

NEW AND EXPLORATORY FISHERIES

11.1 The Commission noted that WG-FSA and the Scientific Committee had reviewed progress in assessing the exploratory fisheries for *Dissostichus* spp. (SC-CAMLR-XXIX, paragraphs 3.125 to 3.128). Many of these fisheries were considered to be ‘data-poor exploratory fisheries’ in, for example, Subareas 48.6 and 58.4, because data are currently insufficient to undertake a stock assessment and in some instances this is despite many years of a structured research and tagging program (SC-CAMLR-XXIX, Table 5).

11.2 In contrast, the Commission noted that WG-FSA and the Scientific Committee have undertaken stock assessments for the exploratory fisheries for *Dissostichus* spp. in the Ross Sea (Subarea 88.1 and Subarea 88.2 SSRUs A and B) and in SSRU 882E using robust information on abundance and yield. Those fisheries are meeting the data and information requirements referred to in CM 21-02, paragraph 1(ii), and research and assessment work has allowed the Scientific Committee to formulate and provide advice to the Commission on appropriate harvest levels and other aspects of conservation over the last eight years (SC-CAMLR-XXIX, paragraph 3.129).

11.3 The Scientific Committee had recalled that the characteristics of successful assessments included the use of well-designed experiments to develop an integrated tag-based assessment of *Dissostichus* spp. in Subarea 48.4 (SC-CAMLR-XXVIII, paragraph 4.87), and the use of a multi-national multi-year tag-based assessment for Subareas 88.1 and 88.2. The spatial concentration of tagging effort and the high standard of research applied by fishing vessels were key factors that led to the success of the tag-based assessments. Further, successful assessments in Subarea 48.3 and Division 58.5.2 have also included data collected from trawl surveys of juveniles and young adults (SC-CAMLR-XXIX, paragraphs 3.130 and 3.131).

11.4 The Commission endorsed the general work plan developed by WG-FSA and the Scientific Committee for implementing research in data-poor exploratory fisheries. Some specific elements of the work plan were identified as a high priority focus topic for WG-SAM in 2011 (SC-CAMLR-XXIX, paragraphs 3.132 and 3.133).

11.5 Russia and Ukraine made a proposal to review the existing system of alternate open and closed SSRUs in exploratory fisheries. This system was implemented in 2005 (CCAMLR-XXIII, paragraphs 10.57 and 10.59) and Russia and Ukraine were of the view that the paucity of information available in the exploratory fisheries in Subarea 58.4, and the increased IUU fishing activities in that subarea, may be attributed to the limited activities permitted in these exploratory fisheries. In addition, these Members stated that the closure of SSRUs in some areas has prevented the acquisition of information on the biology and distribution of *Dissostichus* spp.

11.6 Ukraine made the following statement:

‘Paragraph 3.144 of SC-CAMLR-XXIX mentions the Scientific Committee’s concern regarding the very low recovery of tags from the exploratory fisheries in Subareas 48.6 and 58.4, and the lack of information coming from these subareas makes it difficult to provide recommendations to the Commission. The Ukraine Delegation agrees with these conclusions. Every year since 2005, reports of the Commission and the Scientific Committee contain statements by Ukraine advising that, in recent years, the

