

MINUTES

Attendance

Members

Dr Malcolm Haddon – Chair
Ms Viki O’Brien – AFMA
Mr Martin Exel, Industry
Mr Les Scott, Industry
Mr Stuart Richey, Industry
Dr Geoff Tuck, CSIRO
Dr Campbell Davies, AAD
Dr Graham Robertson, AAD
Mr Barry Baker, AAD
Mr Graham Love, ABARE
Dr Rosemary Gales, DPIWE
Mr Peter Neave, Executive Officer

Apologies

Dr Andrew Constable, AAD
Dr Nick Gales, AAD

Observers

Mr Bob Stanley, AFMA
Dr Sharon Appleyard, CSIRO
Mr Alistair Hobday, CSIRO
Mr David Stevenson, CSIRO
Ms Gill Slocum, AAD

Introduction

Agenda item 1 - Preliminaries

The 20th meeting of SAFAG was opened at 10.20 am. Members welcomed the new SAFAG Chair, Dr Malcolm Haddon. Dr Haddon replaced the outgoing Chair, Dr Keith Sainsbury.

Messrs Hobday and Stevenson made a presentation to SAFAG on the afternoon of 28 April. Dr Appleyard made a presentation to SAFAG on the morning of 29 April. Ms Slocum attended the meeting briefly on 28 April.

1.1 Apologies

Apologies were received from Dr Constable and Dr Nick Gales. Messrs Richey, Scott, Baker and Robertson, and Dr Rosemary Gales provided apologies for being unable to attend the second day of the meeting.

1.2 Adoption of agenda

The agenda for SAFAG 20 was adopted, with the order in which agenda items were considered being altered to accommodate Members availability. Agenda items 1, 2, 3, 6, 12 and 14 were considered on the first day with the remainder being discussed on the second day. The items are reported on as they appeared in the agenda.

The following items were included in the agenda:

- joint industry/science/managers meeting – under agenda item 7; and
- outcome of the OECD meeting in Paris on Illegal, Unregulated and Unreported (IUU) fishing – under agenda item 15.

1.3 Adoption of Minutes from SAFAG 19

The draft minutes from SAFAG 19 were circulated to Members on 19 December 2003. Comments were received from Dr Davies and incorporated into the Minutes. Further comments were provided by Dr Davies at the meeting and also incorporated. The Minutes from SAFAG 19 were accepted as a true and accurate record of the meeting.

1.4 Action arising from SAFAG 19

SAFAG discussed the status of action arising items from SAFAG 19. Items are reported on as they appeared in the SAFAG 19 Minutes.

1. **Provide an update on the Australian Antarctic Division (AAD) website information package on the CCAMLR process:** Dr Davies advised that the AAD website link to information on the CCAMLR process is still under construction. He informed the Group that the issue is being addressed by the AAD Corporate Data Manager.

Action arising

2. **Provide a paper on comparative TACs using longlining and trawling in the Heard Island and McDonald Islands (HIMI) Fishery** – sensitivity analysis on longline and trawl total allowable catches (TACs) will be released when the Report of the Working Group on Fish Stock Assessment (WG-FSA) for 2003 is finalised.

Action arising

3. **Discuss the possibility of incorporating longline fishing in the 2003/04 Fishery Assessment Plan for the HIMI Fishery:** this issue was discussed under agenda item 6.

4. **Provide AFMA with a copy of the framework for seabird mitigation priorities from an Australian perspective from January 2003 workshop** - Completed. Mr Baker provided a copy to AFMA which was provided to Members.

5. **Provide SAFAG with an update on gear loss reporting arrangements with AMSA** - Completed. Response received from the Australian Maritime Safety Authority (AMSA) which listed the type of incidents which needed to be reported to AMSA.

6. **Prepare wildlife interaction summary tables to include target fish, method, shot number and other recommendations made at SAFAG 17 and in the format provided to the Working Group on Incidental Mortality Arising from Fishing (IMAF)** – this issue was discussed under agenda item 12.

7. **Determine the number of otolith samples required to be collected in each fishery** - Not completed. Awaiting advice from Steve Candy at AAD. This issue is to be included on the agenda for the stock assessment meeting in September 2004.

Action arising

8. **Develop protocols for tagging skates and rays for increasing survival rates** – this issue was discussed under agenda item 9.

9. **Invite relevant researchers to discuss collaborative work being undertake on the HIMI toothfish stock** – this issue was discussed under agenda item 7.

