30 November 2019

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IN THIS BULLETIN

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NEWS

Sea life under threat in Mozambique channel (Mozambique)

29 November 2019, by Arimando Domingos, The Southern Times

A "rapid and catastrophic" fall in marine life off Mozambique has led to warnings from some of Africa's leading biologists that a number of species could be "lost within a generation". Between them, Madagascar and Mozambique have licensed hundreds of Asian and European Union (EU) boats to fish the waters. Activists say locals venture from the beach with nets, catching fish but also rays, sharks and the rare dugong.

In Mombasa, Kenyan marine biologist, Dr. Melita Samoilys, is a director of Cordio, a research NGO for the western reach of the Indian Ocean. She was lead author of a recent paper on Mozambique and its fish, and said little would change while the country suffered "high levels of poverty and illiteracy in coastal communities". She said there was a need for patrols at sea and on land, "but too often coastal fishers are blamed when, really, they have little alternative." She said poverty lay at the heart of the problem. Dr. Samoilys said the world was shifting attention to the oceans, "but action on the ground is slow".

At the World Wildlife Fund (WWF) office in Cape Town, Craig Smith said the Mozambique Channel was one of the "most bio-diverse hot spots on the planet". Smith, who works on WWF projects for the western Indian Ocean, called for "urgent, collective and decisive intervention," across the region, including South Africa. Vic Cockcroft is a Zimbabwean researcher who has worked on dugongs along the coast of East Africa where he says numbers have fallen 99 per cent since 1960, though Mozambique still has a viable population. "There is a critical need to police and monitor places like the Channel," Cockcroft said. In Mombasa, Dr. Samoilys said marine animals deserved the same protection as those on land.

more…….https://southerntimesafrica.com/site/news/sea-life-under-threat-in-mozambique-channel

Flooding and coastal damages risking £12bn to UK economy (United Kingdom)

28 November 2019, Matt Mace, edie

Rising sea levels, storms and flooding driven by climate change has placed more than £12bn of the UK's economy at risk, according to new findings from WWF which warns that almost 2.5 million homes in the UK will be at risk of flooding by 2050. The £12bn loss to the UK economy could be driven by coastal damages alone, according to the Global Futures initiative, created through a partnership between WWF, the Global Trade Analysis Project and the Natural Capital Project to calculate the economic losses associated with ecological damages.

Coastal protection is largely provided by saltmarshes and seagrass beds. Yet the UK has already lost up to 92% of its seagrass in the last century and 85% of its saltmarsh. The new findings warn that unless action is taken, up to 0.8% of the UK's GDP will be lost – more than what the UK Government spends on the police, fire services and law courts annually. WWF's executive director of science and conservation Mike Barrett said: "Our research reveals the potentially devastating economic impact of the climate and nature crisis. Many coastal areas in the UK are at serious risk of land erosion and flooding, threatening hundreds of thousands of businesses and homes, roads, railways and huge swathes of valuable farmland.

In response, WWF is urging all political parties to commit to new policies that halt contributions to climate change through net-zero targets, stop deforestation, and drive finance and ambition to respond to a "planetary emergency". Globally, continued loss of habitats that provide coastal protection services – including coral reefs and seagrass beds – would see £205bn wiped out of the economy annually by 2050 – equivalent to 0.47% of the global GDP. Sky's Ocean Rescue arm has partnered with WWF on a new project aimed at restoring carbon-sequestering seagrass habitats in west Wales. The project will see 20,000m^2 of seagrass habitat restored at Dale Bay, Pembrokeshire.

more…….https://www.edie.net/news/9/Flooding-and-coastal-damages-risking--12bn-to-UK-economy/&ct=ga&cd=CAEYACoUMTExOTEyMzgxNjQzNTMyNTE4MjEyGmZlYzcyOGU5MGU4ZjQyMjU6Y29tOmVuOlVT&usg=AFQjCNEi3oZsvTt_-CjAqkVBdjx4rNG8kw

Fishermen Reaps Benefits of blue Economy (Kenya)

28 November 2019, by Wagema Mwangi, Kenya News Agency

In the early 2000's, dozens of fishermen in Kuruwitu village had detected a drastic decline in their daily catch. The reduction in fish population posed unprecedented crisis to this fishing community where almost everyone relies on fishing as the main source of livelihood. Several crisis meetings were held to tackle this problem that threatened their very lives. The climax was formation of Kuruwitu Conservation and Welfare Association (KCWA) in 2005.

KCWA, a community group with a membership of over 200, would spearhead all activities towards the protection of the ocean along the beach and preservation of marine life. It banned fishing within 30 hectares of marine zone marked by a reef that separated the shallow waters and the deep ocean. The group also outlawed harvesting of ornamental corals. Members of KCWA were to police the beach and ensure the laws were enforced. Almost fifteen

years after formation of KCWA, Kuruwitu Beach, located 20-km North of Mombasa City in Kenya, has become a model of how communities living along endangered marine zones can be involved in protection and conservation of marine environment and in return reap the benefits of blue economy.

Data by World Conservation Society shows fish population in the Marine Protected Area is booming with fish biomass estimated to grow by a whopping 400 per cent. The spillover effect of the fish boom at Kuruwitu area is being felt in adjacent fishing grounds managed by other Beach Management Units (BMU) where fishermen are reporting increased catch. The fields of seagrass used by fish to lay their eggs are regenerating while the endangered green turtles have returned to nest in the sandy beaches as they used to decades ago. These community efforts have seen Kuruwitu become the first community-owned Marine Park in Kenya.
more……http://www.kenyanews.go.ke/fishermen-reaps-benefits-of-blue-economy/

'Wonder plant' to be restored off Welsh coast (Wales, UK)
27 November 2019, Wellston Journal

Acres of underwater seagrass meadows are to be restored off the Welsh coast to tackle climate change. A million seeds of the “wonder plant” have been gathered from existing meadows and will be planted over 4.9 acres at Dale Bay in Pembrokeshire. Conservationists say it will be the UK‘s biggest seagrass restoration – after 92% of it has been lost over the last 100 years.

WWF, Sky Ocean Rescue and Swansea University are starting the replanting this winter as they say the plant is key to reducing carbon dioxide – a gas which contributes to global warming. “When we think about climate change we probably think we need to plant more trees,” said Jenny Oates of WWF. “We wouldn‘t necessarily think that seagrass is something that can store carbon 35 times faster than a tropical forest. “So actually we can do something right here in the UK to address .”

