

Seagrass-Watch E-Bulletin



31 August 2014

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Mapping seagrass beds (USA)

22 August 2014, *The News-Press*

One morning last week, Mike Campbell did a little sole searching. In water from waist- to neck-deep, the senior Lee County environmental specialist mapped a seagrass bed in Jug Creek at the north end of Pine Island, feeling the grass with the bottoms of his feet. Starting in the middle, he shuffled through the grass bed; whenever his feet felt bare sediment instead of grass, he knew he was at the edge and marked the point with GPS; connecting the points, he determined the grass bed's size and shape.

Scientists from Lee County's Division of Natural Resources, Florida Gulf Coast University, the Florida Department of Environmental Protection and the Sanibel-Captiva Conservation Foundation monitor seagrass beds in various parts of the county. Lee County scientists monitor grass beds near public boat ramps, such as the bed in Jug Creek, which is near Lavender's Landing ramp in Bokeelia. "We have some really old maps that need to be updated," Campbell said. "We need an accurate inventory of the resource: If the grass beds are damaged, we need to know what we had so we can tell what we lost.

When he finished mapping the grass bed in Jug Creek, Campbell drove the county's Carolina Skiff through Shell Cut into Charlotte Harbor, where he put on a dive mask and snorkel for his next task. Standing in the shallow water, he randomly threw a 1-meter-square quatrat (a four-sided frame) and let it settle into the grass; then he ducked underwater to document how much grass was inside the quadrat and which of the area's three dominant seagrass species (turtle grass, shoal grass and manatee grass) were present. "This area doesn't seem to be doing too bad," Campbell said. "The grass beds have definitely changed. The old lines don't match up with the new ones, but it's not that we've lost seagrass. It's more a shifting of the resource."

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

Heat wave offers glimpse into climate change (USA)

22 August 2014, *Nassau News Live*

An unprecedented marine heat wave that swept the Southeast Indian Ocean in 2011 has given FIU scientists a glimpse into the future of climate change. The heat wave caused the loss of more than 90 percent of the dominant seagrass in some regions of Shark Bay, Australia. Since seagrass meadows provide habitat for many ecologically important species, and provide food for large grazers like turtles and sea cows, this dieback could have significant impacts on marine wildlife in the region, particularly the deteriorating health of green sea turtles. The heat wave also led to declines in scallops and blue manna crabs, triggering fishery closures for these species.

The findings, published in *Global Change Biology* today, show extreme climatic events, which are likely to become more frequent and intense under climate change, can abruptly restructure ecosystems if they disturb key habitat-forming species including seagrasses.

The research in Shark Bay is unique because this region is remote, well-protected and is relatively free of most human stressors. According to Mike Heithaus, co-author of the study and interim dean of FIU's College of Arts & Sciences, it is essential to determine how increasing levels of disturbance under climate change will interact with other common stressors, including pollution, overexploitation, habitat loss and fragmentation, to affect coastal marine ecosystems. The researchers hope to expand the research and explore how declining shark populations, the primary predator of sea turtles, may interact with climate disturbance to influence these ecosystems in the future.

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related article

<http://www.nassaunewsline.com/heat-wave-offers-glimpse-into-climate-change/74101>

Pave Paradise, Put Up a U.S. Military Airstrip (Japan)

20/8/2014, *Vocativ*

Despite protests, the U.S. military has begun construction of runways off the coast of Okinawa, Japan, potentially harming a critically endangered marine mammal. In the bright blue waters of Henoko Bay, off the coast of Okinawa, Japan, endangered dugong graze on fields of seagrass growing on the ocean floor. The local population is estimated to include only one remaining herd with as many as 50 to as few as three animals, which is why American and Japanese conservation groups are outraged that the U.S. military is set to pave over their last remaining habitat.

The Department of Defense has already begun preliminary construction of what will be an airstrip extending offshore for the U.S. Marine Corps, which is relocating from its current location in a crowded, residential area of Okinawa to a stretch of shoreline in Camp Schwab. Environmental activists have filed a supplemental complaint against the DoD as a final, desperate attempt to halt the project. Locals have also taken to protesting from the base's future site by paddling out in small skiffs and kayaks.

The recent filing was an addendum to a suit initially brought against the DoD in 2003, requiring that the government agency conduct a detailed analysis of the airstrip's potential impact on dugong population. In April of this year, the U.S. military concluded that the construction of the base and its runways would have no effect on the health of the marine mammals. Unfortunately for the dugong, the fate of their tenuous existence now rests on a court decision.

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

related articles
<http://english.ryukyushimpo.jp/2014/08/12/14844/>

Endangered dugong spotted just east of Henoko site (Japan)

19 August 2014, *The Japan Times*

A dugong, a rare marine mammal that inhabits waters around Okinawa, was spotted about 5 km east of Henoko on Sunday, the same day as seabed surveys started before landfill operations begin at the relocation site for the U.S. Marine Corps' Air Station Futenma.

In the Henoko coastal area, just a few kilometers away from where the mammal was spotted, a barge was readied Sunday. Around it, orange buoys and other floating devices have been installed to mark the restricted area where the survey of the seabed will be carried out. Outside the marked-off area, as many as 15 Japan Coast Guard patrol ships were on duty in an effort to keep protesters away from the site.

