



# Seagrass-Watch E-Bulletin

## 29 December 2011

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## IN THIS BULLETIN

NEWS .....	2
James Cook University to launch probe into dugong trade (QLD, Australia) .....	2
Futenma plan once again thorn in side of DPJ (Japan) .....	2
Queensland Greens Sceptical About Gladstone Water Quality Panel (QLD, Australia) .....	2
Storms brews at Port Geographe (WA, Australia) .....	3
Tourist's keen eye saves green sea turtle (Thailand) .....	3
Dugong protection sparks rule changes (QLD, Australia) .....	3
Monitors profile turtle feeding grounds (Fiji) .....	4
Happy ending for four turtles (QLD, Australia) .....	4
Authorities to probe turtle spearing (QLD, Australia) .....	4
Industrialization weakens important carbon sink (NSW, Australia) .....	4
Wet season ban on reef chemical (QLD, Australia) .....	5
Marine animals showing signs of recovery (QLD, Australia) .....	5
Indigenous authority mooted to manage traditional hunting (QLD, Australia) .....	5
Report uses pre-dredging data (QLD, Australia) .....	5
Global Warming's Impact May Be Detected in Genes, Suggests Study of How Seagrasses React to Heat Waves .....	6
Baby dugong found dead on beach (QLD, Australia) .....	6
Harbour's seagrass cover increases (QLD, Australia) .....	6
Calls for action on traditional turtle hunting after tourists witness slaughter on Green Island (QLD, Australia) .....	7
Reef chief recommends port rethink (QLD, Australia) .....	7
Far North's green sea turtles too hungry to breed (QLD, Australia) .....	7
Saving Queensland's marine life (QLD, Australia) .....	8
Board Classifies Perplexing Invader As Noxious Weed (WA, USA) .....	8
Dugong, turtles in spotlight (QLD, Australia) .....	8
Seagrass threat from cable project (NSW, Australia) .....	9
Old's seagrass beds under threat into 2012 (QLD, Australia) .....	9
Disappearing Eelgrass Called Canary In Declining Salt Ponds (USA) .....	9
Algae bloom threat to Broome beaches (WA, Australia) .....	10
Turtle tracker studies sea damage (QLD, Australia) .....	10
Council budgets for seagrass removal (SA, Australia) .....	10
Shark Bay seagrass worth \$8.13 billion in carbon sequestration (WA, Australia) .....	10
SEAGRASS-WATCH Magazine (Issue 44)- NOW ONLINE .....	11
PUBLICATIONS: .....	11
WSA 2012 seagrass calendar .....	11
Field Guide to Seagrass of the Red Sea, just released from IUCN. ....	11
Seagrass training manual for resource managers. ....	11
Proceedings of a workshop for monitoring seagrass habitats in the Kimberley region, Western Australia. ....	11
GALLERY .....	12
Singapore : 24 November - 22 December 2011 .....	12
Mackay - Whitsunday, Qld (Australia): 24 - 27 October 2011 .....	12
CONFERENCES .....	12
ICRS 2012 (Cairns, Australia from 9 – 13 July 2012) .....	12
International Seagrass Biology Workshop ISBW10 (Brazil, late Oct/early Nov 2012) .....	12
SEAGRASS-WATCH Workshops 2011 .....	12
SEAGRASS-WATCH on YouTube .....	12

...seagrass matters blog.....	12
World Seagrass Association blog.....	12
FROM HQ.....	13
Past E-bulletins .....	13
Frequently Asked Questions .....	13
Seagrass-Watch Magazine .....	13
Seagrass-Watch Shop .....	13
Virtual Herbarium .....	13
Giveaways.....	13
Future sampling dates.....	13
Handy Seagrass Links .....	13

Please note: links to sources were active on date of publication. Some sources remove links periodically.

## NEWS

### **James Cook University to launch probe into dugong trade (QLD, Australia)**

29 December 2011, by Daniel Bateman, *The Cairns Post*

James Cook University researchers have received \$170,468 in government funding to find out how much dugong meat is being illegally harvested in the Torres Strait and the reasons behind it. The three-year project, to be carried out by scientists Natalie Stoeckl and Helene Marsh, will also investigate the best way to control a sustainable catch of the endangered animals.

Torres Strait Islanders and green groups, however, believe the money could be put to better use in supporting indigenous rangers to prevent the illegal take of the sea mammals. Dugong numbers are on the decline along Queensland's east coast, the victims of boat strikes, being caught in fishing nets and declining water quality. There are larger numbers of the animals north of Cooktown. However, a thriving black market trade in dugong meat has suggested the Torres Strait dugong population is over-harvested.

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

### **Futenma plan once again thorn in side of DPJ (Japan)**

28 December 2011, by Masami Ito and Eric Johnston, *The Japan Times*

The submission of the environmental assessment on Henoko in Okinawa sparked polarized reactions from the governments in Tokyo and Washington and the people of Okinawa, underscoring the gap in awareness over the contentious relocation of the Futenma air base. Despite thunderous public outrage among Okinawa residents, Prime Minister Yoshihiko Noda had repeatedly expressed his intention to submit the report by the end of the year. Pundits say Noda was adamant about submitting the report by Dec. 31 as a show of good faith to the United States. Amid the gridlock facing the Futenma plan, the U.S. Congress lost patience and recently decided to cut \$150 million from the 2012 budget to move thousands of marines from Okinawa to Guam, which was a major part of the relocation package.