Richard Unsworth, of Swansea University, said: “We‘ve lost extensive areas of seagrass around the UK over the last 100 years… We‘re basically trying to bring that back over in west Wales by working very closely with some local communities to understand how we can restore these seagrass plants, whilst at the same time respecting people‘s livelihoods – the fishermen and the boaters who live and work in these areas – so that everyone develops this amazing resource.” Dale Bay, which had previously lost its seagrass meadow, has the right water depth and light levels for seagrass to thrive there again, according to conservationists. If the pilot project works, environmentalists want it to be replicated around the UK coastline.
more……https://wellstonjournal.com/wonder-plant-to-be-restored-off-welsh-coast.html

Indian River Lagoon health improves, but still 'poor' (FL, USA)
25 November 2019, by Jim Waymer, Florida Today

The Indian River Lagoon's second health checkup looks slightly better than its first, but still is mostly bad, according to a new report from the estuary's main advocacy group. The nonprofit Marine Resources Council (MRC) announced early findings of its second-annual lagoon report card at a fundraiser Saturday in Melbourne Beach. As the group pieces together 2017 seagrass and water quality data from state agencies, MRC's early findings for the report card point to a few bright spots, including a "tiny improvement" in water quality in some areas Leesa Souto, executive director of MRC said. But the overall picture remains bleak.

The Indian River Lagoon has taken on a more brownish color in recent years, as "brown tide" algae has bloomed more often, robbing the water of dissolved oxygen fish and other marine life need to respire. "Water quality really hasn't changed. Seagrasses continue to not proliferate. They continue to decline. I think we saw pretty much the same, scores for seagrass for the entire lagoon," Souto said. Seagrass is prime habitat for fish and other lagoon life, so are considered a key barometer of the estuary's health. According to the St. Johns River Water Management District, 2½ acres of seagrass supports up to 100,000 fish; 100 million worms, snails, clams and other invertebrates; and up to $10,000 in economic activity.

MRC's annual lagoon health update — the first released last year — is to compare key indicators with healthy targets to gauge how lagoon conditions are changing over time. The reports examine various segments of the lagoon, looking at more than 20 years of water quality and habitat data, including measures of chlorophyll — a pigment in algae and other plants — nitrogen, phosphorus, seagrass and the typical cloudiness of the water. Most areas scored about the same as last year's report, with a few slightly improving but still poor. Nitrogen had been decreasing, since sewer plants stopped directly discharging into the lagoon in the 1990s, until 2016, when it increased across the board, MRC's first report card showed. Phosphorus also has worsened in most of the lagoon since 2010, the same time the estuary begin to experience extreme harmful algae blooms. Phosphorus sources include car washes, sewage, fertilizers, sediments and canal discharges. MRC plans to update its lagoon report card story map with the 2017 data.
more……https://www.floridatoday.com/story/news/local/environment/lagoon/2019/11/25/indian-river-lagoon-report-shows-slight-improvement-but-still-poor-health/4296983002/

Seeds for Snapper seagrass restoration project (WA, Australia)

25 November 2019, Fishing World

Western Australia's second largest snapper spawning ground is slowly getting restored with the help of an innovative habitat restoration project, Seeds for Snapper. Behind the project is OzFish, who developed a trial last year to see if the community can support seagrass habitat restoration by collecting floating seagrass fruit for processing on-shore. This saw 200,000 *Posidonia australis* seeds processed and re-established in Cockburn Sound. The trial demonstrated impressive results to resorting seagrass beds and OzFish senior project manager Andrew Matthews, said he was excited that the pilot has been so successful.

In recent years, 80 per cent of seagrass has been lost in WA due to greater fishing pressure, environmental change and habitat degradation and this has put this important area at risk. The seagrass meadows of Cockburn Sound are well recognised as critical foraging and nursery grounds for snapper, calamari, whiting and blue swimmer crabs. "The project is a collaborative effort, without the help of the community, including boating, fishing and diving volunteering time and resources, it simply would not get it off the ground," he said. The Cockburn Power Boat Club are an important partner in facilitating the Seeds for Snapper restoration work providing a location for tanks, site security, power and access to sea water within the club marina.

Researchers, with the help of fishers, will continue to monitor the reseeded meadows and measure their growth. Marine ecologist Dr John Statton from UWA has been working on seagrass restoration for several years and said, "By using community members to scale up seagrass restoration, we will not only see a return of ecological services in large numbers, but also economic and social benefits from the sustainable use of ocean resources for economic growth, improved livelihoods and jobs while preserving the health of ocean ecosystem."

more……https://www.fishingworld.com.au/news/seeds-for-snapper-seagrass-restoration-project

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OzFish wants habitat restoration to be part of the SA snapper solution (28 November 2019, Fishing World)

http://www.fishingworld.com.au/news/ozfish-wants-habitat-restoration-to-be-part-of-the-sa-snapper-solution

Half a billion dollars' worth of benefits provided free by Victorian coastal wetlands (Vic, Australia)

25 November 2019, The Nature Conservancy, Mirage News

After three years of research, a team of leading marine experts, led by The Nature Conservancy and Deakin University, release today a watershed report describing and mapping the economic value provided, free-of-charge, by the coastal wetlands of south-eastern Australia. "Our research reveals for the first time the often underappreciated economic value provided by our coastal wetlands," said Dr Paul Carnell, marine scientist at Deakin University and lead-author of the report. "For example, we've calculated that wetlands in places such as Port Phillip Bay and Western Port can collectively contribute at least $562 million in tangible goods and services to the community. This includes food, recreation and shoreline protection. This all helps to support livelihoods and grow the blue economy."

The Mapping Ocean Wealth Australia report, found that ecosystems that fringe our coastlines – saltmarshes, mangrove forests and seagrass meadows – provide a bounty of benefits for people and nature. Taking just one example in south-eastern Australia, coastal wetlands contribute $35.5 million per year to nearshore commercial fisheries. Seagrass meadows alone produce on average 207kg more fish per hectare compared to areas without seagrass. With an estimated 72,000 hectares of seagrass in south-eastern Australia, this adds up to 14 million tonnes more fish produced by seagrass each year.

The Australian Mapping Ocean Wealth project represents three years of marine ecosystem service research, spatial mapping and communication for coastal wetlands in south-eastern Australia by several of Australia's leading marine science and conservation institutions. The Australian project is funded and supported by The Nature Conservancy, Deakin University, The Thomas Foundation, HSBC Australia, The Ian Potter Foundation, Victorian Government, NSW Government and the Australian Research Council.

more……https://www.miragenews.com/half-a-billion-dollars-worth-of-benefits-provided-free-by-victorian-coastal-wetlands/

African Development Bank pulls out of Kenya's controversial Lamu coal project (Kenya)

22 November 2019, by George Tubei, Pulse Live Kenya & Pulse Nigeria

Environmental activists have a reason to smile after one of the biggest backers of the controversial Lamu coal project decided to pull out of the project citing environmental concerns. African Development Bank (AfDB) has announced that it will not fund the coal-fired power plant project in Kenya and has no plans to finance new coal plants in future. AfDB president Akinwumi Adesina said that the bank took environmental concerns seriously and was focusing on renewable energy, adding that coal-fired power plant projects risked becoming "stranded assets" on the AfDB's balance sheet.

