

COOPERATION WITH OTHER ORGANISATIONS

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

Cooperation with the Antarctic Treaty System

CEP

9.2 The Chair of the Scientific Committee, Dr Fanta, was an observer at the IXth meeting of CEP, from 12 to 16 June 2006, in Edinburgh, UK. The CEP meeting was chaired by Dr A. Press (Australia). Dr Fanta's report to the Scientific Committee (CCAMLR-XXV/BG/40) was presented by Dr N. Gilbert (CEP Observer) and covered the following key elements of CEP's discussions:

- (i) CEP had agreed to develop a five-year work plan to assist with managing its expanding agenda. CCAMLR's work on developing a five-year work plan for WG-EMM was seen by CEP as a model example.
- (ii) CEP had received a presentation from Dr D. Carlson, Director of the IPY Programme Office, on the International Polar Year. CEP had encouraged Parties to provide logistic and financial support for scientific research operations and outreach within the framework of the IPY.
- (iii) CEP submitted nine new or revised management plans to the ATCM for subsequent approval. Two of those management plans included a marine component: ASPA No. 165 – Edmonson Point, Wood Bay, Ross Sea (Italy), and ASMA No. 1, Admiralty Bay, King George Island (Brazil, Ecuador, Poland, Peru and USA). These management plans had been considered by SC-CAMLR and approved by the Commission.
- (iv) CEP spent considerable time discussing the issue of MPAs, in particular CCAMLR's proposed work to undertake a bioregionalisation of the Southern Ocean, with the aim of providing a scientific basis for identifying representative areas for protection. CEP members highlighted the need to base any further MPA work on a sustainable and scientific approach. CEP expressed its willingness to engage with CCAMLR on the issue of bioregionalisation and MPAs. The Committee further agreed that, during the intersessional period up to CEP-X, the new Chair of CEP, Dr Gilbert, should represent CEP on the Steering Committee for the CCAMLR Bioregionalisation Workshop.
- (v) New Zealand had presented a report of a workshop on 'Non-native species in Antarctica' which was held in New Zealand in April 2006. The key issues outlined in the workshop report included, but were not limited to, concern over the transfer of species both into and within the Antarctic, and the need for practical preventive measures. It was considered that the introduction of non-native species to the region requires close consideration, particularly as a warming climate is expected to increase the ability of new introduced species to survive in the Antarctic. CEP placed the issue as a standing item on its agenda,

and requested New Zealand to also submit the report to SC-CAMLR for consideration (SC-CAMLR-XXV/BG/21). CEP emphasised the need to maintain a dialogue with CCAMLR with respect to introduced marine species and the potential for fishing vessels to contribute to introducing new species to the Southern Ocean.

- (vi) CEP also endorsed new Guidelines for Ballast Water Exchange in the Antarctic Treaty Area, aimed at reducing the risk of introducing non-native marine species into Antarctica through ballast water. The guidelines are intended to provide the means for early implementation of IMO's Convention for Control and Management of Ships Ballast Water and Sediments (2004). ATCM-XXIX adopted the guidelines by means of Resolution 3 (2006).
- (vii) SCAR tabled a proposal to list southern giant petrels (*Macronectes giganteus*) as a Specially Protected Species under the provisions of Annex II to the Protocol. CEP agreed to postpone a decision on designation of the species pending a proposed review of its population status by IUCN. If this reappraisal changed the global status from Vulnerable to Near Threatened (using the IUCN 'Red List' criteria) then listing as a Specially Protected Species would not be justified under the procedures agreed by the CEP (Annex 8 of the Final Report of CEP-VIII). However, CEP agreed to give further consideration to the option of designating this, and other species, on the basis of their regional status. SCAR was also urged to prepare proposals for listing other species that fell into the appropriate IUCN status categories (notably macaroni penguins (*Eudyptes chrysolophus*)), following CEP guidelines. SCAR was also requested to review the status of Ross seals (*Ommatophoca rossii*), which, like fur seals, have been listed as Specially Protected Species since 1964.
- (viii) SCAR had also tabled a proposal to delist Antarctic fur seals as Specially Protected Species. SCAR noted that Antarctic fur seals are a conservation success-story and that populations in the Antarctic Treaty Area are expected to continue to increase. CEP agreed to recommend that the ATCM remove the two fur seal species from the list of Specially Protected Species under Annex II. In so doing, CEP emphasised its understanding that the species would continue to receive the comprehensive general protection afforded to all Antarctic seal species under the Protocol. CEP also requested SCAR to take regular advice from CCAMLR on the level of incidental seal mortality, potential impacts of krill harvest on seal populations as well as on the development and effectiveness of seal mitigation measures in the krill fishery.
- (ix) SCAR had reported to CEP on the outcomes of its workshop on 'Marine Acoustics and the Southern Ocean' as well as on its work on a 'Broadband Calibration of Marine Seismic Sources – A Case Study'. SCAR reported that it had used the COMNAP survey on marine acoustic systems employed by national Antarctic program vessels, and, following discussions with the IWC Secretariat and others, had updated risk assessments undertaken two years earlier. SCAR noted that the recommended mitigation procedures were being used by most permitting authorities, however, further data was needed to ensure these procedures were as relevant and effective as possible. In particular, further research was needed to establish the natural levels of background noise as well

