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INDIAN COUNCIL OF AGRICULTURAL RESEARCH

ON AN UNUSUALLY LARGE SEA COW *DUGONG DUGON* LANDED AT MANDAPAM, GULF OF MANNAR*

An unusually large sized male sea cow *Dugong dugon* measuring 310 cm in total length captured from the Gulf of Mannar using dynamite sticks is reported. This is the first record of a dugong exceeding 300 cm in total

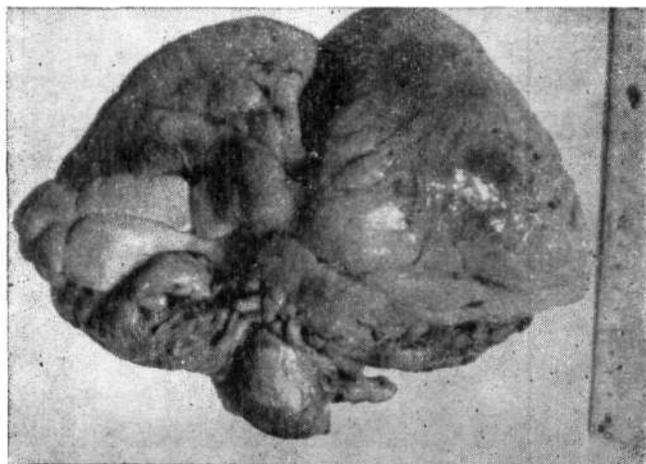


Fig. 1. Heart of the dugong. Note the dorso - laterally flattened shape and the prominent inter-ventricular cleft.

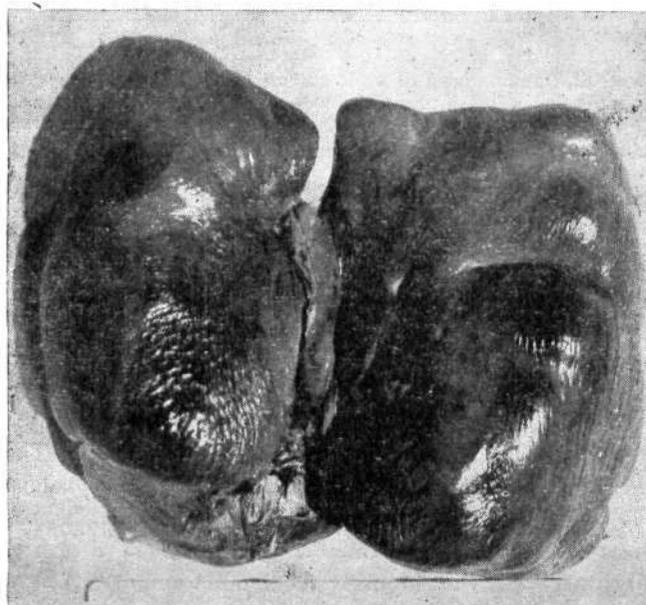


Fig. 2. The liver - a dorsal view.

length from the Gulf of Mannar. Stomach contents, heart, liver and copulatory organ of the dugong were examined.

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The sea cow *Dugong dugon* popularly known as 'Avolia' and 'Kadal panni' (Sea pig) in Tamil and 'Babloo' in Saurashtra and Kutch is a herbivorous mammal that occurs in coastal waters where sea grasses are abundant offering food and shelter. In India, the dugong occurs commonly in the Gulf of Mannar and the Palk Bay and in very stray numbers in the Gulf of Kutch. It is also reported from the Malabar coast and the Andamans.

On 16th December, 1986 around 1630 hrs a dugong was reported killed by Sri Lankan refugees using dynamite sticks in the inshore waters of Gulf of Mannar (depth 2 m; distance from shore 100 m) very close to the Regional Centre of CMFRI., Mandapam. Eye witnesses reported that a pair of adult dugongs were sighted

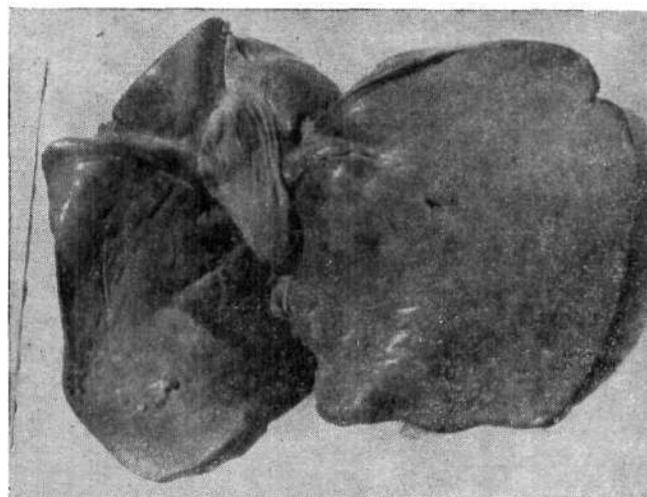


Fig. 3. The liver - a ventral view.

several times close to the shore between 1530 and 1630 hrs on that day. On further enquiry it was learnt that dynamite sticks were hurled into the sea by some youngmen when the pair surfaced for breathing. As a result, one of the dugongs was killed and the other was presumed to have escaped.

