Queensland Aent Seagrass-Watch NOVEMBER 1999

What's Been Happening in the past couple of months?

Its been a busy time for Marine Plant Ecology Group members involved with Seagrass-Watch over the past couple of months. Two field trips to each of the Hervey Bay and Whitsunday regions, and a research trip investigating coastal and deepwater seagrass resources in Dugong Protection Areas have occurred. Consequently we are running a bit late with this issue! But-there are lots of good things to report on as a result!

Spotlights on Seagrass-Watch

Spreading the word about the Seagrass-Watch program has continued. Displays of the program have been shown at the Cairns Show in July and the Hervey Bay Seafood Festival in October (more info later). As mentioned in the previous newsletter, a Seagrass-Watch display was established in the Australian Museum in Sydney. Over 7,000 people visited this exhibition during July and August. Interest for starting similar community based seagrass monitoring programs have been expressed by people in Victoria, Western Australia and the Northern Territory.

Long term monitoring sites up and running

Throughout the months of August and September permanent monitoring transects were set up in the Hervey Bay and Great Sandy Straits region and in the Whitsundays region - see pages 2 & 3 for more details.



How The Data Is Being Used

The aim of the Seagrass-Watch program is to collect information on changes in seagrass meadow characteristics so as to provide a reliable early warning system on the status of our seagrass resources. A program outcome is to make this information available for planning and contingency use. Seagrass-Watch data has already assisted with:

- •a response to a dredging proposal in the Poona area. Maps of seagrass distribution have been provided to ensure any management decisions are made using the most current and accurate information available;
- •contributing to the information being considered in the assessment of world heritage values in an application for World Heritage Area listing of the Cooloola region;
- •reassessment of the existing Fraser Island World Heritage Area;
- •Regional Coastal Plan Whitsundays and Mackay Maps of seagrass distribution along the coast and islands are being used to ensure any management decisions for anchoring and marina plans are made using the most current and accurate information available;
- •Whitsunday Shire Council's Strategic Plan Maps of seagrass will help toward long term planning of sewage treatment and disposal.

Seagrass-Watch calendar for the year 2000

We are currently producing a "year 2000" calendar to distribute to Seagrass-Watch volunteers and other affiliated people across Queensland. The desktop calendar will have snippets of information about seagrasses from Queensland and around the world. On the back of the calendar there will be space for volunteers to write down any observations they make between formal monitoring events (eg washed up seagrass on local beach, dugong sited, fruits/flowers sited etc). If you are on our current mailing list, you'll receive one in December. If you would like one, get in contact with us (details on last page).

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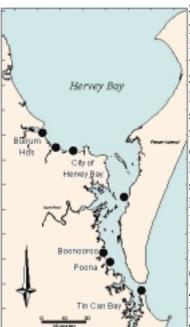
The estimated coverage of Australian seagrasses is over 50,000km²

One square metre of seagrass can produce up to 10 litres of oxygen per day

Hervey Bay Happenings!

Long-term monitoring sites established in Great Sandy Straits

Between August 9th-18th, the Marine Plant Ecology Group worked with the Hervey Bay Dugong and



Seagrass Monitoring program (HBDSMP) in Hervey Bay and the Great Sandy Straits to establish long term monitoring sites across the Sites were region. established at six locations (with 2-3 sites marked at each location) including Boonooroo, Pelican Bay, Burrum Heads, Poona. Wanggoolba Creek and Toogoom. A total of 14 sites were permanently marked with plastic star pickets, a yellow tag

and a subsurface buoy (see the photo on page 1 of this newsletter).

Additional monitoring sites were also established between October 6th-9th at Toogoom, Dundowran and at Boonooroo.

A total of 19 monitoring sites are now established across 7 locations in the Hervey Bay and Great Sandy Straits region.

