



SARAG 64

18 AUGUST 2021

SUB- ANTARCTIC RESOURCE ASSESSMENT GROUP (SARAG)

CHAIR: Dr Malcolm Haddon

Date: 18 August 2021

Venue: Teleconference and Australian Antarctic Division

Attendance

Members	Observers
Dr Malcolm Haddon, Chair	Mr Trent Timmiss, AFMA
Dr Rich Hillary, CSIRO	Dr Heather Patterson, ABARES
Dr Jemery Day, CSIRO	Mr Martin Johnson, Industry
Dr Philippe Ziegler, AAD	Mr Brad Milic, Industry
Mr Malcolm McNeill, Industry Member	Dr Jaimie Cleeland, AAD
Mr Rhys Arangio, Industry Member	Dr Genevieve Phillips, AAD
Mr Brodie Macdonald, AFMA	Mr Dale Maschette, AAD
Ms Sarah Kirkcaldie, Executive Officer, AFMA	Dr Cara Miller, AAD

Introduction

Agenda item 1 - Preliminaries

The sixty fourth meeting of the Sub-Antarctic Resource Assessment Group (SARAG 64) was opened at 9am on 18 August 2021 by the Chair, Dr Malcolm Haddon. Dr Haddon welcomed members and observers to meeting.

1.1 Acknowledgment of Country

The Executive Officer on behalf of all members and observers acknowledged the Traditional Owners of the land on which we met, and also paid our respects to Elders past, present and emerging.

1.2 Declaration of interests

Dr Haddon asked members and observers to state their name and profession and declare any conflict of interest that they may have on specific agenda items.

Dr Haddon advised that he is both a CSIRO Honorary Fellow and an Adjunct Professor with the University of Tasmania and is currently involved in two Fisheries Research and Development Corporation (FRDC) projects relating to abalone. He declared he has no pecuniary interest in the sub-Antarctic fisheries.

Dr Hillary advised that he is employed by CSIRO and is the Principal Investigator of the Macquarie Island Toothfish Fishery (MITF) stock assessment. He also advised that he is a member of AFMA's Southern Bluefin Tuna Management Advisory Committee (SBTMAC) and



Tropical Tuna RAG. Dr Hillary advised that he has no pecuniary interests in the sub-Antarctic fisheries.

Dr Day advised that he is employed by CSIRO and works on the MITF stock assessment. Dr Day advised that that he has no pecuniary interest in the sub-Antarctic fisheries.

Mr McNeill advised he is the Managing Director of Australian Longline Fishing Pty Ltd (ALFPL) which holds various fishing rights in, and operates vessels in, the sub-Antarctic fisheries and New and Exploratory fisheries under the jurisdiction of Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). Mr McNeill further advised he is a member of Sub-Antarctic Management Advisory Committee (SouthMAC) and Board member of the Coalition of Legal Toothfish Operators (COLTO). Mr McNeill 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 Arangio advised that he is employed by Austral Fisheries P/L (Austral Fisheries) as the Senior Manager of Environment and Policy. Austral Fisheries owns Statutory Fishing Rights (SFRs) in the Australian sub-Antarctic fisheries and waters under the jurisdiction of CCAMLR. Mr Arangio further advised he is the Executive Officer of COLTO, as well as being a member of SouthMAC. 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.

Dr Ziegler advised that he is employed by AAD and is the Fishery scientist responsible for Heard Island and McDonald islands Fishery (HIMIF) work, including the HIMI stock assessments. Dr Ziegler has no pecuniary interest in the sub-Antarctic and his salary is not connected to any research grants noting that he is a co-investigator on a current FRDC project and future FRDC projects. Dr Ziegler informed members that he is also a member of SouthMAC.

Mr Macdonald advised he is employed by the Australian Fisheries Management Authority (AFMA) as the Manager for sub-Antarctic fisheries at AFMA. Mr Macdonald advised he has no pecuniary interests in the sub-Antarctic fisheries.

