SCHEDULE OF CONSERVATION MEASURES IN FORCE 1992/93 SEASON

(As amended by the Commission at the Eleventh Meeting, 26 October - 6 November 1992)

This schedule lists Conservation Measures adopted by the Commission in accordance with Article IX of the Convention for the Conservation of Antarctic Marine Living Resources.

Conservation Measures are numbered in simple consecutive order in arabic numerals with a roman numeral identifying the number of the meeting of the Commission at which they were adopted. For example, Conservation Measure 3/IV denotes the third Conservation Measure adopted by the Commission, and indicates that the Measure was adopted at the Fourth Meeting of the Commission, i.e. in 1985.

The map depicts the CCAMLR Convention Area and its Statistical Areas, Subareas and Divisions.

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Boundanes of the Statistical Reporting Areas in the Southern Ocean

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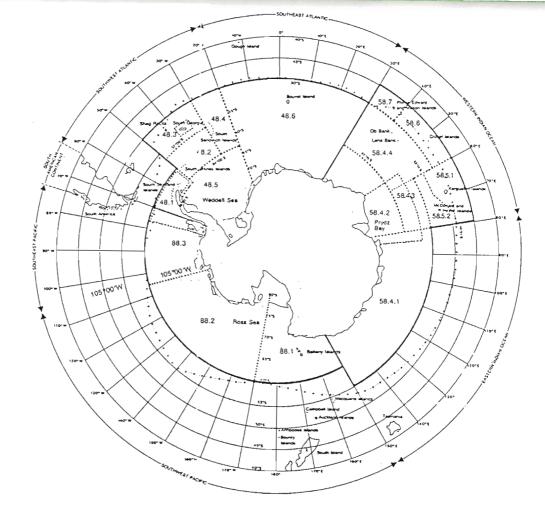
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CONSERVATION MEASURE 2/III MESH SIZE (as amended in accordance with Conservation Measure 19/IX)

1. The use of pelagic and bottom trawls having the mesh-size in any part of a trawl less than indicated is prohibited for any directed fishery for:

Notothenia rossii, Dissostichus eleginoides - 120 mm Notothenia gibberifrons, Notothenia kempi, Notothenia squamifrons - 80 mm

- 2. It is prohibited to use any means or device which would obstruct or diminish the size of the meshes.
- 3. This Conservation Measure does not apply to fishing conducted for scientific research purposes.
- 4. This Measure will apply as of 1 September 1985.

CONSERVATION MEASURE 3/IV Prohibition of Directed Fishery on *Notothenia rossii* around South Georgia (Statistical Subarea 48.3)

- 1. Directed fishing on *Notothenia rossii* around South Georgia (Statistical Subarea 48.3) is prohibited.
- 2. By-catches of *Notothenia rossii* in fisheries directed to other species shall be kept to the level allowing the optimum recruitment to the stock.

CONSERVATION MEASURE 4/V Regulation on Mesh-size Measurement This Conservation Measure supplements Conservation Measure 2/III

Regulations on Mesh-size Measurement

ARTICLE 1

Description of Gauges

- 1. Gauges to be used for determining mesh sizes shall be 2 mm thick, flat, of durable material and capable of retaining their shape. They shall have either a series of parallel-edged sides connected by intermediate tapering edges with a taper of one to eight on each side, or only tapering edges with the taper defined above. They shall have a hole at the narrowest extremity.
- 2. Each gauge shall be inscribed on its face with the width in millimetres both on the parallel-sided section, if any, and on the tapering section. In the case of the latter the width shall be inscribed every 1 mm interval and the indication of the width shall appear at regular intervals.

ARTICLE 2

Use of the Gauge

- 1. The net shall be stretched in the direction of the long diagonal of the meshes.
- 2. A gauge as described in Article 1 shall be inserted by its narrowest extremity into the mesh opening in a direction perpendicular to the plane of the net.
- 3. The gauge shall be inserted into the mesh opening either with a manual force or using a weight or dynamometer, until it is stopped at the tapering edges by the resistance of the mesh.

ARTICLE 3

Selection of Meshes to be Measured

- 1. Meshes to be measured shall form a series of 20 consecutive meshes chosen in the direction of the long axis of the net.
- 2. Meshes less than 50 cm from lacings, ropes or codline shall not be measured. This distance shall be measured perpendicular to the lacings, ropes or codline with the net stretched in the direction of that measurement. Nor shall any mesh be measured which has been mended or broken or has attachments to the net fixed at that mesh.
- 3. By way of derogation from paragraph 1, the meshes to be measured need not be consecutive if the application of paragraph 2 prevents it.
- 4. Nets shall be measured only when wet and unfrozen.

ARTICLE 4

Measurement of Each Mesh

The size of each mesh shall be the width of the gauge at the point where the gauge is stopped, when using this gauge in accordance with Article 2.

ARTICLE 5

Determination of the Mesh Size of the Net

The mesh size of the net shall be the arithmetical mean in millimetres of the measurements of the total number of meshes selected and measured as provided for in Articles 3 and 4, the arithmetical mean being rounded up to the next millimetre.

2. The total number of meshes to be measured is provided for in Article 6.

ARTICLE 6

Sequence of Inspection Procedure

1. The inspector shall measure one series of 20 meshes, selected in accordance with Article 3, inserting the gauge manually without using a weight or dynamometer.

The mesh size of the net shall then be determined in accordance with Article 5.

If the calculation of the mesh size shows that the mesh size does not appear to comply with the rules in force, then two additional series of 20 meshes selected in accordance with Article 3 shall be measured. The mesh size shall then be recalculated in accordance with Article 5, taking into account the 60 meshes already measured. Without prejudice to paragraph 2, this shall be the mesh size of the net.

2. If the captain of the vessel contests the mesh size determined in accordance with paragraph 1, such measurement will not be considered for the determination of the mesh size and the net shall be remeasured.

A weight or dynamometer attached to the gauge shall be used for remeasurement.

The choice of weight or dynamometer shall be at the discretion of the inspector.

The weight shall be fixed to the hole in the narrowest extremity of the gauge using a hook. The dynamometer may either be fixed to the hole in the narrowest extremity of the gauge or be applied at the largest extremity of the gauge.

The accuracy of the weight or dynamometer shall be certified by the appropriate national authority.

For nets of a mesh size of 35 mm or less as determined in accordance with paragraph 1, a force of 19.61 newtons (equivalent to a mass of 2 kilograms) shall be applied and for other nets, a force of 49.03 newtons (equivalent to a mass of 5 kilograms).

For the purposes of determining the mesh size in accordance with Article 5 when using a weight or dynamometer, one series of 20 meshes only shall be measured.

CONSERVATION MEASURE 7/V Regulation of Fishing around South Georgia (Statistical Subarea 48.3)

Without prejudice to other Conservation Measures adopted by the Commission, for species upon which fisheries are permitted around South Georgia (Statistical Subarea 48.3), the Commission shall, at its 1987 Meeting, adopt limitations on catch, or equivalent measures, binding for the 1987/88 season.

