# Seagrass-Watch E-Bulletin

#### 31 May 2017

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## **NEWS**

### Locals Committed to Protecting Dugong in Raja Ampat (West Papua, Indonesia)

30 May 2017, Tempo.co

Indigenous people in Aduwei village in Raja Ampat, West Papua are committed to protecting dugongs. Adewei village chief Karel Fatot said that dugongs are easily found in the waters off the village. He explained that Sasi is a traditional prohibition on catching dugongs and fish in the waters off the village. Sasi typically applies for six months in a year and people may catch fish after the end of Sasi period but may not hunt dugongs. He said that Aduwei village in Raja Ampat boasts a beautiful marine attraction and tourists can easily interact with dugongs. He, however, bemoaned the lack of transport modes in the area and marketing campaign to draw visitors.

## Noted veterinarian backs satellite tracking of dugongs after NSTDA suspends project (Thailand)

29 May 2017, The Nation

Chulalongkorn University Veterinary Medical Aquatic Animals Research Centre director Nantarika Chansue has said that a scheme to fit dugongs with satellite transmitters was not harmful to the animals. She also said the tracking programme would benefit future research and conservation of the marine mammals in the Trang Sea and help to reduce mortality rates.

Nantarika's comments on Monday followed an earlier announcement by the Pathum Thani-based National Science and Technology Development Agency (NSTDA) on its website that it would suspend the fitting of transmitters on to dugongs at Hat Chao Mai National Park's Koh Mook on the grounds that the technology was involved in unresolved disputes over reported negative impacts. Nantarika said the research team prioritised the safety of dugongs, while research methods were subjected to careful scrutiny and conformed to international standards. She also cited medical reports that showed the stress hormone levels in dugongs' blood did not exceed normal levels as they were fitted with transmitters.

She said the data on dugong behaviour and migration patters would help to formulate a better conservation strategy based on zone management. She added that many villagers had joined in conservation efforts to ensure dugong habitat would not be disturbed by human activities. Dugong deaths that had been blamed on the satellite transmitters were actually caused by them getting caught in fishing equipment, Nantarika said, adding that fishermen should refrain from casting nets in conservation areas if they wanted to spare the marine mammal.

### Sites identified for Dugong conservation in Trang (Thailand)

26 May 2017, TheStarTV.com

Local authorities in Trang have identified several key areas along the province's coastline as Dugong conservation areas. Dugong sightings are common in the area and three of such animals have been tagged with satellite tracking devices to monitor their movement.

more...... http://www.seagrasswatch.org/news.html

### Parks Dept orders dugong project to be revised (Thailand)

25 May 2017, Bangkok Post

The Department of National Parks, Wildlife and Plant Conservation has ordered Hat Chao Mai's national park chief to revise the dugong monitoring project in Trang province after an activist group lodged complaint, saying equipment used in the project could endanger the rare species. The three-month project started in April. Satellite tracking tools have been attached to three dugongs in the area as scientists study their behaviour and habitat

Parkpoom Witantirawat, coordinator of the Saving Andaman Network Foundation, who opposes the project, said some dugongs have moved out of the national park to Libong island since the study started. He said the satellite tracking device could be dangerous as its long cords could get caught around fishing equipment. He said it did not make sense to monitor three dugongs especially when local fishermen have been working closely to protect the animal by setting aside an area of 100,000 rai to protect its habitat. They avoid using any fishing equipment in the area which could be harmful to the mammal. However, he admitted some kinds of fishing equipment not friendly to dugongs can still be found, so further talks are needed with fishermen.

Thailand has about 160 dugong, with five or six dying a year. More than 90% are living in the Libong Non Hunting Area and the rest in Hat Chao Mai National Park. Sontham Suksawang, director of the National Park Office, said the department was worried about conflicts between forest officials and locals over the dugong. He said the department has suggested the Hat Chao Mai National Park chief could review the project or the satellite microchips could be removed. The project is carried out with the support of the National Science and Technology Development Agency, with the aim of studying the dugong's habitat so the department can set up a proper management zone for the species, which is now at risk of extinction due to the harm inflicted by fishing devices.

