A TIME FOR ACTION IN THE MANAGEMENT OF

ANTARCTIC KRILL FISHERIES

THE ANTARCTIC AND SOUTHERN OCEAN COALITION
(ASOC)

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Abstract

In this paper, ASOC draws CCAMLR’s attention to the most pressing issues in relation to the ecosystem-based management of the krill fishery, including the adoption of a conservation measure that ensures systematic scientific observer coverage, the development of a coordinated research plan to address key scientific uncertainties at the SSMU level in Area 48, and the consideration of feedback management approaches in this Area as soon as possible. In addition, ASOC maintains that CCAMLR should take precautionary measures to prevent concentration of catches in coastal areas as the fishery approaches the interim catch limit in Subareas 48.1-48.4, and that a standardized method for green weight krill catch reporting should be developed and required.
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I. INTRODUCTION

In the last two years, ASOC called for the need to improve the management system for krill by establishing feedback management procedures at the SSMU level, requiring systematic scientific observer coverage on board krill vessels, and enhancing control measures applicable to krill fishing, among others. 1 ASOC has maintained that these elements should be integrated into a strategic plan that responds to a long-term ecosystem vision for Antarctica, and that CCAMLR needs to ensure that the krill fishery develops in response to management rather than the reverse.

At its XXVI Meeting, CCAMLR adopted some important measures to improve the management regime applicable to krill fishing, including the establishment of an interim catch limit (CM 51-01), also known as trigger level, until SSMU allocations are in place in Subareas 48.1, 48.2, 48.3 and 48.4. 2 In spite of this, key management elements still remain to be addressed, especially since notifications to fish for krill continue to increase. Notifications for the upcoming season are exceeding nominally the interim catch limit of 620,000 tonnes for Subareas 48.1-48.4.

In addition, in view of the scientific gaps and uncertainties that preclude progress in SSMU allocations, and taking into account the precautionary approach embedded in the CCAMLR Convention, the Commission must take decisive steps to develop management measures at the SSMU level in a timely manner. ASOC considers that a coordinated research plan should be designed and implemented as a matter of urgency in order to improve data gathering and reduce uncertainties. Furthermore, ASOC calls on CCAMLR to enact new precautionary measures to prevent excessive concentration of catch in coastal areas close to predator colonies. Until such measures are in place, CCAMLR Members should commit not to increase their krill catches.

Time is running out for CCAMLR to establish a solid management regime that is based on robust science before the fishery escalates. In order to support the new management system, increased accountability and enforcement measures need to be enacted. These include establishing a standardized method for reporting the green weight of the krill catches and a requirement that all vessels utilize this method. In addition, a new conservation measure needs to be adopted, compelling all Parties fishing for krill to require systematic scientific observer coverage for all of its vessels, in accordance with the CCAMLR Scheme of International Scientific Observation.

CCAMLR needs to begin to develop feedback management procedures as a matter of urgency. To make this possible, the Scientific Committee should develop recommendations to adapt and expand the current CCAMLR Ecosystem Monitoring Programme (CEMP) to the needs of a feedback management system at the SSMU level. Concurrently, funding mechanisms should be adopted to support existing and expanded monitoring, such as a dedicated CEMP fund.

Finally, as interest in krill fisheries grows, the potential for the fishery to expand to other areas of the Southern Ocean increases. CCAMLR should follow a consistent management model for krill fisheries across the Convention Area as it is being developed for Subareas 48.1 - 48.4.

II. PRIORITY ISSUES

A. Preventing Concentration Of Fishing Effort In The Expansion Of The Krill Fishery

ASOC is concerned about the current situation where the krill fishery could expand up to the interim catch limit in Subareas 48.1 - 48.4 (620,000 tonnes) without any spatial limitation. Although Conservation Measure 51-01 (2007) does not require SSMU allocations until the interim catch limit is reached, the Working Group on Ecosystem Monitoring and Management (WG-EMM) has noted that negative ecosystem impacts can arise from the retention of the current fishing pattern at catches of 620,000 tonnes. This is because the current spatial distribution of catches reflects the historical fishing distribution (Option 1). According to previous analysis conducted by WG-EMM, allocation under Option 1 is likely to involve a higher risk to predators at fishing levels close to 620,000 tonnes. 3 Consequently, Option 1 has been already rejected as a method of allocation by the Scientific Committee.

