



# Seagrass-Watch E-Bulletin

**08 June 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

### **World Oceans Day: 8th June**

2011 Theme - "Youth: The Next Wave for Change"

On World Oceans Day people around the planet celebrate and honor the body of water which links us all, for what it provides humans and what it represents. Be a part of this growing global celebration! Thanks to The Ocean Project and The World Ocean Network for helping to promote and coordinate this event since 2003.

Recent research has revealed that youth, especially those between the ages of 12 and 17, are especially important to ocean conservation. According to reports from The Ocean Project, youth not only have the highest level of concern about the problems facing the world's oceans, from oil spills and overfishing to climate change, but also are the most

confident in their ability to make a difference, and increasingly looked to by the adults in their families for ways to be part of the solution by 'going green,' or perhaps more appropriately, 'going aquamarine!'

This year, World Oceans Day encourages you to reach out to young people in your community and help inspire them. The future of ocean conservation is in their hands!

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

### **Silt a threat to dugongs (QLD, Australia)**

7th June 2011, Rockhampton Morning Bulletin

Biologists from the University of Queensland have teamed up with Sea World and Taronga Western Plains Zoo to assess the health and reproductive status of wild dugongs in Hervey Bay. The research team started work here yesterday after completing a similar project in Moreton Bay.

Leader of the UQ Dugong Research Team Dr Janet Lanyon said the floods had placed a huge question mark over the health of the dugongs along the entire Queensland coast as the silt and sediment had the potential to kill their only food source, seagrass. The aim of the research trip will be to determine both the health and reproductive status of dugongs. Reproductive status of individuals is one of the most important factors for estimating reproductive capacity and health of the population. Dr Lanyon said field biologists would this week be sampling a selection of dugongs, representative of both sexes and from adult, sub-adult and juvenile size classes.

Sea World Director of Marine Sciences Trevor Long said the sampling involved lifting wild dugongs out of the water and on board Sea World's research vessel to take a comprehensive series of blood and other tissue samples to measure reproductive hormones, collect semen from adult males and conduct abdominal ultrasounds to confirm pregnancy of females. The plan is to capture up to 20 dugongs in Hervey Bay over five days with a team of 16 skilled personnel taking approximately 30-40 minutes to sample each animal.

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

### **Dugongs doing well after Brisbane floods (QLD, Australia)**

01 June 2011, Sydney Morning Herald

Fears had been held for them after tonnes of silt and other rubbish washed down the Brisbane River and into the bay during January's floods, threatening the seagrass the dugong relies on to survive.

Biologists from the University of Queensland (UQ) have teamed up with Sea World, Sydney Aquarium and Taronga Western Plains Zoo to assess the health and reproductive status of wild dugongs in Moreton Bay this week. The team has been taking samples of the population, which involved lifting wild dugongs out of the water and putting them on board Sea World's research vessel to take a comprehensive series of blood and other tissue samples. The samples are used to measure clinical health parameters and levels of pollutants, including heavy metals.

Sea World director of marine sciences Trevor Long said the work they have done so far this week has been very encouraging. Mr Long said they had pulled five animals on board on Wednesday - among them two pregnant females and one of the biggest dugongs they had ever pulled out of Moreton Bay. He said most of the animals have been in very good condition, with only about two in what he called "slightly poor condition".

Mr Long said they were very pleased with the findings. "There was a lot of concern, even amongst ourselves, about what would be the outcome for this population, considering the amount of silt that came out of the Brisbane River," he told AAP. "It was a concern when we had the floods because we had floods in 1991 in Hervey Bay and we lost a lot of animals there, probably over half of the population."

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

Related articles: <http://www.sbs.com.au/news/article/1550131/latest-from-wire/>

<http://www.abc.net.au/news/stories/2011/06/01/3232713.htm>

### **Seagrass 'at risk of extinction' (WA, Australia)**

01 June 2011, Zee News

A species of seagrass found only in western and southern Australian waters is at the risk of extinction, says an international study. The seagrass -- *Posidonia sinuosa* -- is one of 10 seagrasses worldwide identified in the four-year study that are in danger of being lost forever, according to lead author Prof Gary Kendrick at the University of Western Australia.

*Posidonia sinuosa* is found in Western Australia from Kalbarri through to Eyre on the south coast and also in Cockburn Sound, which has had declining populations for several decades. The seagrass is also found along the South Australian coast as far as Encounter Bay. "*Posidonia sinuosa* is declining at an alarming rate -- about 1.2 per cent every year," Prof Kendrick said.

