## CONSERVATION MEASURES

8.1 The Commission agreed that Conservation Measures 2/III (as amended by 19/IX which came into force on 1 November 1991 except for waters adjacent to Kerguelen and Crozet Islands), $3 / \mathrm{IV}, 4 / \mathrm{V}, 5 / \mathrm{V}, 6 / \mathrm{V}, 7 / \mathrm{V}, 18 / \mathrm{IX}, 19 / \mathrm{IX}, 30 / \mathrm{X}$ (which came into force on 3 May 1992, except for waters adjacent to Kerguelen and Crozet Islands), 31/X (which came into force on 3 May 1992, except for waters around Kerguelen and Crozet Islands and around the Prince Edward Islands), 40/X, 48/XI, 51/XI, 52/XI, 54/XI, 59/XI, 61/XI and 62/XI should remain in force ${ }^{1}$.
8.2 Conservation Measures 44/XI, 49/XI, 50/XI, 53/XI, 55/XI through 58/XI and 60/XI were applicable to the 1992/93 season only and therefore lapse at the end of the present meeting.
8.3 Appreciation was expressed for a list of current Conservation Measures prepared by the Secretariat and the process of gradual consolidation of a conservation and management regime in the entire area of the Convention was recalled. The integrated approach to the conservation and management problems in Subarea 48.3 envisaged by Conservation Measure 7/V and other subsequent Conservation Measures, was praised and compliance with the full range of obligations, including accurate and thorough reporting, was once again emphasised.
8.4 In this regard, the Commission recalled that the majority of Conservation Measures apply to Subareas 48.3 and 48.4, and that consequently the full exercise of the responsibility of the Flag State to ensure compliance is called for in these areas.
8.5 In the course of other agenda items, the Commission adopted Conservation Measures $64 /$ XII and $65 /$ XII concerning scientific research exemption and exploratory fishing (paragraphs 6.9 and 7.3).
8.6 While agreeing in principle with Conservation Measures 64/XII and 65/XII, France and South Africa indicated that these Conservation Measures will not apply to their respective Exclusive Economic Zones around Kerguelen and Crozet Islands, and around

[^0]the Prince Edward Islands. They specified that their countries will of course, as in the past, inform the Commission of their research programs and results; the total catches made during these research surveys in these economic zones will naturally be taken into account so as to comply with the advice of the Scientific Committee and the Commission.
8.7 One Member stated its reservation that the expression of paragraph 2(vi) of Conservation Measure 65/XII was not entirely in the spirit of a precautionary approach.

## Krill Resources

8.8 The Commission considered the advice from the Scientific Committee that its revised estimate of potential yield for the combined Subareas 48.1, 48.2 and 48.3 was 3.08 million tonnes, but that changes to this estimate were likely to be made following refinement of the calculations being performed by WG-Krill. Revised estimates of yield in Statistical Area 58 are also expected in the near future (SC-CAMLR-XII, paragraphs 2.66 to 2.80 ).
8.9 The Commission agreed that no revision of the precautionary catch limits for krill in the Convention Area was necessary at the present meeting.
8.10 Consequently, the Commission agreed that Conservation Measures $32 / \mathrm{X}, 45 / \mathrm{XI}$ and 46/XI should remain in force.

## Fish Resources

8.11 In considering Conservation Measures addressing data reporting, the Commission recalled that SCOI had recommended that catch reports be submitted for the entire duration of a fishery, including so-called zero catches (paragraph 6.18). Accordingly, Conservation Measures 51/XI and 61/XI were amended and adopted as 51/XII and 61/XII (see paragraph 8.39).

Subarea 48.3 (South Georgia)

## Champsocephalus gunnari in Subarea 48.3

8.12 In reviewing management advice on this stock, the Commission recollected its decision last year to re-open the fishery for C. gunnari with a conservative TAC and to introduce detailed reporting requirements to improve the provision of data from the commercial fishery (CCAMLR-XI, paragraphs 9.18 and 9.19), based on the advice of the Scientific Committee (SC-CAMLR-XI, paragraph 3.68).
8.13 The Commission was informed that, for economic reasons, there had been no catch of C. gunnari in Subarea 48.3 during the 1992/93 season.
8.14 The Commission noted the recommendations of WG-FSA (SC-CAMLR-XII, Annex 5, paragraphs 6.56 to 6.62 ) that:
(i) in the light of uncertainty on the current status of the exploitable stock a conservative approach to management is appropriate in the immediate future;
(ii) a survey to establish the abundance of C. gunnari and other fish should be carried out during the 1993/94 season;
(iii) a TAC should be set either at 9200 tonnes, because of the lack of new data on the by-catch of non-target fish species, or at 13000 to 21000 tonnes if the by-catch of these species could be monitored continuously during fishing; and
(iv) that all Conservation Measures covering reporting of effort and biological data, closure to protect spawning stock, mesh size regulations and prohibition on bottom trawling, should remain in force.
8.15 The Commission further noted that while the advice of the Scientific Committee was not unanimous, most Members agreed with the above recommendations of WG-FSA (SC-CAMLR-XII, paragraph 3.45). However, another view was expressed, suggesting closure of the fishery in view of the lack of recent data, past high variability in stock
estimates and the large drop in biomass between 1989/90 and 1990/91, all combining to produce high levels of uncertainty (SC-CAMLR-XII, paragraph 3.46).
8.16 The Commission agreed on the general principle of a precautionary TAC and the prevailing view was that the TAC should remain at 9200 tonnes, while some Members continued to stress that high levels of uncertainty associated with the current biomass estimates, warranted more stringent measures. In this connection, the information from the UK of its intention to do a research survey of C. gunnari in Subarea 48.3 in January 1994 was welcomed by the Commission and it was decided to delay accordingly the commencement of the fishing season. The proposed TAC was then endorsed by the Commission, subject to the understanding that any significant trend which would effect current estimates of the stock would be immediately brought to the attention of the Commission. The Commission noted that this would allow Members to be informed early by the Secretariat if there were indications against continuing fishing in the 1993/94 season. As always, the TAC level shall be kept under review by the Commission, taking into account the advice of the Scientific Committee.
8.17 Accordingly, the Commission adopted Conservation Measure 66/XII (see paragraph 8.39).

