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#### 31 July 2011

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## **NEWS**

## Oceans Oration illuminates the depths (WA, Australia)

25 July 2011 Science Network Western Australia

UWA Oceans Institute Director Dr Carlos Duarte has highlighted the importance of seagrass beds in absorbing CO2 from the atmosphere. www.seagrasswatch.org

In his Inaugural Professorial Oration Ocean: Opportunities in Exploring the Planet's Last Frontier, given to a full house on Thursday July 21, Dr Duarte stressed the myriad benefits to be derived from expanding ocean research and touched on the on-going international Malaspina Expedition. With a future of further climate stress, Dr Duarte emphasised the exciting potential oceans hold for clean energy, food, carbon absorption, water conservation and sustainable biodiversity.

## Another dugong death (QLD, Australia)

25 July 2011, The Gladstone Observer

Another dead dugong has been found in Gladstone Harbour, and the man who found it wants some answers.

Clive Last, who in May discovered a dead dolphin on Turtle Island, was shocked on Friday afternoon when he found the body of a dead dugong on Witt Island. Mr Last is wary of suggestions marine animal deaths this year can be attributed to boat strikes and net fishing. He said those explanations didn't match his observations on the harbour. "I honestly believe it's either starvation (from damaged seagrass meadows) or there is something in the harbour," Mr Last said.

Mr Last, whose work requires him to spend a lot of time on the harbour, is increasingly disturbed by the trend of dead marine animals in Gladstone Harbour. Mr Last said he was worried the scientific advisory committee's investigation into the deaths in Gladstone Harbour would take too long to come up with results.

## Indigenous input essential to survival of endangered species (SYD, Australia)

25 July 2011 Sydney Morning Herald

Green turtles and dugongs have been on the global "red list" of threatened species for many years, but the situation is looking up for Australian populations as a community-based protection approach evolves.

Hunting is one reason numbers have dropped in parts of Australia. Both species enjoy legal protection nationally but indigenous communities are able to hunt dugongs and turtles for cultural and economic reasons. "Urban development, fishing impacts and hunting are some factors, but remember indigenous people have a right to hunt and people in Torres Strait Islands have been harvesting dugongs for 4000 years," Helene Marsh, professor of environmental science at James Cook University, said. Research suggests that harvests in some areas are unsustainable but indigenous communities are key to the solution, joining James Cook University and the government to protect marine life.

"The Australian government has invested large amounts of money in the indigenous ranger programs, and they not only provide valuable training and employment opportunities in remote communities but they also have species conservation benefits," Professor Marsh said. One example is community development of the Traditional Use of Marine Resources Agreements in the Great Barrier Reef region, which guides sustainable hunting.

The Department of Sustainability and Environment estimates the dugong population in Australia to be about 57,000, based on figures from 1995 to 2008, but a department spokesman said there were no definitive figures on dugong or turtle numbers.

more...... http://www.seagrasswatch.org/archives\_11.html

## Marine rally to end sea turtle deaths (QLD, Australia)

22 July 2011 ABC Online

## More protection needed for marine animals (QLD, Australia)

18 July 2011, Gladstone Observer

Experts on the Great Barrier Reef are calling for increased efforts to protect dugongs and green turtles. The campaign by the Great Barrier Reef Marine Park Authority was launched yesterday as news emerged of another dead turtle found at Tannum Sands on the weekend.

GBRMPA is stepping up its efforts to promote smart boating and fishing practices to protect the animals, as record numbers of deaths are being recorded along the coast. "The evidence is pretty strong that it's a loss of seagrass and loss of condition (that is the main factor in the deaths)," GBRMPA chairman Dr Russell Reichelt said. "Essentially these animals are actually staving."

Dr Reichelt said the extreme pressures being put on the species by low seagrass levels made it more important than ever for boaters and fishers to take extra care. He said there was anecdotal evidence turtle behaviour was being affected by the seagrass damage from the floods. Dr Reichelt said he was looking forward to the findings from the Scientific Advisory Committee recently set up to investigate marine animal deaths in Gladstone Harbour. He said he hoped it would provide answers to questions that have caused controversy in recent months.

