



Australian Government

Australian Fisheries Management Authority



Sub-Antarctic Resource Assessment Group (SARAG)

MINUTES
SARAG 46

19 MARCH 2013

SUB- ANTARCTIC RESOURCE ASSESSMENT GROUP (SARAG)

CHAIR: Dr Malcolm Haddon

Date: 19 March 2013

Venue: CSIRO Marine Labs, Castray Esplanade, Hobart

Attendance

Members

Dr Malcolm Haddon – Chair
Dr Dirk Welsford, AAD
Dr Phillipe Ziegler, AAD
Ms Sally Wayte, CSIRO
Mr Martin Exel, Industry Member
Mr Les Scott, Industry Member
Dr Heather Patterson, ABARES
Mr Peter Neave, AFMA
Ms Sarah Kirkcaldie, Executive Officer, AFMA

Observers

Mr Rhys Arangio, Austral Fisheries Pty Ltd
Mr Graham Patchell, Consultant for
Australian Longline Pty Ltd

Apologies

Dr Richard Hillary, CSIRO
Dr Rosemary Gales, DPIWE

Introduction

Agenda item 1 - Preliminaries

The forty-sixth meeting of the Sub-Antarctic Resource Assessment Group (SARAG 46) was opened at 9.10am on 19 March 2013 by the Chair, Dr Malcolm Haddon.

1.1 Declaration of interests

Dr Haddon asked Members and Observers to declare their professions and their interests on specific agenda items. No Members or Observers were requested to leave the room during the meeting and they were able to participate in the discussions on all agenda items.

Dr Haddon advised he is employed by CSIRO and is not undertaking specific research projects in relation to Sub-Antarctic fisheries, although he does provide advice to other researchers in relation to stock assessments, particularly for the Macquarie Island Toothfish Fishery (MITF). Dr Haddon is also a member on the Northern Prawn Fishery Resource Assessment Group and Slope Resource Assessment Group.

Mr Exel declared his interest in all agenda items. He advised that he is the General Manager, Environment and Policy, Austral Fisheries P/L. Austral Fisheries P/L owns Statutory Fishing Rights (SFRs) in the Australian sub-Antarctic fisheries and waters under the jurisdiction of Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). Mr Exel also declared that he is the Director of the Institute of Marine and Antarctic Studies, Chair of the Commonwealth Fisheries Association (CFA), member of the South East Trawl Fishing Industry Association (SETFIA), Member of the Great Australian Bight Industry Association, Member of Coral Sea Fishers Association and Chair of the Coalition of Legal Toothfish Operators. He was not aware of any investigation or prosecution action by AFMA against his Company or of any legal action taken by his Company against AFMA.



Mr Scott advised that he is the Managing Director of Australian Longline P/L and Managing Director of Petuna Sealord Deepwater Fishing P/L and which holds various fishing rights in, and operates vessels in the Australian Sub-Antarctic fisheries and waters under the jurisdiction of CCAMLR. Mr Scott is also an advisor to Petuna Fisheries. Mr Scott further advised he is a member on SlopeRAG, the Sub-Antarctic demersal longline member on the Threat Abatement Plan, industry representative on the Australian delegation to CCAMLR, director to CFA and Director of SETFIA. Mr Scott was not aware of any investigation or prosecution action by AFMA against his Company or of any legal action by his Company against AFMA.

Ms Wayte advised she is a CSIRO employee and was undertaking work on the Macquarie Island Toothfish Fishery stock assessment and Management Strategy Evaluation. Ms Wayte also attends ShelfRAG.

Dr Welsford advised that he is employed by the Australian Antarctic Division (AAD) and was responsible for monitoring and assessing the Heard Island and McDonald Islands (HIMI) Fishery and other CCAMLR fisheries and also data collection for the MITF. Dr Welsford advised that AAD get core funding but also seek grants from Fisheries Research and Development Corporation (FRDC) and AFMA. However, members noted that Dr Welsford salary was not connected to these grants.

Dr Ziegler advised that he is employed by AAD and will be involved in the HIMI assessment this year. Dr Ziegler has no pecuniary interest in the sub-Antarctic and his salary is not connected to any research grants.

