



Australian Government

Australian Fisheries Management Authority

Southern and Eastern Scalefish and Shark Fishery

Great Australian Bight Resource Advisory Group (GABRAG) Meeting

Meeting Minutes

Date: 6 December 2018

Venue: The Pier Hotel, Glenelg

Attendees

Name	Member type i.e. industry member
Mr Lance Lloyd	Chair
Dr Ian Knuckey	Scientific Member
Mr Anthony Moore	Scientific Member
Mr Jim Raptis	Industry Member
Mr Neil MacDonald	Industry Member
Ms Marcia Valente	Industry Member
Professor John Tisdell	Economics Member
Dr Miriana Sporcic	Invited Participant - CSIRO
Mr Daniel Corrie	AFMA Member
Ms Kehani Manson	Executive Officer

Minutes

1. Preliminaries

1.1 Introduction and apologies

- 1 The Chair opened the meeting and welcomed members and other participants at 09:00, Thursday 6 December 2018.

1.2 Declaration of interests

- 2 Members reviewed and updated the table of Declarations of Interest (included at Attachment 1) prior to the meeting.
- 3 The Chair asked participants to declare any interests in matters being considered, not limited to pecuniary gain. Such interests were declared by:
 - Jim Raptis, Marcia Valente and Neil MacDonald due to commercial interests.
 - Miriana Sporcic, Ian Knuckey and Anthony Moore due to research interests.
- 4 The RAG noted the individuals conflicts of interest and, recognising each participant's knowledge and valuable contribution to the discussions, the RAG agreed that on any agenda item for which a member had a particular conflict of interest, they should participate in the discussion of agenda items, but leave the room at the time that recommendations on that agenda item are being determined.

1.3 Adoption of Agenda

- 5 The RAG adopted the agenda (Attachment 2), noting that there were no additional items to be added.

1.4 Outstanding action items

6 The AFMA Member updated the RAG on the status of actions arising from previous GABRAG meetings. The updated Action Item status is included at Attachment 3. The RAG noted:

- A report comparing discards recorded in logbooks against ISMP data should be presented as an Agenda Item at the 2019 RAG meeting.
- That Items (12) & (14) from November 2017 should be combined. Professor Tisdell to move this item forward by providing a draft research project outline and guidance on cost/benefit analysis of the Bycatch Research and Development Plan. Dr Knuckey to provide FRDC report (2015-104 Realising economic returns of reducing waste through utilisation of discards in the GAB Trawl Sector of the SESSF) and associated published paper (van Puttin 2018, Fresh eyes on an old issue: Demand-side barriers to a discard problem, including economic content, to Professor Tisdell.

ACTION ITEM 1: Professor Tisdell & Dr Knuckey

Professor Tisdell to provide a draft research project outline and guidance on cost/benefit analysis of the Bycatch Research and Development Plan.

Dr Knuckey to provide Professor Tisdell with relevant bycatch paper that includes economic content of interest.

- Fish Ageing Services (FAS) has been asked to provide an overview of what orange roughy otoliths have been collected and aged from the Albany & Esperance areas. This action item lead to a discussion on orange roughy closures in the GAB.

ACTION ITEM 2: AFMA

AFMA to provide industry with a paper outlining what would be required in order to allow commercial targeting of orange roughy in the GAB, noting much of this is detailed in the GABT Orange Roughy Research Plan 2016-20.

- Industry agreed that Item (2) June 2018 was to be removed under the proviso that AFMA would work with GABIA on the proposal open a portion of the Kangaroo Hill closure. The AFMA member agreed that this would be considered as part of the upcoming review of the Upper-Slope Dogfish Management Strategy to be undertaken in 2019 and could be discussed further during Agenda Item 7 (Orange Roughy Research Plan).

