

31 March 2017

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NEWS

Protecting Sri Lanka's Dugongs (Sri Lanka)

26 March 2017, Sunday Leader

Fishing communities in Puttalam, Kalpitiya once practiced illegal methods, especially when it came to fishing gear that threatens Dugong and seagrass habitats, have chosen a number of alternatives thanks to the conservation initiatives of United Nations Environment Programme (UNEP). Twenty two year-old, Upeka Thanamali says she is very happy to see her father and brothers giving up illegal fishing methods. Asked how it was possible, she says it is due to the initiatives of some non-governmental organisations by providing sewing machines, assisting the ornamental fishing industry and other small business ventures. Wildlife Department Deputy Director of Conservation Research and Training, Dr. Lakshman Peiris says the major aim of the project is to reduce the impacts of destructive fishing practices on seagrass habitats and provide income generation opportunities to local communities.

In Sri Lanka the Department of Wildlife Conservation (DWC) has entered into an MoU with CMS. The MOU that has an understanding that the country strengthens the conservation of dugong and their habitat with financial support

from the Global Environmental Facility (GEF) and with the technical support from United Nation Environment Project (UNEP). Community participation and ownership of dugong and seagrass conservation, introducing sustainable fisheries practices and innovative financial incentives, establishing Locally Managed Marine Protected Areas (LMMPA), and mainstreaming dugong and seagrass conservation priorities into national and regional policies and planning are prominent among global project objectives. This is especially in the North western sea from the Puttalam to Jaffna districts of Sri Lanka where dugongs have been sighted.

Establishing a marine conservation coordination centre in north-west Sri Lanka, featuring computerised communication systems to overcome the current lack of communication among relevant stake holders is important. Programmes also involving baseline seagrass maps with the distribution and abundance of seagrass in Palk Bay, the Gulf of Mannar and Kalpitiya must be established. Other areas includes conducting field surveys of the Bay of Bengal/Palk Strait area using divers and being supported by community interviews to identify dugong and seagrass hotspots. The other project being attempted is to reduce the impacts of destructive fishing practices on seagrass habitats and provide income generation opportunities to local communities in return for their commitments to wise habitat and natural resource use. LK8 is the facilitating body for coordinate the work carried out by the six other project partners by establishing a National Facilitating Committee.

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No evidence of illegal turtle, dugong hunting in far north Queensland, unreleased report finds (Australia)

24 March 2017, ABC Online

An Indigenous land council boss has called on the Federal Government to end a long-running debate by publicly releasing a report that found "no substantive evidence" of an illegal trade in sea turtle and dugong meat in Queensland. This week the Australian Crime Commission (ACC) told the ABC it handed its report to Environment Minister Josh Frydenberg in October. Northern Land Council chief executive Joe Morrison said the Government must release it to end inaccurate accusations about Indigenous hunting practices.

The Federal Government committed \$2 million to the investigation into illegal poaching and the transportation and trade of turtle and dugong meat in far north Queensland and the Torres Strait. ACCC chief executive Chris Dawson said the two-year investigation found no substantive evidence of an organised illegal trade in meat. While speaking generally about the report, Mr Dawson said it was never intended to be made public, furthermore Mr Frydenberg did not respond to the ABC on whether it would be released.

Australian traditional hunting laws give Aboriginal and Torres Strait Island people the right to hunt dugong, sea turtle and other protected or endangered species for personal, domestic or non-commercial communal needs. Yet politicians and animal rights activists have long claimed that animals are being hunted for a profit. Member for Leichardt Warren Entsch has not seen the final report, yet he questioned its investigation methods and conclusions. He added that he still believed there was cause to curtail traditional hunting rights and called for a "total prohibition" of meat being flown out of communities where it was caught.

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The Seagrass of Florida Bay Is Under Siege -- and Not For The First Time (FL, USA) 21 March 2017, WLRN

Seagrass in Florida Bay has died off rapidly over the past couple of years. About 40,000 acres have been lost, harming the habitat of animals from manatees to toadfish and imperiling the area's fishing industry. Researchers say it's not the first time a die-off like this has happened and that there are lessons to be learned from the last major seagrass die-off. That one started around 1987 and damaged about 60,000 acres.

