



Seagrass-Watch E-Bulletin

31 March 2015

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Help with seagrass research project (UK)

25 March 2015, *View Online*

People interested in a unique project to preserve seagrass beds have gathered for a volunteer evening at Weymouth Sea Life Park. There are 19 known seagrass beds along 191 miles of coastline between Weymouth and Looe and the night, which attracted more than 40 visitors, was devoted to explaining all about how people could get involved in the three-year project. The seagrass beds are home to everything from young fish to seahorses.

Community seagrass initiative spokesman Jess Mead said: "We are looking for three groups of volunteers, kayakers, sailors and qualified divers, as well as our schools programme which will engage with 19,000 schoolchildren. "We hope that we will get lots of volunteers to help us survey the sea grass." She added that the Heritage Lottery Fund had provided nearly £500,000 for the project into the habitat which appears to be in decline perhaps through poor water quality, invasive species and increased recreational water use over the habitat.

Many people were unaware of the sea grass bed locations, five of which are in the Weymouth area at Ringstead, Weymouth bay, Weymouth pier, Portland harbour and the Fleet lagoon. She urged people to volunteer for the project and said no knowledge or survey experience was needed.

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

Compiling and expanding knowledge of dredging (Australia)

25 March 2015, *Great Barrier Reef Marine Park Authority*

An independent panel of experts has compiled existing scientific knowledge of how dredging and disposal impacts on the Great Barrier Reef. Brought together under a joint initiative of the Great Barrier Reef Marine Park Authority and the Australian Institute of Marine Science, the panel reviewed information on the physical and biological effects of dredging and disposal. The panel's report titled *Synthesis of current knowledge of the biophysical impacts of dredging and disposal on the Great Barrier Reef* summarises what is known about the effects of dredging, what is scientifically contentious, and the key gaps in our knowledge.

Among its key findings, the report concluded:

In terms of direct effects, dredging and burial of seafloor habitats during disposal can have substantial impacts at a local level, but have only a small impact on the broader Great Barrier Reef and its biodiversity as a whole.

In terms of indirect effects, sediments released by dredging and disposal have the potential to stay suspended in the water and move.

Dredging and disposal may be a significant source of fine sediments in the World Heritage Area, in addition to other sources, such as land run-off.

The recent policy commitments to ban disposal of capital dredge material in marine environments will mean future disposal, which will be limited to maintenance dredging, will contribute much less fine sediment. This reduced amount will still need to be considered in the context of other cumulative impacts on the Great Barrier Reef.

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Related links:

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<http://www.abc.net.au/news/2015-03-26/green-group-makes-fresh-calls-for-reef-dredging-ban/6349860?section=qld>

<http://www.skynews.com.au/news/national/2015/03/25/dredging-impact-can-differ-on-location.html>

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<http://www.brisbanetimes.com.au/queensland/dredging-increases-barrier-reef-risks-20150320-1m4by6.html>

<http://www.dailytelegraph.com.au/news/breaking-news/dredging-increases-barrier-reef-risks/story-fni0xqi3-1227271921571>

Dugong washed ashore (India)

25 March 2015, *The Hindu*

The carcass of a male Dugong, weighing around 200 kg, was found washed ashore at Maraikayarpattinam seashore near here on Tuesday morning. Forester M. Jaffar said forest personnel were on routine patrolling when they found the carcass washed ashore with injury on its back. The injury suggested that it could have hit against a rock and succumbed to the injuries on Monday night.

This was the second carcass of Dugong to be washed ashore in the Gulf of Mannar region in less than one month. On February 27, the forest officials found a two-year-old female Dugong washed ashore at Thalaithoppu near Periyapattinam.

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Chant questions Middlebank reclamation by state government (Malaysia)

24 March 2015, New Straits Times Online

An environmental interest group here questioned the state government's insistence in going ahead with the Middlebank reclamation, with the knowledge that it could destroy the ecosystem of the seagrass bed there. Speaking in a press conference today on the matter, Citizens Awareness Chant Group (Chant) adviser Yan Lee said the Penang government should explain why it insist on reclaiming the Middlebank area, when there are so many other places to be reclaimed.

Lee claimed that reclamation in the area would change the whole system and water flow in Penang, affecting fish farmers from the island to Nibong Tebal, and cause siltation. Lee cited the Forest City project in Johor as an example of how such a seagrass bed should not be touched for development. He said the Johor Department of Environment (DoE) had not allowed the Forest City developer to reclaim areas that have a large amount of seagrass.

The 50.6ha seabed in the Middlebank, located between the first Penang Bridge and the Sungai Pinang river mouth, is the second largest in Peninsular Malaysia after Merambong in Johor. It was reported that the state government planned to reclaim the area under the proposed RM27 billion Penang Transport Master Plan. The Penang Development Corporation (PDC) had called for a Request for Proposal (RFP) to reclaim the area, and ended on Feb 23.

