

# Seagrass-Watch E-Bulletin



**31 October 2014**

Seagrass-Watch's electronic news service, providing marine and coastal news of international and national interest. Abbreviated/edited 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.

## IN THIS BULLETIN

NEWS .....	2
Seagrass hitches a ride on ocean currents, marine life (Australia) .....	2
For the love of cod, let's save our disappearing seagrass (UK) .....	2
Penalties for harming Great Barrier Reef raised (QLD, Australia) .....	3
Seagrass, the tiny plant at the heart of a community (Australia) .....	3
Seagrass meadows are crucial for human food supply (Indonesia) .....	3
Cane plan aims for clean nitrogen use (QLD, Australia) .....	4
Studies show Lagoon grass gained 12 percent (USA) .....	4
Marine marvels – Seagrass balls (Australia) .....	4
Great Barrier Reef study hopes to find answer to mass turtle stranding (QLD, Australia) .....	4
University of Florida Seagrass Study Shows Need for Clear Water (FL, USA) .....	5
Ead teams up with Total to protect region's dugongs (UAE) .....	5
Scientist disputes tumor findings (USA) .....	6
Workshop Focuses on Dugong Research in Qatar (Qatar) .....	6
Efforts stepped up to protect, conserve dugongs in Qatar (Qatar) .....	6
Real blow for dugongs: Cyclones an ill wind for sea mammals, says professor (QLD, Australia) .....	7
Black swans and seagrass strike a delicate balance (Australia) .....	7
Qatar home to second largest gathering of dugongs in the world (Doha) .....	7
Climate change threatens Western Australia's iconic Shark Bay (Australia) .....	8
Douglas tour operator concerned at dredging plans (Australia) .....	8
Turtle tumors linked to excessive nitrogen from land-based pollution (USA) .....	8
Protectors of Great Barrier Reef cut (Australia) .....	9
Seagrass removal permit in conflict with approvals (Australia) .....	9
Did the summer fertilizer ban work? (USA) .....	9
Queensland plan to dump dredge spoil onshore 'will not harm wetlands' (Australia) .....	10
Great Barrier Reef Madness (USA) .....	10
Australia's Sea Cows Struggle to Survive Poachers (USA) .....	10
Something fishy about seagrass (Australia) .....	11
Waterfront homeowners can't build docks in FL coastal community (FL, USA) .....	11
Residents turn out to support WRAD (Australia) .....	11
Protestors call for end to dredge spoil dumping in Great Barrier Reef (QLD, Australia) .....	12
Help Cornell researchers restore native eelgrass beds (USA) .....	12
Reef fund opens (QLD, Australia) .....	12
Quoin Island centre leads way in turtle care (QLD, Australia) .....	13
First of two Grassy Flats Lake Worth Lagoon islands completed (FL, USA) .....	13
Long Bar Pointe developers file challenge of Manatee comprehensive plan (FL, USA) .....	13
GALLERY .....	13
CONFERENCES .....	14
The 11th International Seagrass Biology Workshop (ISBW11) (China, 7-10 November 2014) .....	14
Coastal & Estuarine Research Federation 23rd Biennial Conference (CERF2015) (Portland, Oregon, USA, 8-12 November 2015) .....	14
SEAGRASS-WATCH on YouTube .....	15
...seagrass matters blog .....	15
World Seagrass Association blog <a href="http://wsa.seagrassonline.org/blog/">http://wsa.seagrassonline.org/blog/</a> .....	15
FROM HQ .....	15
Past E-bulletins .....	15
Frequently Asked Questions .....	15
Seagrass-Watch Magazine .....	15

Virtual Herbarium .....	15
Future sampling dates.....	15
Handy Seagrass Links .....	15

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

## NEWS

### **Seagrass hitches a ride on ocean currents, marine life (Australia)**

29 October 2014, ScienceNetwork, WA

WA scientists have unlocked the travel secrets of seagrass, including migration patterns which they say are key to safeguarding the plant's future. For more than a year, Edith Cowan University, University of WA, University of Adelaide and Murdoch University researchers collated studies from around the world on seagrass movement. The work revealed the coastal plant is novel for its ability to travel across the globe at such wildly differing speeds.

ECU researcher Dr Kathryn McMahon says while seagrass fruit and flowers float hundreds of kilometres in just a few weeks, plants growing on the ocean floor can take thousands of years to spread over a similar distance. The researchers say the plant's ability to spread over such vast distances could protect the species against the effects of climate change and allow it to migrate to recover from disturbance. Scientists have found that seagrasses move through the ocean in five ways. Despite being rooted in sediment, the plant's flowers and seeds can hitch a ride on currents on the ocean's surface or through water columns. The plant can also spread through animal faeces after being consumed by sea creatures such as dugongs or turtles; through sediment movement along the seafloor; or by individual plants growing like lawn over thousands of years.

Dr McMahon says this spread is possible because of the longevity of some seagrass species, including the Australian Posidonia family, which lives for more than 100,000 years. Spreading by seeds is the best way for seagrasses to survive global threats and for humans to improve degraded seagrass habitat, but it was the least understood, the researchers found.

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

### **For the love of cod, let's save our disappearing seagrass (UK)**

29 October 2014, The Conversation UK

Seagrass is one of the most important coastal habitats where young ocean-going fish such as Atlantic cod can grow and develop before setting out on the journey of life. But these critically important habitats, revealed in new research, are being damaged the world over and its not just threatening biodiversity but our food security. The Atlantic cod is a species of significant economic and historic importance but is now better known for its catastrophic decline. Apart from overfishing, the causes of this decline and its subsequent lack of recovery remain largely unresolved. There is extensive evidence of the presence of juvenile Atlantic cod in seagrass throughout the North Atlantic. Juvenile cod have been recorded in such high density in seagrass that they average 246 individuals per hectare. This density of juvenile Atlantic cod is higher in seagrass meadows compared to alternative habitats. This includes an incredible dataset from Norway where researchers have sampled juvenile cod in seagrass annually since 1919 and other recent studies observing juvenile cod in seagrass in North Wales by our team at Swansea University using stereo Baited Remote Underwater Video systems and seine nets.

Juvenile Atlantic cod have greater long-term viability after having spent time in seagrass, which improves their chances of reaching maturity. Our new analysis, published in the open access journal, Global Ecology and Conservation, illustrates how juvenile Atlantic cod grow faster in seagrass than in surrounding alternative habitat types and have higher survival rates from predation. Although juvenile Atlantic cod do not always need to use seagrass meadows as juvenile habitats, it appears that they may intentionally select seagrass as a nursery habitat. This data comes from studies throughout the Atlantic including Newfoundland in the west and Sweden in the east.

The study, conducted in collaboration with Richard Lilley at Cardiff University, was an extensive meta-analysis of research on the life history of the Atlantic cod resulting in a review and synthesis of its nursery habitat usage. It includes data sources from throughout the region, ranging from Newfoundland, to Norway, to Scotland and to Sweden. Our work provides strong evidence that seagrass meadows are of significant importance to contributing to Atlantic cod stocks, and our review presents extensive quantitative evidence of the role of seagrass as valuable nursery habitat for Atlantic cod. These findings are of major significance given the continued threats to these systems.

