

## COOPERATION WITH OTHER ORGANISATIONS

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

### Cooperation with the Antarctic Treaty System

#### CEP

9.2 Dr N. Gilbert (CEP Observer) referred to the Executive Secretary's report of his attendance at CEP XI (Kiev, Ukraine, from 2 to 6 June 2008) (CCAMLR-XXVII/BG/5), and briefly highlighted those matters raised at CEP XI that would be of interest to the Scientific Committee.

9.3 Dr Gilbert noted that CEP XI had agreed a rolling five-year work plan as a means of prioritising its workload. Issues considered to be of high priority for the CEP include: prevention of introduction of non-native species; aspects and impacts of tourism and non-governmental activities; global pressures on Antarctica including climate change and pollution, and the Antarctic protected areas system, including MPAs.

9.4 On the issue of non-native species, Dr Gilbert referred to CCAMLR-XXVII/BG/19 Rev. 1 which summarised the CEP's discussions on the matter to date. This had been prepared recognising the high priority afforded to the issue in the CEP's five-year work plan and in anticipation of dedicated time being spent on the matter at the CEP's next meeting. Dr Gilbert noted in particular the CEP's consideration of non-native species in the marine environment with hull fouling and ballast water exchange being vectors of concern.

9.5 CEP XI and ATCM XXXI had endorsed the Antarctic Environmental Domains Analysis (the terrestrial version of SC-CAMLR's bioregionalisation) developed by New Zealand, as a dynamic model to underpin the Antarctic protected area system and assist with the identification of new protected areas.

9.6 In this context the CEP had considered 21 new or revised protected or managed area management plans. Fourteen of these were endorsed by the CEP and subsequently adopted by the ATCM.

9.7 Dr Gilbert noted that SCAR had held a workshop in May 2008 in conjunction with ACAP and other experts to review the status of southern giant petrels (SC-CAMLR-XXVI, paragraph 10.3). On the basis of that assessment and advice from SCAR, the CEP had agreed that the species does not merit listing as a specially protected species under the provisions of Annex II to the Protocol.

9.8 The CEP discussed the environmental implications of a changing Antarctic climate noting SCAR's ongoing work to prepare a comprehensive report on Antarctic Climate Change and the Environment. The CEP noted that it would reconsider a proposal to hold a meeting of experts on Antarctic climate change on the basis of SCAR's report once it had been published.

9.9 The CEP had welcomed a presentation from the CCAMLR Observer on the work of CCAMLR in general. This had provided a useful insight for the CEP into the work of CCAMLR and assisted in the CEP's consideration of the proposed joint workshop with SC-CAMLR.

9.10 Dr Gilbert noted that SC-CAMLR-XXVI had suggested that a joint workshop be held with the CEP to consider issues of mutual interest to the two Committees (SC-CAMLR-XXVI, paragraphs 10.8 and 10.9). In response, CEP XI had welcomed the proposal as an opportunity to consider ways in which to improve and maintain practical cooperation between the two bodies. The CEP prepared the following list of issues that it felt were worthy of consideration at such a workshop:

- climate change research
- ecosystem and environmental monitoring
- protected areas and spatial management measures
- species requiring special protection
- marine pollution
- biodiversity management and non-native species.

9.11 The CEP had suggested that an overarching theme for the workshop might be 'Opportunities for collaboration and practical cooperation between the CEP and SC-CAMLR'. This was endorsed by the Scientific Committee.

9.12 The CEP had requested that the CCAMLR Observer to CEP convey these to SC-CAMLR (CEP XI Final Report, paragraphs 337 and 338; SC CIRCs 08/47 and 08/65).

9.13 The Scientific Committee noted that WG-EMM had considered the response from CEP for the proposed workshop at its meeting and had noted the importance of all the proposed issues for discussion and had highlighted 'Protected areas and spatial management measures' and 'Species requiring special protection' appeared particularly worthy of SC-CAMLR attention (Annex 4, paragraph 9.3). In the case of species protection, WG-EMM had noted that consideration should be given on how interactions and practical cooperation between SC-CAMLR and the CEP could be developed to facilitate the process of affording additional protection to species in which SC-CAMLR and/or the CEP had an interest(s) (Annex 4, paragraphs 9.1 to 9.5).

