

## COOPERATION WITH OTHER ORGANISATIONS

11.1 The Scientific Committee noted that the observers from IUCN and ASOC would present their reports to the Commission.

### SCAR

11.2 The Scientific Committee regretted the absence, for the second consecutive year, of an observer from SCAR. The presence of such an observer, able to provide information on the status of SCAR's programs of marine research and to facilitate collaboration between SCAR and CCAMLR, would be very useful.

11.3 The CCAMLR liaison officer (Dr Fanta) presented a report on the Ninth Meeting of SCAR's Group of Specialists on Environmental Affairs and Conservation (GOSEAC), held in Bremerhaven, Germany, in July 1997 (SC-CAMLR-XVI/BG/34). The main points of interest to CCAMLR are listed below.

- (i) The standardisation and quality control of environmental monitoring of chemical and physical pollutants was discussed and will be developed during the intersessional period. The majority of the pollutants under consideration affect seabirds and seals on land, and/or krill, fish and elements of their food chain in coastal waters. Information on these methods, and the monitoring itself, may be of interest to WG-EMM.
- (ii) Biological monitoring methods about the effect of human activities on some Antarctic organisms was a difficult task because of the natural fluctuations in the size of populations. This matter may be developed in conjunction with CEMP.
- (iii) Attention was given to the issue of fishery-derived marine debris in the Southern Ocean, and its effect on seabirds and marine mammals within regions covered under the regulations of the Protocol on Environmental Protection of the Antarctic Treaty.
- (iv) A matrix on environmental impact assessments continued to be developed. This matrix should contain a list of organisms that are sensitive to specific human actions. Collaboration with WG-EMM is important to ensure thorough coverage of this issue.
- (v) In the future, marine areas will be considered for protection, and advice would be required from CCAMLR to evaluate the scientific and conservation priorities for these areas, as well as defining their boundaries and for definitions on marine areas.
- (vi) As Antarctic Specially Protected Areas (ASPAs), and Antarctic Specially Managed Areas (ASMAs), are considered useful tools to avoid, or minimise, environmental impacts, developments should include closer links with CEMP.
- (vii) Environmental education and training is considered important for improving

compliance with environmental conservation measures. GOSEAC welcomed the publication of the booklet *Fish the Sea Not the Sky*.

- (viii) A workshop on Environmental Education and Training in Antarctica is scheduled in Concepción, Chile, from 17 to 18 July 1998, and has been organised jointly by Chile and New Zealand. Topics will include consideration of marine ecosystems, and CCAMLR should be represented at that workshop.
- (ix) Closer links between GOSEAC and WG-EMM should be developed to consider issues of common interest in environmental protection and monitoring in Antarctica.

11.4 The Scientific Committee noted the areas of common interest of both GOSEAC and WG-EMM, and encouraged close collaboration between these two working groups.

11.5 The CCAMLR liaison officer also presented a report on the meeting of the SCAR Subgroup on Evolutionary Biology of Antarctic Organisms, held in Padua, Italy, in October 1997 (SC-CAMLR-XVI/BG/36). The main points of interest to CCAMLR are listed below.

- (i) The state of the art and present knowledge about evolutionary biology of Antarctic organisms were reported by specialists, and future trends of research were discussed.
- (ii) CCAMLR's interests in fish stock identification and the determination of the provenance of seabirds killed during fishing activities were discussed (SC-CAMLR-XV, paragraph 11.1(v)); the SCAR subgroup requested information on the latter topic.
- (iii) A workshop on adaptation, gene flow, evolution, biodiversity and new techniques will be held in Curitiba, Brazil, in 1999, to develop future programs of collaborative, interdisciplinary and coordinated research. An official announcement of this event will be sent to the CCAMLR Secretariat and the participation of CCAMLR experts in the fields of interest is welcomed.
- (iv) The subgroup will meet in Concepción, Chile, in July, in connection with the SCAR meeting.

11.6 In respect of genetic research to determine the provenance of seabirds killed during fishing activities (paragraph 11.5(ii)), the Scientific Committee noted that further information was available in Alexander et al. (1997), and additional advice could be made available to the subgroup from experts such as Dr P. Ryan (South Africa).

