31 May 2019

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IN THIS BULLETIN

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NEWS

New Isle Of Wight Marine Conservation Zones Revealed (England, UK)

31 May 2019, by Lauren Roberts, MaIsle of Wight Radio

The Isle of Wight is to become home to two new marine conservation zones. The Government has announced the designation of 41 new Marine Conservation Zones around the coasts of England and Northern Ireland. These areas have been recognised for their special habitats and wildlife, and include Yarmouth to Cowes and Bembridge.

“We are very pleased to see two local areas given this level of recognition,” said Debbie Tann, CEO of Hampshire & Isle of Wight Wildlife Trust. We have some incredible marine species and habitats here – from colour changing cuttlefish and magnificent seagrass meadows to seahorses and stalked jellyfish – and we know that, with such busy local waters, our wildlife can really struggle. Properly managed, these new underwater ‘nature reserves’ around the Island should provide much needed safe-havens and will form part of a wider Nature Recovery Network across English waters.”

As reported by Isle of Wight Radio, the seagrass meadows, described as “underwater rainforests” between Norris (East Cowes) and Ryde, were not considered as part of the consultation. “We are, of course, disappointed that we don’t yet have a complete local network, as we are still missing protections for other important habitats and areas such as the seagrass meadows found between Norris and Ryde and the native oyster beds at Fareham Creek. However, today’s announcement does take us a significant step closer to creating a wilder future for our seas,” Debbie added.
more……..https://iwradio.co.uk/2019/05/31/new-isle-of-wight-marine-conservation-zones-revealed/

Related article
Isle of Wight marine life protected with blue belt expansion (31 May 2019, Island Echo)
https://www.islandecho.co.uk/isle-of-wight-marine-life-protected-with-blue-belt-expansion/

Dorset's wildlife given a boost from six marine nature reserves (England, UK)

31 May 2019, by Alex Cutler, Dorset Echo

Dorset's diverse selection of marine wildlife are set to thrive as six Marine Conservation Zones (MCZs), containing a range of Dorset's most important species and habitats have been designated across the county. The sites are: Albert Field; Purbeck Coast; South of Portland; Southbourne Rough; Studland Bay and West of Wight-Barfleur. These cover a wide range of underwater habitats, from deep, tide-swept rocky cliffs to sheltered seagrass meadows.

This good news comes after many years of campaigning by The Dorset Wildlife Trust and others to get support for the designation of MCZs across England. In 2013, three were designated in Dorset: Chesil Beach and Stennis Ledges, South Dorset and Poole Rocks. Designation of these sites will allow the important features of each site to recover from damaging activities, such as trawling and dredging. The resulting protection of these sites that designation should lead to will allow marine wildlife such as black bream, spiny seahorses and peacock’s tail seaweed to thrive in Dorset and create a ‘blue-belt’ of protected places for marine wildlife in Dorset, and England.

“Today’s announcement is a fantastic win for both marine conservation and all those who earn a living from the sea as it is an important step to help restore the health and productivity of our seas,” said Dr Simon Cripps, DWT Chief Executive. "In particular we are delighted that Studland Bay has been designated as part of a network of protection as we have for many years led the push for its inclusion into the network.” Studland Bay, with its seagrass meadow, is home to both species of native seahorses, all five species of pipefish and is a nursery area for a number of commercial finfish such as pollack, black bream and bass. If properly managed these MCZs will help protect marine life and livelihoods for years to come.
more……..https://www.dorsetecho.co.uk/news/17675985.dorsets-wildlife-given-a-boost-from-six-marine-nature-reserves/

Researchers create online assessment tool to detect blue carbon (Philippines)

29 May 2019, by Dhel Nazario, Manila Bulletin

Researchers from the University of the Philippines Diliman have created an online community-based assessment tool to assess the presence of blue carbon in coastal areas, by utilizing the power of satellite imagery. Blue carbon refers to the carbon captured and stored by the coastal ecosystems, specifically mangroves, and seagrasses. When these ecosystems are degraded, they release the captured carbon back to the atmosphere, greatly contributing to climate change. It is thus beneficial to everyone that our mangroves and seagrasses are conserved and protected.