Save Lamu, Lamu Youth Alliance and Lamu Marine Forum organization are just some of the few environmental activists who have been especially vocal in their opposition to the proposed Sh200 billion ($2 billion) Lamu coal fired power plant.

The Lamu marine environment contains a diversity of land and seascapes including mangroves, mudflats, lagoons, sand dunes, beaches, sand islands, raised reef islands, seagrass beds and coral reefs. It is feared all these Lamu's diverse marine life may be disappear and go up in smoke with the establishing of the coal plant.
more…….https://www.pulse.ng/bi/politics/african-development-bank-pulls-out-of-kenyas-controversial-lamu-coal-project/3kffjys

DEP to extend stormwater outfall pipe to protect thriving oyster reef at MacNeil Park in College Point (NY, USA)

22 November 2019, by Jenna Bagcal, QNS

At the beginning of November, the Department of Environmental Protection revealed that it would soon extend a stormwater outfall pipe which faces the East River in College Point's MacNeil Park. According to Councilman Paul Vallone, who had gotten word from DEP, the agency would extend the pipe 200 feet beyond the shoreline in order to protect a restored oyster reef at the formerly polluted cove.

In the early 2000s, the state Department of Environmental Conservation granted a permit to College Point resident Dr. James Cervino and fellow marine biologists to establish and restore the oyster reef, seagrass and other marine life at the MacNeil Park waterfront. DEP's proposal to install the outfall pipe at the MacNeil Park cove in 2016 sparked outrage and concern within the community.

Dr. Cervino and his wife Kat Cervino, president of the Coastal Preservation Network (CPN) and a vice president of the College Point Civic Association, brought their concerns to Vallone. The pair highlighted the planned pipe's proximity to the salt marsh oyster reef and potential reversal of over a decade of hard work. "This is the beach where we'd been planting seagrasses with volunteers and doing trash cleanups since 2002, where our oyster growth project was thriving and where we host annual free kayaking days," said Kathryn Cervino. For the past two years, Vallone and CPN have joined together to advocate for an alternative solution. "Our wetlands are a critical part of our natural ecosystem and play a key role in fostering a healthy marine environment for future generations," said Vallone. "I am relieved to learn that the outfall pipe at MacNeil Park will be extended and relocated away from this thriving ecosystem, which activists like the Cervinos have worked so hard to protect."
more…….https://qns.com/story/2019/11/22/dep-to-extend-stormwater-outfall-pipe-to-protect-thriving-oyster-reef-at-macneil-park-in-college-point/

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Oysters soon to make a comeback (28 November 2019, Queens Chronicle)
https://www.qchron.com/editions/north/oysters-soon-to-make-a-comeback/article_c6bddd46-1772-5b9d-8296-1d9dfcefd516.html
Long-Awaited Change To MacNeil Park Cove Is In 'Pipeline' (27 November 2019, Western Queens Gazette)
https://www.qgazette.com/articles/long-awaited-change-to-macneil-park-cove-is-in-pipeline/

Scallop restoration show continued signs of traction (FL, USA)

21 November 2019, by Tim Croft, The News Herald

In their post-season survey of the Port St. Joe Bay last month and into October, Florida Fish and Wildlife Conservation Commission researchers found 19 scallop per transect line. That is more than double the number found in 2018 before the season even started and 19 times the number from 2016. And comes after the season began with more than 66 per transect line. Under FWC guidelines, the bay would be categorized as "vulnerable," but those are statistics that come following a season that began with a higher intensity of scallops in decades and kept on giving through to season's close.

As emphatic as the numbers and opinions, from FWC staff and local residents, that restoration has been a success, there was equal emphasis from residents, on preferred harvest season dates. Residents did not support the tentative season dates the FWC had established, opening July 1 and running until the final week of September. Scallop size is also a factor opening the season in July, adding the scallops need time to grow, making the mollusk easier to get to and saving many tiny scallops from being cracked and discarded. The restoration efforts, meanwhile, will continue into 2020.

But, as one FWC researcher said, the restoration efforts could be helping, but thus far researchers could not identify "one event that we can point to" as causing what was witnessed this year. Dusty May from local non-profit Baysavers pleaded with the FWC staff present to step up enforcement, particularly during times such as scallop season, of seagrass damage to propellers on boats moving too fast or outside of marked channels. "People are destroying our bay bottom," May said. "We have to step up enforcement to save our bay bottom." The staff will take input from the workshop and comment cards as well as online comments and will establish 2020 season dates to bring to the FWC board early next year.
more…….https://www.newsherald.com/news/20191121/port-st-joe-scallops-show-continued-signs-of-rebound

Researchers persevere through challenges at start of endangered sea turtle study (TX, USA)

21 November 2019, by Kali Venable, Victoria Advocate

Marine biologists and research assistants hopped on Capt. James Helms' boat on a recent Saturday morning and sped to Decros Point in search of sea turtles. The temperature hovered around a chilling 46 degrees Fahrenheit and the team shivered as they threw two nets out in Matagorda Bay, near seagrass beds where sea turtles have been known to feed. Those nets, each about 100 meters long, were checked every 20 to 30 minutes as the sun rose and crouched toward setting, but sea turtles never showed.

The two-year project that started in May with $2.7 million in funding from the Texas Comptroller of Public Accounts and is directed by Pamela Plotkin, who is a co-principal investigator on Matagorda Bay Ecosystem Assessment. This is the latest in a saga of trips that Pamela Plotkin's team of researchers has made to Port O'Connor to try to net sea turtles as part of the study. The team has caught four green sea turtles during 56 hours of netting for the project, or one turtle for every 14 hours of work, said Christine Figgener, a marine conservation biologist on the project.

Researchers attach acoustic and satellite tags to the turtles before they are released to track their movements. Two tissue samples are also collected, as well as their weight and measurements to analyze growth and diet several years back. "We're also interested in seeing if the species have certain preferences, for example, for certain seagrass beds in one region and stick around there a long time ... (and) map out hot spots that are particularly critical to turtles," Figgener said. Those understood "hot spots" could enlighten plans for development that might pose harm to the species, as well as identify favorable environmental characteristics that could be replicated elsewhere, she said.
more…….https://www.victoriaadvocate.com/news/environment/researchers-persevere-through-challenges-at-start-of-endangered-sea-turtle/article_4c040ecc-071e-11ea-bd07-f3d9b1bf21ef.html

Integrating Global Seagrass and Mangrove Ecosystem Observations (DC, USA)

20 November 2019, by Emmett Duffy, Lisa Rebelo and Patricia Miloslavich, Eos Earth & Space Science News

To advance coordinated international observations of seagrasses and mangroves ecosystems, including observations of essential ocean variables (EOVs) and essential biodiversity variables (EBVs), multidisciplinary experts recently convened at a workshop jointly sponsored by the Global Ocean Observing System (GOOS) and the Marine Biodiversity Observation Network (MBON). Participants focused on current *in situ* and remote sensing observing capabilities, the technological innovations required to overcome the limitations of these two approaches, and how to promote data accessibility for use by a range of stakeholders.

