MIDEAST CORAL REEF SOCIETY (MCRS)

NEWSLETTER

Our Goals

- Promote collaboration among researchers
- Promote Knowledge Exchange with stakeholders outside academia
- Generate a deep understanding of Middle Eastern coral ecosystems
- Promote their conservation and sustainable use

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Mideast Coral Reef Society

Issue I

05 February 2015

Welcome!

We are excited to present the first newsletter of the Mideast Coral Reef Society (MCRS). We have been very busy these past few months and we're looking forward to sharing some of our happenings with you.

MCRS consists of researchers and members of governmental, non-governmental, academic, industry and private sector organisations with an interest in a broad range of aspects of Middle Eastern reefs.

Our purpose is to promote collaboration among researchers and knowledge exchange with stakeholders outside academia that share an interest in regional reefs. Our aim is to generate a deep understanding of the functioning of these unique ecosystems and to promote their conservation and sustainable use.

This newsletter is intended to keep you informed on all that is happening with the MCRS as well as with recent and upcoming event and activities, publications and conferences.

If you are interested in the MCRS Initiative you can become a member and subscribe receive the 6-monthly to newsletter in our webpage http://mideastcrs.org/ An email discussion list (ListServ) feature which will become available very soon, will allow our members to participate in discussions on topics that are of interest, such as research progress, funding opportunities, expert advice, meetings, as well as to facilitate dialogue and cooperation among our members.

MCRS Initiative is jointly hosted by the New York University Abu Dhabi and the University of Southampton. Funding is contributed by the Natural Environment Research Council, UK. During the initial stage, membership of the



MCRS Initiative will be free of charge so there is no excuse not to join us!

With best wishes



Prof. J. Burt

Prof J. Wiedenmann

Well wishing notes from our host institutions - Part 1: Prof. Don Nutbeam, Vice chancellor, University of Southampton

Many congratulations to Profes- fects of global warming. The sor Burt and Professor Wieden- reefs in this region are under mann for their successful efforts in forming the Mideast Coral Reef Society.

Population growth, the pursuit of economic development, and climate change have put the world's coral reefs under exceptional pressure. With their unique capability to thrive at temperatures that would kill corals elsewhere. corals from the Gulf are a most important research resource helping us to understand the ef- Coral Reef Society can, in my

threat and the loss of their biodiversity would have major social and economic consequences for the region's dependent populations.

The daunting challenge of protection, conservation and sustainable exploitation of the reef ecosystem requires concerted, co-ordinated and integrated efforts by all stakeholders. The establishment of the Mideast



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The establishment of the Mideast Coral Reef Society can, in my opinion, provide a very effective and efficient way to achieve such an objective.

The MCRS is an excellent example of an institution that will generate ample opportunities for international and interdisciplinary research collaborations. It will facilitate the exchange of knowledge between stakeholders to generate a deeper understanding of the functioning of coral reef ecosystems of the region, protecting them for future generations. I wish the Mideast Coral Reef Society and its members all the best and am looking forward to hear more about their exciting research that is underway.

R_ Nutbeam

Professor Don Nutbeam Vice-Chancellor, University of Southampton



The 2013 "Conserving Coral Reefs in the Arabian Gulf Workshop" was a big success with impact!

This workshop paired GCC national scientists with leading international scientists to conduct collaborative researchbased training on the unique coral reefs in the Arabian Gulf in order to increase regional awareness and scientific capacity in coral reef conservation and management.



There were a total of 23 participants representing 12 different countries including 10 nationals representing 5 GCC countries. Several survey and data analysis methods were taught through presentations, lab work and field work in an effort to standardize coral reef monitoring being conducted throughout the GCC region. Further to this, NYUAD have provided a photoquadrat frame along with the protocol that they have been using for the past 4 years to a representative in each of the GCC countries represented, aiming to further increase our knowledge of Arabian Gulf coral reefs and their processes. "The coral monitoring workshop held in Abu Dhabi by NYU was among the best workshops I have attended so far. It clearly demonstrated the significance of coral reefs and the threats imposed on them. The new techniques to monitor and assess the status of the coral reefs were put immediately into use and also shared with the Kuwait Diving Team to monitor the coral reefs of Kuwait. The workshop also help to establish a communication network with other scientists in the fields of coral reef science and marine ecology so we can now exchange information and knowledge frequently."

Mohammed Al-Kharafi (MSc)

Head of Bio-aquatic Studies and Research Section Department of Fisheries Resource Development Public Authority of Agriculture and Fisheries Resources (PAAFR), Kuwait



The workshop participants at NYUAD

Background information: Conserving Coral Reefs in the Arabian Gulf (https://sites.google.com/a/nyu.edu/conserving-coral-reefs-in-the-gulf/)

A participant comments:

Monitoring Coral Reef Health in Qatar: An Introductory Workshop on PAM fluorometry



19-20th May 2014

Attendees included representatives from Ministry of Environment, environmental advisors from RasGas and Qatargas, technical professionals and marine specialists from Qatar University.



Issue I

Primary School outreach, Dubai

November 2013

As part of World environment week, NYUAD spent the day with 90 Grade 5 pupils at Jumeira Baccalaureate School in Dubai.

The day began with a beach clean which was followed by interactive classroom sessions outlining the variety of marine habitats within the UAE and their importance to marine life.

The day was focused around urbanisation in the UAE and how even small changes to everyday life could help preserve the environment.

