



Seagrass-Watch E-Bulletin

31 August 2016

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NEWS

Seagrass in Everglades National Park is dying (FL, USA)

25 August 2016, CNN

Balancing on the deck of a National Park Service skiff over Florida Bay, US Interior Secretary Sally Jewell held a clump of seagrass collected from the underwater meadow below. The plants pulled from the shallow water were brown and appeared dead -- nothing like the lush, green seagrass that has grown in the same area for years.

Over the past year, researchers from the National Park Service, have discovered a 40,000-acre section in rapid decline. The suspected culprits for this massive die-off are many: For the past 100 years, increasing development in Florida has disrupted the balance through the construction of homes, industry and roadways. Meanwhile, rising sea levels -- which scientists attribute to climate change -- have increased the salinity in the water, further causing disruption. That, mixed with a devastating drought in recent years, has worked to create a perfect storm that's threatening one of the nation's most prized natural wonders.

Efforts to restore the balance and flow of freshwater into the Everglades are underway. As part of a years-long project coordinated by federal and state agencies, officials are working to raise sections of the Tamiami Trail to allow water to flow. In 2013, the National Park Service celebrated the completion of a mile-long stretch, and have just begun a new project to raise another 2.5 miles of the highway as part of a project funded in part by the US Department of Transportation Federal Lands Highway Program and Florida's Department of Transportation. The construction is expected to be completed by 2020. The Interior Department said the project is "one of the largest conservation projects ever undertaken" by the National Park Service.

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Seagrass restoration threatened by fungi (Netherlands)

23 August 2016, *Science Daily*

Dutch biologists have discovered that seagrass seed is killed by waterborne fungi that are related to the well-known potato blight. These fungi, which have not previously been found in seawater, hinder seed germination and thus prevent the restoration of seagrass. The seawater fungi that are to blame (*Phytophthora gemini* and *Halo phytophthora* sp. *zostera*) have been identified as members of the large *Phytophthora* family. The widespread presence of these pathogens therefore threatens the global recovery of seagrass. The biologists, including Laura Govers of Radboud University, published their results in *Proceedings of the Royal Society B*.

This investigation was prompted by disappointing germination of seagrass seed that was collected for the restoration project on the North Sea island of Sylt. Nearly all this seed was found to be infected with *Phytophthora*. Lead researcher Laura Govers, who works at Radboud University and the University of Groningen, tested the germination of the infected seed. "This proved to be six times less likely to germinate than non-infected seed. Only three to four percent of all infected seeds germinated."

In the Netherlands, the vast seagrass beds that were originally present in the Wadden Sea disappeared after 1930 and never recovered. That's why biologists are investigating whether seagrass restoration in the Dutch Wadden Sea is possible. One way to improve the chances for seagrass restoration is by treating the seeds during storage with a copper solution. This method has been used in farming since the 19th century to combat *Phytophthora* infection and appears to be promising for seagrass seed.

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Laurence Reisman: Loving manatees give show despite shaky conditions (FL, USA)

18 August 2016, *TCPalm*

Call me naive, but when I came across eight to 10 manatees in the Indian River Lagoon — including two calves — a couple of weeks ago, I was surprised. I saw the manatees amid reports at least nine manatees had died since May, mostly closer to Melbourne. They are among more than 100 found dead since 2012. Also, a manatee calf was found dead in Stuart, shortly before large amounts of blue-green algae polluted the water there.

"Eight is a slow day this time of year," said Steve Cox, who is a volunteer manatee spotter at Round Island for the Florida Fish and Wildlife Conservation Commission. Seeing six or seven manatees near Round Island is normal before April or May when the marine mammals start mating, said Cox, who has been touring in the area for about 20 years. This time of year, there are days when 20 are visible. The calves might have been rare twins, Cox said. The only way to identify most of the manatees, he said, is from scars or cuts from boat propellers. The good news: I saw only one motorized boat return to shore and it left no wake.

