



Seagrass-Watch E-Bulletin

28 February 2011

Seagrass-Watch's electronic news service, providing marine and coastal news of international and national interest. Abbreviated articles are presented with links to their source. Seagrass-Watch HQ recommends that readers exercise their own skill and care with respect to their use of the information in this bulletin and that readers carefully evaluate the accuracy, currency, completeness and relevance of the material in the bulletin for their purposes. You are free to distribute it amongst your own networks.

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NEWS

Scientists gain fresh insight to travel diaries of dugongs (Australia)

23 February 2011, *The Cairns Post*

Dugongs have been tracked for the first time swimming across the shark-infested stretch of ocean between Torres Strait and Papua New Guinea.

Scientists have been using a satellite to follow the journeys of three female and three male dugongs that were tagged between Mabuiag and Turnigan islands in September. One of the six endangered sea mammals took a week to swim the 150km expanse of ocean between the islands into PNG waters, possibly in search of seagrass.

Another herd northwest towards the Gulf of Carpentaria, and four of the animals moved across different management boundaries. James Cook University researcher Dr Mariana Fuentes said their movements showed the importance of Torres Strait Islander communities and Papua New Guinea working together to manage their dugongs.

The Torres Strait supports the largest population of dugongs in the world, however, little is known about the mammals in the region. "All of the information we're getting is pretty exciting and new," she said.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Professor warns of long-term economic effects of flooding (UK)

17 February 2011, Walesonline.co.uk

A Welsh university professor at the forefront of climate change research has warned of the catastrophic consequences of extreme weather on coastal ecosystems. Dr Richard Unsworth said rising sea temperatures and extreme storms and flooding, as seen in the Australian state of Queensland last month, could lead to the destruction of coral reefs and delicate underwater seagrass populations, upon which many of the world's economies depend.

Dr Unsworth, who lectures in international wildlife biology at the University of Glamorgan, has spent 16 years studying the effects of climate change on seagrass off the coast of Queensland and two years studying its effect on the Australian state's prized coral reef. He said last month's flooding in Queensland – the worst for more than half a century – would have caused untold damage to coastal ecosystems. He said: "In Australia, December and January was particularly bad for seagrass meadows and there were huge losses of habitat. Events such as the floods in Queensland flushed a lot of carbon, organic matter and sediment out onto the coast and the effect on marine habitats is a pretty negative one, causing coral disease.

"These big storm and flood events are historical things that always occurred in Australia but now, as a result of poor catchment management, lack of regulation on rivers and poor farming practices, when you get these flood events all the soils, organic matter and carbon is being washed down into the ocean. These can have a serious effect on coral reefs and seagrass, killing off coral reef and fish populations." "If there is good forestry, farming and river management, then these large storm events possibly wouldn't be such an issue, and in Australia they are spending billions to address this. But in developing countries in the Indo-Pacific area, which are experiencing huge changes in farming and industries, this is a very serious issue. "These studies show that, if we fail to improve the resilience of marine ecosystems to climate change, there could be a huge impact on food security. "If these findings from Australia are applicable to the region as a whole, then they have huge implications for many millions of people."

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

For more on the effects of climate on seagrass read [Seagrass-Watch Issue 40 March 2010 \(6.59 mb\)](#) , [Seagrass-Watch Issue 39 December 2009 \(12mb\)](#) ; [Seagrass-Watch Issue 37 June 2009 \(6.0mb\)](#)

Calls grow for more dugong protection (Australia)

17 February 2010, Cairns Post

The Crocodile Hunter's father has called for greater protection of dugongs, as the Federal Government trains traditional owners to assist in the battle against illegal hunters.

Hectares of seagrass – the main food of dugongs – in the Hinchinbrook Channel near Cardwell has been left devastated in the wake of cyclone Yasi. Bob Irwin said the damage showed how vulnerable the animals were to extinction. "This is why I called for a temporary moratorium on the hunting of dugongs," he said. "It just reinforces the fact that if we don't get our act together, we are going to lose them."

Mr Irwin's comments come as a dead baby dugong, suspected to have been caught in a net, was washed ashore at Trinity Beach on Monday. The Great Barrier Reef Marine Park Authority conducted a workshop at Yarrabah earlier this week, training more than 20 traditional owners to help fight illegal activities such as dugong hunting within the Great Barrier Reef marine park.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Yasi strips rare forests, reef (Australia)

08 February 2011, The Courier Mail

World Heritage rainforest and surviving populations of endangered southern cassowaries and dugong were hit hard by Cyclone Yasi, scientists warn. Some of Queensland's top tropical experts met for the first time yesterday to assess the ecological impact of the Category 5 cyclone described as "far worse and over a far greater geographical scale" than Cyclone Larry. Experts believe hundreds of kilometres of the Great Barrier Reef, too, will take up to 10 years to recover from the effects of Cyclone Yasi.

