31 December 2018

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IN THIS BULLETIN

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NEWS

Despite current recovery, Indian River Lagoon seagrass almost gone (FL, USA)

28 December 2018, WPTV.com

After another round of freshwater discharges on the Treasure Coast, much of the St. Lucie Estuary has recovered just in time for the busy tourist season. Mark Perry with Florida's Oceanographic Society said after this year's water woes, less than 20 percent of the seagrass remains in the Lagoon. He points toward those freshwater discharges. Now he hopes there is some kind of a recovery in 2019. Mark's nonprofit is working to do their part by replenishing the seagrass. But he knows it will take years for a full recovery.

more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

Low awareness on seagrass (Malaysia)

28 December 2018, Daily Express

Seagrass Guardians co-founder Michael Yap said awareness on the importance and conservation of seagrass is still low. He said “like other habitats, the seagrass also faces the same problems due to human activities and climate change, which affects sea-level rise that prevents seagrass growth and reproduction”, at a discourse on "Seagrass and Climate Change" organised by the Centre for Research and Innovation Management (CRIM), University College Sabah Foundation (UCSF), here, recently.

CRIM Director, Professor Junaenah, said the event was aimed at nurturing and enhancing awareness among students, lecturers and communities on the importance and function of seagrass in the marine ecosystem. "Our society considers the seagrass as seaweed, but it is two different things. Therefore, we take the initiative to educate students, academics and the public on this differences between seagrass and seaweed," she said. It was part of UCSF effort to raise awareness on the threats and problems faced by seagrass due to climate change and human negligence towards the environment, she added.

more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

How now sea cow | Scientists recently dig into the history of ancient treasures on Santa Rosa ... (USA)

26 December 2018, Ventura County Reporter

Santa Rosa Island is once again proving to be an archeological hot spot. Scientists from the United States Geological Survey discovered the sea cow fossils while studying earthquake faults. The first sea cow specimen found in 2014 had mostly eroded away when geologists came to investigate in July 2017. That’s when the second, more complete fossils were discovered. Found by chance, the site represents the first sirenian known on the Channel Islands National Park. The rock that the sea cows were discovered in is tens of millions of years old instead of tens or hundreds of thousands of years old rock mammoths were discovered in.

Scientists know this sirenian’s estimated age of 20 million to 25 million years old is a time frame in their evolutionary history that is not well represented in Southern California. This discovery helps fill in a gap giving insight into what drove this distribution of sirenians that includes the modern dugong.
Roughly 20 million years ago the four northern Channel Islands (Anacapa, Santa Cruz, Santa Rosa and San Miguel Islands) were one “mega island” scientists dubbed Santarosae. That hunk of land broke off what is now the San Diego/Baja region. These sirenian fossils came over when that large block of continental crust broke off the North American tectonic plate and was pulled northwest by the Pacific Plate.

Excavation of the sirenian was completed in August 2018 and brought to the Santa Barbara Museum of Natural History (SBMNH) this past October. Scientists are just now studying the fossils, especially the skull. The skull contains the most diagnostic features for potentially describing new species. Dr. Jonathon M. Hoffman, Dibblee Collection Manager of Earth Science at the SBMNH said Dr. Jorge Velez- Juarbe, an expert in sirenian paleontology, is confident this specimen is likely a new species based on what’s been exposed thus far. Other physical characteristics scientists have gleaned from this species of sirenian are that it’s slightly smaller than modern dugongs, which average three meters in length. This animal would have a forked tail instead of a paddle tail like a manatee. Its ribs are dense and robust like modern day dugongs and manatees, allowing them to weigh themselves down underwater while feeding. Its teeth are different though. Modern dugong molars are peg-like, while this specimen’s molars are more complex and have two cusps with ridges running across the width of the tooth.

more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

Blue carbon focus could sail Indonesia through Paris targets

16 December 2018, Forests News, Center for International Forestry Research (blog)

The next U.N. climate talks will be known as the “blue COP,” said a top expert at the COP24 conference venue in Katowice, Poland, where thousands of delegates from around the world are trying to forge an agreement over how best to tackle global warming. Daniel Murdiyarso, blue carbon champion and principal scientist with the Center for International Forestry Research (CIFOR) made the remarks about how best to manage carbon stored in the world’s coastal and ocean ecosystems at a side event organized by Indonesia’s Coordinating Ministry of Maritime Affairs.

Known as “blue,” because of its association with the ocean, Indonesia’s 3.5 million hectares of mangroves and 0.3 million hectares of seagrass meadows store about 3.5 billion tons of carbon. “Indonesia’s coastal mangroves and seagrass meadows are unmatched in their efficiency at locking carbon, preserving and restoring these coastal superheroes makes social, environmental, and economic sense for Indonesians and the world at large facing climate change and sea level rise,” he said. “There’s hope that if we act seriously on mangroves and seagrass, we can meet the Paris objectives relatively easily, Murdiyarso said, referring to the 2015 U.N. Paris Agreement on climate change aimed at keeping global warming in check, the focus of negotiations in Katowice.

