

# Seagrass

## Fact Sheet



### PLANT MATTERS



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**1** Seagrasses aren't actually grass! They are flowering plants similar to those growing in your garden.

**2** Seagrasses are the only flowering plants that can live completely submerged in sea water.

**3** Dugongs LOVE seagrass – particularly the species found around Gladstone.

**4** Seagrass meadows cover less than 0.2% of the area of the world's oceans.

**5** In Queensland, all seagrasses are protected under the *Fisheries Act 1994*.



Eelgrass  
© Emma Jackson CQUniversity



Eelgrass  
© Emma Jackson CQUniversity



Eelgrass  
(*Zostera muelleri*  
subsp. *capricorni*)

## Explore the seagrasses of the Gladstone region

### What is seagrass?

Seagrasses are named as such because they resemble grasses and form meadows, but they are not really grasses, rather a type of flowering plant that has evolved to live in sea water. They range in size from no bigger than your fingernail to plants with leaves as long as seven metres. Like the plants in your garden, seagrasses draw nutrients from their roots and leaves – they love sunlight and need lots of it to grow!

Seagrasses like to live in sandy or muddy intertidal zones (areas that are covered by water at high tide and uncovered at low tide) and subtidal zones (areas that are always underwater) protected from big waves and surf. Seagrasses are most common in shallow waters (less than 5 metres deep) but they can grow in deeper waters. In Gladstone, some species have been found growing 19 metres underwater.

When there is a lot of seagrass growing in one place it is called a seagrass meadow where it can look more like an underwater carpet.



Paddleweed  
© Emma Jackson CQUniversity

### Why it matters

Seagrass meadows play a very important role in the marine ecosystem as they:

- provide food for turtles, dugongs and other marine animals
- provide a foraging habitat for shorebirds
- provide habitat and shelter for young fish, crabs and prawns
- stop waves from stirring up the seabed (called turbidity)
- trap sediment (dirt and sand).

Over 30 species of seagrass can be found within Australian waters with a local subspecies of eelgrass (*Zostera muelleri* subsp. *capricorni*), paddleweed (*Halophila ovalis*) and narrowleaf seagrass (*Halodule uninervis*) the most common types near Gladstone.



Seagrass monitoring  
© Cardno



Paddleweed  
(*Halophila ovalis*)

Gladstone's  
**Big 6**

Paddleweed and Eelgrass illustration source:  
Integration and Application Network, University of  
Maryland Center for Environmental Science (ian.  
umces.edu/imagelibrary/)

[www.gpcl.com.au/Big6](http://www.gpcl.com.au/Big6)

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### The grass isn't always greener underwater...

Seagrass meadows are very fragile ecosystems. Recovery from disturbance or damage (causes can range from boat propellers to cyclones) can vary; in some instances, seagrass recovery can be quick, while in others, it may take several years, or may never grow back.

The main threats to seagrass are:

- natural weather events like storms and cyclones
- poor water quality caused by human pollution or run-off
- changes in water temperature
- boat anchors and propellers
- dredging or marine construction that is not managed properly.

### Where it grows!

The map below shows areas in Port Curtis where seagrass meadows have historically been found. This information is based on Gladstone Port Corporation's ongoing monitoring of the area since 2002.



### Lifecycle of a seagrass

Seagrasses are true flowering plants. Male flowers release pollen into the water, and the pollen drifts with the waves and currents and fertilises female flowers. A fertilised flower develops into a seed, which can traverse many miles before it settles onto soft seafloor and can be stored in the sediment to form a seed bank where seeds can survive for some time before growing into a new plant.

Seagrasses in Gladstone are highly seasonal with a peak growth period between July and December inclusive, and a slower growth (or senescent) period from February to June.

Seagrass meadows can grow and spread, but only if:

- the bottom is muddy or sandy
- water is the right depth
- they can get enough light.



### What you can do to help!

- Never anchor your boat in a seagrass meadow.
- Know your depth and draft – if you are leaving a muddy trail behind your boat, you are probably cutting seagrass with your propeller!
- Be wise – be careful when washing your car or fertilising your garden as chemicals enter drains and end up in the ocean.



### Find out more

Seagrass Watch  
[www.seagrasswatch.org](http://www.seagrasswatch.org)

Queensland Government  
[www.ehp.qld.gov.au](http://www.ehp.qld.gov.au)

TropWATER  
[research.jcu.edu.au/tropwater](http://research.jcu.edu.au/tropwater)

