

COOPERATION WITH OTHER ORGANISATIONS

9.1 The Scientific Committee was chaired during this section by Dr Sushin, Vice-Chair of the Scientific Committee.

Cooperation with the Antarctic Treaty System

CEP

9.2 The report of the Chair of the Scientific Committee (CCAMLR-XXIII/BG/7) outlined his participation in CEP-VII under the Madrid Protocol (Cape Town, South Africa, May–June 2004). The most important issues of relevance to CCAMLR were:

- (i) CEP again addressed the issue of establishing ‘Specially Protected Species’. CEP reviewed two working papers presenting different views on some issues and prepared a suggested revised text for consideration by the ATCM.
- (ii) CEP’s Intersessional Contact Group (ICG) on the State of the Antarctic Environment continued its work under agreed terms of reference. The Chair of the Scientific Committee monitored progress as a member of the ICG. CEP agreed to continue the ICG under modified terms of reference.
- (iii) CEP reviewed progress of the Antarctic Site Inventory (ASI) to monitor and assess the effect of visitors to sites in the Antarctic Peninsula. The ASI has collected biological data and site-descriptive information in the Antarctic Peninsula since 1994. CEP agreed to establish an open-ended ICG to further address this issue.
- (iv) Dr A. Press (Australia), the CEP Observer to CCAMLR-XXII and SC-CAMLR-XXII, presented an information paper which highlighted the main aspects of SC-CAMLR-XXII. Dr Press continues to serve as the CEP Observer to the Scientific Committee.

9.3 It was noted that CEP worked to a large extent through intersessional correspondence groups reporting to the regular meetings of CEP, and that many items are in an early stage of development.

SCAR

9.4 Dr Fanta, CCAMLR Observer at SCAR and SCAR Observer at CCAMLR, presented a report (CCAMLR-XXIII/BG/37) on SCAR.

9.5 SCAR presented a long-term strategic plan for the period 2004–2010, including activities to be established for the IPY (2007/08). The main program of interest to CCAMLR is ‘Evolution and Biodiversity in the Antarctic (EBA)’.

9.6 The twenty-eighth meeting of SCAR was held in Bremen, Germany, from 25 to 29 July 2004.

9.7 LSSSG (www.nioo.knaw.nl/projects/scarlsssg/) was chaired by Dr S. Chown (South Africa). Topics of interest to CCAMLR are:

- (i) SCAR has presented to the ATM a report on marine acoustics technology and the Antarctic environment. Apparently, and in contrast to military equipment, no research equipment has negative effects on marine mammals, and only in a few cases avoidance behaviour was observed.
- (ii) The criteria for the identification of species to be especially protected under the Treaty were considered not to be consistent with modern concepts of conservation. Therefore, for the time being, the IUCN criteria for species at risk were adopted. The exclusion of fur seals and Ross seals from the list of protected species is not yet agreed.
- (iii) A workshop on 'Biological Monitoring and Human Impacts in the Antarctic' will be held in 2005, and the steering committee started the definition of terms of reference for the workshop, including themes such as habitat protection and management of species.
- (iv) Bioprospecting was discussed and SCAR suggested that CCAMLR pay attention to new tendencies of the world market in relation to products and molecules obtained from marine organisms. They may result in large removals of marine organisms.
- (v) The plans for Cape Sheriff and San Telmo, which include a CEMP site, Edmondson Point, and Deception Island were approved. Again there was a discussion about the need for CCAMLR to revise such plans when they include a marine component. This raised the question whether SCAR would have to review plans that CCAMLR presents, when they are inside the Treaty area. There was a suggestion that SCAR could propose areas for protection, if LSSSG or any other group could identify values that would need protection. This will now be a permanent item on the group's agenda.