"Globally, the biggest threat to seagrasses is coastal development. Degraded water quality and the mechanical damage from dredging and port, industrial and urban growth on the coast are other major factors. "Perhaps surprisingly for many people, climate change isn't identified as a threat. Seagrasses are, in fact, one of the few groups expected to benefit from climate change," said Prof Kendrick.

The seagrass study involved more than 20 leading researchers who used the Red List criteria of the International Union for the Conservation of Nature to determine the conservation status of 72 seagrass species. It found that *Posidonia sinuosa* was in "vulnerable" category, the second highest threat classification after "endangered", according to the IUCN system.

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

Related articles:<http://au.news.yahoo.com/thewest/a/-/breaking/9551586/wa-seagrass-endangered-report/>

<http://www.perthnow.com.au/news/special-features/seagrass-loss-could-threaten-marine-life/story-e6frg19l-1226066686733>

### **New study provides global analysis of seagrass extinction risk (USA)**

25 May 2011, Virginia Institute of Marine Science Press Release

A team of 21 researchers from 11 nations, including professor Robert "JJ" Orth of the Virginia Institute of Marine Science, has completed the first-ever study of the risk of extinction for individual seagrass species around the world. The 4-year study, requested by the International Union for the Conservation of Nature (IUCN), shows that 10 of the 72 known seagrass species (14%) are at an elevated risk of extinction, while 3 species qualify as endangered.

The researchers listed 48 species (67%) in the "Least Concern" category, including eelgrass (*Zostera marina*), the most common seagrass in lower Chesapeake Bay. Orth notes, however, that most of these species—including eelgrass—are declining in their area of coverage. (Data from VIMS' annual aerial survey shows that eelgrass is absent from one-half of its former range and continues to decline in the areas where it remains).

Orth says that eelgrass was listed as a species of least concern—despite severe declines in Chesapeake Bay, San Francisco Bay, and other parts of its range—because it is still widespread elsewhere and thrives in less developed and clear-water areas. He cites his team's successful efforts to replant eelgrass in the seaside bays of Virginia's Eastern Shore as evidence of the species' ability to rebound quickly given clear and cool water.

VIMS scientists have been restoring eelgrass to Virginia's seaside bays since 1997. Their efforts have resulted in the largest and most successful seagrass restoration project in the world, with 38 million eelgrass seeds broadcast onto 309 acres during the last decade. As of 2010, these restored sites have spread naturally to more than 4,200 acres.

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

Related articles:<http://www.bbc.co.uk/nature/13441738>

### **Scientists turn on BHP tidal plan for Upper Spencer Gulf (SA, Australia)**

27 May 2011, Science Reporter Clare Peddie, The Advertiser

Scientists are powerless to prevent the pollution of the Spencer Gulf by toxic waste from Point Lowly. The case for BHP Billiton's desalination plant is made in hefty documents such as the original Environmental Impact Statement and recent Supplementary EIS. The company trawled through existing literature and commissioned new work to fill the gaps. Even vocal opponents admit it's a comprehensive effort. They say it's not the science, but the interpretation that is flawed.

The main justification for the current location is the strength of ocean currents, which could drag the salty waste water away from the coast. BHP's uranium customer service group president, Dean Dalla Valle, says Point Lowly was chosen as the best location from 20 sites across the state. But Flinders University Associate Professor Jochen Kaempf says BHP's approach is "extremely sad and frustrating". He urged governments at every level to stop the project, describing the current proposal as an attempt at blackmail. Associate Professor Kaempf conceded the science had been done well, but the interpretation was "severely flawed" because alternative locations had not been rigorously assessed.

The diversity of life in the Spencer Gulf rivals the Great Barrier Reef. Seagrass beds and rocky reefs are home to many different animals, including prawns, soft corals and sponges, as well as the giant Australian cuttlefish that comes back every year to breed. University of Adelaide earth scientist Dr Victor Gostin says BHP is missing the point ecologists have been trying to make. The area is some 400km away from deep ocean currents, so there are times when salt builds up naturally around Port Bonython, especially during dodge tides. Extra salt from a desalination plant could have untold effects on marine life and the large Gulf fisheries.

Full story and source: <http://www.adelaidenow.com.au/scientists-turn-on-bhp-tidal-plan/story-e6frea6u-1226064421396>

## **Stock crossing to help protect Geographe Bay (WA, Australia)**

25 May 2011, Busselton-Dunsborough Mail

New stock crossings will help reduce nutrient pressures on Geographe Bay. About 96 per cent of the bay's original wetlands have been lost or modified, and the catchment's waterways are showing signs of stress.

