

SC-03-06.3.2 (11)

3<sup>rd</sup> Meeting of the Southern Indian Ocean Fisheries Agreement (SIOFA) Scientific  
Committee

20-24 March 2017, Saint Denis, La Reunion

Proposal for designation of the 'RUSKY KNOLL' fishery closure for the  
purpose of the protection of its bioregional representativeness

*Relates to agenda item: 6.3.2*

Working paper  Info paper

## Delegation of Australia

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### Abstract

The purpose of this paper is to propose that the Rusky Knoll feature meets the following criteria under the SIOFA protocol for protected areas designation (see Annex H of SC2 report):

2b. Bioregional representation – The area is known to contain unusual, rare or distinct habitats or ecosystems that bottom fishing operations will disturb.

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## Recommendations *(working papers only)*

It is recommended that the SC:

- **Note** that the proposed Rusky Knoll feature meets following criteria in the protocol: 2b. Bioregional representation – The area is known to contain unusual, rare or distinct habitats or ecosystems that bottom fishing operations will disturb.
  - **Recall** Article 4(c) of the Agreement which obliges Contracting Parties to apply the precautionary approach in accordance with the FAO Code of Conduct for Responsible Fisheries and the 1995 UN Fish Stocks Agreement, whereby the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures.
  - **Recommend** to the Meeting of the Parties that, in line with the precautionary approach, the Rusky Knoll feature is designated as an interim fishery closure for the purpose of the protection of its bioregional representativeness, with a prohibition on all fishing to be reviewed after 2 to 5 years.
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**Proposal for designation of the 'RUSKY KNOLL' fishery closure for the purpose of the protection of its bioregional representativeness**

Australia

**Acknowledgement**

Australia have prepared this proposal in consultation with the Cook Islands, SIODFA, Ms Lynda Goldsworthy AM, and an informal steering committee of SIOFA SC members who met to advise Australia on its review of the SIOFA Standard protocol for future protected areas designation.