9.8 The following Science Programs of LSSSG were active during the past year:

- (i) Evolution and Biodiversity in the Antarctic: the response of life to changes (EBA), convened by Dr G. di Prisco (Italy), will be the main scientific program of LSSSG, and will examine patterns of gene flow and their consequences for population dynamics; the patterns and diversity of organisms; ecosystems and habitats in Antarctica; and the impact of past, current and predicted environmental change on biodiversity and the consequences for Antarctic marine ecosystem functions. Two inclusions in the program were agreed:
 - the Circum-Antarctic Census of Marine Life (Circum-Antarctic CoML) following a proposal by Australia that there be an international, centrally coordinated Circum-Antarctic Census of Antarctic Marine Life (CircAntCML) conducted during the Antarctic summer in 2007/08, with the

aim to describe and define biodiversity of marine life in the oceans that surround the Antarctic. This will also be a significant contribution to the IPY;

- the Information Net on Marine Biodiversity of SCAR (SCAR-MarBIN), a databank to integrate and disseminate information on Antarctic marine biodiversity.
- (ii) Evolutionary Biology of Antarctic Organisms (EVOLANTA), convened by Dr P. Rodhouse (UK), held a Workshop on 'Evolution and Adaptation' in Siena, Italy, in December 2003. Papers have been published this year in a special volume of *Antarctic Science*.
- (iii) The program, Ecology of the Sea Ice Zone (EASIZ), convened by Dr A. Clarke (UK) and Dr W. Arntz (Germany), was formally closed with a final symposium held in Croatia in September 2004. Another significant event of the past year was a symposium held at Ushuaia, Argentina, in October 2003. The main themes of the symposium were interactions between the Magellan region and the Antarctic (IBMANT) and Antarctic benthic deep-sea diversity (ANDEEP).

9.9 Two expert groups reported on their activities during the past year:

- (i) Expert Group on Seals (EGS), chaired by Prof. A. Blix (Norway), has updated information at www.fagmed.uit.no/info/imb/aab/Scar/. The group reported that Antarctic fur seals and sub-Antarctic fur seals continue to increase over their entire range, while some populations of *Arctocephalus gazella* (Bouvetøya, South Shetland and South Sandwich Islands) and *A. tropicalis* (Amsterdam Island) and all three stocks (South Georgia, Macquarie and Kerguelen Islands) of southern elephant seal populations have stabilised.

The Status of Stocks Report will be provided to the CCAMLR Scientific Committee in 2005.

- (ii) Expert Group on Birds (EGB), chaired by Dr E. Woehler (Australia) met in the Netherlands in June 2004. The main topics were the ratification of ACAP, progress on the compilation of contemporary and historical data on the distribution and abundance of birds in the Southern Ocean, and specially protected species and the status of giant petrels.

9.10 Among the action groups, the following were active:

- (i) Biological Monitoring, convened by Dr D. Walton (UK), includes Dr Fanta among its members to promote liaison with CCAMLR. In 2005 there will be a workshop with the aim of producing a document for the Antarctic Treaty. Some objectives of the workshop are to consider a series of biological indicators of human impact, to consider if the monitoring of key species is practicable, and to evaluate the protocols of biological monitoring that are tested and validated in other parts of the world;
- (ii) Best Practices for Conservation, chaired by Dr Walton, to look at conservation related to the Antarctic;

- (iii) Global International Waters Assessment (GIWA) – the Ambassador of this program is Prof. G. Hempel (Germany). The group will organise a workshop for a discussion on the terms of reference for the report on Area 66, Antarctica.

9.11 The IXth SCAR International Biology Symposium (www.pucpr.br/scarbiology_symposium) will be held in Curitiba, Brazil, from 25 to 29 July 2005. The central theme of the symposium is 'Evolution and Biodiversity in the Antarctic'. The themes of the sessions are: Evolution and adaptation, Ecological processes, Conservation and management, Patterns and processes in biodiversity, and an Open session. The final date for submission of abstracts is 1 March 2005.

9.12 The IPY is a major event in which SCAR will play a significant role. Thus, LSSSG has defined some questions to be answered, that were derived from the IPY Initial Outline Science Plan:

- How do polar ecosystem structure and function vary through space and time and how much of this variation can be attributed to anthropogenic change?
- How has polar diversity responded to long-term changes in climate?
- What are the linkages between the physical, chemical and biological systems in the polar regions?
- What is the pattern and structure of polar marine and terrestrial biodiversity, at all trophic levels?
- How does phylogenetic and functional diversity vary across extreme environments, and what are the evolutionary responses underpinning this variation?