Since at least 2003, activists have waged a campaign to stop the Henoko base due to environmental concerns. That year, a coalition of U.S. and Okinawan groups filed a lawsuit in a U.S. District Court in San Francisco against the U.S. Department of Defense, charging that the plans to construct the Henoko facility on reclaimed land would destroy the habitat of the endangered Okinawa dugong. The 2003 lawsuit charged that the Defense Department failed to take into account the effect of the proposed Henoko facility on the dugong, something required under America's National Historic Preservation Act. In 2008, the court ruled in favor of the plaintiffs and ordered the Defense Department to submit additional information on what was needed to evaluate the impacts of a Futenma replacement facility on the dugong. But the scope of the ruling applied only to the U.S., not Japan.

In 2009, Okinawa Prefecture called on the central government to carry out a survey of the dugong over a period of several years after it was learned that the Okinawa Defense Bureau cut the discovery of a dugong in Henoko Bay out of an official report. Tuesday's assessment says the government is satisfying Okinawan demands by carrying out dugong surveys since 2009. The exact number of dugongs in the Henoko Bay area is unknown, with environmental activists saying there are up to 50 while some residents who support the base claim sightings are rare.

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### **Queensland Greens Sceptical About Gladstone Water Quality Panel (QLD, Australia)**

15 December 2011, *Dredging Today*

The Queensland Greens say a team of experts reviewing water quality and seagrass health in and around Gladstone Harbor is too close to the dredging industry. The Dredge Technical Reference Panel oversees dredging in Gladstone Harbor, and comprises marine and water quality experts, and representatives from the Queensland government and the Gladstone Ports Corporation.

The corporation is conducting the dredging program off Gladstone to prepare for the construction of two liquefied natural gas plants and export hubs at Curtis Island and the expansion of the Gladstone port. The panel met in Gladstone on Thursday to review the latest water quality and seagrass monitoring results. The Gladstone Ports Corporation says the panel is an "independent panel of technical experts established ... to provide high level advice to the project team". A spokeswoman said the panel members will analyse the latest data and convene early next year to discuss the results and recommend changes, if any, to the corporation's dredging program.

Queensland Greens spokeswoman Dr Libby Connors said the statement that the panel was independent was media spin. Scientific consultants employed by the Gladstone Ports Corporation were also on the panel, she said.  
[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

### **Storms brews at Port Geographe (WA, Australia)**

*14 December 2011, Busselton Dunsborough Mail*

Living on a cliff top overlooking the sea may sound heavenly – unless it's at Wonnerup Beach, and the cliff is a man-made pile of stinking, decaying seawrack and sand. The leaders of residence groups associated with Port Geographe say the Wonnerup beachfront is in the worst state in the 16 years since groynes were installed at the harbour entrance, and they've had a gutful of excuses.

Chairman of the Port Geographe Action Group, Peter Maccora said a late start to the bypassing work to remove built-up seagrass wrack from the western side of the groynes at the harbour entrance, has created a disaster area. The Busselton shire began removing some 200,000 cubic metres of seagrass wrack and sand from the western side and depositing it on the Wonnerup beach to the east on October 10.  
[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

### **Tourist's keen eye saves green sea turtle (Thailand)**

*14 December 2011, Phuket Gazette*

An observant tourist yesterday spotted a young green sea turtle floating in the water off the Yacht Haven Marina in Mai Khao, in the north of Phuket, and by doing so may have saved its life. The Phuket Marine Biological Center (PMBC) was immediately contacted, who in turn asked the Phuket Kusoldharm Rescue Foundation for assistance in recovering the turtle.

With the rescue operation a success, the turtle was quickly transferred to the care of Dr Patcharaporn Gaewmong, veterinarian for the PMBC's Endangered Marine Species Unit. Dr Patcharaporn and her team examined their patient, finding it weak and in need of treatment. The turtle discovered yesterday is the third to be rescued off Phuket since October 1, the other two being an Olive Ridley and a Hawksbill.  
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### **Dugong protection sparks rule changes (QLD, Australia)**

*13 December 2011, Sail World*

The Dugong populations off Townsville will benefit from changes to Great Barrier Reef Marine Park regulations on commercial net fishing, which will become effective from today. Great Barrier Reef Marine Park Authority Chairman Dr Russell Reichelt said Burdekin commercial fishers proposed the changes to the Species Conservation (Dugong Protection) Area in Bowling Green Bay, working in close consultation with the Australian and Queensland Governments.

The amendments change the rules for commercial net fishing within the southern part of Bowling Green Bay. They include a 'No Netting Area' and a 'Restricted Netting Area', which limit the size of nets as well as how they are to be used. 'These amendments are in response to concerns about unsustainable levels of dugong deaths in the area,' Dr Reichelt said. 'Dugong populations are under pressure. Extreme weather events last summer has killed off seagrass, their main food source.'