The Integrated Assessment and Modelling of Blue Carbon Ecosystems for Conservation and Adaptive Management (IAMBlueCECAM) program, led by Dr. Ariel C. Blanco and with funding support from the Department of Science and Technology-Philippine Council for Industry, Energy and Emerging Technology Research and Development (DOST-PCIEERD), produced an accurate and detailed inventory of mangrove forests and seagrass habitats in selected pilot sites using remotely-sensed data and ground-based measurements as one of its major outputs. In addition to an extent, blue carbon ecosystem zonation, species composition, and above-ground biomass were mapped using methodologies developed by the program.

Dr. Blanco calls on collective action to alleviate deterioration of these ecosystems, “these blue carbon ecosystems are heavily impacted by human activities, including coastal developments. The citizens can serve as monitors, sentinels, and scientists for the environment by gathering data, reporting their observations, and contributing knowledge towards crafting measures to arrest ecosystem degradation.” Researchers have also developed a web tool that allows the public to contribute data on mangroves and seagrasses in the country.
more……..https://news.mb.com.ph/2019/05/29/researchers-create-online-assessment-tool-to-detect-blue-carbon/

Biscayne Bay Seagrass Habitats Near Total Collapse (FL, USA)

27 May 2019, by Rumya Sundaram, Key News

A blockbuster report this past February concluded that in certain spots, up to 93 percent of Biscayne Bay's seagrass is dead. The report was so grave that several groups, both inside and outside of government, are rapidly trying to come up with solutions. The "Report on the Findings of the County's Study on the Decline of Seagrass and Hardbottom Habitat in Biscayne Bay" outlines the current state of seagrass habitat and the changes it has incurred over the past several years.

Biscayne Bay has historically been an estuary where freshwater flows from the Florida mainland and then mixes with saltwater from the Atlantic Ocean. Seagrasses have been particularly hard hit by changes in fresh water flow. Most importantly, according to the County's report, the change in freshwater flow now means an excess of nutrients. In the past, as groundwater filtered through the Everglades' tributaries, freshwater flowing into the bay would have extremely low nutrient levels, including phosphorus and nitrogen. Now that the water has been channelized into canals, it flows directly from high-nutrient areas, such as agricultural land or leaking septic tanks, into the bay without the benefit of natural filtration. The seagrass has suffered as a result. The canals account for 60 percent of phosphorus and 16 percent of nitrogen load into the bay. The increased nutrients cause turbidity, or cloudiness, in the water that prevents photosynthesis. This is also often linked to algal blooms. The high nutrient loads also reduce the water quality which seagrass needs to thrive. Algal blooms often create environments of anoxia, or lacking oxygen. This, in turn, affects the physiology of seagrass and causes animal species to leave the area or perish.

The Miami-Dade County Commission has ordered crash studies to get a better understanding of the problem and to find solutions. The County staff report suggested improving water quality and habitat monitoring programs and a bay habitat restoration program. But it also said "infrastructure improvements" would be needed to address some of the problems at the source.

more……..https://www.keynews.org/2019/05/27/dying-bay-biscayne-bay-seagrass-habitats-near-total-collapse/

Support the inclusion of habitat in fisheries management (FL, USA)

24 May 2019, by Bonefish & Tarpon Trust, Boca Beacon

Whether you fish for bonefish, tarpon, permit or any other species, it is important to understand the vital role of habitat in our fisheries. The current marine fisheries management model uses regulations such as size limits and seasonal closures to manage harvest. That's not enough. The amount of healthy habitat we have determines the number of fish we have. Habitat is the future of our fisheries, and anglers are the voice for habitat. Bonefish & Tarpon Trust calls on anglers, guides and other stakeholders to sign the "Habitat is the Future of Florida Fisheries" petition and to contact the Florida Fish and Wildlife Conservation Commission (FWC) to voice their support for prioritizing habitat conservation.

From secluded mangrove creeks to expansive seagrass flats, healthy habitats are vital to the health of Florida's fisheries. Unfortunately, a staggering amount of Florida's coastal habitat has been decimated by development, pollution and altered freshwater flows. Florida Bay has lost one-third of its seagrass, while Tampa Bay has lost nearly half of its mangrove forests. In the Keys, the number of flats classified as "severely degraded" due to propeller scarring has increased 90 percent over the past 20 years.