Such limitations of catch or equivalent measures shall be based upon the advice of the Scientific Committee, taking into account any data resulting from fishery surveys around South Georgia.

For each fishing season after 1987/88, the Commission shall establish such limitations or other measures, as necessary, around South Georgia on a similar basis at the meeting of the Commission immediately preceding that season.

CONSERVATION MEASURE 18/IX Procedure for According Protection to CEMP Sites

The Commission,

Bearing in mind that the Working Group for the CCAMLR Ecosystem Monitoring Program (WG-CEMP) has established a system of sites contributing data to the CCAMLR Ecosystem Monitoring Program (CEMP), and that additions may be made to this system in the future;

- <u>Recalling</u> that it is not the purpose of the protection accorded to CEMP sites to restrict fishing activity in adjacent waters;
- <u>Recognizing</u> that studies being undertaken at CEMP sites may be vulnerable to accidental or wilful interference;
- <u>Concerned</u>, therefore, to provide protection for CEMP sites, scientific investigations and the Antarctic marine living resources therein, in cases where a Member or Members of the Commission conducting or planning to conduct CEMP studies believes such protection to be desirable;

hereby adopts the following Conservation Measure in accordance with Article IX of the Convention:

- 1. In cases where a Member or Members of the Commission conducting, or planning to conduct, CEMP studies at a CEMP site believe it desirable that protection should be accorded to the site, it, or they, shall prepare a draft management plan in accordance with Annex A to this Conservation Measure.
- 2. Each such draft management plan shall be sent to the Executive Secretary for transmission to all Members of the Commission for their consideration at least three months before its consideration by WG-CEMP.
- 3. The draft management plan shall be considered in turn by WG-CEMP, the Scientific Committee and the Commission. In consultation with the Member or Members of the Commission which drew up the draft management plan, it may be amended by any of these bodies. If a draft management plan is amended by either WG-CEMP or the Scientific Committee, it shall be passed on in its amended form either to the Scientific Committee or to the Commission as the case may be.
- 4. If, following completion of the procedures outlined in paragraphs 1 to 3 above, the Commission considers it appropriate to accord the desired protection to the CEMP site, the Commission shall adopt a Resolution calling on Members to comply, on a voluntary basis, with the provisions of the draft management plan, pending the conclusion of action in accordance with paragraphs 5 to 8 below.

- 5. The Executive Secretary shall communicate such a Resolution to SCAR, the Antarctic Treaty Consultative Parties and, if appropriate, the Contracting Parties to other components of the Antarctic Treaty System which are in force.
- 6. Unless, before the opening date of the next regular meeting of the Commission, the Executive Secretary has received:
 - (i) an indication from an Antarctic Treaty Consultative Party that it desires the resolution to be considered at a Consultative Meeting; or
 - (ii) an objection from any other quarter referred to in paragraph 5 above;

the Commission may, by means of a conservation measure, confirm its adoption of the management plan for the CEMP site and shall include the management plan in Annex B to Conservation Measure 18/IX.

- 7. In the event that an Antarctic Treaty Consultative Party has indicated its desire for the Resolution to be considered at a Consultative Meeting, the Commission shall await the outcome of such consideration, and may then proceed accordingly.
- 8. If objection is received in accordance with paragraphs 6 (ii) or 7 above, the Commission may institute such consultations as it may deem appropriate to achieve the necessary protection and to avoid interference with the achievement of the principles and purposes of, and measures approved under, the Antarctic Treaty and other components of the Antarctic Treaty System which are in force.
- 9. The management plan of any site may be amended by decision of the Commission. In such cases full account shall be taken of the advice of the Scientific Committee. Any amendment which increases the area of the site or adds to categories or types of activities that would jeopardize the objectives of the site shall be subject to the procedures set out in paragraphs 5 to 8 above.

- 10. Entry into a CEMP site included in Annex B shall be prohibited except for the purposes authorized in the relevant management plan for the site and in accordance with a permit issued under paragraph 11.
- 11. Each Contracting Party shall, as appropriate, issue permits authorizing its nationals to carry out activities consistent with the provisions of the management plans for CEMP sites and shall take such other measures, within its competence, as may be necessary to ensure that its nationals comply with the management plans for such sites.
- 12. Copies of such permits shall be sent to the Executive Secretary as soon as practical after they are issued. Each year the Executive Secretary shall provide the Commission and the Scientific Committee with a brief description of the permits that have been issued by the Parties. In cases where permits are issued for purposes not directly related to the conduct of CEMP studies at the site in question, the Executive Secretary shall forward a copy of the permit to the Member or Members of the Commission conducting CEMP studies at that site.
- 13. Each management plan shall be reviewed every five years by WG-CEMP and the Scientific Committee to determine whether it requires revision and whether continued protection is necessary. The Commission may then act accordingly.

CONSERVATION MEASURE 18/IX: ANNEX A

INFORMATION TO BE INCLUDED IN MANAGEMENT PLANS FOR CEMP SITES

Management plans shall include:

A. GEOGRAPHICAL INFORMATION

- 1. A description of the site, and any buffer zone within the site, including:
 - (a) geographical coordinates;
 - (b) natural features;
 - (c) boundary markers;
 - (d) natural features that define the site;
 - (e) access points (pedestrian, vehicular, airborne, sea-borne);
 - (f) pedestrian and vehicular routes in the site;
 - (g) preferred anchorages;
 - (h) location of structures within the site;
 - (i) areas or zones within the site, described in generic or geographical terms, or both, in which activities are prohibited or otherwise constrained;
 - (j) location of nearby scientific stations, research or refuge facilities; and
 - (k) location of areas or sites, in or near the site, which have been accorded protected status in accordance with measures adopted under the Antarctic Treaty or other components of the Antarctic Treaty System which are in force.

2. Maps showing:

- (a) the location of the site in relation to major surrounding features; and
- (b) where applicable, the geographical features listed in paragraph 1 above.

B. BIOLOGICAL FEATURES

1. A description of the biological features of the site, in both space and time, which it is the purpose of the management plan to protect.

C. CEMP STUDIES

1. A full description of the CEMP studies being conducted or planned to be conducted, including the species and parameters which are being or are to be studied.

D. PROTECTION MEASURES

- 1. Statements of prohibited activities:
 - (a) throughout the site at all times of the year;
 - (b) throughout the site at defined parts of the year;
 - (c) in parts of the site at all times of the year; and
 - (d) in parts of the site at defined parts of the year.
- 2. Prohibitions regarding access to and movement within or over the site.
- 3. Prohibitions regarding:
 - (a) the installation, modification, and/or removal of structures; and
 - (b) the disposal of waste.
- 4. Prohibitions for the purpose of ensuring that activity in the site does not prejudice the purposes for which protection status has been accorded to areas or sites, in or near the site, under the Antarctic Treaty or other components of the Antarctic Treaty System which are in force.

E. COMMUNICATIONS INFORMATION

- 1. The name, address, telephone, telex and facsimile numbers of:
 - (a) the organization or organizations responsible for appointing national representative(s) to the Commission; and
 - (b) the national organization or organizations conducting CEMP studies at the site.