Commission has been able to receive scientific information mainly from the vessels engaged in exploratory fisheries and that it is necessary to maintain the level of information provided and to strive to increase this level (SC-CAMLR-XXIV, paragraph 4.177; SC-CAMLR-XXVII, paragraphs 4.116, 4.127, 4.134, 4.157 and 4.158; SC-CAMLR-XXVIII, paragraphs 4.157, 7.8, 7.9 and 7.10; CCAMLR-XXV, paragraph 11.14; CCAMLR-XXVI, paragraph 10.144; CCAMLR-XXVII, paragraph 12.8). This year's WG-FSA and Scientific Committee reports contain multiple references to the issue of insufficient scientific information. The closure of SSRUs in Subarea 58.4 and Area 88 has resulted in a decrease in available scientific information. For example, in Subarea 58.4, due to the closure of some areas there, tagging in SSRUs that are open for fishing produces negligible results because, in Ukraine's opinion, the tagged fish move into the adjacent SSRUs that are closed to fishing, as tagging often takes place near the boundaries of small-scale units. Furthermore, some tagged fish are undoubtedly being caught during IUU fishing which is at a very high (and, most likely, is increasing annually) level in the subarea (e.g. SC-CAMLR-XXIX, paragraphs 3.154 and 3.155 note that the registered IUU catch in Division 58.4.1 in 2009/10 was 910 tonnes (4.5 times more than the allowable catch), 615 individual fish were tagged in legal fisheries and only three were recovered; paragraphs 3.158 and 3.159 note that the level of registered IUU fishing in Division 58.4.2 this year was 432 tonnes (six times more than the allowable catch), 291 individual fish were tagged and not a single fish was recovered). As Ukraine stated earlier, it is necessary to open all SSRUs for fishing and to increase the catch limit in this subarea (possibly, in each SSRU separately) in order to boost the volume of information and reduce the pressure from IUU fishing. Ukraine had warned the Commission of this scenario a few years ago. The situation with the provision of scientific information for stock assessments in Subarea 58.4 is getting progressively worse every year. Ukraine believes that this situation was created artificially when some SSRUs were closed for fishing and the catch limits were reduced to the levels that make it unprofitable for vessels to go there, although there were no scientific grounds for the reduction of catch limits in the area. Ukraine urges Members to act responsibly when making the decision at the Commission meeting to increase the level of scientific information provided and to reduce the level of IUU fishing in Subarea 58.4. Ukraine's specific proposals for these areas were submitted to the Conservation Measures Drafting Group.'

11.7 The Commission noted that the spatial concentration of tagging effort was a key factor that led to the success of the tag-based assessment of the exploratory fishery in Subarea 88.1 (SC-CAMLR-XXIX, paragraph 3.130). The Commission also noted that for those fisheries for which the Scientific Committee currently provides, or plans to develop, advice based on stock assessments that utilise tag-recapture experiments, a system of open and closed SSRUs is an integral part of the assessment methods used to provide this advice, and that any proposed revision of this system would require detailed consideration by the Scientific Committee.

11.8 Taking into account completion of the scientific experiment in Subareas 88.1 and 88.2, some Members suggested that the Scientific Committee develop recommendations regarding the future status of closed SSRUs in Subareas 88.1 and 88.2.

11.9 Australia advised that it retained a strong interest in participating in exploratory fishing and developing robust assessments for exploratory fisheries. The implementation of

research that leads to assessments is an important responsibility for Members notifying for exploratory fisheries, and Australia has conducted such research which was endorsed by the Scientific Committee and the Commission, and which lead to management advice.

11.10 The Commission noted that the Scientific Committee had agreed that the data currently being collected in exploratory fisheries in areas other than the Ross Sea was unlikely to contribute to assessments of exploratory fisheries in the near future (SC-CAMLR-XXVIII, paragraph 4.164). The Scientific Committee had agreed that a well-designed experiment was needed to clarify the issues on stock status in Subarea 58.4 (SC-CAMLR-XXVIII, paragraph 4.159).

11.11 Some Members were deeply concerned that the current high numbers of vessels notified for the exploratory fisheries in Subareas 48.6 and 58.4 is unsustainable, with little prospect of assessments in the near future or the formulation of management advice consistent with Article II.

11.12 Australia urged the Commission to take steps to set these exploratory fisheries on a sustainable path with a suitably precautionary approach. Australia considered that SSRUs with catch limits for *Dissostichus* spp. of less than 100 tonnes should be closed until such time when the Commission is confident that the catch limits in these areas are precautionary, the levels of effort are manageable, and the data collected will lead to advice on sustainable harvest levels in the near future.

11.13 The Commission noted that the development of a research framework for data-poor exploratory fisheries will be a high priority focus topic for WG-SAM in 2011 (paragraph 11.4).

Tagging of *Dissostichus* spp.

11.14 The Commission noted that all longline vessels fishing in exploratory fisheries for *Dissostichus* spp. in 2009/10 had achieved the required tagging rate, and had released tags continuously, at or above the required rates, throughout their fishing trips. However, significant concerns were raised by some Members in respect of some vessels that had failed to meet the requirement in CM 41-01, Annex C, paragraph 2(ii), for the lengths of tagged toothfish to reflect the length frequency of the catch.

