31 May 2018

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IN THIS BULLETIN

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NEWS

Researchers to study whether seagrass could combat effects of climate change (CA, USA)

31 May 2018, The Log

Scientific divers jumped into the waters of Newport Beach's Upper Bay on May 29 to retrieve water sensors; the sensors, researchers hope, could demonstrate how beds of eelgrass could be used to battle ocean acidification. Katie Nichols, Orange Count Coastkeeper's marine restoration director, told The Log she would be sampling water weekly, adding the underwater sensors in the Upper bay would help determine whether there is a difference between natural and restored eelgrass. The marine restoration director added she expects seasonality to have less of an effect on eelgrass in Southern California, as compared to the efforts in Northern California.

The data collected by researchers at Newport Bay is part of a larger project spearheaded by scientists at U.C. Davis and U.C. Santa Cruz. Surveys are being conducted at multiple bays across California to determine answers to several questions, such as whether eelgrass serves as a buffer to ocean acidification across multiple seasons and years (and, if so, to what extent). It is unclear whether the reliance on restored (as opposed to natural) eelgrass to provide marine life with relief from higher carbon dioxide levels in the water would work on a global scale, according to a July 2016 article published by Yale Environment 360.

Researchers here in Newport Beach are certainly hopeful to prove the restoration of eelgrass in the city's Upper Bay would ultimately fight back against ocean acidification. Whether future studies would be conducted is contingent upon funding, Nichols said. It is also unclear whether restoration efforts would be expanded to cover more areas off or along the Southern California coast.

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Port Geographe seagrass wrack. Calls to lower wrack threshold (WA, Australia)

31 May 2018, Busselton Dunsborough Mail

A Department of Transport spokesperson maintains the volume of seagrass wrack built up at Port Geographe is currently appropriate despite pleas to have it removed. Seagrass wrack built up on the western side of the groyne has created an odour and covered the beach up to heights of 12-feet at the water's edge. The DoT are responsible for intervening when wrack built up around Port Geographe exceeded 60,000m^3, as required in its Environmental Monitoring and Management Plan. Calls have been made to reduce the threshold to 10,000m^3 which would then trigger a response from the DoT.

Vasse MLA Libby Mettam has written to the Transport Minister Rita Saffioti for the third time calling for an amendment to the EMMP to reduce the trigger for intervention. Ms Mettam said if the seagrass was pulled back onto the beach it would likely be a one-off exercise and would not disrupt the groyne reconfiguration.

DoT coastal infrastructure general manager Steve Jenkins said they were satisfied the thresholds in the plan were currently appropriate against the risks of environmental impacts from wrack accumulation. The DoT are responsible for maintaining Port Geographe and developed the EMMP with the Environmental Protection Authority to minimise environmental and health impacts. Mr Jenkins said the EMMP included two thresholds for seagrass wrack, one for volume and another for odour, if the threshold of wrack exceeded a volume of 60,000m^3 then the DoT would start contingency works. Mr Jenkins said the DoT continued to regularly monitor the Port Geographe coast through site inspections, surveying and photography. In December last year, the DoT gave approval for the City of Busselton to engage a contractor to redistribute a portion of the seagrass wrack after safety concerns about the accumulation were raised by residents.

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May deluge could help bay recuperate (FL, USA)

30 May 2018 KeysNews.com

Rains washed out many Memorial Day holiday plans, but May's record-setting month of wet could make for a healthier Florida Bay. Even before Tropical Storm Alberto added its weekend deluge, seemingly incessant rains went a long way to reduce the shallow bay's salinity, several experts said. Among those benefits may be a much reduced chance of harmful algal blooms in the hot summer months.

Several Florida Bay basins that had disturbingly high salinity levels are dropping toward a normal range, which helps to discourage fish-killing blooms. It has been a rough decade for Florida Bay. The 2015 drought helped trigger a massive 2016 seagrass dieoff that destroyed tens of thousands of acres. Scientists estimate seagrass recovery may

take 20 years. That decaying seagrass sucked dissolved oxygen out of the system, leading to poor water visibility that hinders seagrass regrowth and higher chlorophyll levels that heighten the threat of harmful algae blooms.

Bay conditions seemed to be improving somewhat in 2017. Then Hurricane Irma arrived, pushing staggering amounts of uprooted seagrass into the bay. Reports of blooms followed in October and November as that vegetation decayed. The winter's dry season caused salinity levels to rise along the Florida Bay coastline north of the Florida Keys. Parts of the northern bay had salinity levels in the 40-plus ppt range in April but had dropped by 10 ppt or more in late May. That was before Alberto sloshed through. Seagrasses become stressed at 55 ppt, said South Florida Natural Resources Center Director Robert Johnson. Some of the recently finished Everglades restoration projects also are having a beneficial effect, said Johnson, whose agency provides research for South Florida's national parks.
more……..www.seagrasswatch.org/news_May2018archives.htm

Andrew Forrest faces fight to open up oyster farm in World Heritage marine park (Australia)
29 May 2018, The Australian Financial Review

Mining billionaire Andrew Forrest faces an uphill battle to convince green groups that his plans for a major oyster farm in a World Heritage-listed section off the West Australian coast won't harm the marine environment.

Conservation Council of WA director Piers Verstegen said the area targeted by Mr Forrest for diversification into aquaculture formed part of the Shark Bay Marine Park and was rich in marine life. Protection of seagrass beds, and interaction with dugongs, turtles, and other marine life are issues that will have to be given close attention by the proponent and environmental regulators. If the project does go ahead, it should be expected that the highest environmental standards must be maintained in a location of this kind.