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

Great Barrier Reef will deteriorate further after decision to dump spoil from Abbot Point, former marine park official says (QLD, Australia)

18 August 2014, *ABC Online*

Australian authorities are failing to protect the country's greatest natural icon, the Great Barrier Reef, by approving the dumping of dredge spoil inside the marine park, a former government official says. Jon Day, until recently the director of Heritage Conservation at the Great Barrier Reef Marine Park Authority (GBRMPA), has told the ABC's Four Corners that not enough was being done to repair the reef. He says the dumping of dredge spoil will put more pressure on the reef, which is already in decline.

In January, the GBRMPA approved a plan to dump 3 million cubic metres of dredge spoil inside the marine park for the expansion of Queensland's Abbot Point coal port. Four Corners reveals the fraught year-long struggle within the GBRMPA against this proposal by scientists and senior officials who feared the effect it could have on an already weakened reef system. The decision has been widely condemned by senior marine scientists and was criticised by UNESCO's World Heritage Committee, which will decide next year whether to declare the reef as "in danger".

Mr Day, who resigned from the authority last month, says alternatives to sea dumping for Abbot Point were not properly considered. He says the dumping will add to the stress already on the reef from agricultural run-off, overfishing and extreme weather.

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

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<http://www.theguardian.com/environment/2014/aug/27/barrier-reef-government-mp-says-he-got-it-wrong-on-dredging-spoil-support>

'Don't tangle with seagrass': Hornsby mayor (NSW, Australia)

16 August 2014, *Cattle Hills News*

Hornsby Council has launched a campaign to raise awareness of the fragile seagrass beds in the Hawkesbury Estuary, urging boat users to take care around them. Mayor Steve Russell said the seagrass beds were vitally important to the health of the estuary, as they act as nurseries for young fish.

Hornsby Council has also created a pamphlet and posters, to be distributed throughout the area, with information boaters need to avoid damaging the seagrass. "The message is a simple one – don't tangle with seagrass," Cr Russell said.

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

Let's Start Caring About Seagrass Like We Care About The Rainforest (UK)

16 August 2014, *Care2.com*

The rainforest gets a lot of attention. There are many Save the Rainforest campaigns, and while there is certainly much more work to be done to ensure that we do what we can to stop deforestation, there's no denying that it's definitely a part of our collective environmental conscience. Seagrass, on the other hand, is a different story.

When was the last time you saw a Save the Seagrass initiative? Probably never. Seagrass deserves just as much attention as the tropical rainforest, because it's disappearing just as quickly, to the tune of two soccer fields an hour.

Why is seagrass so important? It plays an essential role in the lives of juvenile fish, providing them with a habitat in which they can thrive. If we don't protect those areas of seagrass, those fish in turn will have a harder time surviving. "When you start to lose these habitats you'll see smaller juveniles and smaller fish stocks," Dr. Richard Unsworth, lead researcher on the study, told the BBC. Seagrass deserves as much attention as some of the other sensitive environments that have taken the headlines in terms of environmental causes. "The rate of loss is equal to that occurring in tropical rainforests and on coral reefs yet it receives a fraction of the attention," Dr. Unsworth said. Maybe it's time we paid a little more attention to protecting seagrass.

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<http://www.smithsonianmag.com/ist/?next=/smart-news/seagrass-meadows-disappearing-same-rate-rainforests-180952344/>

Seagrass fish feeding grounds 'lost like rain forests' (UK)

12 August 2014, BBC

Seagrass is a key habitat for feeding and sheltering young fish, including plaice, haddock and pollock. Scientists from Swansea University believe the habitats need to be protected otherwise fishing stocks could be affected. "The rate of loss is equal to that occurring in tropical rainforests and on coral reefs yet it receives a fraction of the attention," said Dr Richard Unsworth, lead researcher. "If you're a small fish, like a juvenile cod, then you need food and shelter. Seagrass meadows provide both." The biggest threat is from poor water quality and damage caused by boat anchors and moorings.

The Swansea research, for the Natural Environment Research Council (Nerc), is part of a global conservation effort to save seagrass. The team, using baited underwater camera systems and netting, took a year to measure the size and number of fish in seagrass meadows in the seas around Britain, and compared the results with nearby sand habitats. The study included Porthdinllaen and Pen-y-Chain on the Llyn peninsula in Gwynedd. The research is part of a wider project assessing the benefits of seagrass meadows across the Atlantic, which is funded by the Welsh government and the EU.

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<http://planetearth.nerc.ac.uk/news/story.aspx?id=1741&cookieConsent=A>

Planting meadows in the ocean: technique may help restore disappearing seagrass beds (CA, USA)

12 August 2014, Mongabay.com

Seagrass meadows form important parts of many ocean ecosystems, but is disappearing due to human impacts. However, a study published recently in PLOS ONE found eelgrass beds could benefit from a restoration technique using seed-filled pearl nets. The technique, called Buoy-Deployed Seeding (BuDS), uses pearl nets filled with seed-containing "spathes," which are much like peas in pea pods. The spathe-filled pearl nets are attached to a buoy anchored to the substrate so that the net sways with the tides. The seeds in the spathes develop naturally and drop to the floor as they ripen. This is closer to what happens in nature compared to other artificial seeding methods that broadcast mature seeds at once, according to Dr. Brian Ort, lead author of this study that was conducted at the Romberg Tiburon Center of San Francisco State University.

