

Member's report on activities to ICRI

Presented by MH Schleyer, Oceanographic Research Institute, South Africa

Reporting period January - July 2012

1. General Information (note that this information will be posted on the ICRI website in your member page: <u>http://www.icriforum.org/about-icri/members-networks</u>)

Are you an ICRI Member?	Yes
Representation to ICRI (Country / Organization):	South Africa
Focal Point 1:	
Name:	Prof M.H. Schleyer
Organization:	Oceanographic Research Institute
Email:	schleyer@ori.org.za
Focal point 2:	
Name:	Mr C. Coetzee
Organization:	Ezemvelo KwaZulu-Natal Wildlife
Email:	cedricc@kznwildlife.com
Last meeting attended:	Reunion, December 2011

For countries only:

National Action Plan / Initiative	
Do you have a National Coral Reef action plan or	All South African coral reefs are in well-
similar? If so please provide URL:	managed MPAs that also fall in a World Heritage
	Site.
If you are you engaged in any regional programs /	East African Coral Reef Task Force
initiatives relating to coral reefs, please indicate	Collaborative research with University of
which ones:	Reunion (two PhDs)
	Regional WIOMSA research programmes

- 2. **Updates on your activities (**new initiatives/programs/projects of your government /organization which will be of interest to the ICRI Members**).** Examples include MPA declarations, World Heritage sites status, economic valuation of reefs, policy changes in relation to coral reefs etc.
- Close collaboration between the iSimangaliso Wetland Park and the Reserva Marinha Parcial da Ponta do Ouro in southern Mozambique is presently under consideration within the Lubombo Transfrontier Conservation Area initiative.
- An economic valuation of the Maputaland Coral Reef System, Maputaland, northern KwaZulu-Natal is currently being completed. It has become clear in this study that the value of the ecosystem services of the reefs far exceeds that of human extractive and nonextractive use.
- Recreational diving on much of the largest reef in the central core area is intense and an assessment is being undertaken with the conservation authority to establish how this can be dispersed to sustainable levels.
- Research on accretion versus erosion on the reefs has revealed that aragonite saturation is not the limiting factor in coral development on the marginal South African coral reefs.

- Ground-breaking work on functional genetic connectivity between the reefs has revealed that coral larval dispersal is very restricted; the reefs are largely self-seeding and not well connected.
- Regional studies are focusing on the incidence and dynamics of coral diseases in the western Indian Ocean as well as of the reproductive success of selected coral species in terms of their recruitment in the face of climate change.
- The above studies are allied with ongoing coral monitoring. New initiatives will commence in late-2012, linking the palaeo-climate record with current changes in SST and ocean acidification, and coral responses to these parameters in terms of resilience and gene expression.

3. Contribution to the ICRI GM

Your responses to the following questions will assist the Secretariat in assessing contributions towards the major themes of the current ICRI action plan and objectives of the general meeting.

a. Management effectiveness

Are you engaged in an assessment of management effectiveness in your marine areas? If so, the ICRI Secretariat invites members to provide a 5-minute presentation on a case study relative to assessing the management effectiveness of an MPA during the management effectiveness workshop that will be held on the Tuesday (17 July). The 5 minute presentation will provide an overview of:

- What kind of assessment was undertaken.
- How the results of this assessment are being used.

The presentation can be illustrated with a PowerPoint presentation or not; if a PowerPoint is used than it should not exceed 5 slides.

Please indicate whether you would like to provide a presentation as described above:

\boxtimes YES \square NO

Is there any other aspect of management effectiveness you would like to share with ICRI members?

b. Community stewardship

Are there any activities or initiatives involving community engagement in coastal marine management that you are involved with?

4. Is there any other topic you would like to raise during the meeting?

\Box YES \boxtimes NO

If yes, please indicate which topic and the reason why you would like to raise it:

5. Please list publications, reports you have been released since the last meeting.

Title (incl. author and date)	Type of publication
	(Paper, report etc.)
Floros, C., Schleyer, M.H., Maggs, J.Q. & Cilliers, L. 2012. Baseline assessment of high- latitude coral reef fish communities in southern Africa. <i>African Journal of Marine Science</i> 34: 55-69.	Peer-reviewed paper
Sheppard, C.R.C., Ateweberhan, M., Bowen, B.W., Carr, P., Chen, C. A.,	Peer-reviewed paper

Clubbe, C., Craig, M.T., Ebinghaus, R., Eble, J., Fitzsimmons, N., Gaither, M.R., Gan, C-H., Gollock, M., Guzman, N., Graham, N.A.J., Harris, A., Jones, R., Keshavmurthy, S., Koldewey, H., Lundin, C.G., Mortimer, J.A., Obura, D., Pfeiffer, M., Price, A.R.G., Purkis, S., Raines, P., Readman, J.W., Riegl, B., Rogers, A., Schleyer, M., Seaward, M.R.D., Sheppard, A.L.S., Tamelander, J., Turner, J.R., Visram, S., Vogler, C., Vogt, S., Wolschke, H., Yang, J.M-C., Yang S-Y. & Yesson C. 2012. Reefs and islands of the Chagos Archipelago, Indian Ocean: why it is the world's largest no-take marine protected area. Aquatic Conservation: <i>Marine and Freshwater Research</i> 22: 232– 261.	
Macdonald, A.H.H., Schleyer, M.H. & Lamb, J.M. 2011. <i>Acropora austera</i> connectivity in the south-western Indian Ocean assessed using nuclear intron sequence data. <i>Marine Biology</i> 158: 613-621.	Peer-reviewed paper
Hart, J.R. 2012. Coral recruitment on a high-latitude reef at Sodwana Bay, South Africa: Research methods and dynamics. MSc thesis, University of KwaZulu-Natal, Durban: 67p.	Thesis
Grimmer, A. 2012. Accretion versus bioerosion on the Maputaland reefs in South Africa – The major processes. MSc thesis, University of KwaZulu-Natal, Durban: 79p.	Thesis

6. Please indicate upcoming coral reef-related meetings you will attend

International Coral Reef Symposium, 9-13 July, Cairns, Australia	
IUCN World Conservation Congress, 6-15 September 2012, Jeju	
→ Are you planning to organise a side event? Please indicate:	
11 th Meeting of the Conference of the Parties on Biological Diversity (COP-11), 8- 19 October 2012, Hyderabad, India	

Other: Nil