#### Uni steps in to help sick turtles (QLD, Australia)

14 July 2011 ABC Online

Researchers at James Cook University (JCU) are trying to cater for sick turtles as the number of strandings in north Queensland continues to soar. The number of stranded turtles is up almost 700 per cent on previous years and scientists believe it will continue to rise.

The Townsville Turtle Hospital has been unable to cope with the influx and scientists at the JCU School of Veterinary Science are setting up extra tanks. JCU virologist Ellen Ariel says there is no funding for the rescue effort yet and they are asking for donations.

#### One dugong killed a month in Far North Queensland

01 July 2011, Daniel Bateman, The Cairns Post

One dugong a month has been killed in Far Northern waters, according to an official dugong death tally. The Queensland Government has confirmed 40 of the threatened marine mammals have died over three years. While many of the animals were killed in fishing nets, many of them were reported as being killed in suspicious circumstances. And there has only been one dugong reported killed in the region stretching between Cardwell to Cape Tribulation.

The figures come as Bob Irwin, the father of Crocodile Hunter Steve Irwin, urged the Government to review its animal cruelty laws to stop the suffering of endangered species taken by indigenous hunters. The environmental campaigner, who's been asked to run for the Queensland Party at the next election, says the state has failed to stop the horrific deaths of endangered dugongs and turtles. Cairns and Far Northern Environment Centre co-ordinator Steve Ryan said the latest dugong death tally was disappointing.

## International workshop on dugong begins in Sarawak (Malaysia)

2 July 2011, The Star online

A three-day Southeast Asia regional workshop on the dugong, a protected species under the Sarawak Wildlife Protection Ordinance, commenced Wednesday with delegates from 11 countries deliberating on the latest efforts to protect the vulnerable marine mammal.

The workshop, organised by the Sarawak Forestry Corporation (SFC), is funded by the United Nations Environment Programme and Convention on Migratory Species (UNEP/CMS) Office in Abu Dhabi, United Arab Emirates. SFC Protected Areas and Biodiversity Conservation general manager Wilfred Landong said the workshop provided an

avenue for deliberating and sharing the research findings on dugong conservation projects undertaken in the Southeast Asia region.

Describing the workshop as a historical milestone in the implementation of dugong conservation work in Malaysia, Wilfred said Lawas was selected to host the workshop as its river mouth, Kuala Lawas, had been found to be a haven for dugongs in the state.

Leading dugong experts attending this workshop include UNEP/CMS dugong programme officer Dr Donna Kwan, James Cook University of Australia researcher Dr David Blair and UNEP/CMS technical advisor Dr Nicolas Pilcher. *Full story and source: http://thestar.com.my/news/story.asp?file=/2011/7/27/nation/20110727170205&sec=nation* 

#### Vet calls for facts of deaths (QLD, Australia)

27 July 2011, The Gladstone observer

In the debate over the disturbing rise in marine animal deaths on Gladstone Harbour what residents really need are facts, says a Gladstone vet. Dr Scott McAuley, a veterinary surgeon, is concerned that speculation is standing in the way of finding solutions.

Dr McAuley called The Observer in May when he found a dead dolphin floating on Gladstone. He and his wife Gabrielle, also a vet, have since done some contract necropsies for the Department of Environment and Resource Management (DERM). The McAuleys love life on the harbour and they are worried about what is going on with the animal deaths.

The McAuleys volunteered recently on a project by the Scientific Advisory Committee to conduct health checks on about 50 live turtles around Gladstone Harbour. The process involved taking blood samples and other tests to check for any patterns of health problems among the turtles. Speculation has been mounting in the community, as blame for the spate of deaths among turtles, dugongs and dolphins is levelled at everything from LNG to floods, pollution, net-fishing, dredging and mysterious diseases. Dr McAuley said he supports the Scientific Advisory Committee's process because it will help find solid answers.

Full story and source: http://www.gladstoneobserver.com.au/story/2011/07/27/vet-calls-for-facts-of-marine-deaths-harbour/

#### Green algae kills fish, seagrass in northern Indian River Lagoon (USA)

18 July 2011 Florida Today

A tiny green algae that scoots around with a whip-like tail grows so thick in the northern Indian River Lagoon it's killing hundreds of fish and stunting seagrass growth. The algae called *Resultor* sp., is not known to be toxic to fish or humans. But too much algae can starve fish of oxygen in the water. And by blooming this spring and summer, the algae is blocking sun from seagrass beds during their prime growing time. And seagrass -- crucial habitat for fish, crabs and other marine life -- is considered the best barometer of the lagoon's ecological health.