The only way to protect Florida's fisheries from further decline is to conserve and restore what habitat remains. "Regulation alone cannot prevent further decline to our flats fishery," said BTT president and CEO Jim McDuffie. "The role of healthy habitats must also be incorporated into FWC's fisheries management plans, including steps to identify and assess critical habitats, to protect those that are intact, to restore those that are degraded, and to effectively manage them all. If we fail, fish populations will continue to decline, regardless of the regulations created to safeguard them."

more……..https://bocabeacon.com/news/support-the-inclusion-of-habitat-in-fisheries-management/

Tape grass could be possible solution to keeping waterways clean in SWFL (FL, USA)

22 May 2019, Wink News

That awful murky algae is creeping back in to our waterways here in Southwest Florida, and scientists are working to make sure it doesn't cause the damage SWFL experienced a year ago. One solution scientists are looking at to help keep the waters clean is tape grass. "It's really critical species of aquatic plant in the upper aquatic estuary it's kind of the forgotten seagrass," says David Ceilly of Johnson Engineering. Not only does the grass provide habitat for animals, it also diminishes the blue-green algae.

"Ecosystem services are beneficial to humanity like preventing harmful algae blooms by removing the nutrients for the water and providing a food source for small animals that are eaten by fish that we like to catch," said James Douglas, a professor at the Florida Gulf Coast University water school. And Douglas says after diving into the water that has been treated by this grass that you can really see a difference. "Preliminary we found there are some big differences in the life that we see where there is a structure and where there's not," said Douglas.

Scientists also tell us it took a while for them to notice the tape grass was diminishing because the water is so murky in color. Their goal is to restore this back to the way it was before, but that will take some time.
more……..https://www.winknews.com/2019/05/22/tape-grass-could-be-possible-solution-to-keeping-waterways-clean-in-swfl/

Fish fences across the tropical seas having large-scale devastating effects (Wales, UK)
21 May 2019, Phys.Org

Huge fish fences which are commonly used in tropical seas are causing extensive social, ecological and economic damage and are threatening marine biodiversity and human livelihoods, according to a new study. Fish fences are a common type of traditional fishing gear regularly constructed from mangrove poles and nets spanning hundreds of metres which are placed semi-permanently in shallow habitats. Using ecological, social and remote sensing methods, the research team examined the landings from fish fences over a 15-year period and assessed the health of condition of local seagrass, mangroves and reef habitats.

Dr. Richard Unsworth from Swansea University, co-author of the study, explained: "These fences which are common across the Pacific, Atlantic and Indian oceans are so large they can be seen from space using Google Earth. Because they are unselective, they catch more than 500 species, many as babies or which are of conservation concern. It's not surprising that these fisheries are having a disastrous impact on tropical marine ecosystems such as seagrass meadows, mangroves and coral reefs. "Over a 10-year period local reef fish density was found to decline by half as a result of these fisheries. Fisheries management often targets commercial and industrial fishing gears, and allows for the use of more traditional fishing gears that are often referred to as 'sustainable'. This work challenges that assumption."

Dr. Dan Exton of Operation Wallacea and lead researcher of the study, said: "Fisheries management is not just about how many fish are being caught, it's about how those fish are being removed, and understanding the far-reaching impacts of a single fishing technique. Governments, National Government Organisations and communities need to direct management efforts toward fishing techniques that are having the most harmful impacts. This could help with sustainability, and even increase short-term resilience to climate change."
more……..https://phys.org/news/2019-05-fish-tropical-seas-large-scale-devastating.html

Restoring Vital Seagrass Beds May Hinge on Transplant Methods, Timing (Portugal)
May 20, 2019, by Polita Glynn, The Pew Charitable Trusts

Restoring damaged or dying seagrass beds holds enormous potential for improving the health of coastal ecosystems, but restoration projects have a mixed record of success. Ester Serrão, associate professor at the University of Algarve in Portugal and a 2017 Pew marine fellow, published a study that found that plot size, grass species, and time of planting all affected the success of restoration efforts. Most notably, Serrão and her team found that 6-square-meter initial plot sizes may overcome a key instability threshold.