#### Call to remove seagrass (QLD, Australia)

25 May 2017, Courier Mail

Brisbane City Councillor Peter Cumming (Wynnum-Manly) has started a petition calling on the council to remove seagrass from the Wynnum foreshore. It comes after complaints from residents and a Wynnum Herald front-page story on March 22.

Cr Cumming is asking that there be an established system that when and if the dead seagrass appears, that council staff have the necessary permits to remove it and not have to wade through large amounts of paperwork each time. Council needs to establish a continuous agreement with the State Government for the removal of the dead seagrass, he said.

When the smell appeared, Wynnum woman Julie Bergin raised concerns about the impact on tourism. The petition closes on ¬October 13.

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### Baby dugongs' return to Great Barrier Reef suggests vital seagrass recovering from

Cyclone Yasi (QLD, Australia) 23 May 2017, ABC Local

An increase in the number of baby dugongs on the Great Barrier Reef suggests seagrass ecosystems are recovering well after recent flood and cyclone events. A James Cook University report on the distribution and abundance of dugongs and turtles on the southern Great Barrier Reef, between Hinchinbrook Island and southern Queensland, showed the number of dugong calves had gone from zero per cent after Cyclone Yasi in 2011 to ten per cent of the visible population in late 2016. The Great Barrier Reef Marine Park Authority's (GBRMPA) Roger Beeden said the fact that dugongs are reproducing suggests their ecosystem is in better health.

It can be tricky to assess the health of seagrass habitats as inshore beds can be hard to access, but Dr Beeden said dugongs are easy to spot in aerial surveys and give an indication of seagrass health. It has been shown that seagrass meadows can recover well from cyclone damage but Dr Beeden said there were concerns after Cyclone Yasi and subsequent floods escalated the impacts of repeated damage. For example in Cleveland Bay, which is just offshore from Townsville, the magnitude of the effect of those cyclones was very substantial - not just on the standing crop of seagrass but also on the seeds of the seagrass which were in the sand, Dr Beeden said.

Dugongs' conservation status is vulnerable and it is believed that most of the world's dugong population lives in Australian waters. It estimated there were 5,500 dugongs on the southern Great Barrier Reef in late 2016. World Wildlife Fund fisheries' Jim Higgs said the presence of dugong calves was good news, but said more net-free zones were needed to enable dugongs to safely travel between feeding grounds.

# Great Barrier Reef under watchful eye of drones piloted by Queensland rangers (QLD, Australia)

22 May 2017, ABC Online

A team of Indigenous rangers is being trained to use drones to monitor the health of the Great Barrier Reef. The Yuku Baja Muliku Rangers will also use the high-tech equipment to survey 22,500 hectares of country around Archer Point, near Cooktown in far north Queensland's Cape York. It is the first time an Indigenous ranger group in Queensland has received certification from the Civil Aviation Safety Authority to use drones commercially.

The Great Barrier Reef Marine Authority's (GBRMPA) drone pilot Andrew Denzin has been training three rangers at the Archer Point site and said they have recently completed their first maiden mission. He said a tiny camera fitted to the 1.3-kilogram drone would help rangers to view areas never seen before. The Archer Point site was chosen because it is considered a "marine highway" for several endangered species of turtles on their way to Raine Island - one of the largest turtles nesting sites in the world, off the far north Queensland coast.

Yuku Baja Muliku Rangers manager Mick Hale said he was excited about the program. "It's really going to help us with our environmental work, being able to get to areas that we can't access by vehicle and sometimes by boat," Mr Hale said.

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#### City hires consultant for Lake Wyman sea grass survey (USA)

23 May 2017 Sun Sentinel

Look for a boat and scuba divers in the next few weeks on the Intracoastal Waterway in front of James A. Rutherford and Lake Wyman parks in Boca Raton. The city has hired a consultant to do a seagrass survey and approved access to a possible spoil site in Spanish River Park, the first two steps in the revived Lake Wyman Restoration Project.

Boca Raton City Council authorized the moves last October after Bistyga presented council, three advisory boards, neighbors and other groups with two options to reconfigure the original plan. That plan stalled in 2012 from strong community opposition after funding was already in place. Now the city has hired the longtime coastal consultant Applied Technology & Management Inc. to do the seagrass survey and provide professional architectural services, according to the contract.

