



Seagrass-Watch E-Bulletin

31 January 2012

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NEWS

Seagrass still recovering from Qld floods (QLD, Australia)

18 January 2012, ninemsn

Seagrass habitats off Brisbane are still at risk because of last year's floods, research shows. Griffith University's Australian Rivers Institute found that seagrass meadows near Stradbroke Island were in poorer condition than expected at this time of year as a result of the flood, which saw million of tonnes of sediment washed into bays off Brisbane.

Research leader Professor Rod Connolly said the meadows were now vulnerable to any major flooding this summer and wildlife may not be able to cope with further destruction. In the year to September 20, 150 dugongs had become stranded, with only three released, he said. That's compared to 68 in the same period in 2010, 37 in 2009 and 30 in 2008. Meanwhile, 999 turtles had died, compared with 555 in 2010, 625 in 2009 and 552 in 2008.

Full story and source: <http://news.ninemsn.com.au/article.aspx?id=8405162>

*Related articles: <http://www.baysidebulletin.com.au/news/local/news/general/moreton-bay-still-recovering-from-flooding/2426103.aspx>
<http://www.brisbanetimes.com.au/queensland/fish-help-bay-bounce-back-after-flood-20120119-1q8jw.html>*

Costa Concordia: Storms threaten to shift marooned cruise liner and release oil spill into a wildlife haven (Italy)

21 January 2012, by Tom Kington, *the Guardian*

As the death toll rises to 12, scientists warn that Giglio's heavily protected marine life is now in serious peril from the thousands of tonnes of fuel and other toxins on board. Teetering on a narrow rock shelf, its tanks filled to the brim with thousands of tonnes of fuel, the marooned cruise ship Costa Concordia has been described by an environmental expert as "a bomb ready to go off in the most protected natural area in the Mediterranean". With predicted rough weather threatening to send the 114,000-tonne vessel plummeting from shallows off the island of Giglio into 70-metre depths, fears are growing that 2,400 tonnes of fuel could be released into the crystal-clear waters, home to whales, dolphins, turtles and dozens of rare plant species.

The Italian environment ministry has warned that the ship is already polluting the granite shallows in which it rests, as tonnes of cooking oil, paint, detergents, solvents and chlorinated swimming pool water seep out from the holes punched in the hull by divers. Serena said the seabed around Giglio was home to vast stretches of poseidon sea grass, a native of the Mediterranean, which grows up to a metre long and provides an invaluable refuge for fish as well as supplying oxygen to the water. "Giglio has one of the best expanses of this grass in the Mediterranean," he added. "It is the lungs of the sea, but where the ship is lying it will be suffocated and take 50 years to grow again."

Full story and source: <http://www.guardian.co.uk/world/2012/jan/21/storms-threaten-oil-spill-marooned-ship-italy?newsfeed=true>

Sex promotes seagrass which acts as carbon sink (WA, Australia)

17 January 2012, *zeenews*

Sex promotes greater growth of seagrass, a vegetation that doubles as a huge carbon sink and shelters marine species, reveals a study. Seagrass meadows grew predominately via vegetative growth or cloning, using rhizomes that spread under the seabed, then send out roots and shoots, says a recent research at the University of Western Australia Oceans Institute. But the researchers found that seagrass also relied a great deal on sexual reproduction involving male and female flowers, pollens, seeds and seedlings.

Professor Gary Kendrick, who led the Oceans Institute study, said healthy seagrass populations were extremely important for coastal stability and carbon sequestration, according to a university statement. Last year, Jim Fourqurean, a professor also from the Oceans Institute, showed that extensive seagrass meadows in Shark Bay, on Western Australian coast, act as a massive carbon sink which stores more than \$8 (Australian) billion worth of carbon dioxide, the journal Bioscience reported.

Full story and source: http://zeenews.india.com/news/eco-news/sex-promotes-seagrass-which-acts-as-carbon-sink_753157.html

EPA Officials Witness Sarasota Bay Estuary Program's Success (FL, USA)

16 January 2012, by Jennifer Glenfield, *The Bradenton Times*

The Acting Assistant Administrator for Water at the Environmental Protection Agency, Nancy Stoner, visited Sarasota recently to learn about local environmental projects.