Restoration in open coastal shorelines is challenging logistically and environmentally. Storms and high wave energy can quickly erode planted areas or stir up sediments that bury seagrasses and block light, which is particularly damaging for young seagrass beds that are not yet full of well-rooted plants. However, once meadows grow large enough, their rooted rhizome networks stabilize the surrounding sediments, making them more storm resistant. Serrão and her team set out to identify the factors that influence the long-term persistence of well-rooted, established plants that can withstand extreme storms and periodic grazing by marine herbivores.

They focused on a marine protected area in southern Portugal that was once an extensive seagrass bed of approximately 30 hectares and is now part of a national park. Team members transplanted mats of seagrass during the spring, summer, and fall starting in 2008. They then monitored the restored areas three times per year during the eight-year project, studying which seagrass species survived best, the ideal season to transplant, and the plot size that offered the best long-term viability. Although all the transplants survived in the short term, many were not able to withstand winters with strong storms, which shifted sediment from the seafloor and covered the grasses or blocked their sunlight. The team found the most promising results with eelgrass (Zostera marina), especially when transplanted during spring and summer, when growth is fastest and the water is calmest. They also found that only the larger planting areas persisted and expanded over time. The three plots of 6 square meters or greater survived a major storm in March 2018, with near-hurricane force winds that destroyed structures on the coast. The authors suggest that future habitat restoration efforts focus on larger areas and that further study could determine the minimum plot size needed to maximize the chances of success in restoration efforts.
more……..https://www.pewtrusts.org/en/research-and-analysis/articles/2019/05/20/restoring-vital-seagrass-beds-may-hinge-on-transplant-methods-timing

Large herd of dugongs filmed swimming in Abu Dhabi marine reserve (Abu Dhabi, UAE)
13 May 2019, The National

A large herd of dugongs has been filmed swimming near Abu Dhabi's Bu Tinah island. About 40 dugongs can be seen at the surface of the water in the new video from the Environment Agency Abu Dhabi, with a further 100

believed to swimming underneath. The team recorded the gentle sea creatures near Khour al Bazem in the Marawah marine reserve, the world's first Unesco-designated marine biosphere reserve, while they were on their way to Bu Tinah to tag green turtles.

The waters around Bu Tinah, a tiny cluster of islands, are important foraging grounds for both turtles and dugongs. The mammals, affectionately known as sea cows due to them feeding on sea-grass, have been protected under UAE law since 1999. More than 1,000 dugongs are also believed to live in the waters around the archipelago.

In 2011, Bu Tinah narrowly missed out being named one of the New Seven Wonders of Nature, after appearing on a shortlist of 28 locations. It is home to around 16 species of coral, which thrive in conditions that would normally destroy them. Corals typically live in water that is between 23°C and 28°C, but in the UAE water temperatures reach as high as 37°C in summer.
more…….. https://www.thenational.ae/uae/environment/large-herd-of-dugongs-filmed-swimming-in-abu-dhabi-marine-reserve-1.860839

Federally protected eelgrass continues its rebound in Newport Harbor (CA, USA)

10 May 2019, by Hillary Davis, Los Angeles Times

Eelgrass has nearly doubled in Newport Beach waters over the past decade, pleasing the city's harbor officials. Three years into a program that allows harborfront property owners to disturb some of the federally protected seagrass during maintenance dredging, the long, billowing blades now cover about 30 acres underwater, up from about 16 in 2009.

"I am trying very hard to change the attitude [toward] eelgrass in the harbor," city Harbor Resources Manager Chris Miller told the Harbor Commission on Wednesday. "I'm trying to be its biggest cheerleader." Until recently, pricey red tape made eelgrass synonymous with frustration. Waterfront property owners, who are responsible for dredging under their docks, have to balance ecological sensitivity with clearing away accumulated muck. Because the National Marine Fisheries Service considers eelgrass a critically important habitat, tight regulations made it difficult to maintain properties. Between biological testing and replacement of damaged grass, mitigation was costly and few property owners sought the green light, Miller said.