Commercial fishers from the Burdekin have worked with the Great Barrier Reef Marine Park Authority, Fisheries Queensland, Department of Environment and Resource Management and the Queensland Seafood Industry Association to bring the rule changes to a reality. Netting rules for other areas within Bowling Green Bay remain unchanged. The rules for other activities, including recreational fishing and other forms of commercial fishing also remain unchanged.  
[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

## **Monitors profile turtle feeding grounds (Fiji)**

13 December 2011, Fiji Times

The Raviravi foreshore in Macuata was a hive of activity last week after a group of turtle monitors in the Northern Division conducted a beach profile. Apart from the beach profile, the monitors surveyed the types of seagrass to acquire additional skills on how to protect turtles from extinction.

Organised by the World Wildlife Fund under the South Pacific's Marine Species and Climate Change Adaption Program, the initiative brought more than 20 turtle monitors from Bua and Macuata together. Penina Solomona, the program coordinator, said the initiative would help the monitors identify certain areas which were adaptable for turtles.

"This activity broadens their knowledge on what is affecting the feeding grounds as seagrass is the main source of food for turtles," she said. Ms Solomona said the monitors would also realise the connection of human activities on the land such as logging and clearing from agriculture with the marine environment. "The monitors will help monitors to proactively safeguard seagrass beds from chemical runoffs and debris," she said.

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

## **Happy ending for four turtles (QLD, Australia)**

08 December 2011, ABC Local

Four Moreton Bay turtles found stranded and starving have been re-released into the wild thanks to a team of marine experts who brought them back to health. It has been a hard year for marine animals in Moreton Bay. The January floods washed river sediment into the bay, blanketing the sea grass beds, a crucial food source for many animals.

Four turtles fell victim, and were found stranded on a beach on North Stradbroke Island in August. Dr Kathy Townsend from the Moreton Bay Research Station at Dunwich was part of the team responsible for saving the animals. The turtles were then sent to UnderWater World on the Sunshine Coast, where they were taken care of and rehabilitated.

And it wasn't just these four turtles that the floods affected. The sediment covering the seagrass beds meant that many marine animals didn't get food to fatten up before the winter season. But the floods were not all bad news for the bay. "The good thing is it's actually bringing a lot of nutrients into the bay, it's like fertilising your garden. "We're starting to see that the bay is recovering quite nicely right now - a lot of that sediment has moved away and a lot of that sea grass is getting wonderful fresh big regrowth." This is why it was safe to release the four turtles back into the Moreton Bay environment.

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

## **Authorities to probe turtle spearing (QLD, Australia)**

06 December 2011, By Kirsty Nancarrow, ABC Online

The Queensland Government has ordered an investigation into reports Indigenous hunters are spearing turtles at Green Island, off Cairns in the far north, while tourists are swimming nearby. The Association of Marine Park Tourism Operators (AMPTO) says it has been sent photographs of the hunters in waters off the island last Friday morning.

Traditional owners are allowed to hunt the protected animals under the Native Title Act but many local Aboriginal groups have imposed a moratorium on taking turtles because of their dwindling numbers. Queensland Environment Minister Vicky Darling says she is concerned by the reports and will ask her department to investigate.

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

## **Industrialization weakens important carbon sink (NSW, Australia)**

29 November 2011, EurekAlert

Australian scientists have reconstructed the past six thousand years in estuary sedimentation records to look for changes in plant and algae abundance. Their 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, which are natural global carbon sinks, to mitigate climate change.

Scientists collected cores, samples of earth, from sites within and around Botany Bay, Sydney. 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 the isotopic ratio of the organic matter in the sediment.

The team's analysis suggests that 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.

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

### **Wet season ban on reef chemical (QLD, Australia)**

*29 November 2011, by Miranda Forster, Sydney Morning Herald*

New restrictions on the use of a weed killer harmful to the Great Barrier Reef won't protect the World Heritage listed asset, a conservation group says. The World Wildlife Fund (WWF) has attacked new rules set by Australia's chemical regulator, which has banned the use of diuron on certain crops during the upcoming wet season.

The Australian Pesticides and Veterinary Medicines Authority (APVMA) says the ban is aimed at protecting aquatic ecosystems from runoff of the chemical, commonly used by cane, tea, banana and pineapple farmers. But WWF's pesticides policy manager Martin Breen said the regulator had caved in to the demands of chemical manufacturers, and the wet season ban was meaningless.

Diuron has been linked to coral bleaching and loss of seagrasses and has been found 60km inside the Great Barrier Reef Marine Park. In September, scientists from Queensland's Environment Department found traces of dangerous pesticides at up to 50 times the levels deemed safe in waterways flowing onto the reef.

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

### **Marine animals showing signs of recovery (QLD, Australia)**

*29 November 2011, By Stephanie Fitzpatrick, ABC Online*

A Queensland Government scientist says there has been a decline in the number of marine animal deaths along the state's coast. Dr Julia Playford, from Department of Environment and Resource Management, says there have been about 270 turtle strandings, 12 dugongs deaths and six dolphin deaths in central Queensland in the past year. Dr Playford says some died from boat strikes, fishing lines and human activities and other from natural causes. Dr Playford says a regrowth of seagrass beds has helped to reduce the number of dugong and dolphin deaths.

