

Seagrass-Watch



Moreton Bay

Newsletter No36. September

Special Edition

Introduction

With Winter over the mid year field work is at a close. A big thank-you must go to all our volunteers, once again your time and efforts have been invaluable.

There will be a few changes to the layout of the newsletter, however please note that the back pages remain the same with all the usual tide times (though not in this special edition), spotlighting opportunities, training dates and good monitoring technique hints.

Planning has commenced for the next round of monitoring. If you are interested in volunteering, some further training or know of anyone else willing to lend a hand please contact us to organize times to do so.

Furthermore, we are doing a shout out for anyone who has **old digital cameras** which work but are no-longer needed for our monitoring kits. This would help us greatly in minimizing time and money spent on developing and scanning of prints into digital images and any help in acquiring these would be much appreciated. The kits are all getting an overhaul a present.

A few changes...

Some sad and good news, Nick Hoffman is leaving Seagrass Watch but the good news is he is taking up a new job in Queensland Parks and Wildlife. We are grateful for Nick's efforts over the years and we wish him the very best in his new endeavors. He will now be chasing koalas.

In the meantime Alix will be helping out on a part time basis to keep things running smoothly. Alix has already made a number of changes that will help you keep in contact with us. The Website <http://www.sbaltais.com/seagrass/> has been updated, a blog site <http://seagrassmb.wordpress.com/> and Facebook group have been created and the new email address resilient to staff change is seagrassmb@gmail.com

Kind Regards

Simon Baltais



**Send us your photographs
of the good, the bad and the
interesting...**

**as they say a picture can
speak a thousand words**

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Wildlife Service**

**Marine Animal
Strandings**

telephone hotline:

1 300 ANIMAL (1 300 264 625)

