



**31 July 2013**

Seagrass-Watch's electronic news service, providing marine and coastal news of international and national interest. Abbreviated articles are presented with links to their source. Seagrass-Watch HQ recommends that readers exercise their own skill and care with respect to their use of the information in this bulletin and that readers carefully evaluate the accuracy, currency, completeness and relevance of the material in the bulletin for their purposes. You are free to distribute it amongst your own networks. This E-bulletin is also available as a downloadable file (pdf) at <http://www.seagrasswatch.org/publications.html#Ebulletin>

## IN THIS BULLETIN

NEWS .....	2
National Climate Change Adaptation Research Facility releases Policy Guidance Briefs (CAN, Australia) .....	2
APPEA Launches Campaign to Muddy Waters of Great Barrier Reef (Australia) .....	2
Conservationist demands end to dugong hunt as numbers plummet (QLD, Australia) .....	2
Turtles' survival is threatened (QLD, Australia) .....	3
Ports chief disputes Abbot Point expansion fears (Australia) .....	3
Toxic algae bloom studied in Indian River (FL, USA) .....	3
Study finds seagrass beds in Palk Bay (India) .....	4
Galapagos turtle drops in to graze Moreton Bay on great Pacific swim (QLD, Australia) .....	4
New law to add penalties for props that destroy seagrasses (TX, USA) .....	4
Long Bar: Developers say Sarasota Bay will not be destroyed by seagrass, mangrove removal (FL,USA) .....	5
Seagrass-planting experiment aims to restore Indian River Lagoon (FL, USA) .....	5
Feds declare Indian River Lagoon dolphin deaths as unusual (FL, USA) .....	5
QRC launches reef campaign to counter green 'hysterics' (QLD, Australia) .....	6
First experimental evidence of corals feeding on seagrass matter (Singapore) .....	6
Snooty the manatee celebrates 65th birthday (FL, USA) .....	6
Manatees Are Touchy-Feely To The Extreme (FL, USA) .....	7
Supporting Indigenous management of Queensland's sea country (QLD, Australia) .....	7
Sea turtle conference addresses Great Barrier Reef sickness spike (QLD, Australia) .....	8
Coalition candidate supports waste dumping in Great Barrier Reef area (Australia) .....	8
Controversial Hinchinbrook resort still leaking raw sewage on to Great Barrier (QLD, Australia) .....	9
Greens want PM to see reef dredging impact (Australia) .....	9
Townsville hosts sea turtle conference (QLD, Australia) .....	9
Fisherman charged with selling turtle meat (Trinidad & Tobago) .....	10
Habitat loss doubles flood impact: study (USA) .....	10
Tropical Far North high risk for Great Barrier Reef pollution (Australia) .....	10
GALLERY .....	11
Far North Qld (Australia): 19-22 July 2013 .....	11
Singapore: 13-14 July 2013 .....	11
CONFERENCES .....	11
CERF 2013 Conference (San Diego, California, 3-7 November 2013) .....	11
SEAGRASS-WATCH Workshops 2013 .....	11
SEAGRASS-WATCH on YouTube .....	11
...seagrass matters blog .....	12
World Seagrass Association blog .....	12
Interested in related e-Newsletters? .....	12
FROM HQ .....	12
Past E-bulletins .....	12
Frequently Asked Questions .....	12
Seagrass-Watch Magazine .....	12
Seagrass-Watch Shop .....	12
Virtual Herbarium .....	12
Giveaways .....	12
Future sampling dates .....	12
Handy Seagrass Links .....	12

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

## **National Climate Change Adaptation Research Facility releases Policy Guidance Briefs (CAN, Australia)**

05 July 2013, NCCARF

The National Climate Change Adaptation Research Facility (NCCARF) evidence-based Policy Guidance Briefs address key challenges to effectively adapting Australia to a variable and changing climate, providing high-level policy advice designed for use by policy makers at Commonwealth and State level.

NCCARF's evidence-based policy guidance briefs address key topics relevant to the challenge of effectively adapting Australia to a variable and changing climate. Policy guidance briefs have been developed in consultation with teams of adaptation practitioners and researchers – through a series of workshops referred to as The Adaptation Conversation. Each workshop was held at a location that faces challenges associated with climate risk, variability and change.

Twelve policy guidance briefs have been delivered in 2012 – 13. Seagrass-Watch HQ contributed to Brief 8) Adapting ecosystems to climate change; this Policy Guidance Brief deals with the challenge of managing Australia's ecosystems (terrestrial, marine and freshwater) to ensure conservation and function under climate change.

*full story: <http://www.nccarf.edu.au/publications/policy-guidance-briefs>*

## **APPEA Launches Campaign to Muddy Waters of Great Barrier Reef (Australia)**

19 July 2013

The Australian Marine Conservation Society has slammed a new multi-million dollar advertising campaign by the Australian Petroleum Production and Exploration Association that will muddy the waters over the protection of special places like the Great Barrier Reef from massive industrialisation. APPEA's campaign attacks environmental safeguards and promotes fast tracking resource projects like those that have already caused the dumping of millions of tonnes of dredge material in the waters of the Great Barrier Reef.

The strong push by the mining industry for government to cut environmental legislation comes a week after a poll showing the protection of the Reef is high on the election agenda for Queenslanders. Felicity Wishart, Great Barrier Reef campaign director said more than 73% of Queenslanders surveyed across nine federal electorates support a ban on dumping dredge waste in the Reef's World Heritage Areas.

"The mining industry is trying to muddy the waters of the Great Barrier Reef and the debate around its protection," Ms Wishart said. "People support mining in Queensland, but they don't want environmental regulation cut and they don't want big mining companies to continue to receive special treatment. "Earlier this year, a group of 150 marine scientists from 33 institutions released a declaration that warns of the threat of rapid industrialisation along the Reef. "The scientists observed that the Reef was already in trouble and could not cope with further pressure from expanding port infrastructure and increased shipping in its waters." Ms Wishart said.

