Seagrass-Watch e-Bulletin

Le Morne, Mauritius

30 September 2021

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IN THIS BULLETIN

Please note: links to sources were active on date of publication. Some sources remove links periodically.

NEWS

Fish fertilize corals and seagrasses, but not the way you think (FL, USA)

29 September 2021, Phys.Org

Fish are like underwater gardeners, fertilizing the coral reefs, kelp forests and seagrasses where they reside. Their fertilizer of choice—their own pee. Will Wied, a Ph.D. student in Justin Campbell's lab in the FIU Institute of

Environment, wants to get to the bottom of how different factors are altering the all-important nutrient balance. And he's going straight to the No. 1 source of these nutrients—fish waste.

Fish waste—excreted through the gills, in addition to the most obvious source—has a lot of beneficial and life-sustaining nutrients, including nitrogen and phosphorous. If fish numbers dwindle and the steady supply of urine slows, these ecosystems suffer. "I'm not just looking at how the fish may be eating a lot more, but also how their excretion is then recycled. Are they no longer hanging out in the seagrass beds, so now the seagrasses don't have a source of nutrients?" Wied said.

The vast majority of Wied's research happens in South Florida. Currently, a normal day of fieldwork means he is out on Biscayne Bay catching fish and putting them in containers filled with filtered water. Wied keeps the fish for a maximum of 12 hours, frequently monitoring their health before releasing them. Then, he examines the water to calculate the rate of excretion to show the potential of how much and what type of nutrients they could be contributing to a certain location.
more…….https://phys.org/news/2021-09-fish-fertilize-corals-seagrasses.html

Rising Sea Levels Could Mean Trouble for Carolina Seagrasses and Their Fisheries (NC, USA)

28 September 2021, Outdoor Life Magazine

Sea water is rising in tidal areas from the Carolinas down to the Florida coast, and that could be disastrous for aquatic grasses and the inshore fisheries they support. In North Carolina the changes in water, grass beds, and coastal aquatic life have been dramatic. North Carolina has about 120,000 acres of seagrass habitat tucked around barrier islands and in estuaries along the coast. Unfortunately, seagrasses are declining all around the Carolinas. “Nowhere are we seeing increases in seagrasses in North Carolina,” said retired NOAA scientist Jud Kenworthy. “And one thing is clear, if you don’t have seagrass, you’re going to lose fisheries. That’s unacceptable.”

Saltwater flowing in and out of costal marshes fosters a staggering amount of diversity, providing food, refuge and nursery habitat for more than 75 percent of fisheries species. “Seagrass and marshes are dynamically interacting with each other,” Kenworthy, an adjunct faculty member at UNC Wilmington, said. As sea levels rise coastal marshes are flooded with more salt water, which throws off the balance of a delicate system. “Seagrass sets the stage for everything. Losing it threatens the entire system. It’s the driver of our fisheries. That alone justifies its protection.”

Higher water from rising tides increases salinity, diminishes sunlight needed by vegetation and reduces dissolved oxygen in the water. None of this is good for sustaining healthy coastal grasses and the aquatic species they harbor. “Those marshes will not be fish habitat if they are underwater most of the time,” says Carolyn Currin, a research scientist at NOAA’s laboratory in Beaufort. “We really need to think about the future and come up with habitat restoration plans that will be resilient to an extra 6 inches to a foot of sea in the next 25 to 30 years. “We’re thinking that those low marshes won’t be around in 10 to 20 years.”
more…….https://www.outdoorlife.com/conservation/carolina-seagrasses-trouble-fishing/

Ahead of UN climate conference, Seychelles pledges to protect all mangroves, seagrass by 2030 (Seychelles)

26 September 2021, Seychelles News Agency

Seychelles has pledged to protect 100 percent of its mangroves and seagrass ecosystem and reduce greenhouse gas emission by 24 percent by 2030 in its climate action plan submitted ahead of the United Nations Climate Change Conference (COP26) in Glasgow in November. The climate change and environment ministry said in a press statement on Wednesday that Seychelles submitted its updated Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change in July.