2. Management Items

2.1 Managers update

- 7 The AFMA member provided the RAG with an update on the management of the fishery. Key points included:
- **Sustainability:** In the most recent ABARES Fishery Status Report for 2018, no SESSF species were classified as 'subject to overfishing.'
 - **GVP estimates:** Estimates for 2017-18 are not available in the 2018 ABARES report; however GVP for the 2016-17 is estimated at \$10.04 million. Of this, deepwater flathead contributed \$5.86 million (58% of total GVP) and Bight redfish contributed \$1.43 million (14% of total GVP). The remaining 28% is made up of byproduct species.
 - **SESSF Fishery Management Strategy (FMS):** The SESSF FMS is being drafted and is a compilation of management arrangements under the existing SESSF Harvest Strategy, Bycatch Strategy and research and data planning. This is expected to be drafted during 2019.
 - **Review of the SESSF Harvest Strategy:** The project proposes to develop, evaluate a fishery-wide harvest strategy with multiple and appropriate reference points, and multispecies decision rules to cost-effectively meet the requirements of the revised Commonwealth Harvest Strategy Policy and Bycatch Policy. This is expected to be completed over the next 2-3 years.
 - **Reducing bycatch and discards in Commonwealth Trawl Fisheries:** This project was instigated by GABIA and the RAG. It was supported by FRDC and is part of the November 2018 call for research. Applications are due 15th February 2019. Industry are encouraged to work with research providers and submit proposals.
 - The **Lakes Entrance Office** was officially opened in 2018. The team consists of two domestic compliance officers and five fisheries management staff.
 - The **Canberra Office** is relocating to a new office near Canberra Airport.
 - Protected species sub-strategies are being developed for seabirds, seals and dolphins under the AFMA Bycatch Strategy.
 - **South Australian OCS:** Correcting the OCS for Bight redfish is a key priority for AFMA. Changes to the finfish OCS have already been agreed to; Commonwealth to have jurisdiction of Bight redfish in Commonwealth waters (outside 3 nautical miles) and South Australia to have jurisdiction in State

Waters (inside 3 nautical miles). A Memorandum of Understanding will establish catch limits; the aim is to have these discussions over the next 6-12 months.

- **Snapper:** AFMA have implemented a no-possession/landing prohibition for hook and gillnet operators to compliment SA arrangements (6 week closure 1 November – 15 December). The size of the snapper bycatch allocation and revised trip limit will be discussed between the two jurisdictions by 1 May 2019; including consultation with associated Industry.
- The GABIA EO advised that the SA snapper management arrangements are currently being reviewed.
- **OCS between Commonwealth and NSW:** The Southern Fish Trawl (SFT) will be absorbed into the SESSF Commonwealth Trawl Sector (CTS) by 1 May 2020. Operators will be allocated quota based on historical catches.
- **Co-Management:** The South East Trawl Fishing Industry Association (SETFIA) is looking at entering into formal co-management with the AFMA. GABIA is looking at taking a similar approach with the GABTS.
- Catches provided in Manager's update papers were taken as read by the RAG.

3. Industry Update

8 The GABIA EO provided an industry update. Key points included:

- Industry are recommending that the boat hire costs associated with the FIS are revised given increased operating costs. This is likely to have an impact on the overall cost of future FISs.
- The AFMA member advised that the next GAB FIS is scheduled for April/May 2020. AFMA are currently budgeting for these costs and the cost that has been budgeted in the draft is the same as that for the previous FIS. The AFMA member will raise Industry's recommendations with AFMA management to reflect the proposed increase in costs.
- GABIA are in discussions with AFMA regarding Co-management arrangements; moving to a fee for service type arrangement.

- Industry are conscious of the fact that there has been an apparent temporal shift in deepwater flathead catches over the past two seasons; with spawning yet to occur this season. This will be discussed further as part of Agenda Item 6.

ACTION ITEM 3: AFMA

AFMA member to raise Industry's recommendations for an increase in boat hire cost with AFMA staff responsible for setting the 2019-20 Financial Year budget.

4. GABT FIS Results

- 9 Scientific Member, Dr Ian Knuckey, provided the RAG with a presentation on the background and results of the GABT FIS. Dr Knuckey noted:
- Deepwater flathead and Bight redfish were caught in 100% and 64% of shots respectively.
 - Catches overall have decreased in the last two surveys.
 - The decrease in 2015 was partially attributed to the seismic survey that was also conducted at the same time. However, catches have not recovered over the three years following this survey. Either the seismic survey had a longer term influence than expected or another factor is impacting stocks (may not be related to fishing pressure).
 - Historically, Bight redfish catches and catch rates increased at night. In 2018, there was no significant correlation between size of catch and time of day. This was highlighted as being quite unusual.
 - There have been significant changes to the catch composition in the GAB. In 2005, Bight redfish and deepwater flathead accounted for approximately half of the total composition. In 2018, both species contributed only 11% of the catch each. Ocean jacket and wide stingaree comprised the majority of the recent catch composition.
 - The length-frequency measurements of Bight redfish decreased (modal length =29cm) from previous years (modal length = 30-35cm).
 - In both 2015 and 2018 there has been a decrease in relative biomass for both Bight redfish and deepwater flathead.
 - Depth distribution of Bight redfish appear to have shifted; with movement inshore apparent.

- The AFMA member questioned whether the large catch of Bight redfish at 190 m in 2016 was accurate. Dr Knuckey agreed that it did appear to be a bit abnormal and would check the logbook data to confirm its accuracy.