Dr Patterson advised she is an employee of the Department of Agriculture, Fisheries and Forestry and one of the authors of the Australian Bureau of Agricultural Resource Economics and Sciences (ABARES) Fishery Status report. Dr Patterson noted that she had no financial interest in the sub-Antarctic fisheries.

Mr Neave advised he is employed by the Australian Fisheries Management Authority (AFMA) and is responsible for managing sub-Antarctic fisheries at AFMA. He advised he was the AFMA Member to SARAG and the Sub-Antarctic Fisheries Management Advisory Committee (SouthMAC).

Ms Kirkcaldie advised she is employed by AFMA and is a Senior Management Officer in the Tuna and International fisheries section at AFMA. She also advised that she is currently the Executive Officer to the Tropical Tuna Management Advisory Committee (TTMAC), Southern Bluefin Tuna Management Advisory Committee (SBTMAC) and the Sub-Antarctic Fisheries Management Advisory Committee (SouthMAC).

Mr Patchell advised he was attending as an observer and is a consultant to Australian Longline P/L and Petuna Sealord Deepwater fishing P/L.

Mr Arangio advised he was attending the meeting as an observer and that he is employed by Austral Fisheries P/L. Mr Arangio further advised that he is the secretary of the Coalition of Legal Toothfish Operators. Mr Arangio was not aware of any investigation or prosecution action by AFMA against his Company or of any legal action taken by his Company against AFMA.

Messrs Scott and Exel declared their interest under all agenda items. The group discussed if the Industry members needed to leave the room for any agenda items and it was agreed that they could remain in the room for all items. However, it was agreed by members that if at any time during the meeting a conflict of interest was identified, then members could be asked to leave the room for that discussion.



1.2 Apologies

Apologies were received from Dr Richard Hillary (CSIRO) and Dr Rosemary Gales (DPIPWE).

1.3 Agenda

The agenda was adopted with three changes: a whale photo identification concept was included as agenda item 5a and the seabird environment update and discussions on the bycatch project were included under agenda item 14 (Environment).

Agenda item 2 – Adoption of minutes from SARAG 45

SARAG noted that the minutes from SARAG 45, held on 30 August 2012, had been adopted out-of-session as a true and accurate record of the discussions. However, it was noted that there was an addition needed on page 9 with the word observers inserted into paragraph 5.

Mr Scott advised that operational flexibility is being sought and the extension would provide greater surety in the event of unforeseen circumstances, such as a vessel breakdown or crew members/observers becoming ill which had occurred in recent seasons.'

Members requested that in future this agenda item be titled 'Confirmation of minutes from SARAG X'.

Agenda item 3 - Action arising from SARAG 45

SARAG discussed the status of action arising items from SARAG 45.

Action arising	Status
Macquarie Island Toothfish Fishery tags – AFMA undertook to seek further details of the tagging program and any tag recaptures made in New Zealand waters.	This issue was discussed and reported on under agenda item 12
Natural mortality in the MITF - SARAG noted that future work would include an investigation of natural mortality (M) which is currently set at 0.13. Recent analysis by AAD and CCAMLR determined an M value of 0.155 for toothfish in the HIMI Fishery and SARAG recommended that the appropriateness, or otherwise, of this figure be investigated for the MITF.	This issue was discussed and reported on under agenda item 6.1.
MITF tagging rate - SARAG agreed that tagging toothfish at a rate of 2 tags per tonne caught was appropriate across the fishery as it continued to deploy large numbers of tags while simplifying instructions to observers doing the tagging. It was agreed that the tagging rate and strategy will be reviewed prior to the start of the 2013/14 season.	This issue was discussed and reported on under agenda item 7.