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New study shows net value of seagrass to fishing in the Mediterranean (UK)

24 March 2015, Phys.Org

Seagrass meadows could be worth around €190 million every year to commercial and recreational fishing in the Mediterranean according to a new study by marine scientists. In a report published in Conservation Biology, academics at Plymouth University and the University of Central Queensland, Australia, say that marine policies should consider the socioeconomic effects of the loss of seagrass, which provides habitat for many fishery species.

Beds of seagrass play a fundamental role in supporting populations of marine species that are caught by commercial and recreational fishers, acting as nursery areas for juveniles, feeding grounds and refuge from predators. But despite protection from the European Union which bans the use of mobile fishing gear over the beds, seagrass is declining in the Mediterranean.

Conducted under the EU's KnowSeas project, the researchers used a 'Seagrass Residency Index' to give different fishery species a score based on how much time they spend in seagrass meadows at different life stages, compared with other habitats. The score was then combined with information on the economic value of seafood caught by commercial fisheries to calculate the total value of seagrass to this industry. For recreational fishing, the scores were combined with figures on how much is spent each year by anglers, for example, on equipment and transport, contributing to the wider economy. The results indicated that seagrass contributed between €58.3 million and €91.5 million per year to commercial fishing in the Mediterranean, between 2006 and 2008, at an average of €77.7 million. Approximately 4.5%, or €112.6 million, of annual angling expenditure could be attributed to seagrass meadows. With seagrass (*Posidonia oceanica*) estimated to account for 5.5 million hectares, or 2% of the surface area of the Mediterranean Sea, it contributes a disproportionately valuable amount to fisheries in terms of 'habitat service'.

The EU's Marine Strategy Framework Directive requires the cost of marine degradation to be determined. The full economic value of seagrass beds would be even higher than this calculated value if other ecosystem services were also accounted for, such as erosion protection and carbon sequestration, indicating how important seagrass habitat is to both the marine environment and human society.

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Related links:

<http://www.worldfishing.net/news101/industry-news/study-looks-at-the-value-of-seagrass>

<http://www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=26&id=75397&l=e&special=&ndb=1%20target=>

After dead Green turtle, remains of dugong found (Malaysia)

23 March 2015, Malay Mail Online

Just weeks after fishermen near here buried the carcass of an endangered turtle, they have been confronted with another shocking discovery. They found the remains a dugong, measuring a little more than 1m in length, floating about 800m from the beach of Teluk Senangin, a popular weekend picnic spot, on Thursday.

According to Sahabat Alam Malaysia field officer Meor Razak, the marine mammal had not been sighted in the area recently. Meor said the dugong came to Teluk Senangin most likely to feed. He said the local geography could also be a factor in attracting dugong, turtles and dolphins. However, fishing, along with the opening of forested areas as picnic spots and rapid industrialisation, were ruining the area's natural beauty.

Fisherman Noor Ismady Ahmad Radzuan said dugong were a common sight in Taluk Senangin many years ago. He said fishermen would normally see them swimming alone although there had been instances when they saw them in pairs, and sometimes a calf with its mother.

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Great Barrier Reef campaign: scientists call for scrapping of coal projects (Australia)

23 March 2015, *The Guardian*

Australia's leading coral reef scientists have called for huge coalmining and port developments in Queensland to be scrapped in order to avoid "permanent damage" to the Great Barrier Reef. The Australian Coral Reef Society (ACRS) report, compiled by experts from five Australian universities and submitted to the United Nations, warns that "industrialising the Great Barrier Reef coastline will cause further stress to what is already a fragile ecosystem."

The report notes that nine proposed mines in the Galilee Basin, in central Queensland, will produce coal that will emit an estimated 705m tonnes of carbon dioxide at capacity – making the Galilee Basin region the seventh largest source of emissions in the world when compared to countries. Climate change, driven by excess emissions, has been cited as the leading long-term threat to the Great Barrier Reef. Corals bleach and die as water warms and struggle to grow as oceans acidify.

In the ACRS report, the scientists urge a rethink on associated plans to expand the Abbot Point port, near the town of Bowen as well as calling for a halt to the Galilee Basin mines, which have broad support from the Queensland and federal governments. The report warns dredging will have "substantial negative impacts on surrounding seagrass, soft corals and other macroinvertebrates, as well as turtles, dugongs and other megafauna."

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Exposing underwater devastation (Malta)

22 March 2015, *Times of Malta*

The thumbs down recently given by the Malta Environment and Planning Authority board to the proposed offshore wind farm at Sikka I-Bajda is still a vivid memory. The major motivations behind MEPA's stance include the fact that the site lies near an important bird rafting zone next to the Yelkouan shearwater colony at Tal-Madonna cliffs. Sikka I-Bajda also lies within a Natura 2000 site – the Northeast Marine Protected Area (MPA). Since Sikka I-Bajda is covered by seagrass (*Posidonia oceanica*) meadows, the logical conclusion to reach was that the environmental impact on marine and bird communities would be considerable.

However, the reef is currently being used as one of the Malta's six offshore bunkering sites. In fact, it is the second largest such site after the massive Hurd's Bank. The economic importance of bunkering is supported by the Maltese islands' strategic geographical location flanking the Malta-Sicily Channel – one of the most important oil transit routes in the world. In 2011, just over 3,000 vessels bunkered in Maltese waters. This is equivalent to an average of eight vessels a day.