11.15 The Scientific Committee reported that the analysis of the tag overlap statistic by WG-FSA showed that in most exploratory fisheries, at least one vessel had achieved a high ($\geq 60\%$) overlap between tag-release length frequency and catch-weighted length frequency (SC-CAMLR-XXIX, Annex 5, Table 12). This indicated that a high overlap statistic was achievable by all vessels fishing in exploratory fisheries. In addition, many vessels had improved their tagging performance over the last three years. However, some vessels still achieve a low overlap statistic with a bias towards the tagging of small fish, and one vessel in 2010/11 had not tagged *D. eleginoides* and *D. mawsoni* in proportion to the presence of these species in the catch (SC-CAMLR-XXIX, paragraphs 3.137, 3.138 and 3.141).

11.16 The Commission noted that tagging large numbers of small fish is of very limited use for the estimation of abundance (SC-CAMLR-XXVIII, paragraph 4.150). The Commission joined the Scientific Committee in reiterating the concern that the failure to tag a

representative part of the fished population was seriously undermining WG-FSA's ability to carry out robust stock assessments in the exploratory fisheries (SC-CAMLR-XXIX, paragraph 3.139).

11.17 The Commission also noted the very low recovery of tagged fish from the exploratory fisheries in Subareas 48.6 and 58.4, and that the continued paucity of information coming from these fisheries makes it difficult to provide advice on precautionary catch limits for these fisheries. Further, the continuation of fishing, when combined with the continuing paucity of information, may increase the uncertainty over the stock status (SC-CAMLR-XXIX, paragraphs 3.144 and 3.145).

11.18 The Commission expressed its disappointment at this outcome and agreed that non-compliance with the tagging program undermined CCAMLR's ability to manage exploratory fisheries and, therefore, the objectives of the Convention and the Antarctic Treaty. The Commission reiterated the importance of full compliance with all requirements of the tagging program. The Commission also noted that tagging was the responsibility of the Flag State, as well as the vessel.

11.19 The Commission agreed with the Scientific Committee that it is feasible for all vessels to achieve a high level of tagging overlap.

11.20 The Commission agreed that the tag overlap statistic (SC-CAMLR-XXIX, paragraph 3.141) was informative. The Commission referred the issue of achieving compliance with the tagging requirements of CM 41-01, Annex C, to SCIC for further consideration (SC-CAMLR-XXIX, paragraphs 3.139 to 3.143; paragraph 12.23).

11.21 Some Members recommended that past tagging performance by vessels should be taken into consideration when reviewing future proposals to undertake research.

11.22 The UK expressed the further view that, in addition to possible incentives to comply with the requirements of the tagging program, vessels which had demonstrated systematic non-compliance with the requirements of the tagging program should be subject to sanction.

11.23 Some Members noted in particular that two vessels, *Insung No. 1* and *Jung Woo No. 2*, were reported to have been non-compliant with respect to their tagging requirements over a period of four years. These Members also drew the Commission's attention to a report that the *Insung No. 1* failed to tag any of the 2 404 *D. mawsoni* it was reported to have caught in Subarea 48.6 and had, therefore, undermined scientific research and the ability to manage the fishery.

11.24 The Republic of Korea expressed its deep regret that its flag vessels had not fully achieved all the objectives of CM 41-01, specifically in relation to tagging overlap rates. Regarding Members' comments on the failure to tag *D. mawsoni* in Subarea 48.6, the vessel had fully implemented tagging of *D. eleginoides*. Korea asserted, however, that all the vessels had made significant improvements with respect to tagging rates in previous years and therefore regarded the low level of overlap as an error on the part of its fishers rather than non-compliance. Korea reminded the Commission of its intent to conduct a training program for fishing masters and crew (Annex 6, paragraph 2.12). Korea assured CCAMLR that its flag vessels' performance would improve in future and that it would achieve full compliance with all requirements of the tagging program in 2010/11. To assist in this endeavour, Korea

had extended an invitation to the Secretariat to travel to Korea to provide detailed information on CCAMLR's approach to the management of fisheries, associated scientific research and data requirements to Korean government officials, scientists and representatives of the fishing industry. Korea explained that this outreach activity would in no way detract from Korea's responsibility for the implementation of CCAMLR conservation measures.

11.25 New Zealand noted that failure to achieve a high tag overlap statistic was not a matter of education but of will. Several Korean vessels had clearly chosen to tag and release small fish while retaining larger fish for commercial reasons. New Zealand noted furthermore that it had received a report that Korean vessels were already departing from a southern hemisphere port for the Convention Area.