Action arising	Status
<p>Observer program - Mr Neave undertook to prepare a paper, with input from AAD, on the data that is currently collected, its use and importance, and whether it could be reasonably collected through e-monitoring technologies. SARAG agreed to discuss the issue further at its next meeting.</p>	<p>This issue was discussed and reported on under agenda item 10.</p>
<p>Fishery Status Reports - SARAG discussed the 'Antarctic Waters Fishery' chapter in the ABARES Fishery Status Reports. Mr Exel queried why the chapter was included as it is not an Australian fishery. Given its status in the report as being overfished and subject to overfishing, he stated it was often confused with the HIMI Fishery and MITF which are subject to Australian management and are not overfished nor subject to overfishing. Dr Patterson advised that Australian operators can technically fish in the Antarctic Waters Fishery subject to CCAMLR approval, along with other CCAMLR members and the fishery was subject to export approval under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>. She undertook to look at restructuring the report to better distinguish the Antarctic Waters Fishery chapter from the HIMI Fishery and MITF chapters.</p>	<p>Dr Patterson noted that the chapter could not be removed from the status report as nothing was preventing Australian vessels fishing in those waters. However, in the latest status report the Antarctic waters chapter has been moved so that it is now after the HIMI and MITF chapters. The chapter also now clearly specifies that no Australian vessels are currently fishing in those waters. Dr Patterson also indicated that the name of the chapter would be changed to indicate these are CCAMLR new and exploratory fisheries. SARAG proposed a new name: New and Exploratory fisheries in the Indian Ocean sector of the CCAMLR region'. It was also suggested that the map in the Antarctic waters chapter needs to be adjusted as it highlights HIMI. SARAG proposed that if an Australian vessel starts fishing in the Ross Sea a new chapter titled 'Ross Sea Fishery' be added.</p>
<p>HIMI catch - AAD to investigate whether the projected catch could be taken in one year, as had occurred in the past. Dr Welsford advised this issue could be considered by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Working Group on Fish Stock Assessments when they meet in October to discuss the icefish stock assessment.</p>	<p>Members noted that this issue was not discussed by CCAMLR's Working Group on Fish Stock Assessments as it was agreed at the industry consultation beforehand that it could not be done in the 2012/13 season. The issue would be discussed at this year's CCAMLR meeting for the 2013/14 season. Members noted that with the removal of the trawler from the HIMI Fishery that a charter would be required to do the random stratified trawl survey (RSTS). It was agreed that when using a charter it was important to maximise usage but minimise time.</p>
<p>Natural mortality in the HIMI - CSIRO to contact Dr Steve Candy at AAD to discuss the natural mortality issue given Dr Candy's analysis of M in the HIMI Fishery.</p>	<p>Members noted that the analysis of natural mortality that Dr Candy conducted was uncertain with a large variation. SARAG noted that Dr Hillary had an idea to use tagging to estimate natural mortality. However, members noted that to do this a large number of tags would be required.</p>



Action arising	Status
HIMI Fisheries Assessment Plan - Mr Neave to investigate how a research program could operate under the Fisheries Assessment Plan, which is a requirement in the HIMI Fishery Management Plan.	This issue was discussed and reported on under agenda item 8.
Season extension - Industry members to write to Dr Tony Fleming (Australian Commissioner to CCAMLR and AAD Director) outlining a proposal and timetable for consideration of the season extension.	Members noted that Industry had written to Dr Fleming regarding the HIMI season extension and held several meetings with AAD who will be preparing a paper on the issue for CCAMLR consideration. Industry tabled the minutes of the last meeting held on 6 February 2013 which outlines the process for a further trial. Industry noted that last year there was not much fishing in the extension (15 April and 1 May) due to operational reasons. SARAG noted that Austral Fisheries P/L intended to fish from 15 April 2013.
HIMI Fishery Research - Mr Exel to prepare a paper on options to work with French industry in better coordinating research on the Kerguelen Plateau.	Members noted that industry has continued to meet and discuss research coordination with French industry.
HIMI Fishery Research - Dr Welsford to test through MSE the potential effects on the HIMI Fishery stock assessments of moving the RSTS to every other year.	Members noted that this action arising had not been completed and would be discussed at the industry consultation meeting on 20 March (Action arising 1).
HIMI Fishery Research - Dr Welsford to look at options for continued ageing work and the most effective use for and quantum of tagging in the trawl and longline components of the Fishery.	This issue was discussed and reported on under agenda item 8.
HIMI Fishery Research - Dr Welsford to provide an outline of how the overcatch and undercatch issue could be addressed under MSE and an indication of the timing required to undertake the work.	Ongoing. Members noted that AFMA is currently reviewing overcatch arrangements (Action arising 2).
HIMI Fishery Bycatch - Mr Neave to prepare a draft document which outlines the bycatch issues for sub-Antarctic fisheries and the strategies that have been adopted to address them.	At the last SARAG meeting it was agreed that AFMA would prepare a Bycatch and Discard Workplan. AFMA prepared the report which was discussed at SouthMAC in November 2012 where some changes were recommended. AFMA, with assistance from Tim Lamb (AAD) updated the workplan. Members agreed that it should again be circulated to SARAG before being finalised (Action arising 3).