Sikka I-Bajda, whose depth ranges from four to five metres at its shallowest point to a maximum depth of 25 metres. Bunkered vessels impact the seabed in two ways – through anchoring and through crabbing, with the latter involving the dragging of anchors along the seabed when vessels need to shift position in the bunkering area. Both actions have a detrimental impact on the seabed, with so-called 'halos' being left behind in seagrass meadows as a result of massive anchors being dropped on the seabed. The anchors in question are juggernauts in size. For instance, the weight of a 26-metre-long vessel is expected to range between 55kg and 110kg.

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Sydney Harbour boat moorings are impacting sea floor marine life: researchers (Australia)

22 March 2015, *ABC Online*

Sydney Harbour is becoming "cluttered" with boats, prompting the New South Wales Department of Transport to launch the first study into the impact of boat moorings on the health of the waterway. Researchers from the University of New South Wales (UNSW) and the Sydney Institute of Marine Science (SIMS) have begun intensive surveys of the sea floor at six sites from Manly in Sydney's north, to Watson's Bay in the east. The project is expected to last three years.

SIMS director Professor Emma Johnston said traditional moorings were a particular concern for seagrass because they carve circular holes in harbour meadows. Professor Johnston said half of Sydney's seagrass meadows had disappeared in the last 60 years. One species, *Posidonia australis*, or strapweed, is endangered. It's a species of

seagrass that has been particularly vulnerable to human activity and it doesn't regrow very quickly. Professor Johnston said alternatives to traditional swing moorings had also raised potential environmental concerns.

In July 2015, 41 swing moorings are due to be removed from Clontarf in Sydney's north as part of the redevelopment of the local marina. Scientists are preparing to monitor the area to see what, if any, recovery is possible on the ocean floor. Their findings will form part of the report to be delivered to the State Government.

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

Great Barrier Reef: Government releases Reef 2050 Long-Term Sustainability Plan (Australia)

21 March 2015, ABC

The Federal and Queensland Governments have together released the final version of the long-term plan for the Great Barrier Reef. The Reef 2050 Long-Term Sustainability Plan satisfies one of the key recommendations made by the United Nation's World Heritage Committee and forms a key plank in the Governments' bid to avoid the site being declared "in danger" by UNESCO. The report warns climate change is the biggest long-term threat facing the reef, while the immediate pressures include water quality, which has declined due to nutrient and sediment runoff from agricultural production.

Previously, a draft version of the report was criticised by some scientists as being a plan for sustainable development rather than protecting and conserving the reef. The Queensland Government also sought urgent changes to the draft, to include its \$100 million election commitment to improve water quality. Queensland Environment Minister Steven Miles said the new plan would help protect and save the reef. Mr Miles said significant changes had been made and he hoped the United Nations World Heritage Committee would not go ahead with upgrading the reef's status to "in danger".

The updated version also contains the Federal and State Government's plans to ban dredge-dumping in the World Heritage Area. However, the report does not stipulate any set caps on the amount of maintenance dredging that can be carried out. "Protecting the Reef requires long-term planning and commitment," the report said. "Actions under the Reef 2050 plan will ensure the Great Barrier Reef continues to be among the world's best managed and protected World Heritage areas."

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Related links:

<http://www.wsj.com/articles/australia-floats-plan-to-save-great-barrier-reef-1426937411>

<http://www.telegraph.co.uk/news/worldnews/australiaandthepacific/australia/11487572/Australia-unveils-35-year-plan-to-save-Great-Barrier-Reef.html>

<http://www.travelweekly.com.au/article/abbotts-100m-promise-to-save-face/>

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<http://www.theguardian.com/environment/2015/mar/21/tony-abbott-unveils-plan-to-save-great-barrier-reef>

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http://www.theaustralian.com.au/subscribe/news/1/index.html?sourceCode=TAWEB_WRE170_a&mode=premium&dest=http://www.theaustralian.com.au/national-affairs/great-barrier-reef-official-preservation-plan/story-fn59niix-1227272882996?metype=anonymous

Delaying dredging will give the Great Barrier Reef breathing room (Australia)

20 March 2015, ABC Online

As concerns regarding the future the Great Barrier Reef reach fever pitch, the Australian government may have just been handed an opportunity for some much-needed breathing space. A paper published today in the prestigious journal *Science* by an international group of researchers suggested ways that World Heritage listed places threatened by climate change could potentially be propped up, until climate change can be addressed.

The paper, which looked specifically at the example of the Great Barrier Reef, said that by bolstering the health of the Reef in other ways, it may become strong enough to withstand the bleaching and acidifying ocean predicted to occur with climate change for as long as it takes to rein in greenhouse gas emissions. The paper listed "runoff nutrients, pesticides, herbicides and sediments from land" as problems for the Reef. In recent years, the Australian government has made steps towards preventing this kind of pollution from reaching the delicate corals. However in a blow to plans to expand the shipping traffic running through the iconic site, the study said that besides climate change, "coastal development and dredging [are] major future threats".