The study found that BuDS is especially effective for preserving genetic diversity. The method was tested in tanks filled with water from San Francisco Bay and with seed-filled nets floating in each. The seeds fell from the nets and started to grow as they matured, and the researchers compared the genetic diversity of the seedlings in the bins to that of the natural environment where the seeds were collected. They found the resulting crop of eelgrass was just as genetically diverse as the beds where they came from.

Several years ago, BuDS was used for a project to restore a meadow that had suddenly died a few years earlier. Currently, this method is used as part of the Living Shorelines Project in the San Francisco Bay area, which aims to protect shorelines with sustainable resources and natural vegetation in lieu of conventional shoreline reinforcement methods that degrade wildlife habitat.

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

Fix found to reef fears over Abbot Point dredging (QLD, Australia)

30 August 2014, The Australian

A disused saltworks near Bowen in north Queensland could solve one of the federal government's major political problems as it is examined as a land-based dumping ground for material dredged from the sea bed near Abbot Point.

Last year's government decision to approve dumping dredge spoil in the Great Barrier Reef Marine Park sparked protests from environmental groups and the local tourism industry. But while environmentalists would still oppose the dredging even if the spoil were dumped on land, tourism operators would drop their opposition to dredging if this were to occur.

One problem with using a land-based solution to dump dredge spoils is that some of the material dumped can become acid sulphate when exposed to the air. But technology being developed by Newcastle-based BDM Resources has the potential to dry out the dredged material quicker and manage the acid sulphate problems more effectively. The company hopes to soon complete a feasibility study which could lead to a more sustained trial of the technology.

full story: <http://www.theaustralian.com.au/national-affairs/state-politics/fix-found-to-reef-fears-over-abbot-point-dredging/story-e6frgczx-1227041833763?nk=38e8c60189126d8df53bab9ac5ac57c6>

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<http://www.sandandgravel.com/news/article.asp?v1=18689>

<http://www.dailymercury.com.au/news/feasible-options-cant-be-ignored/2357609/>

Indian River Lagoon provides cautionary tale on Manatees (FL, USA)

28 August 2014, *Hernando Today*

The U.S. Fish and Wildlife Service (FWS) is reviewing the status of the Florida manatee, a species that has been listed as endangered since the federal Endangered Species Act was created. The arguments heard to date to change the species' classification to threatened seem centered around the number of sea cows that now swim in our waters. This is an over-simplification of a complex issue — something that happens all too often. We need only to look at our Indian River Lagoon to see the folly in this logic.

For decades, due to intense management efforts, not unlike those that have been undertaken for the manatee, seagrass acreages were increasing in the lagoon, and had reached pre-development levels by 2009. As long as seagrass acreages were increasing, the Indian River Lagoon system was thought to be improving and the regulations on such things as septic tanks and stormwater discharges remained more lax than they should have.

We can't afford to make the same mistake for our manatees, focusing on the species' numbers and not on the current and future levels of threat the species faces from such challenges as climate change, sea level rise, Florida's expected population growth, and the continued degradation of our water quality and water supply. In 2013 we saw unsustainable record levels of mortality for the species, caused in large part by red tide and the mysterious ailment in the Indian River Lagoon. Manatees are living in a polluted environment. Until the root causes of that pollution are addressed and corrected, having more manatees than we had so many years ago simply means we have more to protect from an uncertain future. Moving to remove manatees from the endangered species list now would be foolish.

full story: <http://hernandotoday.com/hellist/hernando-columns/indian-river-lagoon-provides-cautionary-tale-on-manatees-20140828/>

Dugong deaths on par with whales (NT, Australia)

26 August 2014, *NTNews.com.au*

A conservationist has labelled Australians "hypocrites" for condemning Japanese whalers while hundreds of dugongs are reportedly slaughtered in Top End waters every year. Australian wildlife activist Colin Riddell said dugongs were at risk of extinction because federal laws allow traditional land owners to hunt and kill the animals without restriction. He estimated about 1600 dugongs – from a population of 10,000-40,000 – were killed in Territory waters each year.

Dugongs are protected by the Territory Parks and Conservation Act and the federal Environment Protection and Biodiversity Conservation Act but there is an exception for indigenous people who have the right to hunt dugongs under the Aboriginal Land Rights Act and Native Title Act.

Parks and Wildlife Commission NT spokesman Edwin Edlund said there was no record of how many dugongs were "taken" annually. Mr Edlund said The Department of Land Resource Management (DLRM) plans to undertake aerial surveys around the NT coastline "to identify significant habitat and areas of high conservation value for dolphins and dugongs" in November. "Repeating earlier surveys in some areas such as the Gulf of Carpentaria will provide information about population trends," Mr Edlund said.

full story: <http://www.ntnews.com.au/news/northern-territory/dugong-deaths-on-par-with-whales-activist/story-fnk0b1zt-1227038321516>

Federal agencies suggest several changes to plan for proposed marina in Coral Bay (Virgin Islands)

29 August 2014, *By Jenny Kane Virgin Island Daily News*

Two federal agencies have submitted recommendations to amend plans for the proposed St. John marina in Coral Bay. The V.I. Department of Planning and Natural Resources sought the opinions of the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration in letters addressed to each agency dated June 25. While NOAA recommended further study of environmental impacts before the DPNR's Coastal Zone

Management Commission issues a permit to the Summer's End Group for the marina, the Fish and Wildlife Service recommended that the CZM permit in its current form be rejected. Both agencies said federal permits would not be issued unless a number of key issues are addressed.

