



**31 August 2013**

Seagrass-Watch's electronic news service, providing marine and coastal news of international and national interest. Abbreviated articles are presented with links to their source. Seagrass-Watch HQ recommends that readers exercise their own skill and care with respect to their use of the information in this bulletin and that readers carefully evaluate the accuracy, currency, completeness and relevance of the material in the bulletin for their purposes. You are free to distribute it amongst your own networks.

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## **Labor details plan to protect reef (Australia)**

30 August 2013, NEWS.com.au

Labor says it will boost the health of the Great Barrier Reef by spending \$137 million to improve farm practices, water quality and wetlands in Queensland. Federal Environment Minister Mark Butler on Friday revealed which projects would be funded under Labor's Reef Rescue program.

Of the \$200 million to be spent on the program over the next five years, Labor has allocated \$137 million to specific projects, mainly in far north Queensland. This includes \$64 million for farmers to reduce sediment and nutrient run-off into the reef and generally improving water quality, \$26 million to protect and restore wetlands and \$21 million to track the health of the reef. A further \$26 million will go to the Great Barrier Reef Marine Park Authority in Townsville.

The Reef Rescue program has been running since 2008 and will continue for at least another five years under Labor. Earlier this year the United Nation's environment arm said Australia needed to take better care of the reef or risk having the reef listed as a World Heritage site "in danger". UNESCO will review the reef's status listing in June next year.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

## **Turtle hospital downplays impact of increased Gladstone shipping (QLD, Australia)**

30 August 2013, ABC Online

The operator of a marine animal rehabilitation facility in central Queensland says the increase in shipping through Gladstone has had little impact on local sea turtle populations. Since March last year, about 55 injured sea turtles have been through the Quoin Island Turtle Rehabilitation Centre near Gladstone.

Australian Marine Conservation Society spokeswoman Felicity Wishart says increased ship movements have taken a toll. "Since the first gas hubs commenced development there's been 45 turtles ... killed," she said. However, rehabilitation centre owner Bob McCosker disagrees.

"A big ship cruising along would really struggle to ever hit a turtle," he said. He says most of the turtles come in underweight, indicating a lack of food since the floods. Mr McCosker says about half of the turtles come from Gladstone. After months of care, Mr McCosker releases them back to the wild.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

## **Sand dollars versus eelgrass (WA, USA)**

29 August 2013, Islands' Sounder

From red octopus to giant clam worms to bay ghost shrimp the waters around our islands are home to fascinating creatures. For Amy K. Henry, a doctoral candidate from the University of Chicago, these salty waters have enticed her to study two well-known – yet mysterious – species. Over the summer, she has been looking at how eel grass and sand dollars compete for space and influence the ecosystem of Crescent Beach. This is her first time working with Friday Harbor Labs and conducting research in East Sound.

"It has been so great to work here," she said during a talk on Wednesday, Aug. 21 at the Orcas Library, organized by the Indian Island Marine Health Observatory. Eel grass and sand dollars are part of Henry's desire to delve into the world of ecosystem engineers, which are animals that modify the environment by making it more beneficial to themselves or for other species. Beavers are known as great engineers because they reduce forests and increase ponds.

In East Sound, eel grass and sand dollars are the perfect subject for Henry's research because they both drastically change their surroundings. At a high density, eelgrass will prevent sand dollars moving into an area because they will not easily be able to move through the sea floor. On the other hand sand dollars have the potential ability to uproot the sea grass.

Henry is currently setting up areas at Crescent Beach to observe which sea creature will prevail. In some areas she has removed the sand dollars and put in grass. In other areas she has transplanted the sea urchins where eel grass once lived. Over the next few years Henry plans to visit the eight different plots and check on the two species.

"Basically we'll see who will reclaim its turf," she said.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

## **Cairns students campaign to help Great Barrier Reef sick turtles (QLD, Australia)**

29 August 2013, *The Cairns Post*

School children are being mobilised in the campaign to save the growing number of sick turtles on the Great Barrier Reef. They are being invited to the Cairns Turtle Rehabilitation Centre on Fitzroy Island to see for themselves the plight of the marine animals. Co-founder Jennie Gilbert said it was the first stage in a campaign to encourage schools throughout the region to adopt a turtle to help nurse it back to health. She said rehabilitating turtles was expensive and relied on donations and sponsorships. It was hoped a whole school could adopt one.

"Large numbers of sick turtles have been in care at the Cairns Turtle Rehabilitation Centre for up to two years before being well enough to be released back into the wild," Mrs Gilbert said. "In the past two years, there has been an 800 per cent increase in turtle strandings. With all of the rehabilitation centres along the east coast of Queensland, many turtles have had to be turned away." Mrs Gilbert said Fitzroy Island was the home to nine turtles presently with room for many more and Fitzroy Island Resort had donated land as well as regularly transferring volunteers and equipment to the new centre, including the turtles, free of charge.

"So far this year we have released nine turtles that initially came in suffering from starvation from the lack of sea grass feeding grounds. They have been successfully rehabilitated and released. Two of these turtles had satellite trackers attached to them to monitor the success of the rehabilitation," she said. "None of this would be possible without donations and sponsorship and with each new arrival the need for more funds is critical. "We are hoping to increase awareness and educate our children on the importance of looking after our marine park and our precious turtles by encouraging families to visit the island and come see the turtle hospital." They are being invited to the Cairns Turtle Rehabilitation Centre on Fitzroy Island ... schools throughout the region to adopt a turtle to help nurse it back to health.

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

## **Boat delivers fatal blow to sick dugong (NT, Australia)**

28 August 2013, NTNews.com.au

The life of an adult male dugong has come to a sad end. Department of Land Resource Management senior scientist Carol Palmer said the marine animal, which washed up on Nightcliff beach yesterday, was more than 10 years old. The NT News alerted the department after a tip off from a reader.

An autopsy on the animal revealed it had ingested a 16cm stingray barb. "This is a bit of a quirky thing, it's a bit strange," Ms Palmer said. "Dugongs just eat seagrass and it has swallowed the barb, which has travelled to the intestine and pierced it." The scientist said the sea cow was suffering severe peritonitis, an inflammation of the thin tissue surrounding the abdominal organs. "It has happened over a period of time," she said. "It is a rare event when this happens."

While it wasn't the cause of his death, the last straw came in the form of cruel blow from a fishing boat propeller, which Ms Palmer said had whacked the dugong. "It's always sad when we have to pick these guys up, they're just friendly creatures," she said.