The paper pointed out that managing climate change is an immensely complex task, requiring the co-operation of all the world's nations. In contrast, managing local pressures on the Reef, while "challenging", is a more achievable task. The researchers cautioned that "local interventions are no panacea for the threats of climatic change", but said that

they would give the government control over at least some of the threats facing the Reef, while reframing the fight against climate change from "gloom and doom" to "positive" and "action-oriented".

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Related links:

<http://www.tourismportdouglas.com.au/Great-Barrier-Reef-at-risk-of-collapse-w.12424.0.html>

Seagrass recovery projects looms for bay (USA)

19 March 2015, Port St. Joe Star

A multi-pronged project aimed at rebuilding seagrass beds in St. Joseph Bay will be underway soon. According to a fact sheet from the Florida Department of Environmental Protection's Florida Coastal Office, the work will employ a restoration and education component to address scarred seagrass in the bay. The hope is to have the bulk of the project completed by the July start of scallop season. The goal is to bolster the seagrass beds which are essential to a healthy scallop population.

The project will be funded with fine monies from BP under the Natural Resource Damage Assessment and stem from the 2010 Deepwater Horizon oil spill. The money flows from the NRDA trustees to the FDEP and Florida Fish and Wildlife Conservation Commission, the two government agencies coordinating NRDA projects in the county.

The seagrass project, which the FDEP includes restoration of a two-acre area that is "severely scarred seagrass habitat." "This restoration project will stabilize injured seagrass areas ... and protect thousands of acres of this critical habitat," according to the FDEP fact sheet. Researchers will use sediment tubes and bird roosting stakes, methods that have proved successful in other areas of the state with "high success rates", the fact sheet detailed. The target site is surrounded by healthy seagrass and the restoration will halt expansion and erosion of the scarred areas to "foster long-term health" of the seagrass beds, according to the FDEP.

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Marine Conservation Zone proposed to protect Irish Sea porpoises (Ireland)

17 March 2015, Belfast Telegraph

Harbour porpoises will be protected under new marine safeguards proposed by the Department of the Environment. The DoE has proposed a new protected Marine Conservation Zone for our smallest marine mammal in the Irish Sea, as well as new protected areas for key seabird colonies and a seagrass colony that provides nursery grounds for marine wildlife.

A new MCZ has been proposed for Red Bay in Co Antrim, which would protect vulnerable beds of seagrass, a fragile plant which produces flowers and seeds. Seagrass meadows are home to wildlife such as larval fish, crustaceans and marine invertebrates. If designated, the new area will join an existing proposed network including Rathlin Island and Belfast and Carlingford loughs.

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

Seagrass is essential to Keys life (USA)

13 March 2015, Florida Keys Keynoter

What does seagrass have to do with diving in the Florida Keys? It seems a lot. Florida takes its seagrass very seriously. Boaters can face federal and state fines as well as costs associated with restoration efforts and monitoring if they are caught destroying seagrass. A fine of up to \$1,000 can be imposed under Florida law.

Bring in the feds and things get more serious. In 1997 federal judge ordered a treasure-hunting company to pay a fine of \$589,311 for destroying seagrass while searching without a permit for shipwrecks in the Florida Keys National Marine Sanctuary.

In 2014, seagrass in Monroe County supported an estimated harvest of roughly \$380.5 million for stone crab, spiny lobster, shrimp, yellowtail snapper, gray snapper and blue crab. (FFWCC, Annual Landings, 2014). March is "Seagrass Awareness Month." Preserving Florida's seagrass is critical to protecting marine life, water quality and Florida's ocean-based economy.

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Tracking the epic journey of sea turtles (Bermuda)

13 March 2015, Royal Gazette

New data about Bermuda's sea turtles, including research tracing the journey of young animals from Bermuda to foreign shores, is to be presented at an upcoming talk. Bermuda Turtle Project co-ordinator Jennifer Gray will host the talk at the Bermuda Underwater Exploration Institute on March 26.

The Bermuda Turtle Project is a partnership with Bermuda Zoological Society, Atlantic Conservation Partnership, Department of Conservation Services, Sea Turtle Conservancy and Chevron. Ms Gray's illustrated talk will include details about the project's efforts in educating other countries to come up to the same standards of conservation that Bermuda has. There will be some information about the Critter Cams used on BAMZ turtles by the Sea Grass Group at Conservation Services. "The two scientific projects dovetailed beautifully because their group studies the habitat and we study the turtles and there is a lot of overlap."

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

Shifting theories (Australia)

12 March 2015, Whyalla News

A resident has rejected the prevailing theory that the marina breakwater barrier is the major cause of the flattening of the foreshore. Graham Butt said contrary to what many believe, this structure actually helped to build sand up because of the south to north littoral sand drift. Mr Butt said although he was not a hydrologist, he had an alternative hypothesis on why the beach was not naturally replenishing. Supporting a theory originally proposed by former Whyalla City Council manager infrastructure Mike Blyth, Mr Butt said an artificially generated seagrass bed had prevented sand drift.