as that emanating from human activities. The Committee agreed to keep this subject on the agenda and discuss it again at CEP-X along with the report from the recent IWC Workshop on Marine Acoustics.

- (x) On the issue of cooperation with other organisations, CEP recognised the importance of its relationship with SC-CAMLR in ensuring the protection of the Antarctic environment and dependent and associated ecosystems. CEP agreed that, as of CEP-X, the CEP report of the CEP Observer to SC-CAMLR be presented as a working paper to ensure more detailed consideration by CEP. CEP also agreed that the report should include a list of contacts of those responsible for the working groups of SC-CAMLR, as well as clear references to those sites where electronic versions of the final reports of the meetings of SC-CAMLR can be found. CEP also supported the proposal that SC-CAMLR present future CEP meetings with syntheses of relevant information (including baseline information, results and expected tendencies) such as CEMP work, seabird and seal by-catch data, and marine debris monitoring activities. CEP also welcomed the CCAMLR Observer's offer to provide an overview of SC-CAMLR's work at CEP-X. This would focus on CCAMLR's advances in implementing its ecosystem approach to management, ecosystem monitoring and strategic model development.
- (xi) Dr Gilbert was elected as CEP Chair for two years, and Dr T. Brito (Brazil) was elected to the position of Vice-Chair.

9.3 Dr Constable noted CEP's request for information on several issues and questioned whether this would be possible to deliver. He also suggested that at some future point, a joint meeting of CEP and SC-CAMLR may be a useful means of refining the relationship and deciding on the most appropriate means of working together.

9.4 Dr Gilbert noted that his report to CEP-X on SC-CAMLR-XXV, as well as the proposed presentation by the SC-CAMLR observer to CEP-X, would likely provide CEP with the information it had requested. However, Dr Gilbert warmly welcomed the suggestion by Dr Constable for a joint meeting and felt this was something CEP would be keen to support.

SCAR

9.5 Dr G. Hosie (SCAR Observer to CCAMLR) and Dr C. Summerhayes (SCAR Executive Director) presented the reports (CCAMLR-XXV/BG/22 and BG/23) tabled by SCAR:

- (i) SCAR's biennial SCAR Delegates Meeting SCAR-XXIX was held in Hobart, Australia, in July 2006 in conjunction with COMNAP-XVIII. An invitation had been extended to the Chair of the Scientific Committee of CCAMLR to attend the SCAR-XXIX meeting as an observer. Unfortunately, Dr Fanta could not attend. SCAR will extend another invitation to CCAMLR to attend the SCAR-XXX meeting which is scheduled for 2008 in St Petersburg, Russia.