Ms Kirkcaldie advised she is employed by AFMA as a Senior Management Officer and advised that she is also the Executive Officer for SouthMAC and SBTMAC. Ms Kirkcaldie advised that she has no pecuniary interests in the sub-Antarctic fisheries.

Dr Patterson advised she is an employee of the Department of Agriculture, Water and the Environment and is the Editor of the Australian Bureau of Agricultural Resource Economics and Sciences (ABARES) Fishery Status Reports. Dr Patterson noted that she had no pecuniary interest in the sub-Antarctic fisheries.

Mr Timmiss advised he is employed by AFMA as a Senior Manager, Tuna and International fisheries and that he is also the member on the Tropical Tuna MAC (TTMAC) and SBTMAC. Mr Timmiss advised that he has no pecuniary interests in the sub-Antarctic fisheries.

Mr Dylewski advised he is an employee of the Department of Agriculture, Water and the Environment and an author of the ABARES Fishery Status Reports. Mr Dylewski noted that he had no pecuniary interest in the sub-Antarctic fisheries.

Mr Johnson advised he was attending as an observer to SARAG and is the Sustainability and Operations Coordinator of ALFPL which holds various fishing rights in, and operates vessels in, the sub-Antarctic fisheries and New and Exploratory fisheries under the jurisdiction of



CCAMLR. Mr Johnson is not aware of any investigation or prosecution action by AFMA against ALFPL or any litigation entered in to by ALFPL.

Mr Milic advised he was attending as an observer to SARAG and is the General Manager, Operations, at ALFPL which holds various fishing rights in, and operates vessels in, the sub-Antarctic fisheries and New and Exploratory fisheries under the jurisdiction of CCAMLR.

Mr Maschette advised that he is a scientist at the University of Tasmania. Mr Maschette advised that he has no pecuniary interests in the sub-Antarctic fisheries.

Dr Phillips advised that she is a fisheries scientist at the Australian Antarctic Division and had no pecuniary interest in the sub-Antarctic fisheries.

Dr Cleeland advised that she is a fisheries scientist looking at skate bycatch assessment at the Australian Antarctic Division and had no pecuniary interest in the sub-Antarctic fisheries.

Dr Miller advised that she is a fisheries scientist at the Australian Antarctic Division and had no pecuniary interest in the sub-Antarctic fisheries.

1.3 Apologies and observers

SARAG noted an apology from Dr Dirk Welsford.

1.4 Agenda

SARAG adopted the agenda with no changes.

Agenda item 2 – Adoption of minutes from SARAG 63

The draft minutes from SARAG 63 held on 5-6 May 2021 were circulated for comment on 23 June 2021. Comments were received from Dr Heather Patterson, Mr Rhys Arangio and Dr Philippe Ziegler. Members noted that the minutes from the SARAG 63 meeting are now finalised



Agenda item 3 – Actions arising from SARAG 63

Actions arising from SARAG 63

Item	Action arising	Status
1	Longline survey – AAD to keep SARAG up-to-date regarding a longline survey in the HIMIF (SARAG 62 Agenda item 7).	The AAD scientific member noted that the random stratified longline survey was in the design stage and an update will be provided at SARAG 65 (Action arising 1).
2	Skate stock assessment – AAD to present skate stock assessment to SARAG 64 (SARAG 63 Agenda item 9).	Members noted that this item will be discussed under agenda item 9.
3	Electronic monitoring trial – Members agreed to form a small sub-committee to discuss the protocols for conducting an electronic monitoring trial (SARAG 63 Agenda item 15).	Members noted that the sub-committee had met and will be discussed under Agenda item 12a.

Agenda item 4 – Correspondence

SARAG noted the following correspondence which had been received out-of-session since the last meeting in August 2020:

- An email dated 23 June 2021 from Sarah Kirkcaldie seeking comments on the draft minutes from SARAG 63 held on 5-6 May 2021:
- An email dated 29 July 2021 from Sarah Kirkcaldie seeking comments from members on the draft agenda for SARAG 64;

Agenda item 5 - Fishing operations update

Mr Arangio and Mr McNeill provided SARAG with verbal updates on fishing operations in the HIMIF, MITF and CCAMLR Exploratory fisheries.