Most seagrass monitoring is done in situ. Global monitoring networks (e.g., SeagrassNet, Seagrass-Watch) use similar low-cost protocols, such as visual surveys, offering promise for efforts to standardize best practices and interoperability. Remote sensing tools that generate high spatial resolution multispectral and hyperspectral images based on reflectance signatures provide data on seagrass spatial coverage at larger scales, but in situ verification is needed for species identification and plant health assessment.

Workshop participants made recommendations for future seagrass observing, including integrating remote sensing and in situ data, linking existing in situ capacity across nations and networks, and leveraging these capabilities with promising technologies such as photo and video transects, including those produced using autonomous underwater vehicles. Participants agreed that advances in artificial intelligence applications for image processing will be needed to improve and speed up transformation of images into data products. Standard operating procedures for Ocean Best Practices could be developed from the Blue Carbon Manual (mangroves) and the protocols of SeagrassNet and Seagrass-Watch. Training and capacity development will be critical to expanding global coverage and ensuring continuity of observations.
more…….https://eos.org/science-updates/integrating-global-seagrass-and-mangrove-ecosystem-observations

Biologist: Seagrass A 'Canary In Coal Mine' (NC, USA)

20 November 2019, by Jennifer Allen B, Coastal Review Online

The Albemarle-Pamlico National Estuary Partnership and its partners are working to better understand the status of the submerged aquatic vegetation (SAV) along the coast of North Carolina and have been mapping the extent and density of SAV. APNEP in September published a map of imagery years 2012-2014 that updates the higher salinity areas of the 2006-2008 SAV map, the first effort to record the location of underwater grasses along the North Carolina and southern Virginia estuarine coastlines. The update will allow APNEP and its partners to study if the region's SAVs are growing, declining or stable, according to APNEP.

"Seagrasses are like 'Canaries in the coal mine,'" Jud Kenworthy, a research biologist, said. "The status of seagrasses can warn us about the health of our coastal ecosystem." Kenworthy, who also serves as team co-lead, said that the maps developed for the period between 2006 and 2013 indicate that the high salinity seagrass beds are in much better condition than what is being documented in many other coastal ecosystems around the world that are experiencing severe declines. "While it appears that widespread declines are not evident in North Carolina, there are some local declines that deserve attention by resource managers, especially in areas experiencing the most coastal

development," he said. "We need to focus on the conservation and protection of this resource because restoration is difficult, uncertain, less than the probability of a coin toss, and very expensive."

APNEP plans to follow the release of the 2013 map with a more extensive analysis of the extent and density of the region's underwater grasses later this year. A set of aerial flights and boat-based surveys took place this summer that will be used for a third SAV map to provide a more complete picture of the state of submerged aquatic vegetation in the Albemarle-Pamlico region, according to APNEP. Kenworthy said he's inspected the aerial photography from this summer and commented that if you had expected to see changes associated with Hurricane Florence, it appears that your expectations were met in some areas of the coastline.
more……https://www.coastalreview.org/2019/11/biologist-seagrass-a-canary-in-coal-mine/

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Submerged Vegetation Mirrors Coast's Health (19 November 2019, Coastal Review Online)
https://www.coastalreview.org/2019/11/submerged-vegetation-mirrors-coasts-health/

Why seagrass in Indonesia's marine protected areas is still under threat (Indonesia)

20 November 2019, by Andri Irawan, The Conversation

Despite being one of the crucial areas in coastal waters, due to their important role as food sources for marine animals and carbon storage, seagrass ecosystems are silently struggling with degradation caused by human activities. The culprits are coastal reclamation and development, oil pollution, sand and coral mining, seaweed farming, sedimentation, deforestation, overfishing, poor water quality, and garbage. Local communities and the government have made efforts to protect seagrass. In some coastal communities in eastern Indonesia, fishermen enacted a fishing moratorium, locally known as "sasi".

Nationally, the government has created Marine Protected Areas (MPAs) across the archipelago, which currently covered at least 20 million hectares. Some marine protected areas, such as in Wakatobi island and Buton regency in Southeast Sulawesi province, have been successful in increasing the seagrass cover in those areas. However, there are also unhappy stories, like in North Nias, North Sumatra and Biak Numfor, Papua. In these areas, seagrass cover has declined from 58 to 48% and 61 to 55% of the average value from several sites in each area from 2016 to 2017, respectively.

Marine protected areas (MPAs) are not necessarily effective in managing programs to protect seagrass as they have failed to predict threats when they were designed. Majority of threats come from outside of the protected areas, for instance sedimentation from runoffs resulted from coastal development and rapid population growth. Lack of awareness and knowledge from MPAs authorities complicates the effort to protect seagrass ecosystem. This resulted to managers of MPAs with insufficient knowledge to construct effective conservation management program for seagrass ecosystem. To address the lack of protected areas to protect seagrass, MPA administrators (either the government or the local communities) should first, improve the inefficiency of MPAs by careful planning and regular monitoring. Second, improve people's awareness of the issues by creating public campaigns. The campaigns should increase knowledge about the importance of seagrass ecosystem via mainstream media, social media to education. And third, engage with local people in marine protected areas and encourage them to get involved in seagrass ecosystem protection.
more……http://theconversation.com/why-seagrass-in-indonesias-marine-protected-areas-is-still-under-threat-125875

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Why seagrass in Indonesia's marine protected areas is still under threat (20 November 2019, MENAFN)
https://menafn.com/1099296602/Why-seagrass-in-Indonesias-marine-protected-areas-is-still-under-threat

Forest City Malaysia to welcome more residents and tourists (Malaysia)

20 November 2019, by Zhao Yusha, Global Times

Forest City Malaysia aims to build a comprehensive community with various services, such as tourism, education, and medical care, to attract more residents, after more than 20,000 residential units are expected to be handed over to owners this year. Located within the Iskandar Malaysia special economic zone (SEC) in southern Johor, Forest City plans to comprise four man-made islands spanning around 30 square kilometers.

Homeowners of Forest City hail from over 35 countries and regions, including China, Malaysia, Singapore, Vietnam, Canada, the US, Australia, and Hong Kong, says Hugo Wu, executive general manager of Forest City; attracted by the community's proximity to Singapore, green environment and pleasant climate. The project minimized the impact on the surrounding environment during construction, and established an online monitoring system to monitor the water quality; actively cooperate with research universities to establish seagrass protection areas and enrich the area's ecological structure.
more……http://www.globaltimes.cn/content/1170532.shtml

Cairns' new hotel, Bailey by Crystalbrook Collection, opens and is filled with Australian art (QLD, Australia)

20 November 2019, by Belinda Jackson, Traveller

Art and the environment are to be permanent guests at Cairns' newest hotel, Bailey. Its foyer has already become a talking point thanks to a six-tonne marble mosaic of former Cairns resident Dolly the Dugong. The mosaic took 5000 hours of labour by 25 Syrian artists, now refugees in Turkey, in a philanthropic move by the hotel's owner, Syrian businessman Ghassan Aboud.

