

SC-03-06.3.2 (12)

3rd Meeting of the Southern Indian Ocean Fisheries Agreement (SIOFA) Scientific
Committee
20-24 March 2017, Saint Denis, La Reunion

Proposal for designation of the 'WALTERS SHOAL' fishery closure for
the purpose of the protection of its biodiversity and bioregional
representativeness and its special scientific interest

Relates to agenda item: 6.3.2

Working paper Info paper

Delegations of Australia and Cook Islands

Abstract

The purpose of this paper is to propose that the Walters Shoal 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.

4b. Biodiversity representation – The area is known to contain high diversity of ecosystems, habitats, communities or species, or has higher genetic diversity.

5a. Scientific interest – The area, excluding existing fishing grounds, has a history of scientific research associated with understanding ecosystem and biodiversity processes in the SIOFA region and fishing activities would compromise current and future research.

Recommendations *(working papers only)*

It is recommended that the SC:

- **Note** that the proposed Walters Shoal feature meets the 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; 4b. Biodiversity representation – The area is known to contain high diversity of ecosystems, habitats, communities or species, or has higher genetic diversity; and 5a. Scientific interest – The area, excluding existing fishing grounds, has a history of scientific research associated with understanding ecosystem and biodiversity processes in the SIOFA region and fishing activities would compromise current and future research.
 - **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 and because it is an area of special scientific interest, the Walters Shoal feature be designated as a fishery closure for the purpose of the protection of its biodiversity and bioregional representativeness, with a prohibition on all fishing to be reviewed after at least 10 years
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Proposal for designation of the 'WALTERS SHOAL' fishery closure for the purpose of the protection of its biodiversity and bioregional representativeness and its special scientific interest

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.

