



# Seagrass-Watch E-Bulletin

**31 March 2013**

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## NEWS

### **Removing seagrass from Glenelg 'futile' (SA, Australia)**

26 March 2013, Yahoo!7 News

Heavy machinery was back clearing seagrass from Glenelg beach, South Australia, today, but experts say the process is a waste of money. Over the weekend, hundreds of tonnes of seagrass washed up on the shore at Glenelg, causing a stink for visitors.

The Holdfast Bay Council has brought in heavy machinery to clear up the mess before the Easter break, but experts say the build-up on the shoreline might not be moved for weeks. Glenelg is not the only South Australian beach to fall foul to the seagrass, with beaches at Lady Bay and along the south coast being coated as well. Experts say the

council is facing an uphill battle, and even with the help of heavy machinery, it could take weeks for nature to take its course.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

## **Sea cows rapidly disappearing from seas of Gujarat, Tamil Nadu (India)**

25 March 2013, *Business Standard*

Sea cows, a large marine mammal, are rapidly disappearing from seas of Gujarat and Tamil Nadu due to pollution, habitat degradation and unscientific fishing, says Environment Ministry. Its population in the Andaman and Nicobar Islands is, however, stable.

The sea cows, scientifically known as dugong, is classified as "vulnerable" on the IUCN Red List of Threatened Species. Its population world is around 85,000 now, marking a 30 per cent drop in the last six decades. "The Government of India has supported the Gujarat Ecological Education and Research (GEER) Foundation, Gujarat to assess the populations of dugong using interview based survey in 2009 and found that the number of dugong has declined in its all ranges," says a Ministry document.

According to a Ministry official, primary analysis of the survey carried out by WII (Wildlife Institute of India) in 2012-13 has also confirmed that dugong population in Gujarat and Tamil Nadu is declining due to fishing activities, pollution and habitat degradation. International Union for Conservation of Nature (IUCN), the world's oldest and largest global environmental organisation, says that applying the correct penalties for illegal fishing is crucial for reducing the entanglement of dugongs in gill nets - one of the major threats to this shy species. Dugong has been identified as one of the 16 selected species for initiating recovery programmes in their respective habitats under the Centrally Sponsored Schemes of "Integrated Development of Wildlife Habitats", says the Ministry. Dugongs are included in Schedule-I of the Wild Life (Protection) Act, 1972, which affords it the highest degree of protection.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

## **Fish and grasses return to lakes (SA, Australia)**

25 March 2013, *The Murray Valley Standard*

Two milestones have been reached this month in the ongoing effort to restore the Coorong and Lower Lakes. Seagrass has been re-planted in the Coorong's South Lagoon and 200 southern purple spotted gudgeon were returned to their habitat last week. Poor flows of fresh water into the South Lagoon over the summer wiped out much of the seagrass *Ruppia tuberosa*, a food source for wildlife. The water has since improved, but the grass had not returned to its former extent, so researchers began taking dry sediment filled with seagrass seeds from Lake Cantara and sowing it into mudflats in the South Lagoon. They hope the grass will now regrow over the winter.

Meanwhile, the 900 gudgeon released into the Lower Finniss River have reportedly thrived since being released in several stages over the past 18 months. Last week's release of 200 fish was the last release under a two-year Environment Department program.

[source: http://www.murrayvalleystandard.com.au/story/1386438/fish-and-grasses-return-to-lakes/?cs=12](http://www.murrayvalleystandard.com.au/story/1386438/fish-and-grasses-return-to-lakes/?cs=12)

## **Manatee, pelican deaths suggest serious problems for Indian River Lagoon (FL, USA)**

21 March 2013, *Orlando Sentinel*

The mysterious deaths of dozens of manatees and hundreds of pelicans may be an indication that the ailing Indian River Lagoon, among the state's most magnificent waterways, is headed for one of the more epic collapses of a Florida ecosystem in years.