The relative lack of motor boats and the relative shelter of Round Island coves are attractive to manatees, Cox said. What's more, he said, the area — even on the west side of the lagoon — is home to some of the best seagrass beds in 20 to 30 miles. And manatees love their seagrass. Unfortunately, algae blooms starting in about 2012 killed seagrass in large portions of the lagoon, particularly north of the Sebastian Inlet. Thus, manatees have been eating stringy seaweed and other greens instead of seagrass. Cox said a cold spell in 2010 was the beginning of problems with seagrass. That, along with Vero Beach shutting down its power plant — which kept water warm near the plant — led to fewer manatees in the region. People watched the manatees closely, but left them alone. But without protecting our lagoon and its seagrass from boats, fertilizer, fecal matter and other pollutants, manatees won't stand a chance.

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Effects of rising ocean acidification on fisheries in spotlight (New Zealand)

18 August 2016, *Stuff.co.nz*

With a budget of nearly \$5 million over 4 years researchers at Niwa, Cawthron Institute in Nelson, University of Auckland, and Otago University under the Carim (Coastal Acidification: Rate, Impact and Management) programme will be looking at how rising ocean acidification affects phytoplankton, aquaculture species paua and greenshell mussels, and young snapper.

Ocean pH is currently 8.1 down from 8.2 in pre-industrial days. But coastal waters, where most of our aquaculture goes on, gets a double whammy with nutrient runoff from the land dropping it further. About 20 percent of the countries Greenshell mussels and Pacific oysters is produced in the Firth of Thames, in the southern Hauraki gulf, with significant expansion planned. Having studied the Firth for the last 30 years principal scientist for marine ecology at Niwa, John Veldis is now seeing pH levels lower than 7.9 in Autumn, not expected in the open ocean until 2100. Nitrogen in the Firth already causes algae blooms in Autumn. Bacteria, breaking them down as they die, release carbon dioxide and sucking oxygen out of surrounding seawater killing other marine life.

A marine spatial plan has been developed for the Gulf, the first of its kind in New Zealand, and is due to be released by the end of the year. A marine reserve site isn't part of the national network but there is merit in including one in the future, to see how ecosystems without fishing pressures cope. Just as on land, increased CO2 sees marine plants grow more. They suck CO2 from the sea water as they grow sequestering carbon and lowering acidity in surrounding water making life easier for fish and shellfish living there. Huge seagrass meadows that once flourished in the Kaipara Harbour have largely been smothered by sediment coming off rural and forestry land. The small remaining patches support virtually the entire west coast snapper fishery.

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Canegrowers' concern about new Reef run-off regulation (QLD, Australia)

14 August 2016, *The Cairns Post*

Cane growers have warned too much State regulation of their activities to improve water quality may produce the opposite effect for the Great Barrier Reef. The Palaszczuk Government has announced it will pursue "targeted regulatory approaches" including mandating the provision of farm level yield and nutrient data, and farm-based caps to reduce run-off within the Reef catchment. The government will spend \$90 million over four years to implement 10 recommendations made by the Great Barrier Reef Water Science Taskforce.

A key finding of the government's report says it will cost an estimated \$8.2 billion to slash sediment and fertiliser run-off to the Reef by 2025. Canegrowers Queensland chairman Paul Schembri said the agricultural body supported a majority of the recommendation, but was concerned about further regulations upon the industry. Mr Schembri said any funding to be spent on compliance would be better spent on assisting cane growers to invest in technology to improve their farming practices.

Great Barrier Reef Minister Steven Miles said some aspects of the report's recommendations, such as regulatory reforms, would require further consultation to develop the most effective approach. WWF Australia spokesman Sean Hoobin said investing \$8.2 billion to dramatically reduce pollution flowing to the natural wonder should be an urgent, national priority. He said Australia has a target of reducing nitrogen or fertiliser pollution by up to 80 per cent.