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

### **Indigenous authority mooted to manage traditional hunting (QLD, Australia)**

*18 November 2011, By Kristy Sexton-McGrath, ABC Online*

Indigenous leaders in north Queensland say banning the use of guns, GPS devices and spotlights could help ease dwindling dugong and turtle numbers. About 80 regional leaders are meeting this week to help develop a turtle and dugong conservation strategy.

Yesterday, they released key recommendations for a report to be handed to the state and federal governments. Among them, the establishment of an Indigenous authority to manage turtle and dugong hunting practices. They have also discussed introducing restrictions on the use of guns, while Cape York traditional owner Robbie Salee says he supports a ban on GPS devices. However, Mr Salee says he does not support a full ban on traditional hunting.

Traditional owner Lauren Bowyer, from Archer Point, south of Cooktown, says she supports the idea of establishing an Indigenous authority that would have the power to fine rogue hunters. Cape York traditional owner Horace Nona says the controlling body would operate like the Great Barrier Reef Marine Park Authority, complete with statutory powers and the ability to fine rogue hunters.

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

### **Report uses pre-dredging data (QLD, Australia)**

*18 November 2011, by Nikita Watts And Daniel Burdon, Rockhampton Morning Bulletin*

The latest report on the environmental health of Gladstone Harbour is based on data 12 months old and gives no indication of what effects the summer floods or dredging activity may have had on the local marine ecosystem. But the report also gives little to no indication of any negative changes to the local ecosystem since the last report in 2007.

The \$750,000 Port Curtis Ecosystem Health Report Card monitors water quality, seagrass and sediment quality in the Gladstone Harbour area. It was released yesterday by its 17 industrial sponsors, after several months of internal negotiations during a protracted "members' feedback" process. One of the "major sponsors and participants" of the PCIMP, Gladstone Ports Corporation, could not reveal why the report had not been released before.

The report card said that of eight different zones in the harbour, all scored at least a "B+", under a scoring system measured against Australian water-quality standards. Data was collected by scientists working for Vision

Environment, a Gladstone company which completes the program, over a three-year period - July, 2008, to November, 2010. All data was collected before the 2010-11 summer floods and recent dredging operations. The aim of the program was to produce baseline environmental data to inform local industry about what other technical studies should be undertaken.

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

## **Global Warming's Impact May Be Detected in Genes, Suggests Study of How Seagrasses React to Heat Waves**

*16 November 2011, Science Daily (press release)*

Seagrass populations thrive in the shallow coastal regions and offer an ideal habitat for many fish, crustacean and microbes. The worldwide decline of seagrass populations in recent years is therefore of major concern to science and to nature conservation. Researchers believe that climate change plays an important role as the increase in extreme events such as heat waves is a major challenge for the seagrass.

How exactly the seagrass species are impacted by extreme events is examined by scientists from the Kiel University, the University of Münster and the Leibniz Institute of Marine Sciences (IFM-GEOMAR) in a study recently published in the Proceeding of the National Academy of Sciences. Scientists led by Professor Dr. Thorsten Reusch from the IFM-GEOMAR are tackling the questions if heat waves have an effect on the genetic of the widespread seagrass species *Zostera marina* (eelgrass). For the analysis the PhD candidates Susanne Franssen and Nina Bergmann collected sea grasses from different locations in Northern and Southern Europe and exposed them to controlled heat waves in a special test site, the AQUATRON, in the laboratory. Afterwards the scientists analysed the activity of almost all genes of the plants.

Regardless of their origin, plants showed activation of genes known to buffer heat stress. Only after the heat wave, the southern European plants proved to be resilient, going back to their normal gene activity immediately after the heat wave. The northern European plants, however, showed signs of irreversible protein damage. Apparently, the critical process whether or not a plant continues to grow or eventually dies occurs during the recovery period after the acute heat wave. To predict the adaptability of organisms to extreme events, such as heat waves, the examination of gene expression during the recovery period seems to be the better parameter.

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

## **Baby dugong found dead on beach (QLD, Australia)**

*15 November 2011, Fraser Coast Chronicle*

Another marine animal has been found dead on a Fraser Coast beach in a year that has seen record numbers of dead turtles and dugongs. Wildlife Preservation Society Fraser Coast chapter president Carolyn Bussey said a baby dugong had been found dead on a Burrum Heads beach, less than two months after an adult dugong washed up on a Pialba beach. The baby dugong brings the 2011 tally of dugong strandings to 21 in total, compared to only 6 in 2010.

Across Queensland, Only Townsville has recorded a higher number of dugong strandings at 52 so far this year. For turtles, Hervey Bay has recorded 94 strandings, compared to 65 last year. Residual effects from the January floods have been blamed for the spike in marine animal deaths.

As the main food source for both turtles and dugongs, the flood damage to seagrass beds has heavily impacted both species. Water quality in the local rivers has also been blamed for creating silt runoff which can kill seagrass.

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

## **Harbour's seagrass cover increases (QLD, Australia)**

*10 November 2011, by David Sparkes and Megan McEwan, Gladstone Observer*

Seagrass levels are increasing in Gladstone Harbour, according to a new report. Gladstone Ports Corporation (GPC) said the report was proof that dredging was not to blame for the reduction in levels early this year. GPC has released the October results of seagrass monitoring which showed increases in seagrass cover around Fishermans Landing, Pelican Banks North and Pelican Banks South. The seagrass cover at these sites had reached similar levels to the same time of year in 2010 and 2009.

