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NEWS

Support for marine zones (Australia)

28 July 2017, The West Australian

Plans to reconfigure the boundaries and zoning of Federal marine parks in the Capes region have been welcomed by local industry groups and fishers, who are optimistic the changes will balance economic growth and environmental protection.

The Federal Government last week released the final draft of the Commonwealth Marine Reserves Network Plan, which in the Capes region encompasses the Geographe Commonwealth Marine Reserve and South-west Corner Commonwealth Marine Reserve.

Busselton Jetty marine scientist Sophie Teede said the Geographe Reserve was previously noted for Marine National Park status and was to receive Habitat Protection status under the proposed plan, but the area covered by the plan was now larger than initially proposed and also covered a sufficient area. Ms Teede said while the plans did open the area to the possibility of commercial fishing, a large area of important seagrass and benthic habitat would

become protected. Ms Teede said the influence of the Leeuwin Current in the South West region and diversity in the seagrass meadows provided a unique environment for diverse marine life, making it an important area.
more…….. http://www.seagrasswatch.org/news.html

Circles in the sand reveal boating damage to marine biodiversity (UK)

28 July 2017, Science Daily

The findings of a study by Swansea and Cardiff University scientists highlights the need for boating activities along the UK's beautiful coastlines to be conducted in a more environmentally friendly manner. Research led by scientists at Swansea University provides evidence for how swinging boat moorings have damaged seagrass meadows throughout the UK (and globally) and create lifeless halos within the seagrass. The creation of these halos devoid of seagrass fragments the meadow and reduces its support for important marine biodiversity.

The study examined swinging chain boat moorings in seagrass meadows across a range of sites in the United Kingdom to determine whether such moorings have a negative impact on the seagrass Zostera marina at the local and meadow scale, said lead author Dr Richard Unsworth. Each swinging chain mooring was found to result in the loss of 122 m2 of seagrass, leading to a direct loss of at least 6 ha of United Kingdom seagrass. Importantly loss was found to be restricted to the area surrounding the mooring and the impact did not appear to translate to a meadow scale. This loss of United Kingdom seagrass from boat moorings is small but significant at a local scale because it fragments existing meadows and ultimately reduces their resilience to other stressors (e.g. storms, anchor damage and poor water quality).

The research highlights the need for boating activities in and around sensitive marine habitats such as seagrass to be conducted in a sustainable fashion using appropriate environmentally friendly mooring systems, Dr Unsworth said.
more…….. http://www.seagrasswatch.org/news.html

Shark Week: Meet the underwater seagrass protectors (FL, USA)

26 July 2017, National Science Foundation (press release)

Sharks, marine scientists say, are often misunderstood, described as ravenous man-eaters. But researchers have discovered that sharks are critically important to the health of the world's oceans.

In 2011, some 15 years into a long-term study of the ecological importance of tiger sharks in Shark Bay (Australia), a heat wave struck the region. Warm ocean waters caused the widespread loss of seagrasses, a main food source for dugongs (sea cows) and other species that are the sharks' prey. Now Shark Bay's seagrasses are struggling to bounce back from the heat wave. They have some unexpected help. Sharks, it turns out, are one of the seagrasses' best allies in the fight to survive. Where sharks rove seagrass beds, dugongs and other shark prey species steer clear. That keeps seagrasses -- which grazers like dugongs and other marine animals eat -- from being decimated. Without enough sharks, the grazers could devour the underwater grass beds, marine scientist Michael Heithaus of Florida International University (FIU) has found.

Heithaus and marine scientist James Fourqurean, also of FIU, are conducting research to assess how climate disturbances and the reduction of shark populations change the oceans. Losing seagrasses disrupts marine ecosystems and removes critical stores of "blue carbon," which help mitigate climate change. Per unit area, seagrass meadows can store up to twice as much carbon as the world's temperate and tropical forests, said Fourqurean. Coastal seagrass beds hold up to 83,000 metric tons of carbon per square kilometer, mostly in the soils beneath them.
more…….. http://www.seagrasswatch.org/news.html

Green projects must also consider habitats lost (Malaysia)

25 July 2017, TODAYonline

Rising out of freshly reclaimed land in the Tebrau Straits between Singapore and Malaysia is an 800-hectare mixed development with homes, businesses, recreational areas and an international school for 700,000 people. Named Forest City, its developer, Country Garden PacificView (CGPV), has touted its sustainability and green features. The development uses the latest in smart green technology to control energy use.

It has extensive plans for rainwater harvesting, and it uses recycled materials in the tiniest details such as road humps and parking bumps. Its masterplan, designed by Sasaki Associates, promises a “symbiotic relationship” between the natural and built environments, with a 250-hectare seagrass preserve, 9km of mangrove forests and 10km of shallow coves and mudflats.

