

Queensland *news* Seagrass-Watch

ISSUE 14,
July 2002



Welcome to the winter edition of the newsletter. Thankyou to all the volunteers for making the last three months one of the most successful monitoring occasions to date. Nearly all Seagrass-Watch sites were re-visited and monitored. A big thank-you to all involved. Remember, contributions to newsletter articles from volunteers are most welcome, so please keep them coming.



Award for Townsville Seagrass-Watchers!

Congratulations to Townsville Seagrass-Watchers, who received an environmental award for their efforts monitoring North Queensland's seagrass meadows. Seagrass-Watch was awarded the *Townsville City Council's Environmental Excellence Award* in the business and industry category at Townsville's Ecofiesta. Jane Mellors (DPI) accepting the award on behalf of the volunteers said that this environmental award recognises the voluntary contributions of the 27 Seagrass-Watchers in the Townsville area and will also raise the profile of this



Jane Mellors and Anne Bunnell at the award ceremony.

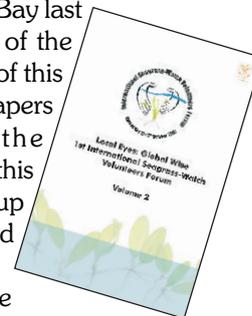
program in the twin cities. Along with the certificate, there was a monetary award of \$1,000. This prize money will purchase extra monitoring equipment, so that the Townsville Seagrass-Watch Volunteers can extend their efforts by monitoring new sites around the Townsville and Thuringowa coastline. Well Done!!

Status of Queensland Seagrass

DPI Marine Plant Ecology Group is compiling a report on the Status of seagrass in Queensland at the start of the new millennium. The report will document the current condition of seagrass resources in Queensland, and how this compares with the condition of seagrass resources in the Western Pacific and globally. Information gathered throughout the Seagrass-Watch program will be included in the report. The report will be finalised at the end of the year, and will be used by management agencies such as the Great Barrier Reef Marine Park Authority, Environment Protection Agency, Queensland Parks & Wildlife and the Department of Primary Industries.

ISWVF-2001 Proceedings Volume 2

All participants of the 1st International Seagrass-Watch Volunteers Forum held in Hervey Bay last year, will soon receive volume 2 of the forum proceedings. The first part of this volume contains additional papers missed in volume 1 of the proceedings. The second part of this volume summarises the focus group discussions and the recommended outcomes.



Since the forum, several of the volunteers' recommendations have been implemented, these include

- Establishment of a temporary website by Paul Wenzler
- Volunteers contribute articles to the quarterly Seagrass-Watch newsletter
- Calibration sheets have been refined in some localities
- Refresher workshops have been conducted
- Results have been presented in a report and pamphlets
- More indigenous groups have become involved, and
- Volunteers have been recognised for their contribution in a letter from the Minister for Primary Industries and Rural Communities, Hon. Henry Palaszczuk MLA.

It is hoped that this additional volume from the ISWVF-2001 will help stimulate further ideas on community involvement in marine resource monitoring.



Heather, Gale and Sara measuring how Pioneer Bay seagrasses are fairing.

There are a few extra copies for those who are interested, but could not attend the forum. If you would like a copy, contact the Seagrass-Watch Coordinator at Northern Fisheries Centre (*contact details on the back page*).

Also, if you have any thoughts on the possibility of having a forum next year, please forward your suggestions on where, when and how to the Seagrass-Watch Coordinator!

Visit the Seagrass-Watch website at
www.seagrasswatch.com



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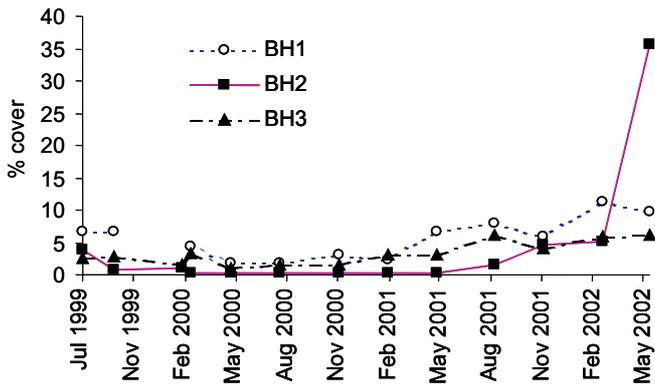
Have you got an interesting snippet
about seagrass to put in this space?