*full story: <http://www.dredgingtoday.com/2013/07/29/appea-launch-campaign-to-muddy-waters-of-great-barrier-reef-australia/>*

## **Conservationist demands end to dugong hunt as numbers plummet (QLD, Australia)**

19 July 2013, by Brian, The Courier-Mail

A conservationist has called for an end to all indigenous hunting of dugongs until the species recovers as numbers dwindle dramatically. There are fears that the marine mammal population is in freefall as flood damage to their habitat has pushed them to the brink. Australians for Animals spokeswoman Sue Arnold said the federal and state governments should conduct a survey of dugong numbers from Cooktown to Brisbane. She said the impacts of north Queensland's Abbot Point port extension and any other port developments should also be taken into account. This was critical for dugong survival due to flood and dredging impacts on seagrass meadows and because dugongs were part of UNESCO's World Heritage listing of the Great Barrier Reef. In 2011 the State Environment Department reported that in some areas seagrass cover had crashed by more than 80 per cent. This saw dugongs and turtles suffering from malnutrition and a major fish disease outbreak in Gladstone Harbour. "The dugongs on the urban coastal stretch have been overwhelmed," Ms Arnold said. "There is a desperate need to protect seagrass. They have had problems at places such as Gladstone because of port development." Gladstone Ports Corporation chief executive Leo Zussino said a James Cook University study showed an overall increase of 718ha of seagrass meadows since the 2011 floods, one of the few places to show such recovery.

James Cook dugong specialist Helene Marsh said a survey of dugongs off their most important habitats on Cape York and the Torres Strait would be conducted later this year to complement a survey of the urban coast in 2011. A survey of Moreton Bay two weeks ago showed a normal calving rate. Professor Marsh said she did not think the situation warranted a survey at this time. "The window of suitable weather is narrow and there would not be sufficient aircraft or trained observers given our other survey commitments," she said.

Environment Minister Andrew Powell said the department was working with indigenous communities to implement appropriate hunting practices. "Many communities strongly support the development of sea country management and related hunting plans and are working towards a self-regulation permit system," he said. A spokesman for Federal Environment Minister Mark Butler said hunting would not be banned and indigenous people were entitled to collect some dugong for personal use.

<http://www.couriermail.com.au/news/queensland/conservationist-demands-end-to-dugong-hunt-as-numbers-plummet/story-fnihsrf2-1226681541135>

*Story also covered by:*

<http://www.heraldsun.com.au/news/national/conservationist-demands-end-to-dugong-hunt-as-numbers-plummet/story-fni5v70-1226681541135>

## **Turtles' survival is threatened (QLD, Australia)**

*17 July 2013, ABC Online*

Hundreds of scientists, rangers and volunteers involved in sea turtle research and rescue, are spending three days swapping information, case studies, stories and tips at a conference in Townsville Queensland. In 2011 Dr Ellen Ariel, senior lecturer at James Cook University, organised a one day event, with a view to pull together experts in a field that can be lonely and isolating.

She says three years later the conference has tripled in size. "When you compare what we know about sea turtles to other animals, we're just scratching the surface," she says. "It's the tip of the iceberg. There are so many areas we need to learn more about... base line studies that need to be done in order to find out what is normal so we can compare that to what we find when the turtles are not well."

In 2012 the Commonwealth Government approved the expansion of the Abbot Point coal terminal to become the largest coal port in the world. Dr Ariel says these developments and others are a serious threat to vulnerable seagrass meadows and reef habitats sea turtles rely on for survival and reproduction. "I feel we have a responsibility to look at what we are doing to the environment and make sure it is safe for sea turtles. They are an indication of what's going on in the environment because they live for so long and are in such close contact with it."

*source: <http://www.abc.net.au/radionational/programs/busstelegraph/turtles27-survival-is-threatened/4825210>*

## **Ports chief disputes Abbot Point expansion fears (Australia)**

*15 July 2013, ABC online*

The head of North Queensland Bulk Ports (NQB) says the Great Barrier Reef is not under threat by proposed port development. NQB is proposing two major port projects in north Queensland. A study is underway for a new port at Dudgeon Point, south of Mackay, and the Federal Government is assessing an application to expand the Abbot Point terminal near Bowen, which includes a plan to dredge about three million cubic metres of seabed. Both projects have been criticised by conservation groups which are worried about the impact on the health of the reef.

However, in an opinion piece, NQB chief executive Brad Fish says port operations and shipping in the marine park are well regulated and the scale of the activity is minor compared to the size of the reef. He says port development has been gradual and ordered and complied with strict environmental guidelines. Mr Fish says the reef and port expansion can safely co-exist. He says debate about the health of the reef is misinformed and threatens future investment in the country. Mr Fish says dredging has been done for more than 100 years in the marine park and says scientific research shows storms and crown of thorns starfish are the main reasons for damage to the reef and not dredging.

*source: <http://www.abc.net.au/news/2013-07-15/ports-chief-disputes-abbot-point-expansion-fears/4819938?section=qld>*

## **Toxic algae bloom studied in Indian River (FL, USA)**

*13 July 2013, San Francisco Chronicle*

A federal researcher has found three varieties of toxins from microscopic algae that he says are responsible for the deaths of manatees, dolphins and pelicans in the Indian River Lagoon in the past year. Scientists said manatees have been eating more of the toxins, which stick to seaweed, because algae blooms have killed the seagrass they normally eat.

Peter Moeller, a research chemist at the National Ocean Service in Charleston, said he still doesn't know which algae are producing them and they don't know how to eliminate it. His lab collected the algae in May in a spot where many manatees were dying. More than 100 manatees, 51 dolphins and 300 pelicans have died from unexplainable causes in the lagoon in the past year. Moeller said the next step is to describe the molecular structure of the three "suites" of toxins, then determine if the same toxins exist in the manatee, dolphin and pelican tissues.

