

1 **Record of male Dugong (*Dugong dugon*, Müller, 1776) in East Halmahera**  
2 **North Maluku Indonesia**

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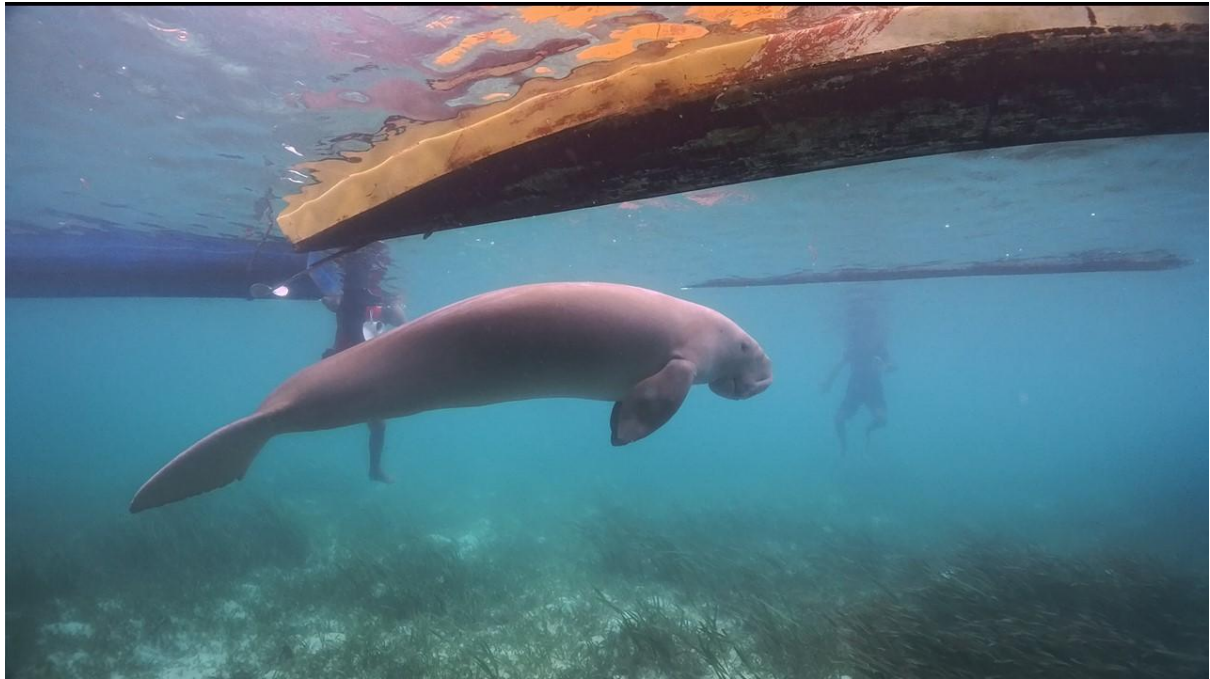
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10 Dugong (*Dugong dugon* Müller, 1776) of the Order Sirenia is the only species  
11 of marine mammal in the family Dugongidae that inhabits tropical and subtropical  
12 waters of the Indo-Pacific (Nishiwaki and Marsh, 1985). Due to its slow life history and  
13 threats to its population, this species is listed as "Vulnerable" (VU) by the International  
14 Union for Conservation of Nature (IUCN) (Marsh and Sobotzick, 2019).

15 In Indonesia, scientific literature on dugong sightings and behaviour remains  
16 very limited, with only a few recorded sightings in North Maluku Province from Morotai,  
17 South Halmahera, and East Halmahera Regencies (Panyawai and Prathep, 2022).

18 We documented a dugong occurrence in Nyaolako Village, Central Wasile  
19 District, East Halmahera Regency, North Maluku Province, in September 2025. A  
20 single individual was swimming in a shallow coastal area (0-2 m depth) with dense  
21 seagrass coverage (Fig. 1). From video documentation, the specimen was larger than  
22 2.5 meters in total length (TL), indicating the individual was mature and had no visible  
23 scars or wounds. From Fig. 2, the positions of the anus, genital slit and umbilicus  
24 confirmed that the individual is a male (Eros, 2007).