Mr Butt said the beach was regularly replenished by a south to north littoral sand drift near the mangroves in the early 1960s. However, Mr Butt said SA Water's Engineering and Water Supply Department had established a sewage treatment plant in Whyalla in the mid '60s and nutrient-rich effluent was discharged via a tidal creek through the mangroves. This effluent had the effect of growing seagrass beds where there were none before which Mr Butt said impeded sand movement onto the beach with sand disappearing in the late '60s. A few years ago the Environmental Protection Agency recognised that the effluent was having a detrimental effect on the marine environment and instructed SA Water to dispose of the effluent on land. Mr Butt said he had observed that the artificial seagrass had since broken up and sand seemed to be progressing towards the beach.

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

High school students help UVI map seagrass (Virgin Islands)

11 March 2015, Virgin Islands Daily News

About 25 high school students spent Tuesday morning at the beach doing a scientific study that could help research being conducted at the University of the Virgin Islands. The students, all 11th and 12th graders at V.I. Montessori School and Peter Gruber International Academy, are taking a humanities and science class called "Environmental Systems and Societies" taught by the school's director, Gloria Zakers. UVI Marine and Advisory Service coordinator Howard Forbes Jr. teamed up with Zakers to use the students to help gather data about seagrasses in the territory.

Zakers' students each came up with their own research question and developed a method to collect and record data to answer that question. "So, today we were looking very specifically at an invasive species of seagrass," Zakers said. "They don't know what the impact of this invasive species might be." The new species is *Halophila stipulacea*, and while it is smaller than the native seagrasses, it is taking over and pushing out the native species.

UVI Marine and Environmental Sciences graduate students Sam Mitchell and Jess Keller recently wrapped up a study of the invasive seagrass as a part of the capstone project for their degrees. Their study revealed evidence that local animals eat the invasive seagrass, but the rate of consumption is not sufficient to prevent its expansion. UVI Environmental Data Manager Primack Avram worked with the Institute for Geocomputational Analysis and Statistics to develop a mapping software for the territory. The students in Zakers' class will enter their findings into the mapping program. It will be the first step toward building a map of native and invasive seagrass beds in the territory, which could help future research projects at the university.

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Weymouth Sea Life Adventure Park is on a mission to save our seabeds. (UK)

12 March 2015, Dorset Echo

Weymouth Sea Life Adventure Park is to turn the tide by taking part in a project to save our sea beds. The Community Seagrass Initiative project covers a 191 mile stretch of the coastline from Looe in Cornwall to Weymouth. The project has a plan to spend the next three years obtaining information about important habitats along the coastline to ensure that they are protected in the future by reducing disturbance. The project plans to do this by raising awareness through the use of data collections to advise policy makers on the current conditions of the habitats.

The aim of the initiative is to encourage and engage volunteers, be they sailors, kayakers, canoeists, divers and even internet users to help monitor the health and biodiversity of sea grass beds and to connect the coastal community. Jessica Mead, CSI project officer for Weymouth at the Weymouth Sea Life Park said: "Being part of this project is hugely exciting, it's a fantastic opportunity for the whole community to get involved and find out more about an extremely special habitat that's right on their doorstep.

"We hope to work with as many people as possible over the three year project to enthuse and engage people with these vitally important but sensitive areas. We have a variety of tools in which to achieve this and will be discussing them in further detail at our official launch party at Weymouth Sea Life Park on March 19."

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

Yes, it happened again! (Malaysia)

10 March 2015, Daily Express

There was yet another shock discovery of a "sea turtle killing field" with 19 "Totally Protected" Green turtles found massacred behind a beach in Pulau Tiga, on the northern side of the Balambangan-Banggi Channel near Pulau Banggi, Monday, about three hours by boat northwest of Kudat. Whistle blower Dr James Alin said a repeat of a pattern of deliberate sea turtle hunting and killing on the same island where some 50-60 turtles were butchered in March 2014, says only one thing: No lesson learnt as the enforcement agencies had failed yet again".

Dr James said he found the failed lesson hard to swallow even though the big shocker last year hit maximum front-page headlines in the local dailies followed by a series feature articles highlighting the Balambangan-Banggi Channel as most likely the crime scene because the Channel is a regular sea turtle migratory route while Pulau Tiga's robust seagrass beds attract female turtles to forage and nest.

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

Great Barrier Reef: Green groups say 2050 plan does nothing to address climate change (Australia)

11 March 2015, ABC Online

Conservation groups are united in their criticism of the Reef 2050 plan which is designed to protect and save the Great Barrier Reef. The Queensland and federal governments say the Reef 2050 Long-Term Sustainability Plan released on Saturday is a comprehensive, strategic assessment and will protect the Great Barrier Reef. It aims to address key recommendations made by the United Nation's World Heritage Committee to avoid the site being declared "in danger" by UNESCO.

The report warns climate change is the biggest long-term threat facing the reef, while the immediate pressures include water quality, which has declined due to nutrient and sediment runoff from agricultural production. The newly elected Queensland Government sought urgent changes to the draft, to include its \$100 million election commitment to improve water quality. However, Greenpeace and the Australian Marine Conservation Society said while the Reef 2050 Plan had some good intentions it also had major limitations.