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Negril hoteliers urged not to remove seagrass meadows (Jamaica)

12 August 2016, *Jamaica Gleaner*

Some residents of Negril say many owners of hotels on the Norman Manley Boulevard, in the resort town, have contributed to the degradation of the beach by removing coastline vegetation, including seagrass meadows, making the areas vulnerable to erosion. The comments came on Wednesday during a symposium staged by the Negril Chamber of Commerce at the Swept Away hotel in Negril, titled 'Building with Nature - Environmentally Sound Solutions to Beach Erosion', after CEO of the Jamaica Environment Trust (JET), Diana McCaulay, who was chairing the proceedings, issued a caution to offenders.

Dalton Hill, operator of the Lighthouse Inn on Negril's West End, who identified himself as a born 'Negrilier', said he has observed over the decades a wanton disregard for the very important marine plant life by some hoteliers on the beach strip. Pauline Pringle, another resident who said she was in her 70s, also attributed the erosion to the actions of hoteliers who remove naturally occurring plants for aesthetic reasons.

The Negril beach has been declared an erosion hotspot from as far back as 1999. A one-year study of the problem by the University of the West Indies between 1999 and 2000 had also concluded that the northern section of the Long Bay Beach had been experiencing shoreline erosion. It recommended that feasibility studies be undertaken to develop other alternatives to protecting the shoreline, including the cultivation of seagrass meadows.

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Fixing water quality for Great Barrier Reef will cost \$8.2bn, report finds (Australia)

12 August 2016, *The Guardian*

Attempting to fix the water quality for the Great Barrier Reef will cost \$8.2bn in the next decade but even then some of the targets will be impossible to meet, according to a landmark report commissioned by the Queensland government. The targets are part of the federal government's Reef 2050 Plan, the implementation of which is required by Unesco in order for the reef to avoid being included on the world heritage in danger list. Currently, state and federal governments are spending less than a tenth of what the report finds is required.

The final costings amount to about half that of a draft version of the report leaked to the ABC, but are roughly in line with independent analysis published in a scientific journal in May. The costing report notes that "policy solution sets to meet the regional Reef 2050 Plan targets for the GBR requires a significant increase in investment from current levels". The report notes that farms are the major source of pollution for the Great Barrier Reef, and identifies seven policy "solution sets", including improving management practices for cane farmers and graziers; remediating gullies; completely shifting the land use for some areas; and improving urban stormwater management. It found that the currently available policy solutions, even with the suggested level of investment, will not be able to meet all the targets because they "cannot be applied widely enough, or they simply cannot address the scale of load reductions". As a result, new policy actions will need to be considered, it said.

The report makes 10 broad policy recommendations, all of which the Queensland government either agreed to, or agreed to "in principle". Queensland environment minister, Steven Miles, said some of the recommendations will require further consultation or collaboration with the federal government. The report was welcomed by WWF spokesman Sean Hoobin.

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Reef tips: Seagrasses in the CNMI (Marianas)

12 August 2016, *Marianas Variety*

In the Commonwealth of the Northern Mariana Islands (CNMI), there are marine flowering plants that are commonly mistaken for seaweeds, or algae, but they are in fact seagrasses. There are three seagrass species present in the CNMI; the large-sized *Enhalus acoroides*, the medium-sized *Halodule uninervis*, and the small-sized *Halophila minor*.

When considering the collective role that seagrass habitats play in governing physical, chemical, and ecological processes that together provide essential ecosystem services, it becomes obvious that attention and care should be given to our seagrass habitats. One of the major threats to seagrass communities is macroalgae (seaweed), which will compete with the seagrasses for sunlight. Smaller seagrasses like *H. uninervis* and *H. minor* are most susceptible to this rapid growth of macroalgae. As the macroalgae over grow the seagrass, they block the sunlight needed to photosynthesize. With continuous input of excess nutrients, the habitat will change from a seagrass dominated habitat to a macroalgae dominated habitat that is not ecologically beneficial or aesthetically pleasing to the CNMI's residents and visitors.

Other threats to seagrass habitats are propeller scars and improper anchoring. What can we do to help protect our seagrass habitats?

