ReefBase Newsletter – January 2011

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Announcements

1. 22nd Pacific Science Congress – 14-22 June 2011, Kuala Lumpur Malaysia

The 22nd Pacific Science Congress will be held in Kuala Lumpur, Malaysia from 14-17 June, 2011. The Congress will provide a platform to discuss the development and outcomes of academic research in the Pacific region especially with research that can contributes towards the challenges of global change, as well as fortifying mutual bonds. Its provides a multidisciplinary platform for scientists from the region to assess and prioritize issues requiring scientific research; brings together scientists from more remote states, catalyzes international and cross-disciplinary collaboration;, and is a venue to establish and announce new research initiatives.

The theme of the Congress is "Asia Pacific Science in the 21st Century: Meeting the Challenges of Global Change", and a variety of symposium and other sessions will be presented under the subthemes such as a

changing climate, global change & ecosystems, oceans, earth system & risk management, globalization, resource constraints & sustainability, health challenges and science for policy and the future

Full details on the Congress can be found on The 22nd Pacific Science Congress website:
http://www.22ndpsc.net

2. Release of COREMO3

The CoReMo project (Coral Reef Monitoring) Version 3, developed by ARVAM and funded under an agreement with Réunion Regional Council, the Ministry of Overseas France and the European Union has been released. The project stems from a successful region-wide collaboration under the aegis of the Indian Ocean Commission (IOC) and has been implemented in cooperation with ReefBase and FishBase hosted by The WorldFish Center. It aims to develop a software package, designed to enable scientific and non-scientific operators to monitor coral reef health. The present coral reef monitoring protocols have been standardized and version 3, which is currently being finalized by ARVAM and its partners, has been available in an offline version since early 2009. CoReMo 3 consists of a Windows executable designed to develop simple, effective, standardized protocols to count benthic populations (fixed fauna including corals; mobile fauna) and ichthyologic populations (fish).

The Version 3 of the software is free for download on this website:
http://www.coremo3.com/spip.php?page=install_coremo

3. Coral Bleaching Update

Thailand closes eighteen dive sites at seven national park to allow coral recover from bleaching (Last updated: 21 Jan 2011)

Thailand's Department of National Parks, Wildlife and Plant Conservation has closed seven marine national parks to allow coral to recover from bleaching. Over 80% of the coral at each diving site had been damaged and up to 90% of coral in the Gulf of Thailand and the Andaman Sea has been bleached according to National Parks, Wildlife and Plant Conservation. They are the Hat Chao Mai National Park in Trang, Mu Koh Petra and Tarutao national parks in Satun, Mu Koh Chumphon National Park in Chumphon, Hat Nopparat Thara-Mu Koh Phi Phi National Park in Krabi, and Mu Koh Surin and Mu Koh Similan national parks in Phangnga. The parks are on the Andaman Sea on Thailand's west coast. The ban imposed at Thai dive sites include Similan Islands National Park, the Surin Islands National Park, Fai Wap Bay, Eve of Eden, and Hin Klang Island.. The department chief said he could not say how long the dive sites would be closed but diving activities probably would be banned until the end of the monsoon season in October. The Marine national parks would be closed for six months during the monsoon season.

ReefBase Publication Database

1. Deep sea sponge ground

- Deep-water sponge grounds are now emerging as a key element of deep-sea ecosystems. Its creating complex habitats hosting many other species. They are an important refuge in the deep ocean and they are also reservoirs of great species diversity, including commercially important fish. Playing a similar role to that of cold-water coral reefs with which they often co-occur, sponge grounds are even more ecologically and geographically diverse, consisting of many individual species and occurring in many places around the world. This report highlights what is currently known about deepwater sponge grounds in terms of their distribution, biology, ecology and present-day uses in biotechnology and drug discovery, and introduces case studies of particular deepwater sponge habitats from around the world. This report also highlights the need to minimize the risk of damage to deep-sea sponge grounds through appropriate conservation and careful management, and presents further evidence of the need to improve awareness and understanding to ensure that future generations have the opportunity to explore, study and benefit from these vulnerable deepwater habitats.

Hogg, M.M., O. S. Tendal, K. W. Conway, S. A. Pomponi, R. W. M. van Soest, R.W.M., J. Gutt, M. Krautter and J. M. Roberts. 2010. Deep-sea Sponge Grounds: Reservoirs of Biodiversity. UNEP-WCMC Biodiversity Series No. 32. UNEP-WCMC, Cambridge, UK.
http://www.reefbase.org/resource_center/publication/main.aspx?refid=72524&linksource=nl

2. Preserving Reef Connectivity: A Handbook for Marine Protected Area Managers

- The coastal ocean environment provides enormous value in fishery and other products, as well as ecosystem services like coastal protection, water purification, and locations for ports, harbors, urban centers, tourist destinations, and numerous recreational pursuits. Coastal environments can also cleanse the soul, stimulate the mind, and restore the body. But 40% of all people live within 50 km of a coast, and our enthusiasm for coastal living is creating ever more environmental damage. Unfortunately, current management practices in most coastal regions are ineffective, and to continue them will endanger the coastal economies and ecosystems that support over one half of the world's population. Marine protected areas (MPAs) have become an important management tool, particularly in tropical regions, and connectivity is an important consideration in the effective design of MPAs and MPA networks. Connectivity issues are also involved in most other aspects of coastal management for two reasons: first, water moves and transports items such as sediments, nutrients and pollutants considerable distances; and second, most marine organisms also move within the water stream, transporting themselves between places. In this report, the target is to assist MPA managers and others in understanding and applying the concept of connectivity in their work. In this way, it will help managers strengthen their ability to tackle the challenging task of sustaining coastal marine environments.

