Development, pollution and dredging threaten seagrass more than climate change (Australia)

Seagrass: it might not sound very exciting, but according to experts these extensive marine flowering plants form the basis of one of the most productive ecosystems on Earth. In recent decades seagrass habitats have come under
threat, from anthropogenic activities and climate change, and currently there is little consensus about which threats are causing the greatest damage. Now a study has pooled knowledge to create a resource to inform management of this valuable natural habitat.

Alana Grech, from James Cook University in Townsville, Australia, and colleagues created a web-based survey to assess seagrass vulnerability. They asked seagrass experts to rank the relative impact of anthropogenic activities and climate-change-related activities in six global seagrass regions. "There was a global consensus that urban and industrial run-off, coastal development, agricultural run-off and dredging has the greatest impact on seagrasses, though the order of relative impact varied by seagrass region," Grech told environmentalresearchweb.

The survey, published in Environmental Research Letters, revealed that the greatest threat to seagrasses comes from land-based anthropogenic activities, highlighting the need for seagrass management to be co-ordinated with adjacent watershed planning. Crucially the new survey will help experts to assess the threats to seagrass in data-poor areas and to overcome some of the problems traditionally associated with expert bias. It also identifies key regional differences that should be taken into account. "Our approach provides a way forward for seagrass managers by informing the strategic deployment of resources at minimal cost," explained Grech.

Campaign aims to protect traditional hunting (QLD, Australia)
20 April 2012, Torres News

Representative bodies throughout the Torres Strait and Far North Queensland are being urged to support a Torres Strait Regional Authority (TSRA) initiated campaign to protect culturally appropriate management of natural resources including fisheries. The call follows a meeting on Badu Island to consider the implications of adverse media reporting of dugong and turtle hunting in the Torres Strait and Far North.

Torres Shire and Torres Strait Island Regional Councils, TSRA and Traditional Owner Prescribed Body Corporate representatives decided at the meeting to seek broader support for the sustainable management of traditional fisheries. A Torres Strait delegation will seek meetings with the member for Cook, David Kempston, the member for Leichhardt, Warren Entsch, the Minister responsible for the Queensland Animal Care and Protection Act 2001, the Cape York Land Council, Balkanu Cape York Development Corporation and other interested bodies as part of an accelerated campaign to guarantee traditional hunting rights.

TSRA Chairperson, John ‘Tosbie’ Kris said the campaign was gaining momentum because of an awareness in traditional communities that activists would continue to use unethical and unauthorised means such as covert filming to pressure governments to intervene. Mr Kris said Torres Strait community leaders believed the right to continue sustainable traditional fishing guaranteed by the Torres Strait Treaty and Native Title legislation was a non negotiable starting point for any future discussion or consultation.

Coastal Flood Impact (QLD, Australia)
19 April 2012, Catalyst

Last year, when flood waters from the Brisbane River dumped sediment into Moreton Bay, scientists expected the worst for the region’s marine life.

Fishing industry commended for acting to protect dugong and turtles (QLD, Australia)
11 April 2012, Townsville Sun

Queensland fishermen are behind a new research project to reduce the risk of tangling species such as dugongs and turtles in their nets. The project is being headed by James Cook University’s Centre for Sustainable Tropical Fisheries and Aquaculture, and funded by the Fisheries Research and Development Corporation (FRDC) on behalf of the Australian Government.

Project leader David Welch from JCU said the main aim of the project was to identify net designs that decreased the likelihood of species of conservation concern getting caught, while improving safety and maintaining fishing efficiency for target species such as barramundi.

Conservation and management groups are increasingly concerned about the status of large marine life such as dugong, marine turtles and dolphins. Although interactions between these animals and fishing gear is very low, the fishing industry wants to do all it can to continuously improve its practices and gear to achieve this. The research will be conducted this year in the inshore waters around Townsville and in Moreton Bay.
100 years on, sea cows may reappear in Chilika Lake (India)
30 April 2012, the Daily Pioneer

Sea cows might be seen in Chilika Lake after over 100 years. The seagrass they graze on has reappeared on the lake bed, which has made the scientists optimistic about the return of the species.

In the first phase, the scientists marked the grass in 20 sq km area in Chilika and later, it was seen growing in 80 sq km area inside the lake near its mouth.

Scientists of the Libidi University of Germany, Dr Qutta P Breze and Dr Mathias Piz, during their research on the special sea grass found it growing inside the lake. They hoped that not just the sea cow, but many aquatic animals and birds would come to the lake as they would get their fodder.


Dugong calf washes ashore Rameswaram coast (India)
26 April 2012, Times of India

A dugong calf (kadal pasu), measuring two metres long and weighing about 180 kg was found dead in the Muttupettai sea coast in Ramanathapuram district on Wednesday.