Tylan Dean is a chief researcher at Everglades and Dry Tortugas national parks. He says hot temperatures and too little fresh water flowing south from the Everglades cause these die-offs, which are vicious cycles for the bay. The algae, he said, blocks out light seagrasses need to thrive. And decaying seagrass also consumes oxygen in the bay water, causing even more die-off. He and Christopher Kavanagh, an ecologist at Everglades National Park, say there's only been one algae bloom associated with the current die-off. Dean and Kavanagh both say getting more freshwater in the bay would be a huge step towards restoring seagrass and avoiding further harm to plants and animals.

Dugong and turtle being over-hunted on Great Barrier Reef (QLD, Australia)

21 March 2017, Courier Mail

Indigenous hunters are using the Great Barrier Reef as a "supermarket" for dugong and turtle meat in an uncurbed practice putting the species in danger, the Federal Government has been told. Federal Environment Minister Josh

Frydenberg is being lobbied by MPs, including from the Queensland Government, to make tougher rules around traditional hunting.

The lobbying coincides with the Bob Irwin Wildlife Foundation's push to change native title laws to ban all hunting of vulnerable and endangered species. The foundation will invite crossbench senators to north Queensland to try to recruit them to the cause. Spokesman Colin Riddell said turtle and dugong meat fetched \$75 and \$150 a kilogram respectively. Governments admit they have no idea how many dugongs and turtles are being killed, although a federal report in 2000 estimated it was up to 1,600 dugongs and 20,000 turtles a year.

Traditional owners have hunting rights on their own country under the Native Title Act 1993 that permits the taking of turtles and dugongs for personal, domestic or non-commercial communal needs. But Mr Frydenberg has been told the laws are being -ignored by some who aren't supposed to be hunting, or who are doing it to make money. Federal Member for Leichhardt Warren Entsch – who said he has had good support from Mr Frydenberg – said there were serious -issues along the east coast, with some families selling to people who just wanted to taste a bit of dugong or turtle meat. He wants prohibitions on freezing and transporting the meat, arguing animals should be consumed where they are taken.

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Marine census planned for coastal waters on March 23 (Kenya)

20 March 2017, The Standard (press release)

The Kenya Wildlife Service will conduct an aerial census for marine mammals from March 23 to March 27. KWS spokesperson Paul Gatitu said the exercise will be launched at the Mombasa Marine National Park on March 23. The survey will focus on dugongs in the area between Diani and Vanga in the South Coast and Ungwana Bay and Kiunga in the North Coast.

The International Union for Conservation of Nature has listed them as vulnerable to extinction," he said. Their population has been declining rapidly in Kenya as indicated from aerial surveys. Initial surveys indicate that 500 of them were sighted off the South Coast of Kenya in 1967. Before 1961, populations were defined as plenty in Lamu although in some sites like Chiamboni (in Somalia), Formosa Bay and Malindi they were rarely seen.

He further explained that aerial surveys conducted in 1973, 1975, 1980, 1994 and 1996 indicated a sharp downward decline in their population. In 1994 and 1996, 10 and six individuals respectively were counted during aerial surveys in Lamu, indicating a sharp decline. The six included a herd of four individuals comprising one calf in the Siyu channel and two lone animals near Manda Toto Island. The Kenyan dugong population was estimated to be approximately 50 at that time. Dugong populations in the North and South coasts of Kenya are two discrete populations.

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Lagoon resurrection unclear one year after fish apocalypse (FL, USA)

17 March 2017, Florida Today

Indian River Lagoon fishermen are reeling in some glimmers of hope. But experts say fish could take years to recover from last year's unprecedented fish kill, and the estuary's future — like its water —remains cloudy. Water quality has improved in most of the lagoon, Duane De Freese, executive director of the Indian River Lagoon Council said, "but we are still seeing rolling algal blooms. The system is still vulnerable."

A year ago this week, a "brown-tide" algae breakdown clogged canals with rotting fish. More than 30 species died. Fish carcasses floated up from Titusville to Palm Bay — a 50-mile area spanning a third of the lagoon — but mostly centering in the Banana River in Cocoa Beach. Apocalyptic images of rotting fish flashed around the globe, to the horror of local businesses and tourism officials who feared the lagoon, a \$7 billion cash cow, was dying right before their eyes. Biologists blamed local runoff for the death toll. Each storm delivers excess nitrogen and phosphorus from fertilizers, grass clippings and leaky septic tanks and sewer systems to the lagoon. Climatologists say this year should be better. With the climate hovering comfortably between two extremes — El Niño and La Niña — they see much lower odds of the lagoon reliving last year's extremes. But they also say a full fish recovery depends on more than the weather.