Mr Arangio noted that Austral fisheries had all three longliners currently fishing in the HIMIF and that fishing for Patagonian Toothfish was the best in the last 3 years with a lot of positive signs and an increase in catch per unit effort. Members noted that the Mackerel icefish quota has all been caught and there were 2 observers on all boats so far in the 2020/21 season. Mr Arangio noted that the *Atlas Cove* was expected to finish fishing at the end of October and return to port to unload before heading to William's Ridge and to trawl at HIMIF. Members noted that the *Cape Arkona* would have a refit when it returns to port before heading back down to trawl in February.



Mr Arangio noted that Sperm whales were prevalent in April and May but left earlier than usual with the last sighting in late May. SARAG noted that the Austral Fisheries vessels had lost some gear but were planning to attempt to recover it at end of season.

Mr McNeill noted that in April the *Antarctic Aurora* took three seabirds and is unable to fish the season extensions for the reminder of the 2020/21 season. Members noted that the vessel recently took another seabird and would cease fishing on 14 September. It is anticipated that the *Antarctic Aurora* would unload in Hobart and then go to New Zealand before heading down the fish the Ross Sea exploratory fishery. Members noted that the company is unsure if the Antarctic Discovery will use the MITF season extension and will return to port shortly before fishing the East Antarctica exploratory fishery.

SARAG also noted the update provided by the AFMA observer section.

Observer deployments in Southern Ocean Fisheries Update

Due to the ongoing COVID 19 pandemic the AFMA Observer Program has continued to face considerable logistical challenges in deploying AFMA Observers onboard Southern Oceans vessels. When deploying AFMA observers, AFMA carefully considers the risks to the observers while ensuring compliance with various governments COVID-19 related border closures and quarantine measures. At times it has been impossible to place two observers on vessels. In response, AFMA amended the HIMI Fishery SFR conditions to allow those vessels fishing after 30 April to fish with a single observer. The MITF SFR conditions were also amended to allow the vessel to fish with an e-monitoring system and one observer.

To ensure the health and wellbeing of a single observer deployed on some voyages and to ensure CCAMLR Scheme of International Scientific Observation (SISO) data collection requirements are met, AFMA and AAD Technical Coordinators have modified the observer duties to account for the reduction in coverage. This ultimately has had an impact on the amount of tagging, biological sampling, catch composition, wildlife/ line observations, otolith removal, gonad staging, and conversion factor tests undertaken by the observers.

Where a Capfish or New Zealand Ministry for Primary Industries data collection officer was unable to be deployed with an AFMA Observer, the opportunity to deploy two AFMA Observers was taken. Where an AFMA observer was unable to be deployed, an Observer from an AFMA accredited observer provider was used.

Observer deployments to date*

For the season to date

Observers have been deployed on 15 completed fishing voyages with reports and data undergoing data quality control and submitted to the CCAMLR Secretariat There are another five voyages currently underway:

- Four Heard Island and McDonald Islands Fishery (HIMI) voyages, and
- One Macquarie Island Toothfish Fishery (MITF) voyage.



Tagging statistics to date*

- 2644 toothfish have been tagged at HIMI (952 recaptured).
- 95 skates have been tagged at HIMI (22 recaptured).
- 510 toothfish have been tagged at Macquarie Island (116 recaptured).
- No skates have been tagged or recaptured at MITF.
- 120 toothfish have been tagged in Ross Sea (26 recaptured).
- 376 skates have been tagged in Ross Sea (one recaptured).
- 309 toothfish have been tagged in East Antarctic (10 recaptured).
- No skates have been tagged in East Antarctic.