The tail and stomach part of the marine mammal was found with deep injuries, though the cause of the injury was not ascertained. The dugong, called sea cow in local parlance, was found washed ashore by the fishermen in the morning. On information from the villagers, experts from the Gulf of Mannar Marine National Park visited the spot and inspected the carcass of the animal. A veterinary doctor also accompanied the officials.


Settlement clears way for Port Miami dredging work (FL, USA)
25 April 2012, by Curtis Morgan

A settlement with environmental groups will add some $2.3 million in environmental restoration and monitoring projects intended to enhance protections of marine life during a two-year port dredging project. The “Deep Dredge” project, a critical and controversial key to PortMiami’s ambitious $2 billion expansion plan, is back on schedule after a legal settlement announced on Wednesday.

Environmentalists, who had argued that two years of blasting and digging in the port’s main channel would leave long-lasting scars in Biscayne Bay, agreed to drop an administrative challenge that threatened to delay the work for months or longer. In exchange, Miami-Dade County has agreed to an additional $2.3 million in restoration and monitoring projects and other tweaks, such as a narrower daily blasting window, intended to enhance protection for corals, seagrass beds and other marine life.

The deal, expected to be approved by the Miami-Dade County Commission on May 1, clears the way for work to begin as early as this summer. The work — widening the port’s offshore entrance to the main channel by some 300 feet and deepening much of the port to 52 feet by scooping out about eight feet of rock, sand and rubble — would also consume some eight acres of sea grass beds and seven acres of reefs, including about five acres of previously undisturbed reef at the channel’s mouth.

Environmentalists had argued that the DEP and U.S. Army Corps of Engineers didn’t include enough “mitigation” to offset the loss of reefs and seagrass beds or set strict enough water quality standards to minimize silting damage to surrounding areas. Under the terms of the settlement, reached after three days of mediation involving environmental groups, the county, the DEP and the Corps, the seaport will transfer $1.3 million into a Miami-Dade trust fund for environmental enhancement projects.


County may have to address damage to seagrass from dredging (FL, USA)
25 April 2012, Bay News 9

Hernando County is in some trouble with Florida environmental regulators over damage to an acre of protected sea grass from its Hernando Beach Channel dredge operation.

Hernando County Environmental Services director Susan Goebel informed county commissioners Tuesday that the Florida Department of Environmental Protection determined that approximately one acre of seagrass had been impacted in the Hernando Beach Channel due to over-dredging. County officials will know more about what needs to be done to fix the problem after meeting Friday with representatives from the Department of Environmental Protection and Army Corps of Engineering.
Those two agencies required the county to plant seagrass to offset expected damage from the dredging operation. The damage discovered was not anticipated.


**Martin County Commission OKs rules for proposed Jensen Beach Mooring Field (FL, USA)**
24 April 2012, by George Andreassi, TCPalm

Two initiatives designed to reduce the environmental harm caused by boats anchoring in Martin County's waterways gained headway Tuesday. The County Commission voted unanimously to approve anchoring and mooring regulations for parts of the St. Lucie River, the Indian River Lagoon and the Manatee Pocket. The regulations still face review by the Florida Fish and Wildlife Conservation Commission and a final vote by the County Commission.

Both initiatives are expected to protect the health of the county's waterways by reducing the number of derelict vessels, cutting down on sewage and fuel spills and preventing anchors from digging up sea grasses, several county officials said.

Plans call for floating docks, mooring buoys anchored into the river bed, restrooms, showers, laundry facility and a dinghy dock on the causeway, county records show. There would also be a harbormaster's office. The harbormaster would determine whether a boat may anchor in the mooring field and enforce the regulations. The county hopes to obtain grants from the Florida Inland Navigation District and the FFWCC's Florida Boating Improvement Program to help pay for the project, Fitzpatrick said.


**Port Geographe solution (WA, Australia)**
18 April 2012, by Rob Bennett

The State Government is considering a rescue package to resolve the current stalemate at Port Geographe. The Mail understands the package will enable the developers to settle their outstanding debts with the Westpac Bank, rejuvenate sales of canal blocks and also tackle the seagrass problem that requires an annual cleanup.

If the rescue package eventuates, then LandCorp would be responsible for solving the seagrass problem through the reconfiguration of the groynes and would also address the water quality problem in the canals. Busselton mayor Ian Stubbs said the situation was extremely complex, a view shared by Vasse MLA and the Minister for Transport Troy Buswell.