The marina would include 145 slips, a mooring field with 12 mooring balls and an additional 75 moorings that would be overseen as a public-private partnership with DPNR to better manage resources within Coral Bay. On land, improvements for the proposed marina complex would include 120 off-street parking spaces, a 56-seat restaurant, a Customs and Border Protection office, a marina office, marina engineering, marina security, fish and farmers markets, a crew shower and locker facilities.

In response to the past permit application, NOAA recommended that the applicant explore further avoidance and minimization of project impacts to seagrass, including through alternatives, such as the construction of the marina at an alternative location. "Instead, when Summer's End acquired the property, they proposed a larger project," Carrubba wrote. "While they have redesigned the project to incorporate grated decking and extend into deeper water away from shore in order to avoid the need to dredge, the project has gotten larger rather than smaller, resulting in greater impacts." The impacts primarily will be to the seagrass, which is frequented by sea turtles, the letter states, and the marina project also will likely have greater implications for the water quality and corals in the area, Carrubba said.

The Fish and Wildlife Service stated that DPNR should not accept the current proposal as is, and said it needs to better address various concerns, including the water quality, the health of nearby wetlands and the health of marine life in the bay, including the seagrass, according to a letter written by field supervisor Edwin Muniz. The service estimated that as much as 8 acres of seagrass could be lost if DPNR approves the current plans submitted by Summer's End.

full story: <http://virginislandsdailynews.com/news/federal-agencies-suggest-several-changes-to-plan-for-proposed-marina-in-coral-bay-1.1743839>

Politicians dump on Great Barrier Reef dredging plans (QLD, Australia)

28 August 2014, by Daniel Bateman, The Cairns Post

A Queensland Senator has called upon Environment Minister Greg Hunt to draw a clearer line in the sand against dumping of Trinity Inlet dredge spoil in Great Barrier Reef waters. It comes as a North Queensland Liberal-National Party MP admits he "got it wrong" about dumping dredge spoil from the Abbot Point port expansion at sea. Greens Senator Larissa Waters put a motion to the Senate yesterday asking the Minister to clarify his "vague" statement about banning future reef dumping.

Mr Hunt appeared on the ABC's Four Corners last week, declaring the approval of three million cubic metres of dredge spoil from Abbot Point, north of Bowen, would be the last time the activity took place in the marine park. Still under consideration, however, is the proposed dumping of about 4.5 million cubic metres of sediment dredged from Trinity Inlet within reef waters as part of the Cairns Shipping Development Project. The project is to widen and deepen the city's shipping channel to accommodate larger cruise ships.

Senator Waters said the Minister's statement about drawing a line in the sand on reef dumping was "full of holes", as it only applied to the marine park, rather than the wider World Heritage Area, and capital dredging projects rather than maintenance dredging. The motion, passed in the Senate late yesterday afternoon, called on Minister Hunt to confirm his commitment applied to plans for offshore dumping in the Great Barrier Reef Marine Park from capital dredging which had been applied for but not yet approved.

full story: <http://www.cairnspost.com.au/lifestyle/politicians-dump-on-great-barrier-reef-dredging-plans/story-fnjpuwet-1227039750889>

Statement by private sector member over Goat Island irks JET head (Jamaica)

25 August 2014, by Kimberley Hibbert, Jamaica Observer

Founder and CEO of the Jamaica Environment Trust (JET) Diana McCaulay has expressed disappointment with a statement attributed to a member of the private sector that the only sign of life on Greater Goat Island were two ants that bit him. Responding to a report in the media yesterday, McCaulay said that she hoped the "private sector leader was making a joke and did not expect to be quoted". She, however, said the general attitude towards the Goat Islands issue made her very concerned.

According to the Save Goat Islands website, which is managed by the JET, the Portland Bight Protected Area is the largest mangrove system in Jamaica which contains seagrass beds and coral reefs and also contains the largest nursery area for fish and shellfish on the island. Apart from 81 square miles of dry limestone forests and 32 square miles of wetlands, it is also home to 44 communities and has the highest number of fishers in Jamaica. But what irks McCaulay most is the fact that a protected area was selected and the information being made available on the developments slated to take place on the islands has been insufficient.

"JET continues to ask the same questions: Why is there no other site being considered? Why does the port and industrial park have to be in arguably Jamaica's most protected area of land and sea? Why is there such a paucity of information in the public domain as to exactly what is planned and what are the net benefits to Jamaica of this development?" she asked yesterday.

full story: http://www.jamaicaobserver.com/news/-Distressing-_17409925

Lagoon closed to the sea (New Zealand)

23 August 2014, by Bridget Railton, The Southland Times

The Waituna lagoon has closed to the sea for the first time in more than a year. Environment Southland director of operations and environmental information Warren Tuckey said the lagoon closed naturally, after being opened in July last year.