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

## **Seagrass restoration plan gets Keys airing (FL, USA)**

28 August 2013, *By Kevin Wadlow, Florida Keys Keynoter*

A plan to simplify and speed restoration of damaged seagrass beds in the protected wilderness of Florida Bay will be outlined by Everglades National Park staff at a Sept. 16 session in Islamorada. The park's draft version of its Seagrass Habitat Restoration Management Plan proposes an assessment and process that applies to most seagrass-repair efforts, which would save time seeking permits and approval.

Everglades Superintendent Dan Kimball said in a statement, "The goal of the plan is to provide a concise and easily applied process for evaluating seagrass damage, determining the appropriate restoration action, implementing restoration projects, and evaluating the success of resource recovery." The draft plan, released Aug. 20, will be open to public comment through Oct. 4. It can be found on Everglades National Park's website: [www.nps.gov/ever](http://www.nps.gov/ever).

The primary threat to Florida Bay's seagrasses remains manmade changes to South Florida's ecosystem and water flow, the report notes. But "recreational boat use has also contributed to benthic resource damage." Studies in 2011 and 1995 of seagrass in 31 Florida coastal counties show "Monroe County had the most seagrass and the most moderate and severe scarring in comparison to all other counties within the study area." Restoration efforts include transplanting limited amounts of seagrass from healthy areas. Listed as the four "priority seagrass restoration areas in Florida Bay were Porjoe Key, Duck Key, the Tern Keys, and the Buchanan Keys.

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

*Story also covered by:  
<http://keysnews.com/node/49635>*

## **Sea otters could be saviours of world's threatened coastal habitat say scientists (CA, USA)**

26 August 2013, Yorkshire Post

Sea otters could be the saviours of an important coastal habitat that is under threat around the world, according to new research. The reappearance of the endearing creatures at Elkhorn Slough, an estuary site in California, led to a "remarkable" transformation, said scientists. Seagrass beds that had been in steep decline burst back into life, providing a vital "nursery" for hatchling fish, including Pacific herring, halibut and salmon.

Brent Hughes, from the University of California at Santa Cruz, said: "When we see seagrass beds recovering, especially in a degraded environment like Elkhorn Slough, people want to know why. "The seagrass is really green and thriving where there are lots of sea otters, even compared to seagrass in more pristine systems."

Flourishing green seagrass also protects shorelines from storms and waves, soaks up carbon dioxide greenhouse gas from the atmosphere, and provides a sheltered home for small delicate creatures such as seahorses and pipefish. Around the world, seagrass meadows have come under increasing pressure from pollution, human disturbance and disease. A key problem is nutrient chemicals from farms and urban areas spilling into the sea and promoting the overgrowth of algae, which stop the grasses getting enough sun. This was the case at Elkhorn Slough in Monterey Bay, a major marine conservation area and tourist attraction, which has been hit by recurring algal blooms. The change began when sea otters started moving back into Elkhorn Slough in 1984.

Scientists documented a chain reaction effect on the ecosystem caused by the otters' eating habits. Sea otters love crabs, which they consume in huge amounts. As the crabs reduced in number and size, the grazing sea slugs they preyed on became larger and more abundant. The sea slugs, in turn, ate the algae growing on seagrass leaves, keeping them clean and once more able to soak up life-giving sunlight. Small crustaceans known as *Idotea* also increased in number as a result of controlling the crab population and helped to hold the algae at bay.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Story also covered by:

[http://www.montereyherald.com/breakingnews/ci\\_23949444/study-sea-otters-helping-turn-tide-algae-at](http://www.montereyherald.com/breakingnews/ci_23949444/study-sea-otters-helping-turn-tide-algae-at)

<http://www.therepublic.com/view/story/471868a263014755967976dacc96a0b1/CA--Sea-Otter-Impacts>

<http://www.csmonitor.com/Science/2013/0826/How-sea-otters-are-saving-California-s-seagrass>

<http://frenchtribune.com/teneur/1319645-sea-otters-help-seagrasses-flourish-say-researchers>

<http://www.redorbit.com/news/science/1112932324/california-sea-otters-help-turn-the-tides-in-trophic-cascade-082713/>

<http://now.msn.com/sea-otters-have-a-beneficial-effect-on-seagrass-recovery-study-shows>

<http://www.hngn.com/articles/10959/20130826/sea-otters-protect-marine-grass-invasive-algae-munching-troublesome-crabs.htm>

[http://esciencenews.com/articles/2013/08/26/sea.otters.promote.recovery.seagrass.beds?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+eScienceNews%2Fpopular+%28e!+Science+News+--+Popular%29](http://esciencenews.com/articles/2013/08/26/sea.otters.promote.recovery.seagrass.beds?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+eScienceNews%2Fpopular+%28e!+Science+News+--+Popular%29)

<http://www.straitstimes.com/breaking-news/technology/story/how-otters-save-the-sea-grasses-20130827>

<http://www.hngn.com/articles/10959/20130826/sea-otters-protect-marine-grass-invasive-algae-munching-troublesome-crabs.htm>

<http://topnews.ae/content/217606-sea-otters-expand-seagrass-protecting-algae-eating-sea-slugs>

[http://www.nzherald.co.nz/environment/news/article.cfm?c\\_id=39&objectid=11115307](http://www.nzherald.co.nz/environment/news/article.cfm?c_id=39&objectid=11115307)

[http://www.plenglish.com/index.php?option=com\\_content&task=view&id=1803101&Itemid=1](http://www.plenglish.com/index.php?option=com_content&task=view&id=1803101&Itemid=1)

<http://www.news24.com/Green/News/How-otters-save-the-sea-grasses-20130827>

<http://www.inquisitr.com/924423/sea-otters-and-seagrass-study-shows-how-the-cuties-save-fish-nurseries/>

<http://www.universityherald.com/articles/4346/20130827/sea-otters-cause-chain-reaction-vital-seagrass-recovery-california-estuary.htm>

<http://www.digitaltimes.co.uk/articles/496595/20130828/sea-otters-boost-seagrass-marine-algae-crabs.htm>

<http://www.scienceworldreport.com/articles/9065/20130827/sea-otters-indirectly-promote-recovery-seagrass-beds-snacking-crabs.htm>

[http://www.huffingtonpost.com/2013/08/27/otters-water-pollution\\_n\\_3826220.html](http://www.huffingtonpost.com/2013/08/27/otters-water-pollution_n_3826220.html)

<http://www.kionrightnow.com/story/23271567/down-to-earth-uscs-study-links-sea-otters-to>

<http://topnews.ae/content/217606-sea-otters-expand-seagrass-protecting-algae-eating-sea-slugs>

[http://www.plenglish.com/index.php?option=com\\_content&task=view&id=1803101&Itemid=1](http://www.plenglish.com/index.php?option=com_content&task=view&id=1803101&Itemid=1)

## **Fishery bounce back informs on seagrass importance (Australia)**

22 August 2013, Science Network Western Australia

Insights into the impact of cyclones on tiger prawn habitats in north Western Australia has demonstrated the resilience of the species, as well as underscored the importance of protecting seagrass for fisheries production and marine biodiversity.