Notes:

- 1. A code of conduct. If it would help towards achieving the scientific objectives of the site, a code of conduct may be annexed to the management plan. Such a code should be written in hortatory rather than mandatory terms, and must be consistent with the prohibitions contained in Section D above.
- 2. Members of the Commission preparing draft management plans for submission in accordance with this Conservation Measure should bear in mind that the primary purpose of the management plan is to provide for the protection of CEMP studies at the site through the application of the prohibitions contained in Section D. To that end, the management plan is to be drafted in concise and unambiguous terms. Information which is intended to help scientists, or others, appreciate broader considerations regarding the site (e.g., historical and bibliographic information) should not be included in the management plan but may be annexed to it.

CONSERVATION MEASURE 18/IX: ANNEX B

MANAGEMENT PLANS FOR CEMP SITES

MANAGEMENT PLAN FOR THE PROTECTION OF SEAL ISLANDS, SOUTH SHETLAND ISLANDS, AS A SITE INCLUDED IN THE CCAMLR ECOSYSTEM MONITORING PROGRAM

A. GEOGRAPHICAL INFORMATION

1. <u>Description of the site</u>:

- (a) Geographical coordinates. The Seal Islands are composed of small islands and skerries located approximately 7 km north of the northwest corner of Elephant Island, South Shetland Islands. The Seal Islands CEMP Protected Area includes the entire Seal Islands group, which is defined as Seal Island plus any land or rocks exposed at mean low tide within a distance of 5.5 km of the point of highest elevation on Seal Island. Seal Island is the largest island of the group, and is situated at 60°59'14"S, 55°23'04"W (coordinates are given for the point of highest elevation on the island see Figures 1 and 2).
- (b) Natural features. The Seal Islands cover an area approximately 5.7 km from east to west and 5 km from north to south. Seal Island is approximately 0.7 km long and 0.5 km wide. It has an altitude of about 125 m, with a raised plateau at about 80 m, and precipitous cliffs on most coastlines. There is a raised, sandy beach on the western shore and several coves on the northern and eastern shores. Seal Island is joined to the adjacent island to the west by a narrow sand bar that is approximately 50 m long; the bar is rarely passable on foot, and only when seas are calm and the tide is very low. Other islands in the group are similar to Seal Island, with precipitous cliffs, exposed coasts, and a few sand beaches and protected coves. There is no permanent ice on any of the islands.

Seal Island is mainly composed of poorly consolidated sedimentary rocks. Rocks crumble and fracture easily, resulting in prevalent erosion from water runoff and coastal wave action. Geologists have characterised the bedrock as "pebbly mudstone". No fossils have been reported from the site. Because colonies of penguins are present in virtually all sectors of Seal Island (including the summit), the soil in many areas as well as several vertical rock faces are enriched by guano.

- (c) <u>Boundary markers</u>. As of 1991, no man-made boundary markers indicating the limits of the protected area had been established. The boundaries of the site are defined by natural features (i.e., coastlines).
- (d) <u>Natural features that define the site</u>. The Seal Islands CEMP Protected Area includes the entire Seal Islands group (see Section A.1(a) for definition). No buffer zones are defined for the site.
- (e) Access points. The site may be accessed by boat or aircraft at any point where pinnipeds and seabirds will not be adversely affected (see Sections D.1 and D.2). Access by small boat is recommended in most circumstances because the number of beach landing spots for helicopters (which must approach these spots by flying over water rather than over land) is very limited. There are no landing sites for fixed-winged aircraft.
- (f) <u>Pedestrian and vehicular routes</u>. Pedestrians should follow the advice of the local scientists in selecting pathways which will minimise disturbance to wildlife (see Section D.2(d)). Land vehicles are not permitted except in the immediate vicinity of the field camp and the beach (see Section D.2(c)).
- (g) <u>Preferred anchorages</u>. Numerous shoals and pinnacles are known to exist in the vicinity of the Seal Islands, and navigation charts of the area are incomplete. Most ships visiting the area recently have preferred an anchorage spot approximately 1.5 km to the southeast of Seal Island (Figure 2), which has a rather consistent depth of approximately 18 m. A

second anchorage utilised by smaller vessels is located approximately 0.5 km to the northeast of Seal Island (Figure 2) at a depth of about 20 m. Organisation(s) conducting CEMP studies at the site can provide further details about sailing instructions pertaining to these anchorages (see Section E.2).

- (h) Location of structures within the site. As of 1991 there were structures at four locations on Seal Island: a research camp and three observation blinds (Figure 2 insert). The temporary field camp, established in December 1986, is located near the sand beach on the western coast of Seal Island. The camp is comprised principally of four structures: the main living quarters, two storage sheds, and an outhouse. In addition, three small blinds are located at various spots on Seal Island (two near penguin and fur seal colonies, and one at the top of the island) to facilitate scientific observations and to house research equipment.
- (i) Areas within the site where activities are constrained. The protection measures specified in Section D apply to all areas within the Seal Islands Protected Area, as defined in Section A.1(d).
- (j) <u>Location of nearby scientific, research or refuge facilities</u>. The nearest research facility to the site is the scientific field camp maintained by the Brazilian government at Stinker Point, Elephant Island (61°04'S, 55°21'W), which is approximately 26 km south of Seal Island. Numerous scientific stations and research facilities are located on King George Island, which is approximately 215 km southwest of Seal Island.

(k) Areas or sites protected under the Antarctic Treaty System. No areas or sites within or near (i.e., within 100 km) the Seal Island Protected Area have been accorded protected status in accordance with measures adopted under the Antarctic Treaty or other components of the Antarctic Treaty System which are in force.

2. <u>Maps of the site</u>:

- (a) Figure 1 shows the geographical position of the Seal Islands in relation to major surrounding features, including the South Shetland Islands and adjacent bodies of water.
- (b) Figure 2 illustrates the location of the entire Seal Islands archipelago and preferred vessel anchorages. The detailed insert of Seal Island in Figure 2 shows the location of structures associated with CEMP studies and the location of the point of highest elevation (indicated by a cross).

B. BIOLOGICAL FEATURES

- 1. <u>Terrestrial</u>. There is no information on soil biology at Seal Island but it is likely that similar types of plants and invertebrates are found as at other sites in the South Shetland Islands. Lichens are present on stable rock surfaces. There is no evidence of well-developed moss or grass banks being present on Seal Island.
- 2. <u>Inland waters</u>. There are no known lakes or ephemeral ponds of significance on Seal Island.
- 3. Marine. No studies on littoral communities have been carried out.
- 4. <u>Birds and seals</u>. Seven species of birds are known to breed on the Seal islands: chinstrap penguins (*Pygoscelis antarctica*), macaroni penguins (*Eudyptes chrysolophus*), cape petrels (*Daption capenses*), Wilson's storm petrels (*Oceanites oceanicus*), southern giant petrels (*Macronectes giganteus*), southern black-backed gulls (*Larus dominicanus*), and American sheathbills (*Chionus alba*). The chinstrap

penguin population on Seal Island numbers approximately 20 000 breeding pairs, nesting in about 60 colonies throughout the island. About 350 pairs of macaroni penguins nest on Seal Island in five separate colonies. The nesting and chick-rearing period for chinstrap and macaroni penguins at Seal Island extends from November through March. No surveys have been made of cape petrel or storm petrel populations, however, both species are numerous; the cape petrels nest on cliff faces and the storm petrels nest in burrows in the talus slopes. Brown skuas (*Catharacta lonnbergi*) are common. Blue-eyed shags (*Phalacracorax atriceps*), Adélie penguins (*Pygoscelis adeliae*), gentoo penguins (*Pygoscelis papua*), king penguins (*Aptenodytes patagonicus*) and rockhopper penguins (*Eudyptes crestatus*) are among the avian visitors to the area.