25 Dugong is fully protected by the Indonesian government (Ministry of  
26 Environment and Forestry Republic of Indonesia, 2018) and this individual dugong has  
27 been a marine tourism attraction in East Halmahera for a few years, bringing income  
28 to the village. However, in the same regency, a pregnant dugong was recorded  
29 slaughtered in October 2011 due to lack of awareness in regulation (Nontji et al.,  
30 2012). Based on these historical circumstances, where dugongs in this region were  
31 utilised as food and a tourist attraction, the authors recommend improvements in  
32 surveillance, law enforcement, a stricter code of conduct for dugong interactions, and  
33 habitat protection in East Halmahera.



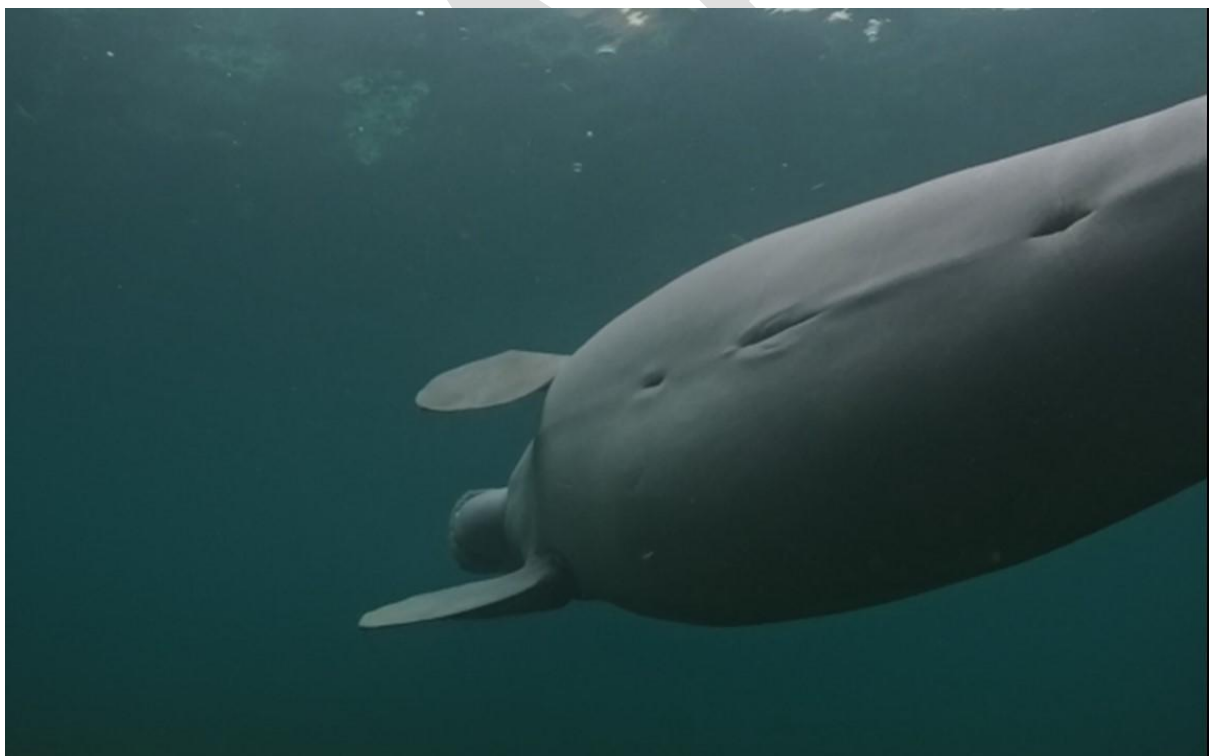
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Fig. 1. Dugong (*Dugong dugon*, Müller, 1776) swimming in Nyaolako waters (Picture by Harimurti Asih Bimantara).



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Fig. 2. Position of anus, genital slit and umbilicus indicating a male individual (Picture by Harimurti Asih Bimantara).

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45 **Data Availability Statement:** The data that supports this study will be shared at  
46 reasonable request to the corresponding author.

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