The 156-mile-long lagoon, one of the richest marine environments in North America, has suffered extensive blooms of microscopic algae in recent years that have in turn triggered mass die-offs of seagrass, the submerged plants that shelter many aquatic species and are a primary source of food for manatees. Scientists feared something bad would happen as a result, and beginning last summer manatees began perishing in areas with the worst seagrass losses, mainly in Brevard County, though no cause of death has been determined. State investigators think that the loss of seagrass has forced manatees to forage on a type of red-colored algae in the Indian River known as gracilaria. Necropsies of manatees have found their stomachs filled with it.

River overall. State water managers now fear that "nutrient" pollution tied to street runoff, lawn fertilizers and sewage is driving the lagoon's ecosystem. That pollution, which is essentially plant food, has been absorbed through the years by seagrasses or by gracilaria and other large species of algae. But cold snaps in 2010 and 2011 killed much of that large algae, which decomposed and released the nutrient pollution back into the water, where it triggered an explosive growth of single-cell, microscopic algae in three sections of the lagoon. Those blooms of microscopic algae then blocked sunlight from reaching the surviving seagrass, killing off more than 30,000 acres of the plants.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

Story also covered by:  
<http://www.postcrescent.com/usatoday/article/2004759>

<http://www.centralohio.com/usatoday/article/2004759>  
<http://www.tcpalm.com/news/2013/mar/26/seagrass-die-off-one-of-major-issues-addressed/>  
<http://www.fdlreporter.com/usatoday/article/2004759>  
[http://www.floridatoday.com/article/20130320/NEWS01/303200018/Deaths-manatees-lagoon-mystery?nclick\\_check=1](http://www.floridatoday.com/article/20130320/NEWS01/303200018/Deaths-manatees-lagoon-mystery?nclick_check=1)  
<http://www.tcpalm.com/news/2013/mar/10/anthony-westbury-beware-its-the-gubment-at-work/>

## **Experts battle to increase dugongs (Thailand)**

21 March 2013, Bangkok Post

Marine experts and veterinarians met in Trang on Thursday to draw up a master plan to increase the number of dugongs in the sea off this southern province as they have dropped alarmingly in recent years. The meeting was attended by officials from state agencies concerned with marine and coastal resources conservation, environmental advocates and members of fishing communities from Trang and Phuket.

The number of rare marine animals being found dead -- especially dugongs, dolphins and sea turtles -- in the Andaman Sea off Trang and Phuket provinces continued to drop, Patcharaporn Kaewmong, of Phuket Marine Biological Centre, said. Last year, 11 dugongs were found dead in the sea off Trang, the highest number for the province in 20 years (1992-2011), Ms Patcharaporn said. An aerial inspection conducted last year showed there were 110-135 dugongs around Koh Libong -- Thailand's largest habitat for the rare species located only 2km away from the Trang mainland -- after 134-150 were estimated in a 2011 survey. She said about 90 percent of the dugongs found dead on beaches were entangled in fishing nets and drowned, while others died from parasite-related sicknesses which signalled increased levels of sea pollution and environmental degradation.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

## **Tohoku coast faces man-made perils in wake of tsunami (Japan)**

17 March 2013, by Winifred Bird, The Japan Times

One day in October 2011, marine ecologist Masahiro Nakaoka donned his scuba gear, paddled into the waters of Funakoshi Bay in Iwate Prefecture, and braced himself for his first glimpse of its underwater communities since a massive tsunami triggered by the Great East Japan Earthquake swept through seven months earlier, on March 11.

Nakaoka knew the bay well. He works at Hokkaido University's Akkeshi Marine Station and studies the seagrass meadows that dot the coasts of Iwate, Aomori, and Miyagi prefectures in the Tohoku region of northeastern Honshu. The meadows are not large, he says, but they are extremely valuable. Nakaoka suspected the tsunami had damaged the seagrass, and as he dove down his hunch was confirmed. Funakoshi Bay's once-lush meadow was almost entirely gone. But then he noticed shoots sprouting on the seabed. If they grow into mature seagrasses, Nakaoka predicts the beautiful underwater meadow could be back within half a decade. Recovery, however, is far from certain.