In 1999, a team of researchers began evaluating tiger prawn (*Penaeus esculentus*) stock in Exmouth Gulf but later expanded their research to assess the impact of Cyclone Vance when it struck before research began. Murdoch University's Neill Loneragan says tiger prawns are highly dependent on beds of seagrass and algae at the juvenile stage, and the destruction caused by Cyclone Vance gave them the opportunity to assess the impact on species when seagrass cover is lost. "Our first survey was in June 1999, three months after the cyclone hit," Professor Loneragan says. "The whole system had been devastated by Vance, there was a 40 per cent loss of mangroves, the sediment had been overturned and there was virtually no seagrass or algae present in the system. "We recorded the

cover of seagrass and algae across the eastern and southern Exmouth Gulf, in relatively shallow waters less than 5m deep. "Seagrass is most abundant in those areas and it's also where the postlarvae and juvenile stages are found."

The cyclone caused major disruption and loss of seagrass and macroalgal beds, the critical prawn nursery habitat, and mangroves in the shallow inshore waters. As a result, prawn landings and recruitment to the fishery were markedly lower in the two years immediately afterwards, before rising again as the cover of macrophytes increased to over 40 per cent in 2003. "In the year [2000] the prawn catch was extremely low, it had dropped to 80 tonnes and in fact, the Department of Fisheries closed the fishery early to conserve the prawn stocks," Prof Loneragan says. "Seagrass can take a long time to recover depending on the species, but in this case within three years it increased its cover up from around two per cent immediately after Cyclone Vance to 30–40 per cent."

Prof Loneragan says the huge loss of seagrass and macroalgae reduced the settling habitat for post-larvae and the nursery habitat for juvenile tiger prawns, which likely lead to the lower recruitment to the fishery in subsequent years. "This study demonstrates three things. Firstly, we were quite surprised to observe the resilience of both seagrass and the prawns after suffering the impacts of the cyclone," he says. "Secondly, it highlights the value of monitoring and adaptive management to conserve fish stocks. "Lastly, it illustrates the importance of seagrass and macroalgae as habitats for fisheries and biodiversity."

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

### **Reef port dredging ruled OK (QLD, Australia)**

12 August 2013, by: Sarah Elks, *The Australian*

AN independent report into the controversial management of Queensland's largest port -- Gladstone, on the Great Barrier Reef -- has found dredging and dumping of dredge spoil in the ocean is environmentally acceptable.

The federal government commissioned the report from four experts following last year's critical monitoring mission by UNESCO's World Heritage Committee team, which raised concerns about rapid development near the reef, particularly the three LNG plants at Gladstone's Curtis Island, as well as fish and turtle deaths in 2011.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

### **Are sea turtles responsible for lower fish catches in India? (India)**

29 August 2013, by Sandhya Sekar, *MongaBay*

Fishing communities on Agatti Island in Lakshwadeep, India, blame their reduced fish catch on green turtles; according to them, green turtles chomp their way through the seagrass beds lining the shallow reef waters that are essential for fish to breed. This leads some in the community to clandestinely kill sea turtles and destroy their nests.

Rohan Arthur and others from the Nature Conservation Foundation, based in Mysore, India, surveyed perceptions of fishers from two places in the Lakshwadeep islands: Agatti and Kadmat. Both are atolls - ring shaped coral reefs with a rim that encircles a lagoon - and both share similar characteristics: size, population, number of households, number and density of fishers, and extent of seagrass meadows. Also, importantly, fish catch had declined in the lagoons of both atolls. The only difference between the two atolls is the number of resident green turtles. The number of green turtles around Agatti has increased tremendously since the 1970s, due to effective conservation measures in the area. In 2010, the turtle density in Agatti was six to seven times the turtle density in Kadmat (27 turtles per square kilometer of seagrass meadow to 3 turtles respectively).

In Agatti, almost 75% of respondents felt decrease in fish catch was due to green turtles. In Kadmat, less than 20% thought green turtles were responsible. According to them, green turtles hurt their livelihoods firstly by "direct" damages, such as tearing nets, breaking lines, or driving fish away from nets and thus reducing catch. Secondly, Agatti fishers proposed that turtles at high densities eat up a lot of the seagrasses, reducing habitat available for the fish through "indirect damages." The researchers decided to test this claim. Their own monitoring shows that when turtles occur at very high densities, such as in Agatti, seagrasses are eaten much faster than they grow.

Up to 2010, turtles were concentrated around Agatti. But in 2011, the turtles shifted residence from Agatti to Kadmat. Since the study period included this transition phase, the researchers could compare the density of turtles, the health of the seagrass canopy and the number of fish, before and after the population shift, in both Agatti and Kadmat. They found that seagrass canopy height fell drastically when turtle numbers went up. Also, before the turtles shifted to Kadmat, there were 12 times more fish in Kadmat than in Agatti. Using measures of catch per unit effort, number of days spent fishing, and market prices, they could arrive at a cost for "earnings from the fish stocks lost due to seagrass habitats being grazed by the turtles," as Nachiket Kelkar describes it. The total amount came to as much as USD \$887 per fisher per year. To resolve the problem, seagrass meadows need to be conserved, and fish protected from human induced stresses like dredging and pollution. Managers can also shift fishers to non-seagrass species, for as long as turtles are grazing. Collaboration can bring down conflict, and it works better when conservationists take local insight into account.

[full story: http://news.mongabay.com/2013/in0829-sekar-green-sea-turtles-lower-catches-india.html](http://news.mongabay.com/2013/in0829-sekar-green-sea-turtles-lower-catches-india.html)

## **Wildlife workers in battle to save Studland Bay (UK)**

27 August 2013, Bournemouth Echo

Wildlife experts have launched a project in a bid to safeguard Studland Bay's fragile ecosystem beneath the waves. So for the next two months Dorset Wildlife Trust (DWT) wardens will be kayaking in Studland Bay and talking to the local community and visitors about what they can do to help. They will also be handing out a new leaflet, from the Royal Yachting Association, which gives guidance about anchoring in areas rich with seagrass.