Stoner and a group of local officials visited the Celery Fields Stormwater Facility, Honore Avenue, Red Rock Park, and Roberts Bay. The trip to Roberts Bay included a boat tour to see a bird colony island, mangrove habitat and recovering sea grass beds. Projects reducing nutrient pollution into Roberts Bay successfully took the bay off Florida's impaired waterways list in under 10 years.

The visit by Stoner underscores the importance of Sarasota Bay and the ongoing collaboration with the Sarasota Bay Estuary Program. The Sarasota Bay Estuary Program is dedicated to restoring the Sarasota Bay. The program has three primary critical habitats: fresh and saltwater wetlands, sea grass beds, and 'hard bottoms,' or oyster and reef beds. It has participated in over 200 projects since its creation in 1989, improving water quality and restoring critical habitats. Sarasota Bay is one of 28 estuaries in the United States that have been named by the U.S. Congress as an 'estuary of national significance.'

Full story and source:

http://www.thebradenton-times.com/news/2012/01/16/environment/epaOfficials_witness_sarasota_bay_estuary_program_s_success/

Australia: Cutter Suction Dredging in Gladstone Harbour Suspended (QLD, Australia)

11 January 2012, dredgingtoday

Turbidity levels in the Western Basin of Gladstone harbour have been increasing in recent days. Water quality monitoring systems have recorded levels at QE4 (at the northern end of the bund wall) above the limits set out in the project approvals. This has meant a temporary suspension of cutter suction dredging has been put in place by the Queensland Department of Environment and Resource Management (DERM).

GPC will comply fully with the decision to reduce dredging in the Western Basin this week and continue to assist water conditions return to normal as soon as possible. GPC's implementation of the Turbidity Management Plan during the Spring tides late last year has been largely successful in mitigating turbidity increases seen during the large tidal ranges. Backhoe and grab dredges will continue to operate.

Turbidity levels are an important measurement of water quality to ensure the health of the seagrasses throughout the harbour. Seagrass beds are continuing to recover from the extreme weather events of 2010-2011. Cutter suction dredging is expected to resume when turbidity levels at all water quality monitoring sites have fallen under and remained below the limit for a period of more than 24 hours.

Full story and source: <http://www.dredgingtoday.com/2012/01/11/australia-cutter-suction-dredging-in-gladstone-harbour-suspended/>

Corps of Engineers changes bay dredging project to protect recovering seagrass (TX, USA)

10 January 2012, Your Houston News

The Galveston Bay Foundation met with officials from the U.S. Army Corps of Engineers Galveston District last week to view and discuss a dredging project near Carancahua Point in West Galveston Bay on the Gulf Intracoastal Waterway.

Galveston Bay Foundation and many local fishermen have been concerned about the dredge material being placed upon seagrasses that have re-established in the area. Galveston Bay had lost more than 90 percent of its seagrasses since the 1950s, but in recent years, seagrasses have begun to return to the bay.

The Corps of Engineers justified the dredging project under a study done in the Laguna Madre that showed that long term impacts to seagrass from being covered with a thin layer of dredge material would be minimized if the material was placed in the winter months when the seagrass is photosynthetically inactive. However, because seagrass is so rare in Galveston Bay as compared to the Laguna Madre, Galveston Bay Foundation asked the Corps to carefully review its plans and make changes to further minimize potential impacts to seagrass.

Full story and source: http://www.yourhoustonnews.com/bay_area/news/corps-of-engineers-changes-bay-dredging-project-to-protect-recovering/article_9f982145-2483-5b0b-a534-27273f010d4d.html

Large-scale SAV restoration discouraged until water quality improves (VA, USA)

09 January 2012, by Karl Blankenship, Bay Journal

A scientific review has offered advice about trying to plant large-scale underwater grass beds in the Chesapeake: Don't bother. At least not until the Bay's often-murky water gets clearer.

The recent report by the Bay Program's Scientific and Technical Advisory Committee recommended that efforts to replant large underwater grass beds be discontinued until environmental conditions improve, although it said small-scale projects in carefully targeted areas should continue.

The state-federal Bay Program in 2003 had set a five-year goal of planting 1,000 acres of submerged aquatic vegetation, or SAV, in the Chesapeake in the hope of jump-starting the growth of underwater meadows in areas that had often been barren for decades. But the goal, estimated to cost more than \$30 million, was never fully funded. The \$5 million which was spent, mostly by federal agencies, resulted in the planting of fewer than 150 acres by 2008, most of which died. The report nonetheless said that scientists demonstrated they had the technical expertise to harvest large amounts of seeds and plant large, multi-acre projects.