The CGPV Forest City project is in an area that harboured good biodiversity despite its proximity to port and industry. Within six months of reclamation beginning, a strip of sand had cut across Malaysia’s largest intertidal seagrass meadow. Sedimentation in the adjacent waters increased, leading to extraordinary blooms of green algae that smothered the already-stressed seagrass areas. Long-term habitat monitoring of the area by a local community

organisation has revealed that a smaller coastal seagrass patch that was a known source of prawns and the feeding grounds of the endangered dugong has disappeared under the first reclaimed island. The sand strip is to be removed and the rest of Forest City's islands will be built around the biggest seagrass meadow that remains to minimise further damage. To be sure, CGPV is taking steps to mitigate damage to the seagrass. A local university has been hired to independently monitor the health of the seagrass meadows, and habitat rehabilitation and species restocking is in the plan.
more…….. http://www.seagrasswatch.org/news.html

Snooty, World's Oldest Known Manatee, Dies at 69 and I'm Not Crying, You're Crying (FL, USA)

24 July 2017, Gizmodo

We have all been robbed of one Snooty, the beautiful, beloved 69-year-old manatee believed to be not only the world's oldest manatee living in captivity, but the oldest in the world. According to Bay News 9, Snooty passed away at the South Florida Museum in Bradenton, Florida just one day after celebrating his 69th birthday.

Snooty's age was remarkably prodigious, given manatees have a biological life expectancy of roughly 40 years in the wild. In practice they often perish at much younger ages due to all the bad things some humans do to them, like degrading their habitats or hitting them repeatedly with boats. The IUCN Red List estimates fewer than 10,000 mature West Indian manatees remain in the wild.

It unfortunately looks like Snooty was not a victim of his advanced age. Snooty was found in an underwater area only used to access plumbing for the exhibit life support system. Early indications are that an access panel door that is normally bolted shut had somehow been knocked loose and that Snooty was able to swim in. Three other manatees who were sharing the enclosure are safe. Snooty was one of just four or five manatees in the entire state allowed to receive regular human contact and training, because he was too old to be released, and was well known for loving it.
more…….. http://www.seagrasswatch.org/news.html

Cockburn Sound Management Council to conduct first major study of Sound in 16 years (WA, Australia)

21 July 2017, Community Newspaper Group

Water quality in the Cockburn Sound is improving, but concerns remain over a lack of seagrass growth and changes to fish stocks. The puzzling results are driving the first major study of the Sound in 16 years. Considered one of the state's most valuable assets, the extensive study was deemed critical for its future management by the Cockburn Sound Management Council (CSMC).

Conducted in three stages, Cockburn Sound – Drivers, Pressures, State, Impacts, Responses Assessment is about to enter the second stage, peer-review for scientific validation of its preliminary findings. The third stage will be the release of the report to the State Government and the public.

CSMC chairwoman Emeritus Professor Kateryna Longley said the research was timely as new environmental pressures had emerged. Nutrients caused the initial depletion of the seagrass from the 1960s leading to a 75 per cent depletion of seagrass over three decades. Although water quality has greatly improved, climate change, groundwater inputs and urban catchment run-offs, dredging, construction and modification of jetties and groynes are some of the new pressures on the Sound.

The Department of Water and Environmental Regulation provided $250,000 for an assessment. KIC Director Chris Oughton said the health of the Sound was important to industry and it had contributed $30,000 to the peer review. The City of Rockingham approved $30,000 for the review at its June meeting. City of Kwinana Mayor Carol Adams agreed the sound was an asset and has committed to contribute $10,000 to the proposed Cockburn Sound Management Committee study in 2017-18.
more…….. http://www.seagrasswatch.org/news.html

New estuary program possibly coming to St. Andrew Bay area (FL, USA)

18 July 2017, WJHG-TV

A new estuary program may be coming to the St. Andrew Bay area, thanks to money from the RESTORE Act. The Gulf Coast Ecosystem Restoration Council received RESTORE Act money to set up one estuary program in Northwest Florida. Right now, those associated with St. Andrew Bay and St. Joe Bay are competing for those funds.

The program will consist of evaluating watershed, keeping it clean and restoring the seagrass, in turn providing habitats for fish. Bay County Commissioners have agreed to use 10% of the county's RESTORE Act funds, or $230,000 a year, to keep the program going if St. Andrew Bay is chosen.
more…….. http://www.seagrasswatch.org/news.html

Keeping an eye out for dreaded algae blooms (USA)

17 July 2017, Daytona Beach News-Journal

After enjoying months of clear water, fishermen and boaters soon could see a return of the algae blooms that have plagued Mosquito Lagoon and the rest of the Indian River Lagoon system for the past six years. The blooms already have begun to the south.