- (ii) The 2nd SCAR Open Science Conference was conducted with SCAR-XXIX. It was a multi-disciplinary conference and attracted nearly 900 delegates from 32 countries. Many of the 45 science themes of the conference addressed CCAMLR-related issues.
- (iii) The EBA Program is one of SCAR's new scientific research programs. It is seeking to address issues on biodiversity and the responses to climate change. This will be of interest to CCAMLR, and SCAR welcomes CCAMLR involvement in this program. EBA projects CAML, SCAR-MarBIN and CPRAG provide the opportunities for direct collaboration between SCAR and CCAMLR in scientific research.
- (iv) CAML (www.caml.aq) is one of the major SCAR-sponsored projects for the IPY. CAML is aiming to investigate the distribution and abundance of Antarctica's marine biodiversity, and how it is affected by climate change. It seeks to provide a robust benchmark against which the effects of future change can be measured.
- (v) CAML is well advanced in its planning for a circum-Antarctic survey in 2007/08. Nearly 30 nations have expressed interest in participating in CAML and potentially 16 ships could be involved in the survey. The CAML Scientific Steering Committee (SSC) subsequently invited Dr V. Siegel (Convener, CCAMLR-IPY Steering Group) to attend the CAML SSC meeting in Bremerhaven, Germany, in June 2006, as an invited expert. He has worked with SCAR to incorporate proposed CCAMLR sampling protocols into CAML protocols. The next meeting of the CAML SSC will be in Poland in June 2007. It is hoped that Dr Siegel will be able to attend that meeting.
- (vi) SCAR-MarBIN (www.scarmarbin.be) compiles and manages existing and new information on Antarctic marine biodiversity. SCAR-MarBIN's web portal provides a single easy access point to marine biodiversity information relevant to scientific research, conservation and sustainable management purposes. SCAR-MarBIN has collated records from 24 databases to date. CAML data will also be linked through SCAR-MarBIN.
- (vii) SCAR-MarBIN will be a useful resource for CCAMLR, particularly for monitoring studies, and the purposes of bioregionalisation. SCAR-MarBIN would welcome CCAMLR's contribution of metadata records to further enhance SCAR-MarBIN. In order to improve the exchange of data and strengthen relations between SCAR and CCAMLR, the Data Manager will be invited to the SCAR-MarBIN Steering Committee. The next meeting of SCAR-MarBIN will be in Poland in June 2007.
- (viii) SCAR has created a new Action Group on Continuous Plankton Recorder research (CPRAG, <http://aadc-maps.aad.gov.au/aadc/cpr/index.cfm>) to support the Southern Ocean Continuous Plankton Recorder Survey. Part of its terms of reference is to map the biodiversity and distribution of plankton and krill life stages, to use the sensitivity of plankton as early-warning indicators of environmental change in the Southern Ocean, and to serve as a reference on the status of the Southern Ocean for other monitoring programs. The database

is available to assist CCAMLR with its ecosystem monitoring program and for bioregionalisation studies. CPRAG is interested in having a member from CCAMLR on the action group.

- (ix) SCAR welcomed the invitation from the Chair of Scientific Committee for SCAR to participate in the land-based predator workshop in 2008. SCAR has considered sending two representatives, one with detailed knowledge of the data and another with detailed ecological knowledge.
- (x) SCAR's proposal at ATCM-XXIX to delist the sub-Antarctic fur seal (*A. tropicalis*) and the Antarctic fur seal from the Antarctic Specially Protected Species list was accepted. The status and trends of Ross seal population numbers are now being examined for the purpose of submitting a similar recommendation to the ATCM. SCAR is also considering the listing of the southern giant petrel as a Specially Protected Species. The species is declining in Antarctic waters. Listing of this species would be on the basis of regional rather than global threats.
- (xi) SCAR is discussing the possibility of merging the birds and seals groups into a new expert group dealing with top predators. There is similarity in the way each group works, and their combination may facilitate the exchange of information. It is expected that the new group will bring new expertise in numerical analyses and modelling and will liaise with CCAMLR and WG-EMM.
- (xii) SCAR convened its third international workshop on marine acoustic studies at the University of Cadiz, Spain, in January 2006. The workshop revised the original risk assessments for particular acoustic equipment currently used in the Southern Ocean, including acoustic releases, bathymetric echo sounders, sub-bottom profilers and echo-sounder arrays used for mapping krill. Mitigation procedures were discussed and a number of recommendations set for future activities and acoustic research in Antarctica. The workshop stressed that detailed research on natural background noise in the Southern Ocean is required before the effects of anthropogenic sounds can be assessed. A noise map for the Southern Ocean should be constructed from ships' tracks and marine geophysics data to define spatial and temporal components of anthropogenic noise.
- (xiii) SCAR reaffirmed its commitment to work with CCAMLR in the future development of MPAs by providing appropriate experts and access to data. An observer participated in the September 2006 Experts Workshop on bioregionalisation held in Hobart, Australia. New methods used in the workshop may also prove very useful for a number of SCAR projects such as EBA and CAML, in addition to helping define MPAs. SCAR is keen to participate and collaborate in future bioregionalisation workshops and analyses.
- (xiv) SCAR and SCOR co-sponsor an Oceanography Expert Group. One of its tasks is the development of a Southern Ocean Observing System (SOOS). The Expert Group and SOOS will provide information on climate change

useful for CCAMLR. Dr Nicol provides a link between this group and CCAMLR. The next SOOS meeting is scheduled for later in 2007 to advance the planning of SOOS. CCAMLR was asked to join in the discussions. SCAR and SCOR are also co-sponsors of the developing ICED program. There are opportunities for ICED, CAML and CCAMLR to collaborate.

