CCAMLR

COMM CIRC 04/54
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Wednesday, 16 June 2004

Further Actions required for the Reduction of By-catch of Southern Ocean Seabirds in Longline Fisheries

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COMMISSION FOR THE CONSERVATION OF ANTARCTIC MARINE LIVING RESOURCES
COMMISSION POUR LA CONSERVATION DE LA FAUNE ET LA FLORE MARINES DE L'ANTARCTIQUE
КОМИССИЯ ПО СОХРАНЕНИЮ МОРСКИХ ЖИВЫХ РЕСУРСОВ АНТАРКТИКИ
COMISION PARA LA CONSERVACION DE LOS RECURSOS VIVOS MARINOS ANTARTICOS

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At CCAMLR-XXII, the Commission recollected the advice of the Scientific Committee that, together with the potential impact of Illegal, Unregulated and Unreported fishing for toothfish within the Convention Area, the greatest current threat to Southern Ocean seabirds is mortality in longline fisheries in waters adjacent to the Convention Area (CCAMLR-XX, paragraph 6.25; CCAMLR-XXII, paragraph 5.17; SC-CAMLR-XX, paragraph 4.73; SC-CAMLR-XXII, paragraph 5.28(ii)).

The Scientific Committee indicated the need to implement mitigating measures, at least as effective as those in use within the Convention Area, in all relevant fisheries in areas adjacent to the Convention Area (SC-CAMLR-XX, paragraph 4.59 and Annex 5, paragraph 7.158).

Members conducting or permitting longline fishing in areas outside the Convention Area where seabirds from the Convention Area are killed are reminded (SC-CAMLR-XX, Annex 5, paragraph 7.158) to provide summary data to the Secretariat on:

(i) longline fishing effort (at least at the scale of FAO area) in each type of longline fishery;

(ii) rates of incidental mortality of seabirds associated with each longline fishery and details of the species involved;

(iii) mitigating measures in use in each fishery and the extent to which any of these are voluntary or mandatory; and

(iv) the nature of observer programs, including observer coverage, associated with each fishery.

Members were also requested to promote collaborative work (including data exchange) with the relevant tuna commissions and other regional fisheries organisations. Members attending this year's meetings of these organisations (especially those nominated as CCAMLR Observers) are requested to provide feedback to the Secretariat, as soon after the conclusion of each meeting as possible, on discussions at such meetings concerning seabird by-catch and potential cooperation and data exchange.

A list of relevant organisations identified by WG-IMAF is attached. A briefing note prepared by the Secretariat for Members attending this year's meetings of the organisations identified, and especially those nominated as CCAMLR Observers, is also attached.

Dr D.G.M. Miller
Executive Secretary

Attch.

Regional Fisheries Management Organisations identified for contact with respect to tasks on the mitigation of by -catch of Southern Ocean seabirds in longline fisheries

Inter-American Tropical Tuna Commission (I-ATTC)
The following CCAMLR Members are Contracting Parties of I-ATTC: France, Japan and the USA.

International Commission for the Conservation of Atlantic Tunas (ICCAT)
The following CCAMLR Members are Contracting Parties of ICCAT:
European Community, France, Japan, Republic of Korea, Namibia, Russia, South Africa, UK, USA and Uruguay.

South East Atlantic Fisheries Organisation (SEAFO)
The following CCAMLR Members are Contracting Parties of SEAFO: European Community, Namibia, Norway and South Africa.

Indian Ocean Tuna Commission (IOTC)
The following CCAMLR Members are Contracting Parties of IOTC: Australia, European Community, France, India, Japan and the UK.

Commission for the Conservation of Southern Bluefin Tuna (CCSBT)
The following CCAMLR Members are Contracting Parties of CCSBT: Australia, Japan and New Zealand. (with South Africa becoming a Contracting party in near future)

The South Pacific Forum Fisheries Agency (FFA)
The following CCAMLR Members are Members of FFA: Australia and New Zealand.