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

## **Penalties for harming Great Barrier Reef raised (QLD, Australia)**

28 October 2014, by Amy Remeikis, Brisbane Times

Damaging the Great Barrier Reef just got more expensive. As part of the Environmental Protection Act, passed overnight, courts will be asked to consider the significance of the Great Barrier Reef to the nation when considering what penalty to hand down to those found to have wilfully harmed it. It essentially identifies harm to the reef to be an aggravating factor to be considered by the courts in sentencing.

Maximum penalties for individuals have increased from \$470,000 to \$700,000, while corporations will face fines of more than \$3.5 million, from \$2.3 million. Jail terms have also increased from two to five years.

But the Opposition said the change does nothing to protect the reef. "The amendments moved at the last minute by Minister Powell do nothing to address the significant threats faced by the Great Barrier Reef and represent more spin by the Newman Government," Jackie Trad said. "Over the past two years, the Newman Government has wound back important environmental protection laws put in place to reduce sediment run-off, protect the Reef coastline and amended the Abbot Point expansion plan so that all dredge material would be dumped at sea. "The Environment Minister and the Newman Government have had many opportunities to reverse their environmentally damaging decisions, including today but, instead introduce ineffective laws to give the impression that they care about the Reef." Mr Powell said the government had gone over and above international expectations to protect the reef.

<http://www.brisbanetimes.com.au/queensland/penalties-for-harming-great-barrier-reef-raised-20141028-11db5a.html>

## **Seagrass, the tiny plant at the heart of a community (Australia)**

28 October 2014, ABC Kimberley

It mightn't look like much, but seagrass is at the root of some of Broome's favourite features. "They look like grass, though some are egg [oval] -shaped, they look like leaves," is how Broome Community Seagrass Monitoring Project (BCSMP) volunteer Carla, describe the humble plant to Richard Dinnen for ABC Kimberley Breakfast. But Carla is in no doubt that the plant's low profile belies its significance for people and the environment. The Yawuru Aboriginal traditional owners around Roebuck Bay have been enjoying the benefits of seagrass for millennia. Fish, dugong and sea turtles are still hunted, and shellfish are collected from the mud. Many of Broome's non-Aboriginal residents also fish the waters, and Roebuck Bay is an important attraction for the town's tourism industry. They are aspects of Broome that depend heavily on the inconspicuous plant.

Len McKenzie is a seagrass researcher from James Cook University in North Queensland. He works with volunteers around the world for the global Seagrass-Watch monitoring program, and he's impressed by Broome's seagrass enthusiasts. Mr McKenzie said that much of what people love about living in Broome comes from seagrass. The BCSMP group was established in 2007 in response to concerns about the impact of poor water quality and blue-green algae on Broome's seagrass. Mr McKenzie says it's a scenario being repeated around the world.

Coordinator of Broome's monitoring group, Julia Rau, says a decline in the local seagrasses appears to be reversing. "Around 2012/13 we actually had quite a decline of seagrass here in the Bay. We're not entirely sure why... Now it's starting to come back, so that's why we have to do this over a long period of time to get this long-term data," she said. Monitoring a marine ecosystem for almost a decade is a big job for a small community. But as well as the pull of the importance of seagrass, Ms Rau has another strategy that has kept the community heading out to the mudflats as the sun comes over the horizon. "Muffins and hot coffee in the mornings; that's to bribe people a little."

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

## **Seagrass meadows are crucial for human food supply (Indonesia)**

27 October 2014, environmentalresearchweb

Creatures linked to seagrass habitat in Indonesia's Wakatobi National Park provide at least half of fish-based human food in the area, according to researchers from the UK. But people are catching too many juvenile fish and, together with poor seagrass habitat management, this could undermine the long-term security of this food supply.

Richard Unsworth and colleagues from Swansea University and Cardiff University assessed the fish catch in 10 villages in Kaledupa, Indonesia in early 2013. The fish were caught using a variety of methods – static fyke nets, gill nets, rod and line, and fish traps. The team also examined which species were on sale at the Kaledupa fish market, and surveyed 254 households in 26 villages. Of these interviews, 230 were with Pulo people (local islanders) and 24 with Bajo people, who live on stilted houses in the intertidal region. Fishermen took nearly 68% of their catches over seagrass habitat, 18% from coral, almost 14% from mixed seagrass and coral, and just under 1% from the deep sea, the team found. A total of 296 species were seen – 106 of these were associated with seagrass habitat for at least some of their lifecycle. Roughly 99% of Pulo people surveyed ate fish every day, while the figure for Bajo people was 54%. And seagrass-associated fauna made up at least half of local people's fish-based food.

The Wakatobi National Park is typical of many large marine protected areas in the Coral Triangle, an area also known as the "Amazon of the Seas" because of its biodiversity. The researchers reckon their study has significant implications for how major conservation programmes throughout Asia-Pacific and the Coral Triangle consider food

security and manage fisheries exploitation. Now Unsworth and colleagues plan to examine the link between food security and seagrass at multiple temporal and spatial scales so that they can understand these processes at a regional and global level. Unsworth and colleagues reported their work in Environmental Research Letters (ERL).  
[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

### **Cane plan aims for clean nitrogen use (QLD, Australia)**

24 October 2014, North Queensland Register

The Australian government and Terrain NRM are offering Wet Tropics' sugar cane farmers a unique opportunity to build on existing efforts to improve the quality of water entering the Great Barrier Reef. The \$5 million Reef Trust Tender - Wet Tropics is a new Australian Government initiative that offers financial incentives to sugar cane farmers to improve their nitrogen use efficiency and help reduce nitrogen discharge from the Wet Tropics - one of the biggest known risks to the Great Barrier Reef.

The Reef Trust Tender – Wet Tropics is a four year program where farmers apply through a market-based competitive tender. Successful tenders are awarded based on the best value for money in improving nitrogen use efficiency on farm.

To be eligible to make an application, sugar cane farmers need to register their expression of interest online at [www.environment.gov.au/reef-trust-tender](http://www.environment.gov.au/reef-trust-tender) by December 18, 2014.

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

### **Studies show Lagoon grass gained 12 percent (USA)**

23 October 2014, Florida Today

The Indian River Lagoon has grown a bit grassier, according to new data released this week. Seagrass increased by 4,700 acres, or 12 percent, between 2011 and 2013. Still, the bottom plant that provides a key barometer of the lagoon's overall health remains well below what it was just two years before an algae "superbloom" struck its deadly blow and killed some 47,000 acres of seagrass.

New data from the St. Johns River Water Management District shows seagrass coverage in Volusia, Brevard and Indian River counties is still 39 percent less than what it was before the 2011 superbloom. Seagrass grew from just over 38,300 acres in that region in 2011 to more than 43,000 acres last year. But the increase may only reflect normal year-to-year variation, district officials said.

As part of ongoing research, the water management district uses aerial photography to create seagrass maps of the lagoon. Photos are taken every two or three years to update the maps. Biologists also dive along the seagrass beds to verify information from the aerial photos.

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

### **Marine marvels – Seagrass balls (Australia)**

22 October 2014, Yass Tribune

Amazing balls of 'woven' fibres were a surprise and delight to Mystery Bay resident Dean Ware when he found some washed ashore at Fullers Beach, south of Narooma. Have you seen them too?