De Freese says the lagoon may have shifted to more small algae species that cycle nutrients more quickly, rather than seagrass and other plants that sequester them for longer periods of time. That shift, which leads to more fish kills, took decades to happen, scientists say, so returning the estuary to one more dominated by seagrass won't be cheap, or easy. The lagoon's ecological comeback hinges in part on whether more than \$302 million from a new Brevard County sales tax and other funding can grow back bottom plants that lay the foundation for all life in the lagoon.

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Court Signals Bend of US Marine Base for Okinawa Dugong (Japan)

16 March 2017, Courthouse News Service

The Ninth Circuit on Wednesday indicated that the Defense Department may have to reconsider how it will operate a controversial new military base on Okinawa, to protect the endangered Okinawa dugong. Ninth Circuit Judge Paul Watford told government attorneys at the hearing that the Center for Biological Diversity and other U.S. and Japanese environmental groups have standing to seek a ruling that the Department of Defense failed to adequately consider whether the base would harm the dugongs, vacate the Pentagon's findings that it would not, and order it to issue new ones.

Despite the dugongs' precarious position, the United States and Japan agreed in 2006 to relocate U.S. Marine Corps Air Base Futenma from Ginowan City in Okinawa to an offshore site near Camp Schwab next to Henoko and Oura Bays. Construction of the replacement base includes two runways built on landfill dumped into both bays that the plaintiffs say could ravage the seagrass beds on which the dugongs feed. The plaintiffs sued in 2003 and filed an amended complaint in 2006, saying construction would destroy Okinawa dugong habitat, and that noise, excessive light and pollution from construction would harm the dugongs. In a fleeting victory for Futenma's detractors, U.S. District Judge Marilyn Hall Patel in 2008 ordered the Defense Department to examine the effects, under the National Historic Preservation Act (NHPA), that the replacement base would have on Okinawa dugongs.

The Defense Department found that the base would not harm the dugongs, and the plaintiffs filed a supplemental complaint in 2014 challenging the findings. They said the Pentagon had not opened the NHPA process to public comment, that it acknowledged it had used insufficient data and that the findings underestimated how much habitat would be lost. The supplemental complaint sought declaratory relief and an injunction barring construction until the Department of Defense issued an NHPA-compliant analysis, according to the government's answering brief to the Ninth Circuit. U.S. District Judge Edward Chen dismissed the case in 2015, finding that the plaintiffs' request for an injunction raised political questions that the court did not have authority to hear. Chen also concluded that the plaintiffs lacked standing to pursue claims for declaratory relief and an order setting aside the Defense Department's findings.

Seeking reversal Wednesday, Sarah Burt, an attorney with Earthjustice, told the Ninth Circuit that her clients do have standing. A declaration that the Defense Department's analysis fell short of NHPA requirements and a remand for new analysis would partially redress their harms, which Burt said was sufficient to establish standing. Burt said that on remand, the Defense Department could determine whether there are certain post-construction measures it could take — such as adjusting the number of flights the base handles and the amount of light it emits — that would reduce its impact on the dugong. Haag conceded that the Defense Department could change how it chooses to run the base, then quickly pivoted to the NHPA. He said the NHPA does not require a public comment period before issuance of findings, and that the Pentagon's findings satisfied its obligations under the statute. Also Wednesday, the parties discussed injunctive relief, though the plaintiffs had not explicitly asked the Ninth Circuit in their brief to consider their injunctive relief claim. Burt said her clients plan to address the claim if they succeed on the merits back at the district court level. But Watford's reaction to the government's argument against injunctive relief may presage what happens in the lower court.

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Saving Sea Cows Helps Ensure Human Food Security (Abu Dhabi, UAE)

16 March 2017, Convention on Migratory Species

The third Meeting of Signatories to the Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats (Dugong MOU), and a two-day expert workshop attended by 125 conservation practitioners from around the Indo-Pacific region which followed, were convened by the Convention on the Conservation of Migratory Species of Wild Animals and the Government of the United Arab Emirates. The international gathering was the largest of its kind ever to be held.

Seagrass meadows support fisheries across the Indo-Pacific, and are increasingly recognized for their ability to help mitigate the impacts of climate change. They store carbon forty times faster than tropical rainforests. Thirty-two per cent of the world's 25 most landed fish species use seagrass as habitat at some stage in their life cycle. Yet, these highly productive habitats are being lost at rates faster than rainforests and coral reefs, putting at risk already endangered migratory species. Seagrass meadows also support fishing communities, and their conservation can support poverty alleviation: in many developing nations, marginalized communities depend on seagrass and the multitude of animals that they harvest from them for their livelihoods.