Wardens are also set to quiz boat owners on whether they would support a voluntary no-anchor zone at Studland. Other species that depend on Studland's seagrass, which has an extensive root system that creates a stable environment, include both British seahorse species, juvenile bass, bream, flatfish and all six species of British pipefish. Seagrass warden Daren Lloyd said: "Often if we can't see something we don't think about it."

"We are not only here to raise awareness, but to ask the opinion of the people who use the bay on how they think they could manage it. "It's not about lecturing people – it is about making them aware of the issues and working together to protect habitats for marine life at Studland Bay."

*full story: [http://www.bournemouthecho.co.uk/news/10634542.Wildlife\\_workers\\_in\\_battle\\_to\\_save\\_Studland\\_Bay/](http://www.bournemouthecho.co.uk/news/10634542.Wildlife_workers_in_battle_to_save_Studland_Bay/)*

*Story also covered by:  
<http://www.bbc.co.uk/news/uk-england-dorset-23800021>*

## **Don't Think You Can Save a Species? Green Sea Turtles Beg to Differ (Australia)**

25 August 2013, Care2.com

A recent study published in the journal Marine Biology found that, not only can citizen scientists contribute to the body of scientific knowledge, they can actually help save a species. Contributing to science seems daunting because this isn't the 1800s anymore; we've progressed so far passed pure observation that it's sometimes hard to see how a non-professional scientist can participate.

However, Julia Reisser, a PhD student at the University of Western Australia's Oceans Institute, studied how environmental variables affected green sea turtles using observational approaches. In a time when everything is going high tech, Reisser sees value in good, old fashioned observation: "Several high-tech methods such as genetic analysis and satellite tracking are providing useful information regarding sea turtle ecology," Ms. Reisser said. "However, observational approaches, extensively used by naturalists in early ecology, still have the potential to fill gaps in our marine ecological knowledge." "Underwater observations such as the ones described in this study could be incorporated to other research programs such Citizen Science projects that involve diving activities," Ms. Reisser said. "It could help deliver better management plans to protect sea turtle populations."

I wasn't aware of the phenomenon of the term "citizen science" until a year or so ago, but the concept is much older than that. It's basically just public collaboration in scientific research. It's a way for passionate volunteers and amateur scientists to propose and contribute to projects alongside professional scientists. We know that green sea turtles migrate long distances from their feeding grounds to mating grounds, but most of their in-water activity is still a mystery. In Reisser's study, she and other researchers studied the sea turtle's shallow water feeding environment. It's research like this that Reisser believes could easily be incorporated in citizen science projects. While there are many threats to the green sea turtle, it's exciting to know that regular people can potentially do something about it. In fact, there already exists sea turtle citizen science projects, just looking for volunteers.

*full story: <http://www.care2.com/causes/dont-think-you-can-save-a-species-green-sea-turtles-beg-to-differ.html#ixzz2d37lkjr3>*

## **Indigenous councils unite to save threatened turtles (Australia)**

26 August 2013, ABC Online

Three Indigenous councils on far north Queensland's western Cape York have joined forces to help protect endangered and vulnerable turtles. The Northern Peninsula, Mapoon and Pormpuraaw councils will pool resources and expertise to better coordinate turtle conservation programs, including culling predators such as wild pigs, which they say eat up to 98 per cent of turtle eggs each season.

Councillor Polly Smith from the Mapoon Aboriginal Shire Council says she is confident the new approach will help increase hatchling survival rates. "For instance, if Pormpuraaw are happy with how they're managing their turtles and there's extra funding there, they can actually give it to either Mapoon rangers or Apudthama rangers," she said. "That's why the alliance was formed, so we can work together as one and we look after each other's problem."

*full story: <http://www.abc.net.au/news/2013-08-26/indigenous-councils-unite-to-save-threatened-turtles/4911618?section=qld>*

## **NGO helps villagers to conserve sea cucumber (Solomon Is)**

24 August 2013 *Solomon Star*

A non-government Organisation called OceansWatch, which is working with people of Fenualoa of Reef Islands and Avatai of Rennell Islands, is currently piloting its sea cucumber farming in Reef Islands. OceansWatch said there has been no sustainable long-term management for the Fenualoa sea cucumber fishery. Surveys conducted by OceansWatch in 2012 found low overall population densities, along with isolated populations suggesting intense localised harvesting, minimal larval dispersal, and neglected fishing grounds. In the longer term OceansWatch hopes to work with Fenualoa communities to establish a sustainable sea cucumber fishery.

OceansWatch said sea cucumbers play an important role in coral reef ecosystems, acting as major benthic recyclers of nutrients and organic matter. "The main ecological role of deposit feeding used by sea cucumbers for coral reefs is considered to be the stirring of the sediment, which destabilises sediment formation and increases aeration of the organic matter released into the water column. "Seagrass habitats can suffer in the absence of sea cucumbers due to increased organic matter and nutrient imbalance. "Therefore, sea cucumber overfishing negatively impacts the productivity of seagrass ecosystems," it said.

Fenualoa communities have observed a decline in their sea cucumber populations over recent years. While the establishment of marine protected areas can promote resource recovery, the depleted sea cucumber populations in Fenualoa's traditional fishing grounds suggest the need for more far-reaching interventions, including the introducing of mariculture to facilitate population recovery, replenishment, and management. This could improve the economic value of the Fenualoa fishery, and the livelihoods of local villagers.

*full story:* <http://www.solomonstarnews.com/news/national/18597-ngo-helps-villagers-to-conserve-sea-cucumber>

## **'Great Bay Scallop Search' again yields sparse haul (FL, USA)**

24 August 2013, by Josh Boatwright, *Tampa Tribune*

The water was clear Saturday, making it easy to see waves of dark green seagrass where the golf-ball-sized shellfish were said to be hiding. But while water quality has improved in Tampa Bay and grass beds have expanded by hundreds of acres a year, a mystery is why the scallop population, which ought to be growing, too, continues to struggle.

More than 200 people set out from Fort De Soto Park in boats and kayaks to help the non-profit Tampa Bay Watch conduct a survey of these swimming shellfish across a broad area stretching to downtown St. Petersburg. It was the 20th year of the Great Bay Scallop Search, which has tracked the success of efforts started in the 1980s to reintroduce scallops into Tampa Bay after they had vanished from the area.

