

**South Africa report on activities to ICRI****Presented by MH Schleyer, Oceanographic Research Institute, South Africa****Reporting period December 2010 – December 2011**

Please note that the purpose of this report is to help you share information about your activities within the ICRI community to allow discussion at the next ICRI General Meeting. The reports will be made available on the ICRIForum prior to the meeting. The ICRI secretariat is well aware of your busy schedule, thus don't hesitate to submit an incomplete report.

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

Are you an ICRI Member?	Yes
Representation to ICRI (Country / Organization):	South Africa
Focal Point 1:	
<i>Name:</i>	Prof M.H. Schleyer
<i>Organization:</i>	Oceanographic Research Institute
<i>Email:</i>	schleyer@ori.org.za
Focal point 2:	
<i>Name:</i>	Mr C. Coetzee
<i>Organization:</i>	Ezemvelo KwaZulu-Natal Wildlife
<i>Email:</i>	cedricc@kznwildlife.com
Last meeting attended:	Samoa November 2010
How do you circulate ICRI information within your country and/or organization?	Email and direct communication at regional and national liaison meetings with state and parastatal organisations
Budget allocated for coral reef related activities (please mention for year/period):	Research: ~\$75 000 (2011) Management: Unknown

For countries only:

National Action Plan / Initiative	
Do you have a National Coral Reef action plan?	Development of a regional action plan commenced in May 2007. Locally covered in MPA management plan under development and review
Is this plan publicly available? If so please provide location:	Under development and review.
Do you have a National Coral Reef Initiative or Task Force?	No; probably not relevant as all South African coral reefs are in well-managed MPAs
Are you engaged in any regional programs / initiatives relating to coral reefs:	Yes
If yes, please indicate which programmes/initiatives:	CORDIO initiatives, East African Coral Reef Task Force (EACRTF), GCRMN

- 2. Updates on your activities** (new initiatives/programs/projects of your government /organization which will be of interest to the ICRI Members)

3. Contribution to the ICRI GM

- **Rio+20**

To support efforts to share ideas and plans for coral reefs/marine initiatives at Rio+20 and nurture opportunities for collaboration, we would like to invite you to share your proposed events and ideas:

- Are you/your organization attending Rio+20?
No.
- Are you proposing an event or other initiative? (please share any ideas and/or details)
As we run a large public aquarium, the event will be marketed in awareness and educational programmes, as is being presently done with COP 17.
- Are you looking to collaborate with others?
Appropriate arrangements will be made with conservation and educational institutions.
- What other new initiatives/programs/projects/progress, in particular since November 2010, has been made by your government/organization relative to i) Marine Protected Areas, Ramsar, World Heritage sites, and Man and the Biosphere Programme (MAB) sites designation containing coral reefs; ii) Policy changes; iii) Economic valuation of coral reef ecosystem services, etc., which you believe would be of general interest to other ICRI Members?
 - A Master of Economics student is currently completing a thesis entitled: An Economic Valuation of the Maputaland Coral Reef System, Maputaland, northern KwaZulu-Natal. It has become clear in this study that the value of the ecosystem services of the reefs far exceeds that of human extractive and non-extractive use.
 - Further 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. Both of these constitute new initiatives in the region.
 - The above studies are allied with ongoing coral monitoring, research on accretion versus erosion on the reefs, and ground-breaking work on functional genetic connectivity between the reefs.
 - Further initiatives are planned that will link the palaeo-climate record with current changes in SST and ocean acidification, as well as coral responses to these parameters in terms of their resilience and gene expression.
- Please list publications, reports you have released since the last meeting.
 - M.H. Schleyer (2011) **Reef Ecosystems**. In: Nicola James & Juliet Hermes (Eds). **Insights into impacts of climate change on the South African marine and coastal environment**. South African Environmental Observation Network: Elwandle Node. pp 33-41.
 - Schleyer, M.H. & Benayahu, Y. (in press). **Pre- and post-1998 ENSO records of shallow-water octocorals (Alcyonacea) in the Chagos Archipelago**. Marine Pollution Bulletin. doi:10.1016/j.marpolbul.2010.08.019
 - Schleyer, M.H. & Pereira, M.A.M. (in press). **Coral Reefs**. In: Bandeira, S. & Paula, J.P. (eds). **Ecology of Maputo Bay**.
 - C.R.C. Sheppard, B. Bowen, P. Carr, C.A. Chen, C. Clubbe, M. Craig, J. Eble, N. Fitzsimmons, M. Gaither, C-H. Gan, M. Gollock, N. Guzman, N.A.J.

Graham, A. Harris, R. Jones, S. Keshavmurthy, H. Koldewey, C.G. Lundin, J.A. Mortimer, D. Obura, M. Pfeiffer, A.R.G. Price, S. Purkis, P. Raines, B. Riegl, A. Rogers, M.H. Schleyer, M.R.D. Seaward, A.L.S. Sheppard, J.Tamelander, J.R. Turner, S. Visram, C. Vogler, S. Vogt, J.M-C. Yang, S-Y. Yang, C.Yesson. (in press). **Reefs and islands of the Chagos Archipelago, Indian Ocean: Why it is the world's largest no-take marine protected area.** Aquatic Conservation: Marine and Freshwater Research.

- Macdonald, A.H.H. 2010. **Reef coral population genetics and the design of marine protected areas in the western Indian Ocean.** Ph.D. thesis, University of KwaZulu-Natal. 123 pp.
 - Macdonald, A.H.H., Schleyer, M.H. & Lamb, J.M. (in press). ***Acropora austra* connectivity in the south western Indian Ocean assessed using nuclear intron sequence data.** Marine Biology.
 - Floros, C. 2010. **An assessment of fish communities on South Africa's coral reefs.** Ph.D. thesis, University of KwaZulu-Natal.
 - Grimmer, A. (submitted). **Accretion versus bioerosion on the Maputaland reefs in South Africa – the major processes.** M. Sc. Thesis, University of KwaZulu-Natal.
 - Hart, J.R. (submitted). **Coral recruitment on a high-latitude reef at Sodwana Bay, South Africa: Research methods and dynamics.** M. Sc. Thesis, University of KwaZulu-Natal.
- Please indicate upcoming coral reef-related meetings you will attend?
12th International Coral Reef Symposium (12 ICRS), 9-13 July 2012, Cairns, Australia