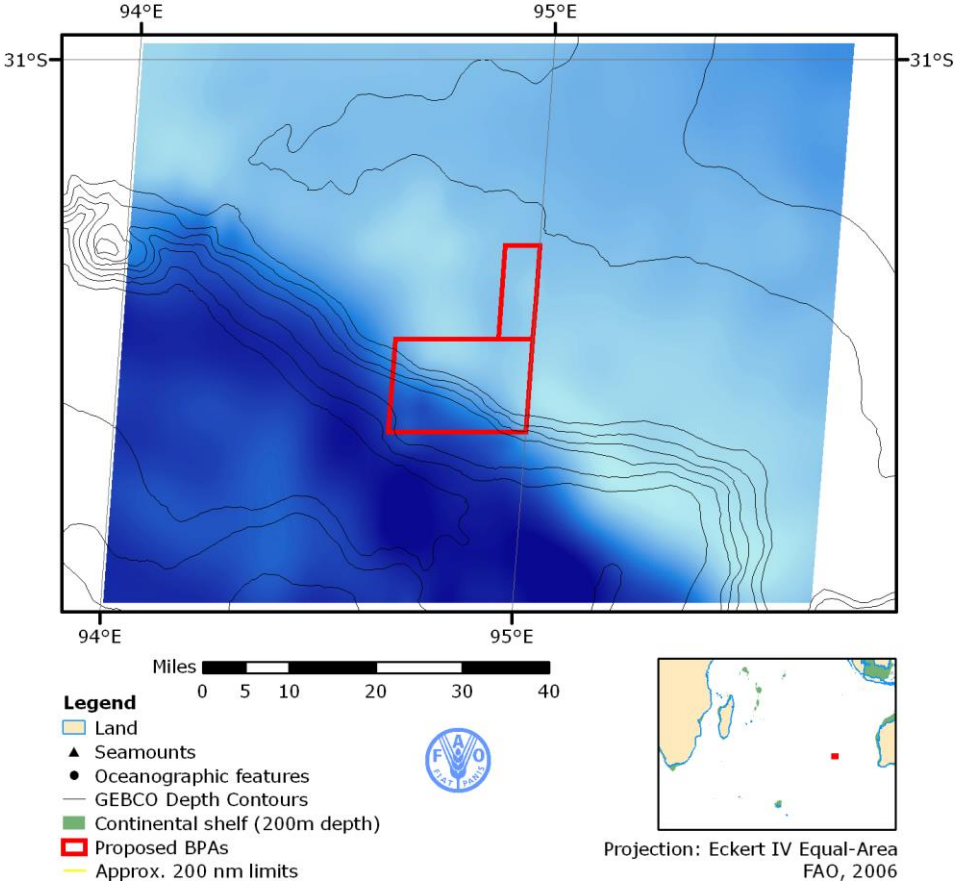
**Purpose and rationale**

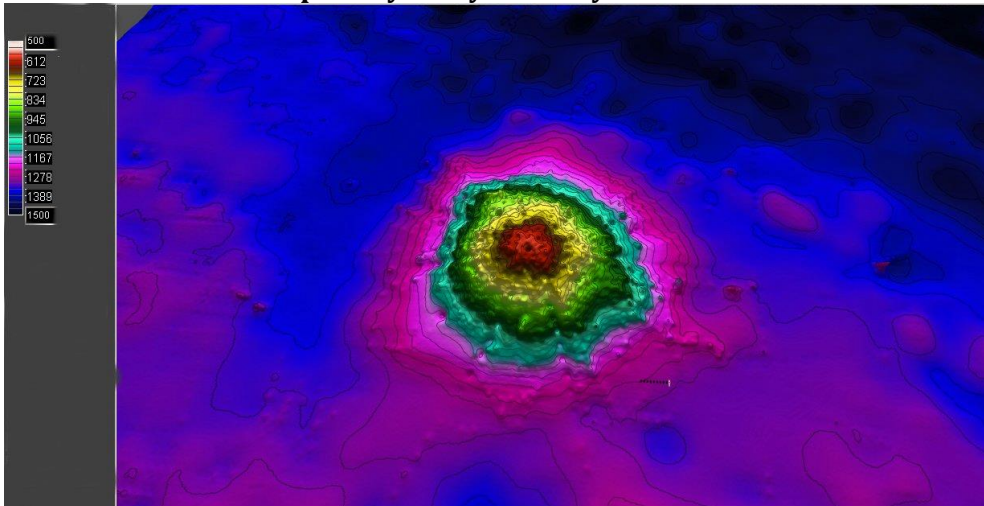
The purpose of this paper is to propose that the Rusky Knoll feature meets the following criteria under the SIOFA protocol for protected areas designation (see Annex H of SC2 report):

- 2b. Bioregional representation – The area is known to contain unusual, rare or distinct habitats or ecosystems that bottom fishing operations will disturb.

**Background**

At the 4<sup>th</sup> Meeting of the Parties in 2017, Australia signalled its intention to review the SIODFA 'benthic protected areas' against the protocol for protected area designation. The proposal follows a template suggested at the intersessional meeting of the informal SIOFA steering committee in November 2017.

<b>Name</b>	Rusky Knoll														
<b>Proponent/s</b>	Australia, Cook Islands (SIOFA Contracting Parties) <i>Prepared in collaboration with the Southern Indian Ocean Deepsea Fishers Association (SIOFA Observer)</i>														
<b>Geographic description</b>	<p><b>Coordinates:</b> Latitude 31° 20' S, 94° 55' E and 31° 30' S and 95° 00' E.  <b>Area:</b> 147 km<sup>2</sup>  <b>Area by depth range:</b></p> <table border="1" data-bbox="464 517 1329 674"> <thead> <tr> <th colspan="4">Depth range (m)</th> <th rowspan="2">Total area (Km<sup>2</sup>)</th> </tr> <tr> <th>300-700</th> <th>700-1000</th> <th>1000-1500</th> <th>&gt; 1500</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>143</td> <td>0</td> <td>147</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Figure 1</b>  <b>General bathymetry of the Rusky Sea floor feature</b></p>  <p><b>Legend</b></p> <ul style="list-style-type: none"> <li>Land</li> <li>▲ Seamounts</li> <li>● Oceanographic features</li> <li>— GEBCO Depth Contours</li> <li>■ Continental shelf (200m depth)</li> <li>□ Proposed BPAs</li> <li>— Approx. 200 nm limits</li> </ul> <p style="text-align: right;">Projection: Eckert IV Equal-Area FAO, 2006</p>	Depth range (m)				Total area (Km <sup>2</sup> )	300-700	700-1000	1000-1500	> 1500	1	2	143	0	147
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	<p style="text-align: center;"><b>Figure 2</b> <b>Swathe Map Bathymetry of Rusky seafloor feature</b></p> 
<p><b>Objectives</b></p>	<p>The objective for this area is the protection of its bioregional representativeness.</p>
<p><b>Criteria that the protected area meets</b></p>	<p>The proposed area meets the following criteria: 2b. Bioregional representation – The area is known to contain unusual, rare or distinct habitats or ecosystems that bottom fishing operations will disturb.</p> <p><u>Feature description</u> Rusky Knoll rises in the middle part of Broken Ridge at 95° E, rising from the base seafloor of the ridge at 1200 m, to a depth of 580 m and is the only known knoll that occurs on the central ridge (CBD 2015). The knoll is unique, being the only such structure that does not arise on the edge of the ridge, as do several other knolls that exist on the ridge (CBD 2015).</p> <p>The location of the Rusky Knoll seafloor feature is to the northeast of the area that has been the subject of exploratory fishing (SIODFA 2016). CBD (2015) notes that the entire Broken Ridge Plateau was habitat mapped by the University of Hawaii Mapping Group under contract to Sealord Group New Zealand, using MR1 sidescan sonar in 1997. Most of the ridge is continuous and overlain with sand and sediments, but local areas of rocky, coral garden and knoll/bank habitat exist. Several knolls were identified, with Rusky as the most prominent. It is close to the area surveyed by Russian research vessels in the 1970s (Kotlyar 1980), where orange roughy (<i>Hoplostethus atlanticus</i>) were identified. Orange roughy in small numbers have also been caught on Rusky (CBD 2015).</p> <p><u>Bioregional and biodiversity representation</u> CBD (2015) note that small alfonsino (<i>Beryx splendens</i>) and amourhead (<i>Pseudopentaceros</i> spp) are found on the knoll. This is the only known area containing black coral on Broken Ridge (FAO 2006), which are slow growing and vulnerable to fishing impact (Rogers et al 2008; FAO 2009). The area has been declared a Benthic Protected Area by SIODFA (CDB 2015; SIODFA 2016).</p> <p>SIODFA (2016) note that the area could be expected to have similar benthos to the nearby Gulden Draak seafloor feature, both of which are in the Broken</p>