The survey can only be done in the summer time. We don't have the first work order issued yet and hopefully in June or July we'll have that survey completed, said Jennifer Bistyga, the city's coastal program manager. We have to map where there is seagrass to see if there will be any components that will be impacted and design the project to have minimal impacts. The city applied for a \$320,000 grant from the Florida Inland Navigation District for Phase I of the project to meet the March 31 deadline set by the district, according to the authorization. Phase I will cover engineering, permitting, revitalization of the canoe trails and boardwalks in both parks and developing a coastal hammock along the FIND property in Lake Wyman, the document said.

#### Dugong face risk of food decline (Malaysia)

17 May 2017, The Star Online

Johor is in danger of losing its seagrass along the coastline, which will have a negative impact on sea creatures, particularly dugong. Universiti Teknologi Malaysia (UTM) faculty of geoinformation and real estate researcher Dr Syarifuddin Misbari said Johor was home to at least 12 of the world's 60 seagrass species.

There is a 20km to 30km stretch in Johor waters where seagrass can be found in abundance, mainly in the eastern and southern parts of the coast. Despite the murky waters in the east of Johor, people can still see the seagrass at the Merambong shoal situated between Johor and Singapore during low tide, Dr Syarifuddin told The Star. He added that this area is the biggest seagrass area within Malaysian waters, but various factors, including development, had contributed to the decline in seagrass. Dr Syarifuddin pointed out that the area is a known hotspot for dugong, a protected animal, as the mammal eats the seagrass there.

Dr Syarifuddin added that the state government's move to establish the Johor Marine Park near Pulau Tinggi and Pulau Sibu off the coast of Mersing was a good one as the water was cleaner, there was no development and heavy vessels did not ply those waters, making it an ideal location for dugong. The state government is in the process of gazetting the area as a dugong sanctuary.

more...... http://www.seagrasswatch.org/news.html

#### 2017 Survey results show seagrass thriving in Sarasota Bay (USA)

*15 May 2017, WWSB ABC 7* 

Sarasota's third annual Seagrass Survey shows seagrasses continue to thrive in Sarasota Bay. In April, Sarasota County scientists, along with citizen volunteers, analyzed seagrasses out in Sarasota Bay. They took photos and used a new app on their phones to identify the type of seagrass and where it was located.

Now the results are available and they show the most common species of seagrasses at this time are turtle grass, manatee grass, and shoal grass. The majority of the bay only had about 30 percent of drift algae. Drift algae colonies can cause seagrass beds to die or prevent growth. Overall, seagrasses in Sarasota Bay have been expanding since 1990.

more...... http://www.seagrasswatch.org/news.html

#### Dugong sanctuary at Pulau Sibu soon (Malaysia)

15 May 2017, The Sun Daily

The state government is in the process of setting up a Dugong sanctuary at Pulau Sibu, Mersing, said Datuk Ayub Rahmat. The Johor Health and Environment, Education and Information committee chairman said the sanctuary will provide a safe haven for the dugong and protect its seagrass habitats. Ayub said more small islands in Mersing are being gazetted as Taman Laut Malaysia under the Fisheries Act 1985, as measures to protect sealife in the Johor waters.

The population of these marine mammals have been on the decline for some time due to sea water pollution that caused damage to seagrass. It was reported that about 40 to 50 dugong remain in the waters off the east coast of the state in Kota Tinggi, Mersing, Pulau Sibu and Pulau Tinggi in Johor. The sightings of dugong carcasses is not uncommon on the islands off Johor, the latest being the carcass of a dugong that was found washed ashore at Pulau Tinggi in April this year.

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#### Researchers revive three-decade-old study on manatee seagrass impacts (FL, USA)

12 May 2017, Florida Today

Does Indian River Lagoon's most voracious vegan gobble up too much seagrass? To lend insight into that question, Lynn Lefebvre came out of retirement to dust off and publish a nearly three-decade-old manatee study she conducted with colleagues in the shallows off NASA's Kennedy Space Center. The study, recently published in the

journal Marine Ecology Progress Series, included researchers from USGS, InoMedic Health Applications, Inc., Kennedy Space Center, and the National Oceanic and Atmospheric Administration.