Sale, P. F., H. Van Lavieren, M.C. Ablan Lagman, J. Atema, M. Butler, C. Fauvelot, J.D. Hogan, G.P. Jones, K.C. Lindeman, C.B. Paris, R. Steneck and H.L. Stewart. 2010. Preserving Reef Connectivity: A Handbook for Marine Protected Area Managers. Connectivity Working Group, Coral Reef Targeted Research & Capacity Building for Management Program, UNU-INWEH.
http://www.reefbase.org/resource_center/publication/main.aspx?refid=72600&linksource=nl

3. Coral reef Monitoring for Management (Second Edition)

- This guide describes a system to monitor and evaluate coral reef designed for local coastal communities who have no training in SCUBA diving. Coral reefs are the focus of the methods in this guide because reefs are less accessible to monitor and evaluate than either mangroves or sea grasses due to their naturally high productivity and aesthetic attractiveness, and also the centerpiece of marine protected areas. This guide outline the importance of monitoring reefs, the steps to gather data, to analyze trends, and to choose solution based on the observations. The simple methods described were adapted from the other methods developed for volunteer SCUBA divers and reef scientists. Using this guideline, it is hoped that the skills and knowledge in monitoring will help empower local communities to be more effective managers of the resources on which they depend.

Uychiaoco, A. J., S.J. Green, M.T. dela Cruz, P. A. Gaite., H. O Arceo, P. M. Alino and A. T White. 2010. Coral reef Monitoring for Management (Second Edition). University of The Philippines Marine Science Institute, United Nations Development Programme Global Environment Facility Small Grants program, Guiuan Development Foundation, Inc. Voluntary Service Overseas, University of the Philippines center for integration and Development Studies, Coastal Resource Management Project, Philippines Environmental Governance Project 2, and Fisheries Resources Management Project. 122p
http://www.reefbase.org/resource_center/publication/main.aspx?refid=72662&linksource=nl

4. Framing the flow: Innovative Approaches to Understand, Protect and Value Ecosystem Services Across Linked Habitats.

- Marine, coastal and freshwater ecosystems are complex and characterized by an array of ecological functions and processes essential to the regulation and continued provision of ecosystem services of direct or indirect benefit to human welfare and society. Ecosystem services flow from their source to sink across both land- and seascapes, and call for the integrated management of connected ecosystems to optimise the flow of these services and benefits. This publication highlights the interconnectivity and linkages between coastal ecosystems (mangroves, coral reefs, seagrasses, estuaries, and lagoons) across environmental, economic, social, and management contexts. It presents innovative approaches to better understand, protect and value ecosystems services across linked habitats, informing the trade-off of different land-use management decisions and the effects on healthy systems from drawing on ecosystem services from linked habitats.

Silvestri, S., Kershaw, F. (eds.), 2010. Framing the flow: Innovative Approaches to Understand, Protect and Value Ecosystem Services across Linked Habitats, UNEP World Conservation Monitoring Centre, Cambridge, UK.
http://www.reefbase.org/resource_center/publication/main.aspx?refid=72663&linksource=nl

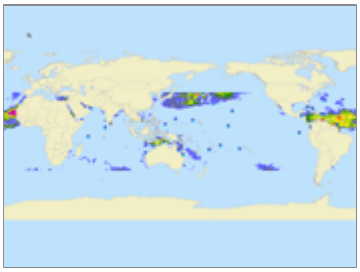
5. NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation

- The National Oceanic and Atmospheric Administration (NOAA) is the lead federal agency mandated to conserve and manage the nation's marine resources, including deep-sea coral and sponge ecosystems. As our understanding of these resources has grown, so has the need to target research and management actions. The NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation represents a concerted effort to identify exploration, research, management, and international cooperation activities that provide the information needed to implement appropriate management measures to protect and conserve deep-sea coral and sponge ecosystems. This document addresses an identified milestone in NOAA's five-year Research Plan for 2005-2009 to develop a NOAA-wide research plan for deep-sea corals; and a commitment by NOAA to develop a national strategy for research and conservation of deep-sea corals and sponges in response to a petition from Oceana to protect deep-sea corals and sponges.

National Oceanic and Atmospheric Administration, Coral Reef Conservation Program. 2010. NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation. Silver Spring, MD: NOAA Coral Reef Conservation Program. NOAA Technical Memorandum CRCP 11. 67 pp.
http://www.reefbase.org/resource_center/publication/main.aspx?refid=72523&linksource=nl

Online GIS

1. Annual / December 2010 NOAA Coral Reef Watch's Satellite Monitoring Products



This map shows the global observations of coral bleaching occurrences combined with NOAA Coral Reef Watch's satellite monitoring products including Sea Surface Temperature, Sea Surface Temperature Anomaly, Bleaching HotSpot and Degree Heating Weeks. These datasets are added into ReefBase Online GIS each month.
To view the latest Annual / December 2010 maps, click here.
http://reefgis.reefbase.org/redirect.aspx?urlid=50943&linksource=nl