Harvest Road, the Forrest family's privately-owned agriculture company, wants to launch a two-year trial of rock oyster aquaculture at nine sites on the eastern shoreline of Shark Bay. The trial would comprise nine sites along a 40-kilometre stretch of the marine park known as Wooramel Bank. Although spread out, in total the nine sites would cover less than a hectare. A spokeswoman for Harvest Road said the company recognised the environmental sensitivity and significance of the World Heritage area and was committed to its preservation. Harvest Road said it consulted widely with leading global experts on the area's seagrass systems, turtles and dugongs. It had requested a meeting with the CCWA, but was told no one with the required technical capacity was available to consult on the project.
more……..www.seagrasswatch.org/news_May2018archives.htm

Port River dredging to go ahead despite environmental concerns (SA, Australia)
29 May 2018, ABC Online

The South Australian Government has today approved a plan to widen the Port Adelaide shipping channel and dump the dredged waste in Gulf St Vincent. The controversial Flinders Ports plan involves removing 1.5 million cubic metres of material from the Outer Harbor shipping channel before being disposed 30 kilometres offshore. Planning Minister Stephan Knoll said he was "extremely comfortable" that the project was environmentally safe.

The plan was met with resistance from fishers and environmental groups, who said it would harm surrounding marine life. Flinders Ports dredged 3 million cubic metres of silt from the Port River in 2005, resulting in a dredge plume off Adelaide, killing about 1,600 hectares of seagrass. In a statement published on its website today, the Environment Protection Authority said the latest proposal would result in "significantly less than 250ha" of die-off.

Greens MLC Mark Parnell said it was too much. "We're putting less sewage out to sea, we're trying to capture stormwater before it goes out to sea because they destroy seagrass — now we're deliberately destroying 250 hectares of seagrass," Mr Parnell said. Port Adelaide Enfield Mayor Gary Johanson pushed for the silt to be dumped on land at Gillman while running as an SA Best candidate for Port Adelaide in the March state election. He said he was devastated by the decision. A consultant's report for the EPA said risks associated with the ocean-dumping proposal were "reasonable". It said land-based options were only feasible if it could not be dumped in the sea.
more……..www.seagrasswatch.org/news_May2018archives.htm

Great Barrier Reef Experienced Five Massive Die-Offs in 30000 Years (Australia)
28 May 2018, The Scientist

Australia's Great Barrier Reef experienced large die-offs, only to recover hundreds or thousands of years later, five times in the last 30,000 years, according to a study published in Nature Geoscience. Researchers found that although the reef has shown greater-than-expected resilience to major environmental shifts such as rising sea levels and temperature changes, it is particularly sensitive to poor water quality and higher volumes of sediment. Study coauthor Jody Webster of the University of Sydney says in a statement that the reef's sensitivity to sediment is "of concern given current land-use practices."

To peer into the reef's past, researchers drilled rock cores and used underwater sonar to reconstruct the previous locations of the Great Barrier Reef. The team found that the reef has moved around over the last 30,000 years in response to changing sea levels, at a pace of up to 1.5 meters per year. However, on several occasions the reef apparently did not respond fast enough to environmental change. Researchers identified five "death events" in which large portions of the coral died off altogether. The most recent, which occurred around 10,000 years ago, was associated with a decline in water quality and increase in sediment.

The authors emphasize in their paper that the findings do not suggest that the reef will be able to resist today's rapid environmental change, writing, "Given the current rate of [sea-surface temperature] increase (0.7 °C per 100 years), sharp declines in coral coverage, and the potential for year-on-year mass coral bleaching, our new findings provide little evidence for resilience of the [Great Barrier Reef] over the next few decades."
more……..www.seagrasswatch.org/news_May2018archives.htm

Greens want inquiry into awarding of $444m Great Barrier Reef grant (Australia)
29 May 2018, The Guardian

The Australian Greens will push for a parliamentary inquiry into how $444m in reef funding was awarded to a small not-for-profit foundation with little scrutiny and without a competitive tender process. Greens senator Peter Whish-Wilson, the party's spokesman for healthy oceans, will move for a Senate inquiry into why the Great Barrier Reef Foundation was announced as the recipient of the record government grant without the funds being offered to existing government reef agencies. The inquiry, if supported by Labor and the crossbench, would also investigate the capacity of the foundation to meet the objectives of the government's Reef 2050 plan, the proficiency of other organisations that could carry out similar work, and the foundation's governance.

In Senate estimates hearings last week, Environment and Energy Department officials revealed there had been no tender process before the grant was awarded and the foundation itself was only made aware of the grant a few weeks before it was announced. In statements provided to Guardian Australia last week it said it was focused on projects with large scale impact "that go to the heart of saving the Great Barrier Reef and that can also benefit coral reefs globally". The foundation has said it did not apply for the funding and was contacted by the Australian government before the initial announcement of the funding commitment that took place in Cairns on 29 April.

The foundation is backed by business and its chairman's panel includes executives from Qantas, Downer Group, AGL and Peabody Energy. Department officials told estimates hearings that the foundation's business focus was seen as an advantage because it had the ability to leverage additional funding from private sources.
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Related article
No competition for $450m reef grant (21 May 2018, 9news.com.au)
https://www.9news.com.au/national/2018/05/21/10/35/no-competition-for-450m-reef-grant

Busselton Jetty swamped by wave of sea grass after recent storms (Australia)
28 May 2018, ABC Online (Australia)

The world-famous Busselton Jetty has been swamped by tonnes of seagrass that was washed into the beach of the WA South West holiday town by strong storms last week. The seagrass is now covering the waterline for metres out to sea, and is posing a smelly problem for the local authorities.

Sophie Teede, a marine biologist who has worked at the Busselton Jetty for seven years, said she had not seen a washup to this extent for a number of years. She emphasised that though the mounds of plant matter haves a really protective element to protect the sand from eroding away from the beach itself. "I think the way the seagrass has washed up on the beach now has definitely been influenced by the sand bags that have been put out by the City of Busselton. Ms Teede said there were no real negative environmental effects of such a large amount of seagrass, which would eventually wash away by itself. The worst effect was likely to be the smell of the material as it dries in the sun.