9.13 The establishment of a SCAR/SCOR/IOC Coordinating Group on Inter-disciplinary Southern Ocean Science (ISOS) is recommended to facilitate coordination between the different discipline research groups currently active in the Southern Ocean, and to encourage an inter-disciplinary approach to Southern Ocean observational and modelling research, recognising the inter-dependence of physical, chemical and biological processes in the ocean.

9.14 In response to questions and comments it was clarified that:

- (i) the time for the meeting of the Working Group on Biological Monitoring and Human Impacts in the Antarctic has not yet been decided but the second week of March is likely;
- (ii) no written documentation is available regarding the Circum-Antarctic CoML which was an idea presented, discussed and accepted during the meeting;
- (iii) there is no standing request for advice to CCAMLR from the two expert groups on seals and birds (EGS and EGB). The potential request envisaged in paragraph 9.9 needs to be approved by the Scientific Committee;
- (iv) a more definitive plan for the IPY is expected in January 2005. At the SCAR meeting, only an Initial Outline Science Plan was presented.

9.15 Prof. Croxall thanked Dr Fanta for her presentation and explanations, and concluded that the Scientific Committee may need to develop more efficient documentary means of linking and coordinating the many overlapping areas of interest for SCAR and CCAMLR, especially relating to monitoring, management and biodiversity issues.

Reports of observers from international organisations

ASOC

9.16 ASOC drew delegates' attention to the following papers: SC-CAMLR-XXIII/BG/25 for recommendations on krill; CCAMLR-XXIII/BG/31 for ASOC's recommendations and priorities for this meeting; CCAMLR-XXIII/BG/32 on noise pollution in the Southern Ocean; and CCAMLR-XXIII/BG/33 on protection of sensitive high-seas areas.

9.17 ASOC welcomed initial efforts made by the SCAR Action Group on Noise Pollution and Acoustic Impacts on the Marine Environment. ASOC submitted that coordinated efforts by CCAMLR and CEP should be made to implement mitigation measures before ATCM-XXVIII, with the aim of reporting back to the ATCM on progress made. ASOC urged the Scientific Committee and CCAMLR Member States to endorse the recommendations developed by the IWC and SCAR, and to commit CCAMLR resources to this joint effort.

9.18 ASOC strongly encouraged CCAMLR Members to take account of different recommendations to promote the development of MPAs from relevant fora like the World Parks Congress, the Convention on Biological Diversity and the UN General Assembly.

9.19 CCAMLR's adherence to the ecosystem and precautionary approaches as integral to the management of the Convention Area, places the Commission in a unique position to take concrete action to protect critical, vulnerable and highly sensitive deep-sea habitats in the Southern Ocean, particularly cold-water corals and their associated and dependent species. Special attention should also be granted to the Ross Sea, which has been highlighted as the largest intact marine ecosystem remaining on Earth.

9.20 ASOC commended WG-FSA and the subgroup on Subarea 48.3 for its hard work on the assessment of the fishery in Subarea 48.3.

9.21 ASOC stated that this body and this fishery are recognised globally as examples of conservative, precautionary and scientific fisheries management. It is clear that there is significant uncertainty associated with this assessment. In that context, ASOC finds it extremely troubling that for the second year running, the Scientific Committee has failed to provide concrete advice to the Commission. A catch limit chosen by a political body is not conservative, precautionary or scientific.

9.22 Additionally, ASOC sought reassurance that the proposed closure to fishing in Management Area 1 (West Shag Rocks) does not preclude patrolling against IUU fishing, which could severely impact on seabird populations in the area.

FAO/Birdlife South American Workshop on Implementation of
NPOA-Seabirds and Conservation of Albatrosses and Petrels

9.23 The observer, Prof. Moreno, reported on the FAO/Birdlife South American Workshop on Implementation of NPOA-Seabirds and Conservation of Albatrosses and Petrels (SC-CAMLR-XXIII/BG/7).