The record number - 674 - was collected in 2009. Subsequent red tides and winter freezes might have caused the bivalves' numbers to plummet. Last year volunteers counted less than a dozen. Peter Clark, president of Tampa Bay Watch, said rainy weather probably skewed last year's total, but it still was surprisingly low and the count has been less than 20 for several years. On Saturday, though, the sun was bright and the scallop searchers were hopeful. As the boats returned to shore for lunch, Clark gathered a preliminary count: 51. "Which is much better than we've done the past couple years," he said, adding the scallops were spread over a broad area. "I still think we've got a long way to go in Tampa Bay," he said.

*full story:* <http://tbo.com/article/20130824/ARTICLE/130829573/1559>

*Story also covered by:*

<http://clearwatergazette.com/Scallop-harvest-lures-family-Citrus-County-072102013>

## **Port Everglades Expansion Plans Underestimate Environmental Damage, Says Fisheries Service (FL, USA)**

17 August 2013, by David Flesher, *Huffpost Miami*

An expansion plan that Port Everglades calls essential for handling the bigger cargo ships plying the world's trade routes would cause far more environmental damage than originally claimed, according to the lead federal agency on ocean protection. The \$313 million project with the Army Corps of Engineers calls for blasting and dredging through limestone and coral to deepen the port's entrance channel from 42 feet to 48 feet. The expansion is among several projects the port says could create 7,000 jobs in South Florida over the next 15 years. But the National Marine Fisheries Service says a draft environmental impact statement prepared by the Corps "significantly understates the project's impacts to seagrass, coral reef and mangrove habitat" and underestimates the amount of work that would be needed to mitigate the damage. The fisheries service said it may take the matter to the assistant secretary of the Army and the President's Council on Environmental Quality if its concerns are not resolved, steps that could further delay a project in the works for 17 years.

Adding to the urgency is the need to finish the environmental review by November, so the project could qualify for funding under a massive water projects bill making its way through Congress. The Corps says the work would

destroy 15.17 acres of coral reef. The fisheries service says the true figure is 21.66, due to the impact of the construction work, the destruction caused by rubble bouncing around the ocean floor and the destabilization caused by blasting and fracturing the reef. The project would cause coral damage on "an unprecedented scale in the southeastern U.S.," according to the fisheries service.

*full story: [http://www.huffingtonpost.com/2013/08/17/port-everglades-expansion\\_n\\_3771199.html](http://www.huffingtonpost.com/2013/08/17/port-everglades-expansion_n_3771199.html)*

### ***Elusive answers vex lagoon scientists (USA)***

*15 August 2013, Florida Today*

As red tide-like algae renders portions of the Banana River a reddish brown, local government officials, conservationists and others huddled Wednesday to ponder ways to clean up the waterway, and other parts of an ill Indian River Lagoon. Officials said they need better, more up-to-date data to identify pollution hotspots and measure whether pollution reduction efforts are working. The key benchmark, they say, is growing back the seagrass that provides vital nursery habitat for fish and other marine life.

Some is already growing back, biologists said. But the lagoon has lost about 74 square miles of seagrass since 2009. By 2011, a massive phytoplankton "superbloom" caused up to a 90 percent loss of Banana River seagrass, said Mary Paulic, a basin coordinator for the Florida Department of Environmental Protection. Officials plan on more frequent and detailed monitoring of seagrass, drift algae and nutrients from groundwater and tributaries.

While nitrogen and phosphorus are vital components for all life, when too much gets into the lagoon the two nutrients can trigger algae blooms that block sunlight to seagrass. Federal officials want the two nutrients reduced to protect the 156-mile lagoon, North America's most productive estuary. But doing so could mean higher stormwater fees in the future, more restrictions on fertilizer use and renewed government pleas to pick up dog droppings. Some cities and counties, with the help of politicians and hired scientific consultants, hope to fend off or refine the nitrogen and phosphorus reductions that the U.S. Environmental Protection Agency is imposing. They question the underlying assumption that cutting the two nutrients would lead to seagrass growing back to the desired levels. They also wonder if doing so is affordable or even possible. Simple steps from homeowners would help much more, they argue, at much lower cost than new huge, regional stormwater projects or other unfunded federal mandates.

*full story: [http://www.floridatoday.com/article/20130815/NEWS01/308150036/Elusive-answers-vex-lagoon-scientists?nclick\\_check=1](http://www.floridatoday.com/article/20130815/NEWS01/308150036/Elusive-answers-vex-lagoon-scientists?nclick_check=1)*

### ***Looking after Moreton Bay's seagrass beds (Australia)***

*13 August 2013, ABC Online*

Reporter Terri Begley was invited by SEQ Catchments to watch a program that involves replacing old style boat moorings with seagrass friendly ones.

It's for the benefit of Dugongs, Turtles and the commercial fishing industry .

*source: <http://blogs.abc.net.au/queensland/2013/08/looking-after-moreton-bays-seagrass-beds.html>*

### ***Task force on dugong soon (India)***

*13 August 2013, Times of India*

The rare dugong, also known as the sea cow, is happily grazing underwater off the Gujarat coast, Tamil Nadu, and Andaman and Nicobar Islands. To offer greater protection to the species, the Union government has decided to form a task force with officials of the three states and international experts associated with the Convention on the Conservation of Migratory Species of Wild Animals, also known as CMS or the Bonn Convention. India has signed a memorandum of understanding with the CMS. The task force will take up studies to suggest ways to conserve the sea cow.

Chief wildlife warden C N Pandey attended the national meeting in Delhi in which the task force decision was taken. He said, "The task force will have the chief wildlife wardens of Gujarat, Tamil Nadu, and Andaman and Nicobar islands and the international experts." Pandey said that a study conducted by the Gujarat Ecological Education and Research (GEER) Foundation had noted dugong trails in the Gulf of Kutch, Pirotan Island, and even Dwarka. The study, sponsored by the Union ministry of environment, estimates that there are about 250 dugongs in India, the highest being in the Gulf of Mannar on the southern coast, followed by Andaman and Nicobar Islands, Palk Bay and the Gulf of Kutch. This study was discussed in the meeting. This study according to senior officials from the state forest department will form the basis for further studies on dugong.

Officials said that in Gujarat there have been some 13 direct sightings of dugongs in the Gulf of Kutch. Local fishermen claim to have seen many more. Besides, some sightings have happened near Porbandar too. Porbandar is coming up as a new dugong home. The herbivorous mammal is usually found in calm sheltered, nutrient-rich water less than five metres deep, generally in bays, shallow islands and reef areas which are protected against strong winds and heavy seas, and which contain extensive sea grass beds, say GEER officials. These habitats have made Gulf of Mannar, Palk Bay, Gulf of Kutch and Andaman and Nicobar Islands ideal for dugongs.