Agreement on the Organization of the Permanent Commission on the Exploitation and Conservation of the Marine Resources of the South Pacific, 1952 (CPPS)
The following CCAMLR Members are Contracting Parties of CPPS: Chile

South West Indian Ocean Fisheries Commission (SWIOFC)
The Fourth Intergovernmental Consultation on the establishment of SWIOFC will be held in Mahe, Seychelles, from 11 to 16 July 2004

Commission for Highly Migratory Species in the Central and Western Pacific (WCPFC)
It is expected that the Convention establishing WCPFC is likely to enter force in 2004. The Commission does not yet exist as a functioning body, however, the Standing Committee on Tuna and Billfish currently operates under the Oceanic Fisheries Program of the Secretariat of the Pacific Community (SPC).

The following CCAMLR Members are members the Pacific Community: Australia, France, New Zealand, UK and the USA.

Western Indian Ocean Tuna Organization Convention (WIOTO)
WIOTO does not have regulatory power. The following CCAMLR Members are Contracting Parties of the organisation: India.

CCAMLR's Work on the Elimination of Seabird Mortality associated with Fishing

(CCAMLR Secretariat)

Introduction

Over the last few years, the Commission for the Conservation of Antarctic Marine Lining Resources (CCAMLR) has played an important role in the creation and implementation of measures designed to reduce seabird mortality associated with fishing. CCAMLR's leading role in this area has received international recognition.

2. The assessment and avoidance of incidental mortality of Antarctic marine living resources have always been very important issues for CCAMLR and its Scientific Committee. In order to assess and monitor the incidental mortality of birds and marine mammals, in 1984 CCAMLR asked its Members to start keeping records and report the number, species, and where appropriate the age, size, sex and reproductive status of any birds and marine mammals taken incidentally during fishing operations.

3. The Scheme of International Scientific Observation was introduced by CCAMLR in the 1992/93 season. The observation on the incidental mortality of marine mammals and birds is a priority item under this scheme. Under CCAMLR conservation measures, deployment of international scientific observers is mandatory for all longline fishing vessels and also for trawl fishing vessels engaged in all new and exploratory fisheries in the Convention Area. In a number of maritime zones of Coastal States in the Convention Area national observers also collect the required data. Guidelines and instructions for seabird observations are published in the *CCAMLR Scientific Observers Manual*.

4. Implementation of all conservation measures adopted by CCAMLR is subject to the international inspection process established in accordance with the CCAMLR System of Inspection. This system has been in operation since the 1989/90 season. In addition, all Members must inspect their fishing vessels at ports of departure and arrival in order to verify compliance with the conditions fishing licences issued, including compliance with measures on the reduction of incidental mortality of seabirds.

5. In 1992, CCAMLR established the ad hoc Working Group on Incidental Mortality Arising from Longline Fishing (WG-IMALF). The group's terms of reference include the review of data on seabird by-catch and the performance of CCAMLR seabird-related measures. In 2001, taking into account that the group also considers incidental mortality associated with trawl fishing, the name of the group was amended to the ad hoc Working Group on Incidental Mortality Associated with Fishing (WG-IMAF). The group's advice is submitted annually to the CCAMLR Scientific Committee for consideration.

Current CCAMLR measures aimed at reducing incidental mortality of seabirds

6. The current set of measures adopted by CCAMLR on the reduction of seabird mortality apply to different types of fishing gear. They comprise measures related to fishing

regulations, reporting and compliance, as well as guidelines for scientific observation and the publication of materials for training and education. All of these measures are briefly described in the following paragraphs.

Driftnet fishing

7. With respect to fishing with driftnets, CCAMLR decided in 1990 that there should be no expansion of large-scale pelagic driftnet fishing into the high seas of the Convention Area (Resolution 7/IX). The decision remains unchanged, and no driftnet fishing is being carried out in the Convention Area.