Then Newport Beach officials crafted a program in 2016 with the Army Corps of Engineers and California Coastal Commission to allow more give and take. Under the plan, small-scale, often private dredging projects can scoop out up to 75,000 total cubic yards of sediment and disturb up to one acre of eelgrass per year overall, with the idea that the grass would eventually grow back. It's based on a dynamic population and distribution model that provides an incentive for having more eelgrass around the harbor — the more eelgrass is present at the time, the more can be lost to small projects. "I know that sounds counterintuitive, but it would be a bad day if we did not have any eelgrass," Miller said. Before Newport's program, Miller said, the city saw fewer than five dredging applications per year. But between 2016 and 2018, the city saw 85 applications. He said Newport Beach is the only city in the United States with this kind of program.
more……..https://www.latimes.com/socal/daily-pilot/news/tn-dpt-me-eelgrass-20190510-story.html

Maya Bay to remain closed till mid-2021 (Thailand)

09 May 2019, By Bangkok Post

The Department of National Parks, Wildlife and Plant Conservation decided yesterday (May 8) to extend the closure of world-famous Maya Bay for another two years. It is now due to reopen in the middle of 2021. The decision was made after a trial closure that began on June 1 last year resulted in ecological recovery. Other islands and beaches in the national park (Hat Noppharat Thara-Mu Koh Phi Phi) will remain open to tourists.

Maya Bay is just 250 metres long and 15m wide. Its popularity soared after the release 19 years ago of Hollywood flick The Beach, starring heartthrob Leonardo DiCaprio, as some scenes were filmed there. This resulted in 5,000 tourists turning up there a day at the peak of its fame. Asst Prof Thon Thamrongnawasawat, a Kasetsart University marine biologist and member of the national park's committee, said the closure extension was warranted because the department needs to not only protect the environment but also develop more facilities there including a walking board, a dock for tourist boats, toilets, and a residence for officials. An e-ticket system will also be put in place for when it reopens, he said. Prof Thon said the number of daily visitors will be limited to 2,400 a day in peak season. Time limits are also likely to be put in place, he added.

In another development, the Department of Marine and Coastal Resources found a dead female dugong on Koh Libong in Trang. The waters around the province are a known habitat of the marine mammal. An initial autopsy showed the dugong died due to respiratory system failure, the department said. There are around 210 dugong in the area, mostly off the coast of Trang in the Andaman. The number is up from 169 in 2017. The growing population is seen as a result of cooperation between officials and local communities, notably a ban of the use of destructive fishing gear in the animals' known habitats.
more……..https://www.thephuketnews.com/maya-bay-to-remain-closed-till-mid-2021-71357.php#ByG3qJrbi5styd74.97

$310 million for Sarasota water quality improvements (FL, USA)

09 May 2019, By Nicole Rodriguez, Sarasota Herald-Tribune

County officials on Wednesday delivered sobering statistics to the Sarasota County Commission about seagrass death and pollutant levels in area waterways while providing an equally astonishing price tag to upgrade its three wastewater treatment plants — one of which is the subject of a lawsuit for illegally spewing millions of gallons of treated wastewater for years from an overwhelmed holding pond.

While presenting its proposed Water Quality Improvement Program to the commission, county staffers said six area bays, including Sarasota and Lemon bays, have lost a combined 771 acres of seagrass from 2016 to 2018. Levels of the nutrient nitrogen in Sarasota Bay have steadily crept upward, from just over .2 milligrams per liter in 1998 to around .4 in 2019. While that is still low, it is a noticeable trend, county staffers said, adding that the boost could have an effect on the dying seagrass.

The cost for upgrading three wastewater treatment plants to what is known as “advanced wastewater treatment” facilities to reduce nutrient pollution will be “significant” — between $70 million and $90 million — warned Michael Mylett, the county’s interim public utilities director. The upgraded facilities would significantly reduce the amount of nitrogen in reclaimed water used for irrigation.
more……..https://www.heraldtribune.com/news/20190508/310-million-for-sarasota-water-quality-improvements

Seagrass to be restored off Adelaide coast (SA, Australia)

09 May 2019, SBS

Australia's largest recovery of seagrass is about to begin off the Adelaide coast. The $1 million project will re-establish seagrass meadows between suburban Glenelg and Semaphore to help protect against seabed erosion and support the marine environment.