Having the lagoon closed over summer was good news for *Ruppia*, a species of seagrass used to indicate the ecological health of the lagoon, as it requires fresh water to grow. However if water levels in the lagoon went over two metres for a period of time it would be reopened.

The lagoon made headlines after it was found in 2011 that its health had reached critical levels and was in danger of becoming an algal soup. It has been described as one of the best remaining examples of a natural coastal lagoon in New Zealand. A multi-agency response has been enforced over the past few years to work towards improving and maintaining water quality in the catchment.

full story: <http://www.stuff.co.nz/southland-times/news/10414501/Lagoon-closed-to-the-sea>

Dugong (Sea Cow) Viewing Tower being built in Trang to welcome tourists (Thailand)

19 August 2014, National News Bureau of Thailand

The President of Trang Provincial Administrative Organization Kij Leekpai recently led a team of engineers, community leaders and residents from Moo 4, Libong Island sub district, Gantang District to observe the active sea life nearby and authorize the construction of a Dugong Viewing Tower. The Dugong is also widely known as the Sea Cow. The work also includes the restoration of the harbor area and renovation of the Leekpai bridge.

The ongoing construction is expected to be completed within 180 days or before the beginning of the high season towards the end of this year.

The Dugong Viewing Tower, is to be 16 meters high, 4.2 meters wide and consist of four levels It is being constructed with a budget of 3,729,000 baht and is intended to facilitate viewing by tourists keen to witness the Dugong in its natural habitat without requiring the visitors to climb a hill or take a long-tailed boat out to sea.

http://thainews.prd.go.th/centerweb/newsen/NewsDetail?NT01_NewsID=WNSOC5708190010006

Get searching for scallops (FL, USA)

14 August 2014, Andrea Stetson, The News-Press

Florida Sea Grant, Lee County Extension and the Sanibel Captiva Conservation Foundation are looking for volunteers for the 2014 Pine Island Sound Scallop Search. This is not a harvest event, but simply a way to monitor and document the health of the sound's bay scallop population. Organizers need up to 40 boats and 150 people to search certain sites in the sound. This will be the third year that Warren Schirado will search for scallops in Pine Island Sound. He also recently attended a scallop event in Charlotte Harbor.

"It's people who just want to go out there and have an enjoyable afternoon," he said. "You are seeing different forms of seagrasses. You can see everything from sea horses to shells and plants. Every time I go out there I see something different. It's relaxing. I have always loved the sea and the water. I enjoy getting out in the water and snorkeling around and being with the people. I enjoy the living daylights out of it." Schirado participates in the event from his kayak. Others go in small powerboats. Organizers say most smaller boats are allowed, but personal watercraft such as JetSkis and SeaDoos cannot be used.

Participants at last year's Pine Island Sound Scallop Search used snorkels to dive to seagrass beds to search for the creatures. Joy Hazell of Florida Sea Grant is the organizer of the event. Hazell determines 40 grids in the sound that are each a nautical mile. Searchers put out a long rope and snorkel along each side of that rope. They only count scallops found within 1 meter on either side of the rope, and they only count the live ones. They do four transects of rope and then average out the rest of the area. "We do have them try to place them over seagrasses," Hazell said. "We have pretty good coverage of sea grasses in Pine Island Sound."

full story: <http://www.news-press.com/story/life/outdoors/2014/08/14/get-searching-scallops/14032427/>

Excess seaweed in Adelaide Shores Boat Harbour at West Beach causes delays for anglers and emergency services (SA, Australia)

14 August 2014, Thomas Conlin, *The Weekly Times*

Anglers and sailors say authorities need to be better prepared to deal with masses of seaweed at Adelaide Shores boat ramp which caused delays and potentially put lives at risk. They have called on the State Government to act and take over the responsibility for maintaining the popular boat launching site. The ramp is also used for SA Sea Rescue boats, which have diverted crews to O'Sullivan Beach at least twice in the past two weeks. Fishermen have waited up to an hour to launch and retrieve boats.

Adelaide Sailing Club, which has winter sailing events during August, called on Adelaide Shores to ensure they better access. "The government has given the responsibility to Adelaide Shores, but they haven't got any equipment to move the seagrass," commodore Mick Bowley said. "We've had times when they haven't been able to get the rescue boats off the ramp because their motors get filled up with seagrass."

full story: <http://www.adelaidenow.com.au/messenger/west-beaches/excess-seaweed-in-adelaide-shores-boat-harbour-at-west-beach-causes-delays-for-anglers-and-emergency-services/story-fni9llx9-1227024159036?nk=37a2fba4ff1deb249f8404cd0bfb7679>

Project Watershed plants eelgrass in Comox waters (Canada)

13 August 2014, *Comox Valley Record*

Project Watershed, as part of their Blue Carbon efforts and habitat restoration activities, collected 2,500 donor eelgrass shoots and then transplanted them into an area devoid of eelgrass off Port Augusta Park in the Town of Comox. These restorations provide habitat for migrating fish and other wildlife as well as increasing the blue carbon sink in our estuary. The effort involved Project Watershed staff and nearly a dozen volunteers during the low tide on Aug. 8-9.

Future measurements will give an indication of how much carbon dioxide is being removed by this newly planted site. During this restoration effort intertidal eelgrass, which is the eelgrass seen at low tide right at the tide line, was re-established. Later this month more intertidal and some subtidal eelgrass will be planted. Divers will be involved with the subtidal efforts. Funding for the project is from The Council for Environmental Cooperation a three-country partnership of Canada, the United States and Mexico and from the Pacific Salmon Foundation.