Trawl fishing

8. For a number of years only occasional seabirds were reported as incidentally killed in trawl fishing operations in the Convention Area. In 1994, CCAMLR banned the use of trawl netsonde cables as seabirds were reportedly killed as a result of interactions with cables. This measure was later reinforced and trawl vessels were demanded to arrange the location and level of deck lighting so as to minimise illumination directed out of the vessel. Nets should be cleaned prior to shooting to remove items that might attract birds. The discharge of offal was also prohibited during the setting and hauling of trawl gear. The current version of the conservation measure is given in Appendix I

Longline fishing

9. In 1989, CCAMLR noted that the introduction of longline fishing in the Convention Area posed a potential threat to seabirds. CCAMLR has mounted a major campaign, directed by WG-IMALF, to reduce the incidental capture and mortality of seabirds in longline fisheries. In 1989, CCAMLR adopted Resolution 5/VIII 'Protection of seabirds from incidental mortality arising from longline fishing'. In 1991, CCAMLR adopted the Conservation Measure 29/X 'Minimisation of the Incidental Mortality of Seabirds in the Course of Longline Fishing or Longline Fishing Research in the Convention Area' which has subsequently been modified to include a suite of measures designed to prevent, or minimise, the incidental mortality of seabirds. CCAMLR keeps these actions under annual review.

10. The development of Conservation Measure 29 is summarised in Appendix II. The current version of the measure is given in Appendix I. In 2002, after a new numbering system for conservation measures was introduced, this measure was given the number 25-02.

11. As part of its continued efforts to minimise seabird mortality in longline fisheries, in 1996, CCAMLR published an educational book for fishers *Fish the Sea, Not the Sky*. The book was published in English, French, Spanish and Russian. The book promotes practical ways in which longline fishers can reduce incidental catches of seabirds in bottom longline operations. The book was widely distributed to companies and vessels engaged in longline fishing in the Convention Area and adjacent waters. In addition, fliers and stickers promoting the message of the book were also published and widely distributed.

12. In cooperation with CCAMLR, in 1999 the Museum of New Zealand published the book *Identification of Seabirds of the Southern Ocean – a Guide for Scientific Observers*

aboard Fishing Vessels. The book was published in English, French, Spanish and Russian. It has been made available to all scientific observers who work onboard fishing vessels in the Convention Area and adjacent areas.

13. In 2003, WG-IMAF decided to review and update the current set of educational materials on seabird by-catch in CCAMLR fisheries.

14. Over the past six years the seabird by-catch and by-catch rate in regulated fisheries in the Convention Area has been significantly reduced. This has been achieved by a combination of improved compliance with Conservation Measure 25-02 and by delaying the start of fishing until the end of the breeding season of most albatross and petrel species (Table 1).

15. By 2001, the operation of regulated longline fisheries in the Convention Area had achieved negligible levels and rates of seabird by-catch in Subarea 48.3, low levels in the South African EEZ in Subareas 58.6 and 58.7 and no incidental mortality in Subarea 88.1 for the fifth successive year. In 2002 and 2003, the Scientific Committee noted that, based on reported data, levels of seabird by-catch in the Convention Area had been the lowest ever recorded.

16. In addition to requiring the use of an appropriate suite of measures to minimise seabird by-catch in regulated fisheries, CCAMLR also considers the advice of WG-IMAF for all proposed new and exploratory fisheries. Each year WG-IMAF reviews these proposals and, taking account of the magnitude of potential risk of seabird by-catch in each area concerned, recommends the appropriate suite of mitigation measures (considering especially the need for fishing season restriction and night setting of longlines).

17. In terms of fishery-related threats to seabirds in the Convention Area, CCAMLR recently endorsed the advice of WG-IMAF and the Scientific Committee that the main threats are now posed by by-catch in IUU fishing in the Convention Area and by by-catch in longline fisheries adjacent to the Convention Area.

18. By-catch of seabirds in IUU longline fishing in the Convention Area remains a serious problem. Estimates of the potential by-catch levels in each of the last seven years are presented in Figure 1. CCAMLR concluded that such levels of mortality remain entirely unsustainable for populations of albatrosses, giant petrels and white-chinned petrels breeding in the Convention Area, many of which are declining at rates where extinction is possible. This situation is viewed by CCAMLR with the greatest concern, and strict measures have been implemented to address the problem of unregulated fishing, with additional measures under development.