9.14 In further review of candidate issues for consideration at the Joint SC-CAMLR–CEP Workshop, the Scientific Committee agreed that VMEs should also be included in discussions relative to protected areas, spatial management and biodiversity. In particular, the Scientific Committee noted that the CEP might have knowledge of information on VMEs in embayments where national research programs are conducted (paragraph 4.231).

9.15 The Scientific Committee noted that the Joint SC-CAMLR–CEP Workshop Steering Group had been established by correspondence and that CCAMLR representation on the group comprised the working group conveners and current Scientific Committee Vice-Chairs, noting that the new Chair of the Scientific Committee would join this group upon election. The CEP had nominated its Chair and two Vice-Chairs to the Steering Group.

9.16 The Joint SC-CAMLR–CEP Workshop Steering Group had proposed the following terms of reference for the workshop:

- I. To develop a shared understanding of the conservation objectives and priorities of the CEP and SC-CAMLR.
- II. To identify areas of common interest between the CEP and SC-CAMLR.
- III. To define mechanisms for ongoing practical cooperation between the CEP and SC-CAMLR, including the sharing and archiving of data and information and, where possible, the appropriate lead body on issues of mutual interest.
- IV. To consider opportunities for future collaboration.
- V. To develop a report and any recommendations for consideration by CEP XII and SC-CAMLR-XXVIII.

9.17 The Joint SC-CAMLR–CEP Workshop Steering Group had also proposed the following work plan for the steering committee:

- detailed agenda and schedule for the workshop to be prepared and circulated by the end of November;
- workshop participation to be agreed by mid-December with invitations to attend, including to keynote speakers, issued before the end of 2008;
- the report of the workshop to be prepared and translated (with support of the Antarctic Treaty Secretariat) for consideration at CEP XII (Baltimore, USA, from 6 to 9 April 2009) and by SC-CAMLR-XXVIII.

9.18 The Scientific Committee endorsed the terms of reference and the work plan and welcomed the offer from the USA to host the workshop in Baltimore, USA, on 3 and 4 April 2009, immediately prior to CEP XII. The Scientific Committee encouraged attendance at the workshop by its Members to facilitate exchanges between scientists.

## SCAR

9.19 Dr G. Hosie (SCAR Observer) started his report on SCAR activities (CCAMLR-XXVII/BG/42) with a message from the new SCAR President, Prof. M. ‘Chuck’ Kennicutt II (USA). Prof. Kennicutt expressed his commitment to working closer with CCAMLR to address Antarctic issues together. He plans to visit CCAMLR at his earliest opportunity in 2009 to discuss future collaboration.

9.20 The SCAR XXX Business Meetings and 3rd Open Science Conference (OSC) were held in St Petersburg, Russia, from 5 to 11 July 2008. The Delegates Meeting was in Moscow, Russia, from 14 to 16 July 2008. The OSC was the most successful so far and the Polar Marine Ecosystem session was the largest of all sessions. SCAR XXXI Business and Delegates Meetings and 4th OSC will be in Buenos Aires, Argentina, in August 2010. Acidification of the Southern Ocean will be a key topic of the 4th OSC. SCAR will continue to invite the Chair of the Scientific Committee to attend SCAR’s meetings.

9.21 The CAML has completed most of its major field work during the 2007/08 season. It was highly successful with 18 vessels involved in the circum-Antarctic survey. Field work will continue in 2008/09 with the South American LA CAML consortium studying the Drakes Passage area, and Australia and Japan studying plankton north of Syowa. A dedicated CAML symposium will be held in Genoa, Italy, from 17 to 21 May 2009, with papers to be published in a *Deep-Sea Research II* volume.

9.22 Dr Hosie's report highlighted significant progress in the development of SCAR-MarBIN and its value to CCAMLR and the wider Antarctic community. However, funding is only secure to the end of 2009.