*full story: [http://articles.timesofindia.indiatimes.com/2013-08-13/flora-fauna/41372443\\_1\\_dugongs-sea-cow-mannar](http://articles.timesofindia.indiatimes.com/2013-08-13/flora-fauna/41372443_1_dugongs-sea-cow-mannar)*



## **Dredging project near Qld reef delayed (Australia)**

09 August 2013, by Cleo Fraser, AAP

A decision on a massive dredging project which could impact on the World Heritage listing of the Great Barrier Reef has been put on hold for three months. The federal government has postponed making a decision on whether to allow the dredging of three million tonnes of soil to expand Abbot Point, south of Townsville. If the project goes ahead Abbot Point would become one of the largest coal ports in the world.

North Queensland Bulks Ports has proposed dumping the dredged soil in the Great Barrier Reef World Heritage Area. Environment Minister Mark Butler was due to make a decision on the plan on Friday, but extended the deadline until November. "This does not prevent a decision being made earlier if I believe I have enough information to make an informed decision," he said in a statement. Mr Butler wants more time to look over new reports he has received over the past week, including a review of the Port of Gladstone, ship anchorage management and research on the possible affects of dredging.

The minister said the Port of Gladstone report was important as it had been carried out at the request of the United Nations body responsible for world heritage. Mr Butler admitted the reef was in "very, very poor condition", but said both state and federal governments were working to improve it. A UNESCO spokesman has told Guardian Australia it wasn't told about the dredging plans, although Mr Butler's office said that was incorrect. The World Heritage Committee has sent a letter to the federal government requesting information about the project. It has also reminded the government about a meeting next year, that could see the reef listed as a World Heritage site in danger unless major coastal developments are reined in.

full story: <http://www.heraldsun.com.au/news/breaking-news/postpone-qld-reef-dredging-un-tells-aust/story-fni0xqi4-1226694178724>

Story also covered by:

<http://www.abc.net.au/news/2013-08-09/government-set-to-announce-abbot-point-coal-terminal-expansion/4875156?section=qld>

<http://www.sbs.com.au/news/article/1798440/Postpone-Qld-reef-dredging-UN-tells-Australia>

<http://www.sandandgravel.com/news/article.asp?v1=17480>

<http://www.theaustralian.com.au/national-affairs/federal-government-puts-off-decision-on-whether-to-dredge-abbot-point/story-fn59niix-1226694486213>

<http://www.greatlakesadvocate.com.au/story/1695259/abbot-point-coal-terminal-expansion-delayed/?cs=12>

<http://www.gympietimes.com.au/news/Dredging-decision-delayed-for-election-result/1979286/>

<http://www.theguardian.com/environment/2013/aug/09/reef-dredging-decision-delayed>

## **Green sea turtles eat more plastic than ever (Australia)**

09 August 2013, Inquirer.net

Endangered green turtles are ingesting more man-made debris, including potentially lethal plastic products, than ever before, a new Australian study has shown. The majestic turtles are significantly more likely to swallow plastic than they were in the 1980s, the study, published in the journal Conservation Biology, showed.

The research reviewed scientific literature on the ingestion of man-made rubbish in the ocean by sea turtles published since 1985. It showed that six of the world's seven species of sea turtles have been found to ingest debris, and all six are listed as globally vulnerable or endangered. "We found that for green sea turtles, the likelihood that a sea turtle has ingested debris has nearly doubled in the last 25 years," Qamar Schuyler from the University of Queensland, who led the study, told AFP on Friday. "Specifically for green turtles, it does appear that they are eating a lot more debris than they used to."

The study found that the likelihood of a green turtle, which can grow to 1.5 metres (five feet) and live for 80 years, ingesting debris jumped from about 30 percent in 1985 to nearly 50 percent in 2012. The research said it was clear that since the first data was recorded more than 100 years ago, the amount of refuse leatherback turtles had ingested had also increased. However, between 1985 and 2012 their intake had been stable. Plastic products eaten by turtles and other marine life can be lethal, killing the animals by either blocking their stomachs and starving them or through puncturing their intestinal system. The research, analysing 37 studies published from 1985 to 2012 which reported on data collected from before 1900 through to 2011, found that turtles in nearly all regions ingested debris, most commonly plastic.

full story: <http://newsinfo.inquirer.net/462047/green-sea-turtles-eat-more-plastic-than-ever-study>

Story also covered by:

<http://www.mysin Chew.com/node/89740>

<http://www.news24.com/Green/News/Green-sea-turtles-ingesting-more-plastic-20130809>

<http://www.universityherald.com/articles/4171/20130809/endangered-turtles-eating-more-plastic-green-leatherback.htm>

<http://www.arabnews.com/news/460763>

[http://www.chinadaily.com.cn/world/2013-08/10/content\\_16884983.htm](http://www.chinadaily.com.cn/world/2013-08/10/content_16884983.htm)

<http://now.msn.com/green-sea-turtles-eating-more-plastic-than-ever-research-says>

[http://www.cairns.com.au/article/2013/08/14/246700\\_local-news.html](http://www.cairns.com.au/article/2013/08/14/246700_local-news.html)

<http://sciencealert.com.au/news/20132208-24722.html>

## **Thai oil spill cause remains a mystery (Thailand)**

08 August 2013, by Pongphon Sarnsamak, The Nation/Asia News Network

Even though the oil spill on Koh Samet has been almost removed from Ao Phrao beach, there is a long road before the marine ecosystem and local tourism industries, which make 16 billion baht (US\$510 million) from 5.5 million visitors a year, recover. Monitoring the impact of the spill on marine life such as coral reef, seagrass or even plankton on a daily, weekly, monthly and annual basis needs to start as soon as possible, to estimate the damage on the marine ecosystem. It's not only possible changes in the marine life, but the quality of seawater, as well as the level of oil-related hazardous substances in marine life in affected areas and nearby sites that must be watched closely to ensure that seafood caught in the area are safe.

At least 50 tonnes of crude oil leaked from a pipeline off Rayong into the Gulf of Thailand on July 27. This oil drifted to Koh Samet the following day. Measures taken in response to the spill were stepped up after the oil reached Ao Phrao on the night of July 28, nine days ago. An emergency response team from PTT Global Chemical PLC (PTTGC) arrived shortly after. PTTGC said it used over 32,000 liters to disperse the 50 tons of crude oil but Pollution Control Department officials said they had allowed PTTGC to use only 5,000 liters. And, there is no penalty for excessive use of oil dispersant.