19. To address problems of by-catch of Convention Area seabirds in areas adjacent to the Convention Area – historically (since the 1970s) the most important cause of many of the population declines of albatrosses and petrels in the Convention Area – CCAMLR has requested closer collaboration with Members and regional fishery management organisations with jurisdiction and responsibility for longline fisheries in these areas. In particular, CCAMLR is advocating that the use of appropriate measures to minimise seabird by-catch be made obligatory for all longline fishing vessels and that appropriate assistance be given to facilitate this.

20. The work of WG-IMAF continues to focus on determining the status of seabirds vulnerable to the impact of longline fishing, evaluating the impact of new and exploratory fisheries in the Convention Area, assessing incidental mortality of seabirds during regulated and IUU fisheries in the Convention Area and adjacent waters and reviewing research into and experience with mitigating measures.

21. In the immediate future CCAMLR's activities relating to seabird by-catch will include:

(i) continuing compulsory placement of international and national scientific observers on board all longline vessels fishing in the Convention Area;

(ii) ensuring full compliance with all elements of the existing suite of CCAMLR mitigation measures contained in Conservation Measure 25-02;

(iii) supporting the conduct of rigorous experiments on the effects of different elements of Conservation Measure 25-02 when applied to the Spanish longline system;

(iv) developing of integrated longline weights for 'autoline' vessels in order to achieve the sink rates required;

(v) continued encouragement for the development and use of underwater longline setting gear and methods and far improved methods of weighting longlines.

Other types of fishing

22. No incidental mortality of seabirds has been recorded for the exploratory squid fishery or the Patagonian toothfish pot fishery being conducted in Subarea 48.3 of the Convention Area.

International Cooperation

23. CCAMLR has kept in regular contact with a number of international fisheries and conservation organisations in order to exchange information on the prevention of incidental mortality of seabirds during fishing operations, the state of Southern Ocean seabird populations affected by longline fisheries, incidental catches of seabirds in these fisheries, and CCAMLR's experience with mitigating techniques and with the formulation of conservation measures.

24. CCAMLR has consistently collaborated with FAO, particularly in contributing to the latter's activities in reducing incidental mortality of seabirds in longline fisheries. Most of the CCAMLR measures in Conservation Measure 25-02 are now incorporated in the FAO International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (IPOA-Seabirds).

25. On the recommendation of its Scientific Committee, CCAMLR encouraged all its Members to support the adopted IPOA-Seabirds. It also requested all CCAMLR Members fishing in the Convention Area to adopt their own National Plans of Action (within the framework of IPOA-Seabirds).

26. CCAMLR, as an observer, took part in the establishment of the Agreement for the Conservation of Albatrosses and Petrels under the CMS/Bonn Convention.

Conclusion

27. The prompt action of CCAMLR in developing and implementing measures to reduce seabird mortality in general (and of albatrosses in particular), coupled with the willingness of captains of many fishing vessels to cooperate with scientific observers, has done much to alleviate the problem within the regulated fishery in the Convention Area.

28. There has been a continued substantial reduction in the level of incidental capture of seabirds in regulated longline fisheries operating in the Convention Area over the period 1997–2003. This trend has been sustained over the past five years and is directly attributable to improved compliance with Conservation Measure 25-02 and the later commencement of the fishing season in most longline fisheries. Some improvement is still possible.

29. In spite of the significant progress achieved by CCAMLR Members in reducing seabird by-catch in regulated longline fishing in the Convention Area, high levels of incidental capture, and associated mortality, are believed to occur during IUU fishing. In addition to measures already implemented by CCAMLR, bringing IUU fishing under control requires a concentrated international effort.