## Electrona carlsbergi in Subarea 48.3

8.18 Last year, in the absence of new scientific data to estimate stock biomass, the Commission agreed to set a TAC broadly in line with that set in the preceding year.
8.19 This year, in the continuing absence of any information on the biomass and biological characteristics of the stock, the Commission agreed that it was no longer acceptable, for this stock, to continue to set TACs in line with assessments that were several years old.
8.20 The Commission also wished to ensure that any substantial fishery should be accompanied by a survey of the biomass and age structure of the stock and that the biological characteristics of by-catch should be studied and reported to CCAMLR.
8.21 Accordingly, Conservation Measure 67/XII, intended as a precautionary measure for the coming season, was adopted in conjunction with Conservation Measures 40/X and 54/XI (see paragraph 8.39).

Dissostichus eleginoides in Subarea 48.3
8.22 In reviewing management advice received from the Scientific Committee on this stock, the Commission:
(i) recollected the extensive discussion last year concerning TAC levels in relation to compliance with data reporting, proposals for division of fishing effort amongst fishing states and restriction of increase in the number of fishing vessels participating in the fishery (CCAMLR-XI, paragraphs 9.26 to 9.39);
(ii) noted the advice of the Scientific Committee (SC-CAMLR-XII, Annex 5, paragraphs 6.24 to 6.26 ) concerning:
(a) the possible depletion of the stock to around $30 \%$ of its unfished abundance and the recommendation that a substantial reduction in catch is required to allow the stock to rebuild;
(b) appropriate TACs in the case of whether this stock is considered restricted to Subarea 48.3 or whether allowance is made for fishing in areas adjacent to Subarea 48.3 but outside the Convention Area;
(c) the need for careful consideration of the number of vessels operating in the fishery;
(iii) noted further that the Scientific Committee had been unable to provide unanimous advice but that many Members had agreed with the recommendations of WG-FSA concerning possible levels of TAC. However, two other suggestions, one for closing the fishery and one for a TAC of 3000 tonnes had also been made (SC-CAMLR-XII, paragraphs 3.34 to 3.39); and
(iv) reiterated its concern that adequate data be made available for the scientific assessment and management of this stock.
8.23 To improve the scientific assessment of the D. eleginoides stock, the Commission decided to designate Subarea 48.3 a special zone for Protection and Scientific Study under Article IX (2) (g) of the Convention. This designation is for one season (1993/94) and for this stock only.
8.24 In order to regulate the number of vessels involved in the fishery at any one time to avoid problems with stock assessments (SC-CAMLR-XII, Annex 5, paragraph 6.26), the Commission agreed to divide the season into five periods of equal length with the TAC evenly divided between these periods, and to allow not more than one vessel to fish at any one time ${ }^{2}$. Members interested in conducting this fishery are encouraged to agree on the period in which each Member may carry out its activities.
8.25 Members intending to conduct fishing activities for D. eleginoides in the Special Area for Protection and Scientific Study shall include in their research plans transmitted to the Secretariat a brief description of studies on at least the following items:

- determination of local density;
- stock distribution and identification;
- biological data including size and age distributions; and
- reports on the effectiveness of mitigation measures.

A protocol for the determination of local density by means of local depletion experiments is being made available by the Secretariat to all interested Members.
8.26 Accordingly, Conservation Measure 69/XII was adopted in conjunction with Conservation Measures 51/XII and 71/XII (see paragraph 8.39).

By-catch Species in Subarea 48.3

[^1]8.27 The Commission noted the advice of the Scientific Committee on these species and adopted Conservation Measure 68/XII (see paragraph 8.39).

Subarea 48.1 (Antarctic Peninsula) and Subarea 48.2 (South Orkney Islands)
8.28 The Commission noted the advice of the Scientific Committee on fisheries in these subareas (SC-CAMLR-XII, paragraphs 3.54 and 3.55 ) and accordingly adopted Conservation Measures 72/XII and 73/XII (see paragraph 8.39).

## Subarea 48.4

Dissostichus eleginoides in Subarea 48.4
8.29 Last year an application by Chile under Conservation Measure 31/X for an exploratory fishery for D. eleginoides in Subarea 48.4 was approved by the Commission under the terms of Conservation Measure 44/XI. This exploratory fishery, in the northern part of the subarea, had resulted in low catch rates. In addition, a non-member, Bulgaria, had also fished in the subarea. Haul-by-haul catch and effort data (as required under Conservation Measure 44/XI) had been reported to CCAMLR from both fisheries.
8.30 The Commission noted that, based on the analysis of these data, WG-FSA had recommended a TAC of 28 tonnes for Subarea 48.4. The Commission noted one view that this TAC should apply only to the part of the subarea covered by the exploratory fishery and another view that the subarea be subdivided to restrict the TAC to the northern area, treating any fishery in the rest of the subarea as a new fishery.
8.31 After considering these views the Commission adopted Conservation Measure 70/XII in conjunction with Conservation Measures 51/XII and 71/XII (see paragraph 8.39).