Dean writes – "I first came across them in August 2012 and again in April the next year. They were mostly 60mm to 100mm, some round and some more oval shaped. Then in May 2013 I was down at Cape Conran on the Croajingolong coast in Victoria and the whole shore was littered with them".

The balls appear to be made of the roots or fibres of *Posidonia seagrasses* (strapweed or tapeweed) but they trap all sorts of flotsam as well. Driftwood, sticks, bamboo, other varieties of sponge, coral, feathers, marram and spinifex grasses, fishing line and shell fragments were just some of the inclusions. All contained lots of sand.

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

### **Great Barrier Reef study hopes to find answer to mass turtle stranding (QLD, Australia)**

22 October 2014, ABC Online

Marine experts working on the Great Barrier Reef have begun one of the largest turtle research projects ever undertaken in a bid to crack a two-year environmental mystery. A mass stranding of turtles at Upstart Bay in North Queensland in 2012 stumped researchers, who have set sail in the Great Barrier Reef to investigate if an increase in water pollution was responsible for the deaths.

World Wildlife Fund researchers and marine experts have begun 'rodeoing' in green turtles from three locations. They took samples from their blood and stomach, which will then be compared to their shells. Researchers said the turtles'

shells will hold traces of chemicals from 2012. The samples will also be compared to some of the turtles which died in the stranding. The turtles are tagged, measured and the contents of their stomach pumped and collected to take back to laboratories.

Today, dozens were wrestled into boats at the site of the mysterious stranding at Upstart Bay, about 150 kilometres south of Townsville. Last month, several hundred green turtles were collected from pristine waters north of Cooktown, and last week more were brought in from Cleveland Bay near Townsville. World Wildlife Fund project manager Christine Hoff believed researchers had a shot of solving the mystery. University of Queensland toxicologist, Associate Professor Caroline Gaus said the study would examine if exposure in the past was much higher than it is currently. Environment Minister Andrew Powell was not convinced pollutants were to blame. Researchers will not get the results of the project for three-and-a-half years.

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

### **University of Florida Seagrass Study Shows Need for Clear Water (FL, USA)**

*21 October 2014, The Fishing Wire*

Seagrass beds represent critical and threatened coastal habitats around the world, and a new University of Florida study shows how much sunlight seagrass needs to stay healthy. Scientists often use seagrass to judge coastal ecosystems' vitality, said Chuck Jacoby, a courtesy associate professor in the Department of Soil and Water Science and co-author of a new UF study that examines light and seagrass health.

When nutrient levels are too high, microorganisms in the water, called phytoplankton, use these nutrients and light to grow and reproduce until they become so abundant that they block sunlight seagrass needs to survive, said Zanethia Choice, a former UF graduate student who led the investigation. Choice studied seagrass beds in a 700,000-acre swath off the coast of Florida's Big Bend. Choice, now a natural resource specialist with the U.S. Forest Service in Mississippi, conducted the study as part of her master's thesis, under the supervision of Jacoby and Tom Frazer, a professor of aquatic ecology and director of the UF School of Natural Resources and Environment. Choice combined 13 years of light and water quality data and two years of seagrass samples from habitats near the mouths of eight rivers that empty into the Gulf of Mexico.

Seagrass off the Steinatchee, Suwannee, Waccasassa, Withlacoochee, Crystal, Homosassa, Chassahowitzka and Weeki Wachee rivers constitutes part of the second largest seagrass bed in Florida. The largest bed is in Florida Bay, between the Everglades and the Florida Keys, Jacoby said. Choice wanted to see how much light was needed to keep the seagrass in this region healthy. She found different seagrass species needed varying amounts of light, ranging from 8 to 27 percent of the sunlight at the water's surface. The study of seagrass light requirements is published in this month's issue of the journal Marine Pollution Bulletin.

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

### **Ead teams up with Total to protect region's dugongs (UAE)**

*20 October 2014, The National*

The environment authority has teamed up with oil giant Total to educate the public about the estimated 3,500 dugongs that call Abu Dhabi home. The dugongs, of which there are 7,000 in the Arabian Gulf and Red Sea, are at risk from human activity. They are considered vulnerable by the World Wildlife Fund, indicating a high risk of extinction in the wild.

In the coming months, interactive and educational workshops on conservation will be presented to middle and high school students, the fishing community and boat owners. They will learn, for example, that the dugong is unique among marine mammals in being herbivorous, which prompts them to migrate from the east African shore all the way to the Pacific Islands. Razan Al Mubarak, secretary general of Ead, said the conservation programme would enable Abu Dhabi "to provide a safe haven for this migrating species and make the UAE a leader in global dugong conservational efforts". The campaign will include public outreach through the Ead's social-media sites, and entertaining and educational activities for families next month at Mushrif Mall.

Significant efforts have been made to conserve the local dugong population. In 2002, Ead banned drift-net fishing in shallow water to prevent dugongs and turtles from becoming entangled in the nets. Nationally, two laws were issued in 1999 to protect dugongs from exploitation. The UAE was one of the first Middle East countries to sign the International Union for Conservation of Nature's agreement in 2007. The Dugong Memorandum of Understanding, which falls under the International Union for Conservation of Nature and the Convention on Migratory Species, is implemented through the convention secretariat's office. The office has been hosted by Ead since 2009.

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

## **Scientist disputes tumor findings (USA)**

18 October 2014, *Thegardenisland.com*

A group of scientists is rebutting a recent study suggesting that invasive algae is driving the grotesque, cancer-like tumors found in Hawaii's green sea turtle population. In fact, they say it's equally plausible that the algae could be having the opposite effect, leading to a decline in tumors. Dr. Thierry Work, a wildlife disease specialist for the U.S. Geological Survey in Honolulu, said those behind the paper, published Sept. 30 in the scientific journal PeerJ, did not do their homework.

Work said the paper's authors found that amino acids, including glycine, proline and arginine, in the tumors were elevated when compared to skeletal muscles, and that turtles' ingestion of invasive algae is "activating latent herpes infections and promoting tumors by foraging on arginine-enriched macroalgae." A more straightforward explanation for the difference in amino acid signatures, according to Work, is that the tumors comprise mainly connective tissues highly enriched in glycine and proline relative to skeletal muscle.

Work discussed the invasive, non-native alga *Hypnea musciformis*, which the paper's authors suspect of playing a role in turtle tumors. Studies, however, have documented the alga contains an amino acid that plays a role in tumor suppression. He wrote that the paper provides no compelling evidence that algae, arginine and tumors in turtles are linked. To view Work's response to the Smith and Van Houtan article, visit <https://peerj.com/preprints/539/more.....http://www.seagrasswatch.org/news.html>

## **Workshop Focuses on Dugong Research in Qatar (Qatar)**

13 October 2014, *MENAFN.COM*

A workshop organised at Qatar University Research Complex discussed marine mammal dugong's population, global status and conservation. Qatar University (QU), ExxonMobil Research Qatar (EMRQ) and Texas A&M University at Galveston (TAMUG) hosted the two-day workshop, QU said Sunday. The workshop follows the recent signing of an agreement in July by the three parties to further environmental research and marine mammal initiatives relevant to Qatar.