South Australian Environment Minister Davie Speirs says one third or 6000 hectares of seagrass off the Adelaide coast has been lost over the past 50 years. "While we have seen some natural regeneration of seagrass, more needs to be done to increase the seagrass habitat along Adelaide's coast," Mr Speirs said.

The restoration project will use a technique developed in South Australia, which places hessian sacks on the sea floor near seagrass meadows, for young plants to attach to and grow. The sacks will be placed at up to 15 sites off the metropolitan coast this year with the restoration project to be expanded in 2020.
more……..https://www.sbs.com.au/news/seagrass-to-be-restored-off-adelaide-coast

Related article
Australia's biggest seagrass restoration to begin in SA (09 May 2019, Mirage News)
https://www.miragenews.com/australia-s-biggest-seagrass-restoration-to-begin-in-sa/
Seagrass to be restored off Adelaide coast (09 May 2019, 9news.com.au)
https://www.9news.com.au/national/seagrass-to-be-restored-off-adelaide-coast/9d2a4a9a-ed57-4f27-85ff-c05caad80035

Study demonstrates seagrass' strong potential for curbing erosion (MA, USA)

02 May 2019, by David L. Chandler, MIT News

New research for the first time quantifies, through experiments and mathematical modelling, just how large and how dense a continuous meadow of seagrass must be to provide adequate damping of waves in a given geographic, climatic, and oceanographic setting. In a pair of papers appearing in the May issues of two research journals, Coastal Engineering and the Journal of Fluids and Structures, MIT professor of civil and environmental engineering Heidi Nepf and doctoral student Jiarui Lei describe their findings and the significant environmental benefits seagrass offers. These include not only preventing beach erosion and protecting seawalls and other structures, but also improving water quality and sequestering carbon to help limit future climate change.

Nepf and Lei recreated artificial versions of seagrass, assembled from materials of different stiffness to reproduce the long, flexible blades and much stiffer bases that are typical of seagrass plants such as *Zostera marina*. They set up a meadow-like collection of these artificial plants in a 24-meter wave tank in MIT’s Parsons Laboratory, which can mimic conditions of natural waves and currents. They subjected the meadow to a variety of conditions, including still water, strong currents, and wave-like sloshing back and forth. Their results validated predictions made earlier using a computerized model of individual plants.

The researchers used the physical and numerical models to analyze how the seagrass and waves interact under a variety of conditions of plant density, blade lengths, and water motions. The study describes how the motion of the plants changes with blade stiffness, wave period, and wave amplitude, providing a more precise prediction of wave damping over seagrass meadows. To test the validity of the model, the team then did a comparison of the predicted effects of seagrass on waves, looking at one specific seagrass meadow off the shore of the Spanish island of Mallorca, in the Mediterranean Sea, which is known to attenuate the force of incoming waves by a factor of about 50 percent on average. The observations there matched the predictions very well, Lei says, showing the way wave

strength and seagrass motion varied with distance from the edge of the meadow to its interior agreed with the model. So, “with this model the engineers and practitioners can assess different scenarios for seagrass restoration projects, which is a big deal right now,” he says That could make a significant difference, he says, because now some restoration projects are considered too expensive to undertake, whereas a better analysis could show that a smaller area, less expensive to restore, might be capable of providing the desired level of protection. In other areas, the analysis might show that a project is not worth doing at all, because the characteristics of the local waves or currents would limit the grasses’ effectiveness.
more……..http://news.mit.edu/2019/study-seagrass-erosion-0503

Related article
Study demonstrates seagrass' strong potential for curbing erosion (31 May 2019, Phys.Org)
https://phys.org/news/2019-05-seagrass-strong-potential-curbing-erosion.html

SeaWorld Abu Dhabi to help animals thrive off the emirate's coast (Abu Dhabi, UAE)
02 May 2019, By Bernd Debusmann Jr, ArabianBusiness.com

Developer Miral hopes that the addition of SeaWorld Abu Dhabi to Yas Island will help rescue and rehabilitate populations of dugong, turtles and other marine animals in the waters off Abu Dhabi, according to CEO Mohammed Abdullah Al Zaabi. Speaking to Arabian Business on the sidelines of the Arabian Travel Market in Dubai, Al Zaabi said that the Yas Island project, first announced in 2016, will be primarily focused on education and conservation. SeaWorld’s facilities, he added, will include state-of-the-art research facilities in which large animals can be studied and provided care.