Towns and cities all along that Pacific coast are building massive seawalls and breakwaters aimed at protecting them from future tsunamis. If not carefully planned, these could cut bays off from one another, from the ocean, and from the rivers and underground spring-fed water courses that carry nutrients down to them from the mountains. Nakaoka says seagrasses cannot thrive in such a segmented environment. The same is true for other coastal ecosystems damaged by the tsunami, such as tidal flats, wetlands and marshes.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

## **Sea grass pollution threatens snapper (New Zealand)**

17 March 2013, by Sanele Chadwick, 3 News

New Zealand pasture has taken a battering from the drought. But under the sea, grass pastures are facing a different threat, and it could impact on our snapper stocks. The sea grass in the Kaipara Harbour is a crucial feeding ground for snapper. But there are fears the fish numbers will drop as the sea grass is being destroyed by sediment and pollution. Baby snapper and a host of other fish filmed over the past few days have been having a feed in the Kaipara Harbour.

"We know it's really important for snapper," says Dr Mark Morrison, NIWA scientist. "We know the habits in there support large numbers of snapper and other species as well -- travelly, sharks, school sharks, grand mullets. So the harbour itself is really, really important for the West Coast ecosystem."

But scientists are worried that pollution and runoff from nearby farms could kill the sea grass and the fish, particularly the snapper, will start to disappear. That means there would be less fish to catch, and that's worrying locals. Scientists have begun using aerial photos to get a better picture of what's happening. "What we're doing now is trying to go towards mapping out those habitats and where they are and what extent they are -- where the important areas are -- and look after them over time," says Dr Morrison.

[full story: http://www.3news.co.nz/Sea-grass-pollution-threatens-snapper/tabid/1160/articleID/290644/Default.aspx](http://www.3news.co.nz/Sea-grass-pollution-threatens-snapper/tabid/1160/articleID/290644/Default.aspx)

[related articles: http://www.scoop.co.nz/stories/SC1303/S00011/niwa-looking-at-undersea-landscapes-from-the-air.htm](http://www.scoop.co.nz/stories/SC1303/S00011/niwa-looking-at-undersea-landscapes-from-the-air.htm)

## **Seagrass mapping shows Tampa Bay healthiest in years (FL, USA)**

15 March 2013, Bay News 9

The health of Tampa Bay centers on seagrass, and scientists say it is healthier than it has been in years. The tiny green blades that wave in the water are picked up by a high-tech camera and closely examined by Kris Kaufman and her team. "We use aerial photography to capture pictures of the Bay and then we use those and GIS software, a computer software program to map the seagrass," Kaufman said. "And then we come out on days like this where we go out into the field and confirm where the seagrasses are." Every two years the Southwest Florida Water Management District sends a team out to map the seagrass in the Bay.

After Kaufman reviews the aerial photos, she heads out in a boat to confirm the findings. She will look to see what types of seagrass are growing and how many acres. She can compare her findings to the previous map completed in 2010.

The mapping revealed 34,642 acres of seagrass. The number is up 5.3 percent since the 2010 mapping. For Kaufman, her most impressive finding was the growth of seagrass in Hillsborough Bay. The Tampa Bay Estuary Program has a goal to maintain a seagrass coverage of 38,000 acres. The 34,642 acres mapped this year is closer to meeting that goal than at any time in the last 20 years. March also marks Seagrass Awareness Month.

more..... [http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

Story also covered by:

[http://www.thebradentontimes.com/news/2013/03/25/environment/tampa\\_bay\\_gets\\_green\\_light\\_on\\_water\\_quality\\_report\\_card/](http://www.thebradentontimes.com/news/2013/03/25/environment/tampa_bay_gets_green_light_on_water_quality_report_card/)