5. Five species of pinnipeds have been observed at Seal Island: Antarctic fur seals (Arctocephalus gazella), southern elephant seals (Mirounga leonina), Weddell seals (Leptonychotes weddellii), leopard seals (Hydrurga leptonyx) and crabeater seals (Lobodon carcinophagus). Of these fur seals are the only confirmed breeders on the island, although small numbers of elephant seals probably breed on the island early in the spring. Nearly 600 fur seal pups were born in the Seal Islands group in December 1989, with approximately half of these born on Seal Island and half on Large Leap Island (Figure 2). The fur seal pupping and pup-rearing period at Seal Island extends from late November to early April. During the austral summer, elephant seals are ashore during their moult period; Weddell seals regularly haul out on the beaches; crabeater seals are infrequent visitors; and leopard seals are common both ashore and in coastal waters where they prey on penguins and fur seal pups.

C. CEMP STUDIES

- 1. The presence at the Seal Islands of both Antarctic fur seal and penguin breeding colonies, as well as significant commercial krill fisheries within the foraging range of these species, make this an excellent site for inclusion in the CEMP network of sites established to help meet CCAMLR objectives.
- 2. The following species are of particular interest for CEMP routine monitoring and directed research at this site: Antarctic fur seals, chinstrap penguins, macaroni penguins and cape petrels.

- 3. Longterm studies are underway to assess and monitor the feeding ecology, growth and condition, reproductive success, behaviour, vital rates, demography and abundance of pinnipeds and seabirds that breed in the area. Since an initial survey and pilot field program at Seal Island during the 1986/87 austral summer, United States scientists have conducted monitoring and directed research annually. It is intended that this program will continue for at least another 10 years (through 2000).
- 4. A program of routine monitoring using CEMP Standard Methods is being carried out by US scientists. Penguin parameters being monitored include trends in population size (A3), demography (A4), duration of foraging trips (A5), breeding success (A6), chick fledging weight (A7), chick diet (A8) and breeding chronology (A9). Fur seal parameters being monitored include duration of foraging/attendance cycles (C1) and pup growth rates (C2). As new CEMP Standard Methods are approved, additional pinniped and seabird parameters may be included in future monitoring efforts.
- 5. Directed research relevant to CEMP is also being undertaken on fur seals and seabirds. Research topics include foraging behaviour, foraging areas, energy requirements, seasonal movements, penguin chick growth rates and relationships between monitored parameters and the physical environment.

D. PROTECTION MEASURES

- 1. Prohibited activities and temporal constraints:
 - (a) Throughout the site at all times of the year. Any activities which damage, interfere with, or adversely affect the planned CEMP monitoring and directed research at this site are not permitted.
 - (b) <u>Throughout the site at all times of the year</u>. Any non-CEMP activities are not permitted which result in:
 - (i) killing, injuring, or disturbing pinnipeds or seabirds;
 - (ii) damaging or destroying pinniped or seabird breeding areas; or

- (iii) damaging or destroying the access of pinnipeds or seabirds to their breeding areas.
- (c) <u>Throughout the site at defined parts of the year</u>. Human occupation of the site during the period 1 June to 31 August is not permitted except under emergency circumstances.
- (d) <u>In parts of the site at all times of the year</u>. Building structures within the boundaries of any pinniped or seabird colony is not permitted. For this purpose, colonies are defined as the specific locations where pinniped pups are born or where seabird nests are built. This prohibition does not pertain to placing markers (e.g., numbered stakes, posts, etc.) or situating research equipment in colonies as may be required to facilitate scientific research.
- (e) <u>In parts of the site at defined parts of the year</u>. Entry into any pinniped or seabird colonies during the period 1 September to 31 May is not permitted except in association with CEMP activities.

2. <u>Prohibitions regarding access to and movement within or over the site:</u>

- (a) Entry of the site at locations where pinniped or seabird colonies are present in the immediate vicinity is not permitted.
- (b) Aircraft overflight of the site is not permitted at altitudes less than 1 000 m unless the proposed flight plan has been reviewed in advance by the organisation(s) conducting CEMP activities at the site (see Section E.2).
- (c) The use of land vehicles is not permitted except to transport equipment and supplies to and from the field camp.
- (d) Pedestrians are not permitted to walk through areas used regularly by pinnipeds and seabirds (i.e., colonies, resting areas, pathways) or to disturb other fauna or flora, except as necessary to conduct authorised research.

3. <u>Prohibitions regarding structures:</u>

- (a) Building structures other than those directly supporting CEMP directed scientific research and monitoring activities or to house personnel and/or their equipment is not permitted.
- (b) Human occupation of these structures is not permitted during the period 1 June to 31 August (see Section D.1(c)).
- (c) New structures are not permitted to be built within the site unless the proposed plans have been reviewed in advance by the organisation(s) conducting CEMP activities at the site (see Section E.2).

4. Prohibitions regarding waste disposal:

- (a) Landfill disposal of non-biodegradable materials is not permitted; non-biodegradable materials brought to the site are to be removed when no longer in use.
- (b) Disposal of waste fuels, volatile liquids and scientific chemicals within the site is not permitted; these materials are to be removed from the site for proper disposal elsewhere.
- (c) The burning of any non-organic materials or the open burning of any materials is not permitted (except for properly used fuels for heating, lighting, cooking or electricity).

5. <u>Prohibitions regarding the Antarctic Treaty System:</u>

It is not permitted to undertake any activities in the Seal Islands CEMP Protected Area which are not in compliance with the provisions of: (i) the Antarctic Treaty, including the Agreed Measures for the Conservation of Antarctic Fauna and Flora; (ii) the Convention on the Conservation of Antarctic Seals; and (iii) the Convention on the Conservation of Antarctic Marine Living Resources.