The local council, which regularly employs front-end loaders to clear away seagrass from the town's beaches during the peak tourism season in summer, is hoping it may avoid a costly clean-up effort to remove the sea debris. Busselton Mayor Grant Henley said he was hoping more storms forecast for later this week would wash away much of the seagrass naturally.
more……..www.seagrasswatch.org/news_May2018archives.htm

Divers fail to find spiny seahorses in Studland Bay (UK)
25 May 2018, BBC News (UK)

Experienced divers have failed to find any protected seahorses in the seagrass meadows off Dorset where they were once a common sight. In 2008, about 40 spiny seahorses were recorded in Studland Bay, but none had been spotted

there since early 2015 until one was found last summer. However, dives organised by the Seahorse Trust this year have so far only managed to find a dead one.

Only 24 specimens of the UK's spiny and short snouted species were recorded off the UK coast last year. Both species have been protected under the Wildlife and Countryside Act 1981 since 2008, which prevents them being killed, injured or taken. The Seahorse Trust and Dorset Wildlife Trust have previously said boat moorings are damaging the seagrass bed habitats at Studland by "dragging and scouring" the seabed. The bay was previously recommended as a Marine Conservation Zone but not selected. Mr Garrick-Maidment said a designation for Studland would ensure the future preservation of the seagrass beds and seahorses.
more……..www.seagrasswatch.org/news_May2018archives.htm

Sea urchin harvest a win-win for seafood industry and seagrass habitat as fishers deal with spike (Australia)
23 May 2018, ABC Online

Commercial fishermen will be allowed to harvest and sell sea urchins from Gippsland's Corner Inlet in a bid to improve seagrass habitat at a crucial wetlands biodiversity site. The Nooramunga Marine and Coastal Park, a Ramsar-listed site, has become overwhelmed by the native purple-spined sea urchins. Last year, volunteers culled more than 57,000 of the creatures in Corner Inlet. But even that has not been enough to curb their enthusiasm for the seagrass. It has led to a unique partnership between conservation bodies and the fishing industry who both have a stake in the issue.

Parks Victoria's acting manager for South Gippsland, Gerard Delaney, said authorities were at a loss to explain the recent rise in the urchin's population. But he said the surge in numbers had put the biological diversity of the area in danger because they have strayed from their usual diet. It has created large areas of bare ocean floor called "urchin barrens". The partnership with the seafood industry may be the best way to tackle the problem.

But he cautioned that it would not be a free-for-all. "There's still very tight constraints on it. We'll be monitoring pre and post the harvests and how successful they are," Mr Delaney said. Parks Victoria is still planning another cull for later in the year, depending on the success of the commercial harvest.
more……..www.seagrasswatch.org/news_May2018archives.htm

Queensland Government announces $40m reef fund boost (Australia)
23 May 2018, NEWS.com.au

The Queensland Government will provide a $40 million boost to funding for the Great Barrier Reef in its June budget. Premier Annastacia Palaszczuk made the announcement today, with the funds to be invested in reef protection and water quality programs. Of that, $26 million will be extra funding over four years for the Joint Field Management Program for reef protection measures, Ms Palaszczuk said.

A further $13.8 million over four years will be allocated to extend a water quality program to enable graziers and cane and banana growers to adopt improved practices. The announcement comes after the Turnbull Government committed more than $500 million to restoring and protecting the reef in the federal budget.
more……..www.seagrasswatch.org/news_May2018archives.htm

Weed build-up annoys locals (WA, Australia)
23 May 2018, The West Australian

A Warnbro resident has spoken out about the build-up of seaweed on a Rockingham beach, saying it needs to be cleared if the city is to maximise tourism. Lawrie Niven is a long-term resident and remembers Waikiki beach – opposite the former Waikiki Hotel site – winning awards for its cleanliness. However, he claims that in recent years the beach has been neglected and beachgoers have been put off by the build-up of seaweed.

Mr Nevin said the City of Rockingham should clean the beach, as it does Rockingham Foreshore. Rockingham Mayor Barry Sammels said the City received few complaints regarding the beach and because Warnbro Sound was part of the Shoalwater Marine Park, removing the seaweed was not an option.

“Beach cleaning on Rockingham Beach foreshore is done specifically to remove litter left behind by beach users or deposited by wave action, the amount of sea grass (wrack) removed during this process is very minor compared to the amount of waste material removed,” he said. “The volume of wrack deposited on Safety Bay foreshore is a significant portion of the material generated by sea grass meadows in the Shoalwater Marine Park (SMP), so this area is the prime source of food and nutrients for the marine park. “Beach-cleaning activities would damage these deposits. Given the significant decline in seagrass meadows in Cockburn Sound there is a need to protect the seagrass meadows and natural processes in Warnbro Sound. “The City’s management practice on the Safety Bay

foreshore is to continue allowing natural processes to deposit, move and remove the wrack because of the significant environmental benefits that result."
more……..www.seagrasswatch.org/news_May2018archives.htm

Carnivore snacks debunk theory of turtles' strict herbivore diet (Australia)

23 May 2018, UQ News

A study has revealed the diet of green turtles is more complex than previously thought, providing insights which could influence conservation and management strategies. University of Queensland PhD student Owen Coffee said mature green turtles continued to snack on jellyfish and small invertebrates, and did not switch solely to a plant-based diet.

The study, coinciding with World Turtle Day (23 May), examined diets of foraging green turtles at three sites at Port Curtis in Central Queensland. The sites included discrete 'home' areas in reef habitats and sandy seagrass meadows. The researchers studied the gullet contents of the animals before safely releasing them. Turtles were recorded eating 30 different food items, categorised as mangrove, seagrass, red algae, brown algae, green algae, animal material or other items incidentally ingested.
more……..www.seagrasswatch.org/news_May2018archives.htm

Dead 'Dugong' sighting on Fijian shore surprises villagers (Fiji)

22 May 2018, Fiji Sun Online

The public is advised to contact the fisheries department or the University of the South Pacific (USP) should they spot a rare sea creature dead or alive on our shores. The notice comes after the carcass of a dugong was spotted washed ashore yesterday at Kiuva Beach, Tailevu, by two villagers of Nasemila. Such rare findings could present an opportunity for the authorities to study and investigate why or what caused its death and why or how it was in our shores.