*full story: <http://www.sfgate.com/news/science/article/Toxic-algae-bloom-studied-in-Indian-River-4663704.php> [Back to Top](#)*

*Story also covered by:*

<http://www.tampabay.com/news/environment/wildlife/scientists-find-toxins-on-seaweed-that-may-be-killing-manatees-but-mystery/2131883>

## **Study finds seagrass beds in Palk Bay (India)**

12 July 2013, *The Hindu*

The 130-km-long stretch between Pamban and Athirapattinam in the Palk Bay coast has a treasure of luxuriant seagrass beds, according to Suganthi Devadason Marine Research Institute (SDMRI). The Tuticorin-based research institute which had taken up a comprehensive underwater survey and assessment of seagrass beds in the Palk Bay in 2008, has completed its study in February this year, and found that the coastline has 254 square km of seagrass cover.

Giving details of the findings, SDMRI director J.K. Patterson Edward said the study was taken up in the area between Pamban and Thondi in the first phase and up to Athirapattinam with the support of Mangroves for the Future Programme of International Union for Conservation of Nature and Natural Resources (IUCN) in the second phase. "The coastline has all the 14 species of seagrass found all over the world and *Thalassia hemprichii*, *Syringodium isoetifolium* and *Cymodocea serrulata* are the dominant species," he told *The Hindu*. The luxuriant growth was seen in Puthupattinam, Mullumunai and Thondi zones, he said.

He said the 130-km-long coastline was divided into 23 zones for detailed data collection like seagrass percentage composition, species diversity, shoot density, biomass, epiphytes, macro faunal assemblage, fish population, distribution pattern and abundance. He said the SDMRI had collected the baseline data in the Palk Bay, but focused conservation and research plan with sufficient funding was the need of the hour to conserve these underwater treasures for the benefit of the dependent coastal community and the protection of biodiversity.

full story: <http://www.thehindu.com/news/national/tamil-nadu/study-finds-seagrass-beds-in-palk-bay/article4908494.ece?homepage=true>

## **Galapagos turtle drops in to graze Moreton Bay on great Pacific swim (QLD, Australia)**

29 July 2013, by Brian Williams, *The Courier-Mail*

Environment Department scientists have found a rare black turtle in Moreton Bay - a visitor all the way from the Galápagos Islands about 12,700km away. There are seven species of marine turtles and the black is recognised as a close relative of, but genetically distinct from, the green turtles of eastern Australia. Aquatic threatened species unit chief scientist Col Limpus captured the turtle last Sunday in the seagrass meadows of eastern Moreton Bay.

"This is only the eighth black turtle to be captured in eastern Australia during the decades of capture and tagging of marine turtles that feed in our coastal waters," Dr Limpus said. Dr Limpus said the black turtle must have drifted across to Australia on the South Pacific Current. "Because we have never seen a black turtle among the hundreds of thousands of green turtles recorded nesting in eastern Australia over the past 40 years, we can assume that these young black turtles ... will eventually return to the eastern Pacific for breeding," he said.

Endangered black turtles have a distinctively pointed back end to the shell and dark coloured skin under the flippers and neck. They also breed in Mexico south to Costa Rica. They are endangered because of hunting, egg collection and being trapped in fishing nets. Dr Limpus tagged the black turtle and hopes the marker will be recovered in the Eastern Pacific in decades to come. If so, it will confirm the capacity for these turtles to make return trips across the vast Pacific. Dr Limpus said the capture showed that marine turtles were a shared international resource that required conservation efforts across many countries to ensure sustainable populations.

full story: <http://www.heraldsun.com.au/news/national/galapagos-turtle-drops-in-to-graze-moreton-bay-on-great-pacific-swim/story-fni15v70-1226687065404>

## **New law to add penalties for props that destroy seagrasses (TX, USA)**

27 July 2013, by Mark Reagan, *The Brownsville Herald*

A new law passed by the 83rd Texas Legislature increases protections for seagrasses and plants that are an integral part of the Texas bay system and adds penalties for uprooting some sea grass species. The law will have a direct impact on the Laguna Madre, which hugs the Gulf Coast between the mainland and Padre Island and covers approximately 216 acres of bay bottom, Upper Laguna Madre Ecosystem Leader Faye Grubbs said.

Seagrass is the basis for the aquatic life system in the Laguna Madre. The law is similar to an existing Texas Parks and Wildlife Department regulation in the Redfish Bay State Scientific Area near Rockport, where uprooting sea grass with a motorboat outboard propeller is a Class C Misdemeanor.

As the new regulation becomes law, the TPWD will be enhancing its coast-wide seagrass educational campaign to inform boaters of the new law. The new law takes effect Sept. 1.

full story: [http://www.themonitor.com/news/local/article\\_cc61d18a-f72b-11e2-a163-001a4bcf6878.html](http://www.themonitor.com/news/local/article_cc61d18a-f72b-11e2-a163-001a4bcf6878.html)

Story also covered by:  
[http://www.valleymorningstar.com/news/local\\_news/article\\_df19984c-f7f0-11e2-af39-0019bb30f31a.html](http://www.valleymorningstar.com/news/local_news/article_df19984c-f7f0-11e2-af39-0019bb30f31a.html)

## **Long Bar: Developers say Sarasota Bay will not be destroyed by seagrass, mangrove removal (FL, USA)**

28 July 2013, By Charles Schelle, Bradenton Herald

The developers of Long Bar Pointe are trying to make the case that their vision for 463-acres along the Sarasota Bay will be better for the environment. Developers Carlos Beruff and Larry Lieberman say their team of experts, which includes former National Oceanic and Atmospheric Administration scientists, are working on a written report on how they will save the bay. As they make their promises, Beruff and Lieberman have trickled out details of mitigation plans.

While the county commission will vote on a countywide text amendment that would give permission to build in certain environmentally sensitive waterfront areas now restricted, the developers are trying to show how their plan fits in to the proposed language, keying in on providing a "net benefit" to Sarasota Bay. As worded now, the comprehensive plan doesn't allow for certain projects in environmentally sensitive areas that provide net positive benefit to the environment, and the developers have requested that language to be inserted in the countywide amendment.