Members requested that in future all actions arising developed in the meeting be listed at the end of its respective minutes.

Agenda item 4 – Correspondence

SARAG noted the following correspondence which had been received out-of-session since the last meeting:

- a letter dated 4 September 2012 from the AFMA Chief Executive Officer to all RAG members regarding dealing with conflicts of interests in meetings;
- an e-mail dated 2 October 2012 from Peter Neave advising that a public notice was placed in the ‘Australian’ newspaper seeking public comment on the amendment to the Macquarie Island Toothfish Fishery Management Plan;
- an e-mail dated 13 November 2012 from Peter Neave seeking members comments on the Department of Agriculture, Fisheries and Forestry review of the Commonwealth Policy on Fisheries Bycatch and the Commonwealth Fisheries Harvest Strategy Policy; and
- an e-mail dated 1 March from Sarah Kirkcaldie attaching a letter from Dr Nick Rayns, Executive Manager, Fisheries, AFMA , regarding the Quota Administration policy.

Members noted that the Macquarie Island Toothfish Fishery Management Plan amendment was accepted and a new fishing year determination made by AFMA which means the 2012/13 fishing year will now finish on the 30th April 2013 and future fishing years will start on 1 May.

Members further noted that the Commonwealth Policy on Fisheries Bycatch and the Harvest Strategy will be going to the Minister for Agriculture, Fisheries and Forestry on 30 March for consideration.

Agenda item 5 – Fishing operations – update

Messrs Exel and Scott provided SARAG with a verbal update on fishing operations in the HIMI Fishery and MITF.

Mr Scott advised that Australian Longline Pty Ltd was not fishing at the moment but will be fishing both the MIT and HIMI fisheries. Members noted that there had been a delay in getting the ‘Antarctic Chieftain’ into the HIMIF by mid-April due to predicted legislative changes to the Navigation Act and occupational, health and safety issues.

Mr Arangio noted that Austral Fisheries Pty Ltd had been potting in the HIMIF earlier this year however commercially catch rates were not high enough and any further fishing using that method was now on hold. Members noted that the Company was planning to begin longline fishing in the HIMIF on 15 April 2013. Members noted that the new longline vessel the ‘Isla Eden’ will conduct two shorter trips between 1 May and 14 September with the ‘Austral Leader II’ doing two longer trips. Mr Arangio further noted that the trawler ‘Southern Champion’ had a successful summer of icefish fishing and will be leaving shortly to conduct the annual random stratified trawl survey (RSTS) and also fish for icefish. SARAG noted that the trawler is then expected to do one more trip before the vessel is retired.

Mr Arangio provided members with an update on the whale photo identification concept. Members noted that the French are currently experiencing issues with whales and have started taking photos and have developed a whale identification catalogue. He noted that two whales had been sighted in recent years in the HIMIF and in both cases the vessel steamed away from the fishing grounds.



SARAG noted that the concern for industry is that the whales are getting trained to be where the vessels are. Industry has proposed to purchase special cameras so photos can be taken and compared with the French. Members suggested that industry develop a plan so that it can be included as part of the training of observer.