The carcass was spotted by Virlikesa Karalo, 24, and Maleli Veidreyaki, 27. "We just came to walk along the beach and we saw something float¬ing near the shore. We thought it was some wood, but as we got closer, we realised that it was some sort of sea animal," Mr Karalo. They had also assumed that it was a dead seal. "We touched it, it was not moving and then we dragged it ashore." The villagers have burnt the carcass, fearing that its blood may draw sharks closer to an area where many children from the village use as a popular swimming spot.
more……..www.seagrasswatch.org/news_May2018archives.htm

Startled by the turtles - The story of India's turtles and attempts to save them (India)

22 May 2018, Research Matters

In March 2018, the city of Mumbai woke up to long bygone visitors - Olive Ridley turtles were crawling on the Versova beach after two decades! Mumbai beaches, infamous for being a pile of garbage, was being cleaned for years for this grand welcome.

India is home to five species of sea turtles; Olive Ridley (*Lepidochelys olivacea*), Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*), Loggerhead (*Caretta caretta*) and Leatherback (*Dermochelys coriacea*) turtles can be found all along the coastline spanning 7500 km. Turtles play a crucial role in nutrient cycling as they transport nutrients from the water to dunes that are nutrient-deficit, resulting in healthy beaches. Sea turtles feed on seagrass thereby preventing their overgrowth that can hinder the water current and result in their decay. "In the Lakshadweep, green turtles have been doing the damnedest thing. In Agatti, about 550 turtles counted a few years ago decimated the meadows", says Mr. Muralidharan M, a Field Director at Dakshin Foundation, who works on turtle conservation projects in India.

However, all is not well with these magnificent and versatile creatures. In recent times, their survival is threatened by many factors. They are often victims of incidental catch in trawler fishing vessels and gill nets that scoop fish (and many other organisms) from the bottom of the sea. Their nesting spaces are destroyed by casuarina trees planted to reduce calamities during strong winds and for timber. Feral dogs, raptor birds such as eagles and kites, and a few communities eat their eggs. Unplanned beach developments involving the construction of resorts is a threat due to expanding tourism. Hunting and exploitation of turtles for meat and climate change are other woes these turtles face. Realising the importance of turtles, many researchers, organisations and individuals have come together to address their declining numbers in the country and to protect coastal ecosystems. There are conservation efforts at multiple scales and levels, including educating local communities of the benefits of these turtles.
more……..www.seagrasswatch.org/news_May2018archives.htm

Seagrass 'supports 20% of fisheries', Swansea Uni finds (Wales, UK)

21 May 2018, BBC News

Popular fish for eating such as cod and pollock are reliant on the existence of healthy seagrass meadows, research led by Swansea University has found. The meadows support the production of a fifth of the world's largest fisheries, the joint study with Cardiff and Stockholm universities showed. Researchers called for better management of seagrass zones to protect the future of fish stocks they support.

Globally, the meadows are in decline. Lead researcher Dr Richard Unsworth of Swansea University explained seagrass acted as a nursery habitat for fish stocks such as Atlantic cod, walleye pollock and tiger prawns. The meadows also had a knock-on supportive effect to adjacent deep water habitats by providing a source of food to nearby fishery zones. Dr Unsworth wants seagrass zones to be officially recognised and protected from threats such as land run-off, coastal development, boat damage and trawling.

Cardiff University researcher Dr Leanne Cullen-Unsworth, who also carried out work along with Stockholm's Dr Lina Mtwana Nordlund, added: "The chasm that exists between coastal habitat conservation and fisheries management needs to be filled to maximise the chances of seagrass meadows supporting fisheries, so that they can continue to support human wellbeing."

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Professor parts ways with James Cook University over climate change studies battle (QLD, Australia)

18 May 2018, TropicNow

Controversial James Cook University professor Peter Ridd is no longer working at the university, but it's unclear if he's been sacked or resigned from his position. Townsville-based Prof. Ridd and JCU have been at legal loggerheads over climate change research, with their stoush currently before the Federal Court as the Professor seeks to overturn a “serious misconduct” ruling brought against him by the university last year.

It stems from Prof. Ridd publicly criticising the university in media interviews and claiming that JCU could not be trusted to provide accurate research results. This, the university alleged, breached the university’s code of conduct. Due to a non-disclosure agreement, neither parties would comment on whether he was fired or resigned from the university.

In August last year, Professor Ridd was interviewed by Alan Jones on Sky News about a chapter in the book Climate Change: The Facts 2017 published by the Institute of Public Affairs. In his chapter, Professor Ridd wrote: "Policy science regarding the Great Barrier Reef is almost never checked." The JCU spokesman said the university "strongly supports academic freedom".

more……..www.seagrasswatch.org/news_May2018archives.htm

Great Barrier Reef sediment flow reduced by 97 per cent at test site (Australia)

18 May 2018, The Sydney Morning Herald

A north Queensland test site has reduced the amount of sediment flowing into the Great Barrier Reef by 97 per cent, Greening Australia has revealed. The 1.5-hectare site forms part of the Burdekin River catchment, south of Townsville, which has been identified as the highest sediment-producing river catchment impacting the Great Barrier Reef.

This week at Strathalbyn, a privately owned cattle property about three hours south of Townsville, Greening Australia's gully remediation expert Damon Telfer said results showed they could reduce sediment at the site by 97 per cent. Mr Telfer said sediment suspended in the water flowing through a “control eroded gully” at Strathalbyn, with no modification, was “between 60 and 180 grams of sediment per litre”. At another unmodified gully, the suspended solids was 400 grams per litre. In areas where the erosion had been repaired, Mr Telfer said the results were stunning.

