КОМИССИЯ ПО СОХРАНЕНИЮ МОРСКИХ ЖИВЫХ РЕСУРСОВ АНТАРКТИКИ



COMMISSION POUR LA CONSERVATION DE LA FAUNE ET LA FLORE MARINES **DE L'ANTARCTIQUE**

COMISIÓN PARA LA CONSERVACIÓN DE LOS RECURSOS VIVOS MARINOS **ANTÁRTICOS**

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Ross Sea Region Marine Protected Area: Explanation of objectives supporting component areas

Delegations of New Zealand and the USA

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30 October 2013

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Ross Sea Region Marine Protected Area: Explanation of objectives supporting component areas

In response to questions from some members, the following paper provides an explanation of specific objectives supporting the various component areas of the proposed Ross Sea Region Marine Protected Area (CCAMLR-XXXII/27).

Ross Sea Region Marine Protected Area: Explanation of objectives supporting component areas

The Ross Sea Region Marine Protected Area (MPA) comprises two zones: a General Protection Zone and a Special Research Zone. The boundaries of the MPA were determined by the objectives for the MPA and the spatial extent of the mapped priority features or ecosystem processes associated with each objective. Collectively, the various components of the MPA contribute to the achievement of 10 objectives, each with one or more associated priority features. A paper summarising the science supporting the MPA proposal was submitted to the July 2013 intersessional meeting of the Scientific Committee (SC) in Bremerhaven¹.

The MPA objectives fit into three main categories: representativeness, mitigating ecosystem threats, and scientific reference areas. The category of MPA objective has implications for the type and level of protection that is required within MPAs, and for the design of research and monitoring to evaluate MPA effectiveness. A full analysis of potential threats from fishing to the objectives of a RSRMPA was also submitted to the Scientific Committee meeting in July 2013². Both "representativeness "and "mitigating ecosystem threats" can also be termed "protection objectives". A table showing proportion of mapped objectives contained within the boundaries of the MPA is attached.

General Protection Zone

The General Protection Zone is designed to provide protection to the full range of bioregions represented in the Ross Sea region and to support scientific research objectives including those relating to assessing the ecosystem effects of fishing distinct from climate change.

This addresses specific objectives (iv) a and b, (iii) and (ii).

Continental Shelf

The Ross Sea continental shelf includes important foraging areas for top predator populations, habitats important to native mammals, birds, fishes and invertebrates, known rare or vulnerable benthic habitats, important life cycle areas for Antarctic toothfish, areas important for ecosystem productivity and functioning of the Ross Sea shelf pelagic ecosystem, krill and silverfish distributions, and other coastal or localised areas of particular ecological importance. The area will also support continued research and monitoring of subadult toothfish and other long-term data series.

This area includes specific objectives (vii) a - d, (i), (x) c and e, (ix) a and b, (v) a and d, (vi) a - c, (viii) a - e, and (iii).

Eastern Ross Sea

The eastern Ross Sea includes habitats and features, such as persistent pack ice, important to native mammals, birds, fishes and invertebrates, including essential moulting habitat for large numbers of Emperor penguins and crabeater seals which feed on Antarctic krill during the late summer moulting period. This area also includes rare or vulnerable benthic habitats associated with the slope, adult toothfish feeding habitat and foraging areas for Weddell seal and killer whales.

¹ http://www.ccamlr.org/en/sc-camlr-im-i/08

² http://www.ccamlr.org/en/sc-camlr-im-i/09

This area includes specific objectives (i), (v) e, (x) d, (ix) c, and (vii) c and d.

Balleny Islands and Proximity

The area around the Balleny Islands encompasses multiple protection objectives, including protection of rare or vulnerable benthic habitats and incorporates objectives similar to those mapped separately on the Ross Sea shelf, for example the presumed foraging area of colony-based predators and island generated temporary polynyas which affect biological productivity. The area also includes a range of seasonal ice characteristics, supports key prey species and includes habitats that are important to native mammals, birds, fishes and invertebrates.

This area includes specific objectives (x) a, (vii) a – d, (viii) b, (v) c, (vi) a and c, and (i).

Northern Region & Scott Seamount

This area provides protection to multiple habitats, including ridges and benthic habitats associated with seamounts, not represented elsewhere in the MPA. It also protects large-scale ecosystem processes associated with the polar front. In addition, Scott Seamount was specifically identified as supporting rare or vulnerable benthic habitats.

This area includes specific objectives (iv) a and b, (v) b, and (x) f.

Special Research Zone

The Special Research Zone presents an opportunity to advance research to increase scientific understanding about the ecosystem effects of fishing and climate change. Limiting fishing in the SRZ enables comparisons between lightly fished vs. more heavily fished locations on Mawson and Iselin Bank. Of key importance in the SRZ is maintaining the continuity and integrity of the toothfish tagging program. Pelagic protection in this zone also serves to protect important areas for key prey species and habitats important to native mammals, birds, fishes and invertebrates.

This area includes specific objectives (iii), (ii), (vi) a - c, and (i).

Table: Protection levels achieved for mapped objectives

D. 18 pelagic bioregions [pelagic bioregionalisation in Figure 2 of WG-EMM-10/30] Minimum 1%	Priority Area	Descr	CCAMLR XXXII/27				
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f. Scott Seamount 100% Cost metric Description of fishing effort displacement metric % displacemen							
Cotab Tatal tana of tasthfish cotab 1000 2012	Cost metric	Description	% displacement				
Catch Total tons of toothfish catch, 1998-2013 23%	Catch	atch Total tons of toothfish catch, 1998-2013					

Objectives marked by * are benthic or potentially affected by fishing for toothfish, the SRZ therefore does not contribute toward achievement of their protection targets

¹ See <u>WS-MPA-11/25</u> for mapped boundaries of priority features and areas ¹ Objectives 1-3 are not listed as they are not suitable for spatial mapping. A full list of objectives can be found in ANNEX 91-XX/B of SC-CAMLR-XXXII/27