ACTION ITEM 4: Dr Ian Knuckey

Dr Ian Knuckey to check the catch of Bight redfish recorded in logbooks for 2016 to confirm the accuracy of the large catch reported at 190 m in the GABT FIS Report.

- Overall, as the Scientific Member of the RAG, Dr Knuckey expressed that he was concerned with the trends highlighted in the 2018 FIS results, particularly those for Bight Redfish.
- The RAG agreed that this information would be considered alongside the MYTAC data when determining RBC recommendations for Bight redfish and deepwater flathead.

5. ISMP report and fish ageing report (SESSF)

- 10 The AFMA member provided an overview of the ISMP 2017 Report, ISMP Quarters 1-3 2018 and the fish ageing report. Key points included:
- 2017 was a port sampling year with no onboard observer coverage.
 - Length frequency data collected by Industry's crew is an important input to the stock assessments.
 - Otolith collection targets were achieved for 2017 and even slightly exceeded for both Bight redfish and deepwater flathead.
 - Stock assessors will determine whether otolith and length-frequency targets need to be revised.
 - 2018 is an onboard observer year; with an observer currently undertaking the fourth trip of the year (one trip per quarter).
 - As at the third quarter, 59% and 62% of the lengths for Bight redfish and deepwater flathead had been collected respectively. Otoliths were prioritised over lengths for both species.

- Aging Report: Otoliths have been collected and can be aged for the next assessment.
- Dr Knuckey emphasised the importance of communicating with FAS when considering which otoliths to age; to ensure a representative sample of length-frequency.

ACTION ITEM 5: AFMA and Dr Ian Knuckey

AFMA and Dr Ian Knuckey to communicate with FAS about the use of FIS/commercial collected otoliths for use in the 2018-19 assessments to ensure it is representative of length-frequencies.

6. MYTAC Analysis and Data Summary

MYTAC

- 11 Both Bight redfish and deepwater flathead are part of a MYTAC; with the 2019-20 season being the fourth year of a five year MYTAC for Bight redfish and the third year of a three year MYTAC for deepwater flathead.
- 12 The RAG were asked to consider the indicators of the fishery to determine the appropriateness of setting the 2019-20 season RBC as part of the agreed MYTAC; 797 t for Bight redfish and 1128 t for deepwater flathead.

Considerations of fishery indicators

- 13 In making their recommendation for RBCs, the RAG were asked to consider the concerns arising from the GAB Fishery Independent Survey (FIS) noted by SESSFRAG at their 2018 Data meeting. This included the following:

Bight redfish

- A significant change in size distribution with fewer large fish
- A continuing decline in FIS catch rates

Deepwater flathead

- An increase in the number of old and big fish in recent years as a positive sign;
- The FIS has shown a consistent length/frequency distribution but declining catch rates for the last few FISs;
- CPUE from the fishery has been declining; and
- Operators have reported that catches were not as high as expected last year however catches have since recovered.

- 14 Dr Knuckey noted the change in depth of commercial Bight redfish catches over the past three years; shifts from deeper to more shallow waters are evident.
- 15 Deepwater flathead appear to also be shifting to shallower depths, though not as noticeably as Bight redfish.
- 16 Industry advised the RAG that they had observed an apparent temporal shift in deepwater flathead; with the spawning season not having yet commenced (as at December 2018).
- 17 The RAG noted that the 2017 length data was missing from the presented graph and that there may possibly be a labelling issue with the graphs. The same was noted for deepwater flathead.
- 18 The RAG noted that the landed catch reported in the Data Summary did not align with that reported within the Catch and Discard report for deepwater flathead.

ACTION ITEM 6: AFMA

AFMA to enquire about the absence of 2017 length data in the 2018 Draft Data Summary ISMP, Port and GAB Industry length frequency graphs for both Bight redfish (page 232 of Data Summary) and deepwater flathead (page 239 of Data Summary). Investigate whether 'length frequencies' and 'ISMP Onboard' data have been labelled incorrectly on the above graphs.

ACTION ITEM 7: AFMA

AFMA to check the discrepancy between landed catch reported in the Data Summary vs that reported within the Catch and Discard Report for deepwater flathead.

Timing of Assessments and FIS

- 19 The AFMA Member informed the RAG that under the MYTAC, deepwater flathead are scheduled for a stock assessment in 2019 and Bight redfish are scheduled for 2020.
- 20 The next FIS is scheduled for the 2019-20 season.

