

8th MEETING OF THE SCIENTIFIC COMMITTEE

New Zealand, 3 to 8 October 2020

SC8-DW15

Cook Islands checklist for exploratory fisheries proposal

Cook Islands



Checklist for Exploratory Fisheries Proposals

CMM 13-2020 and CMM 14b-2020

Scientific Committee Considerations Fisheries Operation Plans

8. The Scientific Committee shall provide recommendations and advice to the Commission on each Fisheries Operation Plan on the following matters, as appropriate:

Fisheries Operation Plan Considerations	Rationale	Assessment
<p><i>a) management strategies or plans for fishery resources;</i></p> <p>[Note that SC has previously interpreted this as to mean as having a clear objective for the fishery]</p>	<p>Revision of the Cook Islands Fisheries Operations Plan (FOP), has assessed the effectiveness of existing mitigation measures, to ensure that the bottom pot fishery is developed through a precautionary and gradual process, in accordance with the best available scientific information.</p> <p>In addition, the Cook Islands have set a CPUE limit on Kopernik seamount and acted upon that in trip 4 by reduction the fishing effort there. Mesh size limits to are also being explored to reduce the catch of female lobsters.</p>	Yes
<p><i>b) reference points, including precautionary reference points as described in Annex II of the 1995 Agreement;</i></p>	<ul style="list-style-type: none"> • An annual global TAC of 300 tonnes per year. • TAE of 80 fishing days is permitted per trip, setting and hauling no more than five lines of 100 traps per day. • Limit of 60 fishing days on Kopernik. • CPUE Limit reference point. • Feature and species specific TAC/TAE recommendations made on the FOP. 	Yes
<p><i>c) an appropriate precautionary catch limit;</i></p>	<p>(SC8-DW03):Cook Islands 2020 Kopernik Seamount lobster biomass estimation Feature specific TAC.</p> <p>Feature and species-specific TAC/TAE recommendations made in the FOP.</p>	Yes
<p><i>d) the cumulative impacts of all fishing activity in the area of the exploratory fishery;</i></p>	<p>No other fishing on crustaceans within the designated area. The Cook Islands analysis on catch to date reviews the cumulative impact of fishing on Kopernik Seamount where the bulk of the catch to date has come from (SC8-DW03).</p>	Yes
<p><i>e) the impact of the proposed fishing on the marine ecosystem;</i></p>	<p>(SC8-DW04): Cook Islands VME and benthic footprint from the Cook Islands Exploratory lobster and crab trap fishery in the SPRFMO area. This paper estimated the impacts on the VMEs and identified a high encounter area that is proposed to avoid in future.</p>	Yes
<p><i>f) the sufficiency of information available to inform the level of precaution required and the degree of certainty with which the Scientific Committee's advice is provided;</i></p>	<p>Refer to SC7-DW02; SC8-DW02, SC8-DW-03, SC8-DW-04. These papers collectively show that the amount of information derived from, and available for informing the management approach of this fishery is growing. The</p>	Yes

	management to date has been responsive and directed at a considered approach to developing this fishery.	
<i>g) the degree to which the approach outlined in the Fisheries Operation Plan is likely to ensure the exploratory fishery is developed consistently with its nature as an exploratory fishery, and consistently with the objectives of Article 2 of the Convention¹; and</i>	Refer to SC8-DW02, SC8- DW-03, SC8-DW-04. This work has shown that the testing of gear as well as running experimental sets in trips 3 and 4 is consistent with an exploratory approach. In addition the FOP for 2020 proposes testing additional trap designs and there has been an increased effort to explore the catch of crabs and other crustaceans. Moreover, addition seamounts have been explored in an attempt to assess the extent of the resources in the area.	<u>Yes</u>
<i>h) in respect of a Fisheries Operation Plan that proposes any bottom fishing activity, advice and recommendations in accordance with paragraph 20 (b) of CMM 03-2020 (Bottom Fishing)².</i>	Refer to SC8-DW02, DW-03, DW-04. While the proposed management strategies are still under development of this fishery to avoid adverse impacts the FOP notes that the management authority has the ability to intervene in this fishery should the need arise to restrict catch on the target species.	Yes

Data Collection Plans

9. When considering a Fisheries Operation Plan [...] the Scientific Committee shall develop a Data Collection Plan in respect of that exploratory fishery which should include research requirements, as appropriate. The Data Collection Plan shall identify and describe the data needed and any operational research actions necessary to obtain data from the exploratory fishery to enable an assessment of the stock, the feasibility of establishing a fishery and the impact of fishing activity on non-target, associated or dependent species and the marine ecosystem in which the fishery occurs. The Scientific Committee shall review and update the Data Collection Plan for each exploratory fishery annually as appropriate.