County government staff has recommended that the county commission vote against the text amendment because it is inconsistent with the state's and county's comprehensive plans, and the developer hasn't shown any material public benefit that staff could use for guidelines for proposed developments. The developers' attorney, Ed Vogler, said that environmental protection is important, but those policies need to be changed for their project. But local scientists say there is a constituency that wants to protect seagrass and mangroves.

One area of contention is the dredging of seagrass. The county's coastal element of the Comprehensive Plan has an objective to increase the seagrass acreage in local waters through protection and restoration, as well as a policy to prohibit new boat ramp areas that have insufficient depth or are built in sensitive habitats. To construct Long Bar Pointe's 80-boat basin, or an upland marina, 2,100 linear feet of seagrass would need to be dredged for a 60-foot wide channel at a maximum depth of five feet, Beruff had told a crowd at Cortez's Fisherman's Hall. That width has since been revised to 15 yards, or 45 feet, Lieberman said. The proposed dredging would also be prohibited, according to staff, because dredging that would "adversely impact seagrasses" is not allowed, according to the comprehensive plan, unless the dredging is considered maintenance, which can be obtained through a maintenance dredging permit to re-establish old channels.

[full story: <http://www.bradenton.com/2013/07/28/4630381/long-bar-developers-say-sarasota.html>](http://www.bradenton.com/2013/07/28/4630381/long-bar-developers-say-sarasota.html)

## **Seagrass-planting experiment aims to restore Indian River Lagoon (FL, USA)**

25 July 2013, by Jim Waymer, Florida Today

Scientists transplanted tufts of seagrass along an otherwise bald Indian River Lagoon bottom Wednesday in hopes of growing back the once-lush fish habitat that algae blooms doomed. No one knows whether the \$110,000 experiment will work or whether the cloudy waters that smothered seagrass during the past few years will return to do so again. But researchers hope the grass transplants teach them the best ways to grow back a vital nursery habitat for fish and crabs, as well as the manatees' favorite meal.

At the inlet, their environmental consulting firm is planting seagrass harvested in Vero Beach. That effort is part of a larger project that could transplant grass at up to 30 sites in the lagoon — but likely fewer — occupying about 1 acre of lagoon bottom. The project ranges from Merritt Island National Wildlife Refuge to Titusville, to Vero Beach.

The scientists harvest the seagrass with hand tools only — no machinery — and manually install the grass at the recipient study sites. They use shoal grass, because it's among the fastest growers. They place metal "manatee cages" over many of the transplants to keep ravenous seacows from chomping the experiment bare. But at least one manatee was quick to find this week's plantings among the inlet's seagrass-starved shoals. After Atkins consultants planted the first tufts of grass, they returned later that day and found evidence a seacow had made a snack of their work.

<http://www.floridatoday.com/article/20130725/NEWS01/307250031/Seagrass-planting-project-designed-restore-bare-spots-lagoon>

Story also covered by:

<http://www.clickorlando.com/news/seagrassplanting-experiment-aims-to-restore-indian-river-lagoon/-/1637132/21160444/-/2rebwif/-/index.html>

<http://www.news-journalonline.com/article/20130728/NEWS/307289980?Title=Seagrass-experiment-tries-lagoon-transplants>

## **Feds declare Indian River Lagoon dolphin deaths as unusual (FL, USA)**

24 July 2013, by Jim Waymer, Florida Today

A federal panel has officially declared the deaths of more than 50 bottlenose dolphins this year in the Indian River Lagoon as unusual, potentially freeing up more federal dollars and other resources to study the die-off. This week's declaration comes at the recommendation of the Working Group on Marine Mammal Unusual Mortality Events, a panel of marine mammal health experts. They based the designation on the higher rate of bottlenose dolphin deaths since Jan. 1. At least 54 bottlenose dolphins have died in the lagoon this year, almost three times the historical

average. The elevated dolphin deaths have happened in the northern and central Indian River Lagoon in Brevard County. Biologists estimate more than 660 bottlenose dolphins live exclusively in the lagoon.

In April, NOAA made a similar designation regarding manatees dying in the lagoon. That unusual die-off claimed at least 111 manatees.

Earlier this month, a NOAA researcher in South Carolina isolated three groups of toxins from tiny algae that sticks to seaweed called *Gracilaria*, or red drift algae. Scientists gathered the drift algae in late May from just south of Minutemen Causeway in Cocoa Beach. Manatees and fish eat the drift algae. Some biologists suspect fish could be taking in the toxins by eating the algae, in turn sickening the dolphins and pelicans that eat them. But NOAA and state wildlife officials say the toxins are just one of many possible culprits responsible for the die-offs.

<http://www.floridatoday.com/article/20130724/NEWS01/130724018/Feds-declare-Indian-River-Lagoon-dolphin-deaths-unusual>

### **QRC launches reef campaign to counter green 'hysterics' (QLD, Australia)**

25 July 2013, *Central Queensland News* 9:48 AM

The Queensland Resources Council has launched a public awareness campaign to "set the record straight" on the future of the Great Barrier Reef and the continuing prosperity of more than one million Queenslanders who live and work adjacent to it. Queensland Resources Council chief executive Michael Roche said it was time that "increasingly hysterical claims by environmental activists were called to account". Mr Roche said anyone with a passing interest in the reef and its recent history knew from documented scientific evidence that ports and shipping through the reef did not represent major threats to its ecological integrity. "Every credible scientific report published on Great Barrier Reef health has named Crown of Thorns starfish outbreaks, water quality and extreme weather events as the real culprits," he said. "Neither an increase in shipping traffic nor decades of port dredging has been scientifically recorded as contributing to coral cover loss or a historical decline in the environmental health of the reef."

Mr Roche said Australia led the world in shipping management, with recently boosted navigation services through automated position reporting, an automatic ship identification system and decision-support tools mandated for use along the length of the Great Barrier Reef. He said the only people advocating the Great Barrier Reef be declared 'in danger' were environmental activists misrepresenting the impact of Queensland's leading export industries.