Mr McNeill, Mr Arangio, Mr Milic and Mr Johnson declared their interest under all remaining agenda items. The members left the room. SARAG discussed whether the members needed to leave the room for any agenda items; it was agreed that, as their input was essential to the agenda items, they should remain in the meeting room for all discussions but not recommendations. It was further agreed that at any time if members felt that Industry should not be in the room they would be asked to leave.

Heard Island and McDonald Islands Toothfish Fishery

Agenda item 6 – Skate and ray assessment

Dr Cleeland presented a preliminary bycatch assessment for skates (*Bathyraja* spp.) in the Heard Island and McDonald Islands fisheries.

SARAG noted that despite being widely distributed over the Kerguelen Plateau, the three skate species vary in abundance by depth strata. The smaller *B. murrayi* is not found often but is most commonly observed in the shallower waters where the icefish fishery currently operates. Similarly, the larger *B. eatonii* is seen frequently in icefish trawls, as well as ranging into deeper waters where longline operations targeting toothfish occur. The largest species, *B. irrasa* is predominantly observed in the longline fishery on the slopes of the Kerguelen Plateau. Members noted that the skate bycatch during trawling is mainly retained whereas skates are cut off alive during longlining. Dr Cleeland highlighted that observer scaled counts and vessel counts of skate bycatch vary, with the vessel count typically being lower. Industry indicated they are confident in the vessel counts of skate bycatch.



^{*}Figures reported only include completed voyages

SARAG noted that the current tag recapture rates for all three species of skate are very low. Members noted that in the past tags have been released across the whole HIMI region. The results of Dr Cleeland's study show that the core areas representing the greatest number of recaptures and releases for each species occurs in an area to the east of Heard Island. SARAG recommended a new tagging area to concentrate the tagging effort which would include both plateau and slope habitats across a wide depth range that has been subject to considerable fishing effort over the last ten years.

SARAG noted that the Skate and Ray handling guide needed to be updated and observer training also improved to increase understanding of cut-off and recording numbers correctly.

SARAG noted that the preliminary analysis indicated that the 120 tonne bycatch limit is currently suitable but supported a skate bycatch workshop to further evaluate biomass and estimates and updated catch limits for skates.

SARAG also discussed fishery or species-specific catch limits to avoid a situation where, for example, high skate bycatch in the mackerel icefish fishery, which typically occurs before the toothfish longline fishery, would close the toothfish fishery before the toothfish catch limit has been reached. SARAG recommended that a 'soft limit' of 50 tonnes (monitored by observer weekly reports) of skate caught should trigger a discussion between AFMA, AAD and industry, with a maximum of 80 tonnes of skate caught by the Mackerel icefish fishery would see trawling cease until toothfish fishing had been completed.

SARAG thanked Dr Cleeland for her presentation and recommended that a summary of her findings is distributed.

Agenda item 7 – Mackerel Icefish stock assessment

SARAG noted a stock assessment for Mackerel icefish at HIMI.

Members noted that the 2021 survey showed a large 3+cohort dominating the Mackerel icefish population with the biomass 3000 tonnes larger than in the 2020 survey. The AAD scientist explained that this was to be expected given that the same cohort dominated the 2020 assessment as a 2+ cohort. Members noted that as in previous years, the preliminary assessment removed the 4+ cohort as it is unlikely that it will be available to the fishery in the coming years and only uses the 1+ -3+ cohorts in the forward projections.

Members noted that the projections from Grym, the Generalised Yield Model which was rewritten in R and approved by CCAMLR in 2020, recommend catch limits of 1528 tonnes for 2021/22 and 1138 t for 2022/23, which satisfy the CCAMLR decision rules. Members noted that a two year catch limit is always presented to CCAMLR but the assessment indicated that a one year conservation measure would be more appropriate.

SARAG agreed that the paper be presented to WG-FSA and Scientific Committee with the recommendations for the two year catch limits, but that the catch limit recommendation for a single year (2021/22) only be sought from CCAMLR.