## Crab Resources

8. 32 Fishing for crabs in Subarea 48.3 during the 1992/93 season was undertaken by one US vessel between 10 July and 12 November 1992. The catch was 299 tonnes (272 000 individuals). No fishing occurred during 1993.
8.33 The Commission noted the development of this fishery under a conservative management strategy and believed that certain aspects of this strategy should be used as a model in the future development of new and exploratory fisheries.
8.34 The Commission agreed that a TAC of 1600 tonnes should be imposed for the crab fishery in Subarea 48.3 for the next season and that indirect controls (size, sex, gear, etc.) should be continued. In addition, the Commission agreed that vessels operating in the fishery shall be required to participate in an experimental fishery.
8.35 The Commission recommended that the following additional measures identified by the Scientific Committee (SC-CAMLR-XII, paragraph 4.12 ) should have a high priority for investigation:
(i) the use of time-release or biodegradable devices to reduce the effects of "ghost" fishing resulting from pot loss, should be considered;
(ii) the adoption of a minimum mesh size and/or the incorporation of an escape port (usually a metal ring set into the side of the pot) in pots following research on mesh or port selectivity. This will serve to select only crabs of harvestable size more effectively in addition to reducing the number of potential discards. It will, however, reduce the ability to monitor parasitic infection; and
(iii) the use of pots with finer mesh or escape ports in order to obtain more representative length frequency information from harvested stocks.
8.36 The Commission noted that at this stage of its development the crab fishery has a number of special characteristics. These include:
(i) the recent fishery consists of only one boat and at this Commission meeting only one US vessel had indicated its wish to participate in the 1993/94 fishery;
(ii) crabs inhabit the ocean floor and are not free-swimming as are finfish and krill resources;
(iii) it is intended that biologists will participate on board the vessel during the entire fishing season to collect data, including haul-by-haul data, as specified by the Commission; and
(iv) the fishery, as set out by Conservation Measures 74/XII and 75/XII, will be conducted using indirect and direct controls and under the framework of an experimental design.
8.37 The Commission also noted the commitment of the uS to provide thorough analyses of all aspects of the crab data to the Scientific Committee's Working Groups.
8.38 Accordingly, Conservation Measure 74/XII, setting direct and indirect controls, and Conservation Measure 75/XII, providing for the experimental design, were adopted in accordance with Conservation Measure 65/XII (see paragraph 8.39).

CONSERVATION MEASURES ADOPTED IN 1993
8.39 Conservation Measures adopted at the Twelfth Meeting of the Commission are given below.

CONSERVATION MEASURE 29/XII
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 the fishing vessels and by preventing them from attempting to seize baited hooks, particularly during the period when the lines are set.

Recognising that successful techniques for reducing the mortality of albatrosses have been employed in the longline fishery for tuna immediately to the north of the Convention Area.

Agrees to 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 the baited hooks sink as soon as possible after they are put in the water. Only thawed bait shall be used.
2. During the setting of longlines at night, only the minimum ship's lights necessary for safety shall be used.
3. Trash and offal are not to be dumped while longline operations are in progress.
4. A streamer line designed to discourage birds from settling on baits during deployment of longlines shall be towed. Specification of the streamer line and its method of deployment is given in the Appendix to this Measure. Details of the construction relating to the number and placement of swivels may be varied so long as the effective sea surface covered by the streamers is no less than that covered by the currently specified design.
5. This Measure shall not apply to designated research vessels investigating better methods for reducing incidental mortality of seabirds.

APPENDIX TO CONSERVA TION MEASURE 29/XII

1. The streamer line is to be suspended at the stern from a point approximately 4.5 m above the water and such that the line is directly above the point where the baits hit the water.
2. The streamer line is to be approximately 3 mm diameter, have a minimum length of 150 m and be weighted at the end so that it streams directly behind the ship even in cross winds.
3. At 5 m intervals commencing from the point of attachment to the ship five branch streamers each comprising two strands of approximately 3 mm diameter cord should be attached. The length of the streamer should range between approximately 3.5 m nearest the ship to approximately 1.25 m for the fifth streamer. When the streamer line is deployed the branch streamers should reach the sea surface and periodically
dip into it as the ship heaves. Swivels should be placed in the streamer line at the towing point, before and after the point of attachment of each branch streamer and immediately before any weight placed on the end of the streamer line. Each branch streamer should also have a swivel at its attachment to the streamer line.


CONSERVATION MEASURE 51/XII
Five -day Catch and Effort Reporting System

This Conservation Measure is adopted in accordance with Conservation Measure 7/V where appropriate:

1. For the purposes of this Catch and Effort Reporting System the calendar month shall be divided into six reporting periods, viz: day 1 to day 5 , day 6 to day 10 , day 11 to day 15 , day 16 to day 20 , day 21 to day 25 and day 26 to the last day of the month. These reporting periods are hereinafter referred to as periods A, B, C, D, E and $F$.
2. At the end of each reporting period, each Contracting Party shall obtain from each of its vessels its total catch and total days and hours fished for that period and shall, by cable, telex or facsimile, transmit the aggregated catch and days and hours fished for its vessels so as to reach the Executive Secretary not later than the end of the next reporting period. In the case of longline fisheries, the number of hooks shall also be reported.
3. A report must be submitted by every Contracting Party taking part in the fishery for each reporting period for the duration of the fishery even if no catches are taken.
4. The catch of all species, including by-catch species, must be reported.
5. Such reports shall specify the month and reporting period (A, B, C, D, E or F) to which each report refers.
6. Immediately after the deadline has passed for receipt of the reports for each period, the Executive Secretary shall notify all Contracting Parties engaged in fishing activities in the area, of the total catch taken during the reporting period, the total aggregate catch for the season to date together with an estimate of the date upon which the total allowable catch is likely to be reached for that season. The estimate shall be based on a projection forward of the trend in daily catch rates, obtained using linear regression techniques from a number of the most recent catch reports.
7. At the end of every six reporting periods, the Executive Secretary shall inform all Contracting Parties of the total catch taken during the six most recent reporting periods, the total aggregate catch for the season to date together with an estimate of the date upon which the total allowable catch is likely to be reached for that season.
8. If the estimated date of completion of the TAC is within five days of the date on which the Secretariat received the report of the catches, the Executive Secretary shall inform all Contracting Parties that the fishery will close on that estimated day or on the day on which the report was received, whichever is the later.