Mr Exel noted that whilst his Company was potting earlier this year the vessel pulled up two different specimens of whale skull. The skull was mineralised and was found in the N/NE corner of the HIMIF. Mr Exel advised that a sample had been brought back to Australia and investigations were underway to determine whether a museum would be interested in the sample. Mr Arangio noted that it was most likely a sperm whale.

Macquarie Island Toothfish Fishery

Agenda item 6 – Stock assessment and TAC recommendation

Ms Wayte presented a paper entitled; 'Stock Assessment of the Macquarie Island fishery for Patagonian Toothfish (*Dissostichus eleginoides*) using data up to and including August 2012'.

Ms Wayte advised that the assessment makes use of the Stock Synthesis assessment software and fits to data obtained from the tag-recapture program since 1995, to length composition information for the years 1994 – 2012, and to age-at-length data obtained from aged otoliths (1997 – 2010). Members noted that there is currently no one at AAD conducting ageing work and that they were seeking external funding sources to do future work.

The following information on the base-case model structure and assumptions were considered by SARAG, which apart from new data remain unchanged from the two area assessment presented in 2012:

1. a single reproductive stock of toothfish, with spatial structuring of the population within the region;
2. a two area spatial model, considering a northern and southern area, with movement of fish between areas, and recruitment to both areas;
3. fitted to data from the entire fishery: 2012/13 catch, length composition and tag recapture data to 2012 and age data up to 2010;
4. five fleets to account for differing selectivity. Southern area - (1) Aurora Trough trawl, (2) Aurora Trough longline, (3) southern Macquarie Ridge longline. Northern area (4) Northern Valleys trawl, and (5) northern Macquarie Ridge longline;
5. logistic selectivity for the Macquarie Ridge fleets, dome-shaped for the others;
6. steepness = 0.75, recruitments estimated from 1985 - 2003;
7. natural mortality, $M=0.13$;
8. growth curve parameters estimated within the model, except female L_{max} fixed at 165cm; and
9. length at 50% maturity fixed at 139 cm.

SARAG also considered sensitivity analyses to examine the consequences to the model results of alternative assumptions. The assessment estimates the current female spawning stock biomass is at 69% of pre-fishery biomass, which is similar to last year.



The CCAMLR decision rule, which is also applied to Patagonian toothfish in the HIMIF requires that the TAC should be the constant catch such that:

- the probability that spawning biomass will fall below 20% of the pre-exploitation level over the 35 year projection period must not exceed 0.1; and
- the median escapement for the Fishery of the spawning biomass shall not be less than 50% over a 35 year projection.

Members noted and agreed that the assessment indicated a range of TAC levels between 405 and 450 tonnes depending on the fishing strategy adopted in terms of the expected distribution of catches among areas. SARAG agreed it is important to maintain fishing across the entire fishery which would continue the previous strategy of spreading effort to help build a comprehensive picture of the fishery.

Industry Members indicated that they would adopt a fishing strategy where toothfish would be taken in approximately the following proportions: 250 tonnes from the Aurora Trough, 99 tonnes in the southern Macquarie Ridge and 66 tonnes in the northern Macquarie Ridge. It is understood that fishing the more rugged northern Ridge is more difficult. Latitude 54°15' is the divide between the northern and southern sectors of the Macquarie Ridge. This proposed strategy resulted in a recommended TAC of 415 tonnes for the 2013/14 season. SARAG agreed and recommended that a toothfish TAC of 415 tonnes be adopted.

Industry members noted that in recent years a lot more smaller fish have been caught in the <2 kilogram class. Industry estimated that about 18% of the catch is less than 2 kilograms.

Members noted that since fishing operations began in the MITF in 1994 approximately 13,000 toothfish have been tagged with about 1,700 recaptures. SARAG agreed that the tagging sampling should be representative of the catch composition and at a minimum reach the CCAMLR standard overlap of 60%. Industry agreed that operationally this target was possible and agreed to discuss what will work and report back to SARAG (**Action arising 4**). Members noted that observers will be able to work out overlap and this will now be included in the observer supplement notes.