The newly launched Dugong & Seagrass Research Toolkit is an online tool where community groups, citizen scientists, conservation bodies and governments can select the most appropriate standardized methods to research seagrass, dugongs and the communities reliant on ecosystems for their livelihoods. For example, learning about Dugong movements as well as seagrass-dependant fishery resources helps communities to maintain sustainable fisheries whilst contributing to the protection of important Dugong populations and improving livelihoods. The

Dugong & Seagrass Research Toolkit will be promoted for use across the Dugong's range, and can be adapted to other parts of the world where the other sirenian species, manatees, live.

As a common endeavour, Governments agreed to work with the Dugong and seagrass research and conservation community to undertake more standardized research and monitoring activities as a prerequisite for devising tailored conservation measures in their own countries. Better coordination of surveys and data exchange on Dugong populations between countries will improve transboundary protection.

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Dugong saved from fishing nets off coast of Abu Dhabi (Abu Dhabi, UAE)

15 March 2017, The National

A rare dugong was saved off the coast of Abu Dhabi after becoming entangled in an illegal fishing net in the Unesco Marrawah Marine Protected Area. The area, near Bu Tinah Island, is home to several species of protected marine wildlife. It took a team from the Abu Dhabi National Oil Company (Adnoc) and Seabed Geosolutions three hours to free the 1.5-metre-long marine mammal.

The fishing net, with attached floats, was tangled around the dugong's tail, preventing it from diving and grazing on seagrasses, its staple food, meaning it could have starved to death. To monitor the animal, the environmental team marked it using non-toxic, lead-free paint. During the operation they were also able, for the first time, to record the sounds of a dugong in distress, which they hope will be useful when monitoring dugong communications.

Despite being legally protected in many countries, the main causes of dugong population decline include fishingrelated fatalities, habitat degradation and hunting. With its long lifespan - 70 years or more - slow rates of reproduction and largely coastal habitat, the dugong is especially vulnerable to human interference. more......http://www.seagrasswatch.org/news.html

At-risk seagrass records 6000 years of climate and land-use change (UK)

14 March 2017, Brunel University News (press release)

Evidence from 6,000 years of climate change and farming developments can be seen in a threatened type of ancient Mediterranean seagrass, and help us understand how damaged coastal regions could be restored, research from Brunel University London has found.

Researchers led by Dr Lourdes López-Merino at Brunel analysed the pollen, spores and microscopic plankton organisms contained in samples taken from a five-metre core of a 6,000-year-old Posidonia oceanica mat located in the Portlligat bay on the Catalonian coast. Samples were also tested at Brunel for their response to an applied magnetic field – their magnetic susceptibility – and for the quantity of charcoal fragments over time. At the University of Queensland, glomalin-related soil protein (GRSP) was extracted and measured from a previously studied seagrass mat located in the same bay.

Writing in the Journal of Ecology, the researchers explain that their results show how the seagrass mat sediments show an increase in fires in the western Mediterranean basin, particularly during Roman and Medieval times as human-induced fires helped open up land and expand areas of cultivation. As land use changed, it had a huge impact on the continental landscape, and this can be seen in the results of pollen and microcharcoal analysis. Drops in GRSP content in the seagrass and the rise in land use change indicators corresponded with periods where crop production increased, especially since the Roman and Medieval periods.

Magnetic susceptibility in a sample depends on its mineral make-up, and increases in susceptibility tend to be related to higher mineral content. The researchers found that increases in the mineral content in the seagrass mat corresponded to historical periods of more intense farming that triggered soil erosion, but also to periods of flooding and the rise and then stabilisation of sea levels during the Holocene.

This sequence of events warn what may happen in the near future if several impacts combine together and initiate ecological shifts in seagrass-dominated ecosystems. The researchers explain that seagrass meadow loss has been significantly accelerated by modern chemical and mechanical factors, including trawl fishing and coastal development. The authors found that thousands of years of on-land agricultural practices and climate change have also played a part in inducing seagrass meadow disturbance by impacting meadow health and how the seagrass accumulates carbon.

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Twenty-three countries unite in Abu Dhabi to conserve the dugong (Abu Dhabi, UAE)

13 March 2017. The National

What animal do Emirati fishermen, Australian Aboriginals living off the Great Barrier Reef, and cave dwellers in Malaysia from 5,000 years ago have in common? The answer is the elusive and mostly shy dugong, whose www.seagrasswatch.org 5

existence is now under threat. On Monday, the descendants of the three groups of people gathered in Abu Dhabi to discuss conserving the species. Delegates from 23 of the 40 countries that are home to the dugong also came together in the capital to find better ways to protect the animals.