- Properly use chemical fertilizers as rain will transport excess nutrients into the nearshore waters.
- Do not burn. Clearing of land may increase the surface runoff of nutrients and sediments.
- Boat responsibly. Propellers and anchoring can damage seagrass habitats by removing or smothering the plants.

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Sabah Wildlife Dept awaiting green light to pursue turtle eggs case against minister (Malaysia)

10 August 2016, *New Straits Times Online*

The Sabah Wildlife Department is awaiting the green light from the deputy public prosecutor to pursue a case involving a Federal Minister who allegedly consumed turtle eggs in Sandakan last year. Sabah Tourism, Culture and Environment Minister Datuk Seri Masidi Manjun said the case report has been forwarded to the DPP.

The bill seeks to impose higher minimum and maximum penalties to deter individuals from hunting and possessing fully protected animals and plants as well as to include two new wildlife species as fully protected under the enactment.

Among the proposed amendments are to impose mandatory fine and jail penalties under Section 25 of the Enactment for hunting protected animals; Section 41 for possessing protected animals and animal parts; Section 53 for smuggling protected animals; Section 62 for possessing protected plants; Section 63 for smuggling protected plants; and Section 87 for collecting or possessing turtle eggs within traditional egg collection grounds.

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Bay fishing suffers as ecosystem struggles (FL, USA)

10 August 2016, FIKeysNews.com

Waters in northern Florida Bay suffering from a massive seagrass die-off still produce fish, guides say — just not as many. Peter Frezza, an Upper Keys biologist and bay guide said he has not seen an expansion of the damaged seagrass beds, an area to cover estimated 40,000 to 50,000 acres. Marine scientists have feared the seagrass die-off could lead to another expansive algae bloom like the 1987-92 bloom that killed sponges, sea life and fish. It took decades for the ecosystem to show significant improvement.

South Florida Natural Resources Center of the National Park Service reported in May that after a seagrass die-off event of this magnitude, the large quantity of dead seagrass and an extensive decaying root system will release nutrients into the water column. The added nutrients may initiate an algal bloom at some time in the future. But, so far in this hot summer, no large-scale algal blooms have been reported.

Some areas in Florida Bay waters at the First National Bank flat and Whipray Basin have “seen evidence of an expansion” of the seagrass die-off. But it’s not entirely gloom and doom, as some areas have resprouting [of seagrass]. But no one should be using these very localized incidents to start spreading false hope. A summer drought in 2015 started the seagrass die-off when Florida Bay waters became highly salty. Efforts are under way to partially restore the historical freshwater flow through the Everglades that kept the bay brackish, but that project may take decades and cost billions.

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Townsville research centre to protect reef turtles (QLD, Australia)

10 August 2016, Brisbane Times

A turtle health research centre will officially open in Townsville, five years after a cyclone caused many to starve to death and left researchers puzzled by their demise. The centre is undertaking groundbreaking research to help protect the Great Barrier Reef’s endangered turtles. The species’ immune system is the primary focus, while their vision and memory is also being put under the microscope.

Researchers realised how little they knew about turtle health following Cyclone Yasi in 2011. The category five cyclone left scores of turtles stranded, with many starving to death. James Cook University Associate Professor Ellen Ariel said her research team was only able to save half of the 30 turtles it took in.

In February this year, the centre started its research with 40 green turtle hatchlings. The turtles are housed in tanks, taken out most days to bask in the sun for some vitamin D, and are fed a diet of fish, squid and vegetables. Assoc Prof Ariel said it was important the turtles were kept healthy so researchers could properly examine their immune system. Researchers have also been studying whether turtles have colour vision, how they learn, and their memory, she said. Scientists and indigenous leaders will be among those at the centre’s official opening on Wednesday.

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Traditional owners slam hunting moratorium plan (Australia)

10 August 2016, The Cairns Post

A respected Aurukun elder has blasted the Federal Government for wanting to place a moratorium on the traditional hunting of dugongs and turtles. The Cairns Post reported this week the Coalition Government was drafting legislation to potentially take the traditional food source off the table and that Leichhardt MP Warren Entsch wanted a blanket moratorium on hunting the species.