The soil at Strathalbyn is fine-grained sodic soil, which is a high erosion risk as it does not bind well. As part of its scheme, Greening Australia bulldozes the entrenched, tunnel-eroded soil, then battens and revegetates the soil to completely recreate the original landlines at Strathalbyn. It plans to repair 15 hectares of eroded Strathalbyn soil in 2018, a tenfold increase on 2017, and wants to raise $132 million to rehabilitate 2000 hectares at about 35 different locations by 2030. Australian Institute of Marine Science marine biologist Ken Anthony said the erosion project should be scaled up quickly, because the impact of climate change "would begin to bite by 2030". A spokesman for Environment Minister Leeanne Enoch said the initial results were encouraging. The department was cautiously optimistic, but cautioned the erosion measures had only been through one wet season.

more……..www.seagrasswatch.org/news_May2018archives.htm

Things you only know if you're a dugong keeper (Australia)
16 May 2018, Time Out (Australia)

According to Samantha Hillman, 29, senior dugong keeper at Sea Life Sydney Aquarium, dugongs aren't as placid as they seem. They've also a palate for protected plants. "In the wild they eat seagrass, but seagrass is a protected species of plant so we don't actually go out and harvest it because we'd be ruining other marine habitats. So here at Sea Life we feed them lettuce – between 60-80 kg daily," Hillman said. But they're picky, "Every 10-15 minutes we're replacing their trays. Naturally seagrass is quite crunchy and obviously lettuce will become soggy after the 15 minute mark, so then they're not very interested in it."

The aquarium's sea cows are safest in human care. "Our dugongs are rescue dugongs. Our female sleeps on the surface and naturally wild dugongs sleep on the bottom. This is one of the reasons she wasn't released, because she could be hit by boat or be a prime target for a shark because her belly would be so exposed and she's quite vulnerable sitting at the surface."
more……..www.seagrasswatch.org/news_May2018archives.htm

Manatee released back into the wild after being rescued months before (USA)
15 May 2018, FirstCoastNews.com WTLV-WJXX

Dozens experienced the release of a manatee back into the wild, Tuesday at the Oak Harbor boat ramp. It's not your everyday sight on the First Coast, but there are many qualities that separate this manatee from all others.

Vilanzo, the 900-pound mammal was rescued in March on Vilano Beach. In March, the manatee was taken to the Jacksonville Zoo's Manatee Critical Care Center. It stayed in rehab for two months. Craig Miller, the Zoo's Curator of Mammals, who also serves as Chair of the Manatee Rescue and Rehabilitation Partnership, said the zoo will do anything to conserve the animals and their environment. Miller is certain after months of strengthening, Vilanzo was ready to return to the wild.

According to the Humane Society, you can help conserve more animals like Vilanzo and the environment by: Respecting speed limits in manatee zones, designated areas throughout Florida in which boats are required to travel at minimum or no-wake speeds; Staying in deep water channels, avoid boating over shallow seagrass beds, where manatees might be feeding or the grass can be destroyed; If you're operating a small powerboat, consider using a propellor guard, a metal cage that will help prevent strikes; Wear polarized sunglasses to help you see below the water's surface; Pay close attention to your surroundings. If you see a manatee when operating a powerboat, maintain a safe distance of at least 50 feet and cut your motor.
more……..www.seagrasswatch.org/news_May2018archives.htm

Jurien Bay Boat Harbour seagrass build-up may be solved by air bubble curtain (WA, Australia)
14 May 2018, Community Newspaper Group

A curtain of air bubbles may be a solution to seagrass build-up at a boat harbour north of Perth. Department of Transport maritime projects manager James Holder said the department was starting a $150,000 trial at Jurien Bay Boat Harbour as part of an ongoing investigation to improve conditions at the facility. Mr Holder said it would test if an air bubble curtain could reduce the amount of seagrass wrack entering the harbour during winter. Mr Holder said storms would activat the compressor and the bubble curtain could minimise annual build-up that causes poor water quality and kills fish in the harbour.

Bubble curtains have been used overseas on commercial and environmental applications, including for aeration, silt management, weed and pollution control. The department has used the technology at other locations in WA, including on a smaller scale within Fremantle Fishing Boat Harbour to contain rubbish. Mr Holder said while they hoped the trial would be successful, there were some uncertainties about the 150m bubble curtain. Mr Holder said during the trial, the department would continue investigating other structural solutions to seagrass wrack build-up at the harbour.
more……..www.seagrasswatch.org/news_May2018archives.htm

Warning Cape York land-clearing approval puts Great Barrier Reef at risk (QLD, Australia)
13 May 2018, The Guardian

The Turnbull government faces a test of its $500m budget commitment to protect the Great Barrier Reef, after federal environment officials ruled that a farmer could clear almost 2,000 hectares of Queensland forest. A draft report from the Department of Environment recommends that the clearing at Kingvale station on Cape York, which was authorised under the former Newman state government 2014, should be permitted to go ahead with conditions. This is despite the report finding that there were endangered species on the land to be cleared, and the government's own consulting scientist warning that it would likely increase sediment runoff.

The land is in the Normanby catchment and the river system flows into Princess Charlotte Bay, an untouched tidal wetland that has large seagrass beds, an important part of the reef ecosystem. Advice from the Great Barrier Reef Marine Park Authority, referred to in the report, warned “increases in sedimentation and nutrients may result in loss of biodiversity by promoting algae growth and reducing the light availability for coral, seagrass, and benthic organisms, which may result in detrimental impacts to the marine ecosystem.”

