

ASSESSMENT AND AVOIDANCE OF INCIDENTAL MORTALITY
OF ANTARCTIC MARINE LIVING RESOURCES

Marine Debris

4.1 Reports on the assessment and avoidance of incidental mortality in the Convention Area for the 1993/94 season were received from Australia, Brazil, Japan, Russia, Poland, South Africa, UK and USA (CCAMLR-XIII/BG/6, 24, 23, 28, 7, 5, 20 and 15 respectively).

4.2 The Scientific Committee noted from these reports that fishing net fragments, especially strings and bags, were the most common forms of entangling material (SC-CAMLR-XIII, paragraph 9.79). The number of entanglements of Antarctic fur seals at Bird Island, South Georgia, in the 1993/94 season was lower than in previous years but still much higher than in 1990 and 1991 (CCAMLR-XIII/BG/3). The first observations of oiled albatrosses at South Georgia were reported (SC-CAMLR-XIII/BG/4). A six-fold increase over the previous years of the incidence of fishing line and hooks associated with, regurgitated by, and impaled in seabirds was reported at Bird Island (SC-CAMLR-XIII/BG/4).

4.3 The Commission shared the Scientific Committee's concern about the apparent increase in the number and variety of environmental threats to birds and seals (SC-CAMLR-XIII, paragraph 9.82).

4.4 In addition to reports on incidental mortality in the Convention Area, Members submitted a number of papers describing results of their studies on marine debris.

4.5 The Delegation of the UK informed the Commission that at Bird Island, South Georgia, amounts of debris on beaches were slightly reduced from 1992 but still five times the 1991 amount (CCAMLR-XIII/BG/3). Almost all material found probably originated from local fishing vessels, especially packaging bands, whose presence coincided with the arrival in the local area of krill fishing vessels. However, for the first time, all packaging bands recovered had been cut as required in accordance with Conservation Measure 63/XII 'Reduction in Use of Plastic Packaging Bands'.

4.6 In addition, at Signy Island the trend since 1991 of a reduction in number and mass of debris was reversed, with a four-fold increase in mass and a five-fold increase in numbers compared with 1993. However, levels are still lower than in 1991. The reason for the increase in 1994 is unknown (CCAMLR-XIII/BG/11).

4.7 At Cape Shirreff, Livingston Island, periodical surveys of beached marine debris conducted by Chile had resulted in the establishment of a baseline for planning further assessment surveys in accordance with the CCAMLR Guidelines for Conducting Surveys of Beached Marine Debris (CCAMLR-XIII/BG/17). During the 1993/94 season, a total of 36 beaches at Cape Shirreff was surveyed and accumulated debris removed (284 kg). As in previous studies in the area, marine debris mainly consisted of plastic and synthetic fibres (92%). It was observed that some nests of Antarctic birds were built with plastic material and some Antarctic fur seals were observed with neck collars.

4.8 The Delegation of Chile advised the Commission that Conservation Measure 63/XII 'Reduction in Use of Plastic Packaging Bands' had been incorporated into Chilean legislation and published in the official Government Gazette.

4.9 A survey of marine debris was conducted by Australia at Macquarie Island on a monthly basis over a one-year period (CCAMLR-XIII/BG/6). In 1994, debris loading on the beach surveyed was equivalent to past years' loadings.

4.10 The Commission reiterated its call that Members should undertake surveys of beached debris in accordance with the Guidelines for Conducting Surveys of Beached Marine Debris adopted in 1993 (CCAMLR-XII, paragraph 5.8). The Commission also urged wider participation of Members in this important activity.

4.11 Members were reminded about simple but effective educational materials which have been produced by the Commission, i.e. a placard on the prevention of marine debris pollution from vessels and an information brochure on marine debris. The Commission strongly encouraged the wide use of this placard and brochure to advise fishermen, researchers and others working in the Convention Area of the sources, fates and effects of marine debris on Antarctic marine living resources.

4.12 Reports of CCAMLR scientific observers in the 1993/94 season indicated that placards, which should be displayed in appropriate places aboard ships operating in the Convention Area, were absent on some vessels. The Secretariat was asked to inquire whether Members needed more placards for their vessels and to produce more copies of the placard if required.

4.13 The Third International Conference on 'Marine Debris - Seeking Global Solutions' was held in Miami, USA, from 8 to 13 May 1994 (CCAMLR-XIII/BG/8). At the invitation of the organisers, the CCAMLR Secretariat was represented at the conference by the Science Officer. His participation was funded by NOAA/NMFS, USA.