CONSERVATION MEASURE 61/XII
Ten-day Catch and Effort Reporting System

This Conservation Measure is adopted in accordance with Conservation Measure 7/V where appropriate:

1. For the purposes of this Catch and Effort Reporting System the calendar month shall be divided into three reporting periods, viz: day 1 to day 10 , day 11 to day 20 , day 21 to the last day of the month. These reporting periods are hereinafter referred to as periods $\mathrm{A}, \mathrm{B}$ and C .
2. At the end of each reporting period, each Contracting Party shall obtain from each of its vessels its total catch and total days and hours fished for that period and shall, by cable, telex or facsimile, transmit the aggregated catch and days and hours fished for its vessels so as to reach the Executive Secretary not later than the end of the next reporting period. In the case of longline fisheries, the number of hooks shall also be reported.
3. A report must be submitted by every Contracting Party taking part in the fishery for each reporting period for the duration of the fishery even if no catches are taken.
4. The retained catch of all species and by-catch species, must be reported.
5. Such reports shall specify the month and reporting period (A, B and C) to which each report refers.
6. Immediately after the deadline has passed for receipt of the reports for each period, the Executive Secretary shall notify all Contracting Parties engaged in fishing activities in the area, of the total catch taken during the reporting period, the total aggregate catch for the season to date together with an estimate of the date upon which the total allowable catch is likely to be reached for that season. The estimate shall be based on a projection forward of the trend in daily catch rates, obtained using linear regression techniques from a number of the most recent catch reports.
7. At the end of every three reporting periods, the Executive Secretary shall inform all Contracting Parties of the total catch taken during the three most recent reporting periods, the total aggregate catch for the season to date together with an estimate of the date upon which the total allowable catch is likely to be reached for that season.
8. If the estimated date of completion of the TAC is within ten days of the date on which the Secretariat received the report of the catches, the Executive Secretary shall inform all Contracting Parties that the fishery will close on that estimated day or on the day on which the report was received, whichever is the later.

## The Commission,

Recollecting that for many years it has received evidence from the Scientific Committee that substantial numbers of Antarctic fur seals have been entangled and killed in plastic packaging bands in the Convention Area.

Noting that, despite the recommendations of CCAMLR and the provisions of the MARPOL Convention and its Annexes which prohibit the jettisoning of all plastics at sea, substantial entanglement of fur seals is still continuing.

Recognising that the bait boxes used on fishing vessels in particular and other packages in general need not be secured by plastic packaging bands because suitable alternatives exist.

Agrees to adopt the following Conservation Measure, to reduce the incidental mortality of seals due to entanglement, in accordance with Article IX of the Convention.

1. As a general practice all packaging bands, once removed from packages, shall be cut, so that they do not form a continuous loop.
2. The use on fishing vessels of plastic packaging bands to secure bait boxes shall be prohibited from the 1995/96 season.
3. The use of such packaging bands for other purposes on fishing vessels which do not use on-board incinerators shall be prohibited from the 1996/97 season.

CONSERVATION MEASURE 64/XII ${ }^{1,2}$
The Application of Conservation Measures to Scientific Research

This Conservation Measure governs the application of conservation measures to scientific research and is adopted in accordance with Article IX of the Convention.

1. General application.
(a) Catches taken by any vessel for research purposes will be considered as part of any catch limits in force for each species taken, and shall be reported to CCAMLR as part of the annual STATLANT returns.
(b) The CCAMLR within season catch and effort reporting systems shall apply whenever the catch within a specified reporting period exceeds five tonnes, unless more specific regulations apply to the particular species.
2. Application to vessels taking less than 50 tonnes of catch for any purpose.
(a) Any Member planning to use a vessel for research purposes when the estimated catch is expected to be less than a total of 50 tonnes shall notify the Secretariat of the Commission which in turn will notify all Members immediately, according to the format provided in Annex 6 of CCAMLR-XII. This notification shall be included in the Members' Activities Reports.
(b) Vessels to which the provisions of paragraph 2(a) above apply, shall be exempt from conservation measures relating to mesh size regulations, prohibition of types of gear, closed areas, fishing seasons and size limits, and reporting system requirements other than those specified in paragraphs 1(a) and (b) above.
3. Application to vessels taking more than 50 tonnes of finfish.
(a) Any Member planning to use any type of vessel to conduct fishing for research purposes when the estimated catch is expected to be more than 50 tonnes, shall notify the Commission and provide the opportunity for other

Members to review and comment on its research plan. The plan shall be provided to the Secretariat for distribution to Members at least six months in advance of the planned starting date for the research. In the event of any request for a review of such plan being lodged within two months of its circulation, the Executive Secretary shall notify all Members and submit the plan to the Scientific Committee for review. Based on the submitted research plan and any advice provided by the appropriate Working Group, the Scientific Committee will provide advice to the Commission where the review process will be concluded. Until the review process is complete the planned fishing for research purposes shall not proceed.
(b) Research plans shall be reported in accordance with the standardised guidelines and formats adopted by the Scientific Committee, given in Annex 6 of CCAMLR-XII.
(c) A summary of the results of any research subject to these provisions shall be provided to the Secretariat within 180 days of the completion of the research fishing. A full report shall be provided within 12 months.
(d) Catch and effort data resulting from the research fishing in accordance with paragraph (a) above, should be reported to the Secretariat according to the haul-by-haul reporting format for research vessels (C4).

1 except for waters adjacent to the Kerguelen and Crozet Islands
2 except for waters adjacent to the Prince Edward Islands

CONSERVATION MEASURE 65/XIII, 2
Exploratory fisheries

The Commission,

Recognising that in the past, some Antarctic fisheries had been initiated and subsequently expanded in the Convention Area before sufficient information was available upon which to base management advice, and
Agreeing that exploratory fishing should not be allowed to expand faster than the acquisition of information necessary to ensure that the fishery can and will be
conducted in accordance with the principles set forth in Article II,hereby adopts the following Conservation Measure in accordance with Article IX of the Convention:

1. For the purposes of this Conservation Measure, exploratory fisheries are defined as follows:
(i) an exploratory fishery shall be defined as a fishery that was previously classified as a Ònew fisheryÓ, as defined by Conservation Measure 31/X;
(ii) an exploratory fishery shall continue to be classified as such until sufficient information is available:
(a) to evaluate the distribution, abundance, and demography of the target species, leading to an estimate of the fisheryÕs potential yield,
(b) to review the fisheryÕs potential impacts on dependent and related species, and
(c) to allow the Scientific Committee to formulate and provide advice to the Commission on appropriate harvest catch levels, as well as effort levels and fishing gear, where appropriate.
2. To ensure that adequate information is made available to the Scientific Committee for evaluation, during the period when a fishery is classified as exploratory:
(i) the Scientific Committee shall develop (and update annually as appropriate) a Data Collection Plan, which will identify the data needed and describe the actions necessary to obtain the relevant data from the exploratory fishery;
(ii) each Member active in the fishery shall annually (by the specified date) submit to CCAMLR the data specified by the Data Collection Plan developed by the Scientific Committee;
(iii) each Member active in the fishery or intending to authorise a vessel to enter the fishery shall annually prepare and submit to CCAMLR by a specified date a Research and Fishery Operations Plan for review by the Scientific Committee and the Commission;
(iv) prior to any Member authorising its vessels to enter an exploratory fishery that is already in progress, that Member shall notify the Commission not less than three months in advance of the next regular meeting of the Commission, and the Member shall not enter the exploratory fishery until the conclusion of that meeting;
(v) if the data specified in the Data Collection Plan lave not been submitted to CCAMLR for the most recent season in which fishing occurred, continued exploratory fishing by the Member which failed to report its data shall be prohibited until the relevant data have been submitted to CCAMLR and the Scientific Committee has been allowed an opportunity to review the data;
(vi) fishing capacity and effort shall be limited by a precautionary catch limit at a level not substantially above that necessary to obtain the information specified in the Data Collection Plan and required to make the evaluations outlined in paragraph 1(ii);
(vii) the name, type, size, registration number, and radio call sign of each vessel participating in the exploratory fishery shall be registered with the CCAMLR Secretariat at least three months in advance of starting fishing each season; and
(viii) each vessel participating in the exploratory fishery shall carry a scientific observer to ensure that data are collected in accordance with the agreed Data Collection Plan, and to assist in collecting biological and other relevant data.
3. The Data Collection Plan to be formulated and updated by the Scientific Committee shall include, where appropriate:
(i) a description of the catch, effort, and related biological, ecological, and environmental data required to undertake the evaluations described in
paragraph 1(ii), and the date by which such data are to be reported annually to CCAMLR;
(ii) a plan for directing fishing effort during the exploratory phase to permit the acquisition of relevant data to evaluate the fishery potential and the ecological relationships among harvested, dependent, and related populations and the likelihood of adverse impacts; and
(iii) an evaluation of the time-scales involved in determining the responses of harvested, dependent and related populations to fishing activities.
4. Research and Fisheries Operations Plans to be prepared by Members participating or intending to participate in the exploratory fishery shall include as much of the following information as the Member is able to provide:
(i) a description of how the MemberÕs activities will comply with the Data Collection Plan developed by the Scientific Committee;
(ii) the nature of the exploratory fishery, including target species, methods of fishing, proposed region and maximum catch levels proposed for the forthcoming season;
(iii) biological information from comprehensive research/survey cruises, such as distribution, abundance, demographic data, and information on stock identity;
(iv) details of dependent and related species and the likelihood of them being affected by the proposed fishery; and
(v) information from other fisheries in the region or similar fisheries elsewhere that may assist in the evaluation of potential yield.

1 except for waters adjacent to the Kerguelen and Crozet Islands
2 except for waters adjacent to the Prince Edward Islands

CONSERVATION MEASURE 66/XII
Limitation of the Total Catch of Champsocephalus gunnari
in Statistical Subarea 48.3 in the 1993/94 Season

Noting that a survey to assess the abundance of the stock of this species in Subarea 48.3 is to take place in January 1994.

The Commission adopted this Conservation Measure in accordance with Conservation Measure 7/v:

1. The total catch of Champsocephalus gunnari in the 1993/94 season, which shall commence on 1 January $1994^{1}$ shall not exceed 9200 tonnes in Statistical Subarea 48.3.
2. The fishery for Champsocephalus gunnari in Statistical Subarea 48.3 shall close if the by-catch of any of the species listed in Conservation Measure 68/XII reaches its by-catch limit or if the total catch of Champsocephalus gunnari reaches 9200 tonnes, whichever comes first.
3. If, in the course of the directed fishery for Champsocephalus gunnari, the by-catch of any one haul of any of the species named in Conservation Measure 68/XII exceeds $5 \%$, the fishing vessel shall move to another fishing ground within the subarea.
4. The use of bottom trawls in the directed fishery for Champsocephalus gunnari in Statistical Subarea 48.3 is prohibited.
5. The fishery for Champsocephalus gunnari in Statistical Subarea 48.3 shall be closed from 1 April 1994 until the end of the Commission meeting in 1994.
6. For the purpose of implementing paragraphs 1 and 2 of this Conservation Measure:
(i) the Five-day Catch and Effort Reporting System set out in Conservation Measure 51/XII shall apply in the 1993/94 season commencing on 1 January 1994;
(ii) the Monthly Effort and Biological Data Reporting System set out in Conservation Measure 52/XI shall apply for Champsocephalus gunnari and all by-catch species listed in Conservation Measure 68/XII in the 1993/94 season, commencing on 1 January 1994.

1 It was agreed that the opening of the fishery on this date was without prejudice or precedent to decisions regarding this fishery in future fishing seasons.