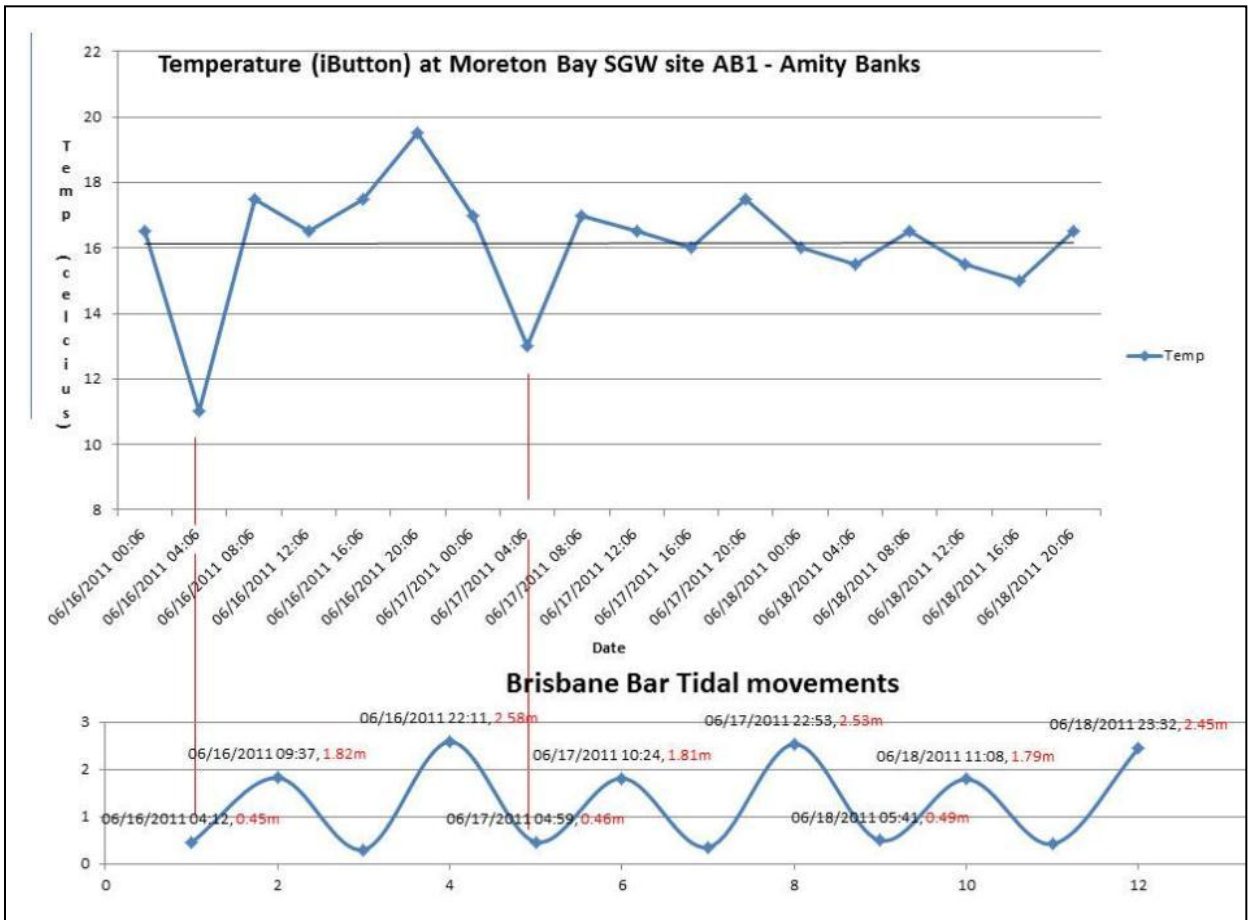
Websites

<http://sbaltais.com/seagrass/>
www.seagrasswatch.org

<http://www.facebook.com/people/Moreton-Bay-Seagrass-Watch/100002844144062>

Seagrass Trends

It gets cold out there. Seagrass Watch has a number of temperature monitors (iButtons) out in the field. A recent check on data generated by the monitor at SGW site AB1 on the Amity Banks found that temperatures got down to 11°C to 13°C on some days. The graph below gives a snapshot of those temperatures. The spikes in the data are a result of the monitor being exposed at low tide (see the red lines) so this means water temperatures were still between 18°C and a cool 15°C. These low temperatures have an impact on species and in particular impacts on dugongs which solely feed on seagrass. Dugongs in Hervey Bay and Moreton Bay in Queensland, as well as Shark Bay in Western Australia (Marsh *et al.*, 1994), seem to respond to a water temperature threshold of 17–18 °C, below which they undertake meso-scale thermoregulatory movements. In Moreton Bay, Queensland, dugongs make microscale movements of about 10 km to escape the cold winter temperatures in the bay. During winter in 1988 –1989 tracked dugongs left the bay at some stage and moved through South Passage to where the waters of the East Australian current were >5 °C warmer than the 17–18 °C water in the bay (Sheppard *et al.*, 2006).





Other News



Facebook is a great (and free) way to keep informed about what's happening in Seagrass Watch.

<http://www.facebook.com/people/Moreton-Bay-Seagrass-Watch/100002844144062>

Pictures, information about upcoming events and fellow Seagrass Members can all be viewed in the one easy location. If your not yet a Facebook member it is very easy to do. Go online to www.facebook.com enter your details in the sign up section (previewed right), click sign up and follow the prompts. From there enter the URL above and add us as a friend.



New and Improved Websites

Check out the new and improved website at

<http://sbaltais.com/seagrass/>

If there any links/pages/picture that don't work let us know.

Also take a look at our blog, of which you can comment on the content without the hassle of becoming a member

seagrassmb.wordpress.com

Seagrass Watch attire available

Seagrass Watch has a number of items available for sale, contact us for a copy of the order forms or go online to print them

<http://www.seagrasswatch.org/shop.html>

If enough interest arises we can do a group order which can be collected from either WPSQ Head Office in Brisbane or the Manly DERM office.



Interesting Finds



A Moreton Bay Baler snacking on a cockle

Melo georginae, a carnivorous sea snail which grows to 200 – 300mm,



Mudflat spotlighting

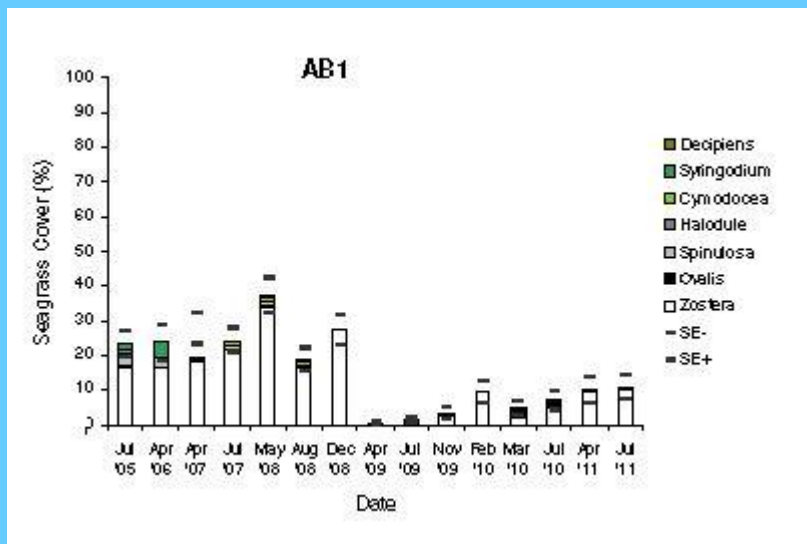
We conduct mudflat spotlighting trips on an opportunistic basis, so we invite you to let us know if you would like to do one of these trips at your own site. This is a great way to see the hordes of bizarre creatures that utilise your site at night. Please contact Nick to arrange one of these evening events.