Upcoming conferences within the region — Coral Reefs of Arabia: 15-17 February 2015

New York University Abu Dhabi, Abu Dhabi UAE

https://docs.google.com/a/nyu.edu/document/ d/1K6vFV2grBQ0YbJsQzEKo-fJavMjI7PoG2ieAutV-XVI/edit

The Arabian region contains some of the most unique but understudied coral reef ecosystems on earth, including those in the Arabian Gulf, the Arabian Sea, and the Red Sea. This conference brings together leading international and regional scientists and marine managers studying Arabia's reefs to exchange recent research findings and to enhance collaboration among regional stakeholders for the purpose of improving our understanding and conservation of these important ecosystems.

Held over three days, from February 15 to 17, this conference includes over 100 oral presentations and poster presentations from regional and international scientists, managers, and other stakeholders.

Audience members and the public can register to attend at: <u>http://nyuad.nyu.edu/en/</u> <u>news-events/abu-dhabi-events/2015/02/coral-</u> <u>reefs-of-arabia.html</u> The Arabian region contains some of the most unique but understudied coral reef ecosystems on earth.

Publications

Special Issue in Marine Pollution Bulletin 72, Issue 2 (2013) - Coral reefs of the Gulf: Past, present and the future of a unique ecosystem.

There has been a rapid and substantial increase in scientific interest within the Gulf region, especially its marine environment and the physical extremes in which its marine communities (especially coral reefs) have evolved. In an era of unparalleled changes in global oceanic climate, understanding the potential implications of global changes on ecologically, economically and socially important coastal coral reef ecosystems will be vital in developing adequate management and conservation measures to cope with such changes.



Reef survey in Abu Dhabi

The 12 published articles in the special issue cover topics ranging from the impact of both environmental and man -made developments on reef communities, to investigations on the high thermal tolerance of Gulf coral reefs, and assessments of conservation techniques, such as the development of Marine Protected Areas and the environmental impacts of tourism. The issue concludes with an identification of high priority areas for future research on coral reefs in the Gulf, with experts in the field recognizing the importance of continued discovery of biological and ecological processes, and a better understanding of the potential role of climate change and man—made developments on coral reefs.



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Publications

- 1. John A. Burt. The growth of coral reef science in the Gulf: A historical perspective. Pages 289-301
- Andrew G. Bauman, David A. Feary, Scott F. Heron, Morgan S. Pratchett, John A. Burt. Multiple environmental factors influence the spatial distribution and structure of reef communities in the northeastern Arabian Peninsula. Pages 302-312
- B. Hume, C. D'Angelo, J. Burt, A.C. Baker, B. Riegl, J. Wiedenmann. Corals from the Persian/Arabian Gulf as models for thermotolerant reef-builders: Prevalence of clade C3 Symbiodinium, host fluorescence and ex situ temperature tolerance. Pages 313-322
- 4. Steve L. Coles, Bernhard M. Riegl. Thermal tolerances of reef corals in the Gulf: A review of the potential for increasing coral survival and adaptation to climate change through assisted translocation. Pages 323-332
- Morgan S. Pratchett, Andrew S. Hoey, David A. Feary, Andrew G. Bauman, John A. Burt, Bernhard M. Riegl. Functional composition of Chaetodon butterflyfishes at a peripheral and extreme coral reef location, the Persian Gulf. Pages 333-341
- 6. John A. Burt, David A. Feary, Georgenes Cavalcante, Andrew G. Bauman, Paolo Usseglio. Urban breakwaters as reef fish habitat in the Persian Gulf. Pages 342-350
- David A. Jones, Manickam Nithyanandan. Recruitment of marine biota onto hard and soft artificially created subtidal habitats in Sabah Al-Ahmad Sea City, Kuwait. Pages 351-356
- John A. Burt, Khalifa Al-Khalifa, Ebtesam Khalaf, Bassem AlShuwaikh, Ahmed Abdulwahab. The continuing decline of coral reefs in Bahrain. Pages 357-363
- Lulwa M. Al-Dahash, Huda M. Mahmoud. Harboring oil-degrading bacteria: A potential mechanism of adaptation and survival in corals inhabiting oil-contaminated reefs. Pages 364-374
- William Gladstone, Belinda Curley, Mohammad Reza Shokri. Environmental impacts of tourism in the Gulf and the Red Sea. Pages 375-388
- 11. Hanneke Van Lavieren, Rebecca Klaus. An effective regional Marine Protected Area network for the ROPME Sea Area: Unrealistic vision or realistic possibility? Pages 389-405
- 12. David A. Feary, John A. Burt, Andrew G. Bauman, Shaker Al Hazeem, Mohamed A. Abdel-Moati, Khalifa A. Al-Khalifa, Donald M. Anderson, Carl Amos, Andrew Baker, Aaron Bartholomew,
- Rita Bento, Geórgenes H. Cavalcante, Chaolun Allen Chen, Steve L. Coles, Koosha Dab, Ashley M. Fowler, David George, Edwin Grandcourt, Ross Hill, David M. John, David A. Jones, et al.
- 14. Critical research needs for identifying future changes in Gulf coral reef ecosystems. Pages 406-4

Contributing to the newsletter:

Contributions are invited to the newsletter via email. Potential news can be references of publications in the interest areas of the MCRS Initiative, descriptions of research projects, job advertisements, etc. We cannot guarantee that all contributions can be accepted and we reserve the right to shorten contents. Please submit your suggestion via email to <u>newsletter@mideastcrs.org</u>

Contact / Subscribe

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