But Aurukun elder Ron Yunkaporta said the government had no right to tell him and his family how to live on their land. He said his family members had caught dugong as recently as Monday night using a “harpoon made out of wood”.

Further north on Cape York, Mapoon Mayor Aileen Addo also denounced the government’s plan and said she saw nothing wrong with people using modern technology to assist with hunting. Cr Addo said instead of blaming indigenous communities, conservationists should focus on the damage caused by prawn trawlers and ghost nets, and said indigenous rangers across the Western Cape were heavily involved in protecting turtle nests from predators.

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Calls to save Oman's Masirah Island from an environmental nightmare (Oman)

08 August 2016, Times of Oman

More plastic bottles are washing ashore on the Masirah Island as environmentalists are pleading with volunteers to save the turtle nesting beaches from a “catastrophe.” Thousands of loggerhead and green turtles are now in danger after a vessel sank two weeks ago, leaving thousands of plastic items floating in the Arabian Sea. The Ministry of

Environment and Climate Affairs had sent a team last week to inspect the affected locations, according to a ministry official.

According to sources, the vessel is still leaking water bottle caps, water bottles, plastic torches, toothbrushes and diesel and petrol barrels. Food items are also being washed onshore, such as biscuits, chewing gum and candy, while a volunteer said some syringes and cosmetics have also been found on the island. Reports suggest that the 800-tonne cargo vessel sank on July 22 on the south east side of the island, around 500 metres from the shore, generating massive quantities of toxic litter.

Isa Al Amri, a kite surfer, explained that some beaches in Masirah have turned blue after many bottle caps washed ashore. Masirah is also one of the largest turtle sanctuaries in the world, accounting for a large number of new hatchlings and is considered to be one of the main beaches that could help increase the number of the endangered loggerhead turtles. July to October is the peak time for turtle watching in Oman as approximately 20,000 turtles or more lay around 50,000 to 60,000 eggs each year in the Sultanate, according to the Ministry of Tourism.

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Coalition preparing new laws to protect dugongs from hunters (Australia)

08 August 2016, The Cairns Post

New laws are being prepared by the Coalition to provide stronger protection for dugongs and sea turtles from traditional hunters. Conservationists have campaigned for years for a moratorium on the traditional take of the marine animals, claiming it is a practice exploited by hunters using non-traditional weapons and equipment.

Leichhardt MP Warren Entsch said that the Turnbull Government was preparing draft legislation to strengthen protection for turtles and dugongs along Australia's eastern seaboard. He said it was not ready to be released publicly. He agreed that there needs to be a moratorium on the taking of these creatures, because they are listed as vulnerable. There has always been an argument about defending native title rights, as opposed to protecting these species, but in my view, unless we take firm action on this, there will be no arguments about native title rights because the target species won't exist.

Several indigenous communities restrict traditional take of the protected species through Traditional Use of Marine Resource Agreements (TUMRAs). However Mr Entsch wants a "total moratorium" to prevent turtles and dugongs being taken in other areas. Wildlife activist Colin Riddell urged a total ban on hunting in Australia's marine parks.

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

Managed turtle breeding helps maintain wild population (Indonesia)

03 August 2016, Jakarta Post

With an output of about 10,000 baby turtles a year, the breeding of green turtles in the regency of Tolitoli in Central Sulawesi is seen as a promising move to maintain the population, said Tolitoli Fisheries and Maritime Agency head Hardiyanto on Monday. He said the breeding of the green turtles in the regency was conducted in cooperation with locals people over awareness that the population of the reptiles was continuing to decrease over time because of illegal hunting. He said his office had allocated some Rp 32 million this year to empower the people of Sese village, North Dampal district, Tolitoli, to breed green turtles. The funds, he said, came from the state budget of the Coastal and Marine Resource Management Center and were handed over to the local community group that was given full authority to disburse them.