The Cairns newcomer is the latest in the Crystalbrook Collection, which is owned by UAE-based Aboud, who is also the founder of humanitarian group Orient for Human Relief, which finds employment for Syrian refugees. The artists' depiction of the baby dugong, which was rescued from fishing nets in the 70s and found fame while she was nurtured in the Cairns Oceanarium, is the first indication of Bailey's artistic aspirations.

The hotel group's commitment to environmental care, with recycled wood guest room keycards, biodegradable, plastic-free bags and disposable containers, a commitment to minimal paper use and low food miles. Crystalbrook is also a founding citizen of the Citizens of Great Barrier Reef movement.
more……https://www.traveller.com.au/cairns-new-hotel-bailey-by-crystalbrook-collection-opens-and-is-filled-with-australian-art-h1jcj5

County trots out ban on horseback surfing (FL, USA)

19 November 2019, by Kathy Prucnell, The Anna Maria Islander

Carmen Hanson, who owns Cponies, a horseback-riding business that operates tours in Palma Sola Bay on the north side of Manatee Avenue, said blaming the bay's environmental problems on horses is misguided. Manatee County commissioners voted unanimously Nov. 7 to direct their attorney and staff to research and report about options to regulate horseback riding in sensitive waters. In supporting the directive, commissioners pointed to seagrass loss and recent no-swim advisories in the bay.

In business for eight years, Hanson disputes that horses are responsible for the fecal matter in the water or that their presence leads to the advisories. She said the horses aren't treading on the seagrass beds, where it's "soft and mucky." In addition, she and her 10 employees collect and remove any feces, place it in a muck bucket and dispose of it at their Myakka City farm.

With regulation, Manatee County would follow Pinellas County, which, in October, approved a measure prohibiting horseback riding, walking and training in Tampa Bay, as well as seagrass damages in the county's preserves. The Florida Department of Health issued no-swim advisories for exceeding EPA guidelines for fecal matter in the bay in July, August and October; but acknowledged the DOH's testing can't tease out whether it's due to human or animal waste. The advisories were lifted about a week after testing showed a return to safe swimming standards.
more……https://www.islander.org/2019/11/county-trots-out-ban-on-horseback-surfing/

Jackie Toledo asks for $26.4M for various Tampa Bay and state projects (FL, USA)

18 November 2019, by Janelle Irwin Taylor, Florida Politics

Tampa Rep. Jackie Toledo is asking the state for $26.4 million for various state and local projects. Toledo filed a total of 22 appropriations project requests for the 2020 Legislative Session, more than any other Tampa Bay area representative. The projects include water quality and environmental plans, education, transportation and public safety.

A couple of the requested items include:
— $5 million for Ecosphere Restoration Institute Submerged Aquatic Vegetation Statewide Restoration and Aquaculture program (HB 2141). The request includes funds from the Department of Agriculture and Consumer services for sea grass restoration that is important for the marine ecosystem because the submerged sea grasses serve as a breeding ground for marine life as well as protection to smaller fish and from larger predators. Sea grass beds are also important for water clarity and cleanliness because they absorb excess nutrients in the water like nitrogen and phosphorous. Reducing nutrient pollution could help reduce incidents of red tide.

— $1.5 million for Monroe County Seagrass Restoration Project (HB 3111). This bill would use Department of Environmental Protection funds for sea grass restoration in the Florida Keys John Pennekamp Coral Reef State Park and the Seven Mile Bridge to improve water quality, enhance marine and fish habitats and reduce negative impacts to coral through the Coastal Conservation Association of Florida.
more……https://floridapolitics.com/archives/311483-jackie-toledo-asks-for-26-4m-for-various-tampa-bay-and-state-projects

Manatees on the move as water temperatures drop (FL, USA)

18 November 2019, by Danielle Uliano, WJXT News4JAX

It's the time of year where manatees are on the move in search of warmer waters. November is Manatee Awareness Month and while these sea cows are on the move the Florida Fish and Wildlife Conservation Commission wants to be on alert. Over time Florida has gone to great lengths to get manatees off the endangered list and listed as a threatened species. As of today the number of manatees in Florida as grown to at least 7,520.

Karen Parker from the Florida Fish and Wildlife Conservation Commission says the organization is dedicated to educating the community on ways to help keep manatees safe. The FWC encourages you to keep our waterways clean, recycle used fishing line in a designated bin by the docks, obey all posted waterway signs, and avoid traveling in seagrass and other shallow areas.

Most importantly if you see and injured, orphaned, entangled or distressed manatee you're encouraged to contact the Florida Fish and Wildlife Conservation Commission at 888-404-3922.
more……https://www.news4jax.com/news/2019/11/18/manatees-on-the-move-as-water-temperatures-drop/

An underwater quest to restore our endangered seagrass meadows (NSW, Australia)

18 November 2019, by Caroline Tang, UNSW Newsroom

A beautiful seagrass is endangered in parts of NSW, but a team of "underwater gardeners" led by a UNSW marine ecologist is working to stem its decline. "*Posidonia australis* is a slow-growing seagrass that likes to live in the same beautiful sheltered bays where us humans like to live, build our houses and moor our boats, so the building of marinas, coastal development, pollution and dredging has caused its decline," UNSW marine ecologist Associate Professor Adriana Vergés said. "Unfortunately, *Posidonia* is officially endangered – it's disappearing from six estuaries in NSW and unless we do something about it, it will be extinct from places like Sydney Harbour in the next 15 years," A/Prof Vergés said.

A/Prof Vergés is leading a team of scientists who are passionate about taking action against this problem: Operation Posidonia aims to restore seagrass to estuaries where it is endangered, in conjunction with replacing traditional swing moorings with environmentally friendly ones, also known as EFMs. Only 18 months after its launch, the project is yielding positive results in Port Stephens where a trial is underway with help from community volunteers. Operation Posidonia's "Storm Squad" has already collected more than 1500 Posidonia shoots at Port Stephens. Storms naturally detach Posidonia from the sea floor and the shoots wash ashore. The volunteers pick up the shoots which are still living and store them at submerged stations for the project's "underwater gardeners" – the scientists – to take and replant.