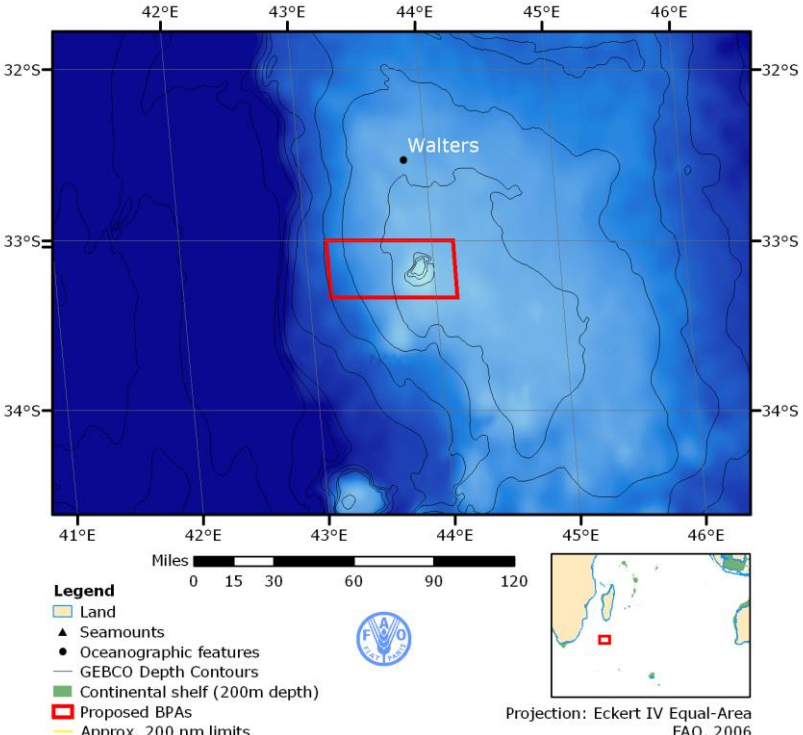
Purpose and rationale

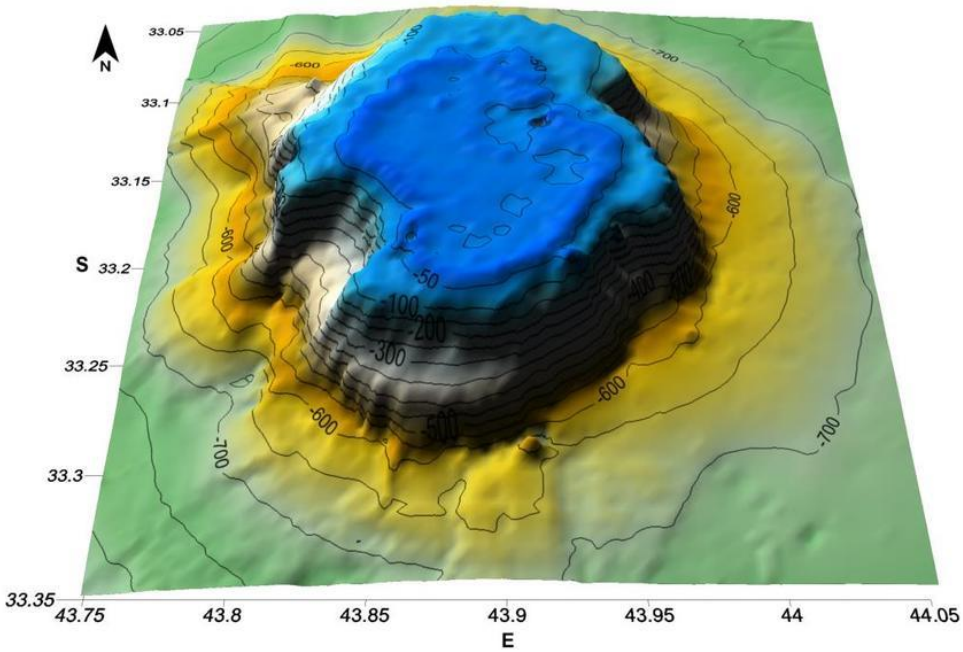
The purpose of this paper is to propose that the Walters Shoal feature meets the following criteria under the SIOFA Protocol for protected areas designation (see Annex H of SC2 report):

- 2b. Bioregional representation – The area is known to contain unusual, rare or distinct habitats or ecosystems that bottom fishing operations will disturb.
- 4b. Biodiversity representation – The area is known to contain high diversity of ecosystems, habitats, communities or species, or has higher genetic diversity.
- 5a. Scientific interest – The area, excluding existing fishing grounds, has a history of scientific research associated with understanding ecosystem and biodiversity processes in the SIOFA region and fishing activities would compromise current and future research.

Background

At the 4th 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.

Name	Walters Shoal
Proponent/s	Australia, Cook Islands (SIOFA Contracting Parties) <i>Prepared in collaboration with the Southern Indian Ocean Deepsea Fishers Association (SIOFA Observer)</i>
Geographic description	<p>Total area: 3,443 km² Coordinates: 33° 00'N-43° 10'W : 33° 20'S -44°10'E Bathymetry: 01-100 m 88 km²; 100-300 m 104 km²; 300-700 m 557 km²; 700-1000 m 1,980 km²; 1000-1500 m 670 km²; >1500 m 42 km²</p> <p>Figure 1 Map showing location and bathymetry of the Walters Shoal</p>  <p>The map displays bathymetric contours in shades of blue, with a red rectangle highlighting the Walters Shoal area. The map is bounded by 41°E to 46°E longitude and 32°S to 34°S latitude. A scale bar indicates distances up to 120 miles. The legend defines symbols for Land, Seamounts, Oceanographic features, GEBCO Depth Contours, Continental shelf (200m depth), Proposed BPAs, and Approx. 200 nm limits. An inset map shows the location of Walters Shoal in the Southern Indian Ocean. The map is projected using Eckert IV Equal-Area projection, dated 2006.</p>

	<p style="text-align: center;">Figure 2 Bathymetric map</p>  <p>Source: Payne 2015</p>
<p>Objectives</p>	<p>The objectives for designation of this proposed protected area are:</p> <ul style="list-style-type: none"> • the protection of its bioregional representativeness; • the protection of biodiversity; and • protection of an area of special scientific interest.
<p>Criteria that the protected area meets</p>	<p>This area meets the following criteria:</p> <ul style="list-style-type: none"> • <u>2b. Bioregional representation</u> – The area is known to contain unusual, rare or distinct habitats or ecosystems that bottom fishing operations will disturb. • <u>4b. Biodiversity representation</u> – The area is known to contain high diversity of ecosystems, habitats, communities or species, or has higher genetic diversity. • <u>5. Scientific interest</u> – The area, excluding existing fishing grounds, has a history of scientific research associated with understanding ecosystem and biodiversity processes in the SIOFA region and fishing activities would compromise current and future research. <p><u>Feature description</u></p> <p>This feature is located near the southern end of the Madagascar Ridge and consists of a spreading plateau with canyons, seamounts and ridges with depths rising from 4500 m to within 15 m of the surface (Rogers 2012).</p> <p><u>Biodiversity and bioregional representation</u></p> <p>Walters Shoal was sampled in 1964 during the International Ocean Expedition by the R/V <i>Anton Bruun</i>, which led to the discovery of several invertebrates (Payne 2015). Clark (1972) described a new endemic sub-species of crinoid, <i>Comanthus wahlbergi tenuibrachia</i> (currently <i>Comanthus wahlbergi</i>). Kensley (1975) described a new endemic isopod, <i>Jaeropsis waltervadi</i>. Kensley (1969, 1981) described an endemic species of shrimp,</p>