There are currently four regions in the regency that have been breeding green turtles. The other three are Galumpang village in Dakopemean district, Lingayan Island and Ogotua village in North Dampal district. The green turtle breeding on Lingayan Island, one of the outmost islands in Tolitoli, was conducted because its population of the protected animals was declining and neared extinction because of extensive illegal hunting.

Lingayan Island directly borders with Malaysia. With 64 families living on it, the island has been in the list of underdeveloped subdistricts despite its rich potential. The breeding of the green turtles in Tolitoli regency, Central Sulawesi, has shown a promising yield, currently producing more than 10,000 baby turtles a year, a local officer said.

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Stephen Hume: Scientists probe carbon marine sinks (Canada)

02 August 2016, Vancouver Sun

Marlow Pellatt, a palaeo-ecologist with Parks Canada, is the lead Canadian scientist on a major international initiative. He's studying the importance of coastal salt marshes and seagrass beds as long-term carbon sinks in which vast quantities of greenhouse gases are absorbed and stored. Many are at risk. Losses are up to seven per cent each year. Real estate developers drain marshes. Recreational boaters rip up seagrass beds with anchors. Farmers convert wetlands in highly fertile flood plains. But research finds that these often unappreciated coastal ecosystems are a critical component in capturing the carbon dioxide that contributes to global warming.

Pellatt is Parks Canada's lead scientist with a research project by the United States, Mexico and Canada launched under the Commission for Environmental Cooperation. It's to map, measure and evaluate the extent and magnitude of carbon storage in these coastal ecosystems as a baseline to help the three countries develop and apply conservation and restoration measures. These blue carbon ecosystems are an extremely efficient, low-energy natural system for pulling carbon from the atmosphere and storing it, Pellatt says. And all we have to do is leave them alone to do their work.

But how much do we have? How much carbon is stored in Canadian ecosystems? What's the potential for restoring what we've damaged and protecting what we have left? That's where Parks Canada steps in. Pacific Rim National Park Reserve has pristine examples of temperate salt marshes and seagrass beds. And Pellatt's task is to collect samples, date them using radioactive isotopes and figure out the volumes of carbon storage.

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A Record Number of Manatees Are Being Killed by Boats (FL, USA)

02 August 2016, TakePart

Florida's manatees are dying from boat strikes in record numbers this year, but conservationists and boating advocates disagree over the reasons why. Seventy-one manatees had been killed by boat strikes as of July 22, compared with 58 manatees by mid-July 2009, the deadliest year on record, when 97 of the docile marine mammals died in collisions, according to the Florida Fish and Wildlife Conservation Commission.

Patrick Rose, executive director of Save the Manatee Club, said an increase in boating traffic is to blame. But Jim Calvin, president of Standing Watch, a boater advocacy group, said that pollution, harmed manatee habitat, and unsustainable manatee management programs are responsible for the increase in boat strikes. He said the manatee population has exceeded its "carrying capacity," meaning there are more animals than the availability of seagrass, their chief food source, can sustain. Calvin said some animals are entering into travel corridors where boats can navigate at higher speeds, while others are moving into shallower waters with heavy vessel traffic.

Kalvin said that algae blooms caused by the release of nutrient-rich water from Lake Okeechobee are blocking sunlight and killing seagrass in certain estuaries, such as the Indian River Lagoon. Rose agreed that algae blooms spawned by runoff of agricultural fertilizer are killing seagrass but said that over-foraging by manatees was not the problem. Carli Segelson, spokesperson for the Florida Fish and Wildlife Conservation Commission, agreed. "We have found no conclusive evidence of manatees reaching carrying capacity," she wrote in an email. Segelson also said that seagrass shortages are not causing manatees to migrate through waters that put them at greater risk of boat strikes. In addition to boat strikes, manatees face cold winters, toxins from red tide blooms, and tourists who swim with the animals. Rose said the solution to boat strikes is better education for boaters.

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

Marooned marine life: Sea creatures wash up in their thousands along Adelaide's coast (SA, Australia)

02 August 2016, ABC Local

Recent wild weather, large tides and strong winds have beached an interesting assortment of sea creatures along Adelaide's coastline. Kristen Messenger from Conservational Education Services told 891 ABC Adelaide's Afternoons program the variety of wildlife that had washed up was astonishing.

