

Seasonal fluctuations in the cover and abundance of seagrass in an important dugong and turtle feeding area.

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From February 2002 until January 2006 seagrass meadows within Shoalwater Bay, a largely undisturbed natural embayment in central Queensland, were monitored for seagrass community structure and abundance. Seagrass cover and biomass within Shoalwater Bay appears to be relatively consistent throughout the year with minor natural fluctuations in seagrass cover recorded, following a weak seasonal pattern with seagrass being less abundant in autumn and more abundant in spring and summer. Furthermore, each seagrass species recorded exhibited a slightly different phenology resulting in a relatively constant seagrass biomass throughout the year, providing a stable supply of food resources for the dugong and green sea turtle that reside in or visit the area. Localised changes in seagrass cover may be the result of variation in environmental conditions, such as temperature, wind and rainfall. Seagrass cover and biomass within Shoalwater Bay was typically lower than has been reported in other seasonal seagrass meadows, however, the results of this study indicate that the seagrass meadows are in relatively good health.