Appendix

Template for Submission of Scientific Information

to Describe Ecologically or Biologically Significant Marine Areas

*Note: Please **DO NOT** embed tables, graphs, figures, photos, or other artwork within the text manuscript, but please send these as separate files. Captions for figures should be included at the end of the text file, however.*

Title/Name of the area: Agulhas slope and seamounts

Presented by (*names, affiliations, title, contact details)*

Kerry Sink, South African National Biodiversity Institute, k.sink@sanbi.org.za

Toufiek Samaai, Department of Environmental Affairs, t.samaai@environment.gov.za

Robin Leslie, Department of Agriculture, Forestry and Fisheries, rleslie@daff.gov.za

Colin Attwood, University of Cape Town, colin.attwood@uct.ac.za

Abstract (*in less than 150 words)*

The outer margin along the southern tip of the Agulhas Bank represents a dynamic offshore area with high pelagic and benthic habitat heterogeneity. The Agulhas and Southern Benguela ecoregions meet at this point and sporadic shelf edge upwelling enhances the productivity along the outer margin. The area is recognised as a spawning area for sardine, anchovy, horse mackerel and hake and this apex area of the Agulhas Bank is recognised as a critical area for retention of spawning products. Eddies in this area help recirculate water inshore and link important nursery areas with spawning habitat on the shelf edge. This area was identified as a priority area through a national plan to identify focus areas for offshore protection because it has relatively high habitat diversity and can meet multiple benthic and pelagic habitat conservation targets in a small area.

Introduction

This area includes the outer margin along the southern tip of the Agulhas Bank in South Africa and is a dynamic offshore area with high pelagic and benthic habitat heterogeneity. The area includes outer shelf, shelf edge, slope and seamount habitats and ranges between approximately 200 – 1800 m in depth. The Agulhas and Southern Benguela ecoregions meet at this point and sporadic shelf edge upwelling enhances the productivity along the outer margin. The area is recognised as a spawning area for sardine, anchovy, horse mackerel and hake and this apex area of the Agulhas Bank is recognised as a critical area for retention of spawning products. Eddies in this area help recirculate water inshore and link important nursery areas with spawning habitat on the shelf edge. This area was identified as a priority area through a national plan to identify focus areas for offshore protection (Sink et al. 2011) because it has relatively high habitat diversity and can meet multiple benthic and pelagic habitat conservation targets in a small area.

Location: The apex area of the Agulhas bank at the southern tip of the continental shelf edge off southern Africa bounded by approximately 35°S to 38°S and 21° to 23°E. The area is within the mainland EEZ of South Africa and is therefore within national jurisdiction. This area includes Shackleton and Mallory Seamounts and was formerly referred to as "Southwest Indian Seamounts" in the Offshore focus areas identified by Sink et al. 2011.

Feature description of the proposed area

The area includes benthic and pelagic features. Sink et al. 2011 provide details but note that the area is referred to as "Southwest Indian Seamounts" in that report.

Feature condition and future outlook of the proposed area

The shelf edge and seamounts have not been sampled although a research funding proposal to achieve this is under development (contact K. Sink or T. Samaai).

Assessment of the area against CBD EBSA Criteria

(Discuss the area in relation to each of the CBD criteria and relate the best available science. Note that a candidate EBSA may qualify on the basis of one or more of the criteria, and that the boundaries of the EBSA need not be defined with exact precision. And modeling may be used to estimate the presence of EBSA attributes. Please note where there are significant information gaps)

CBD EBSA Criteria (Annex I to decision IX/20)	**Description** (Annex I to decision IX/20)	**Ranking of criterion relevance** (please mark one column with an X)			
		Don't Know	**Low**	**Some**	**High**
Uniqueness or rarity	Area contains either (i) unique ("the only one of its kind"), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features.			**x**	
This area includes 2 of 4 known seamounts within the Davie seamount cluster (Sink *et al.* 2011, 2012) (* need to check the presence of rare shelf edge gravels)					
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive.				**x**
This area is recognised as a spawning area for small pelagic fish (sardine, anchovy, horse mackerel) and hake (Hutchings *et al.* 2002, Sink *et al.* 2011). This apex area of the Agulhas Bank is recognised as a critical area for retention of spawning products. Eddies in this area help re-circulate water inshore and link important nursery areas with spawning habitat on the shelf edge. [might be important for turtles – need to check BirdLife and turtle data.]					
Importance for threatened,	Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of			**x**	