40 environmental regulators and academics, from environment research, management, and conservation institutes, and other stakeholders, including the Ministry of Environment and the Ministry of Municipality and Urban Planning, discussed strategies and recommendations for dugong conservation.  
[more.....http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

## **Efforts stepped up to protect, conserve dugongs in Qatar (Qatar)**

13 October 2014, *The Peninsula*

Institutions in Qatar have stepped up efforts to protect and conserve dugongs — marine animals that have historical importance to Qatari society. Qatar University (QU) in collaboration with ExxonMobil Research Qatar (EMRQ) and Texas A&M University at Galveston (TAMUG) hosted a workshop to discuss the dugong population, their global status, and current and future strategies for their conservation.

Qatar is home to the largest population of dugongs outside Australia. The large, herbivorous mammals consume sea grass and can reach lengths of over three meters. They weigh more than 400kg and live up to 60 years. Dugongs have a cultural and economic importance to Qataris, having been used as an economic and food resource in the Arabian Gulf for more than 7,500 years. Though long-living, dugongs have a low reproductive output. They are listed as vulnerable to extinction by International Union for the Conservation of Nature. Dugongs in Qatar face challenges, including incidental fishing and habitat degradation.

Limited research has been conducted on Qatari dugongs and the tri-party initiative aims to develop the scientific understanding to provide decisions for their protection and conservation. The extreme marine and physical environment of the Arabian Gulf, as well as the northern limit of dugong distribution may suggest that their life history will differ from those in Australia.

The workshop followed the signing of an agreement in July by the three parties to further environmental research and marine mammal initiatives relevant to Qatar. Close to 40 environmental regulators and academics, from environment research, management and conservation institutes, and other stakeholders, including the Ministry of Environment and the Ministry of Municipality and Urban Planning, participated in the discussion. Deliberations focused on strategies and recommendations for dugong conservation as well as current and future collaborative opportunities.  
[more.....http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

*Also reported as:*  
<http://www.gulf-times.com/qatar/178/details/412675/seminar-shines-spotlight-on-conservation-of-dugongs>

## **Real blow for dugongs: Cyclones an ill wind for sea mammals, says professor (QLD, Australia)**

06 October 2014, by Daniel Bateman, Cairns Post, page 10

A leading scientist says cyclones rather than hunting pressure may be responsible for a drop in dugong numbers in the northern part of the Great Barrier Reef. A report released by James Cook University last month revealed a 6 per cent decline in population of the endangered sea mammals along Cape York, the lowest recorded since 2000. A survey of the marine herbivores, carried out last year, estimated there were 6500 dugongs in the northern Reef, compared to 15,000 of the animals in Torres Strait. The Torres Strait population is the highest recorded in 13 years. The researchers from JCU's Centre for Tropical Water & Aquatic Ecosystem Research said the changes may be caused by several factors, including a lack of seagrass.

Report co-author Professor Helene Marsh said this may be due to extreme weather events in the region. "I think that the fact that the population in the Great Barrier Reef was lower than usual would suggest to me that the seagrass beds in that area probably aren't in as good a condition as they are in Torres Strait," she said. "That's probably a result of cyclones crossing the coast in the last few years. One of the things that happens when we get increased cyclones and habitat loss is that animals breed less."

The report's authors have recommended continued support for the implementation of community-based management by traditional owners and that authorities examine the potential need for more dugong "no-take" zones. The Federal Government has been working with indigenous leaders towards a two-year moratorium on the taking of dugongs. Formal agreements regulating dugong harvest have not yet been formalised in key areas such as Lockhart River, Hope Vale and the Northern Peninsula.

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

## **Black swans and seagrass strike a delicate balance (Australia)**

09 October 2014, Phys.Org

Edith Cowan University researcher Gary Choney investigated the grazing pressure black swans (*Cygnus atratus*) exerted on seagrass in the lower Swan River, between the Narrows Bridge and East Fremantle, as part of his Masters research. He says the state's early explorers documented large numbers of the birds in the 1700s and he's surprised that, as the state emblem, more research hasn't been done into them. He estimates there are now just 185 birds in the lower estuary in autumn, when they are most abundant, dwindling to just 53 in spring. The research shows intrusions to shorelines and habitats by factors like dogs and jetties help determine swan numbers, but the biggest driver is seagrass abundance.

He examined the swan's grazing patterns on three seagrass species, *Ruppia meagcarpa*, *Halophila ovalis* and *Zostera muelleri*, in areas where they are known to feed. The investigation found that when swan abundance peaks, seagrass production is also at its peak and grazing pressure is delicately balanced. However, he says the balance could be upset if swans were forced to the river from outlying wetlands drying because of factors like climate change or groundwater extraction. In addition, seagrass is susceptible to algal blooms caused by suburban water runoff containing contaminants like phosphates and detergents.

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

Also reported as:

[phys.org](http://phys.org)

*Black swans and seagrass strike a delicate balance*

<http://phys.org/news/2014-10-black-swans-seagrass-delicate.html>

## **Qatar home to second largest gathering of dugongs in the world (Doha)**

09 October 2014, Peninsula On-line

Qatar's coast has the second largest gathering of dugongs in the world, according to a new study by Texas University, Qatar University and Axon Mobil Research. The research, conducted to highlight the behaviours of the dugongs, found that Qatar was second to Australia in having many dugongs along its coast in the world, Al Sharq reports. The research also aims at bridging the gap of information on the dugongs due to inadequate research on the species.

There is a new agreement between these research institutes to enhance the understanding of the dugongs, especially when taking major environmental decisions on the coasts like that of Qatar where they are in large numbers. Results of the study will be revealed at Qatar Foundation's Annual Research Forum.

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

## **Climate change threatens Western Australia's iconic Shark Bay (Australia)**

08 October 2014, *The Conversation AU*

In the summer of 2010-2011 Western Australia experienced an unprecedented heatwave — but not on land. Between December 2010 and April 2011, sea temperatures off the WA coast reached 3C above average, and for two weeks peaked at 5C above average — 28C compared to the normal 23C. A recent research published in *Journal of Ecology and Global Change Biology* and *Global Change Biology* shows that the heatwave had a significant, possibly permanent, impact on the seagrass beds of Shark Bay — an internationally recognised World Heritage Area.

The main seagrass species of Shark Bay (*Amphibolis antarctica*) is a temperate species found only in Australia. In Shark Bay it lives near the limit of its temperature tolerance. The 2011 heatwave (dubbed the “Ningaloo Niña”) pushed the grass past its limit — 90% dieback was recorded in some areas across the bay. At the same time, the Wooramel River, which flows into Shark Bay, flooded three times in the summer of 2010/11. These floods delivered over 500 gigalitres of floodwater containing large amounts of sediment into Shark Bay. This reduced light availability resulted in meadows up to 15 kilometres from the River mouth being among the worst affected.

