



DUGONG (*Dugong dugon*) FEEDING BEHAVIOUR IN SEA WORLD INDONESIA, TAMAN IMPIAN JAYA ANCOL, JAKARTA

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ABSTRACT

Dugongs is a protected herbivorous marine mammals (Suwelo *et al.*, 1992) and included in vulnerable category of IUCN (*International Union for the Conservation of Nature and Natural Resources*) and Appendix I CITES (*Convention on International Trade in Endangered Species*) (IUCN 2012). Dugong population continues to decline due to the human threat (Suwelo *et al.*, 1992). Another factor is because Dugong has a low reproductive rate (Hindell & Kirkwood 2003). *Ex-situ* conservation of dugong is become important and has conducted by Sea World Indonesia, Taman Impian Jaya Ancol, Jakarta. Research on dugong feeding behaviour can help the *ex-situ* conservation of dugong. This because feeding behaviour is a main daily behaviour of dugong in the sea (Chilvers *et al.*, 2003). The aim of this research was to describe feeding behaviour of two dugong in Sea World Indonesia. Observations were made in SWI Dugong aquarium with a diameter of 10 meters and two different depth (2 meters and 5 meters). Observations were made during two weeks on December 2012. Behavioral observation time was divided into morning (9:15 to 09:35), (11:30 to 11:50) and (14:30 to 14:50) observations. The feeding behavior observed was hand-fed, surface-fed and bottom-fed. Daily observations of dugong feeding behavior were done using focal animal sampling and ad libitum sampling. The data obtained was displayed in the form of tables and graphs. The data was analyzed using descriptive analysis reinforced with statistical tests. The statistical tests used were the t-test and ANOVA test. Hand-fed behavior of male dugong (31,30%) was higher than female (29,67%). Results from t-test showed that the hand-fed behaviors of both dugongs were not significantly different. Meanwhile, the other t-test result for surface-fed behavior and bottom-fed behavior of both dugongs was significantly different. Surface-fed behavior of male dugong (65.83%) was higher than female (32.08%). Bottom-fed behavior of male dugong (6.23%) was lower than females (36.63%). Hand-fed behaviour and feed on surface are the adaptation of feeding behavior in captivity. Feed on bottom behaviour is the behavior that similar to dugong feeding in the wild, which is grazing. Based on the observation, it is known that both dugong, male dugong especially, have a good adaptation on hand-fed seagrass behaviour and feed on surface, while the female dugong maintain its natural feeding behavior.

Key words: *Dugong dugon*, Sea World Indonesia, feeding behaviour, captive