Bight redfish

- 21 Given the changes in size and depth distribution and the continuing decline in FIS catch rates, the RAG were asked to consider the risks of undertaking the assessment as scheduled or whether the assessment should be brought forward to 2019.

Deepwater flathead

- 22 The RAG were asked to consider, given the concerns surrounding Bight Redfish, the appropriateness, risks and feasibility (resource availability) of proceeding with the deepwater flathead assessment as scheduled, delaying the assessment by a year to bring forward the Bight redfish assessment or undertaking both the Bight redfish and deepwater flathead assessments in 2019.
- 23 The RAG discussed and noted the following:
- Industry members emphasised the importance that the next stock assessment for both Bight redfish and deepwater flathead includes data up to and including June 2019, to accurately capture the apparent temporal shift in deepwater flathead.
 - The AFMA member suggested the possibility of bringing forward the Bight redfish stock assessment and delaying another Tier 1 SESSF species assessment scheduled for 2019 that is of a lesser concern than Bight redfish.
 - The AFMA member also advised that if both assessments were to be undertaken in 2019, the cost for both assessments would come out of the same financial year.
 - The RAG noted that the next FIS is also scheduled for the same financial year.
 - The RAG discussed the amount, type and assessment of data that would need to be collected to successfully complete both assessments in 2019.
 - Dr Knuckey suggested FAS should prioritise the GAB otolith ageing such that they can be included in the assessment. He also suggested that an observer be onboard during the main time of the Bight redfish spawning season (Feb – May) to collect otoliths. With forward planning i.e. ageing collected otoliths by April/May, all of the relevant data will be able to be included in the upcoming assessments.
 - The AFMA member advised that providing an onboard observer during redfish spawning season in 2019 would be an additional trip, as 2019 is a non-onboard observer year. It may be possible to do one less trip in the 2019-20 season and undertake a trip in the 2018-19 season instead.

Industry RBC Recommendations to the RAG

- 24 Industry members left the room to discuss their recommendations to the RAG for both Bight redfish and deepwater flathead 2019-20 RBCs and stock assessments.

Bight redfish

- 25 Industry advised the RAG that they believed the MYTAC RBC of 797 tonnes was no longer appropriate and recommended that the RAG consider setting the 2019-20 RBC at 600 tonnes.

Deepwater flathead

- 26 Industry advised the RAG that they believed the MYTAC RBC of 1128 tonnes was still appropriate for deepwater flathead and recommended that the RAG consider maintaining the RBC at 1128 tonnes.

Industry Assessment Recommendations to the RAG

- 27 Industry advised that they would like to see both Bight redfish and deepwater flathead stock assessments completed next year (2019) as well as the FIS. If, due to availability of resources, all three cannot be undertaken in the one financial year, then they would like to see the two stock assessments completed and the FIS pushed back to the following financial year.

Recommendation on Bight redfish and deepwater flathead Assessments

That both assessments for deepwater flathead and Bight redfish be undertaken in 2019 if possible. If the resources to do so are unavailable, this could be achieved by swapping this assessment with another scheduled Tier 1 assessment of a species that is of a lesser concern (across the SESSF) and could be pushed back another year; for example gummy shark, which has been pushed back to 2020. If this swap is not possible, the preference is to undertake the deepwater flathead assessment during 2019 as scheduled.

- 28 The RAG continued to discuss the potential of running both assessments and the FIS next year; and the implications associated with delaying the FIS by a year.
- 29 Dr Knuckey requested that he remove himself from the meeting during this discussion due to an obvious conflict of interest regarding the FIS. The RAG agreed that this was appropriate.
- 30 The RAG decided that it had heard enough information and were ready to provide formal advice on RBCs.

RAG RBC Recommendations

- 31 Dr Knuckey re-joined the meeting.
- 32 Industry left the room due to conflicts of interest regarding the RBCs.

Bight redfish

- 33 The remaining RAG members debated different RBCs for Bight redfish considering the information and recommendations provided by Industry and the outcomes of the FIS.
- 34 The RAG noted that there has been a decrease in the estimated biomass of Bight redfish in the FIS as well as a shift in the length frequencies collected in the FIS and ISMP. However, commercial CPUE has been increasing.
- While the risk to the stock over the next twelve months is low considering the TAC is less than 50% caught, the remaining RAG members agreed with Industry's proposal to cut the RBC for Bight redfish to 600 t for the 2019-20 season to recognise the outcomes of the FIS and ISMP length frequencies.

Deepwater flathead

- 35 The remaining RAG members agreed that deepwater flathead should continue with the MYTAC and the RBC should remain at 1128 tonnes.