In 2016, Indonesia defined its Nationally Determined Contributions (NDCs) as part of The Paris Agreement – to reduce its carbon dioxide emissions by 834 million tons, or 1.1 billion ton carbon dioxide equivalent with international support by 2030. “Indonesia’s NDC ambitions can and should be enhanced by engaging local people and local government,” Murdiyarso said. “Preserving intact ecosystems is financially more effective than restoring degraded ones” he said. Various public-private partnership opportunities exist, which would make conservation economically viable. Murdiyarso continued: “We need strong governance and coalition between government agencies in all of Indonesia’s islands, a ramp up of research capacity, and partnerships that can build a blue economy that benefits coastal communities”.
more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

As US Airbase Construction Starts in Okinawa, Legal Action Aims to Save Endangered Dugongs

12 December 2018, Center for Biological Diversity (press release)

As workers prepare to begin construction of a new U.S. military base in Henoko Bay in Okinawa, Japan, U.S. environmentalists are gearing up for legal action and blasting the destructive project. The planned base could wipe out the Okinawa dugong, one of Earth’s most endangered marine mammals.

As early as Friday ships could start dumping tons of dirt and sand into Henoko Bay. This landfill is part of a process of destroying and paving over many acres of rich coral and seagrass habitat crucial to the handful of surviving Okinawa dugongs, a manatee relative. But the U.S. Department of Defense’s base plan still faces legal action by the Center for Biological Diversity and other U.S. conservation groups. Under the U.S. National Historic Preservation Act, American officials must avoid or mitigate harm to places or things of cultural significance to another country. Dugongs are cultural icons in Okinawa.

“We will never stop fighting to protect the Okinawa dugong from extinction at the hands of the U.S. military,” said Peter Galvin, cofounder of the Center. “This base is an environmental atrocity. Wiping out these gentle, culturally important animals would forever stain America’s international reputation.” Briefing begins in January in the groups’ appeal to the 9th Circuit Court of Appeals, which ruled last year that the issue deserved a full hearing. The appeal challenges an adverse district court ruling. The U.S. base is also opposed by Okinawa’s new governor, Denny Tamaki, who has strongly urged Japan’s Defense Ministry to halt construction. Okinawa’s assembly recently approved holding a popular referendum on the base.
more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

Reel Time: Sarasota Bay seagrasses take a big hit (USA)

11 December 2018, The Anna Maria Island Sun Newspaper

Red tides have previously wrought devastation in the bays and Gulf. Images of dumpsters stuffed with fish, dead dolphins, manatees and sea turtles have filled the news and been displayed across social media for the last four months. What is not seen and what as yet may prove to be the most damaging aspect is the death and dieback of seagrasses. These underwater ecosystems have been referred to as the rainforests of the sea and function to support the marine environment in numerous ways. Most importantly, perhaps, is their importance to water quality.

When a seafloor area lacks seagrass communities, the sediments are more frequently stirred by wind and waves, decreasing water clarity, affecting marine animal behavior, and generally decreasing the recreational quality of coastal areas. Seagrasses also work to filter nutrients that come from land-based industrial discharge and stormwater runoff before these nutrients are washed out to sea and to other sensitive habitats such as coral reefs, according to Florida Fish and Wildlife Conservation Commission. Some grass will recover, and the bare areas probably have living roots that will regenerate when the waters clear and they can properly photosynthesize. Unfortunately, the current condition when extrapolated bay wide portends a marine environment that will be much less productive.

The current condition of the bay and Gulf is undeniably impaired and should be a call to action to all who live near and appreciate this magical resource. If you’re looking for a bright spot and an opportunity to help, you don’t have to go far. Sarasota Bay Watch, known for its scallop restoration is now reseeding clams, another dynamic water filterer into Sarasota Bay. The non-profit will have released close to a quarter million southern hard-shell clams into Sarasota Bay by years end and has ambitious plans for planting a million in 2019. Its efforts were embraced by the public and volunteers community-wide, including corporate partners like Gettel Toyota and Gold Coast Eagle Distributing.
more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

Assessing the trawling footprint of Australian fisheries (Australia)

11 December 2018, Fishing World

The first national picture of the footprint of bottom trawling on Australia’s seabed habitats has just been released. Overall, less than 3.5% of the Australian seabed was found to be affected by trawling in recent years, according to an

article on the Fisheries Research and Development Corporation's website. Although this figure varies regionally, it is among the lowest footprints recorded worldwide. The work, conducted by CSIRO and funded by FRDC, provides a map of which seabed habitats are not exposed at all to trawling, but also those that are the most exposed and are the highest priorities for future detailed risk assessment studies.

Some of the areas identified as highest priorities for risk assessment are the Australian east coast from southern Queensland including deep areas of the southern Great Barrier Reef, through shelf areas of NSW, to eastern Victoria/Bass Strait — as well as western Tasmania to SE South Australia near the shelf break, in Shark Bay, and the outer Great Australian Bight.

