

HOW-TO GUIDE



The *Posidonia australis* fragments you collect will be used as donor shoots in the restoration. To be suitable for replating, the fragments must be healthy, living and still have some rhizome (the 'trunk'-like part at the bottom of the shoot where energy for growth is stored).

What does a suitable *Posidonia* fragment look like?

Healthy, living *Posidonia australis* is vibrant green, with long, wide leaves growing straight upward from a woody base that runs flat along the seafloor – the rhizome. There may be multiple shoots coming from a single rhizome, and often you will see several white roots attached as well.

The growing region of the plant, which we call the meristem, is at the base of the green leaves, and looks slightly pink, especially in the inner leaves.

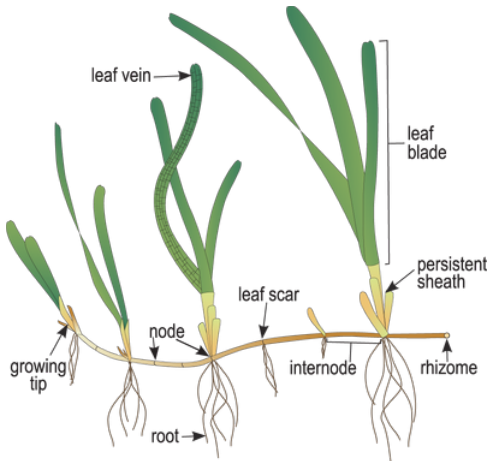


Illustration of *Posidonia australis* (Source: James Cook University)

Suitable fragments have green leaves and a brown rhizome, which feels tough and woody.

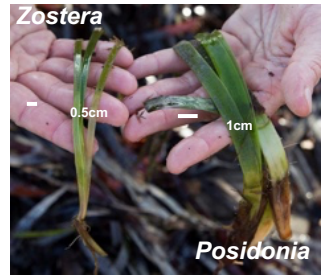


Many green and brown *Posidonia* leaves can be found on the shores of Lake Macquarie. However, without rhizomes these cannot be used in restoration



Posidonia or Zostera?

Posidonia and *Zostera* are two seagrasses that can be found in Lake Macquarie. They look quite similar when washed ashore, but *Posidonia* has wider leaves, about 1cm across.



When and where to find fragments

As winter westerly winds increase, *Posidonia* fragments are likely to end up on the eastern shores of Lake Macquarie. We've found viable fragments near **Swansea, Marks Point and Belmont**. Fragments may also be **floating** in the lake and can be collected by boat or kayak. The best time to collect will be immediately **after large storms** or wind events, and at **low tide**.

Where to take fragments

Drop fragments off at **Belmont Baths** (Brooks Parade Belmont). We have set up a collection tube on the left hand side of the wharf. Simply drop your fragments in! Our team will frequently recover these and prepare them for restoration.

Safety first!

Stay safe while collecting. Bring sun protection, a raincoat, and a water bottle.

A pair of **gardening gloves** will be handy for searching through accumulated seagrass – this will keep you safe from sharps and any potentially harmful marine life.

Also bring a container or bucket you can use to keep fragments damp while you transport them.



Do I need a permit?

Removing seagrass 'wrack' from the intertidal zone (up to 20 kg/ day) is allowed. As this restoration is also part of a research project, we are operating under **Section 37 Fisheries Management Act Collection Permit PN20/452**, which allows the permit holder (Associate Professor Adriana Vergés) and additional people (i.e., volunteers/ citizen scientists) to collect detached seagrass shoots from the Lake Macquarie area.



Our restoration work in Lake Macquarie is supported by NSW DPI Recreational Fishing Trusts

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