The seagrass did recover a little over the next two years (measured in weight of leaves or “biomass”), but only to 7-20% of the historical averages for Shark Bay. Belowground roots and rhizomes decreased over the same period. This lowered resistance could therefore increase vulnerability to future extreme events. As extreme climatic events are predicted to increase in frequency and intensity, this points to a worrying future for the seagrasses of Shark Bay. [more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Same article appeared in:  
*WA Today*

<http://www.watoday.com.au/wa-news/climate-change-threatens-was-iconic-shark-bay-20141010-1146yi.html>

## **Douglas tour operator concerned at dredging plans (Australia)**

07 October 2014, *Newsport Daily*

A Port Douglas tourism operator is expressing concern at dredging impacts on the Great Barrier Reef after the release of new images of dredge dumping off the coast of Cairns. Ports North have been under increased scrutiny this year after a permit variation was required prior to the annual maintenance dredging program. A heavy dredge barge is expected to dredge and dump 350,000 ‘dry tonnes’ of material in the World Heritage Area and marine park, allowed for under the permit variation.

Maintenance dredging occurs every year and tourism operators, including Mark Fraenkel from Blue Dive Port Douglas, have reported reduced visibility on reefs as far afield as Opal reef off Port Douglas, during dredging and dumping operations.

In its long-term sustainability plan, Ports North admitted that around half of the material dumped from dredging operations does not stay on the spoil dump ground. Ports North continue to deny impacts of dredging and dumping with a spokesperson reported as saying that any sediment plumes are gone ‘after about two hours’. Yet at a Cairns forum on the impacts of dredging, Professor Richard Bush of Southern Cross University recently pointed out that “Dredge spoil should not be considered a benign material; it can react very quickly to become an acidic source of contamination.”

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

## **Turtle tumors linked to excessive nitrogen from land-based pollution (USA)**

06 October 2014, *UH System Current News*

Hawai'i's sea turtles are afflicted with chronic and often lethal tumors caused by consuming non-native algae, “superweeds,” along coastlines where nutrient pollution is unchecked. The disease that causes these tumors is considered the leading cause of death in endangered green sea turtles. The new research was just published in the scientific journal *PeerJ*.

Turtles that graze on blooms of invasive seaweeds end up with a diet that is rich in a particular amino acid, arginine, which promotes the virus that creates the tumors. Scientists at the University of Hawai'i at Mānoa and their NOAA colleague estimate that adult turtles foraging at high-nutrient grazing sites increase their arginine intake 17–26 g daily, up to 14 times the background level. More than 60 percent of turtles in Kāne'ohe Bay have been observed to bear tumors. Kihei, Maui, has been called a “ground zero” for fibropapillomatosis, the disease that is caused by a herpes virus and manifests as tumors in turtles. Humans appear unaffected by the disease.

Van Houtan and colleagues previously described an epidemiological link between tumors and coastal eutrophication, that is, the enrichment of coastal waters with nutrients from land-based sources of pollution such as wastewater or agricultural fertilizers. This new study analyzed the actual tissues from tumored green turtles and the amounts of arginine in the dominant algae forage species from across Hawai'i. The analysis revealed remarkably high levels of

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

arginine in tissues of invasive seaweeds harvested under nutrient-rich conditions, such as those affected by nitrogen from land-based pollution. These are the same conditions that promote algal blooms. The non-native algae "superweeds" grow so quickly when fertilized that some can double their weight in a period of two days.

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

### **Protectors of Great Barrier Reef cut (Australia)**

*06 October 2014, ABC Lateline*

It's been described as the biggest loss of expertise from the agency tasked with protecting Australia's most stunning natural wonder and it comes at the very time the Great Barrier Reef is facing the biggest threat to its survival.

After having its budget cut, the Great Barrier Reef Marine Park Authority is slashing 17 staff, with five of its senior directors agreeing to take voluntary redundancies. In exclusive interviews with Lateline, three of those recently-departed directors have questioned the agency's decision-making, describing how morale at the internationally-acclaimed authority has plummeted, potentially threatening its effectiveness.

One industry group agrees, calling the loss of so much experience a disgrace and warning that bureaucrats, not scientists are making the big decisions. Mark Willacy reports from Townsville.

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

*Same article appeared in:*

*ABC Online*

*Godfather of coral says GBRMPA is finished*

*related article:*

*<https://au.news.yahoo.com/a/25194596/reef-watchdog-upheaval-great-barrier-reef-marine-park-authority-insiders-say-budget-cuts-job-lay-offs-undermining-conservation-effort/>*

*<https://smallbusiness.yahoo.com/advisor/reef-watchdog-upheaval-great-barrier-063120030.html>*

### **Seagrass removal permit in conflict with approvals (Australia)**

*06 October 2014, The Sunshine Coast Daily*

The Gladstone Ports Corporation was given a permit to remove seagrasses in a "low impact zone" during the controversial Western Basin dredging project, in conflict with approvals meant to prevent such damage in the zone. An APN investigation has established the ports corporation applied for the "marine plant removal permit" inside the dredging project's "low impact zone", despite the zone being designated as such as damage to seagrasses or other marine plants was not meant to occur.

While the ports corporation initially denied the existence of the permit, a spokeswoman later said that "following further investigations", the port could confirm the permit existed. Both the port and Fisheries Department said the permit was sought and approved as a "precautionary measure" in case a dredge spoil plume affected marine plants in the dredging project's low impact zone.

The port applied to the State Government for the permit to remove marine plants in December, 2010, about two months after the Federal Government had approved the Western Basin dredging project, despite the EIS predicting very little or no impacts from dredging to seagrasses in the low impact zone. The state government then approved the permit in April, 2011, to allow "the removal of seagrass and any other marine plants within the low impact zone", a fisheries department spokeswoman said. A ports spokeswoman has denied any damage to seagrasses in the low impact zone from dredging and said the permit was a legal requirement for "any direct or indirect disturbance" to seagrass or mangroves from the dredging project.

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

### **Did the summer fertilizer ban work? (USA)**

*04 October 2014, Florida Today*

The jury is still out on how much rainy-season fertilizer bans can help heal the Indian River Lagoon. But in the first summer of widespread bans in Brevard County, manufacturers distributed almost two-thirds less fertilizer here during peak summer months than last summer.

At first, as local governments debated the bans, locals stocked up on lawn fertilizer and the tonnage distributed in Brevard initially grew, state agriculture data shows. But as the bans set in, lawn fertilizer distribution plummeted. Industry officials say it's too soon to read a trend, but some businesses aren't waiting. They're already selling new, more lagoon-friendly fertilizer. Officials hope less fertilizer on grass will grow back more seagrass in the lagoon, by reducing the frequency and intensity of algae blooms.

In recent years, unprecedented algae blooms have choked off tens of thousands of acres of seagrass in the lagoon. Seagrass is important source of food and shelter for marine life in the lagoon. The seagrass die-off was followed by

the mysterious deaths of large numbers of manatees, dolphins and pelicans. Excessive nitrogen and phosphorous — the active ingredients in most fertilizer — is widely suspected of feeding the lagoon's algae blooms.

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

### **Queensland plan to dump dredge spoil onshore 'will not harm wetlands' (Australia)**

*04 October 2014, The Guardian*

A controversial plan to dump dredge spoil onshore will not damage nationally significant wetland, Queensland's deputy premier, Jeff Seeney, says. Three million cubic metres of dredged material linked to the expansion of the Abbot Point coal terminal near Bowen in north Queensland was destined to be dumped in waters off the Great Barrier Reef. But a backlash against the plan, which had gained federal approval, prompted the state government to endorse onshore dumping instead.

