

# Seagrass Disturbance, Fragment Recovery and Recolonisation of *Zostera muelleri* Beds at Raglan Harbour, New Zealand.

Octavia Cade<sup>1</sup>

<sup>1</sup>*Waikato University*

New Zealand has one seagrass species, *Zostera muelleri*. This intertidal species is recognised by the Department of Conservation as vulnerable. Potential restoration programmes are hampered by the fact that *Z. muelleri* is the subject of a limited number of studies and thus helpful knowledge is not always available.

Whāingaroa Harbour, Raglan, on the east coast of the North Island, contains established *Zostera* beds. Unpublished studies indicate that reproduction at these beds is likely to be primarily vegetative, though sampling for seed banks is ongoing. The potential spread of these local populations is therefore (at least partially) dependent on the ability of vegetative fragments to remain viable for the duration of their existence in the water column and for re-attachment to occur upon settling to the substratum.

To determine the viability and establishment potential of *Z. muelleri* vegetative fragments after periods of meadow disconnection and floating, aquaria experiments are being undertaken. The presence or absence of a seed bank, the success of fragment reproduction, and the resulting consequences for meadow genetic diversity, will affect future restoration and management strategies at Raglan.