1 See The Need For A Strategic Plan For The Management Of The Antarctic Krill Fishery (CCAMLR-XXVI/BG/25); Improving Monitoring and Control of the Krill Fishery (CCAMLR-XXV/BG/27); Ecosystem Management of Antarctic Krill in the South Atlantic: Uncertainties and Priorities (CCAMLR-XXV/BG/26).
2 The interim catch limit is applicable only to these 4 Subareas (referred too in this paper as Subareas 48.1-48.4).
3 See Report of the XXV Meeting of the Scientific Committee (CCAMLR SC XV, 2006), para. 3.11.
ASOC is alarmed by the dramatic increase in krill notifications involving new entrants and new flag States. These notifications show that the capacity already exists to catch 620,000 tonnes and beyond. The subsequent risk to land-based krill predators in the absence of an allocation of catch limits among SSMUs is troubling. In consequence, ASOC believes that CCAMLR should establish additional precautionary measures until Stage 1 allocation is completed, such as constraining fishing in coastal SSMUs in order to avoid excessive catch concentrations in areas close to land-based predator colonies. Season-specific measures may be the most effective way to protect predator colonies. In addition, CCAMLR Members should avoid expanding krill fishing from current levels until such measures are in place.

B. CCAMLR Needs To Start Developing Feedback Management Procedures As Soon As Possible

While ASOC supports Stage 1 allocation (based on static options 2-4) as a short-term, interim solution to avoid excessive concentration of catches close to land-breeding colonies, it also maintains that the development of a feedback management scheme will be the only way to achieve ecosystem conservation objectives through incorporating the effect of environmental factors, including climate change. CCAMLR has also acknowledged this and has agreed to give priority to these options (formulated as options 5 and 6 by CCAMLR) starting in 2009. ASOC maintains that inter-sessional work on these options should start as soon as possible, in order to assess the practicalities of their implementation in Area 48, and their effectiveness to achieve CCAMLR principles.

C. The Need For More Research And Monitoring Through A Coordinated Research Plan And A Strengthened CEMP Program

ASOC is concerned by the level of scientific uncertainty on krill and krill predator populations, their distribution and seasonal and inter-annual variability, as well as predator-prey relationships and the effects of climate change. These uncertainties are precluding progress on Stage 1 allocation of krill catch limits among SSMUs in Area 48.

In order to fill current information gaps, ASOC believes that a coordinated research plan is urgently needed. This research plan should be developed by the Scientific Committee as a matter of urgency and should prioritise the information gaps that need to be solved for taking management Stage 1 decisions at the SSMU level. In addition, the plan should be accompanied by appropriate financial commitments by CCAMLR Members to put it into practice as soon as possible.

Furthermore, ASOC is concerned that data submitted to CEMP has been decreasing in recent years. This situation is worrying, especially taking into account that monitoring needs will increase as CCAMLR moves to consider feedback management options for krill fisheries. In that context, CCAMLR will need to consider the monitoring requirements for a feedback management system in Area 48. Consequently, the Scientific Committee should develop recommendations to adapt and expand the current CEMP to meet these needs. Unfortunately, investments in krill fishing industry are currently not being matched by the appropriate investments in science that would be needed for a robust, scientifically-based management system. Therefore, CCAMLR should develop funding mechanisms that ensure that the resources are available for an expanded, on-going monitoring program, such as a dedicated CEMP Fund. Fishing nations have a special responsibility to support a strengthened research. As a starting point, CCAMLR should restrict krill fishing opportunities to CCAMLR Members.

D. The Need For A Standardized Reporting Method For Krill Catches And A Conservation Measure To Compel CCAMLR Members To Use It

ASOC is very concerned about the uncertainty in krill catch reporting. Currently, flag States are allowed to report catch data derived from product information, without indicating product composition of catches, and the product specific conversion factors used. Given the reported variability in conversion factors for krill, a nominal reported catch could actually represent a catch in green weight that is 4 times larger, when the conversion factor for krill oil is applied. Thus,
small errors in conversion factors can result in hundreds of tonnes of catch not being recognised as being caught. Uncertainty of reported krill catch not only affects assessments of krill stocks, but also the estimations of the impact of krill removals on predators. Moreover, it also raises important enforcement issues.