The NDCs are national climate plans highlighting climate actions and targets by governments to respond to climate change. They work on a five-year cycle. In the chapter dedicated to the ocean and blue carbon in the Seychelles climate change plan, the island nation will protect at least 50 percent of its seagrass and mangrove ecosystems by 2025, and 100 percent by 2030. A long-term monitoring programme for seagrass and mangrove ecosystems by 2025 will be set up and it includes the greenhouse gas sink of the blue carbon ecosystems within the National Greenhouse Gas Inventory by 2025.

Seychelles also commits to the implementation of its adopted Marine Spatial Plan and the effective management of the 30 percent marine protected areas within its Exclusive Economic Zone (EEZ) of 1.4 million square kilometres. In the long-term commitment in the climate change plan, the Seychelles' government is set to achieve a decarbonised economy by 2050. This will be done by boosting electricity generation from renewable energies, shift progressively to low carbon transport, use renewable energy for water supply mobilisation and secure a sustainable and resilient water management system.
more…….http://www.seychellesnewsagency.com/articles/15532/Ahead+of+UN+climate+conference%2C+Seychelles+pledges+to+protect+all+mangroves%2C+seagrass+by+

"Johnny Appleseed Of The Ocean" is fighting climate change by planting seagrass (VA, USA)

24 September 2021, GOOD Magazine

Most of us don't think much about seagrass. Robert Orth, a marine biologist at the Virginia Institute of Marine Sciences, or VIMS, is not like most people. He's been thinking about seagrass daily for over 20 years, and for good reason: seagrass captures and stores a massive amount of carbon. In fact, it's such an effective carbon sink, that it's estimated to be 35x more efficient than tropical rainforests. Simply put, given its carbon sequestering capability, planting more seagrass could be an effective way of combating climate change.

In the 1930's a disease decimated large amounts of eelgrass. For decades scientists believed the eelgrass couldn't be regrown, but in 1990 small patches of it were discovered off the coast of Virginia. This discovery led Robert Orth to start a series of experiments in collaboration with the University of Virginia, first transplanting eelgrass from other areas into the bay in 1999. Once the eelgrass survived, Orth and his team began scattering seeds across a total of four bays: South Bay, Cobb Bay, Spider Crab Bay, and Hog Island. Not only did the seeds grow into plants, the plants thrived and spread. South Bay even successfully reintroduced bay scallops for the first time in nearly a century.

In the years since that first experiment, Orth's operation has grown significantly. Aided by volunteers, his team has sown nearly 75 million seeds, blanketing six thousand acres of coastal bay in eelgrass and earning Orth a moniker: "The Johnny Appleseed of seagrass." Ocean restoration groups across the world have looked to VIMS for guidance. Meanwhile VIMS is hoping to build on their established success and restore all of the Eastern Coastal bays to their pre-1930 conditions. Doing so would mean cleaner, clearer oceans with more biodiversity, as mollusks, crustaceans, sea turtles, bottle-nosed dolphins and many more marine animals rely on seagrass to live. It would also mean much less carbon in the environment, and better defense from extreme weather, since coastal beds with seagrass are much less vulnerable to wave action from ocean currents and storms. Planting seagrass may not get us to carbon neutrality alone, but innovations like Orth's, which protect and restore our environment, are essential contributors in the fight against climate change.

more……https://www.good.is/johnny-appleseed-of-ocean-seagrass

Tourists criticised for 'overcrowding the seas' in Balearics as travel rules relax (Spain)

22 September 2021, Daily Express

Members of the Balearic Government have expressed anger at tourists' behaviour in the islands. The beautiful islands are extremely popular with tourists. But as the islands welcome tourists back after the pandemic, some traveller activity has attracted the rage of the local Government. Tourist boat overcrowding has angered some of the officials.

Miquel Mir said the masses of boats in the region were causing the “overcrowding of the sea”. The Balearic islands are home to the largest *Posidonia* seagrass reef throughout Spain and the Mediterranean. *Posidonia* is a species of seagrass which is under special protection as a Priority Habitat of Community interest in the Balearics. Around the island of Minorca, 40 percent of boats were ordered to move for anchoring in Posidonia seagrass areas. Anchor dragging has damaged the endangered plant. The island saw 2,380 boats docking in the area of which just under half were in the seagrass.