The report by Dr Jeff Shellberg advised that the increase would come from a variety of cumulative sources on site: sheet erosion, rill and gully erosion, bank erosion, road and fence erosion, and possible sub-surface erosion (piping). He also warned that nutrient and herbicide loads could also increase; and that fine sediment pollution from Kingvale station is likely to be a contributor to poor water quality in the Great Barrier Reef World Heritage area. But another consultant said he thought the risks could be managed by ensuring the land clearing was restricted to areas with a gradient of less than 2%. The draft recommendation imposes conditions including keeping a buffer of vegetation around waterways, maintaining 50% native vegetation ground cover, and building contours to manage water flows during the rainy season.

more……..www.seagrasswatch.org/news_May2018archives.htm

Related article
Why is land clearing bad news for the Great Barrier Reef? (25 May 2018, ABC Online)
http://www.abc.net.au/news/science/2018-05-25/why-is-land-clearing-bad-news-for-the-great-barrier-reef/9783420

Cebu town has healthiest coral habitat cover in Central Visayas (Philippines)

10 May 2018, Manila Bulletin (Philippines)

Two barangays in Sibonga town, Cebu, have the healthiest massive live coral covers in Central Visayas based on an assessment survey by the Department of Environment and Natural Resources (DENR). The survey was made as the department embarked on a 10-year Coastal and Marine Ecosystem Management Program (CMEMP).

Lorenz Gideon Esmero, the regional focal person of CMEMP, said Barangays Sabang and Poblacion got the highest coastal marine environmental rating of 86 percent in terms of live corals habitat. His CMEMP team had assessed 32 local government units in the region, the most LGUs in the country that have been assessed so far. Esmero said the habitat assessment aims to provide the local governments with scientific-based data and decision for planning and management of sustainable coastal marine programs in their areas.

In 2017, the CMEMP team assessed over 9,388 hectares of coral cover, exceeding its target of 5,266 hectares. It also assessed 12,571 hectares of seagrass cover from the target of 5,261 hectares. This year the team expects to assess 1,800 hectares of corals and seagrass covering Cebu, Bohol, Negros Oriental, and Siquijor, Esmero said.

more……..www.seagrasswatch.org/news_May2018archives.htm

Two manatee lost in St. Croix Waters (U.S. Virgin Islands)

10 May 2018, ST Thomassource.com

Friends of the St. Croix National Parks sent out an alert this morning for the community to be on the lookout for two manatee sighted by multiple snorkelers on St. Croix. Friends of the Park has partnered with the Department of Planning and National Resources, the National Park Service, the U.S. Fish & Wildlife Service, and the Puerto Rico Manatee Conservation Center, to locate and rescue the manatees.

This is the first time a manatee sighting has been reported in St. Croix in decades, said Zandy Hillis-Starr, resource management specialist of the National Park Service. The closest manatee population is in Puerto Rico. The first of the pair was seen on Sunday, about 150 feet south of the pier in Frederiksted. The other was spotted near Buck Island yesterday. Hillis-Star stressed the importance of finding the manatees quickly.

Once the pair has been located and their health properly assessed, a net will be used to secure them on a boat, from which aerial assistance by the U.S. Coast Guard can assist in transporting the manatees back to Puerto Rico. Additional manatee sightings can be reported to the National Park Service in St. Croix or to @manatipr.org on Facebook.

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Bubbling up: listening to photosynthesis may help reef conservation (Australia)

10 May 2018, Cosmos

Marine scientists using underwater microphones have managed to eavesdrop on the sound of photosynthesis. The process works by measuring the rate at which underwater plants such as seagrass, kelp and other algae release tiny bubbles of oxygen, created as a byproduct of photosynthesis. At low rates of photosynthesis, marine plants simply release dissolved oxygen into the water. But at higher rates, oxygen collects on the leaves as bubbles. Eventually, these grow large enough to break loose and rise to the surface, where they reach the air without dissolving.

Traditional measurements of dissolved oxygen miss these bubbles and therefore underestimate the rate of photosynthesis in a seagrass bed or kelp forest — an important omission for climate scientists wanting to use oxygen production as a proxy for the rate at which marine plants removes carbon dioxide from the water and, by extension, from the atmosphere. But that doesn't have to be the case. It is also possible to use a sonar-like process to monitor the rate at which the bubbles are released, Jean-Pierre Hermand, an acoustical oceanographer at the Free University of Brussels, Belgium, reported this week at a meeting of the Acoustical Society of America in Minneapolis, Minnesota.

Physical acoustics is very sensitive to the presence of bubbles, Hermand says, adding that cardiologists use the same effect when they inject microbubbles into the body, then monitor them by infrasound to determine blood flow through constricted arteries. Better yet, says Hermand, it's possible to use this process to monitor oxygen production over the length or breadth of an entire seagrass meadow. "The longest I have done is 1.5 kilometres," he says.
more……..www.seagrasswatch.org/news_May2018archives.htm

New addition to James Cook University's Turtle Health Research Facility (QLD, Australia)
10 May 2018, Townsville Bulletin

Baby turtles have a new place to bask in the sun and swim after the opening of a nursery at James Cook University's Turtle Health Research Facility yesterday. The nursery is an addition to the centre's main facility known as the "Caraplace", which opened in August 2016.

Associate Professor Ellen Ariel said the opening of the new section named the "Outer Shell" would allow further research into the species. The indoor Caraplace can house 48 little green sea turtle hatchlings each in their own tank where they can freely eat, swim and rest on a sub-surface platform. The Outer Shell will protect hatchlings from predators while allowing them exposure to sunlight via retractable shade sails that will keep them cool in summer and warm in winter.
more……..www.seagrasswatch.org/news_May2018archives.htm

Another dead dugong — or sea cow — washes up in Palawan (Philippines)
08 May 2018, Philippines Lifestyle

The body of a seven foot long male dugong has been found washed ashore in Puerto Princesa City. Vivian Soriano, senior ecosystems management specialist of the Community Environment and Natural Resources Office, said the dead sea cow was observed to have scars and scratches all over its body. The creature was found off Purok Baybay, Barangay Babuyan, by fisherman Brandon Tunga at about 1pm on Saturday (May 5).