Capricorn Conservation Council project officer Chantelle James said although she had not seen the report she was glad to hear the seagrass percent cover had increased. But she said she was not convinced of the significance of the findings because it was in her understanding that seagrass levels always increased at this time of year.

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

## ***Calls for action on traditional turtle hunting after tourists witness slaughter on Green Island (QLD, Australia)***

*10 November 2011, by Laura Packham, The Cairns Post*

Tourists have watched on in horror as turtles have been slaughtered in a popular holiday location in the Far North. Tourism operators are now calling for increased public debate about the traditional hunting of green sea turtles and dugongs and are seeking a ban on the practice in key tourist locations. They said killings happened often enough to distress visitors and send the wrong message around the world.

Visitors to Green Island on Friday were confronted with a number of speared turtle carcasses left at the popular tourist island. Two weeks ago, tourists said they saw fins being cut off turtles on an island beach. A ranger at the park was also believed to have been threatened for asking traditional hunters not to kill marine animals in front of tourists.

The island attracts about 300,000 visitors a year. Located about 30km from Cairns, Green Island is used for traditional hunting and fishing under the Native Title Act of 1993. Indigenous leaders said they could self-regulate their traditional hunting practices. Traditional owners of the area, also known as Wunyami, have hunted there for thousands of years.

Last month Environment Minister Vicky Darling praised two Far Northern Aboriginal tribes, the Nywaigi and Girramay people, for suspending hunting permits until turtle and dugong numbers recovered. The latest data on turtle populations show there were 1232 turtle strandings in 2011, compared with 639 last year.

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

## ***Reef chief recommends port rethink (QLD, Australia)***

*07 November 2011, by Four Corners and the ABC News Online Investigative Unit, ABC Online*

Queensland's iconic Great Barrier Reef could be put at risk if authorities do not rethink plans to allow massive expansion works at ports along the Queensland coast, an expert says. Great Barrier Reef Marine Park Authority chairman Russell Reichelt has also told ABC TV's Four Corners he warned the Federal Government that huge dredging operations aimed at servicing Queensland's growing coal seam gas industry posed an unacceptable risk to marine life on the reef.

At least six major port developments are either planned or underway up and down the Queensland coast, but Mr Reichelt says officials need to change tack to protect the reef. He raised particular concerns over two planned expansions: one at Port Alma, south of Great Keppel Island, and one in the pristine waters of far north Queensland at Bathurst Bay. Both plans include the development of coal-loading facilities.

Mr Reichelt says the authority expressed extreme concerns to the Federal Government about the development of a liquefied natural gas hub and the associated dredging operation at Curtis Island, off Gladstone. It is the largest dredging operation ever undertaken in the World Heritage area, and part of the spoil will be taken out to sea to a dump site within one kilometre of the Great Barrier Reef Marine Park. Marine life is already under enormous stress in the area from this year's floods and Cyclone Yasi, which have caused a record number of dugong and turtle strandings as well as significant damage to seagrass beds. Mr Reichelt says he provided written evidence to the government that the scale of dredging associated with the building of four coal seam gas processing plants on Curtis Island would have an unacceptable impact on marine life.

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

## ***Far North's green sea turtles too hungry to breed (QLD, Australia)***

*07 November 2011, The Cairns Post*

The Far North's green sea turtles are too hungry to think about sex, according to experts who are tipping a short breeding season and dramatically reduced numbers of babies. Seagrass meadows from Mission Beach south to Townsville were devastated by cyclone Yasi in February and in the following months, reports of dead and sick turtles were highlighted right up the coast.

Nine months after the monster storm, traditional turtle spots such as Cowley Beach are without nests and Mark Hamann from James Cook University's School of Earth and Environmental Sciences said it was because the species failed to fatten up before the breeding season – leaving many with no extra energy for mating.

Joined by Giringun Rangers and Great Barrier Reef Marine Park Authority staff in Cardwell on Friday, Dr Hamann released three green sea turtles into the ocean after attaching state-of-the-art satellite tags to their shells. As part of JCU's Extreme Weather Response Program the groups will track the turtles to better understand how they respond to cumulative impacts like loss of food and habitat degradation after an event like Yasi.

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

## **Saving Queensland's marine life (QLD, Australia)**

04 November 2011, by Alice Roberts and Jacquie Mackay, ABC Online

Concerns over the impacts of dredging on marine life in Gladstone have been raised by locals and environmental groups recently. Great Barrier Reef Marine Park Authority protected species expert Dr Mark Read addressed a national forum on ways industry are already working to manage human related impacts on turtles and dugongs. He says this year they've recorded over 1200 turtle strandings along the Queensland coast.

"Whilst the level of marine strandings this year has obviously been alarming and disturbing, in terms of the overall population, we're not likely to have a long term impact and so the population is not going to be threatened," he says. "However the story for dugongs is probably a little bit different because the population of dugongs along what we call the urban coast, which is from Cooktown down to the New South Wales border, that population is experiencing a number of threats.