Hervey Bay Happenings!

Great Sandy Strait Seagrasses are RECOVERING!!

Browns Gutter and Tootawwah Creek seagrasses are on their way to recovery. The seagrass at these sites died after the Mary River flood of February 1999, and had showed initial recovery of seagrass in the last monitoring event. Due to remoteness and difficult access, these sites are monitored once per year.

Seagrass cover at most monitoring sites either appears relatively stable or seasonally low. In Hervey Bay however, a significant increase was recorded at Burrum Heads BH2.



Busy Times in Hervey Bay

Jerry Comans reports

The Hervey Bay Dugong & Seagrass Monitoring Program, the Great Sandy Strait Fauna & Flora Watch and Tin Can Bay volunteers organised a social gathering and BBQ at Poona on Saturday 27th July. After the BBQ, the groups collected invertebrate specimens from the Poona area. Specimens have already been collected from Burrum Heads, Toogoom, Dundowran and Urangan. University of Southern Queensland [Wide Bay Campus] in conjunction with Dr. Greg Skilliter UQ, will identify, photograph and prepare ID sheets.

Due to the influx of new volunteers and establishment of new sites, 8 new monitoring kits are being purchased. 5 for Sandy Straits and 3 for Hervey Bay.

Another new school has come on board "Star of the Seas" primary school. They have 6 students and a keen teacher who want to assist.

The group has also decided to look at preparing a school education presentation unit and program that may be used by primary and secondary marine students. Wendy Jones is looking into this and will report back to the next meeting [August 8th].

Monitoring Seagrass at Urangan Harbour

Peter Wood (Queensland Transport) reports

In late February/early March 2002, 6 transects were set up to monitor the impact of construction of a retaining wall at Urangan Harbour on nearby seagrass meadows. The

transects were surveyed by volunteers from the Butchulla Aboriginal Community (the traditional owners of the Hervey Bay area) and volunteer Marine Science students from Urangan High School. Each of the six transects were dominated by *Zostera capricorni*, no *Halophila ovalis* was recorded. The *Zostera capricorni* (narrow morph) had a mean canopy height of 50 to 90 mm at each transect, slightly longer than in the previous survey. Since monitoring began, seagrass cover has increased at most of the transects including the 2 closest to the harbour.

Proposed Great Sandy Marine Park

A new marine park covering the Great Sandy Strait has been proposed and discussion and planning to declare a multiple-use marine park for the region is underway.

On May 30th, Stuart Campbell (DPI), presented findings of Seagrass-Watch to the Heritage Advisory Committee in Maryborough. The committee has been established to advise EPA and QPWS in their proposal to develop and declare the Great Sandy Marine Park (Northern Section). Stuart is a member of the Great Sandy Marine Park Scientific and Technical Reference Group providing scientific advise on issues relating to marine plant habitats in the region.

The proposed Great Sandy Marine Park will contribute to a system of marine protected areas that conserves the marine biological diversity of the Tweed Moreton Bioregion. The Marine Park would provide better management of the Ramsar site through specific regulation of activities.

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FREE Diving in Hervey Bay

Juanita Bité has started her PhD research project in Hervey Bay. She is researching the nutritional value of seagrasses to dugong at various depths - and is in need of certified SCUBA divers to help her out. If you are interested in diving for free and taking part in her project, email her on juanita.bite@dpi.qld.gov.au, or phone her on 07 40350157.

Next Surveys in Hervey Bay & Great Sandy Strait

The next monitoring of long term sites will be from 8th to the 11th August 2002

Best tides are:

Hervey Bay (Urangan): Lowest tide (0.34m) on Saturday 10th August at 3:52pm and Sunday 11th August at 4:38pm

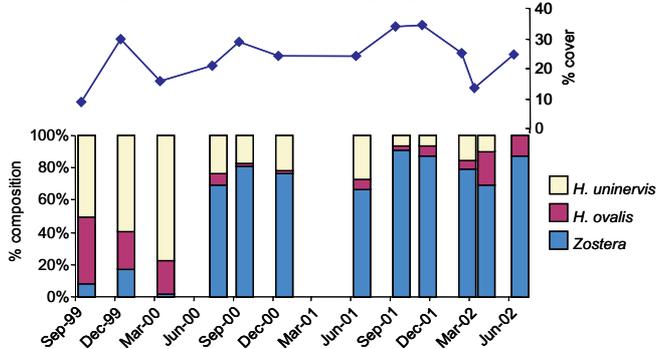
Sandy Strait (Elbow Point): Lowest tide (0.27m) on Saturday 10th August at 3.32pm



Whitsunday Wanderings!