9.23 His report also noted the expansion of the SO-CPR Survey around Antarctica. Russia and the USA participated in 2007/08, extending coverage to the Amundsen and Bellingshausen Seas and the Drake Passage. South America will commence regular tows in the Drakes Passage from 2008/09 and France also south of Hobart. New Zealand will use a fishing vessel between New Zealand and the Ross Sea as part of the Ministry of Fisheries Biodiversity Project.

9.24 The former Expert Groups on birds and seals have merged into the Expert Group on Birds and Marine Mammals. Ms Patterson-Fraser will be the Chief Officer and Prof. M. Bester (South Africa) will be the Deputy Chief Officer. Provisional terms of reference are in CCAMLR-XXVII/BG/42, paragraph 37.

9.25 SCAR has created three new Action Groups:

- (i) Prediction on Changes in the Physical and Biological Environment of the Antarctic – the terms of reference are listed in CCAMLR-XXVII/BG/42, paragraph 49;
- (ii) Antarctic Fuel Spills – created in response to the sinking of the *MS Explorer*;
- (iii) Cold Seeps and Hydrothermal Vents in Antarctica – to identify areas likely to contain VMEs.

9.26 The 10th SCAR Biology Symposium will be held in Sapporo, Japan, from 26 to 31 July 2009. The main theme is 'Antarctic Biology in the 21st Century – Advances in and beyond IPY'. There will be a session on Marine Biodiversity and Processes. Details are available at <http://scarbiologysymposium2009.jp>.

9.27 Dr Hosie also referred to the report of the meeting by the SCAR/SCOR Oceanography Expert Group to develop the Southern Ocean Observing System. SOOS will encompass physical, biogeochemical and ecological processes (CCAMLR-XXVII/BG/43).

#### SCAR-MarBIN

9.28 Mr D. Delbare (Belgium) presented the report on the SCAR Marine Biodiversity Information Network (SCAR-MarBIN) (CCAMLR-XXVII/BG/25). SCAR-MarBIN is a database on marine biodiversity in the Antarctic, which provides free and open access via internet.

9.29 This database has proven its value for CCAMLR during the Workshop on Bioregionalisation in Brussels, Belgium, in 2007 and also during the review of all known or potentially vulnerable ecosystems carried out by the Australian Antarctic Division this year. SCAR-MarBIN has proved to be a useful tool and can play a crucial role in the CCAMLR environmental mandate to act in the Southern Ocean and to conserve marine biodiversity through the promotion of the rational exploitation of marine living resources.

9.30 The SCAR-MARBIN project was initiated in May 2005 by SCAR, with the support of the Sloan Foundation, through CML. Thereafter the project is seen as the Belgian contribution to the IPY and is funded by the Belgian Science Policy Office until the end of 2009.

9.31 For the period after 2009 sponsors are sought. This item was also presented at the 2007 ATCM meeting in Kiev, Ukraine, with little response.

9.32 SCAR-MarBIN is presently seeking to broaden its support basis. It plans to do so by establishing a consortium of partners willing to provide funding to sustain and provide further its services to the Antarctic community.

9.33 The Scientific Committee noted that WG-FSA has identified SCAR-MarBIN as a valuable source of information on VMEs, including data on the taxonomy, distribution and abundance of benthic fauna (Annex 5, paragraph 10.45).

#### Reports of observers from international organisations

##### ASOC

9.34 Dr R. Werner drew attention to the papers tabled by ASOC (CCAMLR-XXVII/BG/24, BG/26, BG/27 and BG/30).

9.35 With regard to the Antarctic krill fishery, ASOC welcomed the intersessional work of the Scientific Committee relating to the risk assessment for the Stage 1 subdivision of the precautionary catch limit among SSMUs in Area 48. However, ASOC was also concerned by the high level of uncertainty that is affecting progress with that subdivision. This is of special concern taking into account that krill fishing notifications continue to increase, with notifications for the coming season exceeding nominally the interim catch limit of 620 000 tonnes for Subareas 48.1 to 48.4.