E. COMMUNICATIONS INFORMATION

1. Organisation(s) appointing national representatives to the Commission:

Bureau of Oceans and International Environmental and Scientific Affairs US Department of State Washington, DC 20520 USA

Telephone: (202) 647-3262 Facsimile: (202) 647-1106

Telex: not available

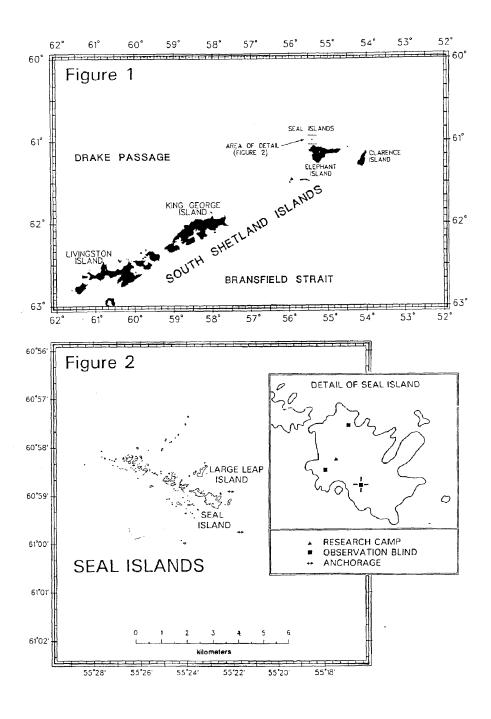
2. Organisation(s) conducting CEMP studies at the site:

US Antarctic Marine Living Resources Program Southwest Fisheries Science Centre National Marine Fisheries Service, NOAA PO Box 271 La Jolla, CA 92038 USA

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- BENGTSON, J.L., L.M. FERM, T.J. HARKONEN and B.S. STEWART. 1990. Abundance of Antarctic fur seals in the South Shetland Islands, Antarctica, during the 1986/87 austral summer. In: KERRY, K. and G. HEMPEL (Eds). *Antarctic Ecosystems, Proceedings of the Fifth SCAR Symposium on Antarctic Biology*. Springer-Verlag: Berlin. 265-270 pp.
- O'GORMAN, F.A. 1961. Fur seals breeding in the Falkland Island Dependencies. *Nature, Lond., 192*: 914-916.
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- SHUFORD, W.D. and L.B. SPEAR. 1987. Surveys of breeding penguins and other seabirds in the South Shetland Islands, Antarctica, January-February 1987. Report of the US National Marine Fisheries Service.
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ANNEX A

CODE OF CONDUCT FOR THE SEAL ISLANDS, ANTARCTICA

Investigators should take all reasonable steps to ensure that their activities, both in implementing their scientific protocols as well as in maintaining a field camp, do not unduly harm or alter the natural behaviour and ecology of wildlife in the Seal Islands. Wherever possible, actions should be taken to minimise disturbance of the natural environment.

Capturing, handling, killing, photographing and taking eggs, blood or other biological samples from pinnipeds and seabirds should be limited to that necessary to provide essential background information or to characterise and monitor individual and population parameters that may change in detectable ways in response to changes in food availability or other environmental factors. Sampling should be done and reported in accordance with: (i) the Antarctic Treaty, including the Agreed Measures for the Conservation of Antarctic Fauna and Flora; (ii) the Convention for the Conservation of Antarctic Seals; and (iii) the Convention on the Conservation of Antarctic Marine Living Resources.

Geological and other studies which can be done inside of the pinniped and seabird breeding seasons in such a way as they do not damage or destroy pinniped or seabird breeding areas, or access to those areas, would be permitted as long as they would not adversely affect the planned assessment and monitoring studies. Likewise, the planned assessment and monitoring studies would not be affected adversely by periodic biological surveys or studies of other species which do not result in killing, injuring or disturbing pinnipeds or seabirds, or damage or destroy pinnipeds or seabird breeding areas or access to those areas.

ANNEX B

BACKGROUND INFORMATION CONCERNING THE SEAL ISLANDS, ANTARCTICA

Prior to the discovery of the South Shetland Islands in 1819, there were substantial colonies of fur seals, and possible elephant seals, throughout the archipelago. Commercial exploitation began shortly after discoveyr and, by the mid-1820s, fur seal breeding colonies had been completely destroyed throughout the South Shetland Islands (Stackpole, 1955; O'Gorman, 1963). Antarctic fur seals were not observed again in the South Shetland Islands until 1958, when a small colony was discovered at Cape Shirreff, Livingston Island (O'Gorman, 1961). The original colonisers probably came from South Georgia where surviving fur seal colonies had substantially recovered by the early 1950s. At present, the fur seal rookeries in the Seal Islands group are the second largest in the South Shetland Islands, with the largest rookeries being at Cape Shirreff and Telmo Islands, Livingston Island (Bengtson *et al.*, 1990).

During the past three decades, the population of Antarctic fur seals in the South Shetland Islands grew to a level at which tagging or other research could be undertaken at selected locations without threatening the population's continued existence and growth.

During the 1986/87 austral summer, researchers from the United States surveyed areas on the South Shetland Islands and the Antarctic Peninsula to identify fur seal and penguin breeding colonies that might be suitable for inclusion in the network of CEMP monitoring sites being established. The results of that survey (Shuford and Spear, 1987; Bengtson *et al.*, 1990), suggested that the Seal Island area would be an excellent site for longterm monitoring of fur seal and penguin colonies that might be affected by fisheries in the Antarctic Peninsula Integrated Study Region.

To safely and effectively carry out a longterm monitoring program, a temporary, multiyear field camp for a small group of researchers was established on Seal Island. This camp has been occupied annually by US scientists during the austral summer (approximately December to February) since 1986/87. To protect the site from damage or disturbance that could adversely affect the longterm CEMP monitoring and directed research currently being conducted and planned for the future, in 1991 the Seal Islands were proposed as a CEMP Protected Area.

CONSERVATION MEASURE 19/IX Mesh Size for *Champsocephalus gunnari*

- 1. The use of pelagic and bottom trawls having the mesh size in any part of a trawl less than 90 mm is prohibited for any directed fishery for *Champsocephalus gunnari*.
- 2. The mesh size specified above is defined in accordance with the regulations on mesh size measurement. Conservation Measure 4/V.
- 3. It is prohibited to use any means or device which would obstruct or diminish the size of the meshes.
- 4. This Conservation Measure does not apply to fishing conducted for scientific research purposes.
- 5. This Measure will apply as of 1 November 1991.
- 6. Conservation Measure 2/III is amended accordingly.

CONSERVATION MEASURE 29/XI 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.

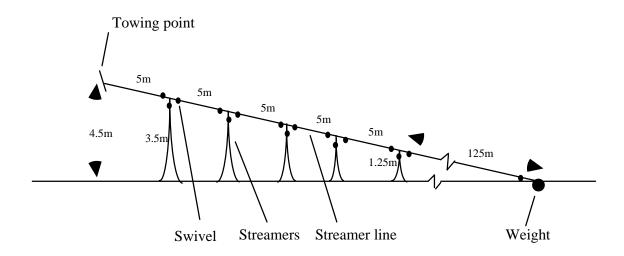
<u>Recognizing</u> that successful techniques for reducing the mortality of albatrosses have been employed in the longline fishery for tuna immediately to the north of the Convention Area.

<u>Agrees</u> 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.
- 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. The specification of the streamer line and its method of deployment is given in the Appendix to this Measure.
- 5. This Measure shall not apply to designated research vessels investigating better methods for reducing incidental mortality of seabirds.