Recommendation

The RAG agreed to cut the Bight redfish RBC for the 2019-20 season to 600 t and to leave the RBC for deepwater flathead set at 1128 t.

- 36 The RAG agreed to move Agenda Item 11 forward and address it before Agenda Item 7 as Mr Moore needed to leave within the hour and his input into Agenda Item 11 would be valuable. Note: to keep the minutes aligned with the papers provided, agenda items remain in the same order as outlined in the agenda.

7. Orange Roughy Research Plan

- 37 This Agenda Item was discussed at the meeting after Agenda Item 8.
- 38 The AFMA member provided background on the GABT Orange Roughy Research Plan 2016-20. Under the plan, holders of GABT Boat Statutory Fishing Rights (SFRs) are required to submit scientific permit applications by 1 April each year. Once issued, these scientific permits allow holders to fish in the GAB Orange Roughy Research Zones from June 1 to 31 August each year and utilise orange roughy research quota subject to permit conditions.
- 39 A 200 tonne research catch allowance has been allocated under the program since 2014.

- 40 The level of catch has been dependent on whether permits were allocated and then how much fishing was undertaken in the Orange Roughy Research Zones. There was approximately 12 t caught in 2014 and 18 t in 2017.
- 41 The RAG agreed that there was no reason to change the 200 t research catch allowance.

Recommendation

The RAG agreed that the orange roughy research allowance for the 2019-20 season should remain at 200 t.

- 42 The RAG discussed the appropriateness of scientific permits having only a 6-month duration. Industry indicated that a 12 month duration would be preferable. The timing of the permits may be affecting the ability to locate aggregating stocks.
- 43 The RAG determined that the cut off day for scientific permit applications should continue to be 1 April each year.
- 44 Onboard observers have been utilised as part of the Orange Roughy Program to collect important biological samples in addition to catch and effort information. Under the Plan, operators are required to carry an AFMA observer on at least one trip each year. It was agreed for the 2018-19 season that this would not occur until operators had caught orange roughy to prevent observers being carried on trips before orange roughy were encountered.
- 45 Industry have expressed concerns that the cost of carrying the observer is prohibitive because they are also paying for the days spent fishing on the shelf as part of 'normal' fishing activity.
- 46 The AFMA member raised the possibility of tying the orange roughy research program observer requirements into the ISMP program to reduce costs. For example, an observer could be taken on a trip for orange roughy research but if the operator decided to leave the orange roughy grounds and fish on the shelf, that part of the trip would become part of, and funded by, the ISMP program. If, for example, the whole trip was spent fishing for orange roughy, the cost of the observers would be recovered to the operator. There would still be resources available to ensure the targets under the ISMP program are met.
- 47 The RAG discussed whether an onboard observer every second year is sufficient or whether an observer should be taken every year. The possibility of non-AFMA observers in the alternate year was discussed.
- 48 Concerns were raised regarding the data that will be missed if an onboard observer is only required every second year. It may be more appropriate if orange roughy is

caught by a vessel, to put an observer on board the next trip and have a fee for service arrangement.

- 49 Industry raised the question whether guidelines could be implemented into the research plan, such as crew based collection of otoliths and gonad conditions, which if all requirements are met, an observer would not be required on future trips.

ACTION ITEM 8: AFMA

AFMA to investigate the feasibility of issuing 12 month scientific permits. If this is not possible, are two six month scientific permits issued to the same applicant a possibility?

ACTION ITEM 9: AFMA and GABIA

AFMA and GABIA to investigate the possibility of using a non-AFMA observer. Observers would need to possess relevant credentials to undertake the same sampling as AFMA observers.

ACTION ITEM 10: AFMA and GABIA

AFMA and GABIA to work together to establish a set of guidelines for orange roughy samples required from crew based collection. Samples collected by crew and through port based sampling could substitute for having an observer on board. If these guidelines are not complied with, the vessel will be prohibited from undertaking future roughy trips without an onboard observer. These guidelines will be reviewed after 12 months and amendments made as necessary.

Overlay of dogfish and roughy closures

- 50 Industry raised concerns about the dogfish closures that are associated with the orange roughy closures. Industry believe that the location and depth of these closures are incorrect for these species.
- 51 Industry expressed their disappointment with AFMA's decision to require observer coverage if operators intend to fish in the Kangaroo Hill or Racetrack/Hamburger Hill closures under the Orange Roughy Research Plan. There was very little consultation and Industry believe it is not in-line with the objectives for the research plan.
- 52 The AFMA member noted that the closures had been re-implemented because the closures are part of the Upper-Slope Dogfish Management Strategy and allowing trawling in these areas could jeopardise the conservation dependent listing of the four dogfish species.