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

Great Barrier Reef in dire straits without extra \$500m and ban on dumping (Australia)

10 March 2015, The Guardian

The Great Barrier Reef risks being officially listed as "in danger" unless Australia provides greater funding to reduce pollution and widens a ban on dumping sediment into the reef's waters, environment groups have told the UN. In a joint submission to Unesco's world heritage committee, the World Wildlife Fund and the Australian Marine Conservation Society claim that key concerns over the fading health of the reef are still not being addressed.

The groups call for an additional \$500m to prevent chemicals from farmed land flowing on to the reef and better resourcing of the Great Barrier Reef Marine Park Authority so it can become a "true champion of the reef". The submission also urges the Australian government to ban dumping of dredged seabed material into the reef's world heritage area. The federal government has committed to banning dumping, but only in the reef's marine park, which does not include the port areas adjacent to the coral ecosystem.

The world heritage committee will meet in Germany in June to decide whether the reef, which has lost half its coral cover in the past 30 years, should be listed as "in danger".

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

'Brunei Bay can be safe haven for sea turtles' (Brunei)

09 March 2015, AsiaOne

Brunei has the potential to develop its own sea turtle sanctuary at Brunei Bay as part of its ecotourism industry, said a biologist from University Malaysia Terengganu (UMT). In a recent interview with The Brunei Times, Dr Juanita Joseph said that the Brunei Bay, which spans an area of 250,000 acres, is a mega seaweed farm site for sea turtles and other marine life. Dr Juanita said it could potentially lure tourists and marine enthusiasts from other countries, and that the Sultanate could emulate the Labuan Marine Park in Malaysia by introducing tour package deals to watch sea turtles nesting and hatching there.

The biologist was speaking during a recent sea turtles biology and conservation workshop organised by the Wildlife Division. Asked how the country can turn Brunei Bay into an ecotourism destination, Dr Juanita said that it has to be a "controlled tourism". She urged Brunei to conduct scientific studies by getting expert advice from other countries.

Dr Juanita said that sea turtles are an indicator of a healthy ocean. "Green turtles eat sea grass and hawksbill turtles eat coral reefs. They become the fertiliser of the ocean bed to ensure fishes are able to lay eggs and as food for other predators. "If there are a lot of sea turtles, it means the ecosystem is healthy. If there are less sea turtle, the food habitat is poor which lead to the declining number of seafood products," she said.

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

Mass fish deaths off Singapore coast spark concern (Singapore)

06 March 2015, BBC News Asia

Last Sunday morning, Bryan Ang woke up onboard his floating fish farm on the Johor Strait between Malaysia and Singapore to find nearly all his stock had died. He was not alone. Hundreds of tonnes of fish - both farmed and wild - died over the weekend in the eastern part of the strait. Fish farmers lost hundreds of thousands of dollars in stock overnight. Floating out at sea and washing up on the beaches and mangroves, dead sea creatures began to appear, from sea snakes and seahorses to squid and moray eel.

Nature guide and environmental biology student Sean Yap said he was jogging along the eastern Pasir Ris beach on Saturday evening when he smelt a foul stench. It came from what he described as a "mass grave" - thousands of dead fish washed up on shore.

The environmental authorities said the deaths were due to a plankton bloom, where a species of plankton multiplies rapidly, damaging the gills of fish. It can be triggered by sudden changes in temperature, high nutrient levels in the water, and poor water circulation.

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

Illegal drift nets killing Abu Dhabi's dugongs (Abu Dhabi)

04 March 2015, The National

Fishing nets are the leading cause of dugong deaths in Abu Dhabi's coastal waters, scientists have said. Since 2000, the Environment Agency Abu Dhabi (EAD) has investigated 153 dugong deaths. Of these, 111, or 72.5 per cent, were caused by drowning after the mammal was caught up in nets. If data from the past five years is reviewed, fishing nets contributed to 85 per cent of deaths.

While EAD scientists have no doubt the data is reliable when it comes to highlighting the main threat to Abu Dhabi's population of the endangered animals, the numbers could in reality be higher. "Globally, usually 50 to 60 per cent of marine mammal mortality incidents are reported," said Dr Himansu Das, unit head for marine threatened species and habitats at EAD's terrestrial and marine biodiversity sector. While it is not possible to record all deaths, it is clear that "the rate of dugongs dying in fishing nets has increased", he said. Most of the fatalities were reported between November and March when increased numbers of dugongs congregate off the shallow coastal waters of Abu Dhabi and when there is also heightened fishing activity.

A type of drift net, known as hiyali, was identified by the EAD as the cause of the deaths. These nets, which reach in length from 500 metres to a kilometre, are used illegally by fishermen to catch king fish. They are deployed at locations with a maximum depth of 10 metres and left to drift. Fishermen return to collect nets based on calculations about currents. The estimates are often wrong and the nets are lost, posing a risk to marine wildlife. EAD has conducted informal interviews with fishermen as part of its study and found that the majority were aware of the laws prohibiting the use of illegal nets and the protected status of dugongs. Yet many continue to rely on this lucrative method of fishing, the agency said. Last year, EAD carried out workshops in the Western Region and is planning on continuing its efforts to ensure existing fishing regulations are implemented, as well as necessary marine clean-ups, Dr Das said.