9.36 ASOC considered that a coordinated research plan for krill fisheries management in Area 48 should be developed as a matter of urgency in order to reduce key uncertainties. In the meantime, CCAMLR should consider taking precautionary measures to prevent excessive concentration of catch in coastal areas close to predator colonies. These measures must be accompanied by increased accountability and enforcement mechanisms to ensure adherence to these new provisions.

9.37 Until such measures are in place, or a subdivision of the precautionary catch limit among SSMUs is established, ASOC believed that CCAMLR Members should not commit to an increase in krill fishing capacity.

9.38 In addition, CCAMLR needs to begin to develop feedback management procedures as soon as possible. Accordingly, the Scientific Committee needs to develop recommendations to adapt and expand the current CEMP to the needs of a feedback management system at the SSMU level. Concurrently, funding mechanisms should be adopted to support existing and expanded monitoring, such as a dedicated CEMP fund.

9.39 ASOC was deeply concerned by the uncertainties related to the reporting of current krill catches as recently stated by WG-EMM. As a matter of urgency, a standardised method for reporting green weight of krill catches and a requirement that all vessels utilise this method should be established.

9.40 Finally, ASOC was encouraged by the WG-EMM discussion on systematic scientific observer coverage for all krill vessels, and hoped that the Scientific Committee will provide clear advice to the Commission so as to adopt a conservation measure requiring krill fishing nations to have systematic coverage of international scientific observers on board, in accordance with the CCAMLR Scheme of International Scientific Observation.

9.41 With regard to the impacts of climate change on Antarctic marine ecosystems, climate change has emerged as an important topic in Antarctic research over the past decade, but little in the way of policy or operational change has resulted at CCAMLR thus far. Climate-related changes are accelerating, including regional alteration of sea-ice persistence and extent. Future reductions in sea-ice overall are likely to lead to major alterations in the distribution and abundance of Antarctic marine species.

9.42 ASOC welcomed the request made by the Commission to the Scientific Committee with regard to incorporating the issue of climate change into its agenda. In the context of ecosystem-based management of Antarctic fisheries, CCAMLR, through this Scientific Committee agenda item, should take into account the cumulative impacts of fishing and climate change. Due to the serious implications of climate change, a proactive rather than a reactive approach is required. ASOC encouraged the Scientific Committee to increase its work expeditiously to develop mechanisms through which climate change impacts can be distinguished from fishing effects, in order to provide the Commission with the necessary advice for the development of sound management decisions.

9.43 With regard to the implementation of Networks of MPAs in Antarctica and the Southern Ocean, ASOC welcomed the intersessional work conducted by CCAMLR and the Scientific Committee, especially in relation to the intention to initiate the process to develop representative systems of MPAs across the priority areas identified so far. Also, ASOC supported the proposed Joint SC-CAMLR-CEP Workshop where the issues of protected areas and spatial management measures were recognised as being of particular relevance.

9.44 CCAMLR is now in a position to begin the process of designating networks of comprehensive, adequate and representative MPAs, including marine reserves, in the Southern Ocean. This process should be guided by designation criteria to be developed jointly by CCAMLR and the ATCM, of which representativeness should be a key criteria. The decision to designate networks of representative MPAs embodies both the 'precautionary' and 'ecosystem' approaches to conservation and management that are at the core of CCAMLR's conservation principles. ASOC welcomed systematic conservation

planning and fine-scale bioregionalisation as useful tools to designate representative MPA networks, and hopes that these tools can be translated as soon as possible into specific recommendations by the Scientific Committee in this regard.

9.45 With regard to bottom fishing, ASOC noted that the Scientific Committee is currently preparing its advice to the Commission to meet the requirements of UNGA Resolution 61/105 by the December 2008 deadline. This resolution requires that all regulated high-seas bottom fisheries without adequate conservation measures to protect VMEs be closed. ASOC was encouraged by discussions in informal subgroups and urged the Scientific Committee to provide agreed advice to the Commission on how best to meet the UNGA commitment within the CAMLR Convention Area.