Hervey Bay Seafood Jestival

Over 10,000 people attended the Hervey Bay Seafood Festival this year on October 10th. The HBDSMP and the Seagrass-Watch program's combined display was complete with a large aquarium containing live seagrass and juvenile eastern king prawns. Special thanks to Vanessa Jamieson for supplying the tank, Steve Winderlich and John Roberts for assisting with the collection of juvenile prawns, John Lindberg for collecting the fresh *Zostera capricorni* and *Halophila ovalis* specimens for the aquarium (covered under permit), and Jerry Comans, Karen Kirk, Wendy Jones, Rob Coles and others who assisted on the day. Overall the display was a big success in raising the profile of



Seagrass-Watch and highlighting the importance of seagrass.

Post-Flood Monitoring

On Sunday 16th and Monday 17th August, the Marine Plant Ecology Group conducted the second of the post-flood monitoring trips to assess the impact and subsequent recovery of Hervey Bay's seagrasses after the Mary River flood in February. Recovery of the seagrass after the flood event is continuing. One more monitoring event will occur in December.

Next Trip To Hervey Bay

The Marine Plant Ecology Group will be joining the local volunteers to monitor the permanent sites in Hervey Bay between 21th-27th November. The Group will conduct further intertidal monitoring, helicopter surveys, and Mary River post-flood monitoring, including deepwater seagrass video monitoring. If conditions are favourable, an additional Seagrass-Watch monitoring location may be established at Moon Point. A workshop on seagrass identification will be held on Saturday 27th November. If you are interested in attending any events during this time, please contact HBDSMP Coordinator Jerry Comans on 07 - 4124 2393 for details.

Good tides for Seagrass-Watch Hervey Bay (Burnett Heads)

November 22-25

Lowest tide is 0.42m on Tuesday 23rd at 2.30 pm.

December 22-24

Lowest tide is 0.49m on Thursday 23rd at 3.15 pm.



Whitsunday Wanderings!

Pilot study of anchoring in Whitehaven Beach Seagrass Meadows

The Marine Plant Ecology Group and the Order of Underwater Coral Heroes (OUCH) volunteer group conducted a pilot study into the effect of anchoring to tropical seagrass beds. The pilot study was conducted in August during the annual Hamilton Island Yacht Race and Beach Party event at Whitehaven Beach. The group discovered that anchor scars quickly blend in with the surrounding environment because of patchiness in the seagrass meadow, natural disturbance from animal activity, and movement of sand by tides and currents. Without any clear results, it was decided to establish monitoring transects similar to those operating in the intertidal programs to assess impacts at a meadow scale.

LONG-TERM MONITORING SITES ESTABLISHED

Pigeon Island- intertidal monitoring sites

Training exercises were undertaken for new Whitsunday Seagrass-Watch intertidal volunteers on Saturday 28 August. The exercise was conducted on the tidal flats at Pioneer Bay near Pigeon Island and everyone was quick at learning techniques for seagrass identification, estimating seagrass percentage cover, and noting special points of interest in the meadows. A month later, 4 long-term monitoring sites were established near Pigeon Island (Pioneer Bay) on the 25th and 26th September (marked with tags like the one on the front page). The training session also included a presentation by James Cook University (JCU) seagrass



genetics researcher, Dr. Michelle Waycott. Michelle is undertaking a study in Pioneer Bay - looking at the available seed bank for seagrass regeneration after loss. As the seagrass meadow was in full bloom (complete with flowers and fruits!), Michelle was able to point out the difference between *Halophila ovalis* male and female flowers.

Whitehaven Beach-subtidal monitoring sites

On 27th and 28th September, Chantal, Michael and Angus (QPWS) accompanied OUCH volunteers to Whitehaven Beach to conduct underwater video training and establish subtidal monitoring transects. Two sites were established, one in a common anchoring location (Whitehaven Beach - south) and the other



outside the commercial use area (Whitehaven Beachnorth). Thanks to our skipper Andrew from Maxi Ragamuffin, who commanded the Azura with great skill in trying sea conditions.