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

Underwater plants, critical to maintaining a healthy environment, face multiple threats (USA)

04 March 2015, Florida Weekly

Seagrasses are extremely important indicators of the health of an ecosystem. And they're being threatened in Southwest Florida, which is why James Douglass, an assistant professor in Florida Gulf Coast University's Department of Marine and Ecological Sciences, is spending a great deal of time and energy investigating them. Mr. Douglass is studying seagrasses in the Caloosahatchee and Matlacha estuaries aided by technician Christina Kennedy, graduate students Shannan McAskill and Thomas Behlmer, and undergraduate interns Spencer Hilbert, Alexandra Rodriguez, Stephanie D'Orazio, Manuel Coffill, Andrew Eiseman, Lisa Rickards and Rachel Margalus.

"Salinity is a really big issue around here because it's affected so much by releases of water from Lake Okeechobee," Mr. Douglass says. "Salinity is not staying constant even in one particular spot of the estuaries. It's going up and down from the wet season to the dry season. When we release water, it gets fresh, and when we hold back water, it gets much saltier than it's supposed to be. This is what I call the 'Rainbow of Death.' There is no variety of seagrass that can deal with such a wide variation.

Mr. Douglass' research has analyzed salinity conditions and the amount of seagrass at various places along the estuary. "In the upper estuary, we've lost a lot of freshwater seagrass species, so we have an unpleasant bottom that is mostly barren and there's not a lot of food for manatees, and the few blades of freshwater grass are sparse and short," Mr. Douglass says. "In the middle estuary, the water is very murky and seagrass is sparse. In the lower estuary, there's a lot of seagrass, but it's covered with a lot of algae, probably because of excess nutrients coming from Lake Okeechobee. We can't entirely blame Lake Okeechobee because there are a lot of nutrients in the water from Fort Myers and Cape Coral." He recently presented his results to a meeting of scientists and managers working on the Comprehensive Everglades Restoration Plan and recommended that to stop killing seagrass in the Caloosahatchee

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

Cane growers beginning to see results from trials aimed at improving water quality of runoff to the Great Barrier Reef (Australia)

04 March 2015, ABC Online

Cane growers in Queensland are making progress improving the water quality running off their properties to the Great Barrier Reef, but say there are still challenges ahead. CEO of land management agency Reef Catchments, Rob Cocco said he would like to see wider uptake of sustainable practices by cane farmers.

Eton North cane grower Phil Deguara has been participating in the project for three years. A trial under way on his property is testing the effectiveness of applying different levels of nitrogen to areas of varying sodic levels. The soil is more sodic at one end of the trial site than the other and the cane is clearly healthier at the less sodic end. In the sections with high sodic levels, the trial is starting to show applying a standard base load of nitrogen provides a benefit, but adding extra nitrogen provides no extra cane growth, as the plant cannot absorb it. On the other hand, in areas with low sodic levels, adding extra nitrogen does provide extra cane growth. The findings of the trial will help Mr Deguara, and other cane growers, determine the right amount of nitrogen to apply at different points of the farm and avoid having the extra nitrogen run off the property.

While the new Labor Government has set ambitious targets relating to future farm water run-off, Mr Cocco said he was hopeful the sugar industry would step-up and meet the challenge.

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

Swift action to protect the Great Barrier Reef (Australia)

04 March 2015, My Sunshine Coast

The Palaszczuk Government has moved to update a key plan for the Great Barrier Reef to reflect its proactive approach to protecting the Reef and address UNESCO's concerns about the protection of the state's single biggest natural asset. Minister for the Great Barrier Reef Dr Steven Miles said the new government had already acted to stop retrograde changes the LNP Government planned to the state's Water Act that would have adversely impacted the Great Barrier Reef.

Dr Miles said the state government has sought federal government support to amend the draft Reef 2050 Long-Term Sustainability Plan to reflect the Palaszczuk Government's commitments to protecting the Great Barrier Reef. The amendments being sought would outline initiatives planned by the Palaszczuk Government including:

- a ban on sea dumping of capital dredge spoil within the Great Barrier Reef World Heritage Area
- convening a high-level taskforce with representatives from regional communities, conservation organisations, industry groups (including primary producers, tourism operators and local government) and leading scientists to determine the best possible approach to achieve an 80% reduction in nitrogen run-off and a 50% reduction in sediment run-off into the Great Barrier Reef by 2025
- providing an additional \$100 million over five years towards water quality initiatives, scientific research and helping businesses transition to better environmental practices in the primary production and fishing industries
- implementing vegetation protection laws in consultation with landowners to minimise damaging run-off to the reef
- reinstating coastal planning laws axed by the LNP Government
- working with the Federal Government and the International Maritime Organisation to develop a new vessel class which will ensure bulk goods carriers travelling in the World Heritage area meet stringent safety codes
- fighting to ensure the Abbott Government pays a fair share to help save the Great Barrier Reef.