Full story and source: http://www.bayjournal.com/article/largescale_sav_restoration_discouraged_until_water_quality_improves

Urban estuaries 100-fold weaker as 'Blue Carbon' sinks (NSW, Australia)

06 January 2012, Science Alerts

Australian scientists have reconstructed the past six thousand years in estuary sedimentation records and found that changes in plant and algae abundance point to a possible undermining of these natural coastal carbon sinks. The findings, published in Global Change Biology, show an increase in microalgae relative to seagrass in the past 60 years. This shift could diminish the ability of estuaries to mitigate climate change.

The scientists collected soil cores from sites in and around Botany Bay. A chronology for the cores was determined using radiocarbon dating. Changes in plant and algae composition over time were then determined according to the change in isotopic ratio of the organic matter in the sediment. The team's analysis suggests the relative reduction in seagrass and increase in microalgae coincided with a time of rapid industrial expansion and increased nitrogen deposition. These findings are critical because plants such as seagrass have a relatively large carbon sink capacity, which plays a critical role in mitigating climate change.

Full story and source: <http://www.eco-business.com/news/urban-estuaries-100-fold-weaker-as-%E2%80%98blue-carbon%E2%80%99-sinks/>

Toxic seaweed build up angers Busselton residents (WA, Australia)

05 January 2012, ABC News

A delay in removing toxic seagrass from Busselton beaches has angered residents who are unable to use the area.

Every year the weed builds up and rots at the Port Geographe marina, releasing hydrogen sulphide gas and causing a noxious smell. The Department of Transport has responsibility for removing 120,000 cubic metres of the weed each year which builds up due to the poor groyne design. It was scheduled to remove the weed in early October but left the work until late December.

The Port Geographe Action Group chairman, Peter Maccora, says the department should have removed the weed as scheduled as it has been left too late. "On the western side, they have managed to move a lot of the seagrass but there is a substantial amount of seagrass buried under the sand; that is bubbling up at the moment and there's hydrogen sulphide bubbles constantly on that western side."

Full story and source: <http://www.abc.net.au/news/2012-01-05/toxic-seaweed-build-up-in-busselton/3759680?section=wa>

Related article: <http://www.abc.net.au/news/2012-01-06/shire-runs-out-of-money-for-seaweed-clean-up/3761288?section=wa>

<http://www.busseltonmail.com.au/news/local/news/general/new-dredging-for-port-marina/2424426.aspx>

<http://au.news.yahoo.com/thewest/a/-/breaking/12672960/mountains-of-seaweed-raises-stink/>

PUBLICATIONS:

WSA 2012 seagrass calendar

12 seagrass genera for 12 months, keeping us informed on when each genera was first described and how old they are getting. Calendar concept, design, and layout by Giuseppe di Carlo of the World Seagrass Association (wsa.seagrassonline.org) and Jane Thomas of the Integration and Application Network (www.ian.umces.edu).

The calendar is available in PDF and can be easily printed in colour or B&W, in both Letter and A4 format, easy to store and travel with.

More info.... <http://wsa.seagrassonline.org/blog/archives/116>

To download the Letter version of the calendar

http://wsa.seagrassonline.org/blog/wp-content/uploads/2011/12/WSA_calendar_2012.pdf

To download the A4 version of the calendar

http://wsa.seagrassonline.org/blog/wp-content/uploads/2011/12/WSA_calendar_2012_A4.pdf

GALLERY

Broome (Western Australia): 26 - 28 January 2012 http://www.seagrasswatch.org/gallery_Jan_12.html

A big Thank You to all our seagrass volunteers who, despite the wet and wild conditions, joined us on the mudflats of Roebuck Bay a couple of weeks ago for some seagrass action! We welcomed the Karajarri Rangers from Bidyadanga as well as a fantastic bunch of Broomites (old and new!) for three days of fun in the mud. Lots of awesome marine creatures were out and about including sea cucumbers, sea anemone's and even a black and white banded sea snake that was waiting for the tide to come in.

