## ASSESSMENT AND AVOIDANCE OF INCIDENTAL MORTALITY OF ANTARCTIC MARINE LIVING RESOURCES

## Marine Debris

- 5.1 Reports of assessment of incidental mortality in the Convention Area in the 1994/95 season were submitted by Australia, Brazil, France, Japan, UK and USA (CCAMLR-XIV/BG/12, 25, 13, 26, 16 and 18). Reports on surveys of beached marine debris, conducted according to the CEMP standard methods, were received from South Africa (CCAMLR-XIV/BG/14), Chile (CCAMLR-XIV/BG/24) and the UK (CCAMLR-XIV/BG/10 and 15).
- 5.2 South Africa reported that all data from its first survey of beached marine debris at Marion Island, Prince Edward Islands (CCAMLR-XIV/BG/14) have been submitted to the Secretariat. South Africa advised the Commission that, as recommended in the report of the survey, the use of expanded plastic foams and plastic packaging bands at Marion Island will be discontinued.
- 5.3 The UK survey of marine debris in 1993/94 showed a continuing reduction in the overall amount of debris at Bird Island, South Georgia (CCAMLR-XIV/BG/10) and in the number of packaging bands recorded. For the second successive year, all bands found had been cut. While this suggests improving compliance with CCAMLR measures seeking to reduce marine debris, it should be noted that most debris and packaging bands were not found until the start of the local fishing season in March.
- 5.4 The UK also surveyed beached marine debris on Signy Island, South Orkney Islands in 1994/95. The trend of the reduction in the amount of debris recorded from 1990/91 to 1992/93 has unfortunately been reversed in the past two seasons. Furthermore, many of the packaging bands found during 1994/95 had not been cut as required by Conservation Measure 63/XIII.
- 5.5 At last year's meeting of the Commission, Chile reported that it has established a baseline for the assessment of trends in the accumulation of marine debris on the beaches of Cape Shirreff, Livingston Island. During the 1993/94 survey, the 14-km-long beach was cleared of all debris. The survey was repeated in 1994/95 (CCAMLR-XIV/BG/24), when the amount of debris collected was similar to last year (237 and 284 kg respectively). Of particular concern was the discovery of some plastic items which showed evidence of having been processed in incinerators before being thrown into the water. In this regard, Chile reminded

Members that, in accordance with Annex III to the Protocol on Environmental Protection to the Antarctic Treaty, all solid residues of such incineration should be removed from the Antarctic Treaty area.

- Japan advised that all its krill fishing vessels are equipped with incinerators for burning plastic materials such as pieces of net gear, etc. No fishing gear lost from Japanese vessels was reported in 1994/95 (CCAMLR-XIV/BG/26).
- 5.7 Australia reported that surveys of marine debris were conducted on a monthly basis throughout the 1995 winter at Macquarie Island (located about 300 n miles north of the Convention Area) (CCAMLR-XIV/BG/12). The results suggested that the collection of materials even every month was likely to underestimate the quantities of materials washed up on the beach because light items could be washed away or blown inland and heavy items buried.
- 5.8 The Commission noted with satisfaction that several Members had reported results of surveys monitoring the incidence of marine debris in the Convention Area. The Commission reiterated its call that Members should continue to do this in accordance with the standard method adopted in 1993 (CCAMLR-XIII, paragraph 4.10) and also urged wider participation of Members in this important activity.
- 5.9 The Commission encouraged Brazil to report to the Commission the results of its surveys of beached marine debris in Admiralty Bay, King George Island (South Shetland Islands).
- 5.10 The Commission noted with concern that current survey data do not suggest any reduction in the amount of marine debris in the Convention Area but do indicate that fishing vessels are probably still an important source of this type of pollution. Members were reminded of the importance of complying with Annex V of MARPOL 73/78 regarding the prevention of pollution from ships in the form of garbage.
- 5.11 The Commission reminded Members that, in accordance with Conservation Measure 63/XII, the use on fishing vessels of plastic packaging bands to secure bait boxes will be prohibited from the 1995/96 season.
- 5.12 The Commission noted that the Scientific Committee had reviewed information on the entanglement of seals and seabirds in marine debris (SC-CAMLR-XIV, paragraphs 3.51 to 3.55). It thanked South Africa and the UK for their detailed reports, noting that the latter's report indicated a trend of a continued reduction in the level of entanglement of Antarctic fur seals at

South Georgia. However, the coincidence of the higher entanglement rates with the start of local longline fisheries also indicated that fishing vessels need to exercise greater care in the disposal of waste at sea.