- (xv) SCAR plans to hold the 3rd Open Science Conference with the SCAR-XXX meeting in St Petersburg, Russia, in July 2008, which will coincide with SCAR's 50th Anniversary celebration. SCAR will again invite the Chair of the Scientific Committee of CCAMLR to be an observer at SCAR-XXX. The 10th SCAR Biology Symposium is scheduled for 2009 in Sapporo, Japan. Prof. M. Fukuchi (Japan) is coordinating that symposium. Both the 3rd Open Science Conference and the 10th SCAR Biology Symposium are expected to have a strong IPY focus. SCAR welcomes CCAMLR's involvement in both meetings.
- (xvi) SCAR is committed to maintaining a strong working relationship with CCAMLR. Further, it is seeking to develop collaborative research projects with CCAMLR, especially on the effects of environmental change on Antarctic marine ecosystems.

9.6 Dr Constable noted that many of the scientific research programs of SCAR are directed at terrestrial species but that theoretical biological questions for marine species related to climate change would be of interest to CCAMLR including how marine species ranges may alter and/or how Antarctic marine species may respond to climate change.

9.7 Dr Hosie agreed that this is at the forefront of SCAR's research and is a key issue in EBA and that CAML is a key component of EBA.

Reports of observers from international organisations

ASOC

9.8 Dr R. Werner drew attention to the four papers tabled by ASOC related to krill, marine protected areas and marine pollution (CCAMLR-XXV/BG/26, BG/27, BG/30 and BG/31).

9.9 ASOC shared the concern in regard to the urgency to undertake the allocation of krill catch limits among SSMUs taking into account the needs of predators. It has been noted at this Committee that notifications for krill fishing are increasing year after year, indicating an increase in the interest in the krill fishery.

9.10 ASOC felt that CCAMLR now has a great opportunity to consider this issue before krill catches are too high, ensuring that the Convention objectives are met. This task should be prioritised in the short-term work plan of the Scientific Committee and its working groups. Also, enough information needs to be collected from the fishery, especially through a scientific observation program that is applied consistently to all vessels fishing for krill using both traditional and new methods.

9.11 ASOC welcomed CCAMLR work towards bioregionalisation of the Southern Ocean and looked forward to further progress towards the full implementation of ecosystem-based management in the Convention Area, including the establishment of a system of marine protected areas.

9.12 Finally, ASOC shared the concerns over the unsustainable level of IUU fishing in Subarea 58.4, particularly on BANZARE Bank.

Reports of CCAMLR representatives at meetings of other international organisations

IWC

9.13 Dr Kock reported from the IWC Scientific Committee that 853 minke whales and 10 fin whales were taken in whaling under special scientific permit in the Southern Ocean. SC-CAMLR's planned survey during the IPY, in which the SC-IWC was interested in participating, is unlikely to take place. SC-CAMLR and SC-IWC have formed a steering group to organise a joint workshop in 2008 to review metadata and information required for ecosystem models. Further information, including the shared budget, will be found in a paper outlined by members of the steering group. This paper will be submitted to the SC-IWC and will form the basis for the organisation of the workshop.

9.14 New information was provided on the abundance of minke whales in (whaling) area III. Another IWC paper described the use of chemical tracer profiles to assess the feeding ecology of Antarctic type C killer whales which are the killer whales mostly interacting with the longline fishery. Japanese scientists were still unable to reconcile the differences between the minke whales abundance estimates from the second circum-Antarctic cruise (786 000, CV = 9.4%) and the third circum-Antarctic cruise (338 000, CV = 7.3%). The comprehensive assessment of the seven populations of Southern Ocean humpback whales has come to near completion with a workshop held in Hobart, Australia, in April 2006.

9.15 Prof. Beddington enquired about the composition of the SC-IWC steering committee for the joint CCAMLR-IWC symposium.

9.16 Drs Kock and Constable explained that Prof. D. Butterworth (South Africa) was a member as were they. Chairing of the SC-IWC steering committee was to be shared between Drs D. DeMaster (USA) and N. Gales (Australia).

Second Advisory Committee Meeting of ACAP

9.17 Prof. Moreno, on behalf of the Brazilian observer, reported on the Second Meeting of the Advisory Committee of ACAP (SC-CAMLR-XXV/BG/31).