Its weight was estimated to be about 400 kg. According to Harrison and King (*Marine Mammals, 2nd Ed., Hutchinson, London 192 PP, 1980*) the dugong seldom attains a length over 240 cm. However, Mani (*J. Bombay Nat. Hist. Soc., 57: 216-217, 1960*) reported a dugong measuring 406 cm in total length and 1,016 kg in total body weight. But Silas (*J. Bombay Nat. Hist. Soc., 58: 263-266, 1961*) considered it to be highly improbable.

Table 1. *Morphometric measurements (in cm) of the male dugong captured from the Gulf of Mannar*

<i>Length from:</i>	
Snout to the deepest point of fluke notch : (Total length)	310.0
Snout to anus	: 270.0
Snout to origin of genital organ	: 160.0
Distance between origin of genital organ and anus	: 52.0
Snout to origin of flipper	: 60.0
<i>Distance between:</i>	
Flippers	: 59.0
Eyes	: 58.0
Snout and eye	: 58.0
Snout and nostril	: 18.0
Length of flipper	: 54.0
Girth at neck region (at origin of flippers)	: 180.0
Girth at genital orifice	: 200.0
Girth at anus	: 135.0

Table 2. *Dimensions of the heart of the dugong (in cm)*

Length of the heart (base to apex)	: 14.1
Breadth of the heart (at its widest point)	: 23.1
Breadth of the right chamber (at its widest point)	: 13.4
Breadth of the left chamber (at its widest point)	: 9.7
Length of the right chamber	: 14.1
Length of the left chamber	: 12.1
Distance from base of heart to origin of inter-ventricular cleft	: 6.4

In consideration of these facts, the data on size (total length) of the present specimen indicates that this is the largest dugong so far recorded from the Indian waters. The various morphometric measurements of the dugong are presented in Table 1.

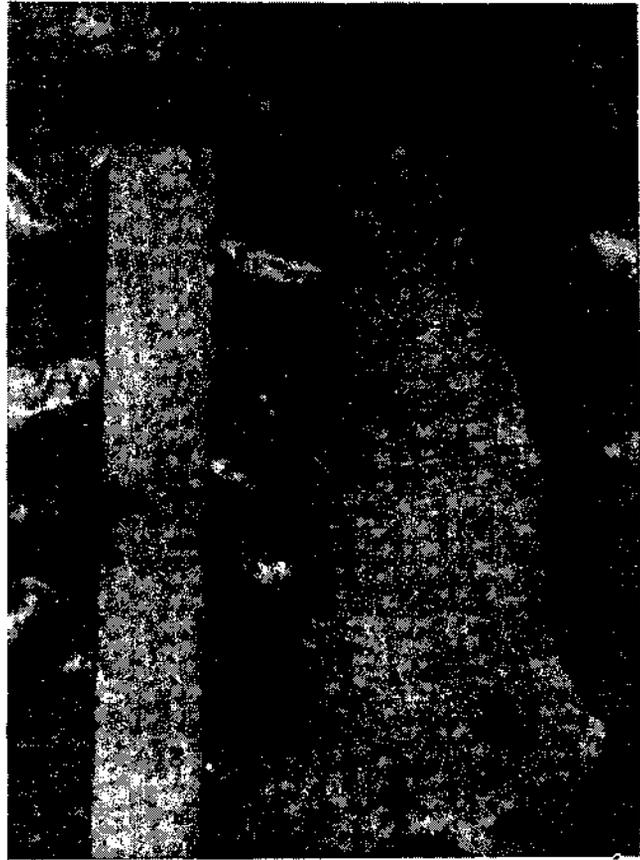


Fig. 4. The male copulatory organ.

Stomach contents: Partially masticated as well as whole blades of sea grass belonging to the genus *Cymodocea* were recovered from the oesophagus and the buccal cavity indicating beyond doubt that the animal was hit while grazing. The stomach was full and sea grass constituted the major component of its contents.