Nearly 6,000 square metres of eelgrass has been restored during the summers of 2013 and 2014. At a recent Fisheries and Oceans workshop in Ladysmith a few weeks ago, it was reported by the contractor who sub-contracted with Project Watershed for the eelgrass planted last year that we have a 95 per cent success rate. Additional eelgrass work is planned for later in the month and in September. And Project Watershed will soon initiate salt marsh shoreline restorations later this month and in September.

full story: <http://www.comoxvalleyrecord.com/news/271109001.html>

Clean Tampa Bay worth \$22 billion to bay area, study says (FL, USA)

12 August 2014, by Craig Pittman, *Tampa Bay Times*

One in every five jobs in the Tampa Bay watershed depends on keeping the bay itself healthy, according to a new study unveiled Tuesday. A clean bay also contributes about \$22 billion to the bay area's total economic activity over the larger, six-county region, according to the study conducted by the Tampa Bay Regional Planning Council and the Tampa Bay Estuary Program.

The survey looked at employment, real estate, food services and lodging in an area that includes all or parts of counties from Hernando to Sarasota. Other findings are less obvious. For instance, the growth of underwater sea grasses, as well as shoreline marshes and mangroves, means about \$24 million less money spent every year on wastewater treatment plants to reduce nutrient pollution.

Since 1974, the estuary program's scientists have checked the quality in the four sections of the bay — Old Tampa Bay, Hillsborough Bay, Middle Tampa Bay and Lower Tampa Bay — to see if the water is clean enough to promote natural recovery of seagrass. Sea grasses are crucial to the health of the bay, but decades ago, they declined sharply to 22,000 acres by 1982. By 2011, though, strenuous local government efforts to clean up pollution flowing into the bay had encouraged the spread of sea grass until it covered nearly 33,000 acres of the bay, leading to a rebound of fish population. According to Greening, the water quality of the bay is now as good as it was in the 1950s.

full story: <http://www.tampabay.com/news/environment/clean-tampa-bay-worth-billions-to-residents-businesses-new-study-says/2192596>

Eel grass decline affecting ecosystem of California's coastal habitat (CA, USA)

11 August 2014, by Randol White, KCBXfm Central Coast Public Radio

According to the National Oceanic and Atmospheric Administration (NOAA) the average Morro Bay water temp for August at 58 degrees, nearly 8 degrees cooler than its current temperature. Scientists believe warmer water is among the main culprits behind the decline of the area's eel grass, a plant that grows along the bottom of the estuary.

"In many respects, eel grass is like the base of the food chain here," Jen Nix is the Restoration Projects Manager for the Morro Bay National Estuary Program. Keith Merkel and his San Diego-based consulting firm are on site working with a group of volunteers on how to collect, bundle and replanting eel grass in the most efficient manner. He's been called into help by organizations up and down the California coast to help with the wasting disease. The grass is being killed off by a slime mold that occurs naturally, but when conditions for the mold are too favorable it overtakes the grass withers and dies.

This is the third year the Morro Bay National Estuary Program is making the push to save the local eel grass. While the beds are known to show fluctuations in size, they're currently at their smallest recorded level—just 15 acres—down from several hundred in a previous count.

full story: <http://kcbx.org/post/eel-grass-decline-affecting-ecosystem-californias-coastal-habitat>

Appearance of manatee excites SPI residents (TX, USA)

09 August 2014, by Christina R. Garza, Valley Morning Star

The salty waters surrounding South Padre Island are home to various marine wildlife, but some islanders were in for a surprise on a recent afternoon when a manatee made an appearance at a local boat dock on the northwest side of the Island, according to Parrot Eyes Water Sports employee Ryan Fuentes.

Fuentes, originally from Miami, is familiar with manatees from his native state but said he hadn't see one in about nine years. Fuentes said the manatee swam under the pier in search of fresh water to drink. Fuentes was able to document the encounter by recording a video with his iPhone. The manatee reportedly appeared to be in good health and didn't have any cuts or injuries.

Tony Reisinger, the Cameron County extension agent for coastal and marine resources with Texas Sea Grant at Texas A&M University, has lived in the area for 32 years and has only heard of a handful of reported manatee sightings here. Reisinger said the reason for the sighting is unknown but may have occurred for different reasons such as migration, mating or grazing on the lush sea grass meadows common in the Laguna Madre.

full story: http://www.valleymorningstar.com/news/local_news/article_e5858cc0-2037-11e4-baae-001a4bcf6878.html

Dead fish, rotting seaweed forces Jurien Bay beach closure (WA, Australia)

8 Aug 2014, ABC

Dead fish and rotting seaweed have washed ashore in Jurien Bay forcing authorities to close a local beach. Warmer weather conditions, a build-up of seagrass and low tides in the coastal town's harbour have resulted in the deterioration of the seawater. The Department of Health says swimming or eating fish caught in the harbour could pose health risks.

"Seagrass comes in and lays on the bottom then sand drifts in and sits on the top of the seagrass and you get an accumulation of rotting material a bit like a giant compost heap forming on the bottom of the harbour," the Member for Moore, Shane Love, said. "Then it begins to leach gasses into the harbour and deplete the oxygen until there's no oxygen left in the water for the fish."