- 53 Industry reiterated that the risk to catching dogfish while fishing for orange roughy is low because of the depth distribution and the method of fishing.
- 54 The AFMA member assured industry that this decision, including the proposal to open a portion of the Kangaroo Hill closure to market fishing, would be considered as part of the review of the Upper-Slope Dogfish Management Strategy.

8. Orange Roughy – Albany and Esperance: Bycatch TAC recommendation for 2019-20 season

- 55 The RAG agreed to rollover the 50 t bycatch TAC for the 2019-20 season.

9. GABT Ecological Risk Assessment

- 56 The AFMA member provided background on the revised ERM Framework.
- 57 Dr Sporic advised the RAG that the GABT ERA had been revised since the initial circulation of the document. A background and overview of the results were then provided to the RAG.
- Byproduct Species – PSA Risk Overview
 - One high risk invertebrate species – Gould's squid (*Nototodarus gouldi*)
 - Byproduct Species – bSAFE Risk Overview
 - Four extreme high risk species: ornate angelshark (*Squatina tergocellata*), bronze whaler (*Carcharhinus brachyurus*), Tusk (*Dannevigia tusca*) and common sawshark (*Pristiophorus cirratus*)
 - One high risk species: yellowspotted boarfish (*Paristiopterus gallipavo*)
 - Bycatch species – bSAFE Risk Overview
 - Seven extreme high risk species: wide stingaree (*Urolophus expansus*), short-tail torpedo ray (*Torpedo macneilli*), piked spurdog (*Squalus megalops*), school shark (*Galeorhinus galeus*), whitespotted skate (*Dentiaraja cerva*), southern round skate (*Irolite waitii*) and Melbourne skate (*Spiniraja whitleyi*).
 - Two high risk species: sharpnose sevengill shark (*Heptranchias perlo*) and Port Jackson shark (*Heterodontus portusjacksoni*)
- 58 The RAG noted the following:
- 59 **Ornate angelshark** – From 2012 to 2016, 169 t was retained (Log) and 147 t retained (Obs). The AFMA member pointed out that this indicates that for the

ACTION ITEM 11: AFMA

AFMA to confirm the accuracy of the retained catch of ornate angelshark reported in the ERA.

majority of the catch, an observer was onboard. It was suggested that this was obviously not correct with 3% observer coverage and that the data be checked for accuracy.

- 60 Most of the high risk species are skates and rays. Management response should focus on species identification and mitigation.
- 61 Industry noted that modification of gear could be possible to minimise or avoid capture of these species. The AFMA member suggested that this could be put forth as part of the FRDC-funded bycatch reduction project.
- 62 The RAG emphasised the importance that AFMA observers identify to species level and not to the groups recorded in logbooks.
- 63 The RAG discussed the seemingly low amount of sharpnose sevengill shark reported in logbooks and by observers. Industry indicated that they caught and retained this species frequently (~ 1 per trip) which doesn't align with these figures.
- 64 Dr Knuckey raised concerns with the reported spurdog catches; indicating that the numbers should be greater.

ACTION ITEM 12: AFMA

AFMA to confirm the accuracy of the retained catch of sharpnose sevengill shark and piked spurdog reported in the ERA.

- 65 AFMA and CSIRO will finalise the GABT ERA out of session and circulate to GABRAG once complete. The final results will be considered by SESSFRAG in February 2019.

10. GABT Research Plan 2020/21

- 66 The RAG did not have time to review the research plan and agreed that AFMA and GABIA would work on the draft plan and circulate to GABRAG out of session. The draft will be submitted to SESSFRAG in February 2019 for consideration.

11. Western gemfish Harvest Strategy Triggers and Assessment

- 67 This Agenda Item was brought forward and discussed after Agenda Item 6: MYTAC Analysis and Data Summary.
- 68 The AFMA member provided background on the western gemfish triggers in the harvest strategy.

- 69 The RAG discussed whether the triggers should be revised from the current 400 t trigger for data collection and development of assessment plan, 500 t cease fishing trigger and 1000 t / 3 years to a commence stock assessment. Key points included:
- Protocols for collecting biological data already exist as part of the crew-collected program (specified in the Boat Operations Manual) and the ISMP program and this is reflected in column two.
 - The heading 'Trigger for data collection and development of assessment plan' is misleading and the RAG agreed it should be amended to reflect the need to analyse/age biological data.
 - The question was raised at what point gonad staging would be recorded and where would it be stored.

ACTION ITEM 13: AFMA

AFMA to investigate whether gonad staging is undertaken as part of the ISMP program for western gemfish and where the data is stored.