Usually, such blooms last a few weeks. This one dates back to April, and it's getting worse, possibly the beneficiary of a drought-driven spike in the lagoon's saltiness, biologists said. Recent lagoon water samples show salt content at 5 percent, twice what's considered ideal for seagrass growth and fish larvae. Ocean water is around 3.5 percent salt.

Resultor is thought to occur worldwide and may have popped up in lagoon samples -- at much lower levels -- in 2005, 2006, and 2010, district officials said. High levels have been seen over the broadest area district officials can recall seeing such a lagoon bloom, from Titusville to almost Melbourne, including the entire Banana River.

So far, the fish toll has been low and sporadic. But on July 12, about 300 red drum, mullet, catfish and trout washed up dead between Mims and Scottsmoor, according to a state fish kill database. Biologists aren't sure how long the bloom will last, but know it could claim more seagrass and fish before its done. Already, its kept seagrass beds from growing half as far out as they could otherwise, district officials said.

Full story and source: http://www.floridatoday.com/article/20110718/NEWS01/107180314/Green-algae-kills-fish-seagrass-northern-Indian-River-Lagoon

## Oil spill didn't hurt seagrass-dwelling juvenile fish (USA)

13 July 2011 Science News

Young fish remained abundant last summer and fall in some areas of the Gulf of Mexico that were slammed by the catastrophic 2010 BP oil spill, a new analysis finds. The finding runs counter to initial expectations of huge losses, especially among fish born during or shortly after the April 20, 2010 well blowout.

F. Joel Fodrie of the University of North Carolina at Chapel Hill and Kenneth Heck Jr. of the University of South Alabama Dauphin Island Sea Lab tallied numbers of juveniles retrieved by research vessels between mid-July and

October 31, 2010. The abundance of these youngsters offered one gauge of whether eggs and larval fish had taken a big, deadly hit from early exposure to hydrocarbons spewed during the months-long spill.

Among 20 types of fish most commonly found in seagrass meadows — natural nurseries in the northern Gulf — juveniles of a dozen types were present in numbers notably higher than during the previous four years. For the remaining eight types of fish, Fodrie and Heck found that 2010 post-spill catch rates were "statistically indistinguishable" from earlier years. The pair detailed their findings online July 6 in PLoS ONE. *Full story and source: http://www.sciencenews.org/view/generic/id/332379/title/Oil\_spill\_didn%E2%80%99t\_hurt\_seagrass-dwelling\_juvenile\_fish* 

## SCCF Marine Lab, 'Ding' Darling survey seagrass in wildlife refuge (USA)

12 July 2011, Sanibel Captiva Islander

SCCF Marine Lab staff, with the assistance of J.N. "Ding" Darling National Wildlife Refuge biologists Joe Stack and Rachel Krauss, surveyed the seagrass resources of the wildlife refuge. Through a cooperative grant with the U.S. Fish & Wildlife Service from May 2011 through October 2012, SCCF (Sanibel-Captiva Conservation Foundation) teamed together with Refuge staff to monitor water quality and aquatic habitat within the Refuge, providing information which can be used to focus management efforts.

To survey seagrasses, the team donned mask and snorkel to count and identify seagrass over a 100-meter distance at 10 separate sites within the Refuge. They also noted the amount of algae or other organisms growing on the seagrass blades (fouling) along with number of shoots, percent coverage, sediment type and water depth. This is done every six months at locations throughout the refuge to provide a long-term record of habitat quality. When the data is analyzed over time, changes in seagrass health can be detected which may be related to water quality conditions or other management concerns, such as hypersalinity or the seasonal draw downs of water for shorebirds.

During the 2011 surveys, the team found five different species of seagrass surviving in conditions ranging from clear colorless water to cloudy, dark water with lots of algae growing over the seagrass. Looking at all the data together, along with long-term water quality data, can give us a better understanding of the long term stability of seagrass habitats and relationships with wading birds or other marine life, like the bay scallop.