<http://dunedin.patch.com/groups/editors-picks/p/tampa-bay-waters-show-seagrass-gains-1a34ee4f>

<http://www.waterworld.com/news.html>

<http://www.tampabay.com/news/environment/water/sea-grass-gains-signal-cleaner-future-for-tampa-bay/2110134>

[http://www.tbnweekly.com/editorial/outdoors/content\\_articles/030713\\_out-04.txt](http://www.tbnweekly.com/editorial/outdoors/content_articles/030713_out-04.txt)

## **Protecting Coastal Biodiversity Supports Fisheries (Wales, United Kingdom)**

13 March 2013, TheFishSite.com

New research by Swansea University is helping to understand the importance of sensitive coastal habitats, in Wales and the UK, for supporting our fisheries. The research, which uses novel stereo video technology, has been assessing the fish communities and their age ranges in different habitats around Wales. Specific focus has been on trying to understand the value of seagrass meadows, kelp forests and horse mussel beds for supporting juvenile fish, particularly those species of commercial importance.

The research was carried out by members of the Seagrass Ecosystem Research Group, at the College of Science, Swansea University and was conducted in collaboration with SEACAMS, the Countryside Council for Wales, the Pen Llyn a'r Sarnau SAC, and the National Trust. It has resulted in the creation of a publically available short film accessible on the internet. The film is available at the group website.

Studies were conducted around the coast of Pembrokeshire and the Llyn Peninsula and were co-funded by the Welsh Government Ecosystem Resilience and Diversity Fund and the ERDF funded SEACAMS project.

more..... [http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

Story also covered by:

<http://www.thefishsite.com/fishnews/19698/protecting-coastal-biodiversity-supports-fisheries>

<http://www.worldfishing.net/news101/industry-news/protecting-coastal-biodiversity-supports-fisheries>

## **WA's role in Australia's blue carbon future (Australia)**

12 March 2013, ScienceNetwork

Edith Cowan University is playing a crucial role in a massive new project, unveiled last month, which will help CSIRO to understand and estimate the potential of marine environments to capture and store blue carbon in Australia. Blue carbon is atmospheric carbon that is captured and stored, or 'sequestered', by marine environments; however, understanding the finer details of how this process works and how much carbon is stored remains largely unknown to scientists.

The CSIRO Coastal Carbon Cluster project is an enormous undertaking and involves the contribution of eight universities across Australia, including ECU and UWA. The work is broken down into four main work packages, three of which focus on; benthic community metabolism and benthic-pelagic coupling; pelagic community metabolism in Australian coastal waters, and scaling up to regional inventories and data assimilation, and parameter and model uncertainties.

ECU Professor of Marine Ecology Paul Lavery says Edith Cowan is involved in two packages and is "smack bang" in work program one, which involves carbon sequestration, stoichiometry and stores potential of representative Australian coastal ecosystems. "So that involves going round the country sampling and taking measurements in a range of saltmarsh, mangrove and seagrass ecosystems, and working out, on average, how much these store," Prof [www.seagrasswatch.org](http://www.seagrasswatch.org)

Lavery says. Prof Lavery says it is imperative the samples and cores are all processed and sampled in the same way, so the data can be collated into a national picture.

In an economic sense, Prof Lavery says the project will allow us to know how much carbon these areas can trap, and therefore, how much are they worth. "We need to start putting realistic values on these ecosystems. "In addition we need to know that if these habitats are destroyed by various activities, how much carbon we will release, and how much carbon capturing capacity have we lost and if they can be rehabilitated or offset." The Coastal Carbon Cluster program has so far secured \$3 million over three years from the CSIRO Wealth from Oceans flagship.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

### **Dugongs and turtles face food shortage after floods (QLD, Australia)**

07 March 2013, *The Sunshine Coast Daily*

Still recovering from floods more than two years ago, Hervey Bay's dugongs and turtles will now face another stretch of scarce food in the region following ex-tropical Cyclone Oswald. Department of Environment and Heritage Protection chief scientist Dr Col Limpus said it could be months before the full impact of the floods on seagrass beds and marine life could be determined. He said both dugongs and turtles rely on the seagrass beds as their main source of food. Murky water and low salinity that followed the 2011 floods is expected to once again impact seagrass supply.