- 70 The SESSF Harvest Strategy is being reviewed as part of an FRDC-funded project and there will likely be changes to monitoring and data collection requirements for all byproduct species.
- 71 The current triggers are based on historical catches of western gemfish in the GABT. Current catches of western gemfish are low compared to historical catches due to changes in fleet capacity (there is no longer a large freezer trawler) and the triggers are unlikely to be reached prior to a review of the SESSF harvest strategy.
- 72 The RAG agreed that the triggers for western gemfish should remain unchanged noting that catches and length frequencies are monitored by SESSFrag and if there appeared to be any concerns they can be addressed on an ad-hoc basis.
- 73 The RAG agreed to amend the heading of column three (see Table 1 below) to 'Trigger for analysis of biological data (inc. ageing of otoliths).' A copy of the amended table will be circulated with the minutes.

ACTION ITEM 14: AFMA

AFMA to amend the table in Appendix A of western gemfish Harvest Strategy Triggers paper such that the third column from the left reads 'Trigger for analysis of biological data (inc. ageing of otoliths).'

74 The RAG agreed to address Agenda Item 8 – Albany and Esperance: bycatch TAC recommendation for 2019-20 season before Agenda Item 7 – orange roughy research plan.

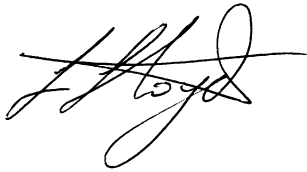
Table 1: Current GABT Trigger limits (original column headings)

Species	Trigger to collect biological data	Trigger for data collection and development of assessment plan	Cease Fishing for that species	Commence Stock Assessment
Gemfish	Currently Collected	400 t	500 t / year	1000 t / 3 years
Blue Grenadier	Currently Collected	400 t	500t/year cease fishing. If a spawning aggregation is found, trigger acoustic survey (500t) and operator collects 100 whole fish.	1000 t / 3 years
Ling	Currently Collected	100 t	250 t	250 t
Blue-eye Trevalla	Currently Collected	100 t	250 t	-
Ribaldo	Currently Collected	100 t	250 t	-
Hapuka	Currently Collected	100 t	250 t	-
Gulper Sharks	Code of practice by industry to not target these species in addition to area closure.	-	2 t	-
Deepwater sharks (black/brier)	Code of practice by industry to not target these species in addition to area closure.	-	-	-
Chinaman Leatherjacket	Management measures on Bight Redfish and Deepwater Flathead influences catch.	-	-	-
Angel Shark	Management measures on Bight Redfish and Deepwater Flathead influences catch.	-	-	-
Jackass Morwong	Management measures on Bight Redfish and Deepwater Flathead influences catch.	-	-	-

12. Dogfish Working Group

- 75 This agenda item was unable to be completed due to the meeting running over time and Dr Knuckey having to leave to make his flight.
- 76 The Chair closed the meeting at 18:03.

Signed (Chairperson):

A handwritten signature in black ink, appearing to read 'J. Lloyd', with a large, sweeping flourish extending to the right.

Date: 31st January 2019

Attachments

- 1) GABRAG declared conflicts of interest
- 2) GABRAG draft annotated agenda
- 3) Outstanding action items from previous meetings
- 4) Actions arising from this meeting

GABRAG Declared Conflicts of Interest

Member	Declared Interest
Mr Lance Lloyd	GABRAG Chair. Member of GABMAC and SEEFRAG. Director – Lloyd Environment Pty Ltd. Research Fellow – Federation University Australia
Dr Ian Knuckey	<p><u>Positions</u></p> <p>Director – Fishwell Consulting Pty Ltd Director – Olrac Australia (Electronic logbooks) Deputy Chair – Victorian Marine and Coastal Council Chair/Director – Australian Seafood Co-products and ASCo Fertilisers (seafood waste) Chair – Northern Prawn Fishery Resource Assessment Group Chair – Tropical Rock Lobster Resource Assessment Group Chair – Victorian Rock Lobster and Giant Crab Assessment Group Scientific Member – Northern Prawn Management Advisory Committee Scientific Member – SESSF Shark Resource Assessment Group Scientific Member – Great Australian Bight Resource Assessment Group Scientific Member – Gulf of St Vincents Prawn Fishery Management Advisory Committee Scientific Participant – SEMAC, SERAG</p> <p><u>Current Projects</u></p> <p>AFMA 2018/08 Bass Strait Scallop Fishery Survey – 2018 and 2019 FRDC 2017/069 Indigenous Capacity Building FRDC 2017/122 Review of fishery resource access and allocation arrangements FRDC 2016/146 Understanding declining indicators in the SESSF FRDC 2016/116 5 year RD & E Plan for NT fisheries and aquaculture AFMA 2017/0807 Great Australian Bight Trawl Survey – 2018 Traffic Project – Shark Product Traceability FRDC 2018/077 Implementation Workshop re declining indicators in the SESSF FRDC 2018/021 Development and evaluation of SESSF multi-species harvest strategies AFMA 2017/0803 Analysis of Shark Fishery E-Monitoring data AFMA 2016/0809 Improved targeting of arrow squid</p>
Mr Andy Moore	GABRAG Scientific Member employed by ABARES – Interest in sources of funding for research purposes, involved in the Gemfish stock structure project and the Western gemfish Tier 1 assessment, senior research fellow at University of Queensland, no personal pecuniary interest.
Mr Jim Raptis	GABRAG Industry Member Operates two boats in the GABT Fishery and owns four GAB SFRs as well as quota in the Southern and Eastern Scalefish and Shark Fishery.