CONSERVATION MEASURE 67/XII
Precautionary TAC for Electrona carlsbergi
in Statistical Subarea 48.3 for the 1993/94 Season

This Conservation Measure is adopted in accordance with Conservation Measure 7/V:

1. For the purposes of this Conservation Measure the fishing season for Electrona carlsbergi is defined as the period from 6 November 1993 to the end of the Commission meeting in 1994.
2. The total catch of Electrona carlsbergi in the 1993/94 season shall not exceed 200000 tonnes in Statistical Subarea 48.3.
3. In addition, the total catch of Electrona carlsbergi in the 1993/94 season shall not exceed 43000 tonnes in the Shag Rocks region, defined as the area bounded by $52^{\circ} 30^{\prime} \mathrm{S}, 40^{\circ} \mathrm{W} ; 52^{\circ} 30^{\prime} \mathrm{S}, 44^{\circ} \mathrm{W} ; 54^{\circ} 30^{\prime} \mathrm{S}, 40^{\circ} \mathrm{W}$ and $54^{\circ} 30^{\prime} \mathrm{S}, 44^{\circ} \mathrm{W}$.
4. In the event that the catch of Electrona carlsbergi is expected to exceed 20000 tonnes in the 1993/94 season, a survey of stock biomass and age structure shall be conducted during that season by the principal fishing nations involved. A full report of this survey including data on stock biomass (specifically including area surveyed, survey design and density estimates), age structure and the biological characteristics of the by-catch shall be available for discussion at the 1994 meeting of the Working Group on Fish Stock Assessment.
5. The directed fishery for Electrona carlsbergi in Statistical Subarea 48.3 shall close if the by-catch of any of the species named in Conservation Measure 68/XII reaches its by-catch limit or if the total catch of Electrona carlsbergi reaches 200000 tonnes, whichever comes first.
6. The directed fishery for Electrona carlsbergi in the Shag Rocks region shall close if the by-catch of any of the species named in Conservation Measure 68/XII reaches its by-catch limit or if the total catch of Electrona carlsbergi reaches 43000 tonnes, whichever comes first.
7. If, in the course of the directed fishery for Electrona carlsbergi, the by-catch of any one haul of any of the species named in Conservation Measure 68/XII exceeds 5\%, the fishing vessel shall move to another fishing ground within the subarea.
8. For the purpose of implementing this Conservation Measure:
(i) the Catch Reporting System set out in Conservation Measure 40/X shall apply in the 1993/94 season;
(ii) the Data Reporting System set out in Conservation Measure 54/XI shall apply in the 1993/94 season.

CONSERVATION MEASURE 68/XII
Limitation of the By-catch of Notothenia gibberifrons, Chaenocephalus aceratus, Pseudochaenichthys georgianus,Notothenia rossii and Notothenia squamifrons, in Statistical Subarea 48.3 for the 1993/94 Season

This Conservation Measure is adopted in accordance with Conservation Measure 7/v:

In any directed fishery in Statistical Subarea 48.3, during the 1993/94 season commencing 6 November 1993, the by-catch of Notothenia gibberifrons shall not exceed 1470 tonnes; the by-catch of Chaenocephalus aceratus shall not exceed 2200 tonnes; and the by-catch of Pseudochaenichthys georgianus, Notothenia rossii and Notothenia squamifrons shall not exceed 300 tonnes each.

CONSERVATION MEASURE 69/XII
Limits on the fishery for Dissostichus eleginoides
in Statistical Subarea 48.3 for the 1993/94 Season

This Conservation Measure is adopted in accordance with Conservation Measure 7/v:

1. For the purpose of the fishery directed to Dissostichus eleginoides during the 1993/94 season, Statistical Subarea 48.3 shall be designated as a Special Area for Protection and Scientific Study in accordance with Article IX (2) (g) of the Convention.
2. The total catch of Dissostichus eleginoides in Statistical Subarea 48.3 caught during the 1993/94 season shall be limited to 1300 tonnes.
3. For the purposes of the fishery for Dissostichus eleginoides in Statistical Subarea 48.3, the 1993/94 fishing season is defined as the period from 15 December 1993 to 15 September 1994, or until the TAC is reached, whichever is the sooner.
4. The TAC for the 1993/94 fishing season shall be divided evenly into five sequential time-periods of 55 days each, with not more than one vessel at any one time fishing within each period. These periods are as follows:

15 December 1993 to 7 February 1994
8 February 1994 to 3 April 1994
4 April 1994 to 28 May 1994
29 May 1994 to 22 July 1994
23 July 1994 to 15 September $1994{ }^{1}$.
5. Any Member planning to conduct fishing and scientific research activities for Dissostichus eleginoides in the Special Area for Protection and Scientific Study during any of the five periods shall be required to conduct fishing for scientific purposes according to a research plan and shall transmit to the Executive Secretary at least ten days before the start of the period:
(i) the research plan it intends to carry out within that period;
(ii) an indication that a Scientific Observer has been appointed in accordance with the Scheme of International Scientific Observation of ccamlr. This Scientific Observer is required to be aboard all vessels during all fishing activities within the period; and
(iii) the name, type, size, and fish processing and storage capacity of the vessels.
6. Fishing within each of the five periods shall cease at the end of the relevant period, or when the TAC allocation of Dissostichus eleginoides for the period is reached, whichever is the sooner.
7. For the purpose of implementing this Conservation Measure:
(i) the Five-day Catch and Effort Reporting System set out in Conservation Measure 51/XII shall apply in the 1993/94 season, commencing on 15 December 1993.
(ii) the Effort and Biological Data Reporting System set out in Conservation Measure 71/XII shall apply in the 1993/94 season, commencing on 15 December 1993.

1 It was agreed that this decision was without prejudice or precedent to decisions regarding this fishery in future fishing seasons.

CONSERVATION MEASURE 70/XII
Catch Limit on Dissostichus eleginoides in
Statistical Subarea 48.4 for the 1993/94 Season

1. The total catch of Dissostichus eleginoides in Statistical Subarea 48.4 caught in the 1993/94 season shall be limited to 28 tonnes.
2. For the purposes of the fishery for Dissostichus eleginoides in Statistical Subarea 48.4, the 1993/94 fishing season is defined as the period from 15 December 1993 to the end of the Commission meeting in 1994, or until the TAC is reached, whic hever is sooner.
3. For the purpose of implementing this Conservation Measure:
(i) the Five-day Catch and Effort Reporting System set out in Conservation Measure 51/XII shall apply in the 1993/94 season, commencing on 15 December 1993;
(ii) the Effort and Biological Data Reporting System set out in Conservation Measure 71/XII shall apply in the 1993/94 season, commencing on 15 December 1993.