To investigate the cause of accident, Energy Minister Pongsak Ruktapong-paisal set up a fact-finding committee last week led by Khunying Thongtip Ratanarat, a former executive director of the Petroleum Institute of Thailand. The Natural Resources and Environment Ministry has also set up a committee led by permanent secretary Chote Trachu to monitor the short- and long-term impacts from imports of oil spilt in the marine ecosystem, and to help estimate the cost of such leaks. This committee has Pollution Control and Marine and Coastal Resources officials who will oversee the monitoring of the quality of seawater in the Gulf. Plus officials from the National Parks, Wildlife and Plant Department and Coastal Resources Department will study marine life, coral and beach ecosystems, as well as seagrass in the Gulf with experts from Chulalongkorn University and King Mongkut's Institute of Technology Lat Krabang. The Fisheries Department will try to assess the effect on marine life.

*full article: <http://www.chinapost.com.tw/commentary/the-china-post/special-to-the-china-post/2013/08/08/385860/Thai-oil.htm>*

## **Seagrass beds in danger from Lake O releases (FL, USA)**

07 August 2013, by Warren Wright

A huge amount of water coming out of Lake Okeechobee now could spell big trouble for manatees this winter. The large amounts of fresh water pouring out of Lake Okeechobee are creating perfect conditions for algae blooms, according to environmentalists. Some canals in Cape Coral are starting to show algae, carpeting the water way. For now its going out with the tide, but it has some people very concerned for the local wildlife, especially manatees.

Victoria Memszak, with the Caloosa Nature Center, says "the Okeechobee releases are definitely having an impact on the seagrasses and the manatee environment." Manatees feed off the local seagrass beds but there might not be much of anything left for manatees to eat this coming winter. She says when you start getting algae blooms along with the already dark water coming out of the lake, its a recipe for disaster:

According to Lee County Natural Resource's division...conditions could get worse for the seagrass beds. Steve Boutelle with the county explains that "history suggests theres going to be more discharges coming from the lake." Lake Okeechobee is at 16 feet right now... thats 4 feet above last year. Currently, the Franklin Lock is pouring out 5590 cubic feet per second into the Caloosahatchee right now. Local scientists fear these numbers could add up to trouble for manatees and all the other animals that seek shelter in the local estuary. Boutelle explains that "if in fact we've had major impacts to the sea grass beds in the Caloosahatchee... they are going to have a long way to go before they can find something to eat."

*full story: <http://www.fox4now.com/news/local/Sea-grass-beds-in-danger-from-Lake-O-releases-218754741.html>*

*Story also covered by:*

*[http://www.news-press.com/article/20130808/ENT13/308080036?odyssey=mod/mostcom&nclick\\_check=1](http://www.news-press.com/article/20130808/ENT13/308080036?odyssey=mod/mostcom&nclick_check=1)*

## **AMCS: Dredge Dumping in Great Barrier Has to Stop (QLD, Australia)**

05 August 2013,

The Australian Marine Conservation Society has delivered a pledge to Prime Minister Kevin Rudd's office to end dumping of dredge material in the Great Barrier Reef. The pledge has been delivered with a demonstration of dumping and dredging by protesters from the AMCS who staged a mock dump of sludge at the Prime Minister's office in Brisbane.

Felicity Wishart, AMCS Great Barrier Reef Campaign Director, said there was currently millions of tonnes of dredging and dumping planned for the Great Barrier Reef Marine Park. "Thousands of Australians are calling on their politicians to end dredge dumping in the Great Barrier Reef Marine Park Area," Ms Wishart said. "This election, we're calling on all politicians to sign the pledge to ban dumping of dredge material in the Reef's World Heritage Area

waters. "The demonstration draws attention to plans to dredge three million cubic metres of seafloor near Abbot Point, less than 50kms from the Whitsunday Islands.

"Dredging causes damage to the sensitive feeding and breeding grounds of marine species like dugongs, turtles and dolphins. "All politicians should take the pledge to end dumping in the Great Barrier Reef. "If Mr Rudd takes the pledge to end dumping will support a \$6 billion dollar tourism industry dependent on the Reef and the 60,000 jobs that go with it," Ms Wishart said.

*full story: <http://www.dredgingtoday.com/2013/08/05/amcs-ask-for-halting-of-dredge-dumping-in-great-barrier-reef-australia/>*

## **Seagrass Planted in Hopes of Restoring Indian River Lagoon (FL, USA)**

*05 August 2013, By Jim Waymer, Florida Today*

Scientists transplanted tufts of seagrass along an otherwise bald Indian River Lagoon bottom recently in hopes of growing back the once-lush fish habitat that algae blooms doomed. No one knows whether the \$110,000 experiment will work or whether the cloudy waters that smothered seagrass during the past few years will return to do so again. But researchers hope the grass transplants teach them the best ways to grow back a vital nursery habitat for fish and crabs, as well as the manatees' favorite meal.

"This used to be — as far as you could see — grass," Adam Gelber, a senior scientist with Atkins North America, said as he and two other scientists transplanted shoal grass along Sebastian Inlet's interior. At the inlet, their environmental consulting firm is planting seagrass harvested in Vero Beach. That effort is part of a larger project that could transplant grass at up to 30 sites in the lagoon — but likely fewer — occupying about 1 acre of lagoon bottom. The project ranges from Merritt Island National Wildlife Refuge to Titusville and Vero Beach.

Transplants are just one way biologists hope to restore some 74 square miles of seagrass lost since 2009, much of it clouded out by algae. The scientists harvest the seagrass with hand tools only and manually install the grass at the recipient study sites. They use shoal grass because it's among the fastest growers. They place metal "manatee cages" over many of the transplants to keep ravenous sea cows from chomping the experiment bare.

*source: <http://www.theledger.com/article/20130804/NEWS/130809679/1374?Title=Seagrass-Planted-in-Hopes-of-Restoring-Indian-River-Lagoon->*

*Story also covered by:*

*<http://www.postandcourier.com/article/20130804/PC1610/130809775/1356/seagrass-returning-to-florida-x2019-s-indian-river-lagoon>*

*[http://www.pnj.com/article/20130805/NEWS/10/308040035/Seagrass-returning-Indian-River-Lagoon?nclick\\_check=1](http://www.pnj.com/article/20130805/NEWS/10/308040035/Seagrass-returning-Indian-River-Lagoon?nclick_check=1)*

## **Threats To Sharks Threaten Entire Ecosystems (Australia)**

*06 August 2013, Inside Science News Service*

Throughout most of the world sharks are in trouble. Big trouble. In some areas, with adequate management, shark populations have stabilized, but likely at levels far below what they were decades ago. Recent estimates suggest that around 100 million sharks are taken by fisheries every year.