	<p>Ridge area. This north-easterly location could result in its benthos being atypical of that found to the south and west (SIODFA 2016).</p> <p>Rusky Knoll is listed as an Ecologically or Biologically Significant Area (EBSA) by the Convention on Biological Diversity was assessed as meeting the following criteria:</p> <ul style="list-style-type: none"> <li>• Uniqueness or rarity (High ranking).</li> <li>• Special importance for the life-history stages of species (No information)</li> <li>• Importance for threatened, endangered or declining species and/or habitats (No information)</li> <li>• Vulnerability, fragility, sensitivity, or slow recovery (High ranking)</li> <li>• Biological productivity (No information)</li> <li>• Biological diversity (No information)</li> <li>• Naturalness (Low ranking).</li> </ul> <p><u>Fishing history</u>  CBD report that some bottom-trawling has occurred on the knoll, and black coral (Cnidaria) has been identified from catches made. SIODFA (2016) note that fishing on the Rusky Knoll is restricted to one, possibly two tracks on the feature in the depth range 400 – 500 m and consequently, most of the feature should not have been affected by demersal trawling. It is reported that there has been past fishing by Soviet/Ukrainian vessels across the flats about the Broken Ridge area (Romanov 2013).</p> <p><u>Other information to support designation</u>  Industry members from Australia, the Cook Islands and Japan support the designation of this feature. No trawling by SIODFA vessels is permitted.</p>
<b>Social, cultural and economic interests</b>	Historical fishing data may assist with understanding any social, cultural and/or economic costs associated with designating this as a protected area. It is possible that designation could have adverse social, cultural or economic impacts in terms of forgone opportunity for fishing.
<b>Proposed activities to be restricted or prohibited</b>	Fishing within this proposed area with all gears could detrimentally impact the representativeness of this area. The MoP should consider closure to all fishing.
<b>Review periods</b>	The scientific evidence to support a closure is uncertain and it is proposed that this fishery closure be regarded as an interim measure in accordance with the requirements of the precautionary approach. It is recommended that this designation be reviewed after 2 and not more than 5 years, or sooner if new information becomes available that enhances or degrades the justification for its protection.
<b>Outline of monitoring and/or research needed</b>	A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.
<b>Compliance</b>	Compliance-related issues are outside of the remit of the SIOFA SC.



## References

CBD 2015. Ecologically or Biologically Significant Areas (EBSAs): Rusky Knoll, available at <https://chm.cbd.int/database/record?documentID=204020>

FAO 2006 Management of Demersal Fisheries Resources of the Southern Indian Ocean. FAO Fisheries Circular No. 1020 FAO Rome 2006.

FAO (2009). Annex F of the Report of the Technical Consultation on International Guidelines for the Management of Deepsea Fisheries in the High Seas. Rome, 4–8 February and 25-29 August 2008.

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Rogers A.D., Clark M.R, Hall-Spencer K.M and Gjerde K.M. 2008. The Science behind the Guidelines: A Scientific Guide to the FAO Draft International Guidelines (December 2007) For the Management of Deep-Sea Fisheries in the High Seas and Examples of How the Guidelines May Be Practically Implemented. IUCN, Switzerland, 2008.

Romanov, E.V., 2003. Summary and review of Soviet and Ukrainian scientific and commercial fishing operations on the deepwater ridges of the southern Indian Ocean. FAO Fisheries Circular No. 991. Rome, Italy: FAO.

SIODFA 2016, Southern Indian Ocean Deepwater Fisheries Association (SIODFA), Benthic Protected Areas in the Southern Indian Ocean. SIODFA Technical Report XVII 16/01. 40 pp