During healthier times for the lagoon in the early 1990s, Lefebvre and her colleagues wanted to know the distribution, abundance and makeup of various seagrass species and how they naturally recover from manatee grazing. So in October 1990, they set up two 13-by-13-meter fenced-in areas to keep manatees out and two paired open plots of equal size in the Banana River at Kennedy Space Center. By July 1993, the mass of seagrass in the enclosed areas greatly exceeded that of the open plots, with almost six times the mass of seagrass growing within them. They found that within four or five months manatees vastly reduced seagrass coverage in the two open plots exposed to grazing, eating almost all the seagrass in one of the open plots. But the manatees didn't harm the grass in the long term, and appeared to improve the diversity of seagrass species by creating openings within the seagrass beds, enabling the smaller species to sprout up. While their study shows manatees don't do lasting harm to seagrass in a "normal" system, grazing impacts on a severely stressed system like the lagoon are less certain.

The most recent count this past winter logged a record 6,620 Florida manatees. In the 1970s, biologists suspected only a few hundred manatees remained in the wild. Seagrass and sea cows led a balanced coexistence before the algae blooms ramped up six years ago, Lefebvre said. Specific small areas could be roped off in places like in Crystal River, she said, to manage seagrass habitat.

more...... http://www.seagrasswatch.org/news.html

#### New buoys aim to help boaters, seagrass (FL, USA)

11 May 2017, Citrus County Chronicle

This past Monday, six seagrass marker buoys were placed in the shallow waters off of the small key known as Sandy Hook in the Crystal River estuary. This area, which remains totally open access for boaters, has suffered increasing seagrass damage from boat propellers and vessel groundings. Damaging seagrass within the boundaries of an Aquatic Preserve carries a fine of up to \$1000, so boaters and seagrasses both benefit when seagrass damage is prevented.

The shallow area off of Sandy Hook is challenging to navigate and marker buoys are meant to assist boaters, especially those visiting during scallop season. A survey of boaters completed by the University of Florida last summer indicated that boaters would find seagrass marker buoys helpful when navigating through shallow zones. Thus, these six buoys were placed in the popular Sandy Hook area to help boaters access the area in a way that prevents seagrass damage.

The marker buoys, paid for by a grant from the University of Florida's Sea Grant program, were placed through a partnership between the UF IFAS Nature Coast Biological Station, Citrus County, and the St. Martin's Marsh Aquatic Preserve. Baseline data on the condition of seagrass and the amount of scarring were collected just before placement of the buoys. The University of Florida and the Aquatic Preserve staff are working together to track whether placement of the buoys has a positive effect on seagrass over time. The results of this scientific evaluation of the buoys will be used to help local and state governments make decisions about future seagrass protection efforts. If the buoys prove effective, additional scarred seagrass areas may be marked with buoys in the future.

#### Nongprue plants more seagrass in Naklua Bay (Thailand)

05 May 2017, Pattaya Mail

Rayong's Marine Development and Research Center planted seagrass for a second year in Naklua Bay to stimulate marine life. Banglamung District Chief Naris Niramaiwong joined officials from the Designated Areas for Sustainable Tourism Administration at Lan Po Public Park for the April 28 planting of 10,000 *Halodule uninervis* plants, a common species of seagrass.

The objective of the planting – the second since July – was to try and revive sea life and plants in Naklua Bay and stimulate the growth of fish and other marine life. The area was selected by fishermen as a prime breeding ground for larviculture. It was also a way to encourage residents and tourists not to litter or throw rubbish into the ocean and raise awareness about what they may be harming if they act carelessly.

## **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: Student Travel Award Application Deadline: 4 August 2017 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: <u>https://goo.gl/forms/TIIhDGhEx71m0tcj1</u> Follow on Facebook @ISBW13 and Twitter #ISBW13

## **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 45,458 views to date)

### ...seagrass matters blog

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

## **FROM HQ**

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