Members noted that bycatch limits are also required to be set. It was agreed at a previous SARAG meeting that a 50 tonnes limit on any one species (other than Patagonian Toothfish) continue to be applied, but there was no need to retain an overall bycatch limit of 200 tonnes for bycatch species. SARAG noted that this was consistent with the approach adopted by CCAMLR and in the HIMIF for setting catch limits for bycatch species. SARAG also recommended that a 50 tonnes limit be set for any one bycatch species.

SARAG thanked Ms Wayte for her presentation.

Agenda item 6.1 – MSE report

Dr Haddon provided an update on the CSIRO project titled 'Update on MSE progress for Macquarie Island Toothfish' which briefly outlined possible management strategy evaluation (MSE) issues for future investigation.

Members noted that it was due for completion in March/April 2014. Industry requested that priority be given to evaluating potential changes to natural mortality and the sensitivity of the assessment to movement and tagging data. An update on these tasks was requested by September 2013 (**Action arising 5**).



Agenda item 7 – Fishery Assessment Plan

SARAG considered the draft Fishery Assessment Plan (FAP) for the Macquarie Island Toothfish Fishery for the 2013/14 Season. The FAP ensures that an adequate program of monitoring takes place in the fishery. The FAP stipulates:

- (1) AFMA must develop and implement a fishery assessment plan to ensure that an adequate program of monitoring takes place in the fishery.
- (2) The fishery assessment plan must provide for:
 - (a) an adequate program of monitoring to ensure that reliable fisheries stock estimates can be for Patagonian toothfish; and
 - (b) adequate monitoring of the direct impact of the fishery on species other than Patagonian toothfish and the ecosystem in the fishery area; and
 - (c) the allocation, before the beginning of each fishing year, of monitoring responsibilities to statutory fishing right holders in proportion to the numbers of statutory fishing rights they are likely to hold at the beginning of that fishing year.
- (3) In developing and implementing a fishery assessment plan, AFMA must:
 - (a) consult, and have regard to the views of, SouthMAC, SARAG and the holders of statutory fishing rights; and
 - (b) have regard to the 5-year strategic research plan mentioned in paragraph 6(i).

SARAG agreed that a tagging rate of 2 tags per tonne was an appropriate rate across the entire fishery for the 2013/14 season.

Members noted that the Fishery Assessment Plan for the MITF for the 2013/14 season needs to be signed and dated by the start of the season on 1 May 2013.

Heard Island and McDonald Islands Fishery

Agenda item 8 – Fisheries Assessment Plan

SARAG members noted that the 2012/13 Heard Island and McDonald Island Fisheries Assessment Plan was agreed to and finalised by 1 March 2013.

Members discussed the requirement to continue the random stratified trawl survey in future years given the expansion of non-trawl fishing methods and the decommissioning of the trawler the 'Southern Champion'.

Industry noted that once the 'Southern Champion' is decommissioned they would need to charter a vessel to conduct the RSTS which would cost significantly more than the current costs using the 'Southern Champion'. Industry advised they would like to only conduct the survey every two years from this year with more focus on tagging and ageing. Industry advised that it would be desirable to undertake a Kerguelen Plateau wide RSTS every two years which linked with fishing activity in the adjacent French fishery at Kerguelen Island.

SARAG noted that industry and AAD would discuss the need for the RSTS at the consultation meeting on 20th March 2013. AFMA agreed to keep SARAG up-to-date with the outcomes from that meeting.



Agenda item 9 – Benthic impacts research project

SARAG noted the update from AAD on the project titled “Demersal fishing interactions with marine benthos in the Australian EEZ of the Southern Ocean: an assessment of the vulnerability of benthic habitats to impact by demersal gear”.

SARAG noted that the project had been delayed due to staffing changes and the final report was currently being finalised. It is anticipated that the full draft will be circulated by the second week in April. Members noted that there were funds identified to do a peer review and SARAG agreed that this should be conducted and suggested that Steve Parker and Susan Jones may be suitable reviewers. SARAG agreed that it required at least one to two weeks to review the project. Dr Welsford agreed to provide an update to the Fisheries Research and Development Corporation who are funding the project (**Action arising 6**).

