

SCIENTIFIC COMMITTEE

4.1 The Scientific Committee Chair, Dr D. Agnew (UK) presented the report of the Committee (SC-CAMLR-XXX). He thanked the many delegations that had contributed to rapporteuring of the meeting.

4.2 The Commission noted the Scientific Committee's general recommendations, advice, research and data requirements. The Commission also discussed substantive matters arising from the Committee's deliberations under various sections of its agenda, marine debris and incidental mortality (section 6); MPAs (section 7); illegal, unreported and unregulated (IUU) fishing (section 9); CCAMLR Scheme of International Scientific Observation (section 10); and new and exploratory fisheries (section 11).

Intersessional activities

4.3 The Commission noted the five intersessional meetings of the Scientific Committee during 2011 (SC-CAMLR-XXX, paragraph 1.8) and joined the Committee in thanking the conveners and participants in these meetings for their contributions to the work of CCAMLR. Members which had hosted the meetings were also thanked for their hospitality, as well as logistical and administrative support.

Advances in statistics, assessments, modelling and acoustic surveys

4.4 The Commission noted that, while the advice from the Scientific Committee was that the primary purpose of research in data-poor exploratory fisheries should be to collect data that will lead to a robust estimate of stock status and enable the estimation of precautionary catch limits, there had been little progress in delivering such advice (paragraph 11.11).

4.5 The Commission endorsed the terms of reference for the 2012 meeting of the Subgroup on Acoustic Survey and Analysis Methods (SG-ASAM) to provide advice on the collection and use of acoustic data from krill fishing vessels (SC-CAMLR-XXX, paragraph 2.10).

Harvested species

Krill resources

4.6 In 2009/10, six Members harvested 211 974 tonnes of krill from Subareas 48.1 (153 262 tonnes), 48.2 (49 999 tonnes) and 48.3 (8 712 tonnes) (SC-CAMLR-XXX, Table 1).

4.7 In 2010/11 (to 24 September 2011), six Members harvested 179 131 tonnes of krill from Subareas 48.1 (9 158 tonnes), 48.2 (116 552 tonnes) and 48.3 (53 421 tonnes) (SC-CAMLR-XXX, Table 2).

4.8 The Commission noted the large difference in the relative distribution of catch between Subareas 48.1, 48.2 and 48.3 between 2009/10 and 2010/11 and that these differences were primarily caused by differences in the extent of winter sea-ice in Subarea 48.1 (SC-CAMLR-XXX, paragraph 3.5).

4.9 Notifications for krill fishing in 2011/12 were received from seven Members and 15 vessels with a notified total predicted catch of 401 000 tonnes (SC-CAMLR-XXX, Table 3); there was no notification for exploratory krill fisheries. The Commission noted that the notification from Ukraine in respect of the vessel *Maxim Starostin* was received by the Secretariat after the deadline specified in Conservation Measure (CM) 21-03 and was not available for review by WG-EMM.

4.10 Ukraine advised the Commission that the notification was delayed because of the process of transferring the Flag State registration of the vessel, that the catches proposed for the vessel would not have any adverse impact on krill stocks, and that there were plans to conduct important scientific research on the vessel during krill fishing operations.

4.11 The Commission agreed that, while there was a desire to make pragmatic decisions in respect of this late notification from Ukraine, accepting a notification received after the specified deadline, such that it could not be considered WG-EMM, would be a departure from normal rules of operation and would set an unfortunate precedent. The Commission did not reach consensus concerning the possibility of accepting the notification from Ukraine. The Commission noted that some Members had provided advice to potential krill fishing operators that proposals would not be accepted after the deadline in CM 21-03 and, therefore, there was a need to ensure a uniformity of approach.

4.12 The Commission agreed that, given the importance of ensuring compliance with all aspects of conservation measures, it was not able to accept the notification from Ukraine.

4.13 The Commission noted that uncertainty in the estimation of green weight of krill was not accounted for in the current management process for krill and looked forward to receiving advice from the Scientific Committee on the potential impacts of this on the management of krill (SC-CAMLR-XXX, paragraphs 3.14 and 3.15).

4.14 The Commission endorsed the advice of the Scientific Committee that CM 51-07 should remain in force and recommended that the measure should be reviewed after three years, consistent with the schedule for progress in developing a feedback management approach for krill fisheries (SC-CAMLR-XXX, paragraphs 3.22 and 3.23).

4.15 The Commission noted the information from the Scientific Committee that fishing for krill had taken place inside ASMA No. 1 in Admiralty Bay in 2010 and that this may be inconsistent with the management objectives of the ASMA. The Commission acknowledged that, while it is the role of CCAMLR to manage fishing, cooperation with the ATCM was important to ensure that fishing activities do not compromise the ecosystem values afforded special protection by the ATCM.