The Great Barrier Reef Marine Park Authority is yet to send divers for underwater assessments. But broken coral from the fragile reef ecosystem and floating islands of seagrass torn off the shallow ocean floor are being washed ashore along the hardest hit parts of the coastline.

GBRMPA chief Russell Reichelt said the progress the reef has made since Cyclone Larry will now be destroyed.

Mr Reichelt said the cyclone and storm surge would have smashed coral beds and moved coral boulders, sand and rubble. He warned any loss of important sea grass beds, disturbed by the cyclone, will have a drastic impact on animals like dugongs. Hinchinbrook Island, off Cardwell, has one of Australia's biggest known populations of dugong.
[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Yearly monster cyclones to harm reef (Australia)

06 February 2011, Ninemsn

If high intensity cyclones batter Queensland annually, coral regrowth on some areas of the Great Barrier Reef may be stunted, marine experts warn. Marine authorities will begin assessing the reef in coming weeks and expect varying degrees of intense and light localised patches of damage from Cyclone Yasi, which almost demolished Mission Beach last week.

Great Barrier Reef Marine Park Authority spokesman Russell Reichelt said on Sunday the reef could cope with one high intensity category five cyclone about every 10 years. "If we have one of these every summer the reef won't have time to keep continuing to recover like it normally does," he told AAP. The Great Barrier Reef has weathered three high intensity category five since 2006 - Cyclones Larry, Hamish (2009) and Yasi.

Mr Reichelt said marine authorities were also concerned about the cyclone's impact on dugong hot spots off the hard-hit Cassowary Coast, between Dunk and Hinchinbrook Island. "The dugongs were likely to escape into deeper water," he said. "But this may disrupt their food supplies ... it won't kill them off but they may have to migrate to areas with undisturbed sea grass.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

For more on the effects of cyclones on seagrass download [Seagrass-Watch Issue 40 March 2010 \(6.59 mb\)](#)

Fake seagrass could help boost fish numbers (NZ)

30 January 2011, NZ Herald

Scientists are using fake grass mats under the sea to prove how New Zealand's fish stocks can be boosted. The plastic mats are being used at Coromandel by NIWA scientists to test how seagrass attracts fish such as juvenile snapper and trevally.

A large amount of New Zealand's seagrass has been lost from sediment from land development washing into harbours. Seagrass at Whangarei Harbour has gone from 14 sq km in the 1960s to virtually none, while Tauranga Harbour lost 90 per cent of its seagrass between 1959 and 1966. NIWA fisheries ecologist Dr Mark Morrison said scientists had created artificial beds at Whangapoua Estuary. The "plants" were made from plastic fronds 5cm to 30cm long and tied to wire frames to form an artificial mat.

Fish numbers reached their highest towards the highest seagrass densities. This summer fish are being tagged to track their survival and growth rates. "What we found, initially, is that fish are really looking for shelter and seagrasses provide good protection to fish." New Zealand Recreational Fishing Council president Geoff Rowling said the research and steps to enlarge seagrass areas was vital. Council vice president Sheryl Hart said fishermen needed to get smart, but it was ultimately up to local body authorities to stop agricultural run-off and sediment run-off from development - the best way to encourage regrowth

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Scientists assess flood impact to Moreton Bay (Australia)

27 January 2011, Australian Broadcasting Corporation

Abridged transcript

TRACY BOWDEN, PRESENTER: While the massive clean-up is well underway in Queensland, the full environmental impact of the floods is still being assessed. The enormous amount of water that flowed down the Brisbane River two weeks ago brought with it thousands of tonnes of silt, which is now settling in Moreton Bay, and that silt is laced with all the pollutants of agricultural and urban development. Scientists are now trying to determine how this will affect the Moreton Bay Marine Park and its vulnerable populations of dugongs and sea turtles. Peter McCutcheon reports.

PETER MCCUTCHEON: Professor Bill Dennison is a former Brisbane resident and international expert on sea grasses who has written several books on Moreton Bay. He says the plume of silt poses a threat to seagrasses that are the main source of food for the bay's turtles and dugongs.