The scientists use jute mats to stabilise sediment in old mooring scars, which helps with the replanting of *Posidonia*. About 70 per cent of the first shoots planted survived. "Now, nine months after the initial restoration we're starting to see growth from the shoots that we planted; we've even seen flowers so it's encouraging," she said. This week, from Wednesday 20 November to Friday 22 November, Operation Posidonia's scientists will don their SCUBA gear and replant the first shoots around the new EFMs at Port Stephens, recently installed into the scars left by traditional block-and-chain moorings. A/Prof Vergés said it was important that Operation Posidonia had the twin aims of restoration of the endangered seagrass and the removal of the problem: traditional swing moorings. A/Prof Vergés said it was still early days for Operation Posidonia, but she hoped it would inspire people to get involved.
more……https://newsroom.unsw.edu.au/news/science-tech/underwater-quest-restore-our-endangered-seagrass-meadows

Related article
Saving endangered seagrass meadows with citizen scientists (18 November 2019, Mirage News)
https://www.miragenews.com/saving-endangered-seagrass-meadows-with-citizen-scientists/

Es Trenc park tourism use being regulated (Spain)

16 November 2019, Majorca Daily Bulletin

The Balearic government has started on the plan for the organisation of natural resources to regulate tourism use in the Es Trenc Nature Park, Majorca. Environment minister Miquel Mir explained yesterday that the plan will set out measures to limit human pressure in the Es Trenc and Ses Covetes coastal area, which is the "most sensitive in the park".

The minister didn't refer to specific numbers of people and confined himself to saying that the plan will guarantee the conservation of fauna and flora and the preservation of "ethnological" elements. Mir added that "we are not talking about indirect management measures", by which he meant limits on, for example, the number of sunloungers and beach chiringuitos.

The 2017 law by which the nature park was established had included these measures and it has, Mir noted, brought order to car parking and a drastic reduction in the number of sunloungers. The plan will essentially deal with beach and dune conservation and the management of *Posidonia* seagrass remains.
more…….https://www.majorcadailybulletin.com/news/local/2019/11/16/59675/trenc-park-tourism-use-being-regulated.html

People are using mosquito nets for fishing – and it works too well (Mozambique)

11 November 2019, by Brian Owens, New Scientist

Mosquito nets designed to help stop the transmission of malaria are finding a new use – fishing. However, the way they are used could have destructive consequences for both food security and coastal ecosystems. Although it was known that mosquito nets are repurposed this way in many countries, little was known about the amount and type of fish they caught. So Benjamin Jones at Stockholm University in Sweden and Richard Unsworth at Swansea University in the UK decided to investigate the practice at 10 sites in northern Mozambique.

The pair found that the nets are extremely effective. A single sweep can bring in almost half of the daily average catch by weight of a traditional net. The researchers recorded dozens of species being caught – and many were juveniles. That could be a problem, both for the people and the local seagrass ecosystem, says Jones. Removing so many juveniles means there could be fewer fish to catch in the future. And the seagrass meadows, which bind the sediment along the coast together and are an important carbon sink, rely on the fish to stay healthy. Remove too many fish and they could collapse, he says.

The fishers use everything they catch, either drying the fish or fermenting them in jars, and the catch provides their main source of protein. For many, the nets are their only choice to provide food for their families. “The people using the nets are the poorest in society,” says Jones. “They are using nets that could be saving them from malaria because they have nothing else.”
more…….https://www.newscientist.com/article/2222873-people-are-using-mosquito-nets-for-fishing-and-it-works-too-well/

Related article
The Ecological Cost of Mosquito Net Fishing (13 November 2019, Modern Farmer)
https://modernfarmer.com/2019/11/the-ecological-cost-of-mosquito-net-fishing/

Horseback tours are trampling seagrass in Palma Sola Bay. That might get them banned (FL, USA)

08 November 2019, by Ryan Callihan, Bradenton Herald

An issue that has nagged Manatee County officials for years may finally have a solution. The Board of County Commissioners on Thursday afternoon voted unanimously to direct their legal team to conduct research and provide options for more regulation of horseback riding in “sensitive” bodies of water. A new ordinance could be modeled after Pinellas County, which voted last month to ban horseback riding in the waters of Tampa Bay in the name of environmental protection. With water quality issues continuing to plague the Palma Sola Causeway, Manatee officials say horseback riding and the droppings the animals inevitably leave behind certainly play a role.

Over the past few months, the Florida Department of Health has issued several no-swim advisories at the Palma Sola south beach due to high levels of enterococci, a bacteria that is often associated with human and/or wildlife feces. In its Oct. 22 presentation on the issue of horseback riding, Pinellas County staff argued that the presence of enterocci bacteria was directly linked to the presence of horses, which have also led to “significant seagrass damage and water quality violations.”

County Attorney Mitchell Palmer told the board that his staff has already begun requesting documents related to Pinellas County’s ordinance, including the past five years of water quality testing conducted by the Department of Health. He said it was his opinion that “ancient” laws that allow FDOT to identify horses as a means of transportation shouldn’t apply to the recreational activity that occurs along the Palma Sola Causeway. County attorneys will present legal options to commissioners at a future meeting.
more…….https://www.bradenton.com/news/local/article237131034.html

Related article
County moves to regulate horses in bay (11 November 2019, The Anna Maria Island Sun Newspaper)
https://www.amisun.com/2019/11/11/county-moves-to-regulate-horses-in-bay/

Pesticide management is failing Australian and Great Barrier Reef waterways (QLD, Australia)

07 November 2019, ARC Centre of Excellence for Coral Reef Studies, EurekAlert

Scientists say a failure of national management means excessive amounts of harmful chemicals--many now banned in other countries such as the EU, USA and Canada--are damaging the nation's waterways and the Great Barrier Reef. The new study was led by Dr Jon Brodie from the ARC Centre of Excellence for Coral Reef Studies at James Cook University (Coral CoE at JCU).

Dr Brodie says pesticides found at concentrations exceeding the nation's own water quality guidelines have the potential to seriously damage aquatic plants and animals. Insecticides affect prawns in freshwater streams, and herbicides affect marine species such as seagrass. "The notorious insecticide imidacloprid--now banned for its effects on bees across Europe, the USA and soon to be banned in Canada--is found in many freshwater streams and estuaries in the Great Barrier Reef and also Queensland more broadly," Dr Brodie said. The highest concentrations of pesticides, often found above Australian guidelines, are found in freshwater bodies adjacent to, and downstream of, areas of intensive cropping. This is mainly sugarcane cultivation and horticulture.

The regulation and management of pesticides in Australia is a joint responsibility of the Australian and State governments. However, Dr Brodie notes that the Queensland Government is taking action to reduce pesticide pollution through research, monitoring, risk assessments and application of better pesticide application methods.
more…….https://www.eurekalert.org/pub_releases/2019-11/acoe-pmi110719.php

Research indicates abundance of microbe diversity key to healthy coastal ecosystem (FL, USA)

05 November 2019, by Laura Schmitt, Phys.Org

For millions of years, symbiotic bacteria have lived inside the gill cells of Lucinidae clams found in seagrass meadows located mainly along tropical coasts, such as the Florida Keys. These bacteria play a crucial role in the clam's survival while also contributing to the overall health of the seagrass in which the clams live. Scientists at Clemson University have recently published a paper indicating that the bacteria are more taxonomically diverse than previously thought.