Dr Miles said the new government had acted swiftly to protect Queensland's water resources and the Great Barrier Reef by stopping changes to the Water Act set in train by the LNP.

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

Water managers struggle with invasive Hydrilla (USA)

03 March 2015, Florida Today

After a Gulf Coast aquarium dealer had the plant shipped from Sri Lanka in the early 1950s, the stringy nuisance has cost government agencies countless millions. *Hydrilla* grows up to two inches a day, clogging lakes, rivers and canals that flow to the Melbourne-Tillman (C-1) canal in Palm Bay. That, in turn, raises flood risks. So Florida water managers spray upward of \$15 million worth of herbicides annually to keep the invasive plant in check on public lands — with uncertain environmental consequences.

The Melbourne-Tillman Water Control District uses a slow-release herbicide called fluridone (brand name Sonar), spending about \$120,000 annually to control *Hydrilla* in 163 miles of canals in the 100 square-mile district. They plan to apply the herbicide again in the next few weeks. But as government gears up to spend millions to dredge muck from Turkey Creek and the Indian River Lagoon (IRL), one longtime, avid river advocate is raising concerns that the herbicide might be killing seagrass at the mouth of the creek and fouling the lagoon with rotted, dead *Hydrilla* and other plants.

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

Grassy Flats restoration project nearly complete (USA)

03 March 2015, Palm Beach Daily News

A Palm Beach County sand placement project to cover muck and create cleaner water in the Lake Worth Lagoon will wrap up by early next week, according to the project manager. The county Department of Environmental Resources Management and other state and federal environmental agencies began the Grassy Flats restoration project, adjacent to the Par 3 Golf Course, 15 months ago. The purpose of the \$3.4 million project is to cover mud on the bottom of the lagoon with clean sand to create 10.5-acres of seagrass, salt marsh, mangrove, tidal flat and oyster habitat.

Anderson said workers brought in about 50,000 cubic yards of sand and are "broadcasting" it into the lagoon. Conveyor and broadcaster machines spray sand across the surface of the water, which provides a 12-15-inch layer above the 1-3 feet of mud. Once the muck is capped, water quality improves and the sand/muck layers become ideal for seagrass and shallow water habitat.

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

Rare dugong is sighted in Seychelles at Aldabra (Seychelles)

02 March 2015, Seychelles News Agency

Around two hundred years ago, the dugong, otherwise known as the sea-cow, was a common sight throughout the Seychelles when the archipelago was first discovered by European explorers. Sadly, the dugongs were hunted to extinction in the Seychelles by seafarers eager to exploit them for their meat and oil. Since those days, the dugongs have not been back to the islands, but in 2001, dugongs were suddenly sighted around the wild, uninhabited western atoll of Aldabra, where up to 150,000 giant tortoises roam freely on the hard, sun-baked land.

The public trust which manages the UNESCO World Heritage Site of Aldabra, the Seychelles Islands Foundation (SIF), believes that the dugongs frequenting the atoll travelled north-west from Madagascar, which lies a scant 426 kilometres away. "Aldabra provides a safe refuge for dugongs and has extensive seagrass beds where they can feed and reproduce," SIF communications officer Rowana Walton said. The dugongs are thought to feed in the numerous seagrass beds both in the lagoon and outside the atoll and have been sighted in both areas. Walton said researchers are still unsure why the notoriously shy dugongs had thus far failed to return to the other islands within the Seychelles archipelago, but said possible reasons could include a loss of natural habitat and disturbance.

In 2013, an aerial survey was undertaken by SIF to establish a population estimate for dugongs at Aldabra. After conducting several survey transects, a total of 14 to 20 dugongs were recorded, but sightings were never in excess of four individuals due to the dugong's nature. The exact number of dugongs at Aldabra is hard to estimate and the SIF says that a more comprehensive survey of the atoll still needs to be undertaken to provide a more accurate estimate.

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

CONFERENCES

4th Mediterranean Seagrass Workshop (MSW '15) (Sardinia, Italy, 18–22 May 2015)

The 4th Mediterranean Seagrass Workshop is hosted by the International Marine Centre of Oristano.

Important dates:

Abstract submission is now closed, but registrations are open
for more information, visit <http://mediterranean.seagrassonline.org/sardinia/> or follow on Twitter @SardiniaMeet

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.

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

GALLERY

Townsville (Aust): 18-20 Mar 2015 <http://www.seagrasswatch.org/gallery.html>

Roebuck Bay(Aust): 20-22 Feb 2015 <http://www.seagrasswatch.org/gallery.html>

Moreton Bay (Aust): 16-18 Jan 2015 <http://www.seagrasswatch.org/gallery.html>

SEAGRASS-WATCH on YouTube

Seagrass: Pastures of the sea <http://www.youtube.com/watch?v=66Y5vgsuj20> or <http://www.seagrasswatch.org/seagrass.html>

Presentation on what seagrasses are and why they are important (over 36,348 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 Richard Unsworth 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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