

ADVICE TO SCIC AND SCAF

12.1 The Chair presented the Scientific Committee's advice to SCIC and SCAF during the meeting. The advice to SCAF is summarised in Section 11. The advice to SCIC is summarised below, and the primary advice is provided elsewhere in this report.

Mitigation measures

12.2 The Scientific Committee noted that information analysed by ad hoc WG-IMAF indicated that Members had achieved 100% implementation of all mitigation measures in 2006/07, except for streamer line design and use, discard of offal and the discard of hooks in offal (Annex 6, paragraph I.18). As a result, the total extrapolated seabird mortality due to interactions with fishing gear in longline fishing for *Dissostichus* spp. in the Convention Area in 2006/07, with the exception of the French EEZs in Subarea 58.6 and Division 58.5.1, was estimated to be zero (Annex 6, paragraph I.2).

12.3 The Scientific Committee advised SCIC that the maintenance of zero, or near-zero, levels of incidental mortality of seabirds and marine mammals in CCAMLR fisheries was closely linked to the successful and complete implementation of mitigation measures in Conservation Measures 25-02, 25-03 and 26-01. The Scientific Committee advised that any erosion of the level of implementation of these measures was likely to result in increased mortality. Members were urged to remain vigilant and ensure that all mitigation measures are fully implemented at all times.

12.4 The Scientific Committee advised SCIC that some vessels in 2006/07 had not met the requirements with regard to the discharge of offal and the discard of hooks (Annex 6, paragraph I.18), the conduct of bottle tests (Annex 6, paragraph I.20) and the use of net sonde cables (Annex 6, paragraph I.25).

12.5 The Scientific Committee also advised that some vessels had discharged oil, gear debris and inorganic garbage during the course of fishing in 2006/07 (Annex 6, paragraph I.21).

Exploratory fisheries

12.6 The Scientific Committee noted that WG-FSA had advised that some vessels operating in exploratory fisheries in 2006/07 had not achieved full compliance with the fishery-based research requirements for deploying research sets and the tagging program (Conservation Measure 41-01, Annexes B and C). This was particularly noted in relation to some vessels fishing in Divisions 58.4.1 and 58.4.2 and Subarea 88.2 (Annex 5, paragraphs 3.42, 5.49, 5.50 and 5.98). The Scientific Committee advised that non-compliance with the fishery-based research requirements compromised WG-FSA's capability to develop assessments for exploratory fisheries.

12.7 A further possibility of non-compliance had been identified by WG-FSA which had noted large differences between the rates of recapture of tagged toothfish reported by vessels, and had sought advice from the Scientific Committee and Commission (Annex 5,

paragraphs 3.57 and 5.49). The Scientific Committee noted that such differences may arise due to factors such as differential survival rates of tagged fish, vessel- or region-specific factors, and variations in tagging rates, tag-detection rates and reporting.

12.8 The Scientific Committee sought advice from SCIC on the type of information required from WG-FSA to allow SCIC to address the compliance issues identified above (Annex 5, paragraph 3.59).

12.9 The Scientific Committee also requested that the Secretariat provide each Member with information on the tag–recapture rates reported by each of its vessel(s), together with the mean and range of the rates reported across all fleets. In addition, the Secretariat was tasked with tabling the tag–recapture rates of individual vessels at the next meeting of WG-FSA.

12.10 The Scientific Committee reviewed the tagging requirements in exploratory fisheries, and agreed to remove the tagging limit of 500 fish (Conservation Measure 41-01, Annex C, paragraph 2(i)). The Scientific Committee agreed that vessels should be required to continue tagging *Dissostichus* spp. at the specified rate until they leave the fishery (Annex 5, paragraph 3.60). In addition, Members were urged to tag fish during the course of fishing, and in proportion to the species and sizes of *Dissostichus* spp. present in the catches.

12.11 The Scientific Committee also considered WG-FSA’s proposal to increase the tagging rate for *Dissostichus* spp. in exploratory fisheries in Subarea 58.4 (Annex 5, paragraph 5.83), and agreed to increase the tagging rate to a minimum of three fish per tonne of green weight caught in the exploratory fisheries in Divisions 58.4.3a and 58.4.3b. This was in line with the requirements in Divisions 58.4.3a and 58.4.3b, and would assist WG-FSA in developing assessments in Subarea 58.4.

12.12 The Scientific Committee endorsed WG-FSA’s proposal that the Secretariat coordinate the tagging program for rajids in new and exploratory fisheries, initially purchasing 50 000 tags for use in 2007/08 and with full implementation in 2008/09 during the Year of the Skate (Annex 5, paragraphs 3.51 and 6.36). This matter was considered under Agenda Item 4.

Fishery notifications

12.13 The Scientific Committee, WG-FSA and ad hoc WG-IMAF considered the scientific aspects of the notifications for exploratory longline fisheries in 2007/08 (summarised in Annex 5, Table 7). This matter was considered under Agenda Item 4.