Members noted that 1.6% of the fishing grounds available to trawling (waters shallower than 1000m) outside of the marine protected areas had been trawled.

Observers

Agenda item 10 – Observer coverage and duties

SARAG discussed observer coverage in the HIMI Fishery and noted that the current set of duties occupied a full 24 hour period and included many high priority biological, fish and bycatch data collection, tagging and wildlife observations.

At the last SARAG meeting members concluded that while adjustments (including electronic monitoring) may be possible in the medium to longer term and would be useful in reducing the current high overall workload for observers and the Data Collection Officer (DCO), these were unlikely to result in a large enough reduction of duties to allow for only one observer to be carried on a voyage. Any adjustments would require work in CCAMLR to revise its requirements.

Mr Neave advised that AFMA recently approached the market through an open Request for Proposal (RFP) process with a view to gain a better understanding of what electronic monitoring and related services are available in the broader market and to potentially engage a provide or consortium of providers to supply these services. Members noted that the RFP process is nearly complete and the outcome will be announced within the next two months (**Action arising 7**).

Industry members and observers advised they had no difficulty in having two observers/DCOs on the vessels continuing to collect the data which have been collected since operations first began in sub-Antarctic fisheries, but expressed concern at the costs of the observer program.

Research

Agenda item 11 – Research issues

SARAG discussed the status of current research projects and possible future research.

SARAG noted that the Commonwealth Fisheries Research Advisory Body (ComFRAB) has supported the project, ‘Developing robust assessment methods for spatially complex, multi-jurisdictional toothfish fisheries in the Southern Ocean’ for Fisheries Research and Development Corporation (FRDC) funding in 2013/14 with a full proposal lodged on 15 February 2013.



The project has been modified since it was rejected for 2012/13 funding by FRDC earlier this year. The project has secured funding from a number of sources including industry (\$165,000), the Institute for Marine and Antarctic Studies (\$270,000) and possibly France (€50,000). The FRDC component being sought is \$187,000, which is substantially lower than the amount sought in the previous application.

SARAG noted that the CSIRO project 'Stock assessment and management strategy evaluation for sub-Antarctic fisheries (1 April 2013 to 21 March 2015)' to enable the ongoing stock assessment work at Macquarie Island has received continued funding. This project is funded 80% by industry through the levy base and 20% by Government.

Members further noted that AAD, industry and the Institute for Marine and Antarctic Studies are also in discussions regarding seeking FRDC support for further ageing work for HIMI and MITF toothfish.

Agenda item 12 – New Zealand toothfish tagging/data sharing

Mr Neave advised that, as requested at the last SARAG meeting, he wrote to the New Zealand Department of Primary Industries requesting information on the toothfish tagging program undertaken by New Zealand in their EEZ. AFMA requested information on the number of toothfish that have been tagged and whether there have been any captures of New Zealand tagged or Australian tagged toothfish.

Members noted that recently AFMA has received a response and request from New Zealand seeking a more detailed data-sharing agreement about each countries respective tagging programs.

SARAG agreed that the following information could be provided to New Zealand authorities, with a view to getting similar information in return

- numbers of tagged fish released annually by each respective fisheries (and fishing method used, i.e. trawl vs. longline);
- physical description of tags used (i.e. tag colour, tag design, double- vs single-tagged, tag sequence numbers) annually in respective fisheries;
- tags recaptured annually originating from within our own fishery;
- tags recaptured annually originating from the other country's fishery (including tag sequence numbers and sizes of recaptured fish); and
- tags recaptured annually originating from within the CCAMLR Subarea 88.1 fishery (including tag sequence numbers and sizes of recaptured fish).

Members noted that AFMA would request that New Zealand provide similar information on the toothfish tagging programs for New Zealand vessels operating in waters in the vicinity of Macquarie Island and provide any information tag recaptures (**Action arising 8**).

Agenda item 13 – Scientific cooperation with France

Industry members informed SARAG that they have continued to meet and discuss research coordination with France across the Kerguelen Plateau. These meetings have included discussing the whale photo identification concept as well as the possibility of doing a joint random stratified trawl survey.