BILL DENNISON: Moreton Bay is really globally unique. It's the only place on the planet where you can be in a healthy dugong turtle population and see a major city skyline.

PETER MCCUTCHEON: Scientists are cautiously optimistic the bay is resilient enough to cope with the shock, but the disaster of two weeks ago is still being played out.

BILL DENNISON: We're not out of the woods yet. We still are in the middle of the cyclone season. We have cyclones forming out there in the Pacific Ocean. So, we've got a very watchful brief and particularly in the next two weeks; that's the most vulnerable period.

more..... <http://www.seagrasswatch.org/news.html>

Charting sea grass growth in the bay (USA)

15 February 2011, Sarasota Herald-Tribune

Twice a year, in February and August, people of all ages and backgrounds join in a mission to observe a sanctuary of life-giving sea grasses submerged in marine and estuarine waters. A new group of 10 volunteers, including a few returning ones, met at the Turtle Beach Community Center on a recent Saturday to get hands-on training in surveying seagrass species, growth and anything biologically unusual around the coastal areas.

"We want to get volunteers involved with our seagrass monitoring program," said Jon Perry, a six-year environmental specialist for Sarasota County and a volunteer training instructor. "We are teaching them how to conduct a seagrass survey, giving them some background information and hooking them up with what they need to do the survey throughout February." Volunteers brought to the workshop their GPS devices, kayaks and flippers, for those surveying via swimming, and the county provided instructions, underwater viewfinders and field books for tracking sea grass data. Amanda Dominguez, another environmental specialist for the county, helped Perry train the volunteers and talked about various sea grass species and conservation and preservation efforts, and directed the group on how to collect sea grass observation data for the research project.

The baseline data the volunteers gather and record helps the county's environmental specialists figure out where the local seagrass beds are, what they are composed of and how well they are doing. Although Perry and Dominguez are specialized, trained sea grass surveyors, Perry said they cannot do the biannual sea grass data collection without their volunteers, due to the massive areas of water throughout the county.

Full story and source: <http://www.heraldtribune.com/article/20110215/ARTICLE/102151014/2055/NEWS?Title=Charting-sea-grass-growth-in-the-bay>

Eco-moorings for conservation zones? (UK)

10 February 2011, Yachting Monthly

Conservationists say eco-moorings could solve the problem of anchor chain damaging delicate eelgrass 'meadows' in areas around the UK that are set to become marine conservation zones. The hi-tech mooring buoys rise and fall with the tide, taking up the slack to ensure that there is no damage to the seabed, as the yacht swings around the mooring with wind and current.

Neil Garrick-Maidment, director of The Seahorse Trust, who has been been investigating the wear and tear of seagrass at Studland Bay, Dorset, said: 'We are looking for a compromise for everybody. A blanket ban on anchoring would be ridiculous. There are quite a few types of eco-mooring. Some have an elasticated rope with a buoy on top.'

Other options include anchoring 300m to the north of the seagrass area in clear sand, which, Mr Garrick-Maidment said, was better holding ground than matted grass.

Full story and source: <http://www.yachtingmonthly.com/news/515844/eco-moorings-for-conservation-zones>

Humans must learn to cohabit with complex aquatic life (Australia)

11 February 2011, Sydney Morning Herald

Sydney Harbour is at the centre of a tug of war between competing interests. On the one hand, people want to use it for recreational pursuits and as the location for new developments; on the other, its marine inhabitants need it to be a healthy and stable home. A research fellow at the Plant Functional Biology and Climate Change Cluster of the University of Technology, Sydney, Dr Paul Gribben, says it's essential we don't overlook the importance of the harbour to marine life in our rush to use the waterway.

A specialist in marine community ecology, Gribben says 90 per cent of the biodiversity in the harbour is there because of habitat-forming species. While there are several types of habitat-forming species, there are two main categories in Sydney Harbour: macrophytes and invertebrates. Macrophytes are aquatic plants such as seaweed or seagrass and are central to the functioning of healthy ecosystems.

Conserving seagrass areas requires a holistic approach to cleaning up the harbour. Pollution needs to be decreased, sediment levels lowered and ecosystems protected from recreational and commercial overuse, Gribben says. He says conserving seagrass areas is the best way to conserve the harbour's health.