Ms Messenger said many of the shellfish washed up were still alive, and locals had taken advantage of the bounty — but she warned people needed to be aware of fishing allowances. The limit is 25 razor fish per person in South Australia. Ms Messenger said because of the sea bed and tidal flows of Gulf St Vincent, the majority of sea creatures had been found dumped along the beaches north of West Beach. Vast swathes of seagrass had also dislodged and been washed up.

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Six green sea turtles get a new home (HI, USA)

30 August 2016, Maui News

Six endangered green sea turtles that were hatched at Sea Life Park Hawaii on Oahu and raised at the Maui Ocean Center in Maalaea were released into the ocean Thursday afternoon by aquarium staff. The animals are all marked with "MOC" and letters A through F on their shells. Residents and visitors are encouraged to report sightings (day, time and location) to the Maui Ocean Center at 270-7075 or info@mauiocenter.com.

Full Story: <http://www.mauinews.com/page/content.detail/id/623372/Six-green-sea-turtles-get-a-new-home.html>

FWC to Florida beachgoers: during this critical time, leave sea turtle hatchlings alone (FL, USA)

29 August 2016, WFSU

The Florida Fish and Wildlife Conservation Commission is getting increasing reports of people interacting with sea turtle hatchlings. People are shining lights or taking flash photos or picking up these animals, which is against the law, says Robbin Trindell, who leads the FWC's sea turtle management program.

Sea turtle hatchlings can be seen on all the sandy beaches across Florida. While most nests are in the South Florida area, Trindell says they are seeing more of these inappropriate interactions in the Panhandle. But it's not completely the violators' fault. The head of the FWC's sea turtle management program says sea turtle programs are fairly new in the Panhandle, compared to other parts of the state. October is the last month of sea turtle nesting season.

Full Story: <http://news.wfsu.org/post/fwc-florida-beachgoers-during-critical-time-leave-sea-turtle-hatchlings-alone>

Adani mine clears another legal hurdle (QLD, Australia)

29 August 2016, NEWS.com.au

It's two legal cases down and three to go before Australia's biggest coal mine, slated for Queensland's Galilee Basin, can start says the Queensland Resources Council. A Federal Court on Monday dismissed a challenge by conservationists to stop the project.

The Federal Court threw out an Australian Conservation Foundation (ACF) case against Adani's \$21 billion Carmichael mine from going ahead on the grounds the approval of the mine was inconsistent with Australia's obligation to protect the Great Barrier Reef from the emissions of coal. The ACF said it would not stop fighting to prevent the coal mine from ever operating.

ACF CEO Kelly O'Shanassy said in a statement that Australians would be shocked that the biggest ever coal mine was approved despite the Great Barrier Reef this year suffering the worst coral bleaching on record as "a direct result of global warming". The Australian Marine Conservation Society's Great Barrier Reef campaign director Imogen Zethoven said the federal government will be to blame if the reef dies.

Full Story: <http://www.news.com.au/national/breaking-news/federal-court-to-rule-on-adani-challenge/news-story/516aa306d8057416492183bd9a25b7f4>

Record number of laying green turtles counted on Lanyu (Taiwan)

29 August 2016, Taipei Times

A record-high 24 female green sea turtles laid eggs on Orchid Island (蘭嶼, Lanyu) this year, with 83 hatchlings counted as of Wednesday evening, a National Taiwan Ocean University research team said, calling the development "heartening."

The university's College of Life Sciences dean Cheng I-Jiunn (程一駿) said the green sea turtle population has increased in the past five years, because they were protected both on Orchid Island, where local residents do not hunt turtles for food, and in the seas near the south of Japan's Ryukyu Islands, where the turtles travel to after laying eggs on Orchid Island.