"We've had significant impacts from the wet season and of course from tropical cyclone Yasi so we've seen a degradation and a decline of seagrass beds. "Now if you're a dugong that relies almost exclusively on seagrass beds or a green turtle that uses that as a big part of your diet, that's really going to impact on you." He says as a result they've seen the highest record of turtle strandings since the program started in 1996. "We're just starting to see some recovery in seagrass beds in some areas whereas in others we're not seeing any recovery at all," says Dr Read. He says DEEDI and the Department of Resource Management is monitoring the situation in Gladstone.

He says while there's little we can do about natural events affecting turtle and dugong numbers, we can help in other ways. "Various government agencies have been working with commercial fishers and the Queensland Seafood Industry Association to minimise the potential impact of inshore netting on turtles and dugongs," says Dr Read. "It's about other groups like traditional owners making the decision to voluntarily cease traditional hunting in recognition that the animals that they have a connection to, are at this particular point doing it pretty tough. "The other things is the really big programs like the reef water quality protection plan to minimise the outflow of sediments and nutrients from the land into the Great Barrier Reef which is going to give the seagrasses the best possible chance of recovery." [more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

## **Board Classifies Perplexing Invader As Noxious Weed (WA, USA)**

03 November 2011, OPB News

Washington oyster and clam growers now have more legal backing to go after an invasive seagrass. The state's Weed Control Board has voted to classify Japanese eelgrass as a noxious weed to allow commercial shellfish growers to control it better. Shellfish growers say the non-native Japanese eelgrass is causing millions of dollars in lost production. "Infestations" of the seagrass smother clam beds and disrupt oyster seed.

Prof. Kim Patten manages Washington State University's extension unit at Long Beach. Patten says it's been challenging to reach consensus on a response because the invasive eelgrass has defenders alongside its critics.

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

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<http://www.nwcb.wa.gov/>

## **Dugong, turtles in spotlight (QLD, Australia)**

3rd November 2011, Fraser Coast Chronicle

Turtle and dugong populations on the Fraser Coast were a major source of debate earlier this week as Queensland's best marine scientists gathered to debate the future of the two species. The Queensland Government convened a Turtle and Dugong Forum at Seaworld on Tuesday to discuss water quality, food sources and the lasting affect of the floods on Queensland populations.

Dugongs are found throughout the Great Sandy Strait region and feed on seagrass beds that are heavily affected by the health of the Mary River. Department of Environment and Resource Management participants at the forum said both species were likely to recover from the heavy impact of the floods if weather improved this summer. DERM assistant director general Environment and Resource Sciences Dr Christine Williams said weather predictions for the summer were likely to delay seagrass recovery in regions such as Hervey Bay after a heavy impact from the January floods. Dr Williams said turtle and dugong strandings were likely to be higher than usual for several months due to the low availability of food.

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



## **Seagrass threat from cable project (NSW, Australia)**

02 November 2011, by Kate Carr, St George and Sutherland Shire Leader

AUSGRID'S Botany Bay cable project has hit a critical phase, with crews burying cables along the bottom of the bay. But questions have been asked about what impact the burial will have on a critical seagrass bed off Silver Beach.

The cable project, which involves laying 132,000-volt power transmission cables between Kurnell and Matraville, was initially approved in 2007, by then-planning minister Frank Sartor. It was amended twice by subsequent planning ministers to allow for dredging of the bay and higher limits on turbidity. The Silver Beach seagrass bed is a protected habitat and Botany Bay Planning and Protection Council spokesman Bernie Clarke said it was one of the last refuges for deep water seagrass, called *Posidonia*, in the bay.

An AusGrid spokesman said the burial through the seagrass bed would be managed by a panel including marine biologists, and representatives of Ausgrid, the Department of Planning, the Department of Industry and Investment, and the Office of Environment and Heritage. However, it appears AusGrid is using exactly the same burial method across the entire bay, with no special machinery utilised to minimise the impact on the seagrass section.

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

## **Qld's seagrass beds under threat into 2012 (QLD, Australia)**

01 November 2011, Ninemsn

The seagrass beds which sustain Queensland's turtles and dugongs could remain under threat into next year, a forum on the Gold Coast has heard. With turtle strandings along the Queensland coast nearly double last year's figure, specialists from around Australia gathered at Sea World on Tuesday to discuss the impact of January's floods and cyclones on turtles and dugongs.

A protected species expert at the Great Barrier Reef Marine Park Authority, Mark Read, said the rich underwater pastures which the turtles need to survive will remain under threat for some time. "At this stage weather forecasters are predicting a moderate La Nina event this season which will produce milder weather patterns than last year's events," Dr Read said. "Despite this we are still anticipating the species' main food source, seagrass meadows, will be adversely affected by these weather patterns, so it is important we minimise all other impacts. "These include coastal development, habitat degradation, boat strikes, marine debris, sedimentation and pollution, oil spills and other threats to water quality."

Sea World's director of marine sciences, Trevor Long, said because turtles have such a slow metabolism there wasn't an immediate impact after January's extreme weather. Mr Long said he'd like to see the creation of a rehabilitation centre in Queensland because there's no facility at the moment capable of dealing with the strandings.