The Greens passed a motion in the Senate last month calling for an end to dredge dumping in the Great Barrier Reef world heritage area. Australian Marine Conservation Society Great Barrier Reef campaign director Felicity Wishart said dredging destroyed seagrass, and destroyed the feeding grounds of species such as turtles and dugongs. Greens senator Larissa Waters said earlier this month the major threat to reef quality was dredging and the dumping of sediment. "Labor has approved the dumping of 17.5 million cubic metres of sediment into the Great Barrier Reef - that's 193 times the amount of sediment the Reef Rescue program has prevented from running off into the reef," she said. "The Reef Rescue program gains are a drop in the ocean when you look at the masses of sediment being dumped into the Great Barrier Reef for the big mining companies." The health of the reef was earlier this month downgraded to "poor".

<http://www.cqnews.com.au/news/resources-body-launches-reef-campaign-counter-hyst/1958721/>

### **First experimental evidence of corals feeding on seagrass matter (Singapore)**

24 July 2013, *sciencealerts*

The first experimental evidence of a coral (*Oulastrea crispata*) ingesting and assimilating seagrass material. Tropical seagrass meadows export a substantial portion of their productivity and can provide an important source of nutrients to neighbouring systems such as coral reefs; however, little is known about the mechanisms of this link. To investigate whether seagrass nutrient uptake via coral heterotrophy is possible, we conducted a feeding experiment with seagrass particulate and dissolved organic matter. Using gut extractions and stable isotope analyses, we determined that *O. crispata* ingested <sup>15</sup>N-enriched seagrass particles and assimilated the nitrogen into its tissue at a rate of 0.75  $\mu\text{g N cm}^{-2} \text{ h}^{-1}$ . Corals took up nitrogen from dissolved matter at a comparable rate of 0.98  $\mu\text{g N cm}^{-2} \text{ h}^{-1}$ . While other ecological connections between seagrass meadows and reef ecosystems are well known, our results suggest a previously unstudied direct nutritional link between seagrasses and corals.

*source*

[http://sciencealerts.com/stories/2412206/First\\_experimental\\_evidence\\_of\\_corals\\_feeding\\_on\\_seagrass\\_matter.html?utm\\_source=dvr.it&utm\\_medium=twitter](http://sciencealerts.com/stories/2412206/First_experimental_evidence_of_corals_feeding_on_seagrass_matter.html?utm_source=dvr.it&utm_medium=twitter)

*Story also covered by:*

<http://www.advancedaquarist.com/blog/first-evidence-of-corals-feeding-on-seagrasses>

### **Snooty the manatee celebrates 65th birthday (FL, USA)**

21 July 2013, *CBS News*

Snooty the manatee was born when Harry S. Truman was president, Columbia records had just released its 33 1/3 LP format, and people were still talking about how the NBC television network had broadcast Beethoven's Ninth

Symphony in its entirety. Life in America, of course, has changed. But Snooty is still around, entertaining visitors, munching on lettuce and swimming silently in his tank at the South Florida Museum in Bradenton.

Sunday was his 65th birthday, and to mark the occasion the museum will hosted a free party Saturday. He's the oldest manatee in captivity and possibly one of the oldest ever, experts say. Snooty, who is in good health, eats about 80 pounds of lettuce and vegetables every day to sustain his 1,000-pound body. He shares a tank with two smaller manatees that are being rehabilitated for cold stress. And lately, he appears thrilled to greet his visitors from the media.

Snooty has been invaluable over the decades for education and conservation purposes, said Robert Bonde, a research biologist and manatee expert for the United States Geological Survey in Gainesville. "Every year we celebrate a birthday for Snooty, it sets a new records as far as the aging potential for manatees," he said. Bonde said that among the wild manatee carcasses found in Florida, research showed the oldest was 53 — yet the average manatee only lives to be about 13 due to man-made threats and environmental stressors, such as cold weather. Although Snooty is the longest lived manatee in captivity, it's entirely possible that they could live just as long in the wild if they didn't face threats like boat propellers, said Bonde.

*full story: [http://www.cbsnews.com/8301-205\\_162-57594526/snooty-the-manatee-celebrates-65th-birthday/](http://www.cbsnews.com/8301-205_162-57594526/snooty-the-manatee-celebrates-65th-birthday/)*

## ***Manatees Are Touchy-Feely To The Extreme (FL, USA)***

*18 July 2013, by Underwatertimes.com*

Manatees can feel water movements thousands of times smaller than the width of a human hair — an ability that makes them one of the most touch-sensitive mammals on Earth — according to a new study led by scientists at Mote Marine Laboratory.

The study, published recently in a special issue of the peer-reviewed Journal of Comparative Physiology A, is the first published research revealing how well manatees can feel water movement using their facial whiskers. Results show that manatees can detect tiny ripples better than any marine mammal studied to date, suggesting that touch may be vital to their survival in the wild. The study tested the touch sensitivity of Mote's resident manatees, Buffett and Hugh — the most extensively trained manatees in the world. The manatees participate voluntarily in training sessions for husbandry (animal care) procedures along with research.

Mote studies have already shown that manatees' vision is poor, compounded by the turbid and tannic waters where they spend much of their lives, that manatees can hear a wide range of pitches despite loud background noise and can detect which direction sounds come from. Research at Mote has also revealed that manatees can feel textures as keenly or better than a human Braille reader by using their sensitive facial whiskers, known as vibrissae. The new study aimed to reveal how well these facial vibrissae detect water movement — possibly one of the most important signals for navigating and avoiding nearby obstacles.

*full story: [http://www.underwatertimes.com/news.php?article\\_id=37084109152](http://www.underwatertimes.com/news.php?article_id=37084109152)*

## ***Supporting Indigenous management of Queensland's sea country (QLD, Australia)***

*17 July 2013, Press Release, Queensland Dept. Environment, Heritage and Water*

The Rudd Government has committed \$930,000 to Indigenous organisations and Traditional Owners across Queensland to manage marine turtles, dugongs and sea-country. Under this second round of Caring for our Country grants administered in partnership with the Queensland Government, eight projects will be supported to undertake a range of activities including sea country planning, managing threats to species, leadership forums as well as raising sustainability awareness in the community.