9.24 The workshop was held at Futrono, close to Valdivia, Chile, from 2 to 6 December 2003, with 28 participants representing the fishing industry, non-governmental organisations, governmental fishery managers, researchers and invited international experts.

9.25 The meeting reached important conclusions and the recommendations emphasise aspects that can help in practical ways to achieve the NPOAs in the whole region, recognising, *inter alia*, that:

- (i) all countries concerned have started to work on the assessment of incidental mortality of seabirds in longline fisheries;
- (ii) all countries have identified a set of mitigation measures and some of them have initiated studies to implement and/or improve such measures;
- (iii) all countries have initiated the preparation of NPOA-Seabirds, although the degree of achievement varies from country to country;
- (iv) a higher commitment – regarding the first workshop – from governmental institutions and also from the fishing industry to deal with the conservation of seabirds is observed;
- (v) some progress has also been achieved in the economic assessment of interaction between seabirds and marine fisheries;
- (vi) a good basis exists for regional cooperation on the reduction of incidental catch of seabirds in countries with longline fisheries in the South Pacific and South Atlantic. In this context, the cooperation between FAO and BirdLife International, which allowed the holding of this workshop, was commended.

9.26 The meeting made the following recommendations:

- (i) encourage the assessment of incidental mortality of seabirds in longline fisheries and intensify the research on suitable mitigation measures for specific fisheries, as well as research oriented to improve the mitigation methods and devices.
- (ii) continue the development of methodologies to assess the economic impact of incidental catch of seabirds in longline fisheries and develop methodologies to assess the economic impact of mitigation measures in longline fisheries;
- (iii) encourage the development of regional research on seabird by-catch and also on the implementation and improvement of mitigation measures in longline fisheries;

- (iv) continue the cooperation between FAO and BirdLife International. The next steps in this cooperation should be: (a) the publication of a technical paper on the interaction of seabirds and longline fisheries in the South American seas; and (b) the holding of a third workshop on this issue by the end of 2005;
- (v) study the possible interactions of trawling fleets with seabirds in the high seas of the southeast Pacific;
- (vi) encourage the adoption by concerned countries of ACAP and the participation of these countries in the research program of the agreement.

IWC

9.27 The IWC Observer, Dr Kock, reported on relevant elements from the meeting of the SC-IWC held in Sorrento, Italy, from 29 June to 10 July 2004.

9.28 The SC-IWC emphasised the importance of close collaboration between the IWC, SO GLOBEC and CCAMLR in the Southern Ocean.

9.29 The role of sea-ice will be a focus of the 'Environmental Subcommittee' of the SC-IWC in 2005, to which some experts from outside the IWC will be invited. The SC-IWC strongly recommended that a workshop on sea-ice be held prior to the annual meeting in Ulsan, Republic of Korea, in May 2005. The CCAMLR Observer recommended that CCAMLR experts should be closely involved and contribute to the workshop and sea-ice discussions within the SC-IWC.

9.30 True blue whales have been estimated to have numbered 239 000 (202 000–311 000) at the start of whaling in the Southern Ocean in 1904. They had been reduced to a low of 360 (150–840) whales by 1973, with their last estimate being 1 700 (860–2 900) in 1996. They currently increase at a rate of 7.3% (1.4–11.6%) per year.

9.31 It was not possible to completely evaluate the effectiveness of the Southern Ocean Sanctuary (SOS) of the IWC at the present time because its scientific objectives are not clear and are not associated with quantifiable performance measures. The SC-IWC requested that its Commission consider clarifying the objectives of the SOS in order to allow the SC-IWC to discriminate among designs that would, *inter alia*, protect whales, protect whale species diversity and increase whaling yields outside the SOS. The SC-IWC developed a series of recommendations that, once the overall objectives have been refined, will allow these objectives to be evaluated, and will facilitate evaluation in future reviews.