The delegates' two-day meeting kicked off a week-long series of events in Abu Dhabi to focus global attention on the need to protect the dugongs and their seagrass habitats, and empower governments, researchers and local communities to work on conservation projects. To that end, the Environment Agency Abu Dhabi and the Convention on the Conservation of Migratory Species of Wild Animals launched a website that encourages volunteer conservationists around the world to share their findings and gain access to wildlife protection agencies' databases. The website will provide a platform for communities in the 40 countries that are home to dugongs to work together. The sharing of information on the website will help scientists and conservation groups to better assess the wellbeing of dugong populations and figure out how best to help them.

Everyone – from community organisers to research universities – can contribute to the website and improve public knowledge of conservation programmes. That means that the public can collaborate with scientists to make more data available.

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Loss of Seagrass Meadows Threatens their Dugong Denizens (Abu Dhabi, UAE)

11 March 2017, Convention on Migratory Species

The on-going bleaching of coral in Australia's Great Barrier Reef continues to generate great concern worldwide. Islands of plastic waste in the oceans contaminating the food chain make the headlines. So why then is there a deafening silence on the deteriorating condition of the world's seagrasses? Seagrasses have undergone a considerable decline in the last few decades as a result of eutrophication, and from the destruction of seabed habitat by coastal developments such as dredging and port installations. Other stresses come from discharges of industrial pollution, and domestic sewage and from commercial fisheries.

One species that depends almost exclusively on seagrass is the Dugong (*Dugong dugon*), which is found in shallow tropical waters of the Indian Ocean and South-west Pacific. Dugongs are almost exclusively herbivorous and rely on seagrass and algae for food. Their numbers have declined significantly over recent decades through loss of the habitats upon which they depend, as bycatch from fisheries, and through targeted hunting.

First ever WII-Forest Dept survey of dugong numbers (India)

04 March 2017. Times of India

The Wildlife Institute of India and Gujarat forest department will soon begin the first ever joint survey to ascertain the exact population of dugongs. Sources in the forest department said the survey will be is a part of the central government's species recovery programme and will focus on location, habitat and migration patterns.

The Wildlife Institute of India, which has been given responsibility for making a road map to revive various species, included the dugong, will carry out an aerial survey, a boat survey and scuba diving or snorkelling surveys of seagrass meadows. The study will also mark the locations of dugongs. Officials said this is the first time that WII and the forest department will undertake a joint survey.

In 2011, Gujarat Ecological Education and Research (GEER) Foundation had found trails of dugongs in the Gulf of Kutch, at Pirotan island and even at Bet Dwarka. The 2011 study, sponsored by the Union ministry of environment and forests (MoEF), estimated that there were about 250 dugongs on the coast on India - the biggest population being in the Gulf of Mannar on the southern coast, followed by the Andaman and Nicobar Islands, Palk Bay and the Gulf of Kutch. Officials said the study was completed in 2011 and nothing much has been done since. The fresh survey will reveal the exact number and their locations. The 2011 report mentioned some 13 direct sightings of dugongs in the Gulf of Kutch.

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Beached dugong dies in Sarangani (Philippines)

03 March 2017, PressReader

The local government of Kiamba, Sarangani reported that attempts to return a juvenile dugong (sea cow) failed, with the marine mammal dying of disease.

The dugong had been found weak in shallow water at Brgy. Kayupo last Wednesday. "Locals tried to coax the animal into deeper water and fed it sea grass in an attempt to revive it back to health but the animal died not long after it was seen," the report from the information office said.

The dugong measured 9 feet in length with a girth of 61 inches and an approximated weight of 500 pounds, which representatives from DENR, MPDC and the Municipal Information Office documented. The remains of the animal will be buried in Barangay Kapate until such time when the skeleton can be gathered for educational purposes. (Yas D. Ocampo)

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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:

Abstract Deadline: 1 May 2017

Conference Registration Opens in February! Early Bird Registration Deadline: 15 May 2017

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: https://goo.gl/forms/TIIhDGhEx71m0tcj1
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SEAGRASS-WATCH on YouTube

Seagrass: Pastures of the sea http://www.youtube.com/watch?v=66Y5vqswj20 or

http://www.seagrasswatch.org/seagrass.html

Presentation on what seagrasses are and why they are important (over 44,829 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.

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