The WA Government has tried many times to fix the long-running problem by excavating sand. Mr Love says it is hoped a larger dredging program, set to begin later this year, will fix the issue.

full story: <http://www.abc.net.au/news/2014-08-08/dead-fish-rotting-seaweed-forces-jurien-bay-beach/5658166>

Sea cow found dead in Negros Occidental (Philippines)

05 August 2014, GMA News

A foul smell led residents to the decomposing remains of a dugong or sea cow in a coastal area of Negros Occidental province. Residents found the sea cow near the shore of Pontevedra town in Negros Occidental, according to a report by GMA Bacolod on Tuesday. The report quoted local authorities as saying the sea cow was in an advanced state of decomposition.

full story: <http://www.gmanetwork.com/news/story/373507/news/regions/sea-cow-found-dead-in-negros-occidental>

Alarm over unabated turtle carnage (Borneo)

06 August 2014, The Borneo Post

A Universiti Malaysia Sabah researcher-lecturer has expressed his concern about the rapid decline in turtle population in Sabah. According to Dr James Alin, nesting records collected by the Kudat Turtle Conservation Society (KTCS) and sightings by artisanal fishermen and recreational divers' show that Green and Hawksbill turtles in these areas are rapidly declining.

Sea turtles are hit by boat engine propellers, he said, adding that the community patrolling teams under KTCS can only protect turtles while they are nesting and laying eggs but not before or after the landing. Once they leave the white sandy beach and head back to open sea, they are in great danger of being hit by boat engine propellers, he pointed out. According to Dr Juanita Joseph, a sea turtle expert working with Universiti Malaysia Terengganu, while underwater, sea turtles can hear the sound of boat engines, especially noisy pump boats, but cannot tell which direction it is coming from, Dr James disclosed. During high tide, submerged coral reefs and seagrasses which happen to be sea turtles' foraging and habitat areas, are busy navigation routes for passengers and fishing vessels.

He also said that sea turtles are incidental catch of fishermen as according to previous studies on dead turtles in Peninsula Malaysia, Thailand, Indonesia and Australia, carcasses washed to shore with these types of visible marks of injuries are either victims of boat engine propellers or fishing nets. "This is a plausible cause of badly damaged carapaces and plastrons. Some of the 654 fishermen working under 121 trawling licenses in Kudat are definitely responsible for disposing of evidence, we just don't know who and when. He was of the opinion that some purse seiners had been doing such wrong things for so long.

full story: <http://www.theborneopost.com/2014/08/06/alarm-over-unabated-turtle-carnage/>

Australia: Queensland plan "fails to protect reef" (Australia)

05 August 2014, Dredging News Online

The Australian Marine Conservation Society says the State Government's Queensland Plan "has failed to provide a credible blueprint for a healthy future for the Great Barrier Reef." AMCS Great Barrier Reef campaign director Felicity Wishart said that while an overwhelming majority of Queenslanders want to see the waters of the Great Barrier Reef protected from port expansions, dredging and dumping, the government has missed another chance to deliver.

"The government has the audacity to claim it is a 'world leader' in environmental management and protection when it has jeopardised the world heritage values of the reef by fast-tracking port developments along its coast and allowing dredging and dumping in its waters. "Local and international pressure is mounting for the Queensland government to stop looking for loopholes and watering down environmental protections. The community wants and expects action to stop industrial port expansion and improve the reef's health.

"The Queensland government is fast tracking some of the most damaging developments the Reef has ever seen. It's not something you'll see in the Qld Plan brochure, but tourism operators, scientists and fishers are worried they'll be seeing the impacts out there in the corals and waters of the Reef," Ms Wishart said.

full story: <http://www.sandandgravel.com/news/article.asp?v1=18682>

GBRMPA approves more dredging and dumping in the Great Barrier Reef Marine Park (QLD, Australia)

04 August 2014, Dredging News Online

The Australian Marine Conservation Society (AMCS) has expressed "extreme concern" about a decision by the Great Barrier Reef Marine Park to re-issue a permit to allow dredging of 82,500 cubic metres and dumping of 378,000 cubic metres of dredge spoil from the port at Hay Point in the Marine Park.

Felicity Wishart, AMCS Great Barrier Reef campaign director said the original permit conditions for the proposed maintenance dredging and dumping were shoddy and the decision to re-issue the permit with only a few improvements, whilst a step forward, was still inadequate.

"The altered conditions include requiring that the environmental management plan is actually implemented, ensuring that monitoring of impacts includes assessing for coral disease, to ensure dredging and dumping does not occur when coral is spawning, and to ensure that visual checks are made for dolphins, dugongs and turtles before dredging and dumping can occur. This should have been a condition of the permit in the first place. "It's even more alarming that, despite public complaints and warnings by the scientists, more dredging and dumping has still been approved for the Great Barrier Reef, one of the great natural wonders of the world", said Ms Wishart.

full story: <http://www.sandandgravel.com/news/article.asp?v1=18680>

Protect Gulf seagrass beds (TX, USA) COMMENTARY

04 August 2014, Monitor

One of the Texas coast's premier recreational fishing destinations, the Lower Laguna Madre owes much of its productivity to its vast, lush seagrass beds, which we all must make an effort to conserve.