Seeney says the strategy has been submitted for federal government approval. But the North Queensland Bulk Ports Corporation project could be delayed by green groups, which have launched federal court proceedings challenging the environmental approval validity. The Mackay Conservation Group secured more time in late September to put its case to the court, initially due at the end of October, saying there was uncertainty around the onshore dumping plan. The group remains opposed to dredging, saying onshore dumping will damage a nationally significant wetland that is home to several threatened species.

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

*related stories:*

*Dredging News Online*

*Abbot Point wetlands project "means no dredge spoil on reef"*

*<http://www.sandandgravel.com/news/article.asp?v1=18873>*

*Sydney Morning Herald*

*New Abbot Point dredge plan to dump spoils in wetlands*

*<http://www.smh.com.au/environment/conservation/new-abbot-point-dredge-plan-to-dump-spoils-in-wetlands-20141029-11dppx.html>*

*Courier Mail*

*No environmental impact assessment over Abbot Point spoil dumping in wetlands*

*<http://www.couriermail.com.au/news/queensland/no-environmental-impact-assessment-over-abbot-point-spoil-dumping-in-wetlands/story-fnihsrf2-1227106068995?nk=eb9a5adcdfeffb29762b1fd3a2672a5>*

### **Great Barrier Reef Madness (USA)**

*04 October 2014, Sierra Club*

Over the past 30 years, half of the coral in the Great Barrier Reef has died as a result of cyclones, rising ocean temperatures, starfish infestations, and agricultural runoff. Things are about to get worse. In August, the state of Queensland, Australia, approved a railroad linking coal mines in its Galilee Basin to the Abbot Point port. It's the latest lost battle for environmentalists fighting Queensland's large-scale plan to expand its coal industry with new mines and bigger export terminals. If the development is fully realized, five major port expansions will accommodate 3,000 new freight and cruise ships per year, and millions of tons of sediment dredged to expand the ports could be dumped inside the Great Barrier Reef Marine Park.

Dredging clouds the water, killing coral, as well as the seagrass that endangered turtles and dugongs eat, says Jon Brodie, a chief marine scientist at Queensland's James Cook University. It also stirs up compounds that turn into sulfuric acid. A 2011 dredging at nearby Gladstone Harbour led to ulcerated fish and crustaceans.

For the Abbot Point project, dumping sediment into the Great Barrier Marine Park was initially green-lighted by the Great Barrier Reef Marine Park Authority, a government body charged with protecting the park. "What they picked was the cheapest, quickest, and dirtiest option," Brodie says. But following a spate of public outrage, as well as two court cases challenging dredging and dumping—one of them supported by the \$6 billion tourism industry—the decision was overturned, though the government refused to permanently ban dumping dredge spoils in the marine park.

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

### **Australia's Sea Cows Struggle to Survive Poachers (USA)**

*03 October 2014, TakePart*

Like the manatees of Florida, dugongs in northern Australia encounter numerous threats. These lumbering marine mammals face a gauntlet of man-made obstacles, including boat strikes and fishing net entanglements, and when their seagrass beds disappear because of coastal development and pollution, starvation can set in. But dugongs face dangers even manatees can't relate to: poaching and the illegal trade in their meat. The problem has become so bad in recent years that the Australian government just pledged \$4.4 million to protect the animals and stop the illegal trade in dugong and turtle meat.

Dugongs are protected as an endangered species in Australia—and international law also bans the trade in dugong meat or other products—but indigenous peoples are allowed to hunt the animals. Many of Australia's native communities depend on dugong hunting for a large part of their diet, and the meat is an important part of ceremonial feasts. But Environment Minister Greg Hunt said poachers, many of whom come from the impoverished native communities, have exploited the "good name" of native populations.

Native communities are fighting back against the anti-poaching plan, claiming dugongs are plentiful. Northern Land Council CEO Joe Morrison, who represents traditional landowners, also questioned why the conservation plan doesn't involve getting indigenous communities to help combat poaching.

Despite the disagreements, there has been progress. In July, three traditional people groups in Australia agreed to place a moratorium on dugong hunting in areas near the Great Barrier Reef. Dugong populations have declined by as much as 97 percent in some areas of the reef, according to a recent government report, but hunting is just one of the causes of the decline.

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

### **Something fishy about seagrass (Australia)**

02 October 2014, *The Islander*

Recently, the two dominant species of seagrass that form meadows throughout Nepean Bay have been assessed as 'Vulnerable' and 'Near Threatened' under International Union for the Conservation of Nature (IUCN) Red List criteria. This prompted Natural Resources Kangaroo Island to investigate the relationship between seagrass and fish species that depend upon them, so that potential flow-on effects from seagrass loss could be better understood.

Baited Remote Underwater Video Systems (BRUVS) were used for the project. Monitoring took place at eight locations around Nepean Bay, including Pelican Lagoon and Bay of Shoals, and so far has recorded almost 3000 individual fish from 55 species. These species included three species of shark, five species of rays, 11 species of leatherjacket, including the rare Bluefin leatherjacket (*Thamnaconus degeni*) and three species of Sygnathid (pipefish and seadragons).

Island Beach was the most diverse location, recording 25 species in total. The greatest abundance of fish was recorded at South Spit (359 individuals). Little rock whiting (*Neodax balteatus*), Tommy rough (*Arripis georgianus*) and King George whiting (*Sillaginodes punctata*) were the most frequently encountered species, recorded at every location. Little rock whiting were also the most abundant individual species. Monitoring is ongoing.

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

### **Waterfront homeowners can't build docks in FL coastal community (FL, USA)**

20 October 2014, *Watchdog.org*

For more than 20 years, waterfront homeowners living along the city of Sanibel, on Florida's San Carlos Bay, have been barred from building boating docks. It's tough luck for homes not grandfathered in, as resale values in the gulf community — where boating is in part a way of life — are directly affected. It's even tougher for owners who believe the reasoning for the ban doesn't hold any water. So when the city government decided to build its own dock in the restricted area eight years ago, some residents started speaking up. Their stop could be the U.S. Supreme Court.

According to Mark Miller, managing attorney for the Pacific Legal Foundation's Atlantic Center, the dock ban violates basic property rights. It limits what homeowners can do with their property based on the city's desire to protect submerged seagrasses. That's not to say area seagrasses aren't important, acknowledges Miller.

Sanibel City Attorney Kenneth B. Cuyler told Watchdog.org in an email the city council determined its dock was necessary "for public health and safety purposes." The four-boat concrete structure is used by city police and fire departments, for the benefit of all residents and visitors to Sanibel, Cuyler asserted. To homeowners it looks like little more than a "do as I say, not as I do" city policy.

[full story: http://watchdog.org/177973/property-rights-florida/](http://watchdog.org/177973/property-rights-florida/)

### **Residents turn out to support WRAD (Australia)**

20 October 2014, *Mackay Daily Mercury*

Over 300 people from all walks of life joined Whitsunday Residents Against Dumping to create a spectacular heart formation for the Reef in Airlie Beach to demand the State and Federal governments ban dumping in the Great Barrier Reef World Heritage Area. WRAD spokesperson, eighteen-year-old Brittney Gregory, said the support from the community was admirable.