10. **Discuss introduction of the 290mm size limit for mackerel icefish** – this issue was discussed under agenda item 8.

- 11. Seek a 2 week extension (to 14 September 2004) to the HIMI season for longlining -** SouthMAC and TAP team supported the extension. Mr Baker advised the issue needs to be considered by the Minister.

Action arising

- 12. Discuss the research set requirements for New and Exploratory fisheries –** this issue was subject to considerable discussion at CCAMLR XXII and will again be raised by AAD at CCAMLR XXIII. The aim is to rationalise the requirements to operate in small scale research units to ensure vessel and crew safety, and practicality.

Action arising

- 13. Provide comments on stock assessment methodologies to AFMA –** Completed. Drs Davies and Tuck provided comments on the draft Macquarie Island Strategic Assessment Report.

- 14. Prepare further draft of Macquarie Island Strategic Assessment Report –** this issue was discussed under agenda item 4.

- 15. Provide results of archival tagging –** to be included in the September 2004 stock assessment meeting.

Action arising

- 16. Examine total mortality for skates and rays -** Dr Davies to report to SAFAG 21.

Action arising

- 17. Discuss trawl survey requirements for the 2003/04 HIMI Fishery Assessment Plan –** this issue was discussed under agenda item 6.

- 18. Discuss seabird and marine mammal bycatch issues prior to the annual IMAF meeting -** to be included on the agenda for the stock assessment meeting in September 2004.

Action arising

- 19. Observe seabird interactions with wires during trawl operations –** this issue was discussed under agenda item 14.

- 20. Obtain Falkland Islands seabird observation protocols for trawl operations. –** Not completed. Request made to Ben Sullivan.

Action arising

- 21. Investigate observer sampling regimes and the sampling levels required –** this issue was discussed under agenda item 14

- 22. Investigate harmonising data formats used by AAD and CCAMLR -** issue being investigated by AFMA's Data Section. This has been resolved for longline operations and is expected to be resolved for trawl operations in July 2004.

Action arising

- 23. SAFAG to write to FRDC to endorse the Management Strategy Evaluation work being undertaken on sub-Antarctic fisheries by CSIRO –** Completed. Letter sent to FRDC.

1.5 Correspondence

SAFAG noted the following correspondence:

- a letter dated 19 November 2003 from Sam Nelson, AFMA Research Manager to Geoff Tuck advising that the AFMA Research Committee supported funding for the continued stock assessment and management strategy evaluation for Australian sub-Antarctic fisheries. The AFMA Board subsequently approved funding. In line with the revised cost recovery policy the MIRF contribution will be \$26,681 and the ARF contribution \$40,023.
- a letter dated 5 December 2003 from Sam Nelson, AFMA Research Manager to the Chair of SAFAG advising that the AFMA Research Committee supported continued funding for SAFAG. The AFMA Board subsequently approved funding for 2004/05.
- a letter dated 9 December from the SouthMAC Chair to FRDC supporting the work being undertaken by Dr Tuck on stock assessment and management strategy evaluation for sub-Antarctic fisheries.

Management update

Agenda item 2 – Report from SouthMAC 20

Ms O'Brien provided SAFAG with an outline of the outcomes of SouthMAC meetings 19 and 20. She advised that SouthMAC had endorsed the toothfish and icefish TACs for the HIMI Fishery, and that the TACs had been determined by the AFMA prior to the start of the season.

SouthMAC 20 had principally discussed the development of the Macquarie Island Toothfish Fishery Management Plan. She advised that SouthMAC recommended that the Management Plan:

- be called the Macquarie Island Toothfish Fishery Management Plan, as the Plan would have the one target species, Patagonian toothfish;
- have two sets of Statutory Fishing Rights (SFRs) – one for Aurora Trough and the other for all other waters. The outcome of the allocation process would apply to each set of SFRs;
- have two TACs set - one for Aurora Trough and the other for all other waters;
- cover all fishing methods for toothfish, with Scientific Permits issued for non-trawl methods as is the case for the HIMI Fishery. However, the Fishery would initially be limited to trawling;
- provide for consideration to be given to TACs being set for more than one year at a time; and
- provide for more stringent carryover provisions to apply than under the current policy, where up to 50 tonnes could be carried over to the following season, with penalties being applied above 20 tonnes. SouthMAC recommended SAFAG advice be sought on an approach where, from 0 – 20 tonnes there would be no penalty provision ie: the amount taken would be deducted from the following season's quota. If greater than 20 tonnes were taken the amount above 20 tonnes would be taken from the following years quota on a two for one basis, up to a maximum 50 tonnes. For example if 25 tonnes above the TAC were taken, 30 tonnes would be deducted from the following year's quota. If over 50 tonnes was taken, it would result in direct prosecution action.