Just like when you were a kid and looked down and saw how many creatures lived within the grass at your feet, when we survey seagrass we also realize that this habitat provides a place where many creatures need to live. Monitoring the health of our seagrass resources is essential to protecting them and the creatures that depend on them.

Full story and source: http://sanibel-captiva-islander.com/page/content.detail/id/512265/SCCF-Marine-Lab---Ding--Darling-survey-seagrass-in-wildlife-refuge.html?nav=5051

#### Tampa Bay's Estuary Program Recieves Prestigious Award

05 July 2011, The Bradenton Times

The prestigious Partnership Award in the 2011 Gulf Guardian awards, which is sponsored by the Gulf of Mexico Program, was given to the Estuary Program's Nitrogen Management Consortium.

Although projects throughout the Gulf of Mexico were nominated, TBEP's Nitrogen Consortium received the award due to their noteworthy accomplishments of a public-private alliance in reducing nitrogen pollution in the Tampa Bay from wastewater, storm water, air emissions and industrial discharges. The Gulf Guardian Award judges coined the Nitrogen Management Consortium as a model of cooperative watershed management for the entire Gulf of Mexico region.

The 40-plus members of the Consortium include cities and counties throughout the region as well as key industries that impact the bay such as fertilizer manufacturers, utilities and agricultural operations. Their efforts have lead to the recovery of more than 9,000 acres of life-sustaining seagrasses in the bay.

Full story and source:

http://www.thebradentontimes.com/news/2011/07/05/local\_news/tampa\_bay\_s\_estuary\_program\_recieves\_prestigious\_award/

#### Fish face same fate as dinosaurs

21 June 2011, euronews

Experts say the world's oceans are facing mass extinction of fish and other marine life on a scale comparable with the disappearance of the dinosaurs. This catastrophic scenario is the conclusion of a meeting of 27 marine biologists earier this year in Oxford.

Scientists and conservationists are seriously worried about the fate of natural habitats like the mangroves and seagrass meadows, which are dying off at an unprecedented rate. Whole marine ecosystems like the coral reefs could disappear within a generation.

After reviewing all the latest research, the scientists found that a combination of negative factors are creating conditions associated with every previous mass extinction of species in the Earth's history. Time is fast running out they say, and they are proposing urgent action. Firstly, there has to be an immediate reduction in Carbon Dioxide emissions, the gas mainly responsible for global warming. Fishing must be reduced to a sustainable level, and some fisheries must be closed if they cannot demonstrate sustainable principles. There should be a global system of marine protected areas to maintain biodiversity. There needs to be rigorous controls and reductions of pollutants harmful to marine environments or toxic to marine organisms. Nutrient input into the oceans also need to be controlled by such factors as the better management of sewage treatment. The extraction of minerals from the ocean beds such as oil and gas need to be avoided, reduced, or, as a minimum, universally and stringently regulated. And there is a need to assess, monitor and control other sub-marine activity such as the laying of cables or pipelines. *Full story and source: http://www.euronews.net/2011/06/21/fish-face-same-fate-as-dinosaurs/* 

#### Scientific Panel to investigate Gladstone marine deaths (Qld, Australia)

16 June 2011, Media Newswire (press release)

Environment Minister Kate Jones has announced a Scientific Panel will investigate the recent deaths of a number of dugongs, dolphins and turtles in waters off Gladstone.

Ms Jones said the panel will be made up of marine science experts, working with scientists and officers in the Department of Environment and Resource Management to look at all the evidence and provide advice on the cause of death. Ms Jones said officers in the Department of Environment and Resource Management (DERM) have advised that the animals appeared to have been in good health prior to their death and they don't believe pollution was a factor in their deaths. The Department is currently awaiting pathology results to confirm this.