Cooler temperatures and a drought through the winter kept storm water runoff with its load of pollutants out of the lagoon. But heat and rain fuel algae blooms. Algae blooms have been reported in the northern Indian River Lagoon around Titusville and in the Banana River near the Merritt Island Causeway. Fishing guides have reported color in the water and a loss of water quality in the southern end of Mosquito Lagoon. Water quality remains pretty good in many stretches of the lagoon system, said Duane DeFreese, executive director of the Indian River Lagoon Council and the Council & Indian River Lagoon National Estuary Program. But with recent rains and hotter weather, patchy blooms “are beginning to pop up.”

An algae “superbloom” occurred across the lagoon system in 2011, causing the loss of more than 40,000 acres of seagrass. The algae chokes out the light by clouding up the water. Then, when it dies, it releases more nutrients into the water. The massive loss of sea grass in the lagoon led to the deaths of hundreds of manatees, dolphins and pelicans, as well as other sea life. Scientists theorize the manatees died because they were eating other things instead of sea grass. The blooms have returned every year since 2011. Some years are worse than others.
more…….. http://www.seagrasswatch.org/news.html

A marine charity went hunting for sharks at Studland - here's what they found (UK)

16 July 2017, Bournemouth Echo

A marine charity dedicated to helping people better understand sharks has been carrying out research in Studland Bay. The organisation, SharkStuff, recently secured funding for its Baited Remote Underwater Video (BRUV) project. The funding has helped volunteers build more of the underwater units, which will be deployed at key locations along the Dorset coast in a bid to capture footage of local shark and ray species.

Last week Dorset-based SharkStuff dropped of one of its BRUV units at Studland's South Beach. While no images of sharks or rays were captured on this occasion, the unit did film footage of other species - including bass, bream and gobies - and their important seagrass habitat. SharkStuff founder and chairman Georgia French told the Daily Echo: "We're especially interested in seagrass and adjacent sandy habitat because it is often used by sharks and rays, including smooth-hound, small spotted catsharks and undulate rays." The BRUV doesn’t just capture shark and skate data - it reports all of the fish filmed to Dorset Seasearch, who use the data to help identify and recommend protected areas to safeguard threatened species, and keep our coasts healthy.
more…….. http://www.seagrasswatch.org/news.html

Female dugong's death 'caused by illness' (Thailand)

14 July 2017, Bangkok Post

A female dugong found on a beach in Kan Tang district this week later died as a result of various ailments, veterinarians said. The endangered mammal was the third dead dugong reported in the southern province this year. A forensic examination revealed the mammal was about 50 years old, and weighed around 300kg veterinarians from the Phuket Marine Biological Centre said.

The symptoms included lung infections, swollen lymph nodes, parasitic infections in the air passage and the nose, as well as inflammation of the intestines, womb, ovaries and urinary bladder, said Prachuap Khosarat, director of the marine resources conservation section at the Seventh Marine and Coastal Resources Administraion Office in Trang.

Althought it was still alive when it was found on the beach, the dugong appeared very sick and frail, according to Mr Prachuap. Despite attempts by a veterinary team to save it's life, the animal died after an operation that took around 15 hours. The Team did everything it could to save the animal, Mr Prachuap said.
more…….. http://www.seagrasswatch.org/news.html

Florida Bay project should help Southwest Florida water quality (FL, USA)

11 July 2017, The News-Press

Moving water south through the historic Everglades will help the ecosystem there as well as coastal estuaries like the Caloosahatchee and St. Lucie. That was the take-home message Tuesday from a Florida Fish and Wildlife Conservation Commission meeting in Orlando.

A drought in the fall of 2015 killed off about 50,000 acres of seagrass in Florida Bay just months before the east and west coasts were blasted with billions of gallons of Lake Okeechobee water. The problem is water moves out to the

east and west and not much to Florida Bay the way nature intended it to, said Gil McRae, director of FWC's Florida Wildlife Research Institute. The unbalanced water delivery is the result of draining and developing parts of the Everglades. Water that once flowed from Lake Okeechobee to Florida Bay has been cut off and diverted to the Caloosahatchee and St. Lucie rivers, neither of which were part of the historic Everglades.

Restoring lost flows to Florida Bay is part of the larger, $10 billion Everglades restoration. The projects discussed Tuesday involve sending water from just south of the lake to Everglades National Park and Florida Bay. The park and the bay see relatively little freshwater flow because large volumes of Lake Okeechobee water are discharged to the Gulf of Mexico and Atlantic Ocean. But not everyone agreed that sending more water to Florida Bay will improve water quality conditions on the east and west coasts. Newton Cook, a member of the South Florida Water Management District's Water Resources Advisory Commission, said the volume of water going to Florida Bay will not be enough to reduce discharges to Fort Myers and Stuart. FWC commission chair Brian Yablonski said he is optimistic about working with the federal government to clear some of the water delivery hurdles.
more…….. http://www.seagrasswatch.org/news.html

Seagrass meadows—critical habitats for juvenile fish and dugongs in the Johor islands (Malaysia)

11 July 2017, Phys.Org

Scientists at University of Malaya, Malaysia, have found that the seagrass meadows in Johor harbor three times more juvenile fish than coral reefs. They also found that the dugong herds there prefer certain types of meadows over others. The team of researchers at the University of Malaya is motivated to raise the profile of seagrass by studying how these plants contribute to something that is naturally compelling to most people – as a rich, productive habitat and a source of food.