Ms O'Brien advised that the AFMA Board was due to consider the allocation issue and the above issues associated with the Management Plan at its meeting on 17 – 18 May 2004.

Mr Baker stated the Threat Abatement Plan (TAP) team were of the view that longlining in the Macquarie Island Fishery would not occur in the foreseeable future. He stated the risks for the 10 breeding pairs of wandering albatross and the recovering population of grey petrels were considered too high.

Mr Robertson stated to be 'even minded' trawling should be stopped as it would be expected longlining would take less seabirds than trawling.

Ms O'Brien also advised that SouthMAC 20 discussed:

- the expansion of longline trials in the HIMI Fishery; and
- a two week extension to the 2003/04 HIMI Fishery season for longlining.

The above two issues were considered by the TAP team out-of-session. Following this consultation a letter of support was received from the TAP team Chair. SouthMAC support was provided to allow a second vessel to longline in the 2004/05 season, and an extension by two weeks to the current season, in line with the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Conservation Measure 41-08 (Limits on the fishery for *Dissostichus eleginoides* in Statistical Division 58.5.2 in the 2003/04 Season).

Mr Exel raised the issue of an Austral Fisheries longline vessel being granted the two week extension after it commenced operations in May 2005. It was agreed this was an issue that needed to be considered by the CCAMLR Consultative Forum (CCF) at its June meeting. Mr Baker advised it was an issue that should also be considered by the TAP team and IMAF. Consideration could be given to issues such as the nature of the vessel, the record of the Company, the culture on the vessel. Mr Exel undertook to prepare a request for consideration.

Action arising

Macquarie Island

Agenda item 3 – Toothfish assessment and TAC setting

Dr Tuck presented his paper entitled 'Abundance estimation and TAC setting for Patagonian toothfish (*Dissostichus eleginoides*) at Macquarie Island: 2004. Revised' (SAFAG.20/1) The paper presents summary results from an assessment of the harvested population of Patagonian toothfish at Macquarie Island to 2004.

Aurora Trough

During the 2003/04 season there were 521 new releases, 102 re-releases and 251 recaptures from the Aurora Trough, including many fish recaptured that were tagged during the earlier seasons of the Fishery. The mean weight of sampled fish increased over previous fishing seasons to approximately 4.06kg.

The estimated available biomass has reduced from 3543 tonnes at 30 June 2003 to 2263 tonnes at 30 June 2004. Using the precautionary approach of harvesting 10% of the available biomass adopted in previous years this would equate to an annual TAC of 226 tonnes.

Dr Tuck outlined that in the calculations of the estimated percentage of available biomass had previously been taken on the final day of the estimation period (30 June), but a more appropriate measure, termed Model B by Dr Tuck, may be to discount the first year by one year of natural mortality. The point estimate using this approach with $M=0.16$ is approximately 76% and with $M=0.1$ approximately 105%.

Using the current approach, with no discount for natural mortality (referred to here as Model A), the point estimate relative to the reference point of 1 July 1995, when using an $M=0.1$ was 89.3% and an $M=0.16$ was 64.9%. The latter is just below the level required for there to be more than a research quota allocated. There was discussion over whether the assessment should use Model A or Model B.

Northern Valleys

The Northern Valleys have not experienced a significant catch since 1997. No tagged fish were recaptured from the Northern Valleys in 2003/04. Since the 1998/99 season, only 5 tagged fish have been recaptured from this ground. There were 61 fish tagged and released in season 2003/04. As no fish were recaptured in the 2003/04 season, an update of the stock's abundance was not possible with the tag-recapture model.

Dr Tuck advised that by using the procedure adopted for the previous season the TACs for the Northern Valleys for the period 1 July 2004 – 30 June 2005 (based on the current TACs [174 tonnes with a trigger TAC of 441 tonnes] for the Fishery, assuming no recruitment to the Fishery, taking into account natural mortality and catches taken from the Fishery in December 2003) would be 148 tonnes with a 376 tonnes trigger TAC.

Given Dr Tuck's paper had been presented to Members on the day of the meeting it was agreed that further consideration should be given to the contents of the paper and assumptions made. It was agreed that the Chair, Dr Tuck and scientists from AAD would examine the paper and meet out-of-session to discuss. SAFAG would then consider the TACs out-of-session.