APPENDIX TO CONSERVATION MEASURE 29/XI

- 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 30/X Net Monitor Cables

The use of net monitor cables on harvesting vessels in the CCAMLR Convention Area is prohibited from the 1994/95 fishing season.

CONSERVATION MEASURE 31/X Notification that Members are Considering Initiating a New Fishery

The Commission,

<u>Recognising</u> that in the past, Antarctic fisheries have been initiated in the Convention Area before sufficient information was available upon which to base management advice,

Noting that in recent years new fisheries have started without adequate information being available to evaluate either the fishery potential or the possible impacts on the target stocks or species dependent on them,

<u>Believing</u> that without prior notification of a new fishery, the Commission is unable to fulfil its function under Article IX.

hereby adopts the following Conservation Measure in accordance with Article IX of the Convention:

- 1. A new fishery, for the purposes of this Conservation Measure, is a fishery on a species using a particular fishing method in a statistical subarea for which:
 - (i) information on distribution, abundance, demography, potential yield and stock identity from comprehensive research/surveys or exploratory fishing have not been submitted to CCAMLR;
 - (ii) catch and effort data have never been submitted to CCAMLR;

- (iii) catch and effort data from the two most recent seasons in which fishing occurred have not been submitted to CCAMLR.
- 2. A Member intending to develop a new fishery shall notify the Commission not less than three months in advance of the next regular meeting of the Commission, where the matter shall be considered. The Member shall not initiate a new fishery pending the process specified in paragraphs 4 and 5 below;
- 3. The notification shall be accompanied by as much of the following information as the Member is able to provide:
 - (i) the nature of the proposed fishery including target species, methods of fishing, proposed region and any minimum level of catches that would be required to develop a viable fishery;
 - (ii) biological information from comprehensive research/survey cruises, such as distribution, abundance, demographic data and information on stock identity;
 - (iii) details of dependent and associated species and the likelihood of them being affected by the proposed fishery; and
 - (iv) information from other fisheries in the region or similar fisheries elsewhere that may assist in the valuation of potential yield;
- 4. The information provided in accordance with paragraph 3, together with any other relevant information, shall be considered by the Scientific Committee, which shall then advise the Commission;
- 5. After its review of the information on the proposed new fishery, taking full account of the recommendations and the advice of the Scientific Committee, the Commission may then take such action as it deems necessary.

CONSERVATION MEASURE 32/X Precautionary Catch Limitations on Euphausia superba in Statistical Area 48

The total catch of *Euphausia superba* in Statistical Area 48 shall be limited to 1.5 million tonnes in any fishing season. A fishing season begins on 1 July and finishes on 30 June of the following year.

This limit shall be kept under review by the Commission, taking into account the advice of the Scientific Committee.

Precautionary limits to be agreed by the Commission on the basis of advice of the Scientific Committee shall be applied to subareas, or on such other basis as the Scientific Committee may advise, if the total catch in Statistical Subareas 48.1, 48.2 and 48.3 in any fishing season exceeds 620 000 tonnes.

For the purpose of implementing this Conservation Measure the catches shall be reported to the Commission on a monthly basis.

CONSERVATION MEASURE 40/X Monthly 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 reporting period shall be defined as one calendar month.
- 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 or telex, 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.
- 3. Such reports shall specify the month to which each report refers.

- 4. Immediately after the deadline has passed for receipt of the reports for each period, the Executive Secretary shall notify all Contracting Parties 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.
- 5. In the case of finfish, if the estimated date of completion of the TAC is within one reporting period 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 44/XI Limitation of the Total Catch of *Dissostichus eleginoides* in Statistical Subarea 48.4 in the 1992/93 Season

The Commission,

- Endorsing the application of Chile to conduct a new fishery on *Dissostichus eleginoides* in Statistical Subarea 48.4 in accordance with Conservation Measure 31/X,
- <u>Welcoming</u> the invitation of Chile for one scientist to participate as an observer onboard the vessel fishing for *Dissostichus eleginoides*,
- Noting that no other Member has notified the Commission of proposals to establish a new fishery for this species and Statistical Subarea,
- Agreeing that no other fishing shall occur for *Dissostichus eleginoides* in Statistical Subarea 48.4 in the 1992/93 season.

hereby adopts the following Conservation Measure in accordance with Article IX of the Convention:

- 1. The new fishery by Chile for *Dissostichus eleginoides* in Statistical Subarea 48.4 in 1992/93 shall be limited to 240 tonnes.
- 2. For the purposes of this new fishery for *Dissostichus eleginoides* in Statistical Subarea 48.4 the 1992/93 fishing season is defined as the period from 6 November 1992 to the close of the Commission meeting in 1993.
- 3. Full data shall be provided to the CCAMLR Secretariat for consideration by the Working Group on Fish Stock Assessment and Scientific Committee, as specified in CCAMLR-X/7, supplemented by SC-CAMLR-XI, paragraph 3.45.

CONSERVATION MEASURE 45/XI Precautionary Catch Limitation on *Euphausia superba*in Statistical Division 58.4.2

The total catch of *Euphausia superba* in Statistical Division 58.4.2 shall be limited to 390 000 tonnes in any fishing season. A fishing season begins on 1 July and finishes on 30 June of the following year.

This limit shall be kept under review by the Commission, taking into account the advice of the Scientific Committee.

For the purposes of implementing this Conservation Measure, the catches shall be reported to the Commission on a monthly basis.

CONSERVATION MEASURE 46/XI Allocation of Precautionary Catch Limit on *Euphausia superba*in Statistical Area 48 (Conservation Measure 32/X) to Statistical Subareas

If the total catch of *Euphausia superba* in Statistical Subareas 48.1, 48.2 and 48.3 in any fishing season exceeds 620 000 tonnes, then catches in the following Statistical Subareas shall not exceed the precautionary catch limit prescribed below:

Antarctic Peninsula	Subarea 48.1	420 000 tonnes
South Orkney Islands	Subarea 48.2	735 000 tonnes
South Georgia	Subarea 48.3	360 000 tonnes
South Sandwich Islands	Subarea 48.4	75 000 tonnes
Weddell Sea	Subarea 48.5	75 000 tonnes
Bouvet Island region	Subarea 48.6	300 000 tonnes

Notwithstanding these subareal limits, the total sum of catches in any fishing season in all Subareas shall not exceed the precautionary catch limit of 1.5 million tonnes for the whole of Statistical Area 48 prescribed by Conservation Measure 32/X. A fishing season begins on 1 July and finishes on 30 June of the forthcoming year.

The above precautionary catch limits shall apply to the fishing seasons 1992/93 and 1993/94 after which time they will be reviewed by the Commission, taking into account the advice of the Scientific Committee.

For the purpose of implementing this Conservation Measure, the catches shall be reported to the Commission for each Statistical Subarea on a monthly basis.

CONSERVATION MEASURE 47/XI Scientific Research Exemption Provisions

This Conservation Measure is adopted in accordance with Article IX of the Convention.