Member's noted that the French industry was continuing to support their scientist's work on assessments and progress towards Marine Stewardship Council certification. A significant review has been conducted on the French stock assessment particularly looking at bycatch. SARAG noted that at this point in time Crozet Island fishery was not part of the review.

Environment

Agenda item 14 – Review of environmental interactions and gear loss

SARAG noted that no seabirds had been killed in the MITF as a result of an interaction with the fishing gear this season. However, in the HIMIF there have been four wildlife interactions since the last SARAG meeting.

In September 2012, a diving petrel was found dead on the deck after colliding with the 'Austral Leader II'.

In October 2012 two seabirds were killed in longline operations on the 'Austral Leader II': a giant petrel (sp unknown) was found dead on a hook when the lines were hauled and a southern giant petrel was killed after being hooked and dragged under water.

A black browed albatross became entangled in the mesh behind the head of the trawl on the 'Southern Champion' in January 2013.

SARAG noted that industry was working hard to ensure that these incidents are not repeated. Mr Arangio advised that Austral Fisheries P/L were looking at deploying the tori lines using extended booms and extra hook up points. The company will also be implementing a new line shooter that ensures the line falls closer to the stern of the 'Austral Leader II' and 'Isla Eden' in line setting operations.

Members also noted that the gear loss at Macquarie Island had halved since 2011/12 although the amount of hooks set remained about the same and advised that catch rates were down. Members agreed that effort should be included in future reports to SARAG **(Action arising 9)**.

Other

Agenda item 15 – Other business

SARAG discussed a number of 'other business' items.

Members noted that Dr Welsford had provided draft chapters for an FRDC funded project: 'Informing the review of the Commonwealth policy on Fisheries Bycatch through assessing trends in bycatch in key Commonwealth fisheries'. The chapters had been circulated to members previously to ensure accuracy and consistency. SARAG noted that the AFMA bycatch and discarding workplan cross-referenced this document.

Dr Haddon recommended that SARAG should advise AFMA what material discussed and papers produced for SARAG consideration should be made public on the AFMA website. It was agreed that as a minimum the RAG agenda and minutes, stock assessments and the sub-Antarctic fisheries bycatch and discarding workplan should be posted on the website.

Industry expressed their frustration regarding the need to have a scientific permit to collect this data for CSIRO. Mr Scott noted that his company wanted to assist CSIRO by conducting acoustic and sampling work between New Zealand and Tasmania but to conduct this work would require the Company to hold a New Zealand fishing permit, a high seas permit as well as a scientific permit.



Agenda item 13 – Next meeting

SARAG agreed to hold its next meeting in early August 2013 where the HIMI stock assessment would be the main issue discussed.

The meeting closed at 3.45 pm.

Actions arising from SARAG 46

Item	Action arising	Action person
1	HIMI Fishery Research - Dr Welsford to test through MSE the potential effects on the HIMI Fishery stock assessments of moving the RSTS to every other year and an indication of the timing to undertake the work.	AAD
2	HIMI Fishery Research - Dr Welsford to provide an outline of how the overcatch/undercatch issue could be addressed under MSE and an indication of the timing required to undertake the work.	AAD
3	HIMI Fishery Bycatch - Mr Neave to prepare a draft document which outlines the bycatch issues for sub-Antarctic fisheries and the strategies that have been adopted to address them.	AFMA
4	Tagging in the MITF - Industry to report back to SARAG on how to achieve an overlap of at least 60% in the MITF and HIMI Fishery.	Industry
5	MSE – Natural mortality and sensitivity and movement and tagging evaluations to be provided for the MITF assessment by September 2013.	CSIRO
6	Benthic impacts research project – Dr Welsford to keep FRDC and SARAG up to date on project.	AAD
7	Electronic monitoring – AFMA to keep SARAG informed on the request for Proposal process.	AFMA
8	Toothfish Tagging – AFMA to write to New Zealand again providing publicly available tagging information and requesting similar information.	AFMA
9	Gear loss report – in future effort to be included in reports.	AFMA