- 5.13 The Commission was informed that the interim summary of the Third International Conference on Marine Debris (May 1994, USA) (see CCAMLR-XIII, paragraph 4.13), attended by the CCAMLR Science Officer, had been published and widely distributed. Members interested in seeing this could obtain the source address from the Secretariat. It was regretted that the report does not contain any reference to CCAMLR and its initiatives with respect to monitoring marine debris or reducing the level of entanglement of marine animals. The Science Officer said that the full report of the conference and its working groups would, however, contain detailed references to CCAMLR initiatives.
- 5.14 In the meantime, the Commission agreed that the Secretariat should contribute an article on CCAMLR initiatives to the recently established newsletter 'Marine Debris Worldwide'.

Incidental Mortality of Marine Animals during Fishing Operations

- 5.15 The problem of incidental mortality of seabirds in longline fisheries, which was a major item in the Commission's discussions last year (CCAMLR-XIII, paragraphs 4.20 to 4.35), was thoroughly discussed by the Scientific Committee (SC-CAMLR-XIV, paragraphs 3.26 to 3.49), particularly in relation to the extensive data and information collected by scientific observers placed on board longline vessels fishing for *D. eleginoides* in Subarea 48.3 in 1994/95 in accordance with the CCAMLR Scheme of International Scientific Observation.
- 5.16 Because of these data from scientific observers, the Scientific Committee had been able to make considerable progress in the assessment of incidental mortality of seabirds within the Convention Area and in the evaluation of the effectiveness of mitigating measures applied in accordance with Conservation Measure 29/XIII.
- 5.17 The Commission expressed its particular gratitude to Argentina and Chile for their efforts in ensuring comprehensive scientific observation on board longline vessels, and also for arranging for two scientific observers on many vessels, thereby ensuring the provision of particularly accurate and extensive data to CCAMLR.
- 5.18 The Commission also thanked the Convener of WG-IMALF, Prof. C. Moreno (Chile), and the Secretariat for the substantial intersessional work conducted in accordance with the plan of intersessional activities described in CCAMLR-XIII/BG/30.

- 5.19 In particular, the following international organisations were informed of CCAMLR initiatives on the prevention of incidental mortality of seabirds in longline fisheries: ICCAT, IOFC, SPC, FFA, CCSBT, FAO, UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks and IWC.
- 5.20 All CCAMLR observers nominated by the Commission to meetings of the international organisations listed above were asked to assist CCAMLR in obtaining information on the steps these organisations have taken or are planning to take on the matter of incidental mortality of seabirds associated with fisheries, especially longline fisheries (CCAMLR-XIII, paragraph 12.16).
- 5.21 The Commission received reports from CCAMLR observers at meetings of ICCAT (CCAMLR-XIV/BG/6), FAO (CCAMLR-XIV/BG/7), CCSBT (CCAMLR-XIV/BG/29) and the UN Conference on Straddling Stocks and Highly Migratory Fish Stocks (CCAMLR-XIV/BG/20), which contain references to information presented on behalf of CCAMLR.
- 5.22 The Secretariat has received letters from IATTC, ICCAT and FFA acknowledging the receipt of information and indicating steps being taken or planned by these organisations to deal with the problem of incidental mortality of seabirds in longline fisheries. The report to the Commission from the observer at CCSBT contains important information on that Commission's plan to address the issue of incidental mortality of seabirds (see paragraph 11.20).
- 5.23 The response of IWC on possible means of reducing interactions between cetaceans and longline fishing in the Convention Area is summarised in SC-CAMLR-XIV, paragraph 11.23 which also notes the intention of continuing dialogue.
- 5.24 In discussing the problem of incidental mortality of seabirds, several delegations expressed their concern that a considerable proportion of the incidental mortality of seabirds in the Convention Area might remain unreported, especially where it results from the illegal fishing operations noted in the report of the Standing Committee on Observation and Inspection (SCOI) (Annex 5, paragraph 1.37). It was further noted that CCAMLR has no evidence that the vessels involved in illegal operations use any mitigating techniques to reduce the mortality of seabirds.
- 5.25 The Delegations of Australia, USA and the UK jointly drew the attention of the Commission to the importance of the following points raised by the Scientific Committee that:

- (i) despite extensive reported compliance with Conservation Measure 29/XIII, there were numerous cases where several parts of this measure were not complied with;
- (ii) despite some excellent data and reports from scientific observers, there are significant improvements to data reporting methods which need to be put in place as soon as possible (through observers' logbooks, guidelines to observers and the revised *Scientific Observers Manual*);
- (iii) the handbook for fisherman entitled 'Catching fish not birds: a guide to improving longline fishing efficiency' should be completed as soon as possible; and
- (iv) an exchange of information on the problem of incidental mortality of seabirds should be initiated not only with relevant international organisations but also with relevant national authorities of those Members whose vessels are engaged in longline fishing in waters adjacent to the Convention Area and in other regions where seabirds from the Convention Area might be affected.
- 5.26 In addition, the Delegation of New Zealand advised the Commission that New Zealand intends to initiate work this year on albatross and petrel populations and the methods for the reduction of their mortality in longline fisheries. In particular, it was noted that the Scientific Committee had yet to determine what level of incidental by-catch would not prevent depleted populations of albatrosses and petrels from recovering to pre-depleted levels. Some work on this issue will be carried out in New Zealand with regard to wandering albatross populations in New Zealand waters. Results of this work will be made available to the Scientific Committee.
- 5.27 The ASOC Observer noted the success of CCAMLR conservation measures designed to reduce albatross death in longline fisheries. CCAMLR should be especially concerned about the increase in mortality of white-chinned petrels. ASOC urged CCAMLR to continue its work on developing measures to reduce albatross and other bird mortality and promote these measures among other relevant organisations on a global scale.
- 5.28 The Commission noted the conclusions of the Scientific Committee in respect of the success of mitigating measures, adopted last year as Convention Measure 29/XIII, in reducing incidental mortality of seabirds, especially albatrosses (SC-CAMLR-XIV, paragraph 3.34). It also noted the advice that better compliance with the conservation measure would have further reduced seabird mortality and improved fishing efficiency (SC-CAMLR-XIV, paragraph 3.35).

- 5.29 The Commission endorsed the following advice of the Scientific Committee:
  - (i) the importance of working internationally to tackle the problem of incidental mortality (SC-CAMLR-XIV, paragraphs 3.27, 3.56 and 3.62);
  - (ii) the need for Members to report information on specimens collected by scientific observers (SC-CAMLR-XIV, paragraph 3.32);
  - (iii) the urgent need for research into ways of reducing the by-catch of white-chinned petrels, especially at night (SC-CAMLR-XIV, paragraph 3.32);
  - (iv) the desirability, wherever possible, of having two scientific observers on board longline fishing vessels in order to collect data on fish and incidental mortality necessary for assessments by CCAMLR (SC-CAMLR-XIV, paragraphs 3.36 and 3.58);
  - (v) the production of a handbook to educate the captains, fishing masters and crew of fishing vessels about the benefit to fishing arising from the reduction of incidental mortality of seabirds (SC-CAMLR-XIV, paragraphs 3.40, 3.41 and 3.61);
  - (vi) that Members comply in full with all elements of Conservation Measure 29/XIII (SC-CAMLR-XIV, paragraph 3.60);
  - (vii) the need to encourage Members to use appropriate mitigating measures in longline fisheries in waters adjacent to the Convention Area (SC-CAMLR-XIV, paragraphs 3.43 and 3.62);
  - (viii) the potential of longline systems which release baited lines under water and the need to evaluate their effectiveness (SC-CAMLR-XIV, paragraph 3.46); and
  - (ix) additional items arising from the report of WG-FSA relating to seabirdidentification handbooks, population and monitoring studies of albatrosses and petrels (SC-CAMLR-XIV, paragraphs 3.28(iii) to (vi)).
- 5.30 With regard to incidental mortality of seabirds in trawl fisheries, the Commission welcomed information from the Delegation of France that the use of net monitor cables would be prohibited in the Kerguelen Exclusive Economic Zone (EEZ) from the start of the 1995/96 fishing season. Conservation Measure 30/X will be, *de facto*, extended to the whole of the Convention Area.