Patricia Font, a local Government official in Minorca, said the boats were “tourist overcrowding at sea, far exceeding the sea’s capacity”. Font blamed tourists for the overcrowding, saying: “There are many inexperienced sailors, who do not know where they can anchor.” She found this particularly annoying as the local officials had created a map marking areas with Posidonia meadows. Some officials said a public campaign could help to increase awareness and protect Posidonia.

more……https://www.express.co.uk/travel/articles/1494807/spain-balearic-rage-british-tourist-boat-overcrowding

No-anchor zones introduced in Studland to protect seahorses (England, UK)

22 September 2021, Dorset Echo

No-Anchor zones will be introduced in Studland as part of a new scheme to protect seahorses and seagrass. The new Studland Bay Marine Conservation Zone (MCZ) Habitat Protection Strategy is being introduced by the Marine Management Organisation (MMO) to protect sensitive seagrass and seahorses. A voluntary no-anchor zone will be introduced in two stages to protect the seagrass habitat and the species that it supports.

From December 17, 2021, an interim no anchor zone will commence protecting the core seagrass habitat off South Beach. Then, from June 1, 2022, the interim no anchor zone will be extended to cover a larger area of seagrass off South Beach. Alongside this, the strategy provides guidance about moorings which will support users of the bay in applying for marine licenses to install advanced mooring systems which are an environmentally friendly alternative to anchoring or using traditional moorings in seagrass.

It was decided that the no anchor zone would be voluntary based on feedback from stakeholders. This will give users of the bay the opportunity to take ownership and work collaboratively, with the MMO and each other, to ensure Studland Bay MCZ is protected. The MMO will be liaising with local groups to raise awareness of the voluntary measure. The MMO will develop plans to monitor and review the voluntary measure, alongside partners. The MMO will inform key stakeholders about how they can participate in reviews.
more…….https://www.dorsetecho.co.uk/news/19595809.no-anchor-zones-introduced-studland-protect-seahorses/

Florida seeks public input on how to manage new Nature Coast Aquatic Preserve (FL, USA)

20 September 2021, The Pew Charitable Trusts

Florida created the Nature Coast Aquatic Preserve last year to conserve more than 700 square miles of coastal habitat north of Tampa and give the public a healthy outdoor space for both recreation and tourism businesses. Now the Sunshine State is giving the public a chance to weigh in on the best ways to manage the area.

On Sept. 28, the Florida Department of Environmental Protection (DEP) will host its first meeting to hear the public's priorities for the preserve, which includes waters off Citrus, Hernando, and Pasco counties. DEP officials will consider the public's input as they develop the preserve's management plan—a roadmap for how to steward the area. A well-crafted management plan would enhance opportunities for recreational pursuits and include measures for boater education, water quality and seagrass monitoring, habitat restoration, and other needs.

The Nature Coast site is one of Florida's 42 aquatic preserves, each of which has a tailored management plan that is meant to strike a balance between human uses and conservation needs. In the Nature Coast preserve, those needs include how to safeguard nearly 400,000 acres of seagrass, mangrove islands, salt marsh, oysters, sponges, corals, and other assets. The area hosts summertime scalloping, world-renowned fishing and manatee watching, and other activities that generate more than $600 million annually for local communities, provide over 10,000 jobs, and support about 500 businesses.
more…….https://www.pewtrusts.org/en/research-and-analysis/articles/2021/09/20/florida-seeks-public-input-on-how-to-manage-new-nature-coast-aquatic-preserve

Seagrass meadows act as vibrio catchers (Germany)

20 September 2021, Eurasia Review

In a study published in the journal Marine Biology, a team of researchers from GEOMAR Helmholtz Centre for Ocean Research Kiel demonstrated that native seagrass meadows can improve water quality with respect to potentially harmful bacteria: Water from the densely vegetated submarine areas contains fewer vibrios – naturally occurring bacteria that can be harmful to health in high concentrations.

At five locations in the Bay of Kiel, divers collected water samples from overgrown and non-vegetated sandy bottoms. In the laboratory, these were placed on a plate prepared with a nutrient solution. After a few days the Vibrio colonies that formed were counted. The analyses showed that water from seagrass beds contained an average of 39 percent fewer vibrios and 63 percent fewer of the potentially harmful *Vibrio vulnificus/cholerae* type compared to non-vegetated areas.