Federal Minister for the Environment, Heritage and Water Mark Butler said this round of funding was part of a broader commitment to assist Indigenous groups to sustainably manage sea country. "Indigenous Rangers across Queensland are doing great work protecting turtles and dugongs from threats such as marine debris and illegal hunting," Mr Butler said. "Our continued support for Traditional Owners to manage their sea country is resulting in real environmental improvements and a better understanding of the sustainable use of resources in our Indigenous communities. "We've responded to feedback from Traditional Owners and developed a package that increases community engagement, knowledge sharing and the sustainable participation of Indigenous people in culturally important activities.

Mr Butler said with rising seawater temperatures and an increase in extreme weather events due to climate change, programs to understand and protect Australian sea-country such as this were vital to the long-term future of our natural marine life. This initiative builds on existing Federal Government investment under the Working on Country Indigenous Ranger and Reef Rescue programs and is undertaken in conjunction with the Great Barrier Reef Marine Park Authority. Organisations to receive funding include:

- Carpentaria Land Council Aboriginal Corporation
- Indigenous Sea Country Strategic Policy Group (Girrigun Aboriginal Corporation)
- Dawul Wuru Indigenous Corporation

- Juunjuwarra Aboriginal Corporation Land Trust
- Kapay Kuyan Steering Committee
- Darumbal Charitable Trust
- Jabalina Yalanji Aboriginal Corporation RNTBC
- Port Curtis Coral Coast Traditional Owners

<http://www.ehp.qld.gov.au/coastal/management/indigenous-sea-country-grants.html>

Story also covered by:

<http://www.environment.gov.au/minister/butler/2013/mr20130718.html>

<http://www.wwf.org.au/?7380/WWF-welcomes-Australian-Government-investment-in-turtle-and-dugong-conservation>

## **Sea turtle conference addresses Great Barrier Reef sickness spike (QLD, Australia)**

18 July 2013, by Oliver Milman, *The Guardian*

Rangers and scientists gather to explore ways of curbing threats that led to soaring number of strandings in recent years. Pesticides, cyclones and boat strikes have been blamed as causes of a worrying spike in the number of sick and dying sea turtles on the Great Barrier Reef.

A three-day conference being held in Townsville has gathered wildlife rangers, scientists, vets, volunteers and government agencies from across Australia to work out a way to curb threats to sea turtles. According to Queensland government data, there has been a sharp increase in the number of sea turtles found stranded on the state's coastline. In 2010, 808 turtles were found stranded, but the tally soared to 1,781 in 2011 and 1,510 last year. This year has so far seen a slight decrease in the rate of strandings, totalling 342 up until 30 June. Cyclone Yasi, which destroyed vast tracts of seagrass – sea turtles' preferred delicacy – in 2011, caused many animals to starve to death. But the conference has heard that human factors have also adversely harmed the creatures.

Julie Traweek of the Sea Turtle Foundation, which rescues stranded turtles, said the animals faced multiple threats. "We get a lot of sea turtles in with floating syndrome, where they can't dive, as well as lesions on their organs and brains caused by blood flukes," she said. "This is becoming more common. Traweek said green turtle numbers appeared to be stable, while loggerhead and hawksbill turtles numbers were "crashing." Although protected in Australia, hawksbill turtles are prized by hunters for their attractive shells when they migrate to Asian waters.

Ellen Ariel of James Cook University's school of veterinary and biomedical sciences said more research needed to be done to understand sea turtles and the threats they face. "We see some populations do well on some parts of the coast and others not so well," she said. "We need to learn more as sea turtles are a good barometer of the health of the water. "Overall, it would be a good idea for people to slow down in boats in shallow waters to avoid hitting them. We can all be sensible about the things we flush down drains and the plastic we throw away, too."

On Wednesday Mark Butler, the federal environment minister, pledged \$930,000 to Indigenous organisations and traditional owners across Queensland to manage sea turtles, dugongs and the marine environment.

*full story:* <http://www.guardian.co.uk/environment/2013/jul/18/sea-turtle-conference-sickness-spike>

## **Coalition candidate supports waste dumping in Great Barrier Reef area (Australia)**

17 July 2013, by Oliver Milman, *the guardian*

The Coalition candidate for the Queensland seat of Capricornia has said she would support the dumping of dredged waste in the Great Barrier Reef world heritage area, despite a poll showing the majority of residents are against the plan. The survey of 571 residents in the electorate of Capricornia, conducted by the World Wildlife Fund, found that 75.2% of them supported a total ban on the dumping of waste in the Great Barrier Reef world heritage area.

Michelle Landry, the LNP candidate for the seat, told Guardian Australia she would like a "suitable" dumping site to be found in the sea, to enable the expansion of the Abbot Point coal port. "Obviously, I would prefer the site to be on land but I understand North Queensland Bulk Ports said that would be a dealbreaker, given it would take four years and cost \$300m," she said. "I believe this project needs to get the green light. The Bowen community is at a standstill, waiting on the Labor government to give its approval. Meanwhile, the cost to local business and employment is immense."

Half of those polled by the WWF said they were more likely to vote for a party that has a "strong, well-funded" plan to protect the reef. However, 46% of respondents said that the expansion of industrial ports should be a primary focus for the government. The federal environment minister, Mark Butler, has to decide whether to allow the Abbot Point dredging, which would allow the site to become the largest coal export terminal in the world.