“Some eco-regions in these areas have high trawl footprints (between 30% and 65% trawled) and typically have low protection (such as in fishery closures and/or marine reserves), and will need to be assessed first”, says CSIRO’s Dr Roland Pitcher who led the research. “To date, ecological risk assessments for Australian trawl fisheries have largely focussed on evaluating which bycatch species are at high risk. However, research has also shown that fishing gear towed along the bottom of the sea can impact seabed habitats” continues Dr Pitcher. “This approach will ultimately lead to outcomes that include reduction of the ecological risks posed by trawling and improved environmental sustainability” says Dr Pitcher.
more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

Manatee numbers – It hasn't been a good year (FL, USA)
10 December 2018, Florida Keys Weekly

It hasn’t been a good year for the manatee in the state of Florida. Statewide, there have been 763 deaths reported in the first 11 months compared to the 538 reported deaths in 2017. The red tide blooms in Lee, Charlotte and Sarasota counties had a definite effect. The official count of red tide deaths statewide stands at 206. Last year, the number was 67. According to Mote Marine Laboratory, red tide is to blame for 10 percent of manatee deaths when averaged over 10 years, but jumps to 30 percent during bloom years.

In the Florida Keys, the numbers are still tragic, but nowhere near the highest in the state. In 2018, there were 25, most in the Upper Keys, except two in Marathon and two in Key West. In 2017, there were 17 reported manatee deaths: six were from undetermined causes, two manatees were never recovered, four were perinatal and five were from boat strikes. Every year, boat strikes are responsible for about 20 percent of manatee deaths. But there’s good news, too. There have been 118 manatees rescued so far, 66 of which have been released. Most of the sea cows had suffered a boat strike, but plenty get tangled in crab traps or monofilament or some type of manmade structure like a culvert. The FWC has an entire department dedicated to manatee research, including tracking and counting the population, and trying to develop some type of technology to reduce boat strikes.

Mote Marine immunology expert Cathy Walsh and FIU chemist Kathleen Rein are studying how to treat red tide sickness in the sea cow. According to Mote, the team will study the effectiveness of certain antioxidants as opposed to the current treatment of anti-inflammatories. Two years ago, the U.S. Fish and Wildlife Service changed the manatee status from endangered to threatened.
more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

Planting Seagrass Gardens to Help Restore the Caloosahatchee River (FL, USA)
05 December 2018, WGCU News

Of the many issues facing the Caloosahatchee River and its estuary, the major decline in seagrass beds is one of the most obvious signs of the ecosystem’s decline. Seagrass beds used to be found throughout the waterway and estuary, but that’s changed drastically in recent years, mostly because of shifting salinity levels throughout the year, often caused by freshwater releases from Lake Okeechobee, and lack of sunlight because of dark water, and more recently the major bloom of toxic blue-green algae which blocked even more sunlight.

But, a project to try to grow small underwater gardens as a source of seeds to begin restoring seagrasses throughout the system are starting to show signs of progress. This project is led by the Charlotte Harbor National Estuary Program, in partnership with local citizens and a Winter Garden-based company called Sea & Shoreline. We’re joined in studio today by the CHNEP's Executive Director, Jennifer Hecker, to learn more.

We'll also check in with Joanna Fitzgerald, Director of the Von Arx Wildlife Hospital at the Conservancy of Southwest Florida, to find out what she's dealing with, as dead dolphins are washing up on area beaches, and seabirds are falling out of the sky.
more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

Speedboat restrictions hinted after fifth death of rare Trang Dugong (Thailand)

03 December 2018, The Nation

The autopsy of a heavily-pregnant Dugong – whose decomposed carcass was found on November 26 in the sea off Trang's Koh Libong – found injuries that indicated it died after being run over by a speedboat while feeding on seagrass. The crash impact caused the 262-centimetre-long, 250 kilogram Dugong's spine to dislodge, break its right-side ribs and cause bleeding of its lung, resulting in its instant death, along with that of its 9.5kg foetus, according to a source at the Phuket Marine Biological Centre familiar with the autopsy results.

As this was the fifth Dugong death in the Trang Sea this year, Koh Libong wildlife sanctuary head Chaipreuk Weerawong and Hat Chao Mai National Park head Narong Khong-ied, will call a meeting of related officials, community leaders and villagers, along with boat operators. The meeting will discuss solutions, including asking for cooperation to prohibit speedboats from travelling through seagrass areas in order to protect these rare marine mammals.

more……..http://www.seagrasswatch.org/news_Dec2018archives.htm

CONFERENCES

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

Theme: Connecting Science and Society

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

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

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

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

Theme: "Responsive | Relevant | Ready"

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

More information:
To get important updates, visit: https://www.erf.org/cerf-2019
Follow on twitter @CERFScience, #CERF2019
Session and workshop proposal deadline: 20 September 2018
Schedule-at-a-Glance: https://www.erf.org/2019-schedule-at-a-glance

SEAGRASS-WATCH on YouTube

Seagrass: Pastures of the sea *http://www.youtube.com/watch?v=66Y5vgswj20* or
http://www.seagrasswatch.org/seagrass.html
Presentation on what seagrasses are and why they are important (over 49,302 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.