Whitsunday's monitoring

Interesting results from Pioneer Bay where a decrease in the cover of *Halodule uninervis* has been balanced by an increase in *Zostera capricorni* over the past 3 years. Such changes have rarely been documented and may influence the feeding of turtles, fish and dugong in the area.



Muddy-Slimy Workshop in the Whitsundays

Fran Guard reports

14 people participated in a most enjoyable and successful training workshop on Saturday June 22. Participants from Mackay CREW, OUCH, Midgeton and Hydeaway Bay monitoring sites joined 'old' and new Whitsunday Volunteers for the workshop. An



Mackay CREW and the Whitsunday Volunteers at the end of the Pioneer Bay workshop - still smiling!

informative presentation was given by Chantal Roder (from Cairns DPI), followed by a practical session on identification of seagrasses with Jane Mellors (Townsville DPI). In the afternoon, we were introduced to the nitty-gritty (or should I say "muddy-slimy") details of quadrats, transects and sites in Pioneer Bay.

Hydeaway Bay - No Mud Here!!

Maren Matthew reports

On Sunday the 23rd June Whitsundays volunteers, Chantal, and Jane, helped me out with monitoring my Hydeaway Bay site. After my Pioneer Bay experience from the day before, I am thrilled to report that I have a beautiful site to monitor with NO MUD. It was also interesting to note that our site has more seagrass species (4) and quite different covers of seagrasses. I find a higher diversity of macro-algae here, while Pioneer Bay has filamentous algae smothering the meadow. I saw dugong feeding trails for the first time in Pioneer Bay, although I have seen evidence of turtle cropping in Hydeaway Bay. *Thalassia hemprichii* was browning at the leaf tips, which could be attributed to the high water temperatures we experienced during the summer months.



Too Much Stress For The Reef?

In April during a regular Seagrass-Watch monitoring event, Maren Matthew photographed corals adjacent to her monitoring site which had bleached. Corals appear bleached when they expel the tiny plants that usually live in their flesh, and is regarded as a response to stress. High water temperatures and other environmental conditions stress corals and can cause them to bleach. Many corals can recover from bleaching but if temperatures stay too high for too long, the corals will die. Maren's photographs were passed on to scientists from the Australian Institute of Marine Science, CRC Reef and the Great Barrier Reef Marine Park Authority who had recently conducted the world's most comprehensive survey of coral bleaching using light aircraft. As the survey did not come close inshore, information provided by Seagrass-Watchers is of great significance. Results from the coral bleaching survey indicated that bleaching in the Great Barrier Reef Marine Park in 2002 may be the worst on record. AIMS, CRC Reef and the GBRMPA will continue to keep a careful watch on the health of the reef and improve our understanding of the implications of global warming for reef management. For more information on coral bleaching, visit <http://www.reef.crc.org.au>

Bivalve Invasion



In late March 2002 when the Wenzler family (Paul, Jennifer, Andrew and Tara) were monitoring Midge Point (MP2) they noticed large clumps of miniature bivalves attached to the *Halodule uninervis* leaves. These clumps covered large patches of the meadow. They collected some specimens which were identified as *Electroma papilionacea* by Dr Kerry Neil (DPI). These individuals are opportunistic foulers that are common on seagrass meadows and are known to occur from just south of Cairns to the Gulf of Carpentaria and over the top end. They are known to foul some of the oyster farms around the Coburg region (near Darwin). The Midge Point specimens are the most southerly collected. The presence of the bivalves was also noted at the most recent monitoring (22 June), although not as abundant as previous.

Public Meeting at Airlie Beach

Stuart and Chantal will be travelling to Airlie Beach in the first week of September to present the report of the baseline of Whitsunday seagrass resources and the Seagrass-Watch data, at a public meeting to be held at the QPWS information centre on Thursday, 5th September at 7pm. For more information, ring Margaret Parr on Ph. (07) 4946 4996.

Best tides are:

Airlie Beach: Lowest tide (0.08m) on Saturday 7th Sept at 4:30pm and on Sunday 8th Sept 5:19 pm (0.18m).