Among the animals that Al Zaabi hopes can benefit from the facility are dugong. “Today we don’t have a dedicated facility to manage such big animals,” he said. “R4 will be the right place for them. Actually, anything all the way from turtles to dugongs, we can take care of them, rescue them and place them again back in their homes.” “That’s great for Abu Dhabi,” he added.

Al Zaabi said that SeaWorld Abu Dhabi is “on schedule” to finish construction in 2022 as was originally announced.
more……..https://www.arabianbusiness.com/travel-hospitality/419222-seaworld-abu-dhabi-to-help-animals-thrive-off-the-emirates-coast

Defining Hurricane Michael's impact on St. Joe Bay, Florida (FL, USA)
02 May 2019, By BRIAN GOFF, EurekAlert (press release)

At the BIG-C monthly meeting April 24, Maya Burke, science policy coordinator for the Tampa Bay Estuary Program, told the mayors of the beach communities how research and perseverance have managed to clean up the Gulf waters, which at one point had poor quality.

Back in the 1950s, the water was murky and of poor overall quality. Researchers discovered that the lack of seagrass was contributing to the problem. They then tackled the issue of getting more seagrass to grow by managing nitrogen levels in the water, which decreased the amount of algae. That led to a clearing up of the water which let more light reach into the water which in turn let more seagrass grow.

Burke urged the mayors to consider joining and supporting the Tampa Bay Resilience Coalition. The coalition is a group made up of most of the counties around Tampa Bay and several local municipalities. The group plans strategies and way to combat problems such as sea level rise and water quality. The group’s website notes that by working together the region has a better chance for federal funding to deal with the problems.
more……..https://www.tbnweekly.com/beach_beacon/article_898a6b56-6c1e-11e9-8c41-6f613e294af2.html

Young dugong rescued in Krabi, taken back to Trang home waters (Thailand)
01 May 2019, The Nation

A young dugong, found on a Krabi beach, has been taken back to its home waters off Trang. The Department of Marine and Coastal Resources on Tuesday reported that the stranded dugong had been transported back to Trang on Monday. “The dugong is aged around two to three years. It is 120 centimetres long. No wounds were found on the dugong, which can swim by itself.

We believe that the dugong got lost from its herd,” the department said. The mammal has been taken to Koh Libong Trang, a popular area for dugongs as the waters are full of seagrass. The dugong is a protected species in Thailand.
more……..https://www.nationthailand.com/breakingnews/30368626

CONFERENCES

OceanObs'19 (16-20 September 2019, Honolulu, Hawaii, USA)

Theme: Connecting Science and Society

The OceanObs'19 conference is a community-driven conference that brings people from all over the planet together to communicate the decadal progress of ocean observing networks and to chart innovative solutions to society's growing needs for ocean information in the coming decade.

As part of the decadal conference series, OceanObs'19 will galvanize the ocean observing community ranging from scientists to end users. OceanObs'19 seeks to improve response to scientific and societal needs of a fit-for-purpose integrated ocean observing system, for better understanding the environment of the Earth, monitoring climate, and informing adaptation strategies as well as the sustainable use of ocean resources. Overall, OceanObs'19 will strive to improve the governance of a global ocean observing system, including advocacy, funding, and alignment with best practices and to designate responsibility for product definition, including production and timely delivery at the appropriate scales (global, basin, regional, national) to serve user needs. The conference program will be built focusing on a single objective each day to provide adequate time to answer to the proposed questions.