**CSG plant 'will have effect on reef animals' (QLD, Australia)**
17 April 2012, by Jared Owens, The Australian

Arrow Energy's coal-seam gas liquefaction plant will have widespread and "possibly irreversible" impacts on some of the Great Barrier Reef's critically endangered animal populations. The project's environmental impact statement, published by Arrow yesterday, predicts that up to 1.1 million cubic metres of sea floor will need to be dredged in waters off Curtis Island to accommodate the massive ships designed to ferry the resource to international markets.

Arrow's project, one of three liquefied natural gas plants slated for Gladstone's Port Curtis, represents a $15 billion initial investment, is expected to employ more than 6000 temporary workers in its two construction phases and will hire 600 permanent staff to operate the facility. But Port Curtis and its surrounding waters are also a habitat for several protected species of turtles, whales, dolphins, porpoises and dugongs, and conservationists are concerned about the more than 10,000 extra boat journeys required to service the plant each year.

The EIS study area is home to six of the world's seven surviving species of marine turtle, two of which, the leatherback and hawksbill, have been deemed "critically endangered" by the International Union for Conservation of Nature. The area is situated entirely within a state-imposed dugong protection area, where herds of about 140 animals are known to feed on abundant seagrass. Even if speed limits and propeller guards were imposed on vessels accessing the plant, Arrow's EIS says the impact of boat strikes on marine turtle and dugong populations would be "widespread, long-lasting and result in substantial and possibly irreversible change". However, the EIS says, the overall significance of boat strikes to turtles, dugongs and cetaceans would be moderate, defined as "short-term and result in changes that can be ameliorated with specific environmental management controls".

Neighborhood opposition threatens Lake Wyman restoration project (Boca Raton)
14 April 2012, by Larry Barszewski, Sun Sentinel

A $2.9 million project to restore canoe trails, expand an existing boardwalk, plant seagrass and provide recreational docking along the Intracoastal Waterway is in jeopardy because of objections from nearby residents.

The Florida Inland Navigation District last year agreed to team up with the city and Palm Beach County to provide the improvements near the city's Rutherford and Lake Wyman parks on the west side of the Intracoastal between Northeast 14th Street and Northeast 25th Terrace.


Dos and don’ts in handling ‘dugongs’ out soon (Philippines)
15 April 2012, by Kristine L. Alave, Philippine Daily Inquirer

What are the odds of finding a dugong (sea cow) or a whale at your doorstep? While the answer could be one in several dozens of digits, the head of a conservation group and a bureau of the Department of Environment and Natural Resources are preparing guidelines on how to handle the animals. Just in case.

AA Yaptinchay, a veterinarian and head of the Marine Wildlife Watch Philippines (MWWP), has teamed up with the DENR-Protected Areas and Wildlife Bureau (PAWB) to draft guidelines on the rescue and retrieval of dugongs stranded in shallow coastal areas. The guidelines, which will be ready next year, would give people step-by-step procedures on the rescue of dugongs and turtles, Yaptinchay said. PAWB will also conduct awareness campaigns in coastal towns and teach residents the basics of giving first-aid to beached marine animals, he added.


Manatee hearing good enough to sense approaching motorboats (FL, USA)
12 April 2012, The Company of Biologists, Science Codex

Grazing seagrass along the subtropical Florida coast, manatees would seem to have a peaceful life. But motorboats and other watercraft can injure the mammals, sometimes shattering their ribcages or leaving scars from collisions. Joe Gaspard from the Mote Marine Laboratory and Aquarium, USA, explains that many factors put manatees at risk and it isn’t clear why the animals are so vulnerable to human activity. For more than 14 years, Mote research has focused on how manatees use their senses to perceive their environment in an effort to understand the factors that put manatees at risk. Their studies have already shown that manatees’ vision is poor, compounded by the turbid and tannic waters where they spend much of their lives. But can manatees hear boats? And can they hear them above the cacophony of sounds in their natural environment? Sound is absorbed less in water than in air, potentially allowing it to travel farther. It also travels five times faster in water than in air, theoretically warning the animals earlier of an approaching threat, Gaspard said. Team up with Gordon Bauer, Roger Reep and David Mann, and a group of trainers from the aquarium, Gaspard tested the hearing of two resident manatees, Buffett and Hugh – the world’s only manatees trained to participate in behavioural research and husbandry procedures – to find out what they are capable of hearing. The discovery, published in The Journal of Experimental Biology at http://jeb.biologists.org, indicates that manatees can hear within the frequency range where boats operate but lead to new questions about why manatees remain at risk.

source: http://www.sciencecodex.com/manatee_hearing_good_enough_to_sense_approaching_motorboats-89578

Point Peron marina development angers locals (WA, Australia)
10 April 2012, by Rhianna King, Sydney Morning Herald

A proposed marina redevelopment at Point Peron has been met with opposition from locals, fishermen and environmentalists who claim the project will threaten fish stocks, wipe out seagrass and destroy a popular recreation spot. The Mangles Bay Marina Tourism Precinct will turn 79 hectares of land between the Garden Island causeway and Palm Beach in Rockingham into a "tourist hub" featuring restaurants, hotels and room for 500 new boat pens.