4.14 The poster 'CCAMLR and its Activities on Monitoring Beached Marine Debris in Antarctic Waters' was prepared for the conference. The poster reflects CCAMLR activities relating to monitoring of the incidence of marine debris, and provides summaries of marine debris surveys conducted by Members. The conference report makes mention of CCAMLR activities regarding monitoring of beached marine debris.

4.15 The Commission noted that the participation of the CCAMLR Secretariat in the conference has helped international promotion of CCAMLR's activities relating to the monitoring of the incidence of marine debris and its impact on marine biota. It has also assisted the Secretariat in gaining a better knowledge of current problems with marine debris on a global level.

Incidental Mortality during Fishing Operations

4.16 Members were asked to report on progress towards the implementation of Conservation Measure 30/X (phasing out of net monitor cables). In accordance with Conservation Measure 30/X, the use of net monitor cables is prohibited from the beginning of the 1994/95 season, i.e. from 1 July 1994.

4.17 Last year the Delegation of Poland proposed that the Commission amend Conservation Measure 30/X in order to allow Polish fishing vessels to defer the installation of cableless net echosounders until the end of 1995. The Secretariat has been informed by Poland that one Polish vessel is intending to harvest in the Convention Area in the 1994/95 season. The Commission noted that Conservation Measure 30/X was passed two years ago, and recommended the Government of Poland to urge its fleet to comply with this measure. It was agreed to place this issue on this year's Commission agenda (CCAMLR-XII, paragraph 5.21).

4.18 The Delegation of Poland had asked SCOI to explore the possibility of granting an exemption from Conservation Measure 30/X for one Polish krill trawler until the end of 1995. After careful and detailed consideration SCOI recommended to the Commission a set of conditions under which the required exemption might be granted. SCOI also decided that any further requests for delay in the implementation of Conservation Measure 30/X would not be considered (Annex 5, paragraphs 1.11 and 1.12).

4.19 The Delegation of Poland, after consultation with the owner of the vessel in question, informed the Commission that the required cableless netsonde would be installed on the vessel

if the owner decided to fish for krill in the 1994/95 season. Therefore, the exemption requested was no longer required. The Commission commended Poland for its action on the implementation of Conservation Measure 30/X with regard to its vessels.

Incidental Mortality in Longline Fisheries

4.20 The Scientific Committee Chairman informed the Commission that an *Ad Hoc* Working Group on Incidental Mortality Arising from Longline Fishing (WG-IMALF) had met for the first time during the intersessional period. The discussions of the Scientific Committee on the results of this Working Group's work are given in SC-CAMLR-XIII, paragraphs 9.1 to 9.70.

4.21 The Commission welcomed the Scientific Committee's work towards addressing the issue of incidental mortality during longline operations, which it recognised was a serious problem and an issue of great importance in the work of the Commission, and congratulated the Scientific Committee and WG-IMALF on the substantial progress they had made.

4.22 Recognising the need for scientific observers in the longline fishery for *D. eleginoides* in Subarea 48.3, in 1993 the Commission had incorporated into the management regulations for the fishery (Conservation Measure 69/XII) the requirement that a scientific observer be aboard each vessel authorised to fish in the subarea. The Commission noted that this measure had proved very successful in terms of acquiring relevant scientific information. The Scientific Committee had reviewed in detail the reports of observers from this longline fishery, and the Commission endorsed its conclusions (SC-CAMLR-XIII, paragraphs 9.11 and 9.12).

4.23 Although considerable uncertainty exists concerning the estimates of total seabird mortality, it was reported that substantial numbers of seabirds are killed each year (SC-CAMLR-XIII, paragraph 9.25). Of the species breeding in the Convention Area, albatrosses and white-chinned petrels are particularly at risk (SC-CAMLR-XIII, paragraph 9.24). From the information available, it was reported that catch rates of seabirds are broadly similar across fisheries, including those inside and outside the Convention Area, despite the differences between the near-surface longline gear employed in tuna fisheries and the bottom lines used in the fisheries for *D. eleginoides* (SC-CAMLR-XIII, Table 8).

4.24 The Commission noted the Scientific Committee's conclusion that in spite of similar catch rates for seabirds inside and outside the Convention Area, the greater part of seabird incidental mortality, relating to birds breeding in the Convention Area, arises from fisheries outside the Convention Area (SC-CAMLR-XIII, paragraphs 9.25 and 9.56). Japan reiterated the

comment expressed in SC-CAMLR-XIII, paragraph 9.57 that it reserved its position on the conclusion of the Scientific Committee (SC-CAMLR-XIII, paragraph 9.56 and Table 8) since Japanese scientists had not yet analysed the relevant papers and data.