More information:
To get important updates, visit: http://www.oceanobs19.net/#main

The 25th Biennial CERF Conference (Mobile, Alabama on 3–7 November, 2019)

Theme: "Responsive | Relevant | Ready"

CERF2019 endeavors to connect science and society in the collective goals of preserving the coastal and estuarine habitats, resources, and heritage. Through the conference, attendees will discuss the nature of research agendas that are directed at finding and solving problems, and how to engage stakeholders in that process. CERF2019 goal is to balance a natural and social scientific agenda with the food, music, and art emblematic of the central Gulf of Mexico. In keeping with tradition, CERF2019 hopes to create a seriously fun and memorable 25th Biennial CERF Conference.

Special session - Seagrasses: sentinel species in a changing world - a tribute to Dr. Susan Williams

Session co-chairs – Robert Orth and Ken Heck

Seagrasses are key sentinel species whose sensitivity to changing water quality is well known to warn of deteriorating conditions in coastal waters. The past five decades have seen great progress in understanding the biology of seagrasses, the ecology of the world's seagrass meadows and in valuing the many services they provide. During this time there have been paradigm shifts in our understanding of many fundamental processes that underpin the ecology of seagrass meadows. Among them is a revised understanding of the phylogeny and evolutionary history of seagrass lineages, the smaller role played by the consumption of detritus in seagrass food webs, and the larger role of direct consumption of seagrasses in energy flux. Additional advances include convincing evidence that seagrasses can be pollinated by small invertebrates, that microbial-seagrass interactions in the sediments and in the water column are a vast area only beginning to be explored and that individual seagrass clones can cover vast areas and exist for millennia. Other recent advances include a revised understanding of the widely varying dispersal abilities of different seagrass species, as revealed by the much improved ability to genotype seagrass clones and the rapidly advancing knowledge, aided by much trial and error, of how to improve the success of seagrass restoration efforts. We have also seen important advances in valuing the services provided by seagrass meadows, such as their important role as nursery habitat for a variety of economically important finfish and shellfish. In addition, their previously less well known services, such as their functioning as vast reservoirs of blue carbon, is becoming increasingly elucidated, with the implication that the continuing global decline of seagrass meadows has profound implications for earth's climate.

Seagrasses face many emerging challenges associated with our changing climate, including the effects of the alteration of temperatures, pH and dissolved oxygen, as well as the immigration and assimilation of tropical species, whose predatory, competitive and pathological effects on the ecology of seagrasses and their associated biotas may be enormous but which remain unknown and unpredictable.

This session will highlight the most exciting, recent advances in seagrass research by those at the forefront of the field, and is dedicated to Dr. Susan Williams, who, throughout her career, played a leadership role in seagrass ecology and mentored some of its leading practitioners. It will be of interest to researchers and resource managers faced with the challenge of preserving, restoring and managing seagrass resources.

More information:
To get important updates, visit: https://www.erf.org/cerf-2019
Follow on twitter @CERFScience, #CERF2019
Schedule-at-a-Glance: https://www.erf.org/2019-schedule-at-a-glance

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 49,857 views to date)

Seagrass & other matters

World Seagrass Day http://wsa.seagrassonline.org/world-seagrass-day/

A global campaign for World Seagrass Day: Raising public awareness on the importance of seagrass meadows is central to efforts in the protection and conservation of seagrass meadows worldwide. The international seagrass research and conservation community, together with the undersigned, call on the United Nations to declare a World Seagrass Day to recognize the importance of seagrass meadows to the health and well-being of the planet, as well as the people, communities, flora, and fauna that rely on them. Show your support by signing the petition.

SeagrassSpotter https://seagrassspotter.org/

SeagrassSpotter seeks to expand the number of people studying seagrass from a handful of scientists to hundreds and potentially thousands of 'citizen scientists.'. As part of efforts to build a sustainable monitoring network, and by leveraging the enthusiasm of everyone from fishers to SCUBA divers to people on vacations at the beach, we'll create a more comprehensive picture of seagrass meadows around the globe. This in turn will inspire new scientific research and practical conservation measures that can help protect ocean habitats. Working together with citizen scientists all over the world, we'll accomplish big things for seagrass and other vulnerable marine species, but only with your help.

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

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