## CONSERVATION MEASURE 71/XII

Effort and Biological Data Reporting System for Dissostichus eleginoides
in Statistical Subareas 48.3 and 48.4 for the 1993/94 Season

This Conservation Measure is adopted in accordance with Conservation Measure 7/v:

1. At the end of each month each Contracting Party shall obtain from each of its vessels the haul-by-haul data required to complete the CCAMLR fine-scale catch and effort data form for longline fisheries (Form C2, latest version). These data shall include numbers of seabirds or marine mammals of each species caught and released or killed. It shall transmit those data to the Executive Secretary not later than the end of the following month.
2. At the end of each month, each Contracting Party shall obtain from each of its vessels a representative sample of length composition measurements from the fishery (Form B2, latest version). It shall transmit those data to the Executive Secretary not later than the end of the following month.
3. For the purpose of implementing this Conservation Measure;
(i) length measurements of fish should be of total length to the nearest centimetre below;
(ii) representative samples of length composition should be taken from a single fishing ground ${ }^{1}$. In the event that the vessel moves from one fishing ground to another during the course of a month, then separate length compositions should be submitted for each fishing ground.
4. Failure by a Contracting Party to provide either/or both of the haul-by-haul and length composition data for three consecutive months shall result in the closure of the fishery to vessels of that Contracting Party. If the Executive Secretary has not received either/or both of the haulby-haul and length composition data for two
consecutive months he shall notify the Contracting Party that the fishery will be closed to that Contracting Party unless those data (including arrears of data) are provided by the end of the next month. If at the end of the next month those data have still not been provided, the Executive Secretary shall notify all Contracting Parties of the closure of the fishery to vessels of the Contracting Party which has failed to supply the data as required.

1 Pending the provision of a more appropriate definition, the term fishing ground is defined here as the area within a single fine-scale grid rectangle ( $0.5^{\circ}$ latitude by $1^{\circ}$ longitude).

CONSERVATION MEA SURE 72/XII
Prohibition of Directed Fishing for Finfish
in Statistical Subarea 48.1

Taking of finfish, other than for scientific research purposes, is prohibited in Statistical Subarea 48.1 from 6 November 1993 until at least such time that a survey of stock biomass is carried out, its results reported to and analysed by the Working Group on Fish Stock Assessment and a decision that the fishery be re-opened is made by the Commission based on the advice of the Scientific Committee.

CONSERVATION MEASUR E 73/XII
Prohibition of Directed Fishing for Finfish
in Statistical Subarea 48.2

Taking of finfish, other than for scientific research purposes, is prohibited in Statistical Subarea 48.2 from 6 November 1993 until at least such time that a survey of stock biomass is carried out, its results reported to and analysed by the Working Group on Fish Stock Assessment and a decision that the fishery be re-opened is made by the Commission based on the advice of the Scientific Committee.

CONSERVATION MEASURE 74/XII
Limits on the Exploratory Crab Fishery in
Statistical Subarea 48.3 in the 1993/94 Season

The following Conservation Measure is adopted in accordance with Conservation Measure 7/V:

1. The crab fishery is defined as any commercial harvest activity in which the target species is any member of the crab group (Order Decapoda, Suborder Reptantia).
2. The crab fishery shall be limited to one vessel per Member.
3. The total catch of crab from Statistical Subarea 48.3 shall not exceed 1600 tonnes during the 1993/94 fishing season.
4. Each Member intending to participate in the crab fishery shall notify the CCAMLR Secretariat at least three months in advance of starting fishing of the name, type, size, registration number, radio call sign, and research and fis hing operations plan of the vessel that the Member has authorised to participate in the crab fishery.
5. All vessels fishing for crab shall report the following data to CCAMLR by 31 August 1994 for crabs caught prior to 31 July 1994:
(i) the location, date, depth, fishing effort (number and spacing of pots and soak time), and catch (numbers and weight) of commercially sized crabs (reported on as fine a scale as possible, but no coarser than $0.5^{\circ}$ latitude by $1^{\circ}$ longitude) for each 10 -day period;
(ii) the species, size, and sex of a representative subsample of crabs sampled according to the procedure set out in Annex 7 of CCAMLR-XII (between 35 and 50 crabs shall be sampled every day from the line hauled just prior to noon) and by-catch caught in traps; and
(iii) other relevant data, as possible, according to the requirements set out in Annex 7 of CCAMLR-XII.
6. For the purposes of implementing this Conservation Measure, the 10-day catch and effort reporting system set out in Conservation Measure 61/XIIshall apply.
7. Data on catches taken between 31 July 1994 and 31 August 1994 shall be reported to CCAMLR by 30 September 1994 so that the data will be available to the Working Group on Fish Stock Assessment.
8. Crab fishing gear shall be limited to the use of crab pots (traps). The use of all other methods of catching crabs (e.g., bottom trawls) shall be prohibited.
9. The crab fishery shall be limited to sexually mature male crabs - all female and undersized male crabs caught shall be released unharmed. In the case of Paralomis spinosissima and P. formosa, males with a minimum carapace width of 102 mm and 90 mm , respectively, may be retained in the catch.
10. Crab processed at sea shall be frozen as crab sections (minimum size of crabs can be determined using crab sections).

