



SPREP

Secretariat of the Pacific Regional
Environment Programme

Factsheet

Pacific Dugongs

Fast facts

Type: Mammal

Diet: Herbivore

Lifespan in wild: 73 years

Age at first breeding: 7 - 17 years

Calving interval: 2.5 – 6 years

Lactation: ~1.5 years

Length (fully grown): 2.4 to 3 metres (8-10 ft)

Weight (fully grown): 231 to 500 kg (510 – 1,100 lbs)

Scientific Classification

Kingdom: Animalia

Phylum: Chordata

Class: Mammalia

Order: Sirenia

Family: Dugongidae

Subfamily: Dugonginae

Genus: *Dugong*

Species: *Dugong dugon*



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Range and Habitat:

Dugong occurs in 38-45 countries and territories, tropical and subtropical coastal and island waters from east Africa in the Indian Ocean to Vanuatu in the Pacific Ocean, between about 260° and 270° north and south of the equator. In the Pacific Islands region, dugongs are found in Australia, Palau, Papua New Guinea, Solomon Islands, New Caledonia and Vanuatu.

What are dugongs?

Dugongs are large marine mammals and are the only strictly marine herbivorous mammals. They are sometimes called “sea-cows” and are usually found in shallow waters protected from large waves and storms. The word “dugong” derives from the Tagalog term for “lady of the sea”.

Biology: Dugongs are the only surviving species of the family Dugongidae - its closest relative, Stellar’s sea-cow, was hunted to extinction within 27 years of its discovery in the eighteenth century. They have a thick layer of fat giving them a distinctly rotund posture, small paddle-like flippers positioned far forward on the body and a broad, flattened powerful tail that resembles the tail of a whale. Calves at birth are about 1.2 metres long weighing about 30kg. Dugongs have few natural predators. However, sharks, crocodiles and killer whales will feed on young dugongs.

Diet: Dugongs feed mainly on seagrass, rooting for them with their bristled, sensitive snouts and chomping them with their rough lips. They maximize the intake of nutrients by selecting, for food, seagrass species that are highly digestible and have high nutrients. They can supplement their diet with invertebrates (polychaete worms, sea squirts and shellfish).

Status: The 2008 IUCN Red List classifies dugong as vulnerable to extinction on a global scale. While they are still present at the extreme ends of their range, they have disappeared from several areas. In the Pacific Islands region the status of dugong populations is generally unknown with the exception of that in the Torres Strait.

Value of dugongs

Dugongs play a significant ecological role in maintaining coastal habitats. Dugongs are also of high cultural value in many communities, a valued source of food, medicine and artifacts and thus an important species for coastal people.

Threats to dugong habitat

Coastal development including human settlement:

These activities increase sedimentation and turbidity in coastal waters where seagrasses are found. Sedimentation and turbidity not only smother seagrass but also reduce the amount of light reaching them, resulting in the degradation of seagrasses and a reduction in their density and productivity.

Nutrient runoff from land: Nutrient enrichment due to land runoff leads to algal bloom which in turn results in reduced light levels for seagrasses. Nutrient enrichment may also change the community structure of seagrass habitat, eg. increased seaweeds and fewer seagrasses.

The continuing health of dugong populations is essential to maintaining a healthy Pacific Ocean.

Threats to dugongs

Dugongs die every year for many reasons, both natural and human related. Dugong deaths need to be minimised to ensure that enough baby dugongs continue to be born to maintain long-term adult population numbers. Although it has been estimated that a dugong population of only 100 animals would not sustain any human-caused mortality (the most common reason for dugong deaths), further research is needed to determine what constitutes a sustainable dugong population in the Pacific.

Hunting for food, medicine and artifacts: These languid animals make an easy target for coastal hunters and they have been long sought after for their meat, oil, skin, bones and teeth. Specific parts of the dugong are used in customary events (e.g. weddings) as well as for making traditional items, including drums, hooks and necklaces.

Incidental by-catch and vessel strikes: The incidental drowning of dugongs caught in fishing gear, such as gill nets, has largely contributed to the decline of dugongs in much of its Pacific range. The increase in vessel traffic also increases the likelihood of dugongs being killed by vessel strikes.

Challenges for dugong conservation and management

Lack of data and information, including basic population parameters and long term data sets;

Limited information exchange, linkages and collaboration;

Absence and lack of ongoing and long term research, survey and monitoring programmes through much of its range;

Limited public awareness and education programmes;

Limited in-country skills/capacity to provide leadership in marine species conservation management;

Limited national management mechanisms to protect marine animals and their habitat;

Lack of resources, including accessing sustained funding.



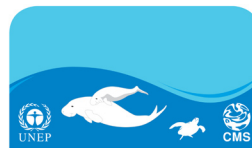
Dugong Regional Management Effort in the Pacific Islands Region

The Pacific Islands region supports the world's largest remaining population of dugongs, although much of this is shared between Australia and Papua New Guinea.

Concerns over the state of marine mammals in the region resulted in a marine mammal conservation programme at SPREP which currently has a 5-year regional Dugong Action Plan (2008-2012) in place.

All dugong range states in the Pacific Islands region (SPREP members that have dugongs in their waters) have signed the Convention on Migratory Species Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their range.

International agreements to protect dugongs



The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or Bonn Convention) aims to conserve terrestrial, marine and avian migratory species throughout

their range. It is an intergovernmental treaty, concluded under the aegis of the United Nations Environment Programme, concerned with the conservation of wildlife and habitats on a global scale.

CMS Link: <http://www.cms.int/about/index.htm>

References and Suggested Additional Reading

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Our Vision is a Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures



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