Seagrasses, along with wind tidal flats covered in algal mats, silt sand bottom, oyster reefs, mangroves and emergent marshes, comprise the habitats of the Lower Laguna Madre. Seagrass meadows account for 79 percent of habitat. The value that seagrasses hold by supporting recreational and commercial fisheries and ecotourism is enormous. The recreational fishing industry of the Lower Laguna Madre, alone, contributes millions of dollars to the local economy. That includes a number of associated costs, such as equipment sales, chartered trips, lodging and restaurants visited by out of town individuals on fishing expeditions. Factor in commercial fisheries, such as shrimping and crabbing; eco-tourists, such as snorkelers and kayakers, and the impact on the local economy soars. At the heart of all of these industries is seagrass. Without it, the health of the ecosystem and those industries would suffer.

It's an important resource that requires our protection and conservation. Seagrasses are fragile and can be easily disrupted. One preventable major threat is propeller scarring. Propellers can physically uproot and cut seagrass roots, killing the plants. And propeller scars can take years to heal. Preventing prop scars is as simple as lifting your outboard motor and drifting or poling across shallow seagrass beds, or using a trolling motor when in critical areas. Anglers and sightseers alike should all take a moment the next time they're out on the waterway to appreciate the little things that make it all possible. And remember to do your part to conserve this valuable natural resource we are so fortunate to have.

[full story: http://www.themonitor.com/opinion/commentary-protect-gulf-seagrass-beds/article_139eb9a4-19dc-11e4-9386-0017a43b2370.html](http://www.themonitor.com/opinion/commentary-protect-gulf-seagrass-beds/article_139eb9a4-19dc-11e4-9386-0017a43b2370.html)

Wonders of the deep in the spotlight (UK)

2 August 2014, by Herald Express

Some of Devon's most beautiful and charismatic marine creatures, including seahorses and cuttlefish, will benefit from new research work being undertaken into their underwater world. Throughout the summer marine conservation and fisheries management bodies will be working together, carrying out new surveys of seagrass beds off the South Devon coast. Information collected by the Devon and Severn Inshore Fisheries and Conservation Authority and the charity Devon Wildlife Trust will be used to help the management of some of the county's most important marine protected areas in Torbay, Salcombe Estuary and Plymouth Sound.

Richard White, Senior Marine Officer with Devon Wildlife Trust explains, "It's not just about the wildlife, it is in everyone's interest that we protect these seabed habitats. Seagrass beds are important nursery areas for commercial fish species and can help with coast protection and carbon capture. We would all be worse off without them. That's why Devon Wildlife Trust is pleased to be able to help gather more information to improve their protection."

Underwater video cameras, flown above the seabed beneath the IFCA survey vessel, will capture images that will be later analysed to assess the size, distribution and condition of seagrass beds. Sarah Clark, Deputy Chief Officer of Devon and Seven IFCA leads on the organisation's environmental programme, 'We will be able to use information on the extent of seagrass beds to better protect these habitats from the impact of commercial fishing activities through our local byelaws. We will also learn more about how these features change with time so we can assess how well our management is working.' The survey work will be carried out over the summer with analysis and a final report completed early next year.

<http://www.torquayheraldexpress.co.uk/Wonders-deep-spotlight/story-22055164-detail/story.html>

Symbiotic survival (USA)

01 August 2014, Phys.Org

One of the most diverse families in the ocean today—marine bivalve mollusks known as Lucinidae (or lucinids)—originated more than 400 million years ago in the Silurian period, with adaptations and life habits like those of its modern members. This Geology study by Steven Stanley of the University of Hawaii, published online on 25 July 2014, tracks the remarkable evolutionary expansion of the lucinids through significant symbiotic relationships.

At its origin, the Lucinidae family remained at very low diversity until the rise of mangroves and seagrasses near the end of the Cretaceous. According to Stanley, the mangroves and seagrasses created protective habitats in which the bivalve mollusks could thrive, in turn providing benefit through a sort of tri-level symbiosis.

Stanley writes that what was especially important was the lucinids' development of a symbiotic relationship with seagrasses. The lucinids flourished as they took advantage of the oxygen-poor, sulfide-rich sediments below roots and rhizomes. These habitats provided a rich supply of sulfur-oxidizing bacteria (or endosymbionts), which the bivalves "farmed" on their gills and then consumed. At the same time, the seagrasses benefited from the uptake of

(to them) toxic sulfide by the bivalves. About 500 lucinid species exist today, with by far the highest diversity in shallow-sea seagrass meadows.

full story: <http://phys.org/news/2014-08-symbiotic-survival.html>

GALLERY

Boonooroo, Great Sandy Strait, Qld: 07 & 09 August 2014 <http://www.seagrasswatch.org/gallery.html>

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.

Important dates:

- 01 September 2014 - End of early bird payment
- 10 September 2014 - The last day of abstract submission
- 05 October 2014 - Notification of abstract acceptance
- 15 October 2014 - End of registration and online payment
- 25 October 2014 - Notification of final list of participants to the ISBW11
- 07 November 2014 - ISBW11 begins

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:

- 12 September 2014 - final date for scientific session/workshop submissions
- 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 34,059 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>

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>

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