30. CCAMLR has encouraged Members to ratify and promote the entry into force of such international instruments as UNIA, the FAO Compliance Agreement and the Code of Conduct for Responsible Fisheries, noting that this will contribute to the elimination of IUU fishing in the Convention Area. CCAMLR also considers contributions that may be made by its Members to international initiatives within the FAO IPOA-IUU, including participation in the international network for fisheries monitoring, control and surveillance and the development of a model uniform catch documentation and reporting measures.

31. CCAMLR urges its Members to implement their own National Plans of Action in support of the FAO International Plan of Action on the Reduction of the Catch of Seabirds in Longline Fisheries. When the agreement for the conservation of Albatrosses and Petrels under the CMS/Bonn Convention comes into force, this should considerably strengthen existing international cooperation.

32. In 2001–2003, CCAMLR continued developing of closer cooperation with a number of Regional Fishery Management Organisations (RFMOs) with jurisdiction in areas adjacent to the CCAMLR Convention Area and where seabirds breeding in the Convention Area are killed.

33. To this end, it was decided that Members of CCAMLR who are also members of these bodies should take steps to ensure that mitigating measures to protect seabirds are used by all vessels operating under the auspices of such organisations. As far as possible, the mitigating measures used should be consistent between areas and fisheries and be at least as effective as the methods used currently within the CCAMLR Convention Area.

Table 1: Total estimated seabird by-catch and by-catch rate (birds/thousand hooks) in longline fisheries in Subareas 48.3, 58.6 and 58.7, from 1997 to 2002 (from SC-CAMLR-XXII, Annex 5, Table 6.3).

Subarea	Year						
	1997	1998	1999	2000	2001	2002	2003
48.3							
Estimated by-catch	5 755	640	210*	21	30	27	8
By-catch rate	0.23	0.032	0.013*	0.002	0.002	0.0015	0.0003
58.6, 58.7							
Estimated by-catch	834	528	156	516	199	0	7
By-catch rate	0.52	0.194	0.034	0.046	0.018	0	0.0003

* Excluding *Argos Helena* line–weighting experiment cruise.