4.16 The Commission endorsed the recommendation that the investigation of recruitment variability of krill should be afforded a high priority because, if recruitment variability is too high or there are long-term trends in recruitment, this may require reassessment of the catch limit or an alternative application of the decision rules (SC-CAMLR-XXX, paragraph 3.30).

4.17 The Commission commended the work of the Scientific Committee in respect of the development of a feedback management approach for the krill fishery and, in particular, it noted the proposed work schedule outlined by WG-EMM (SC-CAMLR-XXX, Annex 4, paragraph 2.157) to address the six components of the process (SC-CAMLR-XXX, paragraphs 3.34 and 3.35).

Toothfish resources

4.18 In 2009/10, 11 Members fished for toothfish in Subareas 48.3, 48.4, 48.6, 58.6, 58.7, 88.1 and 88.2 and Divisions 58.4.1, 58.4.2, 58.5.1 and 58.5.2; Japan also conducted research fishing in Divisions 58.4.3b, 58.4.4a and 58.4.4b. The reported total catch was 14 518 tonnes (SC-CAMLR-XXX, Table 1).

4.19 In 2010/11, 12 Members fished for toothfish in Subareas 48.3, 48.4, 48.6, 58.6, 58.7, 88.1 and 88.2 and Divisions 58.4.1, 58.4.2, 58.5.1 and 58.5.2; Japan also conducted research fishing in Divisions 58.4.3b, 58.4.4a and 58.4.4b. The reported total catch to 24 September 2011 was 11 254 tonnes (SC-CAMLR-XXX, Table 2).

4.20 In addition, catches reported under the Catch Documentation Scheme for *Dissostichus* spp. (CDS) indicated that 9 190 tonnes of *Dissostichus* spp. were taken outside the Convention Area in 2010/11 (to 26 September 2011) compared with 12 441 tonnes in 2009/10 (SC-CAMLR-XXX, Annex 7, Table 2). As in previous years, catches in both seasons were taken mostly in Areas 41 and 87.

4.21 The Commission endorsed the request from the Scientific Committee that Members fishing for *Dissostichus eleginoides* outside the Convention Area be encouraged to provide information on these activities and associated research for review by the Working Group on Fish Stock Assessment (WG-FSA) and the Scientific Committee (SC-CAMLR-XXX, paragraph 3.49).

4.22 The Commission endorsed the Scientific Committee's management advice on toothfish fisheries (SC-CAMLR-XXX, paragraphs 3.77, 3.78, 3.87, 3.92, 3.97, 3.101 to 3.103, 3.107 and 3.108), including:

- (i) a catch limit of 2 600 tonnes of *D. eleginoides* in Subarea 48.3 for 2011/12 and a revised starting date of 16 April 2012 for the season extension
- (ii) a catch limit of 48 tonnes of *D. eleginoides* in Subarea 48.4 North and 33 tonnes of *Dissostichus* spp. (*D. eleginoides* and *D. mawsoni* combined) in Subarea 48.4 South for 2011/12, including the continuation of the tagging experiment in Subarea 48.4 South
- (iii) a catch limit of 2 730 tonnes of *D. eleginoides* in Division 58.5.2 in 2011/12.

4.23 The Commission noted that an assessment model is being developed for *D. eleginoides* in Division 58.5.1 but that, as currently configured, the model could not be used for management advice. The Commission encouraged further development of this assessment, noting that the fishery in Division 58.5.1 was the largest fishery for *D. eleginoides* in the Convention Area (SC-CAMLR-XXX, paragraphs 3.93 to 3.96).

4.24 The Commission noted that, as no new information was available on the state of fish stocks in Division 58.5.1 outside areas of national jurisdiction, the prohibition of directed fishing for *D. eleginoides*, described in CM 32-13, should remain in force.

4.25 The Commission encouraged the estimation of biological parameters and the development of a stock assessment for *D. eleginoides* in the French EEZ of Subarea 58.6.

4.26 The Commission noted that the catch limit for *D. eleginoides* in the South African EEZ for 2011/12 is likely to be 320 tonnes, and that a revised operational management procedure to form the basis for management advice is under development by national scientists. The Commission noted that the Scientific Committee was unable to provide management advice for *D. eleginoides* in the South African EEZ at the Prince Edward Islands.

4.27 As no new information was available on the state of fish stocks in Subareas 58.6 and 58.7 and Division 58.4.4 outside areas of national jurisdiction, the Commission agreed that the prohibition of directed fishing for *D. eleginoides*, described in CMs 32-10, 32-11 and 32-12, remains in force.