CONSERVATION MEASURE 75/XII<br>Experimental Harvest Regime for the Crab Fishery in<br>Statistical Subarea 48.3 for Seasons 1993/94 to 1995/96

The following measures apply to all crab fishing within Statistical Subarea 48.3 for the 1993/94, 1994/95, and 1995/96 fishing seasons. Every vessel participating in the crab fishery in Subarea 48.3 shall conduct fishing operations in accordance with an experimental fishing regime as outlined below:

1. The experimental regime shall consist of three phases. Each vessel participating in the fishery shall complete all three phases. Phase 1 shall be conducted during the first season that a vessel participates in the experimental regime. Phases 2 and 3 shall be completed in the next season of fishing.
2. Vessels shall conduct Phase 1 of the experimental regime at the start of their first season of participation in the experimental regime. For the purposes of Phase 1, the following conditions shall apply:
(i) Phase 1 shall be defined as a vessel's first 200000 pot hours of effort at the start of its first fishing season.
(ii) Every vessel conducting Phase 1 shall expend its first 200000 pot hours of effort within a total area delineated by twelve $0.5^{\circ}$ latitude by $1^{\circ}$ longitude blocks. For the purposes of this Conservation Measure, these blocks shall be
numbered A through L. The blocks are illustrated in Figure 1, and the northeast corner of each block is listed in Table 1 of Annex 7 of CCAMLR-XII. For each string, pot hours shall be calculated by taking the total number of pots on the string and multiplying by the soak time (in hours) for that string.
(iii) Vessels shall not fish outside the area delineated by the twelve $0.5^{\circ}$ latitude by $1^{\circ}$ longitude blocks prior to completing Phase 1 .
(iv) During Phase 1, vessels shall not expend more than 30000 pot hours in any single $0.5^{\circ}$ latitude by $1^{\circ}$ longitude block.
(v) If a vessel returns to port before it has expended 200000 pot hours in Phase 1 , the balance of remaining pot hours shall be expended before the vessel can consider Phase 1 to be completed.
(vi) After completing 200000 pot hours of experimental fishing, vessels shall consider Phase 1 to be completed and commence fishing in a normal fashion.
3. Normal fishing operations shall be conducted in accordance with the regulations set out in Conservation Measure 74/XII.
4. For the purposes of implementing normal fishing operations after Phase 1 of the experimental regime, the 10 -day catch and effort reporting system set out in Conservation Measure 61/XII shall apply.
5. Vessels shall conduct Phase 2 of the experimental regime at the start of their second season of participation in the experimental regime. For the purposes of Phase 2, the following conditions shall apply:
(i) Every vessel conducting Phase 2 shall fish in three small squares measuring approximately 26 square nautical miles in area (the dimensions of these squares shall be $6^{\circ}$ latitude by $7.5^{\circ}$ longitude). These squares shall be subdivisions of the blocks delineated in Phase 1 of the experimental regime and numbered A1 through L40. The squares are illustrated in Figure 2 and the northeast corner of each square is listed in Table 2 of Annex 7 of CCAMLR-XII.
(ii) Vessels shall fish continuously (except in emergencies or foul weather conditions) within a single square until the average catch per pot has been reduced to 25 percent or less of its initial value and then continue fishing for an additional 7500 pot hours. Not more than 50000 total pot hours shall be expended in each square. For the purposes of Phase 2, the initial catch rate for a particular square shall be defined as the average catch per pot calculated from the first five sets made in that square. Soak times for these initial sets shall be at least 24 hours.
(iii) Vessels shall finish fishing in one square before starting operations in another square.
(iv) Vessels shall attempt to distribute effort throughout the entire square and not fish the gear in the same location on every set.
(v) Vessel captains shall decide which three squares will be fished, but selected squares may not be contiguous.
(vi) After completing fishing operations in the third square, fishing vessels shall consider Phase 2 to be completed and commence fishing in a normal fashion.
6. For the purposes of implementing normal fishing operations after Phase 2 of the experimental regime, the 10 -day catch and effort reporting system set out in Conservation Measure 61/XII shall apply.
7. Vessels shall conduct Phase 3 of the experimental regime at the end of their second season of participation in the experimental regime. For the purposes of Phase 3, the following conditions shall apply:
(i) A vessel shall begin conducting Phase 3 of the experimental regime approximately one week prior to the conclusion of its second fishing season. A vessel's fishing season shall be concluded if the vessel leaves the fishery voluntarily or if the fishery is closed because the TAC has been attained.
(ii) If a vessel captain voluntarily concludes fishing operations, the vessel shall begin implementing Phase 3 approximately one week prior to the conclusion of its fishing operations.
(iii) The CCAMLR Secretariat shall notify (according to the guidelines set out in Conservation Measure 61/XII) all Contracting Parties that are conducting operations in their second experimental fishing season to begin Phase 3 when approximately one week remains before the TAC is attained and the fishery is closed.
(iv) To conduct Phase 3, every vessel shall return to the three squares it depleted during Phase 2 of the experimental regime and expend between 10000 and 15000 pot hours of effort in each square.
8. To facilitate analysis of data collected during Phases 2 and 3, vessels shall report the number (A1 through L40) of the square where fishing occurred, date, fishing effort (number and spacing of pots and soak time), and catch (numbers and weight) for each haul.
9. Data collected during the experimental regime shall be submitted to CCAMLR by 31 August of the prevailing split-year.
10. Vessels that complete all three phases of the experimental regime shall not be required to conduct experimental fishing in future seasons. However, these vessels shall abide by the guidelines set forth in Conservation Measure 74/XII.
11. Fishing vessels shall participate in the experiment independently (e.g., vessels may not cooperate to complete phases of the experiment).
12. Crabs captured during the experimental regime shall be considered part of the prevailing TAC for the current fishing season (e.g., for 1993/94, experimental catches shall be considered part of the 1600 tonne TAC outlined in Conservation Measure 74/XII).
13. The experimental regime shall be instituted for a period of three split-years (1993/94 to 1995/96), and the details of the regime may be revised by the

Commission during this period of time. Fishing vessels that begin experimental fishing in the 1995/96 split-year must complete the regime during the 1996/97 splityear.


[^0]:    1 Conservation Measures 5/V and 6/V, which prohibit directed fishing for Notothenia rossii in Subareas 48.1 and 48.2 respectively, remain in force but are currently encompassed within the provisions in Conservation Measures 72/XII and 73/XII.

[^1]:    2 It was agreed that this decision was without prejudice or precedent to decisions regarding this fishery in future fishing seasons.