New local coordinator for Whitsundays intertidal monitoring program

Amanda Parr has answered the call to take over as local contact person/coordinator from Robin Salmon. Amanda has a Science degree in Marine Biology and is also a diving instructor, so is no newcomer to the marine environment. Being the busy person that she is, Amanda will be assisted from time to time by her mother, Margaret. Amanda and Margaret may be contacted on 4946 4996. Thank you Amanda, and welcome aboard! Our thanks go to Robin Salmon and wife Coral for all their hard work and assistance.

Next trip to the Whitsundays

The next tip to the Whitsundays by the Marine Plant Ecology Group will be 20^{th} - 30^{th} January 2000. Please contact Amanda Parr or Tony Fontes (contact details on last page) if you would like to join in.

Good tides for monitoring Pigeon Island Sites

November 22-23

Lowest tide 0.52m on Monday 22nd at 3.50 pm.

December 22-23

Lowest tide 0.54m on Thursday 23rd at 5.30 pm.



Queensland Seagrass-Watch remy continued ..

Seagrass-Watch Logo Design

Was it the reference to "small" prize in the last newsletter that didn't take your interest?? We are extending the closing date of our logo design competition until January 2000 as entries have been slow to arrive. Come on and have a go! Maybe your school or class could put in a design. If you design the winning Seagrass-Watch logo, you'll be rewarded with a prize. Send entries to the Seagrass-Watch Coordinator at DPI Northern Fisheries Centre.

Good luck! We hear that Tony Fontes has taken up the challenge!

Proposed International conference in 2001

Marine Plant Ecology Group Senior Principal Research Scientist, Dr. Rob Coles recently met with Bill Brennan, (Mayor of Hervey Bay City Council), and Dr. Malcolm Cooper, (Principal of University of Southern Queensland Wide Bay Campus), to discuss the idea of holding an international forum on community monitoring of coastal vegetated habitats. The discussions are continuing in view of a proposed date sometime in 2001.

Michael Moves On

After 5 months working as co-ordinator, Michael Baer has decided to move on. Message from Michael: "I have thoroughly enjoyed meeting and working with you all, and wish you the best of luck with your monitoring in the future". Thank-you Michael for your excellent and enthusiastic contributions to Seagrass-Watch!

New Seagrass-Watch Co-ordinator

Stuart Campbell from Victoria will be appointed as Seagrass-Watch co-ordinator in January next year, but will be attending the upcoming trip to Hervey Bay. Further info on Stuart in the next issue.

Other People Movements

A new addition to the Marine Plant Ecology Group is Mandy Ross. Mandy's job is to enter all the data collected as part of the Seagrass-Watch program and to the assist the Group with laboratory support.

Another move away is Angus Thompson. Angus's secondment with QPWS has ended so he will be returning to the Australian Institute of Marine Science. Angus has been a great support and contributor to the Seagrass-Watch program over the last six months in the Whitsundays. Although he's going back to research on coral reefs, he'll be keeping a keen eye out for seagrass.

Seagrass-Watch programs are funded by the Natural Heritage Trust-Coasts and Clean Seas Program and CRC Reef Research for the Great Barrier Reef World Heritage Area.

Do you want to get Involved?

Contact your local Seagrass Watch representatives:

<u>Hervey Bay:</u>

Jerry Comans (Hervey Bay Dugong and Seagrass Monitoring Program)

Ph. (07) 4124 2393

Whitsundays:

Amanda Parr (Whitsunday Volunteers Association) Airlie Beach

Ph. (07) 4946 4996

Tony Fontes (Order of Underwater Coral Heroes Volunteers) Airlie Beach

Ph. (07) 4946 7435



Everyone can get involved in Seagrass-Watch - here's Ian McLean and Maree Cliff with Jarrah, at Toogoom, Hervey Bay



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

NEXT ISSUE OUT JANUARY 2000

Contact: Seagrass-Watch Coordinator
Northern Fisheries Centre
38-40 Tingira Street
PO Box 5396,
Cairns. Qld. 4870

Email: roderc@dpi.qld.gov.au Phone(07) 4035 0100