Soriano said an autopsy led by Dr Theresa Aquino of the Marine Wildlife Watch of the Philippines revealed that the sea cow had "fluid in the chest cavity" with its stomach full of undigested food with no plastic or garbage inside as previously suspected. The actual cause of death could not be determined although the necropsy findings hinted to the possibility of drowning. This is the second time this year that a dead dugong was reported from the area.
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State and baymen finding common ground (NY, USA)
07 May 2018, Shelter Island Reporter

Revisions to a town-developed plan for an underwater seagrass project united baymen and members of the Town Board in May. Councilman Jim Colligan, who had led the effort to write the initial plan, acknowledged at last month's meeting with the baymen that it was his mistake not to have involved them from the outset. He quickly agreed to strike from the plan all mentions of fines and violations. The aim isn't to punish, he said, but to adopt a plan to guide anyone from harming the underwater meadows of seagrass.

Tom Field, a spokesman for the baymen, let Soren Dahl, New York State Seagrass Coordinator with the New York State Department of Environmental Conservation, know from the outset of the May 2 meeting that local people control sea bottom resources. Shelter Island is one of the areas where viable seagrass still exists, Mr. Dahl said. If anything, he wants to understand why, especially in areas like Coecles Harbor, and why it isn't thriving in places like West Neck Harbor. If no actions are taken, he said more seagrass could be lost. Trying to replant damaged seagrass hasn't proven very effective, he said, so the emphasis should be on protecting what exists.

Communities throughout the state and around the country have plans, but they're unfunded mandates, leaving it to local communities to find a way to reduce pollutants with little money to accomplish the goal. The baymen generally agreed that pollution from chemicals — from septic systems or other sources — is the main problem. Fisherman Steve Lenox said because of algal blooms, the seagrass isn't getting the light it needs in some areas. Mr. Dahl said he's concerned about eelgrass being torn from the roots, something the baymen said comes from outsiders who don't know the local waters.
more……..www.seagrasswatch.org/news_May2018archives.htm

Seagrass survey completed in Sarasota Bay (USA)

06 May 2018, WWSB ABC 7

Another successful year for the annual seagrass survey in Sarasota Bay. Over one hundred volunteers using a part of their Saturday to help the Sarasota Bay Estuary Program analyze seagrass. Volunteers found different types of grass while snorkeling or kayaking in Sarasota, then input the data using a smart phone app.

Registered volunteers helped identify seagrass species, in an effort to collect data for Sarasota County's Seagrass Monitoring Program. The seagrass survey celebrates Sarasota County's commitment to protecting its water resources and focuses on increasing awareness of the economic and environmental value of seagrass habitat.
more……..www.seagrasswatch.org/news_May2018archives.htm

WWF accused of politicising plight of Queensland dugongs as debate rages over gill net purchase (QLD, Australia)

06 May 2018, ABC Online

The World Wildlife Fund (WWF) has been accused of playing political stunts and making a "money grab" as a divisive debate rages over the future of far north Queensland's dugong population. The conservation group this week signed a deal to purchase the last remaining commercial gill net off the east coast of Cape York and intends to retire the licence to protect vulnerable species. It says it raised a confidential six-figure sum from nearly 3,000 donors to make the deal.

The nets can span large distances along the seabed in order to trap fish swimming through and are often blamed for indiscriminately trapping endangered animals including dugongs and turtles. But the purchase has raised the ire of a motley crew including conservationists, academics and fishermen. James Cook University's Geoff McPherson, a former fisheries officer and marine researcher, said it appeared the WWF was more interested in gaining political sway than protecting wildlife. He said fisherman using gill nets were required to stay near them, and not many dugongs were actually caught. The WWF's head of oceans Richard Leck rejected the suggestion that gill nets were of low concern. The commercial fishing industry is also up in arms over the conservation group's purchase of the gill net.

Colin Riddell, environmentalist and campaigner against hunting by traditional owners, said gill nets were not a big killer of the protected species. Duane Fraser, a Wulgurukaba traditional owner from the Townsville region, said he was growing increasingly frustrated by the "seemingly everlasting" debate about traditional hunting. Mr Fraser said traditional owners had already self imposed quotas on the number of animals taken from the ocean. He said there were so few traditional hunters in Queensland that it was "physically not possible" to catch dugongs and turtles in quantities "that some individuals claim they are capturing".
more……..www.seagrasswatch.org/news_May2018archives.htm

6 drones on mission to save Krishna's sea cows (India)

06 May 2018, Daily Pioneer

India is scrambling to protect its critically endangered dugongs with the help of the unmanned aerial technology i.e. drones. Dugong, the only marine herbivorous mammal, also finds mention in the Indian mythology as Lord Krishna’s humble sea cow.

Being imported from New Zealand, six drones will be pressed into service in Gulf of Mannar (Tamil Nadu), Gulf of Kutch (Gujarat) and Andaman & Nicobar to keep a tab on the movement and habitat of dugongs whose population has sharply declined to less than 200 due to entanglement in fishing nets, killing for its meat, speeding boat strikes and depleting seagrass bed. With a population of 100, the Gulf of Mannar has the highest number of dugongs. The Andaman & Nicobar Islands follow with 50-60 of them, while the Gulf of Kutch, where a live dugong has not been seen in the last 7-8 years, might have as few as 10 individuals, said Dr K Sivakumar, research scientist and dugong expert at the Dehradun-based Wildlife Institute of India (WII) which is executing the project.