The South West Catchments Council (SWCC) is working in partnership with land owners and the community to reduce the pressure on our waterways. The two stock crossings have been installed along the Vasse and Caribunup rivers, with a third planned for later this year in the Buayanyup catchment.

"Nutrients leaving the catchment eventually end up in Geographe Bay, where they can affect seagrass growth and the numerous marine species that rely on the seagrass meadows," SWCC coastal environments' team leader Emily Lewis said. SWCC is working in partnership with the Department of Environment and Conservation and GeoCatch to deliver this project as part of their Bay OK program.

*Full story and source: <http://www.busseltonmail.com.au/news/local/news/general/stock-crossing-to-help-protect-geographe-bay/2174575.aspx>*

## **Black swan shoot leaves residents outraged (New Zealand)**

23 May 2011, ONE News

An annual black swan shoot has left some Bay of Plenty locals angered and upset at what they say are inhumane killing practices. For one day each year Tauranga's usually tranquil estuary is filled with the sound of gunfire as dozens of black swans are bought down in the name of sport.

Bay of Plenty Regional Council backs the hunt, saying swans can significantly impact on the harbour's seagrass beds. In the last eight years swan numbers have risen from 4000 to 5000. However, opposing locals say there are more humane ways to keep swan numbers down. "I think the best way is to prick eggs from nests. You prick all bar one, and then only one cygnet hatches," Maskell said.

Fish and Game said that has not worked in the past as the swans simply move to new breeding grounds. The organisation admits it may have to start considering additional control measures, but says it is common to have hunters involved.

*Full story and source: <http://tvnz.co.nz/national-news/black-swan-shoot-leaves-residents-outraged-4185143>*

## **Pasco dredge permit OK'd; boaters to have more access to Gulf (Tallahassee, USA)**

18 May 2011, by Laura Kinsler, The Tampa Tribune

Gov. Rick Scott and the Florida Cabinet unanimously approved a dredge permit Tuesday for a canal that will give Pasco County boaters more access to the Gulf of Mexico and clear the way for construction of SunWest Harbourtowne resort. The multimillion-dollar project would transform the former limestone mine in northwest Pasco County by converting one of the lakes into a marina. The developers have approval to build 2,500 residences, 250,000 square feet of retail, 250 hotel rooms and 500 boat slips. The canal will include a seven-lane boat launch and a boat lift capable of handling 45 boats a day.

But environmental groups have opposed the dredge project. Julie Brashears Wraithmell, conservation director for the Florida Audubon Society, said the project would impact nearly twice the amount of environmentally sensitive lands as the Port of Manatee. Several officers with the Gulf Coast Conservancy voiced concerns about the project's impact on native plants and wildlife. Conservancy member Linda Prescott questioned who would maintain the channel and the monitor the seagrass beds if the Harbourtowne project "went belly up."

Attorney General Pam Bondi questioned whether the cabinet could approve the park, which is in phase one of the permit, and consider the dredge later. "Is there anyway we can approve it in phases?" she asked. "My concern is whether it's going to be completed." But Scott quashed that idea, saying it wouldn't be fair to expect SunWest to put up the money for the park and restore seagrass beds without an expectation that the channel would ultimately be approved.

*Full story and source: <http://www2.tbo.com/news/breaking-news/2011/may/18/cabinet-approved-pasco-dredge-permit-boaters-to-ha-ar-208019/>*

*Related articles: [http://www.wusf.usf.edu/news/2011/05/17/florida\\_cabinet\\_approves\\_dredging\\_pasco\\_boat\\_channel](http://www.wusf.usf.edu/news/2011/05/17/florida_cabinet_approves_dredging_pasco_boat_channel)*

*<http://www.tampabay.com/news/environment/cabinet-okays-pasco-channel-near-sunwest-harbourtowne/1170155>*

## **Officials blame pollution for death of Dolphins, Dugongs (Rameswaram, India)**

14 May 2011, IBN Live

After at least two dolphins and a number of dugong were washed dead ashore in the past one month, Fisheries Department officials blamed the pollution levels in the Gulf of Mannar.