Normally, when seagrass decomposes, sulfide is produced which is toxic to seagrasses and clams. However, the bacteria oxidize the sulfide compounds to harmless sulfate, using the energy produced to turn carbon dioxide into sugars for the clam. "This whole symbiotic process enables the clams and bacteria to live in environments that are not necessarily hospitable," said Clemson biological sciences associate professor Barbara Campbell." Campbell and her students collected *Ctena orbiculate* clams from the shallow waters at Sandy Creek Landing on Sugar Loaf Key in the far western Florida Keys. They also surveyed the types of seagrass in the area, conducted physical and chemical surveys of the environment, and counted other clams. In subsequent months, her team performed next-generation sequencing and analyses in her campus lab and at Clemson's Genomic and Bioinformatics Facility to characterize the taxonomic, genetic and functional composition of the symbiont bacterial communities.

"We looked at the DNA and RNA, in terms of what genes are present, the diversity of the genes and genomes, as well as the diversity of what is being expressed by the bacteria and the host," Campbell said. According to Campbell, her research team plans to apply additional experiments to explore the diversity of the genes of both the clams and the microbes, which should provide more fundamental knowledge about the interactions between the two organisms. "We can introduce a symbiont with a specific function versus a symbiont with a different function and then put the clams back into the seagrass and see what happens," said Campbell. They will see if more diversity leads to better seagrass health.
more…….https://phys.org/news/2019-11-abundance-microbe-diversity-key-healthy.html

Related article
Clemson research indicates abundance of microbe diversity key to healthy coastal ecosystem (04 November 2019, Clemson Newsstand)
https://newsstand.clemson.edu/mediarelations/clemson-research-indicates-abundance-of-microbe-diversity-key-to-healthy-coastal-ecosystem/

Caribbean seagrass is awash with infected lobsters – but the habitat could be saving the species (Mexico)

05 November 2019, by Charlotte Eve Davies, Phys.Org

The Caribbean spiny lobster *Panulirus argus* is under threat from a deadly virus. *Panulirus argus 1* (PaV1) is found throughout the Caribbean, infecting up to 30% of lobsters in some areas. Alongside overfishing, it is the biggest danger spiny lobsters are facing today. This is important because the species plays a vital role as both predator and prey in Caribbean seagrass and reef ecosystems. The virus replaces blood cells, eventually turning infected lobsters' haemolymph milky white, leaving the disease visible to the human eye through their translucent abdomens. Once this happens, it's usually not long before the lobster dies. The virus is contagious and can be transmitted through direct contact, ingestion of diseased tissue via cannibalism and through water.

Depending on its life stage, a spiny lobster lives in different habitats. Larvae float in open oceanic waters, while postlarvae and small juveniles like shallow, vegetated habitats where they can hide from predators. When they outgrow the protection afforded by the vegetation, they seek structured shelters such as rocks and crevices around the seagrass meadows. In a recent study with colleagues at the National Autonomous University of Mexico's Reef Systems Unit in the Caribbean, we surveyed three very different habitat types—a shallow, sparsely vegetated area, an algae and seagrass meadow, and a coral reef. We found that significantly more lobsters with PaV1 lived in the highly vegetated seagrass meadow.

It's not yet clear why the seagrass habitat is a disease hot-spot. While further research is needed, it could be that seagrass is an environment in which the virus naturally reproduces, or that the habitat prevents the virus from escaping. From our study it seems that lobsters in seagrass habitats that are unable to avoid becoming diseased are much less likely to live long enough to migrate into the reef habitats where larger lobsters live. In terms of species health this can be seen as a positive, as the diseased population becomes isolated, while the best sniffers make it out onto the reefs to live and breed—natural selection in action.
more…….https://phys.org/news/2019-11-caribbean-seagrass-awash-infected-lobsters.html

Related articles
Caribbean seagrass is awash with infected lobsters – but the habitat could be saving the species (05 November 2019, The Conversation UK)
https://theconversation.com/caribbean-seagrass-is-awash-with-infected-lobsters-but-the-habitat-could-be-saving-the-species-121704
Caribbean seagrass is littered with infected lobsters — but the habitat may help save the species (10 November 2019, Tech Ballad)
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Caribbean seagrass is littered with infected lobsters — but the habitat may save the species (01 December 2019, Daily Stock Dish)
https://dailystockdish.com/caribbean-seagrass-is-littered-with-infected-lobsters-but-the-habitat-may-save-the-species/

Trang banking on eco market (Thailand)
5 Nov 2019, by Dusida Worrachaddejchai, Bangkok Post

Ecotourism and community-based tourism are key drivers to diversify the sector in Trang, a southern province rich in natural resources. The change meets growing demand for sustainable tourism as more tourists look to nature and travel with environmental awareness, said Banjong Naruepornmatee, president of the Tourism Council of Trang.

Last month, Hat Chao Mai National Park and Mu Koh Libong Reserve in Trang, were approved as the 45th Asean Heritage Park at the 15th Asean Ministerial Meeting on the Environment in Siem Reap, Cambodia. Mr Banjong said the news about Marium, the baby dugong, helped build awareness about responsible tourism and eco-friendly movements. Mu Koh Libong serves as the largest home for endangered dugongs in Thailand with around 180 animals, with only 250 in the country. He said visitors to Hat Chao Mai National Park and Mu Koh Libong are still relatively small in terms of tour operators. Some 1,000 people visit Hat Chao Mai each day and less than 500 for Mu Koh Libong.

The province welcomed 1.17 million visitors in the first nine months this year, up 1.7% from the same period last year, and generated 7.77 billion in tourism income, a gain of 5.21%. Nantawan Siripokkaphat, director of the Tourism Authority of Thailand's Trang office, expects tourist arrivals this year to rise by 5% from 1.6 million in 2018, creating 9.9 billion baht in income, up 10%. The international market consists of travellers from Sweden, Germany, Malaysia, France, Denmark and China.
more…….https://www.bangkokpost.com/business/1787469/trang-banking-on-eco-market

Thailand's critically endangered dugongs keep dying and humans are to blame (Thailand)
03 November 2019, by Jack Board, CNA

For as long as any local villager remembers, dugongs have found a home in the waters around Koh Libong. Drawn to the vast fields of seagrass close to shore, they are a common sight for fishermen. But there was something special about Mariam. She was a young dugong brought to the area by marine officials hoping to rehabilitate her. She was lost and alone, with no mother in sight. Her helplessness activated a communal caring. “Everybody loved her. It wasn’t only the people who saw her on social media. People who surrounded her, or nursed her, gave her their hearts,” said Dr Patcharaporn Kaewmong, a veterinarian from the Phuket Marine and Coastal Resource Research & Development Institute, which was centrally involved in caring for Mariam. “But she died faster than we thought.” When an autopsy was performed, there was alarm at what was found inside Mariam’s stomach - a shocking amount of plastic. “We found that it blocked her colon, making excretion harder, which afterwards caused an infection,” Dr Patcharaporn said.