Agenda item 8 – Bycatch limits for the 2021/22 season

Since there was no updated advice on bycatch limits, SARAG recommended that bycatch limits from the current fishing season be rolled over to the coming fishing 2021/22 season.

Heard Island and McDonald Islands Fishery bycatch species:

Macrourus Caml and M. whitsoni	409 tonnes
M. halotrachys and M. carinatus	360 tonnes
Unicorn Icefish (Channichthys rhinoceratus)	1 663 tonnes
Skates and Rays (<i>Bathyraja spp.</i>)	120 tonnes
Grey Rockcod (Lepidonotothen squamifrons)	80 tonnes
All other species	50 tonnes
	(for each species)

Members noted that the recommended bycatch limits for the 2021/22 season will be provided to SouthMAC before being considered by the AFMA Commission.

Agenda item 9 – Patagonian Toothfish stock assessment

AAD presented an updated integrated stock assessment for the Heard Island and McDonald Islands Patagonian Toothfish (*Dissostichus eleginoides*) fishery.

Members noted that the 2021 HIMI Patagonian toothfish stock assessment was consistent with the 2019 assessment, and indicated that the SSB has further decreased since 2019–the stock was estimated to be at 45% of B0 compared to 51% of B0 in 2019. AAD explained that the estimate is below the target reference point of B50 and that under the catch limit which satisfies the CCAMLR decision rule the stock is projected to continue to decline to 37% of B0 over the next seven years before recovering to the target level at the end of the projection period. This decline in spawning biomass is also likely to deplete available biomass leading to reduced future commercial catch rates meaning the fishery may need to increase effort to catch the same level of catch. Additional fishing effort may lead to more environmental impacts from the fishery and deteriorating economic conditions. The long-term projected recovery also assumes a more optimistic pattern of recruitment compared to what has been seen in the fishery for the last 20 years. If recruitment does not return to pre-1996 levels, then the current decision rule is unlikely to achieve the management objective.

At SARAG 63, members discussed the need to develop a strategy with explicit targets to be implemented immediately to support the recovery of SSB to target sooner than the CCAMLR decision rules and that a more conservative domestic TAC be set for 2021/22 and 2022/23 before a longer-term strategy is developed.



SARAG considered a number of different stock targets and resulting catch scenarios and supported the adoption of scenario that recovers the stock to 50% of B0 at the end of a 20-year projection period.

Scenario	Stock target	Catch limit (t)
(a)	CCAMLR decision rule	3010
(b)	Target of 55% B ₀ at the end of 35-year projection period	2680
(c)	Target 50% B ₀ at end of 25-year projection period	2790
(d)	Target 50% B ₀ at end of 20-year projection period	2510
(e)	Median SSB status above 40% B ₀	2210
(f)	Constant harvest rate: H = 0.06 (catch limit of)	1950 (2021/22), 2070 (2022/23), 2210 (2023/24), 2350 (2024/25)

AFMA and AAD supported the adoption of recovering the stock to 50% of B_0 at the end of a 20-year projection period resulting in a catch limit of 2510t (scenario (d)). Members noted that this option strikes a balance between maintaining catch levels at reasonably high levels whilst minimising the depletion of the stock and the amount of time it is projected to spend below B_{40} . SARAG acknowledged that this would result in a significant financial loss for industry and a step-down approach was a sensible option.

Industry left the room and SARAG endorsed a 50% step down approach, recommending a TAC of 2760 tonnes in 2021/22 and 2510 tonnes in 2022/23. Members noted that this recommendation would be presented to SouthMAC before being presented to the AFMA Commission.

CCAMLR & Exploratory Fisheries

Agenda item 10 – Update from WG-EMM and WG-SAM

SARAG noted that the Working Group for Statistics, Assessments and Modelling (WG-SAM) was held online from 28 June to 2 July and the Working Group for Ecosystem Monitoring and Management (WG-EMM) was held from 5-9 July 2021. Members noted that no relevant papers to SARAG were submitted to WG-EMM and the paper submitted to WG-SAM were well received including a preliminary evaluation of alternative harvest control rules.