11.7 Last year the Scientific Committee commented on the proposal by ATCM for a State of the Antarctic Environment Report. Further developments (CCAMLR-XVI/5, paragraph 12) indicate that an open-ended contact group of ATCM, facilitated by New Zealand would consider the development of this project during the intersessional period. No assistance from CCAMLR was required at present.

11.8 In respect of paragraph 11.3(v), the Scientific Committee noted that the Commission would be receiving from the ATCM a proposed definition of marine areas for consideration and possible endorsement (CCAMLR-XVI/5, paragraph 11).

## SCOR

11.9 The Scientific Committee noted the report of the SCOR Working Group 105 on the impact of world fisheries harvests on the stability and diversity of marine ecosystems (SC-CAMLR-XVI/BG/24). Dr Everson informed the Scientific Committee that, contrary to earlier indications (letter from Dr Miller to Working Group 105 dated 22 May 1997), he had no intention of preparing an overview paper, or involving WG-EMM. However, Dr Miller's suggestion that a copy of the book *Understanding CCAMLR's Approach to Management* would make a significant contribution by CCAMLR was noted.

11.10 The Scientific Committee agreed that a copy of the final draft of this book should be sent to the SCOR Working Group prior to its meeting in Hobart, Australia, in January 1998.

## IWC

11.11 The IWC Observer (Mr Ichii) reported on the Forty-ninth Meeting of the Scientific Committee of the IWC held in Bournemouth, UK, during September/October 1997 (SC-CAMLR-XVI/BG/32). The main points of interest to CCAMLR are listed below.

- (i) The meeting considered cetaceans and climate changes, platforms of opportunity for cetacean sighting surveys, southern hemisphere humpback whales, and IWC-CCAMLR collaboration.
- (ii) In relation to cetaceans and climate change, SC-IWC agreed that the research activities planned by CCAMLR and SO-GLOBEC present a unique opportunity for IWC to conduct research on whale distribution over a range of spatial and temporal scales. SC-IWC endorsed the proposal to conduct collaborative work with CCAMLR and SO-GLOBEC in the Southern Ocean, and recommended that this proposal be approved by the IWC.

11.12 The Scientific Committee noted that no specific recommendation for collaboration had been formulated. Rather, general discussions were held with Dr S. Reilly (IWC Observer) during WG-EMM (Annex 4, paragraphs 8.130 to 8.136). These discussions had established areas of mutual interest, and would facilitate future collaboration.

11.13 The Scientific Committee endorsed the terms of reference proposed by WG-EMM for a small liaison group with SC-IWC to further collaboration between IWC and CCAMLR (Annex 4, paragraph 8.137).

## CCSBT

11.14 The Scientific Committee noted the following statement of the CCSBT Observer (Dr G. Tuck) at the ad hoc WG-IMALF. CCSBT is pleased to note the continuing cooperation between CCSBT and CCAMLR. The exchange of information and mutual participation in these meetings is very beneficial and will enhance the process required to mitigate the seabird by-catch problem. The CCSBT is encouraged by the efforts to monitor and mitigate seabird

by-catch from longline fisheries within CCAMLR waters and welcomes further cooperation between the two organisations.

11.15 The Scientific Committee noted the report of the CCAMLR observer (Dr Sabourenkov) on the second meeting of the Ecologically Related Species Working Group (ERSWG) of CCSBT (SC-CAMLR-XVI/BG/13). This report was considered by WG-FSA, and used in its deliberations (Annex 5, paragraphs 7.13 to 7.15). The Scientific Committee welcomed the development of collaboration between CCSBT-ERSWG and CCAMLR and recommended that this continue and be built on in the future.

11.16 The Scientific Committee agreed to supply CCSBT with data on longline fishing effort in the CCAMLR Convention Area (Annex 5, paragraph 7.14).