4.25 The Commission considered three ways it could act to reduce the incidental mortality of seabirds in longline fisheries: dissemination of information on incidental mortality and its mitigation to Members, fishermen and other management authorities and international organisations (SC-CAMLR-XIII, paragraphs 9.30 and 9.61); comprehensive acquisition of data from longline operations in the Convention Area, especially by observers (paragraphs 9.26 to 9.30); and through conservation measures applying to longline fisheries. Conservation Measures dealing with incidental mortality are discussed in section 8.

4.26 The Commission endorsed the advice of the Scientific Committee given in paragraphs 9.47 to 9.49 and 9.61 and requested that the Secretariat contact appropriate fishery management authorities and international organisations, including international fishery organisations covering the waters adjacent to the Convention Area, and FAO and the UN, to exchange information on the status of Antarctic seabird populations affected by longline fisheries, incidental catches in these fisheries and relevant data on fishing effort, and CCAMLR experiences with mitigating techniques and the formulation of conservation measures. Further details of the information to be exchanged are given in paragraphs 12.20 and 12.21.

4.27 The Commission agreed to consult FAO and IWC to seek advice on the topic of the interactions between longline fishing and cetaceans (SC-CAMLR-XIII, paragraph 9.60).

4.28 The Commission noted that several Members had already been actively informing their fishermen about the problems of incidental mortality during longline fishing operations. In order to continue and expand this work, it endorsed the Scientific Committee's advice (SC-CAMLR-XIII, paragraphs 9.30 and 9.39) that two documents, WG-IMALF-94/19 and 20, suitably revised to apply to CCAMLR fisheries, would be particularly useful for educating fishermen about the problems of incidental mortality of seabirds and the benefits that possible solutions would have for seabirds and fishing operations. They also clearly describe the principles involved in the construction and use of streamer lines.

4.29 The Commission requested that the Secretariat arrange for these documents to be revised to apply to CCAMLR and to be translated into all Commission languages and other languages of Members currently fishing in the Convention Area. These should be circulated to Members and, through them, to longline fishing fleets. However, it noted that no provision had been made in its 1995 budget for translating these documents into languages other than those of the Commission.

4.30 Several delegations commented on these financial implications, but noted that the principle of preparing this information was important enough to be endorsed without reference to a time frame for completion of the work. It was also pointed out that considerable work was required before translation could commence, and that assistance could be sought from Members whose language was not one of the Commission's.

4.31 The Delegation of Australia stressed the importance of addressing this urgent problem in a timely fashion, and stated its concern that its implementation may be delayed because of financial constraints. It stated that the Australian Antarctic Foundation would contribute A\$20 000 to a special fund to assist in the drafting of text, applicable to fisheries in the Convention Area, aimed at facilitating the reduction of incidental mortality; design and production of materials suitable for the fishing community; and the translation and printing of this material for distribution to longline fishing vessels.

4.32 The Commission expressed its gratitude to Australia for this offer and requested that the Secretariat proceed with this project in consultation with Australia.

4.33 The Commission endorsed the advice of the Scientific Committee in respect of data reporting on incidental mortality arising from longline fishing (paragraphs 9.26 to 9.30). Specifically, it agreed that reliable data would only be obtained from observers, that whenever logistically possible two scientific observers, one of which should be an international scientific observer, should be present on each vessel, that it was necessary to have observers on all longline vessels, and it endorsed the priority tasks for observers (paragraph 9.27).

4.34 The Commission agreed that the Scientific Committee should work towards updating the *Scientific Observers Manual* (paragraph 9.28) to take account of observations of incidental mortality, and endorsed the request that the Secretariat create data sheets in book format for reporting observations conducted on board longline vessels. It endorsed the Scientific Committee's plans for this work (SC-CAMLR-XIII, paragraph 13.15), recognising that it would not be completed in time for the 1994/95 fishing season, and would require close liaison between WG-IMALF and WG-FSA. The Commission also endorsed the Scientific Committee's recommendation that the Secretariat circulate to Members the existing list of data required for scientific observers to assist standardisation of data collection from vessels fishing in the 1994/95 season.

4.35 A coordination group has been set up to continue WG-IMALF activities intersessionally (CCAMLR-XIII/BG/30). The Commission encouraged the Convener (Dr C. Moreno, Chile) in this task.