12.14 The Scientific Committee and WG-EMM had reviewed the notifications for krill fisheries in 2007/08. The Scientific Committee noted a number of issues regarding the notifications:

- (i) the large number of notifications from the Cook Islands;
- (ii) for the first time, the total notified catch (684 000 tonnes) was greater than the trigger level in Area 48 (620 000 tonnes);

- (iii) the increasing numbers of notifications for fishing using new fishing methods (continuous fishing system and pair trawling);
- (iv) some notifications were incomplete on submission and/or revised after the deadline for submission;
- (v) the varying quality of the notifications.

12.15 WG-EMM had requested the Secretariat to obtain further information on the notifications, and this has been reported in CCAMLR-XXVI/11 (Table 3).

12.16 In addition, the Scientific Committee noted that the actual reported catches in recent seasons were less than the amounts notified (CCAMLR-XXVI/11, Table 4).

12.17 The Scientific Committee sought the advice of SCIC on these matters.

Scheme of International Scientific Observation

12.18 The Scientific Committee agreed to establish an ad hoc technical group to address priority scientific aspects of the Scheme of International Scientific Observation, as well as other technical issues related to the at-sea implementation of conservation measures (Annex 5, paragraph 11.11). This matter was considered under Agenda Item 7.

12.19 The Scientific Committee and its working groups noted that the quality of observer data which had been provided continued to improve and thanked technical coordinators and observers for their efforts in the last year. However, the Scientific Committee noted that improvements could still be made in the reporting of observer data and encouraged technical coordinators and observers to continue to fully implement the specifications of the various observer protocols and report all required data (Annex 6, paragraph I.48).

12.20 The Scientific Committee noted that ad hoc WG-IMAF had expressed concern that the reported percentage of hooks observed fell below the recommended minimum of 20% on several vessels in 2006/07 (as low as 0%) and had recommended that clarification be sought from the Members which designated the international observers for these cruises (Annex 6, paragraph I.47). The Scientific Committee sought advice from SCIC on this matter.

12.21 Following consultation with its working groups, the Scientific Committee recommended a small number of changes to the observer data forms in order to improve the accuracy of the observations (Annex 5, paragraphs 6.49 to 6.51).

12.22 The Scientific Committee reiterated the need to collect standard scientific observations on krill fishing vessels (SC-CAMLR-XXV, paragraphs 11.13 to 11.16). The requirements for scientific observers have also been reviewed by WG-EMM (Annex 4, paragraphs 4.85 to 4.88) and WG-IMAF (Annex 6, paragraph II.120). Systematic scientific observer coverage of the krill fishery is required across all fishing methods so as to allow the Scientific Committee to develop advice on the fishery, including evaluation of by-catch and the efficacy of mitigation measures. The strategic objectives for scientific observations of the krill fishery were:

- to understand the overall behaviour and impact of the fishery
- to undertake routine monitoring of the fishery to inform population and ecosystem models.

12.23 This matter was further discussed under Agenda Item 3, and referred to SCIC for further consideration.

Research exemptions

12.24 The Scientific Committee considered a proposal that a research survey be conducted in Division 58.4.3b, and the results analysed by WG-FSA, prior to further fishing in the exploratory fishery for *Dissostichus* spp. in that division. This matter was further discussed under Agenda Item 9.

Advice on sharks

12.25 The Scientific Committee was unable to provide new advice on the extent of shark stocks in the Convention Area.

Advice on gillnetting

12.26 The Scientific Committee was unable to provide new advice on the interim prohibition of deep-sea gillnetting in the Convention Area. However, the Scientific Committee agreed that deep-sea gillnetting has significant negative consequences with respect to resources in the Convention Area (see also paragraph 8.6).

Bottom fishing in CCAMLR high-seas areas

12.27 The Scientific Committee and WG-FSA had developed a method to estimate the effective footprint of bottom fishing in CCAMLR high-seas areas (Annex 5, paragraphs 14.1 to 14.43). This matter was further discussed under Agenda Item 4, and referred to the Commission for further consideration.

Estimation of levels of IUU Fishing

12.28 The Scientific Committee agreed that the method for estimating the extent of IUU fishing currently used by the Secretariat could be further improved by the addition of a measure of the local density of licensed vessels. Such a measure would reflect the ability of licensed vessels to detect (i.e. sight) IUU fishing. WG-FSA had discussed various measures, including the number of days in a season when legal vessels are present in an area (Annex 5, paragraphs 8.1 and 8.2).

12.29 The Scientific Committee agreed that such measures would provide an estimate of the probability of detecting an IUU fishing event, and may indicate areas where such a probability was low. The Scientific Committee requested that the Secretariat consider including a measure of the local density of licensed vessels in the tables it prepared on IUU fishing (e.g. WG-FSA-07/10 Rev. 5, Table 1).

12.30 The Scientific Committee noted the Secretariat's development of a trial matrix for estimating the uncertainty associated with IUU fishing events.