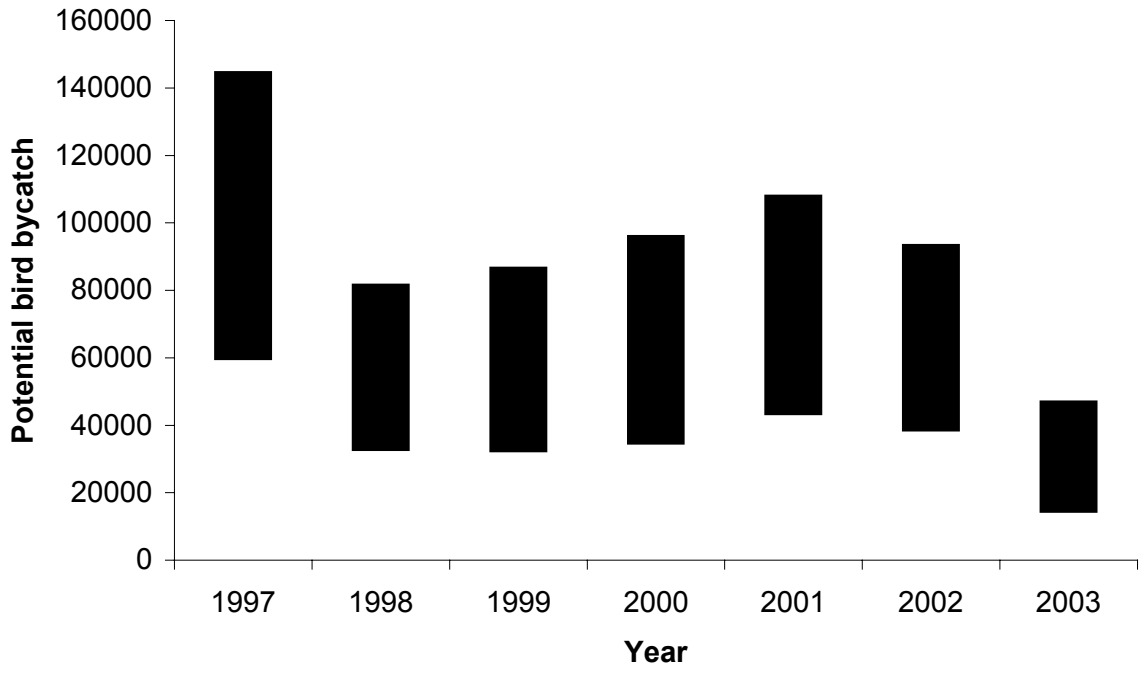


Figure 1: The range of estimated potential by-catch of birds in IUU longline fisheries in the Convention Area from 1996–2003. The solid bars represent the range from the lower limit of the lower estimate to the upper limit of the upper estimate (from SC-CAMLR-XXI, Annex 5, Figure 6.2 and SC-CAMLR-XXII, Annex 5, Table 6.8).

Appendix I

Species	seabirds
Area	all
Season	all
Gear	longline

CONSERVATION MEASURE 25-02 (2003)[1,2]
Minimisation of the Incidental Mortality of Seabirds in the Course of Longline Fishing or Longline Fishing Research in the Convention Area

The Commission,

Noting the need to reduce the incidental mortality of seabirds during longline fishing by minimising their attraction to fishing vessels and by preventing them from attempting to seize baited hooks, particularly during the period when the lines are set, and

Recognising that in certain subareas and divisions of the Convention Area there is also a high risk that seabirds will be caught during line hauling,

Adopts the following measures to reduce the possibility of incidental mortality of seabirds during longline fishing.

1. Fishing operations shall be conducted in such a way that hooklines[3] sink beyond the reach of seabirds as soon as possible after they are put in the water.

2. Vessels using autoline systems should add weights to the hookline or use integrated weight hooklines while deploying longlines. Integrated weight (IW) longlines of a minimum of 50 g/m or attachment to non-IW longlines of 5 kg weights at 50 to 60 m intervals are recommended.

3. Vessels using the Spanish method of longline fishing should release weights before line tension occurs; weights of at least 8.5 kg mass shall be used, spaced at intervals of no more than 40 m, or weights of at least 6 kg mass shall be used, spaced at intervals of no more than 20 m.

4. Longlines shall be set at night only (i.e. during the hours of darkness between the times of nautical twilight[4])[5]. During longline fishing at night, only the minimum ship's lights necessary for safety shall be used.

5. The dumping of offal is prohibited while longlines are being set. The dumping of offal during the haul shall be avoided. Any such discharge shall take place only on the opposite side of the vessel to that where longlines are hauled. For vessels or fisheries where there is not a requirement to retain offal on board the vessel, a system shall be implemented to remove fish hooks from offal and fish heads prior to discharge.

6. Vessels which are so configured that they lack on-board processing facilities or adequate capacity to retain offal on board, or the ability to discharge offal on the opposite side of the vessel to that where longlines are hauled, shall not be authorised to fish in the Convention Area.

7. A streamer line shall be deployed during longline setting to deter birds from approaching the hookline. Specifications of the streamer line and its method of deployment are given in the appendix to this measure.

8. A device designed to discourage birds from accessing baits during the haul of longlines shall be employed in those areas defined by CCAMLR as average-to-high or high (Level of Risk 4 or 5) in terms of risk of seabird by-catch. These areas are currently Subareas 48.3, 58.6 and 58.7 and Divisions 58.5.1 and 58.5.2.

9. Every effort should be made to ensure that birds captured alive during longlining are released alive and that wherever possible hooks are removed without jeopardising the life of the bird concerned.

[1] Except for waters adjacent to the Kerguelen and Crozet Islands
[2] Except for waters adjacent to the Prince Edward Islands
[3] Hookline is defined as the groundline or mainline to which the baited hooks are attached by snoods.
[4] The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to GMT.
[5] Wherever possible, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

APPENDIX TO CONSERVATION MEASURE 25-02

1. The aerial extent of the streamer line, which is the part of the line supporting the streamers, is the effective seabird deterrent component of a streamer line. Vessels are encouraged to optimise the aerial extent and ensure that it protects the hookline as far astern of the vessel as possible, even in crosswinds.