#### ICES

11.17 The Scientific Committee noted the information provided by the CCAMLR observer (Dr Croxall) at the ICES meeting: Seabirds in the Marine Environment (SC-CAMLR-XVI/BG/3). Dr Croxall was unable to attend the meeting, but advised that the proceedings of that meeting are now published and contain two articles dealing with the Southern Ocean and others of potential interest to WG-EMM.

11.18 The Scientific Committee noted the report of the CCAMLR observer (Dr I. Lutchman) at the 1997 ICES Annual Science Conference – Eighty-fifth Statutory Meeting (SC-CAMLR-XVI/BG/26). The main points of interest to CCAMLR are listed below.

- (i) A major session of the meeting concerned the precautionary approach and ICES. A new study group on the Precautionary Approach to Fisheries Management was formed in response to the growing demand for advice based on this concept. In addition, ICES will be hosting a symposium in Cape Town, South Africa, in November 1998 on the topic 'Confronting Uncertainty in the Evaluation and Implementation of Fisheries Management Systems'.
- (ii) Other theme sessions of the Annual Science Conference included: trophic relationships, environmental factors, and synthesis and critical evaluation of research surveys.
- (iii) One of the other highlights of the conference was the formalisation of four new committees of ICES: Oceanography Committee; Marine Habitat Committee; Living Resources Committee; and, Resource Management Committee.
- (iv) The Living Resources Committee will be responsible for the biology and ecology of living resources, including those that are subject to harvest or have the potential to be harvested in the foreseeable future. The Resource Management Committee will provide a bridge between fisheries and environmental issues, and between science and management. Both these committees may be of interest to CCAMLR.

## IOC

11.19 Dr Kock reported that he had been unable to meet with Prof. M. Tilzer regarding future collaboration between CCAMLR and IOC. The Scientific Committee recalled that a number of recommendations of IOCSOC relate to fundamental aspects of CCAMLR's work. However, it appears that few invitations were issued by IOC to scientists responsible for coordinating CCAMLR's work in these fields (SC-CAMLR-XV, paragraph 11.19).

## CWP

11.20 The Scientific Committee noted the report of the Seventeenth Session of CWP, held in Hobart, Australia, during March 1997 (SC-CAMLR-XVI/BG/12). The matters discussed by CWP were referred to the Commission. CWP took note of the work of WG-IMALF. However, the Scientific Committee agreed that these and other specific issues regarding incidental mortality of seabirds would need to be followed up with ICCAT and IOTC.

## SPC

11.21 The Scientific Committee noted the report of the SPC on the Twenty-sixth Regional Technical Meeting of Fisheries, held in Noumea, New Caledonia, in August 1996 (SC-CAMLR-XVI/BG/37). The main points of interest to CCAMLR are listed below.

- (i) Incidental catches of seabirds (*Diomedea* spp. and *Procellaria* spp.) are frequent in tuna longline fisheries operating in the southern Pacific Ocean (zone WteP).
- (ii) Incidental capture of seabirds was reduced by 88% following the introduction of streamer lines in a tuna longline fishery in the Tasman Sea.

## Other

11.22 The Scientific Committee noted the report by Dr Øritsland on a symposium on 'Fisheries Management Under Uncertainty', held in Bergen, Norway, in June 1997 (SC-CAMLR-VI/BG/8). This paper was considered in paragraph 7.10.

11.23 The Scientific Committee noted the report of the CCAMLR observer (Dr M. Fukuchi) at the international Symposium on Environmental Research in the Antarctic held in Tokyo, Japan, in December 1996 (SC-CAMLR-XVI/BG/23). The main points of interest to CCAMLR are listed below.

- (i) Activities under CEMP were considered an outstanding contribution since BIOMASS.
- (ii) The possible direct and indirect effects of increasing CO<sub>2</sub> concentration, temperature, and UV-B irradiation on microorganisms in the Antarctic marine ecosystem were reviewed.

- (iii) The international oceanographic surveys in the Antarctic Peninsula area, directly linked to the CCAMLR program, were introduced by Dr Kim.
- (iv) The Japanese Sea Ice and Penguin Study program was investigating how Adélie penguins react to changes of environmental conditions.
- (v) The long-term continuous measurements of partial pressure of CO<sub>2</sub> in the surface sea water and air in the eastern Indian Ocean Sector of the Antarctic Ocean revealed a dip of partial pressure of CO<sub>2</sub> in surface waters related to the upwelling around the Antarctic divergence.