	<p><i>Alpheus waltervadi</i>, and the presence of four other decapods. Various corals were collected in 1976 using the French vessel <i>Marion Dufresne</i> (Zibrowius 1982). Many fishery resources (and some crustaceans) were also found by French and Soviet vessels (Collette and Parin 1991; Romanov 2003; Rogers et al. 2009). Collette and Parin (1991) describe the discovery of fishery resources in more detail. Nesis (1994) describes cephalopod species found in on, over or around the seamount. A number of endemic fish species were discovered and described by Poss and Collette (1990), Collette et al. (1991) and Iwamoto et al. (2004). Early work on the distribution patters of Walters Shoal benthic and water-column fauna were undertaken (e.g. Parin et al. 1993 and Detonova and Sagaidachny (1994) but these are reportedly inaccessible (Payne 2015).</p> <p>More recently, a commercial fishing trip on board the Spanish vessel <i>Iannis</i> led to the discovery of a new species of lobster, <i>Palinurus barbarae</i>, as described by Groeneveld et al (2006). The research vessel <i>Dr Fridtjof Nansen</i> undertook a research cruise in 2009 aimed at understanding pelagic biology and physical oceanography of the region, and included a sampling point near the Walters Shoal seamount (Rogers et al. 2009).</p> <p>Le Corre et al. (2012) note that Walters Shoal is an important foraging ground for the red-tailed tropicbird and Barau's petrel.</p> <p>It provides a habitat for a variety of whale species, including sperm whales, humpback whales and short-finned whales (Collette and Parin 1991; Rogers et al. 2009; Shotton 2006).</p> <p><u>Scientific interest</u></p> <p>There is a long history of scientific research associated with the Walters Shoal feature (see Payne et al. 2015 for a comprehensive review). More recently, the IUCN undertook a research voyage in 2016 on the shallows of the Madagascar Ridge MAD-Ridge 2016 Expedition, South-West Indian Ocean to analyse the hydrodynamics, hydrology and trophic levels (first and intermediate), and in April 2017 undertook a 36 day research trip to Walters Shoal to obtain information on the benthic component and "water column", and the pelagic and avian fauna. The voyage included video recordings (see https://www.iucn.org/theme/marine-and-polar/our-work/international-ocean-governance/conservation-seamounts-ecosystems/ffem-swio-project/walters-shoal-expedition for links to this project).</p> <p><u>Fishing history</u></p> <p>The feature is known to have been trawled on the western side in the past and bottom fished in the shallow areas. Lobster fishing has also been reported in shallow areas of sandy bottom (SIODFA 2016).</p> <p>Romanov (2003) provides a summary and review of Russian and Ukrainian scientific and commercial fishing operations on the deepwater ridges of the southern Indian Ocean.</p>
<p>Social, cultural and</p>	<p>Some historical fishing data are available (e.g. Romanov 2003), which may assist with understanding any social, cultural and/or economic costs associated with designating this as a protected area. The area is the location</p>

economic interests	of a productive fishery. It is possible that designation could have adverse social, cultural or economic impacts in terms of forgone opportunity for fishing.
Proposed activities to be restricted or prohibited	Fishing within this proposed area with all gears could detrimentally impact the biodiversity and scientific interest of this area. The MoP should consider closure to all fishing.
Review periods	The proposal documents and provides information to support a closure. It is recommended that this designation be reviewed at least every 10 years, or more frequently if new information becomes available that enhances or degrades the justification for its protection.
Outline of monitoring and/or research needed	A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.
Compliance	Compliance-related issues are outside of the remit of the SIOFA SC.

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