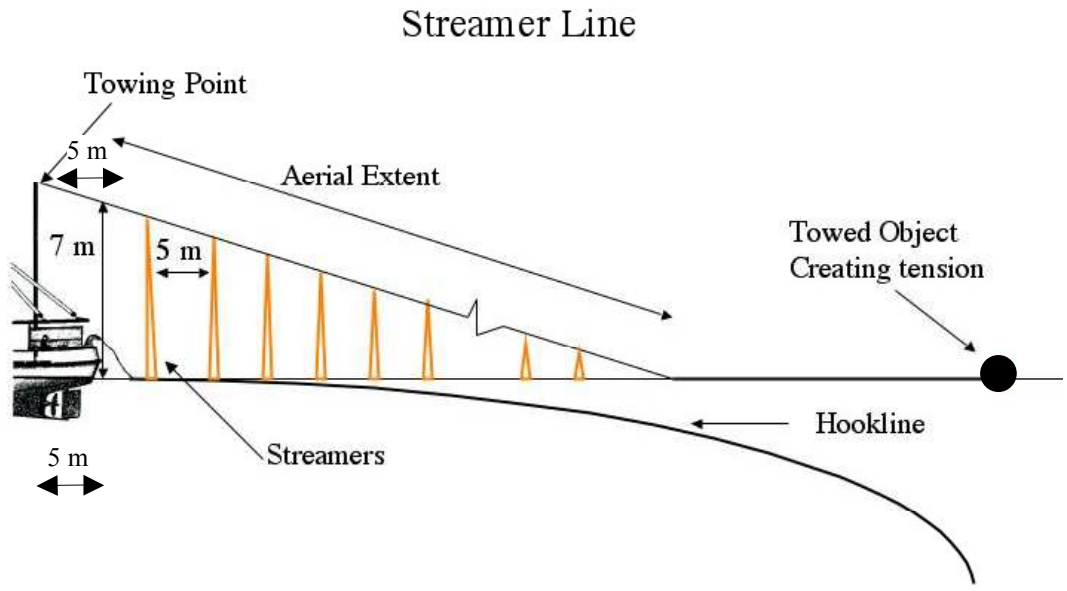
2. The streamer line shall be attached to the vessel such that it is suspended from a point a minimum of 7 m above the water at the stern on the windward side of the point where the hookline enters the water.

3. The streamer line shall be a minimum of 150 m in length and include an object towed at the seaward end to create tension to maximise aerial coverage. The object towed should be maintained directly behind the attachment point to the vessel such that in crosswinds the aerial extent of the streamer line is over the hookline.

4. Branched streamers, each comprising two strands of a minimum of 3 mm diameter brightly coloured plastic tubing[6] or cord, shall be attached no more than 5 m apart commencing 5 m from the point of attachment of the streamer line to the vessel and thereafter along the aerial extent of the line. Streamer length shall range between minimums of 6.5 m from the stern to 1 m for the seaward end. When a streamer line is fully deployed, the branched streamers should reach the sea surface in the absence of wind and swell. Swivels or a similar device should be placed in the streamer line in such a way as to prevent streamers being twisted around the streamer line. Each branched streamer may also have a swivel or other device at its attachment point to the streamer line to prevent fouling of individual streamers.

5. Vessels are encouraged to deploy a second streamer line such that streamer lines are towed from the point of attachment each side of the hookline. The leeward streamer line should be of similar specifications (in order to avoid entanglement the leeward streamer line may need to be shorter) and deployed from the leeward side of the hookline.

[6] Plastic tubing should be of a type that is manufactured to be protected from ultraviolet radiation.