The new results are of particular importance because all climate models predict above-average warming in the future in combination with a sweetening of the Baltic Sea. "These are exactly the environmental conditions that will lead to the further spread of vibrios also on beaches used for swimming in summer," said Professor Ute Hentschel Humeida, microbiologist at GEOMAR and co-author of the publication. The study also highlights the crucial importance of seagrass beds as a nature-based solution for the health of shallow water ecosystems and their water quality. Thus, it provides further incentives for the protection and restoration of these long underestimated coastal ecosystems.
more…….https://www.eurasiareview.com/20092021-seagrass-meadows-act-as-vibrio-catchers/

USM prof, Water Institute work to restore Chandeleur Islands (LA, USA)

19 September 2021, Associated Press

A Louisiana-based research organization and a professor at the University of Southern Mississippi are joining forces in a research project aimed at restoring and protecting the Chandeleur Islands in the northern Gulf of Mexico. Led by Dr. Kelly Darnell, an assistant research professor at USM, the project is one of 20 awarded a combined $2.3 million to find ways of best managing natural resources in the Gulf, including marine, mammals, shorebirds, barrier islands, seagrass and fisheries. The projects are funded by the National Oceanic and Atmospheric Administration RESTORE Science Program.

Darnell's project, which relates to seagrass ecosystems along the Chandeleur Islands, was given $127,065. "We're committed to developing a plan that provides practical and useable data that can be easily incorporated into restoration and management decisions for the unique and productive Chandeleur Islands," Darnell said. "These seagrass beds are very dynamic and have greatly reduced with major storms, such as Katrina in 2005. This project will help understand how decisions made in planning the Chandeleur Islands restoration may influence the area of

seagrass potentially growing in future decades," said Tim Carruthers, director of Coastal Ecology at The Water Institute of the Gulf in Baton Rouge.

"The Chandeleur Islands are a highly dynamic system, and the long-term health of the seagrass meadows and other habitats is tied to them being resilient to storms and sea level rise even as the islands themselves evolve on a daily and weekly basis," said Soupy Dalyander, senior research scientist at The Water Institute.
more……https://apnews.com/article/science-environment-and-nature-louisiana-gulf-of-mexico-wildlife-5081286e57012939c19a068c2d8ef6c8

Area estuaries seeing seagrass losses (FL, USA)

15 September 2021, Sarasota Herald-Tribune

Back in April, some very disconcerting news came to light when the Southwest Florida Water Management District released data indicating Tampa Bay had suffered a 13% loss of seagrasses. To add insult to injury, this past week SWFMD updated their data to a higher 16% (6,353 acres) along with 18% in Sarasota Bay and a whopping 23% in Charlotte Harbor. This is so disheartening as I still remember writing glowing articles about an increase of seagrass acreage in all three estuaries within the past 10 years.

Justin Bloom, founder of Suncoast Waterkeeper, states "that kind of signals the really bad scenario that we are afraid of." He continues, "our estuaries are facing the same progression of worsening conditions that we saw over in Indian River Lagoon, which suffered massive seagrass losses in recent years leading to staggering manatee deaths due to starvation. As of Sept. 3, the death count stands at 937. Let this be a cautionary tale as our estuaries simply will cease to function without healthy seagrasses.
more……https://www.heraldtribune.com/story/sports/2021/09/15/area-estuaries-seagrass-losses-sarasota-bay-charlotte-harbor-southwest-florida-water-management/8339184002/

Coastwatch Fight to Save Vital Native Species Continues (Ireland)

15 September 2021, Afloat

Zostera marina is a type of seagrass which grows in the inshore areas of south Wexford. However, local seagrass habitats are under threat from the invasive species *Sargassum muticum*, or 'wire weed', which stunts its growth and eventually kills it. Mick Berry of Coastwatch and local environmentalist Karin Dubsky invited members of the public and government officials to St Patrick's Bridge in Kilmore Quay to highlight the importance of seagrass and the urgent need to safeguard its future.

"England has already lost 92 per cent of its sea grass and Ireland's levels are patchy, we don't know how much is left," said Mick. "We need to map it around the coast of Wexford and identify where it might be. People don't know what it looks like, even the people living here in Kilmore, they get it mixed up with green algae. At the moment no one is doing anything to preserve it, there's a lot of red tape holding everything up."