Seagrass surveys

Seagrass-Watch surveys are undertaken three times a year (March-April, July-August and November-December). The **November/December** monitoring period is nearing and there is a limited number of good tide times. Those who have been trained and set up at sites should select a suitable day and contact Alix to book the equipment. The tide times will be published in the next Newsletter which will be out in early October.

Email: seagrassmb@gmail.com

Please give plenty of notice when making a booking.



To view your Seagrass Watch site go to:

http://www.sbaltais.com/seagrass/seagrass_Survey_Sites.html

Compiled by: Alix Baltais

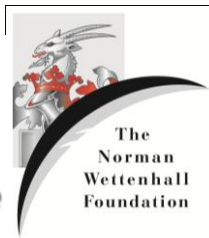
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Disclaimer: The views expressed in this newsletter are those of the authors and not necessarily those of the Queensland Government.



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Quick Seagrass-Watch Reference Guide to Monitoring Techniques:

- Sediment description:** Dig your fingers into the top centimetre of the substrate and feel the texture. Describe the sediment by noting the grain size in order of dominance (e.g. sand, fine-sand, fine-sand/mud, mud/sand, mud/coral rubble). It will reduce confusion if we record the sediment in this way, taking care to list the sediment types in order from most to least dominant sediment type. For example, if the sediment is more muddy than sandy, then it is recorded as mud/sand.
- Other organisms:** If possible, be more specific about the number and type of other organisms present within quadrats. For example, information about the distributions of predatory versus algal-grazing gastropods is potentially important. Identification of other organisms should only be taken to the individuals' skill level, i.e. if you know what it is then write it down.
- Water depth:** We would like to start recording the depth of water present in each quadrat. Please measure the depth of water (in centimetres) in each quadrat and record it in the comments (if there is no water, please also make a note of this).
- Photographs:** These are to be taken at 5, 25 and 45 meters along each transect instead of 10, 25 and 40 meters. Please take the photo from as vertical as possible and make sure to include the three items: the tape, quadrat and quadrat identifier.
- Estimating percentage seagrass cover:** Always use the percentage cover photo guide to narrow down seagrass cover estimates. Also, please be more specific with estimates, especially if the cover is less than 50% (i.e. do not simply round off to the nearest 5%). Never use greater- or less-than symbols (i.e. '<' or '>').
- Seagrass canopy height:** When measuring the seagrass canopy height, please take care to select seagrass blades randomly and not to focus on the three longest blades. Seagrass-Watch HQ in Cairns advise ignoring the top 20% but if you have some other sort of system that works for you (e.g. always taking samples from roughly the same three points within the quadrat) then continue.
- Seagrass species composition:** Estimate the least dominant species first, up to 100%. This is useful for quality assurance/quality control (QAQC) procedure as some people have trouble adding up. If we have this system of writing down the least dominant species first then we can generally work backwards to get the percentage composition. Try and use several diagnostic characteristics for species identification (e.g. blade shape, leaf venation and rhizome structure/colour), not only one.
- Macroalgae:** Please record anything that is not attached to the seagrass and keep separate from seagrass cover, i.e. it is possible to get 100% cover for both seagrass and macroalgae if drift algae is covering the entire quadrat. In this case one must lift up and remove the drift algae in order to measure the seagrass.
- Epibionts (epiphytes versus epizoans):** Epiphytes are algae attached to seagrass blades and often give the blade a furry appearance. Epizoans are sessile animals attached to seagrass blades (e.g. ascidians or anemones growing on seagrass blades). Please do not include epizoans in with the estimation of epiphytes. Record the presence of epizoans in the comments or an unused/blank column. Also, we need to measure epiphytes more accurately, as a percentage cover, and not just within the three categories: low, medium and high. There is a new protocol for this, for example: if 20% of the seagrass blades are each 50% covered by epiphytes, then quadrat epiphyte cover is $[(20 \times 50) / 100] = 10\%$ (there is a matrix to help with this process, available to download at <http://www.seagrasswatch.org/monitoring.html>, under Quarterly Monitoring, Step 8. estimate epiphyte % cover). The values of percentage epiphyte cover may be lumped prior to data analyses but when and how to do this is for a statistician to decide.
- Seagrass resilience (seed bank) sampling:** For those who are keen we can provide training in assessing the *Halodule* seed bank reserve and thus the resilience of this species. Thirty core samples are taken within each site and training will be provided if you would like to give this a go.