi*, and J. Pushpakumara

Inland Aquatic Resources and Aquaculture Division, National Aquatic Resources Research and Development Agency (NARA), Crow Island, Colombo 15, Sri Lanka.

The dugong (*Dugong dugon*), known locally as “*muhudhu ura*” in Sinhala and “*kadal pandi*” in Tamil, is the only representative of the order of mammals known as Sirenia found in the coastal waters of Sri Lanka. Dugongs are strict herbivores, foraging along the bottom in shallow coastal waters, usually grazing on seagrass beds. In Sri Lanka, the Gulf of Mannar is the home range for dugongs. Today, this species has declined both in range and number, and its geographic distribution is limited to the tropical waters of the Indo-Pacific between about 26° and 27°N and S of the Equator from the Red Sea in the west to Australia in the east where an estimated population of 85,000 dugongs still survive. The 1996 IUCN Red List classifies the dugong as vulnerable, but in Sri Lanka, it is certainly one of the most seriously endangered species of large mammals. Twelve stomach samples were collected from two dead dugongs during January 2011 in the Gulf of Mannar, Sri Lanka. As dugongs masticate food finely, epidermal-cell characteristics are used for the identification of forage items. Quantitative analysis of samples indicated that the majority of stomach contents (95-98%) were seagrasses. Algae were also found in negligible quantities. About 85% of stomach contents were seagrass rhizomes of *Halophila ovalis*. *H. ovalis* dominated all the samples. Other species found were *Halophila decipiens*, *Cymodocea rotundata*, *Cymodocea serrulata*, *Syringodium isotifolium*, *Thalassia hemprichii* and *Halodule spp.* Although the area where dugong carcasses were found is dominated by *E. accordius*, it was not found in the stomach contents proving that dugong may prefer soft, thin leaves of small seagrasses. The information will be of immense importance in conservation and management of the habitats of dugongs.

Keywords: dugongs, seagrasses, stomach contents

*Corresponding author e-mail: vasalanka@gmail.com