Thus, ASOC strongly urges CCAMLR to take prompt action to resolve this issue through adopting standardized methods for reporting krill catches.

E. Systematic Scientific Observer Coverage For The Krill Fishery

ASOC is encouraged by the progress made at the last WG-EMM meeting on the issue of systematic observer coverage for the krill fishery in Area 48. ASOC expects the Commission to endorse the approach agreed by the WG-EMM and adopt a conservation measure that ensures that the scientific observer data needed for management are collected.

III. OTHER IMPORTANT REGULATORY ISSUES

A. Krill Notifications

There is an increasing disparity between notified and real krill catches. CCAMLR should take action to encourage Members to be realistic about the expected level of catch that is notified. One way to achieve this would be to apply a fee for notifications that is proportional to the notified catch. Krill fishing opportunities should be restricted to CCAMLR Members only.

B. New And Exploratory Krill Fisheries

Notifications to fish for krill have recently included areas where no catch limits have been established. At its meeting last year, CCAMLR endorsed the view that krill fishing in those areas should be subject to the same requirements as exploratory fisheries. Under CM 21-02 (2006), exploratory fishing operations should proceed in accordance with a Data Collection Plan developed by the Scientific Committee. Consequently, ASOC believes that CCAMLR should not accept krill notifications for areas where no catch limits have been established, unless a Data Collection Plan has been agreed and a precautionary catch limit has been set.

In addition, krill fisheries notifications continue to indicate the use of new fishing gears and methods to fish and process krill. The Commission should consider these proposed operations as proposals for new or exploratory fisheries, as appropriate, even if they refer to areas where krill catch limits are in place. This is because the potential ecosystem impacts of the use of such gears are unknown and needs to be properly assessed and controlled.

New and exploratory krill fisheries should be restricted to CCAMLR Members, as in the case of finfish fisheries.

C. Bycatch In Krill Fisheries

Bycatch of marine larvae in the krill fishery remains a concern, especially in view of the diversity of gears and methods currently used to catch krill. To address this issue, CCAMLR needs to develop consistent observer protocols across krill fishing vessels to analyse bycatch of fish and other marine larvae, including a procedure for sampling fish of all sizes and different species. In addition, the Scientific Committee should provide advice on the acceptable level of bycatch for different fish species in the krill fishery.

IV. ASOC PRIORITY RECOMMENDATIONS FOR CCAMLR XXVII

- CCAMLR should establish, as a matter of urgency, additional, season-specific precautionary measures in Subareas 48.1 – 48.4 until Stage 1 allocation is completed, in order to avoid excessive concentration of catches in coastal areas close to land-based predator colonies.
- CCAMLR Members should avoid expanding krill fishing from current levels until such measures are in place.
- In order to fill current information gaps, The Scientific Committee should adopt, as a matter of urgency a coordinated research plan for Area 48. This research plan should address the scientific questions that need to be answered prior to taking Stage 1 management decisions at the SSMU level. This research plan should be accompanied by appropriate financial investment commitments by CCAMLR Members.
• Intersessional work should start immediately after this CCAMLR meeting to **develop feedback management approaches** for SSMUs in Area 48.

• The Scientific Committee should develop recommendations to **adapt and expand the current CEMP to the needs of a feedback management system** at the SSMU level.

• CCAMLR should develop funding mechanisms to support existing and expanded monitoring, such as a **dedicated CEMP fund**. Fishing nations have a special responsibility in this regard.

• CCAMLR should adopt a Conservation Measure requiring countries need to report accurate haul-by-haul, **green weight krill catch data**. Standardized reporting methods should be adopted and required. Biological, fine-scale data reporting should also be required in accordance with CM 23-05 (2000).

• Building on action taken at CCAMLR XXVI, CCAMLR needs to urgently adopt a Conservation Measure that ensures **systematic scientific observer coverage for the krill fishery**, in accordance with the CCAMLR Scheme of International Scientific Observation.