Action arising

Agenda item 4 – Strategic Assessment Report for Macquarie Island

SAFAG noted the latest draft of the Macquarie Island Strategic Assessment Report which had incorporated comments received from AAD, CSIRO, the Department of the Environment and Heritage (DEH) and industry. Further comments were provided by Members at the meeting which will be incorporated in the text.

Action arising

Agenda item 5 – Issues for the Management Plan

SAFAG discussed the following issues in relation to drafting the Macquarie Island Toothfish Fishery Management Plan:

- reference points for the Fishery;
- the possible use of multi year TACs; and
- an up to 50 tonne overcatch provision.

Ms O'Brien advised that specific reference points need to be included in the Management Plan, rather than outlining a process for agreeing to reference points, as in the HIMI Fishery Management Plan. It was agreed that SAFAG would consider the appropriate reference points at the next meeting.

Action arising

The concept of a multi-year TAC was not supported at this stage given the variation in the recruitment series. Dr Tuck advised multi-year TACs could be investigated as part of his Management Strategy Evaluation work in the future.

Mr Exel sought to modify the recommendation from SouthMAC regarding overcatch. He suggested that there be provision for up to 20 tonnes overcatch which would be deducted from the following years TAC on a one for one basis. He was of the view that there should not be a category to allow 20 - 50 tonnes to be taken above the annual TAC on a 2 for 1 basis. It was agreed this would be considered by SouthMAC.

Action arising

Heard Island and McDonald Islands Fishery

Agenda item 6 – Fishery Assessment Plan 2003/04

SAFAG discussed progress with finalising the Fishery Assessment Plan for the HIMI Fishery for the 2003/04 season.

Members noted that the 'FV Janas' had undertaken research last season in the HIMI Fishery and would continue the work in the 2003/04 season. The vessel will operate on specific transects and consideration will be given to taking a 'research credit' into the 2004/05 Fishery Assessment Plan.

Ms O'Brien undertook to clarify the situation regarding other trawl credits from previous seasons. This will be discussed at the next SAFAG meeting.

Action arising

Dr Robertson provided background on an experiment he was looking to have undertaken by the 'Janas' in the current season. He is looking to quantify the effectiveness of integrated weighted line (IWL) on catch rates, by having the vessel deploy both IWL and lines without any weighting. The experiment had received the support of the TAP team, on the understanding that seabird limits would apply.

Mr Scott advised that from an operator's perspective he had no desire to use unweighted lines as he wanted to fish with IWL. However he would be prepared to consider undertaking the work to progress the objective of trying to convince IUU vessels to use weighted gear. He recognised that there was an increased risk that seabirds would be taken, and if the experiment were to proceed it would likely be after general fishing operations (where weighted lines and IWL would be used) had occurred. Mr Scott was concerned that any take of seabirds during the experiment would tarnish the reputation of longlining fishing in the HIMI Fishery, where industry are looking to have a zero bycatch.

SAFAG noted that the juvenile icefish survey would not proceed in 2003/04 as the IYGPT net could not be provided to the vessel prior to its departure from Mauritius.

Mr Exel advised that his Company and AAD had agreed to undertake the toothfish and icefish surveys in May 2004 over a 20 day period. It was agreed that the Fishery Assessment Plan for 2003/04 could be finalised.

Action arising

Agenda item 7 – Toothfish straddling stock issues

At SAFAG 19 on 18-19 November 2003, Members discussed the possibility of the Patagonian toothfish stocks around HIMI being a straddling stock. SAFAG agreed that this issue would be discussed at SAFAG 20 where the tagging results, available genetic information and the progress with collaborative work being undertaken between Australian and French scientists, would be discussed.

Dr Sharon Appleyard from CSIRO made a presentation to SAFAG on her recent genetics study on toothfish populations in the western Indian Ocean. She reported that samples from Crozet, Kerguelen, Prince Edward islands and HIMI had similar genetic material. She could find no significant differences between the populations and found no evidence of sub-structuring. Dr Appleyard's work had detected genetic differences between the HIMI and Macquarie Island populations.

Dr Appleyard commented that there were limited sample sizes from some areas and future work would benefit from greater sample sizes across a range of cohorts. Dr Davies commented that the prospect of collaborative work with French scientists on a range of stock issues offered the opportunity to address this issue.