The researchers began their project by documenting the types and numbers of fish life in the seagrass meadows around the islands of Johor, and did the same in coral reefs as a way of juxtaposing the two ecosystems. GoPro underwater cameras were deployed in a series of 2 x 2 m plots within the seagrass beds and coral reefs to view the types of fishes that visited the ecosystems, and how they utilized the space. After eighteen months of sampling across different seasons and locations, Nina Ho Ann Jin, MSc student of the project, found three times more juvenile fishes than adult fishes in the seagrass video recordings. She also noted that fishes in the seagrass meadows spent most of their time feeding, while those in the adjacent coral reefs were more occupied by defending their territory. Clearly, the two ecosystems have very different roles from the viewpoint of the average fish: seagrasses are nursery and feeding areas, whereas coral reefs are the home of adult fish. These two ecosystems complement each other in supporting the survival needs of marine organisms at different parts of their life cycle. Thus, seagrasses are no less important than coral reefs in providing us with marine resources, and deserve much more public attention than they have currently received.

Recently, the researchers turned their attention to studying the feeding ecology of dugongs because they depend almost entirely on seagrass as a food source. The researchers tracked the feeding patterns of dugongs by mapping out their feeding trails across different seasons. Using the geographical approach, Harris Heng Wei Khang, MPhil student, was able to identify dugong feeding hotspots within the meadows. Harris Heng is now focusing on finding out why these locations are preferred over others, and has a hypothesis that plant nutrient content may be the key factor. As a result of this work, the researchers' local NGO collaborator has been able to zone the meadows for different levels of protection, based on whether the dugongs use them consistently as feeding grounds or not. This information has also been used to present a persuasive case for establishing a State-sanctioned dugong sanctuary in the area.
more…….. http://www.seagrasswatch.org/news.html

WATCH: Jersey's seagrass beds - the Island's own coral reef (UK)

10 July 2017, Jersey Evening Post

A short film showing Jersey’s seagrass beds – regarded as the Island’s own ‘coral reef’ – has been published online.

There are about 5 km sq of seagrass off the Island’s south and east coasts and around the Minquiers reef. It is regarded as the Island’s own ‘coral reef’ because of its ecological importance, particularly in providing a habitat for species to breed and grow.

The video was recorded on Saturday and published on the Société Jersiaise Marine Biology Section’s Facebook page.
more…….. http://www.seagrasswatch.org/news.html

CONFERENCES

Coastal & Estuarine Research Federation 24th Biennial Conference (CERF2017) (Providence, Rhode Island, USA, 5-9 November 2017)

Theme: Coastal Science at the Inflection Point: Celebrating Successes & Learning from Challenges
The CERF 2017 scientific program offers four days of, timely, exciting and diverse information on a vast array of estuarine and coastal subjects. Presentations will examine new findings within CERF's traditional science, education and management disciplines and encourage interaction among coastal and estuarine scientists and managers. Additionally, the Scientific Program Committee plans to convene special sessions and workshops that promote intellectually stimulating discussions. Join us and over a thousand of your colleagues to network, celebrate our work, learn from each other and grow within our amazing profession.
Important Dates:
Presenter Confirmation/Registration Deadline: 5 September 2017
Registration Deadline: 5 September 2017
Advance Registration Deadline: 6 October 2017
for more information, visit http://www.erf.org/cerf-2017-biennial-conference

The 13th International Seagrass Biology Workshop (ISBW13) and World Seagrass Conference (June 2018, Singapore)

Theme: Under pressure – Seagrass science and conservation in stressful environments

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 a good opportunity for the scientists working on various aspects of seagrass ecosystems to come together and discuss their latest findings. The ISBW13 will be held in June 2018 at the National University of Singapore, Singapore, organized by National University of Singapore, National Parks Board, and DHI Water & Environment, Singapore.

More information:
To get important updates on ISBW13, register your interest here: *https://goo.gl/forms/TIlhDGhEx71m0tcj1*
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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 45,984 views to date)

…seagrass matters blog

World Seagrass Association blog http://wsa.seagrassonline.org/blog/
Keep up to date on what's happening around the world from the WSA.

FROM HQ

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