- 1. Catches taken during fishing for research purposes by commercial fishing or fishery support vessels, or vessels of a similar catching capacity, will be considered as part of any catch limit.
- 2. For the purposes of implementing this Conservation Measure, the catch reporting procedure set out in Conservation Measure 51/XI shall apply whenever the catch within any five-day reporting period exceeds 5 tonnes, unless more specific regulations apply to the particular species.

CONSERVATION MEASURE 48/XI

Prohibition of Directed Fishery on Notothenia gibberifrons, Chaenocephalus aceratus, Pseudochaenichthys georgianus, Notothenia squamifrons and Patagonotothen guntheri, in Statistical Subarea 48.3 for the 1992/93 and 1993/94 Seasons

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

Directed fishing on *Notothenia gibberifrons*, *Chaenocephalus aceratus*, *Pseudochaenichthys georgianus*, *Notothenia squamifrons* and *Patagonotothen guntheri* in Statistical Subarea 48.3 is prohibited in the 1992/93 and 1993/94 seasons, defined as the period from 6 November 1992 to the end of the Commission meeting in 1994.

CONSERVATION MEASURE 49/XI Limitation of the Total Catch of *Champsocephalus gunnari* in Statistical Subarea 48.3 in the 1992/93 Season

- 1. The total catch of *Champsocephalus gunnari* in the 1992/93 season, which shall commence on 6 November 1992 shall not exceed 9 200 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 50/XI reaches its by-catch limit or if the total catch of *Champsocephalus gunnari* reaches 9 200 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 50/XI 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 1993 until the end of the Commission meeting in 1993.
- 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/XI shall apply in the 1992/93 season commencing on 6 November 1992.
 - (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 50/XI in the 1992/93 season, commencing on 6 November 1992.

CONSERVATION MEASURE 50/XI

Limitation of the By-catch of Notothenia gibberifrons, Chaenocephalus aceratus, Pseudochaenichthys georgianus, Notothenia rossii and Notothenia squamifrons, in Statistical Subarea 48.3 for the 1992/93 Season

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

In any directed fishery in Statistical Subarea 48.3, during the 1992/93 season commencing 6 November 1992, the by-catch of *Notothenia gibberifrons* shall not exceed 1 470 tonnes; the by-catch of *Chaenocephalus aceratus* shall not exceed 2 200 tonnes; and the by-catch of *Pseudochaenichthys georgianus, Notothenia rossii* and *Notothenia squamifrons* shall not exceed 300 tonnes each.

CONSERVATION MEASURE 51/XI 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 or telex, 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.
- 3. The catch of all species, including by-catch species, must be reported.
- 4. Such reports shall specify the month and reporting period (A, B, C, D, E or F) to which each report refers.
- 5. 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.
- 6. 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.

7. 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 52/XI Monthly Effort and Biological Data Reporting System for Trawl Fisheries

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

- 1. Specification of "target species" and "by-catch species" referred to in this Conservation Measure shall be made in the Conservation Measure to which it is attached.
- 2. At the end of each month each Contracting Party shall obtain from each of its vessels the data required to complete the CCAMLR fine-scale catch and effort data form for trawl fisheries (Form C1, latest version). It shall transmit those data to the Executive Secretary not later than the end of the following month.
- 3. The catch of all species, including by-catch species, must be reported.
- 4. At the end of each month each Contracting Party shall obtain from each of its vessels representative samples of length composition measurements of the target species and by-catch species 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.
- 5. Failure by a Contracting Party to provide the fine-scale catch and effort data or 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 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.

- 6. 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 ground¹. 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.
- 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° latitude by 1° longitude).

CONSERVATION MEASURE 53/XI Limitation of the Total Catch of *Electrona carlsbergi* in Statistical Subarea 48.3 for the 1992/93 Season

- 1. For the purposes of this Conservation Measure the fishing season for *Electrona carlsbergi* is defined as the period from 6 November 1992 to the end of the Commission meeting in 1993.
- 2. The total catch of *Electrona carlsbergi* in the 1992/93 season shall not exceed 245 000 tonnes in Statistical Subarea 48.3.
- 3. In addition, the total catch of *Electrona carlsbergi* in the 1992/93 season shall not exceed 53 000 tonnes in the Shag Rocks region, defined as the area bounded by 52°30'S, 40°W; 52°30'S, 44°W; 54°30'S, 40°W and 54°30'S, 44°W.

- 4. The directed fishery for *Electrona carlsbergi* in Statistical Subarea 48.3 shall close if the by-catch of any of the species detailed in Conservation Measure 50/XI reaches its by-catch limit or if the total catch of *Electrona carlsbergi* reaches 245 000 tonnes, whichever comes first.
- 5. The directed fishery for *Electrona carlsbergi* in the Shag Rocks region shall close if the by-catch of any of the species detailed in Conservation Measure 50/XI above reaches its by-catch limit or if the total catch of *Electrona carlsbergi* reaches 53 000 tonnes, whichever comes first.
- 6. 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 50/XI exceeds 5%, the fishing vessel shall move to another fishing ground within the subarea.
- 7. For the purpose of implementing this Conservation Measure:
 - (i) the Catch Reporting System set out in Conservation Measure 40/X shall apply in the 1992/93 season; and
 - (ii) the Data Reporting System set out in Conservation Measure 54/XI shall apply in the 1992/93 season.

CONSERVATION MEASURE 54/XI Biological Data Reporting System for *Electrona carlsbergi* in Statistical Subarea 48.3

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

Each month the length composition of a minimum of 500 fish, randomly collected from the commercial fishery, will be measured and the information passed to the Executive Secretary not later than the end of the month following.

CONSERVATION MEASURE 55/XI Catch Limit on *Dissostichus eleginoides* in Statistical Subarea 48.3 for the 1992/93 Season

- 1. The total catch of *Dissostichus eleginoides* in Statistical Subarea 48.3 caught in the 1992/93 season shall be limited to 3 350 tonnes.
- 2. For the purposes of the fishery for *Dissostichus eleginoides* in Statistical Subarea 48.3, the 1992/93 fishing season is defined as the period from 6 December 1992¹ to the end of the Commission meeting in 1993, or until the TAC is reached, whichever 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/XI shall apply in the 1992/93 season, commencing on 6 December 1992.
 - (ii) the Effort and Biological Data Reporting System set out in Conservation Measure 56/XI shall apply in the 1992/93 season, commencing on 6 December 1992.
- 4. There will be no increase over the 1991/92 season in the number of vessels of Members who have been fishing in the 1991/92 season for *Dissostichus eleginoides* in Subarea 48.3.
- 1 This date allows one month to elapse from the end of the Commission meeting in order for notification of this measure to be transmitted to the fishing vessels.

CONSERVATION MEASURE 56/XI Effort and Biological Data Reporting System for *Dissostichus eleginoides*in Statistical Subarea 48.3 for the 1992/93 Season

- 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). 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. 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 haul-by-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.