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		Don't Know	Low	Some	High
endangered or declining species and/or habitats	such species.				
Threatened habitat types in this area include Agulhas hard outer shelf and shelf edge, Agulhas muddy outer shelf and Agulhas sandy shelf edge (Sink et al. 2012.). This area reflected as a key area for management of shark, seabird and turtle bycatch in South Africa's large pelagic longline fishery. One of the pelagic habitat types characterised by elevated productivity and frequent fronts (Lutjeharms et al. 2000, Lagabrielle 2009) due to shelf edge upwelling is also considered threatened (Sink *et al.* 2012) by intensive pelagic fishing and demersal fisheries that target hake (which feed in the pelagic environment).					
Vulnerability, fragility, sensitivity, or slow recovery	Areas that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.				**x**
This area includes hard shelf edge and seamounts (for hard grounds some of which are untrawled, all seamounts untrawled). These are likely to support fragile long lived biota. Video images of the shelf edge show cold water corals, gorgonians and large sponges (Sink *et al.* 2011). Vulnerable biota that use this area include long lived seabirds, turtles and sharks and the area has been identified by analyses aimed at identifying priority areas for reducing bycatch in the large pelagic fishery (Sink *et al.* 2011.)					
Biological productivity	Area containing species, populations or communities with comparatively higher natural biological productivity.				**x**
Higher productivity related to the eastern limit of the Benguela upwelling on the outer shelf (Pelagic habitat type Ab3) and very frequent SST and chlorophyll fronts (Lutjeharms *et al.* 2000, Lagabrielle 2009, Sink *et al.* 2011, 2012), Cool productive water is advected onto the shelf in this sheer zone through Agulhas current driven upwelling cells (Lutjeharms *et al.* 2000).					
Biological diversity	Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.				**x**
This area has high pelagic and benthic habitat heterogeneity. Four pelagic habitat types (Ab3, Bc1,Cb3 and Cb4) occur in this dynamic area and ten benthic habitats occur here leading to the selection of this area in a national systematic conservation plan (Sink *et al.* 2011, 2012)					
Naturalness	Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation.				*x*
Rough grounds and strong currents already offer some protection from pressures to this area. (Sink *et al.* 2011, 2012). Relatively lower levels of disturbance occur in this area based on fishing data. Most of the hard areas fall outside of the hake trawl footprint indicating an opportunity to protect intact hard ground					

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		Don't Know	**Low**	**Some**	**High**
habitats.					

Sharing experiences and information applying other criteria (Optional)

Other Criteria	**Description**	**Ranking of criterion relevance** (please mark one column with an X)			
		Don't Know	**Low**	**Some**	**High**
Add relevant criteria					
Explanation for ranking					

References

Hutchings L, Beckley LE, Griffiths MH, Roberts MJ, Sundby S, van der Lingen C. 2002. Spawning on the edge: spawning grounds and nursery areas around the southern African coastline. *Marine and Freshwater Research* 53: 307-318.

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Lutjeharms JRE, Cooper J and Roberts M 2000. Upwelling at the inshore edge of the Agulhas Current. Continental Shelf Research, 20(7): 737 – 761.

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Sink K, Holness S, Harris L, Majiedt P, Atkinson L, Robinson T, Kirkman S, Hutchings L, Leslie R, Lamberth S, Kerwath S, von der Heyden S, Lombard A, Attwood C, Branch G, Fairweather T, Taljaard S, Weerts S, Cowley P, Awad A, Halpern B, Grantham H, Wolf T. 2012. National Biodiversity Assessment 2011: Technical Report. Volume 4: Marine and Coastal Component. South African National Biodiversity Institute, Pretoria.

Maps and Figures

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k.sink@sanbi.org.za