*full story:* <http://www.guardian.co.uk/world/2013/jul/17/coalition-candidate-barrier-reef-dumping>



## **Controversial Hinchinbrook resort still leaking raw sewage on to Great Barrier (QLD, Australia)**

17 July 2013, Herald Sun

The failed Keith Williams Port Hinchinbrook resort at Cardwell has intermittently polluted the Great Barrier Reef World Heritage Area with raw sewage for at least two years. Repeated spills have raised health fears for Cardwell residents and the Environment Department has spent two years unsuccessfully trying to get the Williams Corporation to fix the problem. It is unclear how much sewage has been dispersed but pollution events occurred in February, 2011 after Cyclone Yasi and were recorded last year in July, November and three times in December.

Department executive director Rob Lawrence said it was unclear how much sewage was spilt but the treatment plant and ancillary pump stations remained noncompliant with environmental conditions and investigations continued. A Right to Information search shows an inspection last November found that, even with the plant operating, its effluent did not meet standards for nitrogen, phosphorous, oxygen and faecal coliforms. The department issued an environmental protection order to the company in January.

A briefing to Environment Minister Andrew Powell said: "Any failure . . . to bring (the sewerage plant) into compliance has the potential to cause environmental harm and public health issues." Williams Corporation did some work on the facility but has since gone into administration and the development is in the process of being sold to AA New Image Developments.

full story: <http://www.heraldsun.com.au/news/national/controversial-hinchinbrook-resort-still-leaking-raw-sewage-on-to-great-barrier-reef-two-years-after-yasi/story-fnii5v70-1226680280502>

## **Greens want PM to see reef dredging impact (Australia)**

17 July 2013, by Cleo Fraser, Sydney Morning Herald

Green groups hope Prime Minister Kevin Rudd's visit to Gladstone Harbour will open his eyes to the impact dredging has on the Great Barrier Reef. Mr Rudd is due to tour the central Queensland harbour on Wednesday after visiting Rockhampton and Townsville earlier this week.

The Australian Marine Conservation Society's Felicity Wishart says Mr Rudd will be able to see first-hand the impact dredging has had on the environment. "Dredging and dumping destroys feeding and breeding grounds for turtles, dugongs and other marine life," she said. The reef simply cannot withstand the pressures from rapid industrialisation, with dredging the biggest new emerging threat." At UNESCO's request, an independent review panel is now assessing the health of the harbour.

Recent research by the Gladstone Ports Corporation (GPC) found the port was having little impact on its surrounds. Ms Wishart hopes Mr Rudd's visit will influence the government's decision over whether to allow the dredging of three million tonnes of soil to expand coal ports at Abbot Point, near Bowen. Under the proposal, the soil will be dumped in the Great Barrier Reef World Heritage Area. A decision is expected on August 9. Bulk Ports boss Brad Fish has said dredging at Abbot Point could make the water cloudy over a short period and damage or destroy seagrass, but would be unlikely to affect other flora and fauna.

full story: <http://www.smh.com.au/queensland/greens-want-pm-to-see-reef-dredging-impact-20130717-2q3q6.html>

related articles:

<http://www.brisbanetimes.com.au/queensland/greens-want-pm-to-see-reef-dredging-impact-20130717-2q3q6.html#ixzz2ZIRqptm4>

<http://www.sandandgravel.com/news/article.asp?v1=17397>

## **Townsville hosts sea turtle conference (QLD, Australia)**

16 July 2013, ABC News

Researchers and environment agencies will use a sea turtle health conference in Townsville in north Queensland to look at the biggest challenges threatening the future of the reptiles. Experts have warned some species will soon be on the verge of extinction if action is not taken swiftly. The annual three-day conference will also address the latest developments in turtle rehabilitation and conservation.

Sea Turtle Foundation spokeswoman Julie Traweek says while there is good news for some species, others face a gloomy future. "The green sea turtle, which is the one that's most populous around here, generally seems to be doing fairly well, especially the southern [Great Barrier Reef] population, does seem to be increasing," she said. "But there are other species like the hawksbill turtles and loggerheads that populations are declining very rapidly and there's one that we don't really see around here, the leatherback, that is almost on the verge of extinction."

She says Indigenous communities are playing an increasingly important role in the rehabilitation and conservation of the species. Ms Traweek says Indigenous communities are often at the front line of sea turtle rescue and care. "A lot of those groups are setting up their own triage centres or first response rehab centres," she said. "We're really

excited of getting people in the same room so we can all work together on how we can make those rehab centres work."

<http://www.abc.net.au/news/2013-07-16/townsville-hosts-sea-turtle-conference/4823062?&section=news>

### **Fisherman charged with selling turtle meat (Trinidad & Tobago)**

14 July 2013 *Trinidad & Tobago Express*

An Arima fisherman is expected to appear in court today charged with selling turtle meat on Saturday afternoon. The man was arrested after game warden Nirmal Ramtahal received an anonymous call just after 1 p.m. saying that the fisherman, the owner of a fish stall at #7 Cocorite Road, Arima, had turtle meat for sale to members of the public.

Ramtahal, five of his colleagues and two fisheries officers arrived at the scene and carried out surveillance on the vendor at the stall. Around 3.30 p.m., the officers noticed the vendor weighing the carcass of baby turtles.

The meat was seized, he was cautioned and taken to Arima Police Station together with the meat of 28 turtles.

He was later charged by officers of the Fisheries Division and is to appear before an Arima magistrate today.

source: <http://www.trinidadexpress.com/news/Fisherman-charged-with-selling-turtle-meat-215467721.html>

### **Habitat loss doubles flood impact: study (USA)**

15 July 2013, *The Australian*

Removing mangroves, marshes, reefs, forests, dunes and other natural defences doubles the risk for life and property from coastal floods, a US climate study says. In the most detailed analysis of the risks facing Americans from rising seas, researchers led by Katie Arkema at Stanford University in California built a computer model of coasts in the continental United States. The huge program factored in population statistics, residential property values, natural defences and flooding probability on a scale of one square kilometre.

"Today, 16 per cent of the US coastline comprises 'high hazard' areas harbouring 1.3 million people, (including) 250,000 elderly (and) 30,000 families below the poverty line, and \$US300 billion (\$A330 billion) in residential property value," the study said. This estimate is for current sea levels and for the current state of natural buffers against floods. Strip away this protection in order to build on the land, and the number of people and the value of property at high risk roughly doubles.