The project is a partnership between the state government's land development body LandCorp and property developer Cedar Woods. The proponents say the marina will create new business opportunities and turn the area into a vibrant tourist precinct. But opponents claim the project poses a serious risk to threatened species in the area and the marine system of Cockburn Sound.

Conservation Council of WA spokesman John McCarten said the land was one of the few undeveloped spaces in Rockingham, and was known by locals as "Rockingham's Kings Park." The CCWA has joined forces with the WA Fishing Industry Council and resident groups and is lobbying the Commonwealth government to intervene to stop the marina going ahead. Mr McCarten said plans to dredge a channel into the marina would devastate hectares of seagrass.

No need for man-made islands (Philippines)
05 April 2012, Tempo

Don’t add 95 man-made islands to the 7,107 islands the country has. This plea was aired yesterday by the Pambansang Lakás ng Kilusang Mamamalakaya ng Pilipinas (Pamalakaya) in reaction to the furious campaign of the Philippine Reclamation Authority (PRA) to implement 95 projects that would reclaim land from the sea and in the process ruin seagrass beds, marine habitats, and spawning areas for a variety of marine species.


GALLERY

Hervey Bay & Great Sandy Strait, Qld (Australia): 19 - 22 April 2012 http://www.seagrasswatch.org/gallery.html

Urangan, 19 April 2012
Burrum Heads, 20 April 2012
Poona, 21 April 2012
Boonooroo, 21 April 2012
Pelican Bay, 22 April 2012

Dry Tropics, Qld (Australia): 04 - 07 April 2012 http://www.seagrasswatch.org/gallery.html

Magnetic Is, 04 April 2012
Shelley Beach, 05 April 2012
Bushland Beach, 06 April 2012
Jeroma, 07 April 2012

Wet Tropics, Qld (Australia): 04 - 07 April 2012 http://www.seagrasswatch.org/gallery.html

Green Island, 04 April 2012
Dunk Island, 05 April 2012
Lugger Bay, 06 April 2012
Yule Point, 07 April 2012

CONFERENCES

ICRS 2012 (Cairns, Australia from 9 – 13 July 2012)
12th International Coral Reef Symposium (http://www.icrs2012.com/)

In July 2012, the world’s leading natural scientists, resource managers, conservationists, economists, educators and students will meet together in Cairns, Australia for the 12th International Coral Reef symposium. This major international scientific conference is held every four years and provides the latest knowledge and leading edge technologies about coral reefs and reef environments worldwide. This 5 day event will bring together 2,500 people from some 80 countries, to communicate their science and hear the latest advances from the international experts in coral reef science. This research and findings will be fundamental in informing international and national policies and protocols in the conservation and sustainable use of coral reefs and the coral reef environment.


Seagrass meadows are an important component of tropical coastal waters. They are part of the complex ecosystem that supports the productivity of coral reefs and reef environments. There is evidence that seagrass populations are declining and this will impact on associated ecosystems. Our knowledge of tropical seagrass systematics, ecology, trends, connectivity and the anthropogenic threats to seagrass communities has improved greatly in the last decade. The symposium will bring together recent findings to enhance our understanding of seagrass associated with coral reef environments.

International Seagrass Biology Workshop ISBW10 (Brazil, late Oct/early Nov 2012)
The 10th International Seagrass Biology Workshop (ISBW10) will take place in Brazil in November, 2012. ISBW10 will be hosted by Universidade do Estado do Rio de Janeiro and the Instituto Biodiversidade Marinha. ISBW10 convenor is Dr Joel Creed. Further information will be posted when available.
SEAGRASS-WATCH Workshops 2012
For more information: http://www.seagrasswatch.org/training.html#workshop12

SEAGRASS-WATCH on YouTube
Presentation on what seagrasses are and why they are important (over 20,000 views to date)

...seagrass matters blog
World Seagrass Association blog http://wsa.seagrassonline.org/blog/
Keep up to date on what's happening around the world from the WSA with regular updates from WSA President Dr Giuseppe Di Carlo and notes from the field by Siti Yaakub.

FROM HQ
Past E-bulletins http://www.seagrasswatch.org/publications.html#ebulletin
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Seagrass-Watch E- Bulletin is compiled by Len McKenzie & Rudi Yoshida.

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