Fisheries Department Commissioner Arumugam said, "The pollution level is high in the Gulf of Mannar. The change of climate is another reason. The sea is warm in the afternoon and late afternoon and the fishermen use certain varieties of fishing nets, like gillnets, which hurt the big marine lives like dugong and dolphin." Arumugam said according to their "detailed analysis" of the reason behind the death of the rare species, scarcity of food due to pollution could also be a factor. "The dugong eats only marine products like sea grass. There could be scarcity for their food due to pollution", he said.

Supporting Arumugam's views, former Assistant Director of Fisheries Vel Pandian said marine biologists should do a deep study into the problem and "come with solutions without ignoring them".

*Full story and source: <http://ibnlive.in.com/generalnewsfeed/news/officials-blame-pollution-for-death-of-dolphins-dugongs/683590.html>*

### **Eelgrass meadows in Barnegat Bay in danger, says ecologist (NJ, USA).**

*13 May 2011, by Kirk Moore, Asbury Park Press*

Stressed-out eelgrass meadows in Barnegat Bay and around the world may be in danger of renewed disease or population collapse, says professor Mark Campanella, a Montclair State University ecologist. "When you start to reduce population size, you start to reduce genetic diversity," Campanella told the audience at a day-long science conference hosted by the Barnegat Bay Partnership at Ocean County College. "You reduce the ability of the plant to adapt."

The afternoon session focused on the health of Barnegat Bay's eelgrass beds, important habitat for fish and crabs that have shrunken dramatically over the years. Montclair State researchers estimate eelgrass coverage has retreated by 62 percent over three decades. From 2004 to 2010, eelgrass blade length has declined by one-third and the mass of sampled grass blades is down by 87 percent, said research professor Michael Kennish of Rutgers University. Genetic analysis of Barnegat Bay eelgrass -- which is now 75 percent of the eelgrass left in New Jersey coastal bays -- shows the plants have signs of inbreeding because of the shrinking population and distances between surviving eelgrass areas on the East Coast, he said.

The algae blooms are fertilizer by nutrients coming into the bay, estimated at around 1.4 million pounds of nitrogen per year by the U.S. Geological Survey. The USGS has been revising its estimated, and most notably downgraded the contribution from air pollution fallout. Older data had been drawn from a sampling station at Washington Crossing on the Delaware River near Trenton. But with data from a newer station near Tuckerton, the estimate for airborne nitrogen compounds from power plants and car exhausts has dropped by 42 percent, Christine Wieben of USGS told the conference. "It doesn't look like there's anything substantial at that station," said Robert Nicholson, who heads environmental programs for the USGS New Jersey office. One unknown is how much nitrogen emissions are laid on the watershed by traffic on local roads and highways, Nicholson said: "The situation is complicated because you have this local signal superimposed on a regional signal."

*Full story and source: <http://www.app.com/article/20110512/NJNEWS/110512012/Eelgrass-meadows-in-Barnegat-Bay-in-danger-says-ecologist>*

*<http://news.rutgers.edu/medrel/news-releases/2011/05/rutgers-study-maps-t-20110512>*

*<http://www.app.com/article/20110511/NJNEWS/305110114/New-bay-study-cites-declining-trends?odyssey=nav/head>*

### **Coastal concern (SA, Australia)**

*10 May 2011, by Karina Natt, Yorke Peninsula Country Times*

The depletion of seagrass, beach erosion, loss of food and habitat for fisheries and loss of biodiversity could be devastating for some Yorke Peninsula coastal communities, according to the Environment Protection Authority.

The ecological condition of coastal waters between Ardrossan and Port Vincent have been assessed by the EPA and rated as only fair after findings of dense algae growth on seagrass. "Potential sources of pollutants are likely to include the port facility at Ardrossan, the Port Vincent marina, and stormwater and septic tank leakage from the coastal towns," EPA senior scientific officer Clive Jenkins said.

"Very little surface run-off enters the marine environment from the catchment due to water extraction, dams and very low rainfall, especially during drought conditions; however, when creeks do flow they will transport significant nutrient and sediment loads to the gulf." Mr Jenkins said at locations around Port Vincent and Pine Point dense algae growth covered seagrasses, an early warning sign of potential seagrass loss in the near future.

*Full story and source: <http://www.ypct.com.au/news/9276-coastal-concern.html>*

### **Marine inspectors find dead male dugong floating on Dubai shores (Dubai)**

*04 May 2011, Gulf Today*

During routine early morning patrols, inspectors of Emirates Marine Environmental Group (EMEG) have found on Monday a dead dugong floating in the water adjacent to a waterfront development near Dubai's Palm Jebel Ali manmade island. Laurence Vanneyre, project manager at the EMEG, said the 133 centimetre long animal was a juvenile male, probably one year old. Its body condition indicates that he recently died, around one or two days ago.