Agenda item 11 – Papers to WG-FSA, SC & Commission

AAD have indicated that the following papers will be submitted to the 2021 CCAMLR Working Group meeting on Fish Stock Assessment (**WG-FSA**) (4 to 15 October 2021):

HIMI Report on the 2021 Random Stratified Trawl Survey;



- HIMI Updated Mackerel icefish assessment;
- HIMI Updated Patagonian Toothfish assessment;
- Update of the research plan for 58.4.1 and 58.4.2 already submitted to SAM;
- Update of East Antarctic ageing and growth.

SARAG noted that the time between the online meetings will help the delegation progress any papers and allow time for flexibility if required. Members noted that the aim would be that Australia would be able to fish in statistical division 58.4.1 again but if this was not allowed the research plan for statistical division 58.4.2 included a new research block.

Research

Agenda item 12 - Recent research

a. Electronic monitoring trial

Members noted that following SARAG 63 an e-monitoring sub-committee was established. The first e-monitoring working group meeting was held on 11 June 2021. A range of actions were agreed and currently being progressed including:

- 1. AFMA to advise on types of EM cameras used.
- 2. AFMA to share EM footage with working group members
- 3. AFMA to investigate using an identifier in the data to link catch items with logbooks and observer data.
- 4. AFMA to work on developing program objectives
- 5. AFMA to distribute observer data collection tasks to identify tasks that can be undertaken using EM.
- 6. AFMA to share images from the four boats with EM with CSIRO, to ensure that handling practices/camera views etc are compatible with image recognition software.

Members noted that unfortunately a drive recently received from the *Cape Arkona* was corrupted so no footage could be reviewed. Members noted that AFMA was looking at moving to solid state drives which are more expensive but more reliable. Members further noted that *Antarctic Aurora*'s drives were recently received, and the company has seen footage. Industry noted that the footage inside the vessel was very clear, however, there were splashes of water on the outside cameras. Industry agreed to discuss with AAD how the footage could be used for collecting information on skates (**Action arising 2**).

Industry questioned if there had been any success in aligning footage with time. SARAG noted that this issue will be discussed at the next sub-committee meeting noting that it relies on very accurate set haul times and then the time difference can also cause problems.

SARAG noted that the AFMA member met with a representative from the UK to discuss the use of e-monitoring in CCAMLR fisheries. The initial focus will be on developing minimum



standards for e-monitoring systems, with papers to be developed for next year's cycle of meetings. The AFMA member will maintain engagement with the UK on e-monitoring.

b. Annual Research Statement

The AFMA member informed SARAG that AFMA drafted the 2022-2023 Annual Research Statement for the sub-Antarctic fisheries. The only project identified for AFMA funding next financial year was the Macquarie Island toothfish stock assessment.

SARAG noted the ARC process the remainder of this year (for funding in 2022/23) is as follows.

- Mid-August 2021 RAGs and MACs to identify priorities this includes the
 development of an annual research statement for each fishery and accompanying
 scopes for priority projects. These will need to be submitted, alongside the
 fishery's five-year strategic research plan, to the ARC for their consideration.
- Late August 2021- ARC considers priorities/scopes submitted as well as strategic issues and agrees on priorities to include in AFMA call for proposals
- Early September 2021 the ARC's call for applications is published, with proposals due mid-October 2021
- Late October 2021 proposals submitted are provided to RAGs and MACs and AFMA Management for comment, with comments due by mid-December 2021.
- February 2022 ARC meets to assess and recommend research proposals for funding to AFMA CEO for 2022-23 financial year

SARAG noted that moving the Patagonian Toothfish stock assessment to Casal2 was included in last year's statement but it has been removed from the 2022/23 statement, and it will need to be included in future research statements. SARAG also recommended that an estimation of skate post release mortality be included.

c. Any other research

No other Research projects were discussed at SARAG 64.