CONSERVATION MEASURE 57/XI Prohibition of Directed Fishing for Finfish in Statistical Subarea 48.2 for the 1992/93 Season

Taking of finfish, other than for scientific research purposes, in Statistical Subarea 48.2 is prohibited in the 1992/93 season, defined as the period from 6 November 1992 to the end of the Commission meeting in 1993.

CONSERVATION MEASURE 58/XI Prohibition of Directed Fishing for Finfish in Statistical Subarea 48.1 for the 1992/93 Season

Taking of finfish, other than for scientific research purposes, in Statistical Subarea 48.1 is prohibited in the 1992/93 season, defined as the period from 6 November 1992 to the end of the Commission meeting in 1993.

CONSERVATION MEASURE 59/XI Limitation of Total Catch of *Notothenia squamifrons* in Statistical Division 58.4.4 (Ob and Lena Banks) in the 1992/93 and 1993/94 Seasons

- 1. The total catch of *Notothenia squamifrons* for the entire two year period shall not exceed 1 150 tonnes, which shall be made up of 715 tonnes on Lena Bank and 435 tonnes on Ob Bank.
- 2. The two year period shall be from 6 November 1992 to the end of the Commission meeting in 1994.
- 3. For the purpose of implementing this Conservation Measure:
 - (i) the Five-day Catch and Effort Reporting System set out in Conservation Measure 51/XI shall apply in the period 1992 to 1994 commencing on 6 November 1992;

- (ii) the Monthly Effort and Biological Data Reporting System set out in Conservation Measure 52/XI shall apply for *Notothenia squamifrons* commencing on 6 November 1992;
- (iii) age frequency and age/length keys for *Notothenia squamifrons* and any other species forming a significant part of the catch shall be collected and reported to each annual meeting of the Working Group on Fish Stock Assessment for each Bank separately; and
- (iv) the fishery for *Notothenia squamifrons* will be subject to review at the 1993 annual meetings of the Scientific Committee and the Commission.

CONSERVATION MEASURE 60/XI Limits on the Exploratory Crab Fishery in Statistical Area 48 in the 1992/93 Season

The following measures apply to all crab fishing within Statistical Area 48:

- 1. The crab fishery is defined as any harvest activity in which the target species is any member of the crab group (Order *Decapoda*, Suborder *Reptantia*).
- 2. The crab fishery in Statistical Area 48 shall be closed from 15 November 1992 until the CCAMLR Workshop to Develop the Longtern Management Plan for Crabs (planned for April or May, 1993) has met, revised the data reporting forms and provided modified forms to Members who have notified the Secretariat of their intention to fish for crabs.
- 3. The crab fishery shall be limited to one vessel per Member, however, if the Secretariat is notified that more than three vessels intend to fish for crabs, no more than 1 600 tonnes shall be taken during the period from the start of the fishery until the end of the next meeting of the Commission in 1993.
- 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 and radio call sign and fishing plan of the vessel that the Member has authorised to participate in the crab fishery.

- 5. The following data shall be reported to CCAMLR by 30 August 1993 for crabs caught prior to 30 July 1993:
 - (i) the location, date, depth, fishing effort (number and spacing of pots) and catch (numbers and weight) of commercially sized crabs (reported on as fine a scale as possible, but no coarser than 1° longitude by 0.5° latitude) for each 10-day period;
 - (ii) the species, size and sex of a representative subsample of crabs and by-catch caught in traps; and
 - (iii) other relevant data, as possible, according to the logbook formats already being used in the crab fishery (SC-CAMLR-XI, Annex 5, Appendix F).
- 6. For the purposes of implementing this Conservation Measure the 10-day catch and effort reporting system set out in Conservation Measure 61/XI shall apply.
- 7. Data identified by the Workshop that are required to determine the appropriate harvest levels shall be collected during the 1993 season by all vessels fishing for crabs. These data shall be reported to CCAMLR in the form specified by the Workshop. Data on catches taken before 30 August 1993 shall be reported to the CCAMLR Secretariat by 30 September to enable the data to 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; and

10. Crab processed at sea shall be frozen as crab sections (minimum size of crabs can be determined using crab sections).

CONSERVATION MEASURE 61/XI 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 A, 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 or telex, 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.
- 3. The retained catch of all species and by-catch species, must be reported.
- 4. Such reports shall specify the month and reporting period (A, B and C) to which each report refers.
- 5. 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.

- 6. 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.
- 7. 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.

CONSERVATION MEASURE 62/XI Protection of the Seal Islands CEMP Site

- 1. The Commission noted that a program of longterm studies is being undertaken at Seal Islands, South Shetland Islands, as part of the CCAMLR Ecosystem Monitoring Program (CEMP). Recognising that these studies may be vulnerable to accidental or wilful interference, the Commission expressed its concern that this CEMP site, the scientific investigations, and the Antarctic marine living resources therein be protected.
- 2. Therefore, the Commission considers it appropriate to accord protection to the Seal Islands CEMP site, as defined in the Seal Islands management plan.
- 3. Members are required to comply with the provisions of the Seal Islands CEMP site management plan, which is recorded in Annex B of Conservation Measure 18/IX.
- 4. To allow Members adequate time to implement the relevant permitting procedures associated with this measure and the management plan, Conservation Measure 62/XI shall become effective as of 1 May 1993.
- 5. In accordance with Article X, the Commission shall draw this Conservation Measure to the attention of any State that is not a Party to the Convention and whose nationals or vessels are present in the Convention Area.

RESOLUTION 9/XI Scientific Research Exemption Provisions for Finfish

In accordance with Conservation Measure 47/XI, the Commission adopts the following resolution:

- 1. (i) Any Member planning to use commercial fishing or fishery support vessels or vessels of a similar catching capacity to conduct fishing for research purposes when the estimated catch may exceed 50 tonnes, shall notify the Commission and provide the opportunity for other Members to review and comment on their research plans. Such plans 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 plans, 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 should not proceed.
 - (ii) The Scientific Committee, in consultation with its Working Groups, shall develop standardised guidelines and formats for research plans.
- 2. (i) Until such time as the Scientific Committee, in consultation with its Working Groups, develops standardised guidelines and formats for research plans, the Member planning to undertake research fishing in accordance with 1(i) above should provide the following information:

Vessel details

- (a) name of vessel;
- (b) name and address of vessel owner;
- (c) port of registration, registration number and radio call sign;

- (d) vessel type, size, fish processing and storage capacity; and
- (e) gear type, fishing capacity and anticipated catch.

Research plan

- (a) a statement of the planned research objectives;
- (b) a description of when, where, and what activities are planned including a fishing plan which includes the number and duration of hauls and the fishing gear to be used; and
- (c) the name(s) of the chief scientist(s) responsible for planning and coordinating the research, and the number of scientists and crew expected to be aboard the vessel(s).
- 3. (i) A summary of the results of any research fishing subject to the research exemption provisions shall be provided to the Secretariat within 180 days of the completion of the research fishing. A full report should be provided within 12 months.
 - (ii) Catch and effort data resulting from the research fishing in accordance with 1(i) should be reported to the Secretariat according to the haul-by-haul reporting format for research vessels (C4).