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

## **Disappearing Eelgrass Called Canary In Declining Salt Ponds (USA)**

23 December 2011, by Peter Brannen, Martha's Vineyard Gazette

There is much ado over eelgrass. On the Vineyard the modest seagrass has brought dredging projects to a halt, thwarted would-be pier developers and has down-Island towns considering millions of dollars worth of sewerage to restore water quality to a level amenable to the light-sensitive plant. Why all the fuss?

By some estimates, the world has lost two-thirds of its seagrass habitat due to coastal human pressures and is losing an additional seven per cent every year. On the Vineyard those losses have been even more dramatic, as overlays of current eelgrass beds compared with their historic distribution are uniformly depressing: Edgartown Great Pond alone has lost 90 per cent of its eelgrass since 1951. During the same period Sengekontacket lost 97 per cent, from 220 acres to just five and a half in 2006. In the last two decades Lagoon Pond has lost half its eelgrass beds, a fact not lost on shellfisherman Bill Alwardt who says that even in the past year he has seen a major die-off in the most well-flushed area of the pond near the mouth. And this week Dr. Brian Howes, a southeastern Massachusetts marine biologist who is directing the Massachusetts Estuaries Project, told an unreceptive Chilmark board of selectmen that 100 acres had been lost in Chilmark's ponds since 1995.

It's why for years Oak Bluffs shellfish constable David Grunden has tried with limited success to restore at least some part of the plant's historic range. He says he has undertaken at least three restoration projects in Sengekontacket with funding from both his town and the Martha's Vineyard Commission. Mr. Grunden tried several different methods, from transplanting plants whole to direct seeding, to no avail.

Full story and source: <http://www.mvgazette.com/article.php?33397>

## **Algae bloom threat to Broome beaches (WA, Australia)**

23 December 2011, by Flip Prior, *The West Australian*

A thick, ugly blight has appeared around the roots of mangroves fringing the sparkling, turquoise waters of Roebuck Bay in Broome, heralding the annual arrival of *Lyngbya*, the toxic blue-green algae that environmentalists and fishermen dread. Broome Port authorities investigated and found it to be the seasonal onset of the bloom which spreads rapidly, choking the life out of seagrass and killing a critical food source for turtles, fish and dugong.

Department of Environment and Conservation Yawuru rangers carried out a shoreline inspection after spotting thick clumps of the algae washed up on the beach near the port. The rangers are assisting a University of WA study into the bay's hydrology and nutrients flowing into it, monitoring outbreaks during the wet season and collecting data on how they spread. When the rains start, the rangers will also collect and test samples from Broome's stormwater drains. The study aims to prove the theory that *Lyngbya* is caused by a combination of high temperatures, iron-rich soils and the nutrients in groundwater run-off.

Full story and source: <http://au.news.yahoo.com/thewest/a/-/breaking/12447599/algae-bloom-threatens-broome-beaches/>

## **Turtle tracker studies sea damage (QLD, Australia)**

22 December 2011, by Ross Kay, *ABC Wide Bay*

Researchers will soon have a better picture of changes to our coastline thanks to a project launched at Mon Repos. The 'project' is a middle-aged loggerhead turtle that goes by the name of Leonie. Leonie is a regular to the waters of Mon Repos. The 102kg turtle started breeding 14 years ago, and in 2009 a satellite tracking system was placed on her back to monitor her progress. It's this previous data that makes her so special says Dr Col Limpus, chief scientist with the Department of Environment and Resource Management.

The data that Leonie's tracking system generates will produce maps once a month, which the scientists will use to monitor changes in behaviour compared to the previous data. Over time this will give the scientists a picture of area damaged by last year's floods. "The damage was caused by the flood plumes that brought sediment down from the catchments. It blocked sunlight, settled on the bottom, and smothered some of the animals and plants." Dr Limpus says the sediment from the floods has killed off sea grass and algae which is the main source of food for ocean-dwelling herbivores.

Full story and source: <http://www.abc.net.au/local/stories/2011/12/22/3396644.htm>

## **Council budgets for seagrass removal (SA, Australia)**

21 December 2011, *ABC Local*

A south-east South Australian council is reviewing its budget for removing seagrass from local beaches after an un-budgeted cost increase.

About 11,000 cubic metres of the grass was removed from beaches at Kingston this year, about 2,000 cubic metres more than expected. When it builds up it can make accessing the beach difficult and smells bad when it rots. Martin McCarthy from the council says it has to find another \$35,000 for additional removal costs.

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

## **Shark Bay seagrass worth \$8.13 billion in carbon sequestration (WA, Australia)**

03 October 2011, by Aaron Fernandes, *Science Netwrk*

Research into Shark Bay seagrass meadows could lead to new climate change mitigation strategies as details emerge of their capacity for carbon sequestration. WA Visiting Fellow Jim Fourqurean estimates the state's seagrass could be worth more than eight billion dollars in carbon sequestration if valued according to the Federal Government's proposed carbon price.

Professor Fourqurean has identified an average number of 884 tonnes CO<sub>2</sub> equivalents per hectare, which multiplied by the 400,000 hectares of seagrass, results in approximately 350 million tonnes of carbon stored in the seagrass meadows in Shark Bay. With the Federal Government proposing to introduce a carbon tax pricing CO<sub>2</sub> at \$23 per tonne, researchers estimate seagrass carbon offset to be potentially worth a considerable sum.

