

Wednesday, July 9, 2008

Daily Digest
11th International Coral Reef Symposium
Ft. Lauderdale, Florida, USA
July 7-11, 2008
Greater Fort Lauderdale/Broward County Convention Center

TODAY'S OVERVIEW

=====

Get the latest news from the world's preeminent coral reef symposium attended by nearly 3,000 global scientists, managers, conservationists and policy makers
http://www.nova.edu/ncr/11icrs/media_newsroom.html

1. Looking beyond the symptoms of coral disease
2. Underwater vacuum helps control alien algae
3. Managing fishing gear should be priority in tropical systems
4. Coral reef degradation's threats to reef fishes

NEWS SUMMARY

=====

1. Looking Beyond the Symptoms of Coral Disease

Scientists are in search of how temperature and other reef species influence the progress and occurrence of disease on coral. Coral disease is significant in all the world's oceans but none has seen outbreaks like the Caribbean, said Dr. Drew Harvell of Cornell University, adding, "Keeping corals healthy is a big challenge." To encourage disease resistance, she said emissions and land-based pollution must be reduced and more marine protected areas should be established. Dr. Laurie Raymundo of the University of Guam echoed that call by explaining that studies in the Philippines and Guam show that corals inside marine protected areas have less disease than areas that are fished. She said fished areas have huge gaps in diversity that affect how a disease is transmitted. Tyler Christensen of NOAA said another major stress for corals are warmer waters, which increases vulnerability to disease. Dr. John Bruno of the University of North Carolina at Chapel Hill said studies are indicating that algal growth is not a direct cause of coral disease. "We are learning that seaweed does not cause or exacerbate coral diseases."

Media contacts:

- Drew Harvell (Cornell University) cdh5@cornell.edu or 607.727.1661
- John Bruno (University of North Carolina, Chapel Hill) jbruno@unc.edu or 919.360.7651
- Laurie Raymundo (University of Guam) lraymundo@gmail.com or 671.787.8578
- Tyler Christensen (National Oceanic and Atmospheric Administration) Tyler.Christensen@noaa.gov

2. Underwater vacuum helps control alien algae

In Hawaii, alien algae is a growing concern as it chokes surrounding coral reefs. Long-term solutions include watershed restoration, herbivore recovery, and urchin biocontrol, but local officials, scientists and conservationists have found a way to reduce the threat now. A mechanical device, much like an underwater vacuum, was developed to quickly remove algae from the reef. The "Super Sucker" was initiated on Oahu's windward coast at Moku o Loe, and in over 19 collection trips more than 8,000 kilograms of algae was removed. Since 2006, there has been substantial recovery of coral at the first sites. Prior to the Super Sucker's efforts, Dr. Eric Conklin of The Nature Conservancy said there was too much algae for herbivores to keep it under control, but now they are successful.

Media contact:

- Dr. Eric Conklin (The Nature Conservancy) econklin@tnc.org or 808.218.4366

3. Managing fishing gear should be priority in tropical systems

As managers seek to respond to climate change, one option is to restrict or ban fishing gears that target species highly susceptible to the effects of bleaching or critical to reef resilience. Dr. Tim McClanahan of Wildlife Conservation Society said it is possible to undertake ecosystem modeling of gear impacts where simulation can pinpoint the most destructive fishing methods that managers should regulate. He said managing gear needs to be a major part of

management and that it is much more effective than trying to control human effort. Spearguns, traps and beach seines have the greatest impact on grazing species and the most potential to lead to fisheries collapse.

Media contact:

- Dr. Tim McClanahan (Wildlife Conservation Society) tmccclanahan@wcs.org or +254.73.477.4225

4. Coral reef degradation's threats to reef fishes

A recent study on the effects of coral reef degradation on reef associated fishes provided somewhat unexpected results. The relationship was tested by examining the response of two species of damselfishes to varying levels of coral cover: 100% live coral, 50% live coral, and 0% live coral. Whereas the number of individuals persisting and their condition did not show a significant difference under the various treatments, growth rates of both species were significantly slower among those exposed to lower levels of coral cover. It is argued that slower growth rates in disturbed reef habitats will delay the onset of maturity in fishes, increase vulnerability to predation, and reduce their ability to reproduce. Scientists believe that population size remained the same because, depending on the size of the degraded area, species may not be able to travel the distance needed to find a suitable habitat, signifying increased cause for concern when threats of degradation are global.

Media contact:

- Dr. David Feary (United Nations University – INWEH, Dubai) dfeary@inweh.unu.edu