9.46 With regard to seabird by-catch:

- (i) ASOC commended CCAMLR on its achievements in reducing the incidental mortality of albatrosses and petrels in Southern Ocean fisheries. CCAMLR leads on best-practice and has contributed to the implementation of smart-fishing initiatives on a global scale. Innovative mitigation measures applied by CCAMLR Members have resulted in a substantial decrease in the number of seabirds killed in the CCAMLR region by licensed longline vessels.
- (ii) ASOC noted with pleasure that reported levels of seabird by-catch in French EEZs continued to decrease, and ASOC looked forward to longliners licensed by French authorities achieving the same low levels as other longliners in the Convention Area.

9.47 ASOC also commended CCAMLR for successfully reducing the level of IUU fishing. This result, coupled with the shift to gillnetting by IUU fishers, has resulted in a very substantial reduction in overall seabird by-catch.

9.48 Finally, the conservation status of seabirds threatened by fishing cannot be improved only by further CCAMLR action. Seabird populations in the Southern Ocean are still threatened as a result of fishing in adjacent waters. ASOC suggested that the Scientific Committee recommends that the Commission urges its Members to engage more fully with ACAP to ensure that all relevant Coastal States, Flag States and RFMOs licensing longline fishing within the range of Southern Ocean seabirds, adopt and enforce mitigation measures to reduce seabird mortality.

## IUCN

9.49 The IUCN representative brought to the attention of the Scientific Committee that SC-CAMLR-XXVII/BG/36 was presented by IUCN for information to the Scientific Committee as it provided a summary of information on research and commercialised products arising from biological samples from the Antarctic region provided by the Antarctic Biological Prospecting Database, noting that 56% of the records in the database originate from the marine environment of the Southern Ocean.

9.50 It was also brought to the attention of the Scientific Committee that the 9th Conference of the Parties of the Convention on Biological Diversity (CBD) has recently adopted scientific

criteria for identifying ecologically or biologically significant marine areas in need of protection as well as scientific guidance for designing representative networks of MPAs, and that the CBD is inviting governments and relevant organisations to provide their views on, and experiences with, the use of these criteria and guidance.

9.51 The IUCN representative also advised that a CBD expert workshop will be convened next year in order to provide scientific and technical guidance on the use and further development of biogeographic classification systems, and on the identification of areas beyond the national jurisdiction, which meet the adopted scientific criteria.

9.52 IUCN encouraged the Scientific Committee to contribute to this global effort, particularly given the excellent work that this Committee has done with regard to bioregionalisation of the Southern Ocean.

9.53 IUCN and its World Commission on Protected Areas (WCPA) will be compiling information on progress with regards to MPA networks and bioregionalisation. WCPA has a subgroup on Antarctica and the Southern Ocean that looks forward to collaborating with the Scientific Committee on this topic.

Reports of CCAMLR representatives at meetings  
of other international organisations

#### ACAP

9.54 The Scientific Committee noted the attendance of the Science Officer at the ACAP Seabird Bycatch Working Group (SC-CAMLR-XXVII/BG/7) and that this invitation reflected the high regard for CCAMLR in respect of seabird by-catch mitigation. The Scientific Committee noted the positive contribution of ACAP invited experts to WG-IMAF and looked forward to future interactions with ACAP on all issues related to seabird by-catch.

#### CWP

9.55 CWP provides a mechanism to coordinate fishery statistical programs of RFBs and other intergovernmental organisations with a remit for fishery statistics.

9.56 The Data Manager participated in the Intersessional Meeting of the CWP which was held at the NAFO Secretariat, Dartmouth, Canada, from 7 to 9 July 2008. Meeting outcomes of interest to the Scientific Committee were reported in SC-CAMLR-XXVII/BG/5, and included:

- further consideration of the possible use of MCS-related data in the collection of fishery statistics and monitoring data. Some organisations, which do not have access to detailed haul-by-haul catch and effort data, are developing ways of using VMS data to determine the levels of fishing efforts on fishing grounds;



- consideration of the use of electronic logbooks, and a request that CCAMLR provide information on its electronic data forms (e.g. C1, C2, TAC, observer) at CWP-23;
- agreement to revise the CWP Handbook to reflect changes in data requirements which have emerged through ecosystem-based fishery management (see also paragraph 13.4);
- initiation of work on the integration of RFB databases on fisheries statistics, and especially those based on STATLANT data.

