

Illuminating Hidden Biodiversity Hotspots: Supporting Deeper Reef Conservation In The Western Indian Ocean

Authors : Paris Stefanoudis¹, Sheena Talma², Nico Fassbender³, Denise Swanborn¹, Christine Nyangweso Ochieng⁵, Kevin Mearns⁶, John Komakoma⁷, Levy Otwoma⁸, Nsajigwa Mbije⁹, Kennedy Osuka; Melita Samoily; Nirmal Shah; Toufi Evan Trotsuk; Arthur Tuda; Francisco Zivane; Danie¹⁰, Lucy Woodall¹¹
¹University Of Oxford, UK,²Nekton, Seychelles,³Nekton, UK,⁴Kenya Wildlife Service, Nairobi, Kenya,⁵Department Of Environmental Sciences, University Of South Africa, Pretoria, South Africa,⁶Marine Parks And Reserves Unit, Dar Es Salaam, Tanzania,⁷Kenya Marine And Fisheries Research Institute, Mombasa, Kenya,⁸Sokoine University Of Agriculture, Morogoro, Tanzania,⁹Multiple (could Not Find Them Here Due To Limit Of 10 Co-authors),¹⁰University Of Oxford

E-mail Address: paris.stefanoudis@zoo.ox.ac.uk

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Background

Reefs built by mesophotic (30–150 m), rariphotic (150–300 m), and cold-water corals (> 300 m) provide many ecosystem services essential for a healthy ocean and human well-being. These deeper reefs remain poorly researched and largely unprotected. In the Western Indian Ocean (WIO) deeper reefs provide food and income to millions, hence, stewardship and sustainable management of their biodiversity will be key to ensure sustainable blue economic growth, food security and climate change resilience.

Method

Here, we identified existing biases and gaps in current conservation approaches focusing on deeper reefs in existing MPA networks across six WIO nations (Comoros, Kenya, Mozambique, Seychelles, South Africa and Tanzania). For that, we used a combination of online questionnaire surveys and online semi-structured interviews aimed at WIO marine professionals representing different stakeholder groups (e.g. researchers, policy makers, marine managers).

Results

Based on those findings, we developed a framework comprising practical recommendations and linked actions across three themes (Capacity, Information Collection, Information Sharing), for the successful integration of deeper reefs into WIO conservation initiatives.

Conclusion

We hope that this framework will provide practical guidance to all those involved with ocean stewardship throughout the WIO, including resource managers, policy makers, scientists, cultural practitioners and educators from government agencies, academic institutions, community-based organizations, non-governmental institutions, cultural groups, and the private sector.