Mr Exel commented that the French industry were likely to be keen to participate and would likely be willing to collect genetic samples. Mr Stanley commented that collecting samples should not be a problem for Australian observers.

Dr Davies advised that AAD were seeking a budget increase to undertake the collaborative work. SAFAG agreed that a draft work program needed to be developed, which should include consideration of genetic sampling, surveys and a tagging program. It was agreed that Dr Davies, Ms O'Brien and Mr Exel would develop a draft for consideration out-of-session by SAFAG and submitted to the CCF for consideration on 16 June 2004.

Action arising

Mr Exel stated that French industry/scientists/managers could be invited to the Stock Assessment meeting tentatively scheduled for Perth on 31 August and 1 September 2004.

SAFAG noted that the single stock scenario, which was currently applied to the Patagonian toothfish stock assessment in the HIMI Fishery, was currently considered to be more precautionary than the straddling stock scenario with adjacent areas.

Agenda item 8 – Mackerel icefish size limit

Mr Exel requested that WG-FSA consider different harvest strategies to allow for continuity of market supply, primarily by investigating the possibility of spreading catch over two years as opposed to having very high and very low years. Dr Davies advised SAFAG that no formal evaluation had been undertaken to investigate using size limits as a mechanism to achieve this. He advised that the trawl survey will provide further information and there was an expectation of greater icefish abundance. SAFAG agreed to consider the issue at its next meeting.

Action arising

Agenda item 9 – Summary of tagging activities

Dr Davies provided SAFAG with a paper 'Toothfish tagging at Macquarie Island AL44' (SAFAG20/3) which summarised activities from the 30 December 2003 to 25 January 2004 voyage. He undertook to provide a summary of tagging activity in the HIMI Fishery at the next SAFAG meeting.

Action arising

The tagging data is a key component of the Macquarie Island toothfish stock assessment. Dr Tuck advised that he would prefer a month from the time he receives the data from AAD to undertake the stock assessment.

SAFAG discussed the protocols for tagging skates and rays. Mr Stanley advised that on trawlers the skates and rays are placed in a deck tub and those alive and vigorous are tagged and released. He advised that the observers will try the same approach on longliners, although there were some concerns about the weight of individuals and the potential damage to the jaw from being lifted out of the water. The issue will be examined further at the end of the current longline season, and the observer manual updated (as appropriate).

Action arising

Agenda item 10 – Conservation Zones

Ms O'Brien outlined the agreed process to collect fishing data from the Conservation Zones around HIMI. Dr Davies advised that AAD and DEH will be undertaking an assessment of the conservation values of the Conservation Zones by June 2005.

Mr Exel advised that the data collected by observers provided the available information on activities within the Conservation Zones. Mr Stanley undertook to extract information from the observer reports since the marine protected area was declared, and circulate it to SAFAG out-of-session and the CCAMLR Consultative Forum.

Action arising

Environmental issues

Agenda item 11 – Ecological risk assessment

Messrs Alistair Hobday and David Stevenson presented SAFAG with an outline of the Ecological Risk Assessment project being undertaken by CSIRO for all Commonwealth managed fisheries.

Mr Hobday advised that the purpose of the project is to undertake ecological risk assessments for major fisheries managed by the Australian government and develop a framework for future risk assessments as additional information becomes available. The results of the project will help inform fisheries of priorities for research, data collection, monitoring and management.

The need for this work was identified during the development of bycatch action plans and when AFMA undertook 'road tests' of fisheries against ecological sustainability assessment guidelines. The ecological risk assessment considers all five ecosystems components – target species, by-product and bycatch species, protected species, habitats and communities. The assessments will categorise various species into high, medium or low risk on the basis of their susceptibility to capture by the various fishing methods and the ability for species populations to recover.

Mr Hobday sought to have the draft report for Antarctic fisheries considered by an expert group comprising AAD and AFMA. SAFAG agreed to consider the report at its next meeting.

Action arising

Agenda item 12 – Review of environmental interactions and gear loss

SAFAG considered the tables provided by AFMA on seabird interactions, mammal interactions and gear loss.

Mr Stanley advised that much of the environmental data was now on an AFMA database, and he was currently dealing with linkages with targeted fishing which was not included in the original data. He expected this work to be completed shortly, and he would then be in a position to circulate draft formats for reporting interactions to SAFAG Members.

Action arising

SAFAG discussed the definitions used by CCAMLR, the TAP team and AFMA as to what constitutes a ‘caught’ seabird. Ms O’Brien advised that the Fishing Permit conditions reflect the words adopted by IMAF.