Professor Fourqurean is involved in the Blue Carbon initiative, an international body aiming to preserve seagrass habitats. The group is currently exploring the monetary value of the carbon in seagrass meadows as part of a possible offset scheme.

Full story and source: <http://www.sciencewa.net.au/3648.html>

## SEAGRASS-WATCH Magazine (Issue 44)- NOW ONLINE

**The official magazine of the Seagrass-Watch global assessment and monitoring program available online** <http://www.seagrasswatch.org/magazine.html>

Seagrass meadows are being lost globally at unprecedented rates. Yet what we know about the consequences of this loss and its relationship with charismatic megafauna such as Sea Turtles is surprisingly limited. In this issue recent research is discussed that has sought to provide further understanding to the inter-relationship of Sea Turtles with seagrass.

The loss of seagrass in the Great Barrier Reef region due to cyclones and flooding has had evident impacts upon Sea Turtles. This issue describes the efforts of many volunteers and scientists to help save these turtles and how turtles undergo dietary shifts throughout their development that may help them survive this loss.

Discussed are studies from Indonesia and the Bermuda that document how it's not just a 'bottom-up' process of seagrass providing feed for turtles, but that seagrass abundance and resilience may also be driven by the 'top-down' effects of sea turtles feeding.

In this issue you can also catch up with seagrass monitoring in the Turks and Caicos Islands, understand about the illegal trade of Sea Turtles in Bangladesh, and learn about seagrass conservation efforts on the west coast of Thailand.

## 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 ([www.seagrassonline.org](http://www.seagrassonline.org)) and Jane Thomas of the Integration and Application Network ([www.ian.umces.edu](http://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](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](http://wsa.seagrassonline.org/blog/wp-content/uploads/2011/12/WSA_calendar_2012_A4.pdf)

### **Field Guide to Seagrass of the Red Sea, just released from IUCN.**

The role of taxonomy in understanding and managing marine ecosystems is pivotal and this Guide is a fundamental step forward in understanding and managing seagrass species and habitats of this region. The Guide has been developed by the IUCN Global Marine Program and supported by the Total Foundation for Biodiversity to be an easy-to-use yet comprehensive field guide to Red Sea seagrasses.

To download the field guide, <http://data.iucn.org/dbtw-wpd/edocs/2011-057.pdf>

### **Seagrass training manual for resource managers.**

Di Carlo G. and McKenzie L.J. (2011). Conservation International, USA. 54pp.

In June 2010, the World Seagrass Association and Seagrass-Watch - in partnership with Conservation International - developed the first curriculum focused on seagrass management for resource managers. With this curriculum over 50 managers were trained on the importance of seagrass ecosystem and their services, what threatens them, and how to implement effective measure to protect them.

Following these trainings, the WSA developed a manual – the Seagrass Syllabus - for educational purposes that, together with the curriculum, is freely available worldwide to continue to increase awareness on seagrass ecosystems, to educate the general public and to improve the management of this critical resource.

This syllabus is the first of a series of initiatives that the WSA is taking to increase the profile of seagrasses within the global conservation arena. Many members contributed to creating and designing the manual, and we look forward to continue to improve it.

It is our hope that this syllabus will represents a useful tool to ensure that seagrass ecosystems receive due attention so that their ecosystem services can be secured for the future.

To download the seagrass syllabus, [http://www.seagrasswatch.org/Info\\_centre/Publications/syllabus/seagrass\\_syllabus.pdf](http://www.seagrasswatch.org/Info_centre/Publications/syllabus/seagrass_syllabus.pdf)

### **Proceedings of a workshop for monitoring seagrass habitats in the Kimberley region, Western Australia.**

McKenzie, LJ & Yoshida, R.L. (2011). Department of Environment & Conservation - West Kimberley Office, Broome, 15 - 16 October 2011. (Seagrass-Watch HQ, Cairns). 66pp.

This workshop is jointly hosted by Environs Kimberley and the Department of Environment and Conservation, with local coordination by Kylie Weatherall and Julia Rau (Broome Community Seagrass Monitoring Project) and supported by Coast2Reef *etc* and Seagrass-Watch HQ.

To download the proceedings, [http://www.seagrasswatch.org/Training/proceedings/Broome\\_workshop\\_Oct11.pdf](http://www.seagrasswatch.org/Training/proceedings/Broome_workshop_Oct11.pdf)

## GALLERY

**Singapore : 24 November - 22 December 2011** <http://www.seagrasswatch.org/gallery.html>

Tuas, 22 December 2011  
Pulau Semakau, 26 November 2011  
Cyrene Reef, 24 November 2011

**Port, Broome, WA (Australia): 30 October 2011** <http://www.seagrasswatch.org/gallery.html>

**Mackay - Whitsunday, Qld (Australia): 24 - 27 October 2011** <http://www.seagrasswatch.org/gallery.html>

Hamilton Is: 24 October 2011  
Sarina Inlet: 25 October 2011  
Pioneer Bay: 26 October 2011  
Midge Point: 27 October 2011

## 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](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 February 2012 - Presenters to have registered  
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 2011

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=66Y5vgsuj20> or  
<http://www.seagrasswatch.org/seagrass.html>

Presentation on what seagrasses are and why they are important (over 19,121 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.