While dugongs perish every year, 2019 has been abnormally deadly, with the highest casualty count ever recorded in Thailand. The reason, experts generally agree, is the impact of humans on the delicate environment these sea mammals depend upon. The DNP estimates that about 80 per cent of Thai dugong deaths are due to entanglement in fishing nets. Fishing is banned close to shore where dugongs feed and patrols are done to prevent incursions or illegal activity. It has not proven to be effective enough.

Increasingly, contaminants in the dugong’s environment, including plastic scraps, marine debris and seeping waste water, appear to be contributing to the casualty rate. With dugongs being at the top of the sea food chain, their health is seen as intrinsically connected to the abundance and vitality of the local environment. The government has announced a ban on the production of three different types of harmful plastic, including microbeads, without making any pledge on outlawing single-use plastics.
more…….https://www.channelnewsasia.com/news/asia/thailand-dugong-mariam-endangered-plastic-waste-12031364

Seagrass—secret weapon in the fight against global heating (Norway)

01 November 2019, UN Environment

One of the most threatened yet overlooked ecosystems on earth, seagrass could have a promising future thanks to its ability to absorb carbon. Seagrass accounts for 10 per cent of the ocean's capacity to store carbon—so-called "blue carbon"—despite occupying only 0.2 per cent of the sea floor, and it can capture carbon from the atmosphere up to 35 times faster than tropical rainforests.

However, it's important to understand that there are many unknowns with seagrass. "Data on the regional cover and carbon stocks in seagrass meadows is sparse for some regions, particularly the Indo-Pacific, Africa and South America," says a report titled Assessing the capacity of seagrass meadows for carbon burial: Current limitations and future strategies. "In addition, our understanding of the factors regulating the variability in carbon sink capacity among seagrass meadows is limited. These gaps limit the capacity to formulate strategies to mitigate climate change based on the carbon sink capacity of seagrass meadows," the report adds.

Nevertheless, the potential of seagrasses to sequester carbon is now starting to gain international attention as efforts to tackle the climate emergency become ever more urgent. The potential for seagrass in nationally determined contributions is significant, as some 159 countries have seagrass on their shores. An analysis soon to be published by GRID-Arendal, a Norwegian foundation working with the United Nations Environment Programme (UNEP), found that 10 countries have included seagrass in existing nationally determined contributions. Five countries refer to its conservation and restoration in mitigation actions, while eight plan to use it in adaptation. UNEP, GRID-Arendal and the UNEP-World Conservation and Monitoring Centre have convened the International Seagrass Experts Network and plan to launch a global report on the importance of seagrass ecosystems in early 2020.

more……https://www.unenvironment.org/news-and-stories/story/seagrass-secret-weapon-fight-against-global-heating

Related article
Seagrass has ability to fight global heating (06 November 2019, Daily Trust)
https://www.dailytrust.com.ng/seagrass-has-ability-to-fight-global-heating-unep.html

Sea urchins devastate broadleaf seagrass: Industry and environmentalists team up to restore it (Vic, Australia)

01 November 2019, by Peter Somerville, ABC Local

An unlikely partnership involving scientists and the fishing industry is at the centre of efforts to restore seagrass stocks in Corner Inlet. Broadleaf seagrass has been decimated by native urchins in the waterway in Victoria's south-east, and it has the commercial fishing industry worried. As part of this project, Landcare is taking to the water in a world-first community-led seagrass restoration project. Yarram Yarram Landcare Network coordinator Scott Elliott said work in the catchment areas had improved the quality of water flowing into the estuary, however a need to improve the seagrass habitat prompted the decision to take Landcare offshore. The Landcare network, in partnership with the commercial fishing industry, will replant 200 hectares of broadleaf seagrass in Corner Inlet over the coming two years.

The project is jointly funded by the Victorian Government and the National Landcare Program, and will make use of $250,000 to regrow seagrass in the inlet. Mr Elliott said this would be achieved by placing long sausage-shaped sandbags in the water, which will form eddies and protect seagrass seedlings from tidal flows. He said the support of Corner Inlet's commercial fishing community was vital to the success of the project. "They were the ones who identified the problem in the seagrass meadows and with their knowledge, support, equipment and experience we are able to do what we're doing today," Mr Elliott said.

Marine scientist John Ford said this project was the first time the commercial fishing industry had united with scientists and Landcare to do a "big thing" for the environment. He said it was vitally important the community recognised the link between oceans and the land, with inflows from rivers and streams having a direct impact on the oceans.

more……https://www.abc.net.au/news/2019-11-01/fighting-urchin-induced-seagrass-devastation/11658504

CONFERENCES

The 14th International Seagrass Biology Workshop (ISBW14) (Annapolis, Maryland, USA on 09–14 August 2020)

Theme: " Signs of Success "

The International Seagrass Biology Workshop (ISBW) is the only international meeting specifically tailored to seagrass scientists, professionals and students. The International Seagrass Biology Workshop (ISBW) provides an excellent opportunity for the scientists working on various aspects of seagrass ecosystems to come together and discuss their latest findings. The ISBW14 Chesapeake Bay 2020 will be held in August

2020 at the Graduate Annapolis Hotel, Annapolis, Maryland. This will be the first time ISBW has been hosted in the U.S.A. and the iconic Chesapeake Bay is the logical setting. Chesapeake Bay is an iconic estuary with a strong scientific and management history. The resurgence of seagrasses (including brackish water submersed aquatic vegetation) in the bay is the largest documented in the world, and clearly a "sign of success" to inspire seagrass scientists globally.

More information:
To get important updates, visit: https://isbw14.org/
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14th International Coral Reef Symposium (ICRS 2020) (Bremen, Northern Germany, 5 – 10 July 2020).

Theme: Tackling the Challenging Future of Coral Reefs

The ICRS is the leading global conference on coral reef science, management and conservation, sanctioned every 4 years by the International Coral Reef Society (ICRS). For the first time in its history, an ICRS will be held in Europe. ICRS 2020 will be the key event to develop science-based solutions addressing the present and future challenges of coral reefs, which are globally exposed to unprecedented anthropogenic pressures. The five-day program will present the latest scientific findings and ideas, provide a platform to build the essential bridges between coral reef science, conservation, politics, management and the public, and will promote public and political outreach.

Key Themes which include seagrass ecosystems:
Theme 3: Ecosystem functions and services
Theme 6: Unexplored and unexpected reefs
Theme 9: Global and local impacts
Theme 10: Organismal physiology, adaptation and acclimation

More information:
To get important updates, visit: https://www.icrs2020.de/program/session-program/

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 50,560 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

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