Queensland Seagrass-Watch *news* continued ..

Townsville Tidings

Jane Mellors reports

Townsville Seagrass Volunteers Train Overseas Visitors

Each year the Maricopa Community College of Arizona Marine Biology Faculty take their students on a field trip to see the Great Barrier Reef. *I guess there's not much you can do in the way of marine fieldwork in Arizona!!* On May 27th, Dr Michelle Waycott and I ran a training session of Seagrass-Watch for Dr Philip Pepe, Terri Kelly, Prof. John Weser, Prof. and Kirsten Hoss. Their training included a seminar session and a field trip to Magnetic Island. It was a great day with the faculty members being particularly impressed with the percent cover sheets. They are now deciding how they could convert them for use with desert plants!

Shelley Beach Recovering

Since the last newsletter Shelley Beach Site 2 has been monitored twice. Percent cover estimates made in April showed seagrass cover to be still increasing. July sampling showed a decrease in cover, as one would expect during the winter months. This observation may suggest that the seagrass community has recovered to the point that it will continue to follow a seasonal pattern. However, it is early days yet with this meadow being monitored for only two years. Past anecdotal evidence would suggest that this meadow is frequently disturbed, with seagrass coming and going over a cycle of years.

Turtle helps out at Shelley Beach

Volunteers on the April trip were delighted to encounter a turtle that had become stranded during the low tide. Apparently, a quite common occurrence as turtles try to rid themselves of parasites. The other notable feature of the April field trip was the recruitment to the site of millions (well thousands) of small nudibranchs. During the July trip there were still plenty of nudibranchs present. Though not as many in number, the animals were greater in size! On this field trip we had lots of new volunteers, which made the sampling trip a great success, so thanks to Sandy, John, Sean and Phoebe Kelly, Dave Watson and Graham Orr.



Dez Wells, Lyn McAndrew and Anne Ferguson relay on their mobile phones to anyone who will listen the presence of a green turtle at Shelley Beach.

Mapping training for Cairns Rangers

After the May monitoring of the Ellie Point Seagrass-Watch site, Chantal and Anthony (DPI) held a Geographic Information System and mapping workshop for the indigenous rangers at Cairns TAFE. The rangers were taught how to download the GPS data onto laptops, how to import that information into the GIS (MapInfo), and convert it to a format ready to map seagrass meadows. The skills involved with GPS, GIS (MapInfo) and mapping are used extensively by coastal managers and can be applied from Seagrass-Watch, to mapping terrestrial weed distributions - even to mapping the basketball court at TAFE! (which the rangers did a couple of days after, just to hone their skills).

Sediment Recording Refresher

When determining sediment type, you describe the sediment as one of, or a combination of:

- Mud
- Fine sand
- Sand
- Coarse Sand
- Shell
- Gravel

You must record the most dominant sediment type first, then the other components. For instance, if you had a very muddy handful with a bit of sand, then it is recorded as Mud/ Sand (NOT Sandy Mud). Recording this information accurately is very important, as often changes in sediment components may be a cause of a seagrass species composition shift.

Do you want to get Involved?

Contact your local Seagrass-Watch representatives:

Hervey Bay:

Jerry Comans (Hervey Bay Dugong and Seagrass Monitoring Program) Ph. (07) 4124 2393

Great Sandy Strait:

Gary Nielsen (The Great Sandy Strait Fauna & Flora Watch) Ph. (07) 4129 8117

Steve Winderlich (QPWS Maryborough) Ph. (07) 4121 1933

Whitsundays:

Margaret Parr (Whitsunday Volunteers Association) Airlie Beach Ph. (07) 4946 4996

Tony Fontes (O.U.C.H) Airlie Beach Ph. (07) 4946 7435

Townsville:

Dez Wells (Townsville Seagrass & Mangrove Volunteers) Ph. (07) 4789 0239

Moreton Bay:

Nicola Udy (QPWS Cleveland) Ph. (07) 3821 9024

Save some trees?

If you would like to receive the Seagrass-Watch newsletter via email (as a .pdf file) send a request to Seagrass@dpi.qld.gov.au



Any comments or suggestions about the Seagrass-Watch program or contributions to the newsletters would be greatly appreciated.

Contact: Seagrass-Watch Coordinator
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