DERM also advise that where necropsies were able to be undertaken, results have shown that human interference is the most likely cause of death for the majority of these cases – with boat strike or netting injuries the likely causes. *Full story and source: <u>http://media-newswire.com/release\_1152522.html</u> Related article: <u>http://www.gladstoneobserver.com.au/story/2011/06/17/wildlife-fund-boss-welcomes-scientist-panel/</u>, http://www.abc.net.au/news/2011-06-16/panel-to-probe-marine-animal-deaths/2760012,* 

## GALLERY

Hervey Bay, Qld (Australia): 29-31 July 2011 http://www.seagrasswatch.org/gallery.html

Urangan, 29 July 2011 Burrum Heads, 31 July 2011 Dundowran, 31 July 2011

Great Sandy Strait, Qld (Australia): 30 July 2011 http://www.seagrasswatch.org/gallery.html Poona, 30 July 2011

Archer Point, Qld (Australia): 29 July 2011 http://www.seagrasswatch.org/gallery.html

Mission Beach, QId (Australia): 13-14 July 2011 http://www.seagrasswatch.org/gallery.html

Dunk Island, 13 July 2011 Lugger Bay, 14 July 2011

Townsville, QId (Australia): 12-15 July 2011 http://www.seagrasswatch.org/gallery.html

Bushland Beach, 13 July 2011 Shelley Beach, 15 July 2011 Cockle Bay, Magnetic Island, 12 July 2011

Far North Queensland (Australia): 12-15 July 2011 http://www.seagrasswatch.org/gallery.html Green Island, 12 July 2011 Yule Point, 15 July 2011

Chek Jawa (Singapore): 03 July 2011 http://www.seagrasswatch.org/gallery.html

# CONFERENCES

## CERF 2011 Conference (Daytona Beach, Florida, 6-10 November 2011)

#### 21st Biennial Conference of the Coastal and Estuarine Research Federation.

Societies, Estuaries and Coasts: Adapting to Change

This theme reflects a growing realization that human societies are an integral component of ecosystems and the dynamics of these societies and ecosystems are interactive - their futures are interdependent. Nowhere is this more evident than in the estuaries and coastal zones of the planet, where human populations are concentrated, typically dominating estuarine watersheds and affecting their linkage with the local, regional, and global dynamics of the coastal ocean. CERF as a professional scientific society has increasingly focused not only on understanding causes of ecosystem change but providing information necessary to manage anthropogenic changes that have impacted the biodiversity and sustainability of estuarine and coastal systems. This conference will highlight new findings and perspectives of the interactive dynamics of diverse ecosystems and human societies, and in particular, explore how these dynamics can only be understood and managed when addressed at regional and global scales. To a greater extent than in previous CERF conferences this will include an effort to specifically address socioeconomic drivers and responses.

Please visit the conference & workshop web site for further details: http://www.sgmeet.com/cerf2011/

## ICRS 2012 (Cairns, Australia from 9 – 13 July 2012)

#### 12th International Coral Reef Symposium

In July 2012, the world's leading natural scientists, resource managers, conservationists, economists, educators and students will meet together in Cairns, Australia for the 12th International Coral Reef symposium.

This major international scientific conference is held every four years and provides the latest knowledge and leading edge technologies about coral reefs and reef environments worldwide.

This 5 day event will bring together 2,500 people from some 80 countries, to communicate their science and hear the latest advances from the international experts in coral reef science. This research and findings will be fundamental in informing international and national policies and protocols in the conservation and sustainable use of coral reefs and the coral reef environment.

Mini-Symposium: Seagrasses and seagrass ecosystems (http://www.seagrasswatch.org/Info\_centre/conferences/ICRS2012/Flyer\_ICRS2012\_Seagrass.pdf)

Seagrass meadows are an important component of tropical coastal waters. They are part of the complex ecosystem that supports the productivity of coral reefs and reef environments. There is evidence that seagrass populations are declining and this will impact on associated ecosystems. Our knowledge of tropical seagrass systematics, ecology, trends, connectivity and the anthropogenic threats to seagrass communities has improved greatly in the last decade. The symposium will bring together recent findings to enhance our understanding of seagrass associated with coral reef environments. We invite you to submit a 250 word abstract for oral / poster presentation to this ICRS 2012 mini-symposium as we see it as an opportunity to advocate the importance of seagrasses and recent seagrass research to coral reef environments.

ICRS 2012 Abstract Submission Closes 1st October 2011

During the online submission process you will be invited to nominate your preferred mini-symposium as well as your preference for an oral or a poster presentation. Please select "Seagrass and seagrass ecosystems" in the theme "Biodiversity and systematics" as your preferred mini-symposia (<u>http://www.icrs2012.com/MiniSymposia.htm#15</u>). Select: 15b – Seagrasses and seagrass ecosystems

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