

Ten species of seagrass have been recorded in Yuwibara Sea Country

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 stabilise marine sediment and help avert erosion.

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

Yuwibara Sea Country Seagrass

About

Seagrass-Watch: Global Seagrass Observing Network is one of the largest long-term seagrass observing programs globally, and is highly recognised for its 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

PO BOX 4
Clifton Beach, QLD 4879
admin@seagrasswatch.org

www.seagrasswatch.org



Local eyes. Global wise

To protect valuable seagrass meadows,
everyone must work together.



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.

Yuwibara seagrass

Seagrasses are a significant component of Yuwibara Sea Country marine ecosystems and their contribution to the total primary carbon production is critical to regionally important dugong and turtle populations and productive fisheries.

Coastal meadows are important nursery habitat to juvenile fish and prawns, and provide habitat for migratory wading birds. Extensive seagrass meadows occur on intertidal mudflats and sandflats, and in subtidal nearshore and offshore areas in the region.

Approximately 192 km² of seagrass meadows (temporal composite) have been mapped in Yuwibara Sea Country since 1987.

Species

Ten species of seagrass have been recorded in Yuwibara Sea Country including: *Cymodocea rotundata*, *Cymodocea serrulata*, *Halophila decipiens*, *Halophila ovalis*, *Halophila spinulosa*, *Halophila tricostata*, *Halodule pinifolia*, *Halodule uninervis*, *Syringodium isoetifolium*, and *Zostera muelleri*.

This represents two thirds 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.



Cymodocea rotundata

- leaf tip rounded with smooth edge
- leaf 2-4mm wide with 9-15 parallel veins
- leaf sheath scars continuous around stem
- old sheaths forming a fibrous mass at the base of each shoot



Cymodocea serrulata

- leaf tip rounded with serrated edge
- leaf 4-9mm wide with 13-17 parallel veins
- leaf sheath broadly flat and triangular, not fibrous
- leaf sheath scars not continuous around upright stem



Halophila decipiens

- leaf margins finely serrated
- fine hairs on both sides of leaf blade
- leaf apex rounded to slightly pointed
- leaf 10-25mm long and 3-10mm wide
- 6-8 cross vein pairs



Halophila ovalis

- cross veins 8 or more pairs
- leaf 5-40mm long & 5-20mm wide
- leaf margins smooth
- no leaf hairs



Halophila spinulosa

- leaves arranged opposite in pairs
- leaf margin serrated
- 10-20 pairs of leaves per shoot
- leaf 15-20mm long and 3-5mm wide



Halophila tricostata

- Erect shoots 8-18cm long
- Leaves with 3 veins
- 2-3 leaves at each node
- Leaves "whorl" around stem
- Found at subtidal depths (>10m)
- Endemic to Queensland, Australia



Halodule pinifolia

- leaf tip rounded
- narrow leaf blades 0.25-1.2mm wide
- leaf with 3 distinct parallel veins, sheaths fibrous
- rhizome usually white with small black fibres at the nodes



Halodule uninervis

- leaf tip tri-dentate or pointed, not rounded
- leaf blades 0.5-5mm wide
- leaf with 3 distinct parallel veins, sheaths fibrous
- rhizome usually white with small black fibres at the nodes



Syringodium isoetifolium

- leaves noodle/spaghetti like and taper to a point
- leaves contain air cavities
- leaves 7-30cm long



Zostera muelleri

- leaf with 3-5 parallel-veins
- cross-veins form mesh-like pattern across leaf blade
- leaf tip smooth and rounded, may be dark point at tip
- rhizome usually brown or yellow in younger parts
- prophyllum present, i.e. single leaf originating from rhizome instead of from vertical, leaf bearing shoot.