Full story and source: <http://www.smh.com.au/environment/water-issues/humans-must-learn-to-cohabit-with-complex-aquatic-life-20110210-1aolm.html>

Abbey residents' sewerage concerns (Australia)

09 February 2011, Busselton Dunsborough Mail

A group of concerned Abbey Beach property owners gathered on the beach on Friday evening to discuss funding options to bring deep sewerage to the area. About 320 dwellings in the unsewered beachside area of Abbey, in the area bordered by Forth Street and Geographe Bay Road, are thought to be causing permanent damage to the seagrass meadows, and contributing to algal bloom.

Abbey resident Judy Slieker said the health of the bay was paramount but there was also a significant number of properties that could be subdivided if deep sewerage was installed. Vasse MLA Troy Buswell will table a petition signed by many concerned Abbey residents in the Legislative Assembly on Monday, to seek funds for deep sewerage under the Water Corporation Sewer Infill program.

Full story and source: <http://www.busseltonmail.com.au/news/local/news/general/abbey-residents-sewerage-concerns/2071428.aspx>

Record seagrass growth in Tampa Bay (Florida, USA)

04 February 2011, 10 Connects

Scientists with the Southwest Florida Water Management District's Surface Water Improvement and Management (SWIM) Program recorded an 11 percent increase in seagrass growth in Tampa Bay since 2008, the largest increase in seagrass growth since the District began the seagrass mapping program. The District study also shows gains in St. Joseph Sound and Clearwater Harbor.

According to the District's 2010 seagrass mapping study, seagrass acreage in the three water bodies has increased 3,313 acres since 2008. Tampa Bay, St. Joseph Sound and Clearwater Harbor now support 50,382 acres of seagrass, more than at any time measured since the 1950s. Tampa Bay saw the largest increase: 3,250 acres. The St. Joseph Sound and Clearwater Harbor areas recorded a combined 62-acre increase in seagrass.

Kris Kaufman, a District environmental scientist, said that both seagrass growth and water quality have shown improvements. "We've analyzed more than 20 years of data and found significant increasing trends in seagrass cover over time," said Kaufman. She cited several factors that could have contributed to gains in seagrass growth. "Current digital mapping technologies that provide the highest quality data in coordination with extensive field work can improve the detection of seagrass and biannual changes in seagrass," said Kaufman. "Also, overall lower rainfall since 2006 means less stormwater runoff flowing into the bay, contributing to the clearer water noted over the last few years."

Full story and source: <http://www.wtsp.com/news/local/story.aspx?storyid=172643&catid=8>

55 million cubic metres of spoil (Australia)

20 January 2011, Gladstone Observer

Dredging of the Gladstone harbour began in October and is expected to create 55 million cubic metres of dredge spoil with the majority dumped on seagrass beds. Mark Greenaway, Gladstone Ports Corporation general manager, special projects, said early works dredging for the Queensland Curtis LNG project had begun.

"This is about opening up an area that allows QCLNG to access their construction dock," he said. "Their construction dock is the initial entry point onto Curtis Island and this allows them to get heavy machinery over there." The Western Basin Master Plan covers around 12,000 hectares, stretching from Friend and Laird Points near The Narrows to Auckland Point in the south and east to Boatshed Point on Curtis Island.

Last year Gladstone environmental advocate Paul Tooker said the Queensland Government was unnecessarily killing off dugongs by taking the cheap option of dumping dredge spoil on seagrass beds. "This dredge spoil can be disposed of at the traditional dredge spoil grounds, or on the mainland, thus avoiding the destruction of these seagrass beds," Mr Tooker said.

Full story and source: <http://www.gladstoneobserver.com.au/story/2011/01/20/55-million-cubic-metres-of-spoil-from-harbour/>

SEAGRASS-WATCH Workshops 2011

Australia

Great Sandy Strait 02 - 03 April 2011: Level 1 (basic)

For more information: <http://www.seagrasswatch.org/training.html#workshop10>

SEAGRASS-WATCH on YouTube

Seagrass: Pastures of the sea <http://www.youtube.com/watch?v=66Y5vqswj20> or <http://www.seagrasswatch.org/seagrass.html>

Presentation on what seagrasses are and why they are important (13,479 views to date)

GALLERY

Pioneer Bay, Qld (Australia): 20 February 2011 <http://www.seagrasswatch.org/gallery.html>

Pulau Semakau (Singapore): 19 February 2011 <http://www.seagrasswatch.org/gallery.html>

Townsville, Qld (Australia): 17 - 19 February 2011 <http://www.seagrasswatch.org/gallery.html>

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