Ms Gregory was joined by high profile speakers including Tony Brown, President of the Whitsunday Charter Boat Association who said the Reef needs protecting for our tourism industry. Cherry Muddle from the Australian Marine

Conservation Society said the Reef and the wetlands are fragile environments and are already under pressure from many threats.

*full story: <http://www.dailymercury.com.au/news/residents-turn-out-support-wrad/2424902/>*

### **Protestors call for end to dredge spoil dumping in Great Barrier Reef (QLD, Australia)**

*19 October 2014, by Allyson Horn, ABC Online*

Dozens of protesters in Townsville and the Whitsundays have staged a flotilla to call for an end to the dumping of dredge spoil in reef waters. On shore, people marched with placards, chanting "sea dumping never, Barrier Reef forever". Organiser Jacinta Tonkin said the future of the Reef's health is under threat unless Governments introduce a blanket ban on offshore dumping.

Last month the Federal and Queensland Governments announced they had reached a decision allowing 3 million cubic metres of dredge spoil from the Abbot Point development to be dumped on land and not at sea. Protesters said the decision was an ideological victory, and the reef was still in danger because of other development proposals.

A former environmental director of the Great Barrier Reef Marine Park Authority Adam Smith said stricter policies were needed. Queensland Premier Campbell Newman would not say if the Government would consider a ban on dumping dredge spoil in reef waters. But he said the state and federal governments had a long term plan to protect the reef.

*full story: <http://www.abc.net.au/news/2014-10-19/reef-flotilla-to-save-the-reef/5825178>*

### **Help Cornell researchers restore native eelgrass beds (USA)**

*19 October 2014, Suffolk Times*

Researchers from Cornell Cooperative Extension of Suffolk County are looking for volunteers willing to spend a day on the water to help restore marine life habitat. The not-for-profit's Marine Meadows Program is hosting a free eelgrass restoration workshop Saturday, Oct. 25 from 1 to 3 p.m. at its Marine Environmental Learning Center, located at 3690 Cedar Beach Road in Southold.

Eelgrass acreage has significantly decreased in Peconic Estuary, down an estimated an 80 percent from the 1930's, according to the state DEC. While learning about the aquatic vegetation, volunteers will help scientists to weave thousands of live eelgrass shoots into specially designed biodegradable planting discs by hand. The discs will then be planted in local bays in hopes of restoring the habitat essential to species such as bay scallops, flounder and seahorses.

*full story: <http://suffolktimes.timesreview.com/2014/10/53004/help-cornell-researchers-restore-native-eelgrass-beds/>*

*also reported as:*

*<http://southoldlocal.com/2014/10/15/cornell-calling-volunteers-new-eelgrass-restoration-workshop>*

### **Reef fund opens (QLD, Australia)**

*15 October 2014, Newsport Daily*

The Australian Government has opened a \$5 million Reef Trust Tender in an attempt to reduce impacts on Great Barrier Reef Health from farming activities on land.

"This competitive tender from the Coalition's \$40 million Reef Trust will provide financial incentives to sugar cane farmers in the Wet Tropics to improve their nitrogen use efficiency and farm sustainability," said Member for Leichhardt Warren Entsch. "The program builds on the positive work sugar cane farmers have already taken to work together on improving the Great Barrier Reef."

Terrain Natural Resource Management (NRM) has successfully bid to act as service provider for this two-stage competitive tender, commencing now with an expression of interest round for sugar cane farmers which closes on 18 December 2014. "Terrain NRM will work with interested cane farmers in the Wet Tropics to help reduce nitrogen runoff into the Great Barrier Reef lagoon," said Minister Hunt. "Nitrogen runoff from farms is a major factor affecting the health of the Great Barrier Reef and is linked to outbreaks of the damaging crown-of-thorns starfish." "The recently released Water Quality Report card shows a significant improvement in water quality over time, but more work is required. This project will deliver further improvements."

Following the expression of interest stage, a market-based competitive tender will be run from 19 January to 19 February 2015 for sugar cane farmers to submit bids to support improvements to their nitrogen use efficiency and farm sustainability. Terrain NRM will be holding workshops in early December to fully inform interested sugar cane farmers of the competitive tender's objectives and requirements. "Sugar cane farmers who are successful in the competitive tender will receive an initial payment in 2015 and then annual payments over three years from 2015-16," said Mr Entsch. "Participation in the project is voluntary and sugar cane farmers will determine their own nitrogen use efficiency targets and cost-effective means of achieving those targets."

*full story: <http://www.tourismportdouglas.com.au/Reef-fund-opens.11953.0.html>*

## **Quoin Island centre leads way in turtle care (QLD, Australia)**

14 October 2014, Gladstone Observer

Gladstone is leading the way in turtle care, with 73% of those being cared for at the Quoin Island Turtle Rehabilitation Centre returned to the wild in a healthier condition. The centre's founder puts that down to the empathy of the volunteers who look after the turtles. The statistic is twice what the centre was expected to achieve up front.

Across Queensland, animal care centres can take a total of 80 turtles in care at the one time. Gladstone has the capacity for 20, and has become one of the most active. Centre founder Bob McCosker said the animals responded well to the time spent with volunteers. Mr McCosker said there was a view that what they did was a waste of time. "I agree that we're not going to save the green turtles of the world, or the hawksbills, but what we do is educate people," he said.

It was an exciting moment for volunteers when Tina was released back into the wild on Saturday. The 100kg turtle has been at Quoin Island Turtle Rehabilitation Centre for four months, after she was found floating in the harbour. Tina was found to have a big calcified tumour underneath her front right flipper. Tina was eating up to 30kg of squid a week, and had to be treated daily until the wound healed.

*full story: <http://www.gladstoneobserver.com.au/news/centre-leads-way-in-turtle-care/2418546/>*

## **First of two Grassy Flats Lake Worth Lagoon islands completed (FL, USA)**

09 October 2014, By Aleese Kopf, Daily News Staff Writer

One of the two muck-capping sand islands that's part of the Grassy Flats Lake Worth Lagoon restoration project was completed this week and work began Monday to add seagrass habitat. The Palm Beach County Department of Environmental Resources Management and other state and federal environmental agencies began the project, adjacent to the Par 3 Golf Course, last December. They plan to cap muck sediments with sand and create seagrass habitat to improve water quality and increase the abundance of fish and other aquatic species in the lagoon.

Contractors have so far placed 43,000 cubic yards of sand to create the north island and will place another 14,000 cubic yards between now and November to complete the second island. The rest of the project, including creating 10.5 acres of seagrass habitat, 1.1 acres of salt marsh, 0.3 acre of mangrove, 0.3 acre of tidal flat and 0.6 acre of artificial reef/oyster habitat will be complete by the end of December.

Project manager Eric Anderson said the project has been a success so far. The county, state Fish and Wildlife Conservation Commission and Florida Atlantic University recently began a one-year program to monitor the fish at Grassy Flats. The goal is to assess the fish species that use restoration areas such as Grassy Flats and Snook Islands Natural Area compared to un-restored areas, Anderson said.