Research hauls and data collection

11.26 The Commission endorsed the Scientific Committee's advice that current single allocation of starting positions for research hauls in Subareas 48.6 and 58.4 could be augmented, in areas of sea-ice, by providing each vessel with up to three random lots of start positions for the required research hauls in each SSRU. These options would be provided by the Secretariat, on request from the notifying Member or its vessel, and prior to the vessel's arrival at the SSRU. The vessel could then choose the allocated start positions which best suited the local sea-ice conditions, and subsequent research hauls would be conducted using the agreed procedure (SC-CAMLR-XXIX, paragraph 3.146 and Annex 4, paragraph 3.6).

11.27 The Commission also endorsed the Scientific Committee's request that the Secretariat prepare a table summarising the data collection requirements in each exploratory fishery, for use by WG-FSA in 2011 to review the data collection requirements in these fisheries, and for inclusion in the Fishery Reports as a description of the data collection required (SC-CAMLR-XXIX, paragraph 3.148).

Fisheries notified in 2009/10 and 2010/11

11.28 In 2009, the Commission agreed to the following exploratory fisheries in 2009/10:

- (i) exploratory longline fisheries for *Dissostichus* spp. in Subareas 48.6, 88.1 and 88.2 and Divisions 58.4.1, 58.4.2, 58.4.3a and 58.4.3b;
- (ii) an exploratory trawl fishery for *Euphausia superba* in Subarea 48.6;
- (iii) exploratory fisheries for crab in Subareas 48.2 and 48.4.

11.29 No new fishery had been notified for 2009/10.

11.30 The notified exploratory fisheries for *Dissostichus* spp. in Division 58.4.3a, krill in Subarea 48.6 and crab in Subarea 48.4 were not carried out in 2009/10, and catches in the other exploratory fisheries in 2009/10 are summarised in SC-CAMLR-XXIX, Table 2. The operation of the exploratory fisheries for *Dissostichus* spp. in Subareas 48.6, 88.1 and 88.2

and Divisions 58.4.1, 58.4.2 and 58.4.3b, and the exploratory fishery for crab in Subarea 48.2 was reviewed by WG-FSA and the Scientific Committee (SC-CAMLR-XXIX, paragraphs 3.149 to 3.188).

11.31 In 2010, nine Members notified their intention to fish in exploratory longline fisheries for *Dissostichus* spp. in Subareas 48.6, 88.1 and 88.2 and Divisions 58.4.1, 58.4.2, 58.4.3a and 58.4.3b in 2010/11. These notifications were reviewed by WG-FSA and the Scientific Committee (see also SC-CAMLR-XXIX, paragraphs 3.149 to 3.188).

11.32 During the meeting, Argentina withdrew its notifications for exploratory fisheries for *Dissostichus* spp. in Subareas 88.1 and 88.2 in 2010/11.

11.33 The Commission thanked Members for their notifications, and agreed to Members' participation in exploratory fisheries in 2010/11 as indicated in Table 1.

11.34 The Commission endorsed the Scientific Committee's management advice on the exploratory fisheries for *Dissostichus* spp. in Subarea 48.6 and Divisions 58.4.1, 58.4.2, 58.4.3a and 58.4.3b, noting that the Scientific Committee could not provide any new advice on catch limits, except for the limits in Division 58.4.3b (SC-CAMLR-XXIX, paragraphs 3.173 to 3.178).

11.35 The Commission recalled that the Scientific Committee has implemented biennial assessments for *Dissostichus* spp. in the Ross Sea (Subarea 88.1 and Subarea 88.2 SSRUs A and B) and in SSRU 882E, subject to the conditions of the biennial assessment procedure (SC-CAMLR-XXVIII, paragraph 4.213). The latest assessments were conducted in 2009, and WG-FSA did not carry out assessments for these stocks in 2010.

11.36 The Commission endorsed the Scientific Committee's management advice on the exploratory fisheries for *Dissostichus* spp. in Subareas 88.1 and 88.2 (SC-CAMLR-XXIX, paragraphs 3.185, 3.187 and 3.188).

11.37 The Commission noted that no notification had been received in relation to exploratory fishery for krill in Subarea 48.6 and exploratory fisheries for crab in Subareas 48.2 and 48.4 in 2010/11. The Commission agreed to close these fisheries for 2010/11.