

Report on Dugong Strandings and Other Events

Period: 2016 – 2017

INTRODUCTION

The dugong (*Dugong dugon*) is one of at the least 35 marine mammal species that can be found throughout Indonesia. This relatively long-lived and slow-reproducing animal has a scattered distribution in Indonesian coastal waters (Figure 1). Among the information being used to map the distribution of the dugong were those obtained from stranding and entanglement (alive) or bycatch (dead) events recorded by local citizens. The inclusion of other information beside sightings had been conducted since the the “National Symposium on Dugong and Seagrass” in April 2016, considering limited scientific information on the dugong abundance.



Figure 1. The map of dugong distribution in Indonesia in Bahasa Indonesian language was produced to update the previous map by de longh and his colleagues that they created 20 years ago (de longh et al., 1997). The latest map shows that the dugong distribution is fairly scattered. Some previously recorded areas were also more emphasized by the new information as the habitat of the dugongs.

Stranding and other events, in fact, still hold an important role in our understanding of dugong populations and the current threats to the dugongs in Indonesia. Not all reportedly stranded animals, for instance, were naturally beached. If examined well, both dead and live-stranded animals might show if there is a human involvement in the stranding itself. In the case of dugongs, the well-known threats to the animal were subsistence hunting and local consumption due to the high value of its

body parts. Well-documented stranding events could show the handling of the dead or live dugongs. The local citizens from some areas of Indonesia, however, are well-known as consumers of dugong meat and traders of its tusks.

This report presents the frequency of dugong stranding and other events relevant events in Indonesia from January 2016 to December 2017. The information is expected to support the examination of the threats to dugongs in Indonesia and the current situation on the dugong population in Indonesian waters.

METHODOLOGY

Information on stranding and other events related to dugongs in Indonesia were obtained from data collected by the WWF-Indonesia, the Whale Stranding Indonesia community, direct reports to the Facebook fanpage Dugong and Seagrass Conservation Project (DSCP) Indonesia, and online articles.

RESULTS

There were 50 dugong stranding, bycatch or entanglement, and live-capture events recorded during January 2016 – December 2017 (Figure 2). The number during this period is the highest since 2005.

Locations

Majority (62%) of the recorded events were stranding cases involving single (94%), dead (74%) dugongs. The highest number of all events was found in Riau Islands and West Papua. Both provinces have six records of events, with the highest number in stranding.

Most of the stranding events were reported to occur in West Papua and Riau Islands. Each province has 9.7% of all stranding events. Riau Islands was also one of the provinces where dugong entanglement in net (sometimes referred as bycatch) occurred more frequently than other provinces. On the other hand, live-capture or killing events only occurred in Central Kalimantan, West Papua, and West Sumatra. Each province had a record of at least one event. One live-capture event involving two dugongs, possibly mother and calf pair, occurring in Ransiki Village, Manokwari Selatan, West Papua, in May 2017. West Papua, in fact, had been the only place in the 2010 – 2017 records where the live-capture of dugongs was conducted. The previous event took place in the area of the Cenderawasih Bay National Park as well, despite the different village.

Time

The highest number of reports on all events in 2016 occurred in January (n =5), while it's April, June, and September (n = 5) in 2017. However, during those years, most events were reported to occur in January and June (n = 8). The situation was quite similar to the highest number obtained during 2005 – 2017, where most events were reported in January.



Figure 2. The map of dugong stranding and other events distribution during 2005 - 2017. Similar to the distribution map (Figure 1), the events were widely distributed throughout Indonesia with many events (29%) occurred in Sulawesi island.

Age Group

The body of an adult dugong was identified to be, at least, two meters long. The calf was usually found dead with its mother, or at maximum of 1.5 meters long. Most (56%) of all events involved adult dugongs, among them were found with at least one calf.

Source of Information

Majority (74%) of the events were reported in person through social media, either applications (e.g. WhatsApp group) or platforms (e.g. Facebook). There were only two information directly obtained through private message to the fanpage of the DSCP Indonesia. Other source of information was the WhatsApp chat group of the national marine mammal stranding network. However, the number of reports obtained from the chat group was unclear, although it was known that all information on dugong collected by the Whale Stranding Indonesia during 2016 – 2017 came from sources in the chat group. All events in the chat group were followed up, at least, by one of the group members.

REMARKS

Majority (96%) of the dugong events during 2016 – 2017 were not examined for the cause of death that to date, it was still assumed that all dugongs involved in stranding cases died of natural causes. It is expected that the exposure of these cases by the DSCP Indonesia during the education program could raise more awareness on the importance of carcass examination and well-obtained documentations.