In addition, rising seas caused by global warming will drive up the exposure, the study warned. The team calculated what would happen under a common scenario for warming, known as A2, under which Earth's average surface temperature would rise by 2.0-5.4 degrees Celsius this century. Around two million people would be in "high hazard" areas - a red line that stretches around most of the Gulf and Atlantic coasts and parts of San Francisco Bay. That exposure would almost double if habitat defences are removed, because more people inland are placed at risk.

full story: <http://www.theaustralian.com.au/news/breaking-news/habitat-loss-doubles-flood-impact-study/story-fn3dxix6-1226679373336>

### **Tropical Far North high risk for Great Barrier Reef pollution (Australia)**

12 July 2013, by Bianca Keegan, *The Cairns Post*

The Wet Tropics has been identified as the highest risk area for water pollutants entering the Great Barrier Reef leading to coral bleaching, a new report has found. A group of 12 scientists from James Cook University, Central Queensland University, government agencies and private consultancies led the recent investigation into the Reef's water quality as part of the Reef Water Quality Protection Plan 2013.

JCU research officer Jon Brodie said it was no surprise the health of the reef had dropped from moderate to poor in the Federal Government report card issued this week. "The Great Barrier Reef is still in poor condition and going downhill because of water quality issues," Mr Brodie told *The Cairns Post*. The scientist said there was a link between nitrogen being used to fertilise sugarcane and banana farms and recent outbreaks of the coral-destroying crown of thorns starfish. "The crown of thorns larvae, when they float around in the water, need food which is called phytoplankton. "Phytoplankton grows better when there is more nitrogen coming out. "That nitrogen, we believe, is coming from fertiliser use, particularly sugarcane and also erosion, and it's a management challenge for sugarcane, banana and erosion sources in the Wet Tropics."

While the report paints a detrimental future for the Reef, which injects about \$5.7 billion into the Australian economy each year through tourism and commercial fishing ventures, Mr Brodie said farmers were improving their management practices. "We are managing agricultural issues better but climate change and coastal development we're not managing well," he said. "If all the port development goes ahead as planned from Gladstone to Cairns and Cape York, they will dump more dredge spoil and the gains we have made will be lost." Mr Brodie said additional government funding would continue to be used to improve sediment, nutrient and pesticides leaving farms and draining into the Reef. To read to the consensus statement visit [reefplan.qld.gov.au/index.aspx](http://reefplan.qld.gov.au/index.aspx)

source: [http://www.cairns.com.au/article/2013/07/12/245191\\_local-news.html](http://www.cairns.com.au/article/2013/07/12/245191_local-news.html)

Related articles:

<http://www.bbc.co.uk/newsround/23269909>

<http://www.ibtimes.co.uk/articles/489132/20130711/australia-great-barrier-reef-unesco-coral-climate.htm>  
<http://personalliberty.com/2013/07/10/great-barrier-reefs-condition-is-declining/>  
<http://www.mydailynews.com.au/news/full-report-yet-released-poor-great-barrier-reef/1941684/>  
<http://www.nerptropical.edu.au/article/news/great-barrier-reef-report-it%E2%80%99s-time-make-polluters-pay>

## GALLERY

**Far North Qld (Australia): 19-22 July 2013** <http://www.seagrasswatch.org/gallery.html>

Green Is, 19 July 2013  
Dunk Island, 20 July 2013  
Lugger Bay, 21 July 2013  
Yule Point, 22 July 2013

**Singapore: 13-14 July 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.

**Topical sessions** [http://www.sgmeet.com/cerf2013/topical\\_sessions.asp](http://www.sgmeet.com/cerf2013/topical_sessions.asp) :

SCI-041 Resilience in Coastal Ecosystems, Part 1: Impact of Stressors on Resilience, Stability, and Recovery in Communities Dominated by Seagrass or Benthic Algae  
Convened by: Benjamin Fertig and Jessie Jarvis

SCI-042 Resilience in Coastal Ecosystems, Part 2: Evaluating and Conserving Resilience in Indo-Pacific Coastal Marine Habitats  
Convened by: Robert Coles, Len McKenzie, Michael Rasheed and Marcus Sheaves

SCI-043 Resilience in Coastal Ecosystems, Part 3: Resiliency of Coastal and Marine Ecosystems and the Services they Provide  
Convened by: David Yoskowitz and Jim Morris

**Important dates:**

3 October 2013 - Early Registration Deadline

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

## SEAGRASS-WATCH Workshops 2013

**Australia** <http://www.seagrasswatch.org/training.html#workshop13>

Moreton Bay, Qld: 17-18 August 2013

Broome, WA: 19-20 October 2013

## 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 29,565 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.

## Interested in related e-Newsletters?

Reef in Brief - July 2013: Sharing news from the Reef (Great Barrier Reef Marine Park Authority)

<http://us4.campaign-archive2.com/?u=6f1464530ffe13686d7fdbade&id=d289dd9c62&e=bee9f491d7>

Flotsam Jetsam - July 2013 (issue 1): Are we there yet? Assessing MPA effectiveness in Indonesia, and other marine conservation stories (WCS Indonesia)

<http://us7.campaign-archive1.com/?u=c6e26d7dcedf7146ee9b900b1&id=a59de01dc3&e=49792d9b67>

BMRG Bulletin: Keeping you up-to-date with NRM news and funding opportunities (Burnett Mary Regional Group)

<http://us5.campaign-archive1.com/?u=00528a3c5800d819155cd958c&id=eecf7c9115&e=fd42f825e5>

## FROM HQ

**Past E-bulletins** <http://www.seagrasswatch.org/publications.html#ebulletin>

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

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

**Seagrass-Watch Shop** <http://www.seagrasswatch.org/shop.html>

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

**Giveaways** <http://www.seagrasswatch.org/shop.html#GIVE1>

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

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

\*\*\*\*\*

### 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.