For the past fifteen years, my colleagues and I have been trying to figure out how important tiger sharks are in the aptly named Shark Bay, Western Australia. Why travel halfway around the world? Quite simply, to study sharks in a place where their ecosystem is relatively untouched. Also, because Shark Bay features some of the world's largest seagrass beds. By working in Shark Bay we can understand the role of sharks and what might happen to Shark Bay and its seagrass if tiger sharks were to disappear. It also lets us predict what might happen in other places where sharks have been overfished.

In Shark Bay, we have worked not only on sharks, but on their prey — including dolphins, sea turtles and sea cows — as well as the wider ecosystem. Our findings demonstrate that tiger sharks are critical to the Shark Bay ecosystem. It turns out that the fear of sharks — by the sea cows and sea turtles that eat the seagrass — helps protect the seagrass from being over-grazed. Tiger sharks like to hunt in shallow waters in the bay; a perfect place for seagrass to grow. To avoid becoming a shark snack, turtles and sea cows generally avoid these areas. The seagrass can grow into a lush habitat that provides shelter for small fish and shellfish that will grow up into species people want to catch. In areas that sharks don't frequent, seagrass is heavily grazed and does not support big populations of fish and shellfish. That means that if we were to lose tiger sharks from the bay, the seagrass likely would be grazed down all over.

*full story: <http://www.insidescience.org/content/threats-sharks-threaten-entire-ecosystems/1351>*

## **New Indigenous rangers to help boost turtle protection (Australia)**

*01 August 2013, ABC Online*

The Queensland Government has employed five new Indigenous land and sea rangers to work in the Ayr region. The group represents traditional owners from Black River, north of Townsville, through to the Burdekin and the Whitsundays.

Eddie Smallwood from the Gudjuda Reference Group Aboriginal Corporation says they will focus on protecting the green turtle population. "The main issues are the diseases on the turtles, we've actually been tagging and releasing turtles for the last 10 years or more and over that time we're finding out that there's a lot of different turtles in different areas that are getting disease," he said.

<http://www.abc.net.au/news/2013-08-01/new-indigenous-rangers-to-help-boost-turtle/4858902>

## **Tetra Tech Awarded \$20 Million Environmental Management Contract for the Expansion of Miami Harbor (FL, USA)**

01 August 2013, BusinessWire

Tetra Tech, Inc. (NASDAQ: TTEK) announced today that it has been awarded a \$20 million contract, with option years for an additional \$3.5 million, with the Great Lakes Dredge & Dock Company, LLC to perform environmental management services and provide construction oversight as part of the Miami Harbor Construction Dredging Project. Tetra Tech's scientists will provide environmental management and quality control oversight for the transplantation of seagrasses, relocation of corals, and monitoring of existing seagrass beds, coral reefs and sediment during dredging activities. Tetra Tech's engineers will also subcontract and manage the construction of new artificial reefs and seagrass beds created from the dredged material. PortMiami is the first port in the southeastern United States to initiate dredging operations to expand its capacity to accommodate the larger shipping vessels anticipated from the expanded Panama Canal.

source:

<http://www.financialpost.com/markets/news/Tetra+Tech+Awarded+Million+Environmental+Management+Contract+Expansion/8735847/story.html>

## **GALLERY**

**Pioneer Bay, Qld (Australia): 20 August 2013** <http://www.seagrasswatch.org/gallery.html>

**Moreton Bay, Qld (Australia): 15 - 18 August 2013** <http://www.seagrasswatch.org/gallery.html>

Wynnum, 15 August 2013

Wellington Point, 16 August 2013

Level 1 training Workshop: 17 - 18 August 2013

**Cyrene Reef (Singapore): 10 August 2013** <http://www.seagrasswatch.org/gallery.html>

## **CONFERENCES**

### **CERF 2013 Conference (San Diego, California, 3-7 November 2013)**

22nd Biennial Conference of the Coastal and Estuarine Research Federation  
Toward Resilient Coasts and Estuaries, Science for Sustainable Solutions.

CERF advances understanding and wise stewardship of estuarine and coastal ecosystems worldwide. Its mission is to: Promote research in estuarine and coastal ecosystems, Support education of scientists, decision-makers and the public, and Facilitate communication among these groups. The 2013 scientific program offers four days of timely, exciting and diverse information on a vast array of estuarine and coastal subjects. Presentations will include discoveries and synthesis on the adaptive dynamics of coastal and estuarine ecosystems and human societies. Participants will explore how these dynamics and adaptations can be understood and managed at regional and global scales. CERF will convene about 1,600 Scientists, Managers and professionals in government, business, nonprofit and related organizations, and Graduate students. From North America's coastal states and provinces, as well as from more than 20 countries around the world, CERF conference attendees are scientists and managers who conduct research and observe/manage change within a variety of global coastal and estuarine habitats.

Topical sessions [http://www.sgmeet.com/cerf2013/topical\\_sessions.asp](http://www.sgmeet.com/cerf2013/topical_sessions.asp) :

SCI-041 Resilience in Coastal Ecosystems, Part 1: Impact of Stressors on Resilience, Stability, and Recovery in Communities Dominated by Seagrass or Benthic Algae  
Convened by: Benjamin Fertig and Jessie Jarvis

SCI-042 Resilience in Coastal Ecosystems, Part 2: Evaluating and Conserving Resilience in Indo-Pacific Coastal Marine Habitats  
Convened by: Robert Coles, Len McKenzie, Michael Rasheed and Marcus Sheaves

**Important dates:**

30 August 2013 - dealing for late-breaking poster abstracts  
3 October 2013 - Early Registration Deadline

Please visit the conference & workshop web site for further details: <http://www.erf.org/cef2013>

## SEAGRASS-WATCH Workshops 2013

**Australia** <http://www.seagrasswatch.org/training.html#workshop13>

Broome, WA: 19-21 October 2013

## 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 29,565 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 with regular updates from WSA President Dr Giuseppe Di Carlo and *notes from the field* by Siti Yaakub.

## FROM HQ

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

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

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

**Seagrass-Watch Shop** <http://www.seagrasswatch.org/shop.html>

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

**Giveaways** <http://www.seagrasswatch.org/shop.html#GIVE1>

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

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

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