Streamer Line
Towing Point
5 m
Aerial Extent
7 m
5 m
Towed Object
Creating tension
Hookline
Streamers
5 m

CONSERVATION MEASURE 25-03 (2003)[1]
Minimisation of the Incidental Mortality of Seabirds and Marine Mammals in the Course of Trawl Fishing in the Convention Area

Species	seabirds, marine mammals
Area	all
Season	all
Gear	trawl

The Commission,

Noting the need to reduce the incidental mortality of or injury to seabirds and marine mammals from fishing operations,

Adopts the following measures to reduce the incidental mortality of or injury to seabirds and marine mammals during trawl fishing.

1. The use of net monitor cables on vessels in the CCAMLR Convention Area is prohibited.

2. Vessels operating within the Convention Area should at all times arrange the location and level of lighting so as to minimise illumination directed out from the vessel, consistent with the safe operation of the vessel.

3. The discharge of offal shall be prohibited during the shooting and hauling of trawl gear.

4. Nets should be cleaned prior to shooting to remove items that might attract birds.

5. Vessels should adopt shooting and hauling procedures that minimise the time that the net is lying on the surface of the water with the meshes slack. Net maintenance should, to the extent possible, not be carried out with the net in the water.

6. Vessels should be encouraged to develop gear configurations that will minimise the chance of birds encountering the parts of the net to which they are most vulnerable. This could include increasing the weighting or decreasing the buoyancy of the net so that it sinks faster, or placing coloured streamers or other devices over particular areas of the net where the mesh sizes create a particular danger to birds.

[1] Except for waters adjacent to the Kerguelen and Crozet Islands

Appendix II

Development of *CCAMLR Conservation Measures* (CM) to mitigate incidental seabird catch during longline fishing in the *Convention Area.*

Measure Component	CM 29/X (1991)	CM 29/XI (1992)	CM 29/XII (1993)	CM 29/XIII (1994)	CM 29/XIV (1995)	CM 29/XV (1996)	CM 29/XV1 (1997)	CM 29/XIX (2000)	CM 25-02 (2002)	CM 25-02 (2003)
Line Weighting	General provision for quick sinking	No change	No change	No change	Specify weight for Spanish system (6 kg @ no more than 20 m spacing). Weight release before line tenses	No change	No change	Revise Spanish line weighting (option for 8.5 kg @ no more than 40 m spacing)	No change	Weighting regime requirement added for vessels with *Autoline* systems
Bait	-	-	Only thawed bait shall be used	No change	No change	No change	No change	No change	No change	Abolished as frozen bait did not affect sink rates under current weighting regimes
Night Setting	Mandatory with minimum ship lighting	No change	No change	Night qualified as darkness between nautical twilight	Line setting at least 3 hrs before dawn to minimize White Chinned Petrel mortality	Reference to exact time of nautical twilight. Term "sunrise" replaced with "dawn"	Reference to *Nautical Almanac* to get time of nautical twilight	Exemption to allow daylight setting subject minimum sink rate of 3m/sec determined according to CM 216/XX	No change.	No change.
Trash/Offal Dumping	Prohibition during longlining	No change	No change	Unavoidable dumping only on side farthest from line set/haul area	Clarification. Unavoidable dumping only on "opposite side" of vessel to where lines set/hauled	No change	Revision prohibiting dumping during setting. Unavoidable dumping now only during hauling	Fishing only authorized if vessels able to process and retain offal on board or discharge it on opposite side of vessel to line set/haul area	Request to remove hooks from fish heads & offal prior to discarding	Request changed to the system to be implemented to remove hooks from fish heads & offal prior to discarding

Handling Caught Birds	-	-	-	Request every effort to release birds alive & remove hooks	No change	No change	No change	No change	No change	No change
Streamer Line Use	Request streamer line use during daylight setting	Streamer deployed during longline deployment	Slightly more flexibility allowed for swivel placement	Details of devices to create streamer line tension – may vary	More flexibility in streamer line tension device	No change	No change	No change	No change	Vessels encouraged to use two streamer lines as compared to a single line
Streamer Line Specification	Specifications of streamer line & deployment	No change	No change	Conditions for testing streamer lines	Further clarification of conditions for testing streamer lined	No change	No change	No change	No change	Streamer line specification revised