11.24 The Scientific Committee noted the report of the CCAMLR observer (Dr P. Quilty) at the Symposium on Antarctica and Global Change: Interactions and Impacts held in Hobart, Australia, in July 1997 (SC-CAMLR-XVI/BG/31). The meeting was mainly concerned with physical aspects. However, future equivalent meetings planned more direct involvement with biologists, more integration of biological parameters, and would therefore have more direct relevance to the interests and needs of CCAMLR.

11.25 The Scientific Committee noted the report of Dr Miller at the First Meeting of Experts on Coastal and Marine Biodiversity held in Jakarta, Indonesia, in March 1997 (SC-CAMLR-XVI/BG/25). The main points of interest to CCAMLR are listed below.

- (i) The meeting had looked to CCAMLR as a forward-thinking organisation.
- (ii) The meeting developed an interim definition of a term 'ecosystem health'. Such a definition is fundamental to assessing the extent to which the effects on biodiversity are 'harmful'. The definition may need to be considered in the context of EIVs discussed by WG-EMM (Annex 4, paragraph 6.6).
- (iii) Initiatives exist, or are being planned, to eco-label fishery products, with the idea that market forces will motivate sustainable resource use. Such initiatives may be of assistance in combating unregulated fisheries within the CCAMLR Convention Area.
- (iv) WG-FSA may wish to consider UNEP as an avenue for spreading awareness of IMALF issues.

11.26 The Scientific Committee also noted that CCAMLR, through the Scientific Committee, should maintain a watching brief on developments within the CBD as these may affect the participation of CCAMLR and its Members in associated biodiversity activities.

#### Future Cooperation

11.27 The following observers were nominated to represent CCAMLR at intersessional meetings:

- (i) meeting of SCOR Working Group, January 1998, Hobart, Australia – Dr Quilty;

- (ii) general meeting of SCOR, including meetings of the GLOBEC Open Science Committee and SO-GLOBEC Steering Committee, March 1998, Paris, France – Dr Kim;
  - (iii) meeting of CCSBT-ERSWG, April 1998, Japan – Drs Tuck or B. Baker;
  - (iv) meeting of the SC-IWC, April–May 1998, Muscat, Oman – Dr Kock;
  - (v) Second international Symposium on Fish Otolith Research and Application, June 1998, Bergen, Norway – Dr J. Ashford;
  - (vi) XXV SCAR, July, Concepción, Chile – Dr Croxall (bird meeting), Prof. Torres (seal meeting), Dr Fanta (Subgroup on Evolutionary Biology of Antarctic Organisms, and Workshop on Environmental Education and Training in Antarctica), Prof. B. Fernholm (Working Group on Biology);
  - (vii) SCAR VII Biology Symposium, August–September 1998, Christchurch, New Zealand – Dr P. Penhale;
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- (viii) 1998 ICES Annual Science Conference, September 1998, Lisbon, Portugal – Dr Lutchman;
  - (ix) ICES Symposium on Confronting Uncertainty in the Evaluation and Implementation of Fisheries Management Systems, November 1998, Cape Town – Dr Miller;
  - (x) FAO meeting on by-catch in fisheries, Japan – Drs Croxall and Miller to consult and approach Dr J. Cooper;
  - (xi) GOSEAC, July 1998, Basel, Switzerland – Dr Fanta;
  - (xii) SC-CMS, April-May 1998, Bohn, Germany – Secretariat to correspond with CMS and obtain information on timing, possibly Dr Kock.

11.28 Australia will host a workshop proposed at the ATCM on the introduction of disease into Antarctic birds and seals to be held in Hobart from 25 to 28 August 1998.

11.29 The Scientific Committee agreed that all observers invited to meetings of the Scientific Committee and Working Groups in 1997 should be invited to attend the meetings in 1998.