9.18 This meeting was held in Brasilia, Brazil, on 5 and 6 June 2006. Relevant works from the ACAP working groups was presented:

- (i) The Status and Trends Working Group reported that information on population trends of 40% of the ACAP list of species shows that some populations are increasing (27%), others are stable (30%) and some are decreasing (43%).
- (ii) The Taxonomy Working Group reported on work related to the three contentious species, Gibson's and Antipodean albatrosses, shy and white-capped albatrosses, and Buller's and Pacific albatrosses.
- (iii) The incidental mortality group reported that analyses of remote-tracking data of albatrosses and petrels indicate that high density of albatross distribution overlap within the jurisdiction of five RFMOs (CCAMLR, CCSBT, ICCAT, IOTC and WCPFC).

The next meeting of the Advisory Committee to ACAP will be held at Valdivia, Chile, in June 2007.

ICES

9.19 Dr Reid reported on the 2006 ICES Annual Science Conference that took place in Maastricht, Netherlands, from 19 to 23 September 2006. There were 18 theme sessions of which many contained science areas of relevance to CCAMLR. In particular there were sessions entitled:

- Integrated Assessment in Support of Regional Seas Ecosystem Advice – beyond Quality Status Reporting – which reported on the development of ecosystem models and their use in the provision of management advice.
- ICES in a Changing World – which considered issues that related to how management advice should take account of environmental change, both variability and long-term change.

9.20 The 2007 ICES Annual Science Conference will be held in Helsinki, Finland, from 18 to 22 September. Details are available from the ICES website.

CWP

9.21 The Data Manager participated in the CWP intersessional meeting in February 2006. The meeting reviewed progress on a range of fishery matters, including the application of the North Atlantic Format (NAF) for at-sea electronic logbook transmissions and reporting, the development of the UN-LOCODE for coding fishing ports in fishery statistics, and the development of data quality indicators (SC-CAMLR-XXV/BG/4).

9.22 The Scientific Committee noted that while a globally agreed electronic format for reporting catch and effort data may simplify data processing, licensed vessels fishing in the Convention Area already report data using agreed CCAMLR formats. In recent years a number of vessels have trialled a new five-day catch and effort reporting procedure which uses a NAF-like 'email text format' developed by the Secretariat (see

www.ccamlr.org/pu/e/sc/fish/forms.htm). The email text format is yet to be evaluated by the Scientific Committee and Commission. However, the Scientific Committee noted that this format allows users to reduce the size of emails by submitting data in the body of email messages instead of using attached files. The reduced size of emails may lead to a reduction in the cost of data submission by vessels at sea.

9.23 The Scientific Committee also noted that the Secretariat uses the full names of ports in its CDS database, and the development of the FAO UN-LOCODE system appears to have limited application to the CCAMLR database. However, the implementation of globally agreed codes for fishing ports may facilitate future searches for information and the exchange of information between CCAMLR and other RFBs.

9.24 The Scientific Committee noted that FAO and CWP are developing data-quality criteria for fishery data, and that this development could have implications for the way CCAMLR may consider data-quality issues in the future.

Future cooperation

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

- 22nd Session of CWP on Fisheries Statistics, 26 February to 2 March 2007, Rome, Italy – Data Manager;
- ICES WGFAST, 30 April to 2 May 2007, Dublin, Ireland – UK;
- CEP-X, 30 April to 4 May 2007, New Delhi, India – Chair, Scientific Committee;
- 59th Annual Meeting of the SC-IWC, 7 to 18 May 2007, Anchorage, Alaska, USA – Dr Kock;
- 5th International Fisheries Observer Conference, 15 to 18 May 2007, Victoria, British Columbia, Canada – Science/Compliance Officer and Scientific Observer Data Analyst;
- Krill Workshop in Fourth International Zooplankton Production Symposium, 28 May to 1 June 2007, Hiroshima, Japan – Dr Kawaguchi;
- Third Meeting of the ACAP Advisory Committee (AC3), early June, Valdivia, Chile (dates to be confirmed) – Chile;
- SCAR-MarBIN Workshop, 7 and 8 June 2007, Białowieża, Poland – Data Manager;
- CCSBT:
CCSBT-ERSWG 7th meeting, June 2007, Japan (dates and venue to be confirmed) – Japan;
12th Scientific Committee and Stock Assessment Group Meeting, 10 to 14 September 2007, Hobart, Australia – Australia;

- ICES Annual Science Conference, 18 to 22 September 2007, Helsinki, Finland – UK.