"If seagrass is in short supply a small proportion of the populations can be expected to die but most dugongs and turtles will alter where they feed until the seagrass beds recover," Dr Limpus said. "We know from the experience of past weather events that the populations will recover but it will take time," he said. Five turtles were found stranded on Hervey Bay beaches in January, however data on strandings in February have yet to be published.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

*Story also covered by:*

<http://www.frasercoastchronicle.com.au/news/boaties-warned-be-aware-dugongs-and-turtles/1810987/>

<http://www.news-mail.com.au/news/be-mindful-wildlife-water-easter/1808820/>

### **Saudi Arabia pledges to support conservation of Sea cows (Saudi Arabia)**

05 March 2013, *WAM Emirates News Agency*

The Kingdom of Saudi Arabia has confirmed its support towards the protection of dugongs and their vital seagrass habitats by becoming the 26th Signatory State to the UNEP/CMS Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range (Dugong MOU).

The Dugong MOU operates under the auspices of the United Nations Environment Programme (UNEP) and the Convention on the Conservation of Migratory Species (CMS). The Dugong MOU is supported by a Secretariat, funded and hosted by the Environment Agency - Abu Dhabi on behalf of the Government of the United Arab Emirates since 2009.

The Dugong MOU was signed by Mohammad Saud Sulayem, Advisor on International Cooperation at the Saudi Wildlife Authority (SWA), on behalf of H.H. Prince Bandar Bin Saud Bin Mohammad Al-Saud, President of SWA, at a signing ceremony held in the UNEP/CMS Office - Abu Dhabi and attended by Mubarak Salem, Director - Western Region, UAE Ministry of Environment and Water in addition to representatives from the Environment Agency-Abu Dhabi (EAD) and UNEP/CMS Office - Abu Dhabi.

[more..... http://www.seagrasswatch.org/archives\\_13.html](http://www.seagrasswatch.org/archives_13.html)

## **GALLERY**

**Noosa, Qld (Australia): 09-10 March 2013** <http://www.seagrasswatch.org/gallery.html>

## **CONFERENCES**

### **CERF 2013 Conference (San Diego, California, 3-7 November 2013)**

22nd Biennial Conference of the Coastal and Estuarine Research Federation  
Toward Resilient Coasts and Estuaries, Science for Sustainable Solutions.

CERF advances understanding and wise stewardship of estuarine and coastal ecosystems worldwide. Its mission is to: Promote research in estuarine and coastal ecosystems, Support education of scientists, decision-makers and the public, and Facilitate communication among these groups. The 2013 scientific program offers four days of timely, exciting and diverse information on a vast array of estuarine and coastal

subjects. Presentations will include discoveries and synthesis on the adaptive dynamics of coastal and estuarine ecosystems and human societies. Participants will explore how these dynamics and adaptations can be understood and managed at regional and global scales. CERF will convene about 1,600 Scientists, Managers and professionals in government, business, nonprofit and related organizations, and Graduate students. From North America's coastal states and provinces, as well as from more than 20 countries around the world, CERF conference attendees are scientists and managers who conduct research and observe/manage change within a variety of global coastal and estuarine habitats. They rely on the information, expertise, methods, products, technology and innovative equipment your organization provides.

Please visit the conference & workshop web site for further details: <http://www.erf.org/cerf2013>

## 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 (over 29,000 views to date)

## ...seagrass matters blog

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

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

## FROM HQ

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**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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