[www.seagrasswatch.org](http://www.seagrasswatch.org)

A statement by the EMEG said the Environment Agency of Abu Dhabi and CMS-UNEP were contacted to see the animal and recorded death of the dugong. According to Vanneyre, this is the third dead dugong to be found in this area. It is likely that the mother is not far and is searching for her baby so the EMEG is keeping an eye out to try to encounter her, alive hopefully.

“Palm Jebel Ali waters host three species of seagrass (*Halodule uninervis*, *Halophila ovalis* and *Halophila stipulacea*) all of which are very good food for dugongs who feed almost exclusively on seagrass. The EMEG team is currently recording the growth and spread of the seagrass beds inside Palm Jebel Ali construction. Surveys began in 2010. If growth continues, the Palm may be a good habitat for Dugong in a near future,” she elaborated.

*Full story and source:* <http://gulftoday.ae/portal/16bdd0d7-0d06-4ac9-8d9c-b9b7bbebc350.aspx>

*Related articles:* <http://gulftoday.ae/news/gulf/uae/environment/dugong-found-dead-near-palm-jebel-ali-1.802957>

### **Planning for end of net ban (QLD, Australia)**

*03 May 2001, Gladstone Observer*

The 60-day ban imposed on net fishing at the mouth of the Boyne River on Sunday has led to a chorus of praise from passionate locals, but what happens when the 60 days is up? Queensland Seafood Institute Association chief executive officer Winston Harris believed net fishing had a future at the river mouth. He told The Observer he supported the temporary ban, as it would provide the impetus for the fishing industry, government and recreational fishers to get together and lay the foundations for a plan allowing net fishing to continue in a responsible, regulated form. He said professional net fishermen in the area were open to new measures to help avoid turtle and dugong deaths.

The QSIA wanted to form an Inshore Group made up of all relevant stakeholders to thrash out a responsible set of measures. It was also researching and trialling new net designs that could help prevent turtle deaths. World Wildlife Fund Queensland manager Nick Heath said there was a place for sustainable net fishing, but questioned whether it was possible to practice net fishing in the Boyne River mouth without unduly endangering turtles.

He said the WWF was keen to work with industry to establish improved net fishing practices and he called for a number of measures to improve the industry, including closing certain areas to net fishing, only allowing professionals to fish in certain areas, government investment to help fishermen adjust to industry changes; and better compliance and fishery management.

*Full story and source:* <http://www.gladstoneobserver.com.au/story/2011/05/03/planning-for-end-of-net-ban-boyne-river-gladstone/>

## **GALLERY**

**Pulau Semakau (Singapore): 21 May 2011** <http://www.seagrasswatch.org/gallery.html>

**Mer Island, Torres Strait (Qld, Australia): 16 May 2011** <http://www.seagrasswatch.org/gallery.html>

**Moreton Bay (Qld, Australia): 05-06 May 2011** <http://www.seagrasswatch.org/gallery.html>

Wynnum, 05 May 2011

Wellington Point, 06 May 2011

**Mabuyag, Torres Strait (Qld, Australia): 26 April 2011** <http://www.seagrasswatch.org/gallery.html>

## **CONFERENCES**

### **CERF 2011 Conference (Daytona Beach, Florida, 6-10 November 2011)**

21st Biennial Conference of the Coastal and Estuarine Research Federation.

Societies, Estuaries and Coasts: Adapting to Change

This theme reflects a growing realization that human societies are an integral component of ecosystems and the dynamics of these societies and ecosystems are interactive - their futures are interdependent. Nowhere is this more evident than in the estuaries and coastal zones of the planet, where human populations are concentrated, typically dominating estuarine watersheds and affecting their linkage with the local, regional, and global dynamics of the coastal ocean. CERF as a professional scientific society has increasingly focused not only on understanding causes of ecosystem change but providing information necessary to manage anthropogenic changes that have impacted the biodiversity and sustainability of estuarine and coastal systems. This conference will highlight new findings and perspectives of the interactive dynamics of diverse ecosystems and human societies, and in particular, explore how these dynamics can only be understood and managed when addressed at regional and global scales. To a greater extent than in previous CERF conferences this will include an effort to specifically address socioeconomic drivers and responses.

*Please visit the conference & workshop web site for further details:* <http://www.sqmeet.com/cerf2011/>

## FROM HQ

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