10. The Data Collection Plan shall require, as appropriate:

Data Collection Plan considerations	Rationale	Assessment
<i>a) a description of the catch, effort and related biological, ecological and environmental data required to undertake the evaluations described in paragraph 24;</i>	Refer to SC8-DW02, DW-03, DW-04, the catch and effort data are routinely collected through logsheets and both fishery and biological data are collected by two observers. This dataset is stored in an Access database.	Yes
<i>b) the dates by which the data must be provided to the Commission;</i>	Provided to the secretariat under CMM 14b-2020, CMM 02-2020, CMM 13-2020.	Yes

¹ The objective of this Convention is, through the application of the precautionary approach and an ecosystem approach to fisheries management, to ensure the long-term conservation and sustainable use of fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources occur.

² The Scientific Committee shall undertake a review of the proposed assessment and provide advice to the Commission on:

- i. whether the proposed bottom fishing would contribute to having significant adverse impacts on deep sea fish stocks for which no stock assessment has been completed, bycatch species and/or VMEs and, if so,
- ii. whether any proposed or additional mitigation measures would prevent such impacts.

c) a plan for directing fishing effort in an exploratory fishery to allow for the acquisition of relevant data to evaluate the fishery potential and the ecological relationships among harvested, non-target and associated and dependent populations and the likelihood of adverse impact;	Refer to SC8-DW02, DW-03, DW-04. These data are collected by two observers from the catch observations and in addition cameras are set to collect additional information on the benthic environment.	Yes
d) where appropriate, a plan for the acquisition of any other research data obtained by fishing vessels, including activities that may require the cooperative activities of scientific observers and the vessel, as may be required by the Scientific Committee to evaluate the fishery potential and the ecological relationships among harvested, non-target, associated and dependent populations and the likelihood of adverse impacts; and	In line with the Marine Resource Act 2005, the flagged vessel operates under the terms of an access agreement with MMR and a license issued by MMR. Additionally, the vessels and the observers have shown closed cooperation in carrying out of complicated experimental line deployments as agreed in the licence terms of this operation. It is anticipated that this arrangement will continue and be expanded.	Yes
e) an evaluation of the time scales involved in determining the responses of harvested, dependent and related populations to fishing activities [Note that SC has previously interpreted this as to mean “when will data be analysed and available”]	These data are analysed in an ongoing manner with post trip analyses being undertaken and reported annually to the SC.	<u>Yes</u>

Particularly regarding Exploratory Fisheries for Cook Islands– CMM14b-2020

The SC notes that compliance with the actual fishing operations will be assessed under the CMS process by the CTC. However, in terms of scientific considerations:

29. *At the 8th meeting of the Scientific Committee the Cook Islands will present a full and comprehensive amended exploratory fishing proposal which conforms, in full, with SPRFMO CMMs and the Convention, in particular CMM 13-2020 (Exploratory fisheries) and CMM 03-2020 (Bottom fishing), and take into account the Scientific Committee advice as described in the SC7 report. The proposal shall include the following:*

Cook Islands para 29 considerations	Rationale	Assessment
a) A detailed and specific proposal and Fisheries Operation Plan that includes formal sampling designs and data collection plans for all phases of the proposed exploratory fishery that conform with CMM13-2020 (Exploratory fisheries);	Refer to SC8-DW02, DW-03, DW-04. Noting the SC7s request for more detailed analyses to inform the TAC setting. The Cook Islands has undertaken an assessment of the biomass in the area. This assessment will assist the Cook Islands in determining appropriate catch limits on specific features. If the methods are acceptable to the SC8 the Cook Islands will expand the analyses to include other Seamounts and possibly repeat the analysis on crabs, provided that the data allow for such an	Yes

	analysis. In addition the SC7 “agreed that the approach outlined in the revised Fisheries Operation Plan is likely to ensure that the exploratory fishery is developed consistently with its nature as an exploratory fishery, and consistently with the objectives of Article 2 of the Convention.”	
<i>b) A description of how the proposed fishing meets the requirements of the Convention and relevant CMMs, including a bottom fishing impact assessment;</i>	The relevant CMMs and Convention are addressed throughout the FOP and supplementary documents SC8-DW02, DW-03, DW-04. In addition, DW-04 explicitly examines the impacts on the seafloor, this work will be augmented with underwater camera footage analysis to add not only the benthos but trap movement in the seafloor and drag on hauling.	Yes
<i>c) Propose measures to ensure the long-term viability of the target species, including reproduction;</i>	The Cook Islands has set a global TAC, TAE, CPUE LRP and insists on fishing activity being conducted outside spawning months which is reviewed continuously through the collection of biological samples. The 2020 FOP proposes the development of feature and species specific TACs.	Yes
<i>d) A description of any fishing conducted to date, including effort, catch, and information on measures taken to protect VMEs.</i>	Refer to SC8-DW02, DW-03, DW-04	Yes