Salvation may yet be at hand in the form of the new Maritime Area Planning Bill which is currently before the Oireachteas and includes plans to give local authorities a role in managing inshore coastal areas. It was published on June 29 and coincided with the launch of the National Marine Planning Framework, Ireland's first national framework for managing marine activities.
more……https://afloat.ie/marine-environment/coastal-notes/item/51939-fight-by-coastwatch-continues-to-save-vital-native-species

How citizen scientists in Port Stephens have helped researchers to restore endangered seagrass (NSW, Australia)

16 September 2021, Port Stephens Examiner

An operation to rehabilitate an endangered seagrass *Posidonia australis* that supports seahorses, blue swimmer crabs and other marine life has been successfully trialed in Port Stephens with the results to inform further restoration efforts across the state. "We have been restoring *Posidonia australis* in mooring scars in Port Stephens, the second most impacted estuary by boat moorings in NSW," University of NSW PhD student Giulia Ferretto said. Operation Posidonia is a collaboration between UNSW's Sydney Institute of Marine Science, the NSW Department of Primary Industries and University of Western Australia. It was launched in 2018 and used social media and meetings with local community groups and schools to engage with 5000 citizen scientists.

During a period of two years the citizen scientists made up of beach-goers, dog walkers and kayakers collected about 1500 naturally detached *Posidonia australis* shoots that had washed up on the beach after storms, strong winds and high tides. In Port Stephens, hundreds of viable fragments in favourable conditions were collected and delivered to a floating box at the Anchorage in Corlette. This box was regularly emptied by NSW DPI Fisheries staff, who kept the fragments alive at the Taylors Beach institute. In 2019 and early 2020 Ms Ferretto and a team of divers began to transplant those fragments back into seagrass gardens around Shoal Bay.

Ms Ferretto said most transplanted fragments produced new shoots after a few months and quickly re-established. Many expanded into new areas. The team is now expanding Operation Posidonia in Lake Macquarie and Botany Bay, two of the estuaries where *Posidonia australis* is formally listed as endangered.
more…….https://www.portstephensexaminer.com.au/story/7427411/port-the-proof-that-washed-up-shoots-can-heal-scars-photos-video/

KWS probe death of 300kg endangered dugong in Lamu (Kenya)

14 September 2021, The Star

The carcass of the endangered dugong has been found by rangers at Block Pezali locationi, Shanga-Ishakani, Lamu East. Pate Marine Community Conservancy manager Nadhir Hashim confirmed the carcass was found about 3km from Shanga-Rubu, where the first dugong carcass was recovered in April last year. It measured 6.5 feet and weighed 200kg.

Officers from the Kenya Wildlife Services moved the carcass to Nairobi, where it will be preserved and used for exhibition purposes for visitors and researchers. PMCC has called for concerted efforts to ensure endangered species at the Kenyan coast are well preserved and protected. Lamu county KWS commander Mathias Mwavita urged mariners to exercise caution while at sea not to hurt endangered animals such as the dugong.

Along the Kenyan Coast, dugongs are only found in Kiunga in Lamu, Kilifi county and some parts of the South Coast but are still hard to sight. These endangered mammals have, however, not been sighted in Kenya's coastal waters for years. It is estimated the remaining population of dugongs in Kenya is less than 10, but an aerial census survey led by the Kenya Wildlife Service in 2017 recorded zero sightings of the marine mammal.
more…….https://www.the-star.co.ke/counties/coast/2021-09-14-kws-probe-death-of-300kg-endangered-dugong-in-lamu/

NSF grants $2.5M for seagrass, marine ecosystem research (NY, USA)

13 September 2021, Newswise

Seagrass now dies at a rapid pace and its demise from wasting disease only gets worse with a warming climate. To seek solutions, the National Science Foundation’s Division of Ocean Sciences and Environmental Biology awarded a four-year, $2.5 million grant to Drew Harvell, professor emeritus in ecology and evolutionary biology at Cornell University, to examine the transmission pathways of seagrass wasting disease in coastal meadows.

“In previous research, we showed how seagrass meadows have superpowers for filtering pathogens – particularly bacteria – from the ocean,” said Harvell, a faculty fellow in the Cornell Atkinson Center for Sustainability, who will serve as the principal investigator. “To lose these coastal meadows is a big setback for both the marine ecosystem and for human health. The pathogen *Labyrinthula zosterae* infects seagrass blades in meadows along the Pacific Ocean shores from Alaska to California, as well as in Europe, creating devastating outbreaks. It also presents an unusual opportunity, since it is tractable for transmission studies because it can be cultured and detected in the water and on other marine organisms.