That is:

‘A bird is deemed to be caught if it falls in to one of the following three categories:

- (i) dead not landed on board – those birds observed to be killed by direct interaction with fishing gear but not landed on the fishing vessel;*
- (ii) dead landed on board – those birds landed on the vessel that are dead (ie: show no muscle movement or corneal reflex);*
- (iii) alive landed on board:*
 - (a)* injured; or*
 - (b) released uninjured.*

**For those birds in category iii (alive landed on board) a bird should be recorded as injured (iii)(a) if it has any of the following pathologies: fracture of a wing bone, a leg bone or beak, more than two primary feathers on either wing that have broken feather shafts, substantial damage to the patagial tendon (indicated by a drooping wing or the inability to fly upon release), an open wound (other than superficial injuries in which there is no subcutaneous muscle damage), waterlogged or hydrocarbon soiled plumage, or any bird released with a hook in situ. Birds in category (iii)(a) should be considered as dead.*

Ms O’Brien undertook to prepare a table on the various definitions for consideration by SAFAG and other groups, as necessary.

Action arising

Dr Robertson advised that consideration should be given to placing a seabird limit on trawl operations. Dr Gales agreed with this approach. Mr Exel advised the issue needed to be looked at and needed to take into account the IUU effort at HIMI and the reported seabird take by legal French vessels around Kerguelen Island. Mr Exel queried what was trying to be achieved by defining a ‘political number’. Dr Haddon queried whether it was the role of SAFAG to determine such a number as it would not be based on science.

Mr Exel advised that limits should apply across sectors and he sought consistency of definitions under the EPBC Act to determine what were reportable incidents. He was of the view that these should apply to tourist and research vessels as well as fishing vessels because they are known to attract and catch birds (by the definition above). Mr Baker advised his concern was with interactions with the fishing gear. Mr Neave advised these interactions were summarised in the current Antarctic Fisheries Bycatch Action Plan.

Ms O’Brien suggested a review group comprising SAFAG and SouthMAC Members could be convened to look at seabird or mammal bycatch interaction issues if a certain level were reached. This arrangement could be on a per vessel basis. It was agreed that Ms O’Brien and Mr Baker would develop draft Terms of Reference for the review group. The review group could comprise Barry Baker, Les Scott, Viki O’Brien, Graham Robertson, Rosemary Gales, Margaret Moore and Martin Exel.

Action arising

Dr Robertson outlined the results of some seabird mitigation work carried out on trawlers operating in the Falklands. He reported that using paired streamer lines on trawlers had proved to be very successful in scaring seabirds away from the warp cables. Mr Exel stated he would be happy to trial mitigation measures such as paired streamer lines from his Company's vessels and requested Dr Robertson provide further details on design.

Action arising

Agenda item 13 – Review of 5 Year Strategic Research Plan

SAFAG discussed updating the Antarctic Fisheries 5 Year Strategic Research Plan for 2004/05 to 2008/09. A number of changes were made to reflect membership, funding arrangements and issues, such as the collaborative work on toothfish being proposed with the French, that had been discussed earlier in the agenda.

Mr Neave undertook to incorporate the comments and circulate a draft Strategic Research Plan to Members for consideration out-of-session.

Action arising

Agenda item 14 – Use of one observer

SAFAG discussed the issue of using one observer on some trawl trips, noting it had been discussed at a number of previous meetings.

Mr Stanley reported that in line with a request arising at SAFAG 19, observers had begun to monitor the warps during trawling operations for any seabird interactions. He advised that no interactions had been observed.

Mr Exel advised that where a trawl survey is conducted then two observers should be mandatory. He sought discussion on the data requirements for voyages where no survey is conducted. Dr Davies indicated that AAD will investigate alternative survey designs and look at the cost-benefit of current data collection methodologies including the number of length frequency and otolith samples.

Action arising

SAFAG discussed the use of video technologies to monitor fishing gear as a means of freeing up observers. Mr Stanley advised that AFMA was currently investigating such technologies, and would keep SAFAG updated with progress.

Action arising

Other

Agenda item 15 - Other business

Mr Exel provided the meeting with a brief outline of a recent OECD meeting he attended on IUU fishing in Paris. He reported the meeting was very successful and that there was considerable scope for cooperation between Australian and French officials and industry.

Agenda item 16 - Next meeting

The next meeting of SAFAG was tentatively scheduled for September 2004.

The meeting closed at 2.45pm on 29 April 2004.