## IWC

9.57 Dr K.-H. Kock (Observer to IWC) reported on the 60th Meeting of the Scientific Committee of the International Whaling Commission held in Santiago de Chile, from 1 to 13 June 2008.

9.58 A total of 2 214 whales were reported as being killed in 2007. Japan took 551 minke whales and 3 fin whales in the Southern Ocean while whaling under a special scientific permit. Some progress had been made to reconcile the very different abundance estimates obtained during the three circumpolar surveys (CPS I–III) conducted over the last 30 years.

9.59 One of the great unknowns is still the number of minke whales present in the pack-ice which is not accessible during scientific surveys. A number of recent estimates of humpback whale abundance on both sides of Africa demonstrated that these had recovered to various degrees (27–90%) from past exploitation. Past whaling reduced the number of blue whales from 256 000 (235 000–307 000) to 395 (235–804) in 1963 when further takes of blue whales were prohibited. Blue whale abundance was last estimated reliably in 1997 when it was 2 280 (0.9% of the initial size).

9.60 The IWC will hold a second workshop on climate change focusing on the Arctic, the western Antarctic and Bangladesh, probably in March 2009.

## Future cooperation

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

- 11th session of the IOTC Scientific Committee, 5 to 9 November 2008, Seychelles – to be advised
- SCAR-MarBIN Workshop, 8 and 9 November 2008, Valencia, Spain – to be advised;
- Southern Seabird Solutions Trust review workshop, 10 and 11 November 2008, Nelson, New Zealand – to be advised;

- World Conference on Marine Biodiversity and Ecosystem Functioning (MarBEF), 11 to 15 November 2008, Valencia, Spain – to be advised;
- IWC workshop on climate change, 3 to 6 March 2009 (to be confirmed), near Siena, Italy – to be advised;
- CEP XII, 3 to 11 April 2009 (including SC-CAMLR-CEP Workshop), Baltimore, MD, USA – Scientific Committee Chair and CCAMLR Science Officer;
- Monitoring Climate Change Impacts – Establishing a Southern Ocean Sentinel Program (5-day CEP workshop), 20 to 24 April 2009, Hobart, Australia – to be advised;
- ICES Symposium 2009: Issues confronting the deep oceans: the economic, scientific and governance challenges and opportunities of working in the deep sea, 27 to 30 April 2009, Azores, Portugal – to be advised;
- ICES Working Group on Fisheries Acoustic Science and Technology (WGFAST), 18 to 22 May 2009, Ancona, Italy – to be advised;
- Biennial Fisheries Observers Conference, 19 to 24 July 2009, Portland, Maine, USA – Secretariat;
- 61st Annual Meeting of the SC-IWC, 31 May to 26 June 2009, Madeira, Portugal – Dr Kock;
- 3rd GLOBEC Open Science Conference, 22 to 26 June 2009, Victoria, British Columbia, Canada – Australia (Dr Kawaguchi);
- 10th SCAR Biology Symposium, 26 to 31 July 2009, Sapporo, Japan – SCAR Liaison Officer (Dr Hosie);
- Fifth Regular Session of the WCPFC Scientific Committee, 10 to 21 August 2009 (dates to be confirmed, venue to be determined) – to be advised;
- ICES Annual Science Conference, 21 to 25 September 2009, Berlin, Germany – to be advised;
- 14th Meeting of the CCSBT Scientific Committee (dates and venue to be advised) – to be advised;
- 5th Annual Meeting of the SEAFO Scientific Committee (dates and venue to be advised) – to be advised.

9.62 The Scientific Committee encouraged other representatives to participate, where possible, in these meetings, and report back to the 2009 meeting of the Scientific Committee.