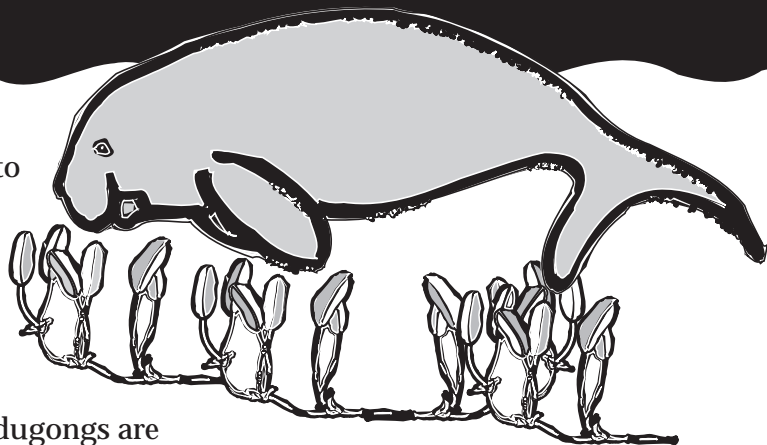


DUGONGS

Introduction

Dugongs are marine mammals which can grow to about three metres in length and weigh as much as 400 kilograms. They are the only marine mammals that live mainly on plants. They graze on seagrasses which form meadows in sheltered coastal waters. Although the animals are slow moving, on occasion they travel considerable distances to other areas. Within the zoning area dugongs are known to occur in Port Clinton.



Dugong status

The dugong (*Dugong dugon*) is listed internationally as vulnerable to extinction (IUCN 1996). This classification means that the species is likely to move into the endangered category in the near future if the causal factors for their decline continue to operate. Major concentrations of dugongs off the Queensland coast occur in wide shallow bays, mangrove channels and in the lee of large islands. These areas support the growth of seagrasses, which are the preferred food source of the animal. The association of dugongs with shallow intertidal habitats brings them into contact with human activities and makes them susceptible to disturbance.

Dugong reproduction

Dugongs have a life span of between 60 and 70 years and reach sexual maturity between 9 and 17 years. The females calve every 3–4 years and have a gestation period of between 13 and 14 months. They suckle their young for up to 18 months. This slow breeding rate and long life-span mean that dugongs are particularly susceptible to factors which threaten their survival.

Dugong decline

Surveys since 1986–87 have shown a disturbing decline is occurring in the number of dugongs in the southern Great Barrier Reef. The Shoalwater Bay–Port Clinton area constitutes a major refuge area where dugongs still occur in significant numbers.

Shoalwater Bay–Port Clinton supports the largest dugong population between Cooktown and Hervey Bay–Great Sandy Strait (Marsh et al. 1996). Aerial surveys and dugong tracking studies have shown that dugongs use Port Clinton all year round and move freely between Port Clinton and Shoalwater Bay. Consequently the area should be managed as a unit.

Threats to dugongs

Natural factors such as predators, cyclones and disease have always caused dugong deaths. This loss to the population can be replaced without a decline in numbers. However, when the number of deaths is greater than the number of births the population goes into decline.

The decline of dugongs in the southern Great Barrier Reef can be attributed to a number of causes. Among these are the degradation of their seagrass habitat, incidental capture in fish mesh nets, shark netting for bather safety, indigenous hunting, boat strikes, defence activity and illegal take.

Land-use issues and seagrass habitat degradation are unlikely to be significant in the Shoalwater Bay Military Training Area and the main factors affecting dugongs are likely to be the use of nets and defence activity.

Dugong conservation measures

A system of dugong sanctuaries (or dugong protection areas) has been established to protect dugong populations and habitat in the southern Great Barrier Reef and Hervey Bay region.

Port Clinton has been designated a Zone 'A' dugong protection area in recognition of its importance to dugongs in the region. Foreshore and offshore set and drift nets have been banned from use in the area. Dugongs are most at risk from these nets in the area. The boundary of the dugong protection area includes a movement pathway linking Port Clinton to Shoalwater Bay.

Training activities involving underwater explosions undertaken by the Department of Defence may have an impact on dugongs. Boat strikes by Defence and other vessels could also be a factor in dugong injury or mortality. The Department of Defence is preparing a number of counter measures to minimise the risk to dugongs from its activities.

The Darumbal-Noolar Corporation, which represents the traditional Aboriginal users of the area, has agreed not to hunt dugongs in the area while the population remains in decline.

Sources

This report is based on information presented in a number of research publications to the Great Barrier Reef Marine Park Authority. Information was also sourced from the Dugong Information Kit produced by the Great Barrier Reef Marine Park Authority.

This report has been prepared as background material for preparation of a draft zoning plan for the Gumoo Woojabuddee Section of the Great Barrier Marine Park and adjacent areas including the waters of Port Clinton and the intertidal areas of Freshwater Bay and the Byfield coast. There are no management proposals contained in this report. If you have any other questions about the process contact:



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