The team began the research at Friday Harbor Laboratories, on the San Juan Islands in Washington, in 2012, as part of an Ecology of Infectious Marine Disease class. There, the team will track transmission paths and examine factors including climate warming and pathogen strain in starting new infections. The group also will investigate how the seagrass microbiomes and the biota – such as snails and oysters – may affect the infection rate. The experimental work will integrate with mathematical modeling, led by Hofmann, that tests scenarios of changing environmental conditions – resulting from climate warming – on disease transmission. This will inform mitigation strategies to reduce disease impact.
more…….https://www.newswise.com/articles/nsf-grants-2-5m-for-seagrass-marine-ecosystem-research

First Dugong Conservation Reserve to be built in India (India)

09 September 2021, The Indian Awaaz

India’s first Dugong conservation reserve will be built in Tamil Nadu for the conservation of Dugong, a marine animal that has been enlisted vulnerable to extinction on a global scale by the World Conservation Union (IUCN). Principal Secretary, Environment Climate Change & Forests, Government of Tamil Nadu, Supriya Sahu said: “Government of Tamil Nadu will set up India’s first Dugong Conservation Reserve in the Palk Bay.”

The reserve will spread over an area of 500 km in Palk Bay on the southeast coast of Tamil Nadu. Palk Bay is a semi-enclosed shallow water body with a water depth maximum of 13 meters. Located between India and Sri Lanka along the Tamil Nadu coast, the dugong is a flagship species in the region. Dugong is the State animal of Andaman & Nicobar Islands. This endangered marine species survive on seagrass and other aquatic vegetation found in the area. Distributed in shallow tropical waters in the Indo-Pacific region, in India, they are found in the Gulf of Kutch, Gulf of Mannar, Palk Bay, and Andaman & Nicobar Islands.

The proposed reserve area has the highest concentration of dugongs in the country. In addition, studies suggest that simultaneous effort towards seagrass meadow restoration, reduction of dugong mortalities, and community participation in dugong conservation can help in helping the dugong population recover. It also calls for creating awareness among the people, involving the local communities.
more……https://theindianawaaz.com/first-dugong-conservation-reserve-to-be-built-in-india/

Jurien Bay residents call for marina redesign to prevent fish deaths and stench (WA, Australia)

10 September 2021, ABC News

Fed-up Jurien Bay residents are planning a rally and circulating a petition calling for an extension to the town's marina. Their upset stems from an annual build up of seaweed and seagrasses in the marina that starves the water of oxygen, kills fish and causes a rotten stench to permeate the township.

Residents say they've pleaded with the Department of Transport for decades to alter the shape of the marina to prevent the seaweed and seagrass build up. But lack of action has caused the new public cry for help. Jurien Bay mother-of-three Sarah Wilson has garnered more than 1,000 names on a petition calling for action.

Department of Transport maritime executive director Steve Jenkins acknowledged the problem and said the department had been studying wind, wave and water movements to model a solution. Mr Jenkins said an addition to the marina would prevent the seagrass build up. But Mr Jenkins said the department was yet to source funding to build such an extension.
more……https://www.abc.net.au/news/2021-09-10/jurien-marina-fish-kill-residents-call-for-marina-redesign/100446598

CONFERENCES

14th International Seagrass Biology Workshop (ISBW14) (Annapolis, 07-12 August 2022)

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 will be held in Summer 2022 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/
Follow on Facebook @ISBW14, twitter @ISBW14 , Instagram @isbw14 #isbw14

58th Australian Marine Science Association conference (AMSA 2022) (Cairns, Australia, 07-11 August 2022)

Theme: " Change and Connections "
The annual Australian Marine Science Association conference (AMSA 2022) will enable you to share new experiences and advancements in knowledge and practice. The theme for the conference is to emphasize important linkages among environmental, ecological and social systems at a time characterised by rapid change across all these areas.

More information:
To get important updates, visit: https://www.amsa2022.amsa.asn.au/

15th International Coral Reef Symposium (ICRS 2022) (Bremen, Germany, 03-08 July 2022).