Shelley Beach (Townsville, Australia): 21-22 January 2012 http://www.seagrasswatch.org/gallery_Jan_12.html

Chek Jawa (Singapore): 08 January 2012 http://www.seagrasswatch.org/gallery_Jan_12.html

It's our first monitoring trip for 2012! And what a wet start we had! Despite the rainy weather, this team of enthusiastic volunteers soldiered on and got it done! So glad Siti is with us today to give a proper briefing to everyone about the monitoring process. We have a lot of first timers today so it's important to explain things properly. The rain falls even more heavily as we are nearing the end of our monitoring. And fortunately, it eased off soon after. Today, we also replaced all the stakes, which have been there since we first started monitoring five years ago! Seagrasses commonly seen at Chek Jawa include Halophila ovalis, Halodule sp., Halophila spinulosa and I was glad to see some

small patches of the rare Halophila beccarii. After the monitoring, I had a quick look around and found many signs of what seems to be dugong feeding trails! Hurray!Click here to read more.

CONFERENCES

ICRS 2012 (Cairns, Australia from 9 – 13 July 2012)

12th International Coral Reef Symposium (<http://www.icrs2012.com/>)

In July 2012, the world's leading natural scientists, resource managers, conservationists, economists, educators and students will meet together in Cairns, Australia for the 12th International Coral Reef symposium.

This major international scientific conference is held every four years and provides the latest knowledge and leading edge technologies about coral reefs and reef environments worldwide.

This 5 day event will bring together 2,500 people from some 80 countries, to communicate their science and hear the latest advances from the international experts in coral reef science. This research and findings will be fundamental in informing international and national policies and protocols in the conservation and sustainable use of coral reefs and the coral reef environment.

Mini-Symposium: Seagrasses and seagrass ecosystems (http://www.seagrasswatch.org/info_centre/conferences/ICRS2012/Flyer_ICRS2012_Seagrass.pdf)

Seagrass meadows are an important component of tropical coastal waters. They are part of the complex ecosystem that supports the productivity of coral reefs and reef environments. There is evidence that seagrass populations are declining and this will impact on associated ecosystems. Our knowledge of tropical seagrass systematics, ecology, trends, connectivity and the anthropogenic threats to seagrass communities has improved greatly in the last decade. The symposium will bring together recent findings to enhance our understanding of seagrass associated with coral reef environments.

Important dates:

- 1 March 2012 - Early bird registration closes
- 1 March 2012 - Manuscripts for Proceedings due
- 30 March 2012 - Photographic competition closes

International Seagrass Biology Workshop ISBW10 (Brazil, late Oct/early Nov 2012)

The 10th International Seagrass Biology Workshop (ISBW10) will take place in Brazil in November, 2012. ISBW10 will be hosted by Universidade do Estado do Rio de Janeiro and the Instituto Biodiversidade Marinha. ISBW10 convenor is Dr Joel Creed. Further information will be posted when available.

SEAGRASS-WATCH Workshops 2012

For more information: <http://www.seagrasswatch.org/training.html#workshop12>

SEAGRASS-WATCH on YouTube

Seagrass: Pastures of the sea <http://www.youtube.com/watch?v=66Y5vgswj20> or
<http://www.seagrasswatch.org/seagrass.html>

Presentation on what seagrasses are and why they are important (over 20,000 views to date)

...seagrass matters blog

World Seagrass Association blog <http://wsa.seagrassonline.org/blog/>

Keep up to date on what's happening around the world from the WSA with regular updates from WSA President Dr Giuseppe Di Carlo and *notes from the field* by Siti Yaakub.

FROM HQ

Past E-bulletins <http://www.seagrasswatch.org/publications.html#ebulletin>

Frequently Asked Questions <http://www.seagrasswatch.org/faq.html>

Seagrass-Watch Magazine <http://www.seagrasswatch.org/magazine.html>

Seagrass-Watch Shop <http://www.seagrasswatch.org/shop.html>

Virtual Herbarium <http://www.seagrasswatch.org/herbarium.html>

Giveaways <http://www.seagrasswatch.org/shop.html#GIVE1>

Future sampling dates <http://www.seagrasswatch.org/sampling.html>

Handy Seagrass Links <http://www.seagrasswatch.org/links.html>

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Seagrass-Watch E- Bulletin is compiled by Len McKenzie & Rudi Yoshida.