The number of turtles the team has observed has risen from a yearly average of 10 in the past five years to 24 so far this year. The Siabadai Bay team hopes to increase turtle numbers by digging up eggs and moving them to a more elevated area, so that they are not crushed by other turtles as they arrive later, Cheng said. The team examined all of the 83 hatchlings and released them into the sea, Cheng said.

Full Story: <http://www.taipeitimes.com/News/taiwan/archives/2016/08/29/2003654102>

Don't eat fish caught off Vietnam's central coast: health authorities (Vietnam)

28 August 2016, VnExpress International

Vietnamese food safety authorities have warned against eating seafood caught off the coast of the four central provinces affected by the environmental disaster caused by the Vietnam unit of Taiwanese conglomerate Formosa Plastics Group.

The Vietnamese government announced on June 30 that the Taiwan-owned steel firm Formosa was responsible for discharging toxic chemicals into the ocean, killing marine life and poisoning fish in four central provinces. Nearly three months after the announcement, Minister of the Environment Tran Hong Ha said last week that it's now safe to swim in the affected provinces and that fish farming could resume in most areas. However, the big question that remains unanswered is whether it is safe to eat fish caught within 20 nautical miles (37 kilometers) off the coast of the four provinces.

Thorough research and strict supervision by the Ministry of Health are needed to make sure it is safe to eat fish caught off the central coast, Nguyen Thanh Phong, the director of the ministry's Food Safety Department, has said. He added that the Health Ministry, supported by a team of experts and scientists, is set to make its final conclusion by early September. The senior food safety official strongly warned the public to refrain from eating fish in the affected areas until the pollution has been cleaned up.

At a conference last week, Mai Trong Nhuan, who led a team of Vietnamese and foreign scientists to study the consequences of the toxic disaster, said that marine life, including sea water and sea-bed sediment, is generally within safety standards for aquaculture farming, fishing and tourism activities. The marine ecosystem, coral reefs, seagrass and other marine resources which were seriously damaged in terms of scale and species has begun to recover. However, since then the media has reported chemical residue still present in fish caught offshore.

Full Story: <http://e.vnexpress.net/news/news/don-t-eat-fish-caught-off-vietnam-s-central-coast-health-authorities-3459650.html>

CONFERENCES

The 12th International Seagrass Biology Workshop (ISBW12) (Wales, 17-23 October 2016)

Theme: Declining seagrasses in a changing world.

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 ISBW12 will be held from 17-23 October 2016 at Nant Gwytheyrn, Gwynedd, Wales, organized by Project Seagrass and the Seagrass Ecosystems Research Group. The conference email address is ISBW2016@projectseagrass.org.

We as scientists know the devastating effects that humanity is having on our worlds seagrass meadows. Although much work is needed to keep documenting, understanding and highlighting the problems facing seagrass we as a research community need to also provide a voice of optimism about how we can make changes to ensure survival of these precious ecosystems. We must go beyond science, and use it to inform policy and management, and ultimately to catalyze change. We know that there are many examples of this, from stakeholder led management and successful restoration to improvements in water quality and the management of boating activities. We encourage participants to contribute stories of seagrass conservation success in order to strengthen this theme. We also encourage submission of research stories that aim to provide evidence to make future successes.

Let's make ISBW12 a conference that celebrates seagrasses and has a spirit of #oceanoptimism

The workshop therefore has 4 key themes that will form the structure of the sessions held throughout the week. These are:

- Resilience and a changing environment
- Ecosystem services
- Restoration and management
- Raising the profile of seagrass meadows

for more information, visit <http://isbw12.org/>

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 42,423 views to date)

FROM HQ

Past E-bulletins <http://www.seagrasswatch.org/publications.html#bulletin>

Frequently Asked Questions <http://www.seagrasswatch.org/faq.html>

Seagrass-Watch Magazine <http://www.seagrasswatch.org/magazine.html>

Virtual Herbarium <http://www.seagrasswatch.org/herbarium.html>

Future sampling dates <http://www.seagrasswatch.org/sampling.html>

Handy Seagrass Links <http://www.seagrasswatch.org/links.html>

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