9.32 In response to questions relating to the recommendation to involve CCAMLR expertise in the planned sea-ice workshop, it was clarified that the IWC ultimately will be interested in the relationship between whales and sea-ice. However, it was envisaged that two experts covering both the physical aspects and the ecosystem-related aspects of sea-ice distribution would be appropriate. It would be valuable to receive a report from the experts to WG-EMM to elaborate on this.

Reports of CCAMLR representatives at meetings
of other international organisations

CWP

9.33 The Data Manager participated in the intersessional meeting of CWP which was held at FAO, Rome, from 3 to 5 February 2004 (SC-CAMLR-XXIII/BG/2). The meeting covered issues of immediate interest to CCAMLR, including:

- data quality indicators
- field guides for species identification
- fishery data processing systems
- the implementation of the strategy on status and trend of capture fisheries
- trade document information
- vessel data exchange formats.

9.34 The benefits of CCAMLR's involvement in CWP include participation in the:

- development of global initiatives for improving the quality of fishery information, including observer data and statistics on by-catch;
- harmonisation of global fishery statistics and other information on fisheries resources;
- exchange of trade data including information on commodity classification;
- exchange of data on landings and fleet statistics.

9.35 The 21st Session of CWP will be hosted by ICES and will be held in Copenhagen, Denmark, from 1 to 4 March 2005. The Workshop on Implementation of the Strategy on Status and Trend of Capture Fisheries will be held immediately prior to the 21st Session.

ICES

9.36 The report from the 2004 ICES Annual Science Conference in Vigo, Spain, from 20 to 25 September 2004, was available as SC-CAMLR-XXIII/BG/24.

9.37 ICES is the organisation that coordinates and promotes marine research in the North Atlantic. This includes adjacent seas such as the Baltic Sea and North Sea. ICES also gives advice to international organisations on fisheries management and pollution.

9.38 The Annual Science Conference was attended by a record of almost 800 scientists from ICES member states, states outside the ICES area and a number of international organisations.

9.39 Several meetings and sessions were held to address issues of specific scientific relevance to ICES. The theme sessions were divided into: (i) functioning of marine ecosystems; (ii) human impacts on marine ecosystems; (iii) options for sustainable marine-related industries; and (iv) the sustainable use of living marine resources.

Future cooperation

9.40 The Scientific Committee noted a number of international meetings of relevance to its work and nominated the following observers:

- 4th Biennial International Fisheries Observer Conference, 8 to 11 November 2004, Sydney, Australia – Australia (SC-CAMLR-XXII, paragraph 9.22);
- Agreement on the Conservation of Albatrosses and Petrels (ACAP), 8 to 12 November 2004, Hobart, Australia – Australia (SC-CAMLR-XXII, paragraph 9.22);
- 21st Session of CWP on Fishery Statistics, 1 to 4 March 2005, Copenhagen, Denmark – Data Manager;
- 7th Indo-Pacific Fish Conference, 16 to 20 May 2005, Taipei, Taiwan – Dr Shust;
- CEP-VIII – Antarctic Treaty, 6 to 17 June 2005, Stockholm, Sweden – Chair, Scientific Committee;
- 57th Annual Meeting of the SC-IWC, 30 May to 10 June 2005, Ulsan, Republic of Korea – Dr Kock;
- SCAR International Biology Symposium, 25 to 29 July 2005, Curitiba, Brazil – Dr Fanta;
- ICES Annual Science Conference, 20 to 24 September 2005, Aberdeen, UK – Dr Collins;
- SCOR 2005 General Meeting, 29 August to 1 September 2005, Cairns, Australia – no nomination.

9.41 A question was raised whether the Scientific Committee is interested in engaging in APEC in order to provide information on tourist-related matters. It was concluded that these questions are within the realm of CEP.

Future procedure

9.42 The Scientific Committee reviewed its advice to observers to the Scientific Committee who wish to submit documents to its meetings (SC-CAMLR-XXII, paragraph 9.23). It was agreed that this advice applied to all documents submitted by observers, including observers from other international and non-governmental organisations as well as CCAMLR observers at meetings of other international organisations. In future, the Scientific Committee would only consider papers from observers which are submitted to the Secretariat by 0900 h on the opening day of the meeting.