After the drone project gets underway, there are plans to tag at least 10 dugongs so that they can be closely monitored. Of the three populations in Indian waters, Sivakumar feels those found in the Gulf of Mannar have the best chance of surviving and breeding. That is because this area has the best seagrass meadows. In the Andaman & Nicobar area, the seagrass is very patchy and cannot support a big population. MS Negi, ADG (Wildlife) in the Environment Ministry said status of seagrass meadows including composition, the threats, the need for monitoring the population, conservation and management imperatives and awareness and capacity building are part of the Dugong recovery plan.
more……..www.seagrasswatch.org/news_May2018archives.htm

Greece's new startup culture: technology and seagrass sunglasses (Greece)
03 May 2018, Reuters

Greek student Stavros Tsompanidis was walking on a beach when he saw a business idea in the piles of dried-up seagrass. He decided to recycle it to make iPhone cases, sunglasses and gift boxes. Four years on, his startup, PHEE, sells its products across Greece and abroad. He represents a change in mindset among young Greeks who are turning to entrepreneurship as a result of the crisis.
more……..www.seagrasswatch.org/news_May2018archives.htm

Canal skimmer project seeks clean sweep (FL, USA)
02 May 2018, KeysNews.com

The catamaran powerboat slowly maneuvered into the oceanside Tavernier basin, its twin hulls swallowing a swath of floating seagrass. Mate Hayley Colarusso raked the seagrass into metal troughs in the centerline of the "RV Clean Waters," Adventure Environmental Inc.'s flat-deck workboat. She inspected the skimming harvest, pulling out discarded water bottles, plastic shopping bags and the occasional lost shoe. The main focus of the sweep was to keep seagrass and seaweed from clogging canals. Floating marine vegetation pushed by wind and tides into Florida Keys canal systems often stays there, eventually degrading into a threat to water quality.

Monroe County in late March launched a $147,168 pilot project to see if collecting the canal-bound marine vegetation proves more effective than trying to keep it at bay. A six-month trial period, with the skimmer boat working two days a week in Key Largo and Tavernier, was funded by a water-quality grant from Florida Department of Environmental Protection under a Florida Keys Stewardship Act appropriation. The vegetation-removal project is separate from the effort to clean Keys canals of Hurricane Irma debris.

Monroe County in recent years paid for a canal-restoration test program that included using air-curtain weed gates to block seagrass from entering canal systems. The hurricane destroyed most of the weed gates. With no money to replace the gates, it was decided to try a pilot project with the skimming boat. Adventure Environmental, a company with Florida Keys roots, has been running its twin-engine skimmer boats, 25 feet long with a 10-foot beam, to clean trash and seagrass from Miami Beach marinas and canals for five or six years, said Greg Tolpin, an Upper Keys resident and company vice president.
more……..www.seagrasswatch.org/news_May2018archives.htm

The Protectors of the Inlet (FL, USA)
01 May 2018, InJupiter Magazine

Jupiter Inlet, a 400 foot-wide turquoise channel where the Loxahatchee and Indian River meet and spill out to the open waters of the eastern Florida coast, is teeming with marine life, mangrove swamp ecosystems, and archaeological deposits. The Jupiter Inlet Foundation (JIF), a recently formed non-profit corporation dedicated to the preservation of the natural wonders and historical treasures found in and around the Jupiter Inlet, has made the protection of this area its first order of business.

The Suni Sands area lies along an estuary that contains a large seagrass bed, which is the food source for green sea turtles, manatees, and fish. The seagrass also acts as a sanctuary for juvenile sawfish, stingrays, and a myriad of other marine species. Given the site's most recent use, there has likely been minimal impact to the seagrass bed and to the aquatic and bird life that feed there. Soon, that might change. The board members of JIF are concerned that new development and more intensive boat use in this area may pose a serious threat to this fragile ecosystem. Whether by dredging, anchoring of boars, or via propeller impact, damage to this vital seagrass bed and habitat may be irreversible.

In order to protect the Suni Sands parcel, JIF looks to bring their case to the Florida Department of Environmental Protection (FDEP) to add the area to the Aquatic Preserve Program. As a sustained aquatic preserve, the waterfront estuary would be protected under Florida state statute of the Aquatic Preserve Act. If JIF succeeds in conserving and preserving the estuary, their next goal is to partner with universities and schools to facilitate awareness to the community through historical, archaeological, and environmental management programs. They will implement this precise model for subsequent projects.
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CONFERENCES

The 5th International Marine Conservation Congress (24-29 June 2018, Kuching, Sarawak)

Theme: Make Marine Science Matter!

To conserve the world's oceans we must go beyond science, and use it to inform policy and management, and ultimately to catalyze change. The Society for Conservation Biology's International Marine Conservation Congress (IMCC) brings together conservation professionals and students to develop new and powerful tools to further marine conservation science and policy. With over 700 marine conservation professionals and students in attendance, IMCC is the most important international event for anyone involved in marine conservation.

More information:
To get important updates on IMCC5, visit: https://conbio.org/mini-sites/imcc5/
Follow on Facebook @ IMCC2018 and Twitter #IMCC2018

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 48,188 views to date)

Seagrass & other matters

World Seagrass Association http://wsa.seagrassonline.org
Keep up to date on what's happening with the around the world from the WSA. The World Seagrass Association is a global network of scientists and coastal managers committed to research, protection and management of the world's seagrasses. WSA members come from many countries and include leading scientists in marine and seagrass biology. The association supports training and information exchange and raises global awareness of seagrass science and environmental management issues.

World Seagrass Association on Twitter @Seagrass_WSA
Everything seagrass related. World Seagrass Association official account. Follow to stay up-to-date with global seagrass info. Moderator: LM Nordlund

Dugong & Seagrass Research Toolkit http://www.conservation.tools/
Dugongs and seagrass are under threat from human activities. By using this Toolkit you should be able to gather information to:
understand better the status of dugongs, seagrass and communities at your research site;
understand threats to dugongs and seagrasses and help find solutions to those threats;
understand the communities that value or may affect dugongs and seagrasses.

The toolkit will guide you to the techniques and tools most suitable to your team capacity, budget and timeline. By using the toolkit, you will also be helping to standardise data sets and methods across different countries and sites, allowing for better comparison of global dugong and seagrass conservation status.

The Toolkit is designed for use by marine natural resource managers and decision-makers (government and non-government) and for dugong and seagrass researchers. The Toolkit will assist organisations to assess funding proposals by describing the scope of work, choice of techniques and tools, and budget.

FROM HQ

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