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). ICRS 2022 follows the success of the 14th ICRS Virtual event that was held in July 2021, and 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.icrs2022.de/

SEAGRASS-WATCH PUBLICATIONS:

Seagrass ecosystems of the Pacific Island Countries and Territories: A global bright spot

L.J. McKenzie, R.L. Yoshida, J.W. Aini, S. Andréfouet, P.L. Colin, L.C. Cullen-Unsworth, A.T. Hughes, C.E. Payri, M. Rota, C. Shaw, P.A. Skelton, R.T. Tsuda, V.C. Vuki, R.K.F. Unsworth
Seagrass ecosystems exist throughout Pacific Island Countries and Territories (PICTs). Despite this area covering nearly 8% of the global ocean, information on seagrass distribution, biogeography, and status remains largely absent from the scientific literature. We confirm 16 seagrass species occur across 17 of the 22 PICTs with the highest number in Melanesia, followed by Micronesia and Polynesia respectively. The greatest diversity of seagrass occurs in Papua New Guinea (13 species), and attenuates eastward across the Pacific to two species in French Polynesia. We conservatively estimate seagrass extent to be 1446.2 km2, with the greatest extent (84%) in Melanesia. We find seagrass condition in 65% of PICTs increasing or displaying no discernible trend since records began. Marine conservation across the region overwhelmingly focuses on coral reefs, with seagrass ecosystems marginalised in conservation legislation and policy. Traditional knowledge is playing a greater role in managing local seagrass resources and these approaches are having greater success than contemporary conservation approaches. In a world where the future of seagrass ecosystems is looking progressively dire, the Pacific Islands appears as a global bright spot, where pressures remain relatively low and seagrass more resilient.
https://www.seagrasswatch.org/mckenzie-et-al_2021b-2/

Seagrass ecosystem contributions to people's quality of life in the Pacific Island Countries and Territories

L.J. McKenzie, R.L. Yoshida, J.W. Aini, S. Andréfouet, P.L. Colin, L.C. Cullen-Unsworth, A.T. Hughes, C.E. Payri, M. Rota, C. Shaw, R.T. Tsuda, V.C. Vuki, R.K.F. Unsworth
Seagrass ecosystems provide critical contributions (goods and perceived benefits or detriments) for the livelihoods and wellbeing of Pacific Islander peoples. Through in-depth examination of the contributions provided by seagrass ecosystems across the Pacific Island Countries and Territories (PICTs), we find a greater quantity in the Near Oceania (New Guinea, the Bismarck Archipelago and the Solomon Islands) and western Micronesian (Palau and Northern Marianas) regions; indicating a stronger coupling between human society and seagrass ecosystems. We also find many non-material contributions historically have been overlooked and under-appreciated by decision-makers. Closer cultural connections likely motivate guardianship of seagrass ecosystems by Pacific communities to mitigate local anthropogenic pressures. Regional comparisons also shed light on general and specific aspects of the importance of seagrass ecosystems to Pacific Islanders, which are critical for forming evidence-based policy and management to ensure the long-term resilience of seagrass ecosystems and the contributions they provide.
https://www.seagrasswatch.org/mckenzie-et-al_2021a-2/

SEAGRASS-WATCH on YouTube

Seagrass: Pastures of the sea *http://www.youtube.com/watch?v=66Y5vgswj20* or
https://www.seagrasswatch.org/podsnmore/
Presentation on what seagrasses are and why they are important (over 52,658 views to date)

Global distribution of seagrass meadows *https://www.youtube.com/watch?v=OPbmam_sitk*

Presentation on scientific paper examining the global distribution of seagrass meadows by McKenzie, Nordlund, Jones, Cullen-Unsworth, Roelfsema and Unsworth *https://doi.org/10.1088/1748-9326/ab7d06*

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 *https://www.seagrasswatch.org/ebulletin/*
Frequently Asked Questions *https://www.seagrasswatch.org/faq/*
Educational Videos *https://www.seagrasswatch.org/education/*
Magazine *https://www.seagrasswatch.org/magazine/*
Virtual Herbarium *https://www.seagrasswatch.org/herbarium/*
Future sampling dates *https://www.seagrasswatch.org/upcomingevents/*

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