*full story: <http://www.palmbeachdailynews.com/news/news/local/mini-ecosystem-sees-progress-first-of-two-islands-nhcwq/>*

## **Long Bar Pointe developers file challenge of Manatee comprehensive plan (FL, USA)**

08 October 2014, by Matt M. Johnson, Bradenton Herald

The developers of a proposed mixed-use residential project at Long Bar Pointe are suing Manatee County again. A suit filed in the 12th Judicial Circuit Court on Tuesday alleges that the county violated the constitutional rights of development company Cargor Partners VIII/Long Bar Pointe LLLP partners Carlos Beruff and Larry Lieberman by depriving them of the right to use underwater lands they own in conjunction with their Sarasota Bay property. Beruff and Lieberman are in the early stages of developing Long Bar Pointe, a residential community and marina fronting Sarasota Bay off El Conquistador Parkway.

Mitchell Palmer, Manatee County's attorney, received early warning last week from one of the developers' attorneys that the challenge was coming. Palmer said the focus of the challenge is language in the county's comprehensive plan that addresses restrictions on development where seagrass is present. Long Bar Pointe's 463-acre property includes seabed acreage.

Project opponents have stated in public meetings, including a 13-hour hearing in August 2013, that the development would destroy seagrass and mangrove habitats in an area prone to storm flooding.

*full story: [http://www.bradenton.com/2014/10/08/5402621\\_long-bar-developers-challenge.html?rh=1](http://www.bradenton.com/2014/10/08/5402621_long-bar-developers-challenge.html?rh=1)*

## **GALLERY**

### **Broome, WA (Australia): Level 1: 25 - 27 October 2014** <http://www.seagrasswatch.org/gallery.html>

Level 1, Department of Parks and Wildlife: 25 - 27 October 2014

Introduction to Seagrass-Watch: 27 October 2014

Demco: 28 October 2014

**Mackay - Whitsunday, Qld ( Australia): 06-09 October 2014** <http://www.seagrasswatch.org/gallery.html>

Sarina: 06 October 2014  
Hamilton Island :07 October 2014  
Pioneer Bay: 08 October 2014  
Midge Point: 09 October 2014

**Cape York , Qld ( Australia): 04 - 08 October 2014** <http://www.seagrasswatch.org/gallery.html>

Stanley Island: 04 October 2014  
Bathurst Bay: 05 October 2014  
Shelburne Bay: 06 October 2014  
Piper Reef: 07 October 2014  
Yum Yum: 08 October 2014

**Wet Tropics, Qld (Australia): 03 - 14 October 2014** <http://www.seagrasswatch.org/gallery.html>

Green Island: 03 October 2014  
Dunk Island: 04 October 2014  
Lugger Bay: 05 October 2014  
Low Isles: 14 October 2014

**Townsville, Qld (Australia): 19 - 22 September 2014** <http://www.seagrasswatch.org/gallery.html>

Magnetic Island: 19 September  
Shelley Beach: 20 September 2014  
Bushland Beach: 22 September 2014

## CONFERENCES

***The 11th International Seagrass Biology Workshop (ISBW11) (China, 7-10 November 2014)***

Theme: Declining seagrasses in a changing world.

The International Seagrass Biology Workshop (ISBW) gives a good chance for the scientists working on various aspects of seagrass ecosystems to come together and discuss their latest achievements. The ISBW11 will be held from 7-10 November 2014 at Sanya city, Hainan Province, China, organized by South China Sea Institute of Oceanology, Chinese Academy of Sciences. ISBW11 convenor is Dr Xiaoping Haung.

The following symposia themes were chosen for ISBW11:

- 1) Key Ecological Processes;
- 2) Ecosystem Vulnerability and Resilience;
- 3) Biodiversity and Ecosystem Services;
- 4) Management and Restoration.

for more information, visit <http://isbw11.csp.escience.cn/dct/page/1>

***Coastal & Estuarine Research Federation 23rd Biennial Conference (CERF2015) (Portland, Oregon, USA, 8-12 November 2015)***

Theme: Grand Challenges in Estuarine and Coastal Science: Securing our Future

The CERF 2015 scientific program offers four days of timely, exciting and diverse information on a vast array of estuarine and coastal subjects. Presentations will examine new findings within CERF's traditional scientific, education and management disciplines and encourage interaction among coastal and estuarine scientists and managers. Additionally, the Scientific Program Committee plans to convene special sessions and workshops that promote intellectually stimulating discussions of the Grand Challenges in Coastal and Estuarine Science:

Managing and mitigating the risks of climate change – *shifts in precipitation and hydrologic patterns; wetland and species migrations; sea level rise; drought and water scarcity; severe storms, etc.*

Synergistic effects of ocean acidification with hypoxia, eutrophication or other conditions – *synthesis of information (e.g., from 2013 CERF) with new research results and methods for mitigating effects*

Polar estuaries and coasts – *physical oceanography, ice cover, biogeochemical interactions and impacts to coastal ecosystems*  
Making data work – *advancement, management and integration of modern datasets (observing, genomics, bioinformatics) and capabilities to yield predictive models and tools*

Cities by the sea – *scientific exploration of dense and growing populations, economies and the built environment on coastal ecosystems; success stories from green infrastructure*

Estuaries under threat – *environmental change and variability associated with population growth, resource acquisition and scarcity, war/conflict, biodiversity loss and interactions in the next 50 years*

Multiple uses – *managing multiple, conflicting uses of coastal resources across the natural and sociological continuum; integration, quantification and valuation of ecosystem goods and services*

The Scientific Program Committee for CERF's 23rd Biennial Conference is now accepting proposals for scientific sessions and workshops. Ideas for topics and speakers will be accepted through 12 September 2014. Proposals will only be accepted online. A formal Call for Scientific Sessions and Workshop Proposals is now posted on the CERF website. Some examples include:

- managing and mitigating the risks of climate change;
- synergistic effects of ocean acidification with hypoxia, eutrophication or other conditions;
- polar estuaries and coasts;
- making data work;
- cities by the sea;
- estuaries under threat; and
- multiple uses of coastal resources.

CERF 2015 sessions will include oral, poster and combined oral/poster formats. Those making submissions should be prepared to either act as a convener or chair of the session/workshop they are proposing, or identify an appropriate chair.

**Important dates:**

- 31 October 2014 - notification of acceptance of scientific sessions/workshops.
- 08 November 2014 - CERF2015 begins

for more information, visit <http://www.erf.org/cerf2015>

## SEAGRASS-WATCH on YouTube

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

Presentation on what seagrasses are and why they are important (over 34,851 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#bulletin>

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

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

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

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

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

\*\*\*\*\*

**DISCLAIMER**

News articles posted as a free community service for the purposes of non-commercial education, research and study; review and the reporting of news; and archived for reference of students and researchers as a 'fair dealing' activity under Australian Copyright Law.

Seagrass-Watch HQ does not guarantee, and accepts no legal liability whatsoever arising from or connected to the accuracy, reliability, currency or completeness of any material contained in this bulletin. 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. This bulletin is not a substitute for independent professional advice and users should obtain any appropriate professional advice relevant to their particular circumstances. The material in this bulletin may include the views or recommendations of third parties, which do not necessarily reflect the views of Seagrass-Watch HQ or indicate its commitment to a particular course of action.

Seagrass-Watch HQ is supported by the Great Barrier Reef Marine Park Authority (GBRMPA), TropWATER (James Cook University) and by private donations.

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