4.28 The Commission noted that the Scientific Committee was unable to provide new advice on the catch limits in data-poor exploratory fisheries for *Dissostichus* spp. in Subarea 48.6 and Divisions 58.4.1, 58.4.2 and 58.4.3a.

Icefish resources

4.29 In 2009/10, two Members fished for icefish in Subarea 48.3 with a reported catch of 12 tonnes and one Member fished in Division 58.5.2 with a reported total catch of 352 tonnes (SC-CAMLR-XXX, Table 1).

4.30 In 2010/11, one Member fished for icefish in Subarea 48.3 with a reported catch of 10 tonnes, and one Member fished in Division 58.5.2 and reported a total catch of 1 tonne (SC-CAMLR-XXX, Table 2).

4.31 The Commission endorsed the Scientific Committee's management advice on icefish fisheries (SC-CAMLR-XXX, paragraphs 3.59, 3.62, 3.65, 3.69, 3.70 and 3.71) and:

- (i) recommended that the catch limit for *Champsocephalus gunnari* in Subarea 48.3 should be set at 3 072 tonnes in 2011/12 and 2 933 tonnes in 2012/13
- (ii) noted the application of an interim limit reference point to the fishery for *C. gunnari* in Division 58.5.2 and agreed to a catch limit for 2011/12 of 0 tonnes, with a 30-tonne research and by-catch limit.

Other fishery resources

4.32 The Commission endorsed the Scientific Committee's management advice on other fisheries (SC-CAMLR-XXX, paragraphs 3.109 and 3.113), including that:

- (i) the prohibitions of finfishing in Subareas 48.1 and 48.2 remain in force
- (ii) the crab fishery in Subarea 48.3 be closed.

Fish and invertebrate by-catch

4.33 The Commission noted that this issue will be considered in detail by WG-FSA in 2012 (SC-CAMLR-XXX, paragraph 3.114).

Climate change

4.34 The Commission welcomed the Scientific Committee's deliberation on climate change and, in particular, noted the recommendation of the EU/Netherlands-sponsored workshop on 'Antarctic Krill and Climate Change' (SC-CAMLR-XXX/BG/3).

4.35 The Commission noted the Scientific Committee's advice about the importance of the KRILLBASE database to the work of CCAMLR. It endorsed the request for the Scientific Committee Chair to write to the data holders to request that the KRILLBASE database be submitted to CCAMLR and made available for work by the Scientific Committee under CCAMLR's Rules for Access and Use of CCAMLR Data.

4.36 The Commission noted the proposal for large-scale multinational krill surveys and encouraged Members to engage in this work (SC-CAMLR-XXX, paragraphs 8.8 to 8.10).

Secretariat supported activities

4.37 The Commission noted the outcomes of the independent review of the Secretariat's data management systems (CCAMLR-XXX/5) and the Secretariat's plan for further work in 2012 and 2013 on this issue, including redevelopment of the CCAMLR website.

Scientific Committee activities

4.38 The Commission endorsed the work plans and priorities for the Scientific Committee and its subsidiary working groups (SC-CAMLR-XXX, Table 6 and paragraph 15.5), including the following meetings in the 2011/12 intersessional period:

Working group meetings –

- SG-ASAM (Bergen, Norway, April/May) (Co-conveners: Drs R. Korneliussen (Norway) and J. Watkins (UK))
- WG-SAM (Tenerife, Spain, July) (Convener: Dr S. Hanchet (New Zealand))
- WG-EMM (Tenerife, Spain, July) (Co-conveners: Drs G. Watters (USA) and S. Kawaguchi (Australia))

- WG-FSA (CCAMLR Headquarters, Hobart, Australia, from 8 to 19 October) (Convener: Dr M. Belchier (UK)).

Technical workshops on MPAs –

- Western Antarctic Peninsula–South Scotia Arc domain (domain 1) to be hosted by Chile and Argentina
- del Cano–Crozet domain (domain 5) – hosted by France
- circumpolar systematic conservation planning – hosted by Belgium.

4.39 The Commission congratulated Dr C. Jones (USA) on his election as Scientific Committee Chair, Dr X. Zhao (China) on his election as the new Scientific Committee Vice-Chair, and all the working group conveners who have contributed a great deal of time and effort to the progress made by the Scientific Committee in the intersessional period (SC-CAMLR-XXX, paragraphs 16.1 and 16.2).

4.40 The Commission noted the request from the Scientific Committee for guidance on the publication of maps showing fine-scale distribution of fisheries data (SC-CAMLR-XXX, paragraphs 3.51 to 3.53) and agreed that, while there is a desire for transparency, the publication of data showing the detailed location of fishing data should be examined on a case-by-case basis to ensure that there is no potential for use of the data by IUU operators.