Green sea turtles consume approx.

2 kg of seagrass leaves per day

## Help seagrass

There are many ways you can help: don't litter; be aware when applying fertilizers and pesticides, as excess amounts can wash down gutters and drain into the ocean; when boating, slow down and avoid shallow areas; support marine conservation initiatives; learn about these special marine habitats and volunteer to monitor their health by joining Seagrass-Watch.

Seagrass-Watch: Global Seagrass Observing Network monitoring efforts are vital to assist with tracking global patterns in seagrass health, and assess the human impacts which have the potential to destroy or degrade these coastal ecosystems and decrease their yield of natural resources.

To protect valuable seagrass meadows everyone must work together.

# Mackay Whitsunday Seagrass

## **About Us**

Seagrass-Watch: Global Seagrass Observing Network is one of the largest long-term seagrass observing programs globally, and is highly recognised for it's scientific rigour.

Participants all share a passion in marine conservation.

Participants involved in the Global Seagrass Observing Network develop a deep sense of custodianship and understanding of their local marine environments that reaches throughout the wider community.

#### **Contact**

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## About seagrass

Seagrasses are the only marine flowering plant. There are approximately 60 seagrass species (possibly 72) globally that belong to four major groups. Seagrasses are not seaweeds. Seaweed is the common name for algae.

Seagrass live in sheltered coastal waters, undergo pollination while submerged and complete their entire life cycle underwater. They grow much like land grasses, with extensive below ground rhizomes or runners. Plants form small patches that develop into large continuous meadows. These meadows may consist of one or many species within one location.

### **Importance**

Seagrass is one of the most productive natural ecosystems globally. Seagrasses are as important as forests in storing carbon (on an areal basis) and can store carbon 35 times faster than rainforests.

Seagrass occupy less than 0.2% of the world's oceans, but are responsible for more than 10% of all carbon in ocean sediments annually.

Seagrasses improve water quality by acting as nutrient sinks. buffering/filtering nutrient/chemical inputs to the marine environment. They also stablise marine sediment and help avert erosion.

Seagrasses provide food and shelter for many organisms including Sea turtles and dugongs.

## Mackay-Whitsunday seagrass

Thirteen species of seagrass have been recorded in the Mackay-Whitsunday region, including: Cymodocea rotundata, Cymodocea serrulata, Halophila capricorni, Halophila decipiens, Halophila ovalis, Halophila spinulosa, Halophila tricostata, Halodule pinifolia, Halodule uninervis, Syringodium isoetifolium, Thalassia hemprichii, Thalassodendron ciliatum, and Zostera muelleri.

This represents 80% of the known species found in Queensland waters. The wide range of physical habitats where seagrasses are found undoubtedly contributes to the high species diversity.

Habitats include intertidal and subtidal areas of estuary, coastal fringing reef environments and deepwater environments. Based on the mapped seagrass areas, the majority of seagrass meadows in the Mackay-Whitsunday region are within coastal and estuary habitats. Of these, 36% are protected within declared Fish Habitat Areas and 10% are located within port boundaries. Only 5% of these seagrass meadows (excluding deepwater) are covered by the highest levels of protection within the GBRWHA zoning.

The most abundant seagrass areas along the mainland coast are found along the northern mainland coast (863 ha), northern Repulse Bay (822 ha) and southern Repulse Bay (678 ha). The majority of the meadows are low - moderate in abundance, and are dominated by *Halophila* and *Halodule* species.

Expansive meadows of Halodule uninervis / Halophila ovalis or Zostera muelleri exist on the coastal intertidal flats with reef top seagrass present on the numerous fringing reefs associated with the islands along this coastline. Deepwater seagrasses are generally not found in the central and northern parts of this region, apart from occasional areas in the lee of islands or reefs. These large areas devoid of seagrass are likely to be due to the scouring currents caused by large tides.

McKenizle, U.& Voshida, R.L. (2025). Proceedings of a workshop for monitoring seagues habitats in the Mackey-Whitsunday, NRM Region, Queensland, Whitsunday Neighbourhood Centre, Cannonvale, 07-09 April 2025. (Seagress-Watch HQ, Ciliton Beach). Spip.