Environment

Agenda item 13 - Environmental interactions and gear loss

SARAG noted that during the 2020/21 HIMI Fishery fishing season (as at 10 August 2021) seven seabirds and six elephant seals have died as a result of interactions with fishing gear (since 1 December 2020):



- On 13 December 2020 a white chinned petrel was found deceased in the trawl net;
- On 2 April 2021 a Southern black browed albatross was hooked on longline gear when setting and drowned;
- Two white chinned petrels were hooked on longline gear when setting and drowned on 5 April 2021 and 17 April 2021;
- On 8 April 2021 a white chinned petrel was hooked on longline gear when setting and drowned:
- On 15 June 2021 a grey petrel was hooked on longline gear when setting and drowned;
- On 3 August a giant Southern petrel was hooked on longline gear when setting and drowned: and
- Six Southern Elephant Seals were found dead after being hooked on longline gear on 3 June, 30 June, 5 July, 23 July and two on 10 August 2021.

Members noted that during the 2020/21 seasons of the MITF and CCAMLR Exploratory Fisheries there were no marine mammal or bird interactions with fishing gear. Members noted that there were three Porbeagle shark interactions with fishing gear in the MITF.

SARAG noted that the spread of effort at HIMIF had resulted in a recent increase in gear loss and that industry were aiming to attempt to recover gear towards the end of season. In 2020/21 the exploratory fisheries also had a significant increase in gear lost when compared to the previous season.

Other

Agenda item 17 - Other business

Members noted that the fourth annual surveillance of the Marine Stewardship Council fisheries standard was conducted in 2021. Changes noted were gear loss and recovery, bycatch reduction and mitigation, habitat mapping and climate change.

AAD advised that a permit has been issued for sealice traps to be deployed on toothfish longline vessels at HIMI. SARAG noted that the observers will be required to take photos of the sealice catch in these traps and this task will be included on the observer requirements for the vessel

Agenda item 18 – Next meeting

SARAG agreed to hold the next SARAG meeting on Thursday 5 May 2022 in conjunction with a SouthMAC meeting. The key items for discussion will be the Mackerel icefish and skate assessments.

The meeting closed at 3:20 pm on Wednesday 18 August 2021.



Sub-Antarctic Resource Assessment Group (SARAG) Meeting 64

Final Agenda

Wednesday 18 August 2021

Teleconference/Australian Antarctic Division

Session 1: 9:00 - 10:00am AEST

Introduction

1. Preliminaries

	1.1	Welcome to Country	AFMA	For Information
	1.2	Declaration of interests	Chair	For Discussion
	1.3	Apologies	AFMA	For Information
	1.4	Adoption of Agenda	Chair	For Decision
2.	Mi	nutes from SARAG 63	AFMA	For Comment
3.	Ac	tion Arising	AFMA	For Discussion
4.	Co	rrespondence	AFMA	For Discussion
5.	Up	date on fishing operations	All	For Information
	(HIMI	, MITF, Exploratory, observers)		

Session 2: 10:15am - 12:15pm

Heard Island and McDonald Islands Fishery

6.	Skate and ray assessment	AAD	For Discussion
7.	Mackerel icefish stock assessment	AAD	For Recommendation
8.	Bycatch limits for the 2021/22 season	AFMA/AAD	For Recommendation



Session 3: 1:00 - 2:30pm

9.	Patagonian Toothfish stock assessment	AAD	For Recommendation
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CCAMLR & Exploratory Fisheries

10.	Update from WG-EMM & WG-SAM	AAD	For Discussion
11.	Papers to WG-FSA. SC & Commission	AAD	For Discussion

Session 4: 3:00 - 5pm

Research

12. Recent research

d.	Electronic monitoring	AFMA	For Information
e.	Annual Research Statement	AFMA	For Discussion
f.	Any other research	All	For Discussion

Environment

13. Environmental interactions and gear loss AFMA For Information

Other

14.	Other Business	Chair	For Discussion
15.	Next Meeting	Chair	For Discussion