Mr Neil MacDonald	<p>Director NMAC(SA) P/L Executive officer of the Great Australian Bight Industry Association Executive officer of Surveyed Charter Boat Owners and Operators Association South Australia Executive Officer Southern Fishermen's Association Executive officer of Saint Vincent Gulf Prawn Boat Owner's Association Executive officer of Marine Scale Net Fishers Association Committee support services South Australian Rock Lobster Management Advisory Committee & Research Sub-Committee Chair – CGG Gippsland MSS Scientific Advisory Committee</p>
Ms Marcia Valente	<p>Consultant for Silver Phoenix Holdings who hold two GAB SFRs</p>
Professor John Tisdell	<p>Economics member of GABRAG, member of the AFMA Economic Advisory Group and Tropical Tuna Resource Advisory Group</p>
Mr Daniel Corrie	<p>AFMA, Trawl Manager, Coral Sea Fishery Manager. No interest, pecuniary or otherwise</p>
Ms Kehani Manson	<p>AFMA, Executive Officer GABRAG and GABMAC. No interest, pecuniary or otherwise</p>
Invited Participant	Declared Interest
Dr Miriana Sporcic	<p>CSIRO, Assessment Scientist. Acquiring funding for research purposes</p>

Drafted Annotated Agenda – GABRAG Meeting 6 December 2018

Time	Item	Presenter
09:00	Preliminaries 1.1 Welcome and introductions/apologies 1.2 Declarations of interest 1.3 Adoption of agenda	Chair
	1.4 Action item review	AFMA
09:45	2. Manager's Update 3. Industry Update	AFMA GABIA
10:30	Morning Tea	
10:45	4. GABT FIS Results	Ian Knuckey
11:45	5. ISMP report & Fish Ageing Report (SESSF) - ISMP Report - Fish Ageing Services Annual Report and Ageing Plan	AFMA
12:30	Lunch	
13:00	6. MYTAC Analysis and Data Summary - Deepwater flathead - Bight redfish	AFMA
13:40	7. Orange Roughy Research Plan - Quota allocation and observer requirements - Research allowance 2019-20 season	AFMA/GABIA
13:50	8. Orange Roughy – Albany and Esperance - Bycatch TAC recommendation for 2019-20 season	AFMA/GABIA
14:45	9. GABT Ecological Risk Assessment	AFMA/CSIRO
15:30	Afternoon Tea	
15:45	10. GABT Research Plan 2020/21	GABIA/AFMA

16:15	11. Western gemfish Harvest Strategy Triggers and Assessment	GABIA/AFMA
17:00	12. Dogfish working group - Overview of recent meeting and work ahead	Ian Knuckey
17:30	Meeting Close	

Outstanding action items from previous GABRAG meetings

- Complete/Redundant

- Underway

- Yet to start

- Need advice

	Meeting & agenda item reference	No.	Description	Responsibility	Timeframe	Progress
	1.4 / Nov 2016	1	AFMA and Dr Knuckey to transfer orange roughly otoliths from 2006 onwards from Fishwell to Fish Ageing Services	AFMA and Dr Knuckey		FAS have indicated the existing samples can be archived within the existing budget Fishwell asked to provide the samples to FAS.
	4/ Dec 2016	4	Investigate the proportion of western gemfish discarded as whole shots to inform the CPUE standardization.	AFMA/CSIRO	Before 2017 CPUE Standardization	CSIRO have been asked to provide an update.
	4/ Dec 2016	6	AFMA and GABIA to review GABTF development strategy species triggers for western gemfish in the SESSF Harvest Strategy Framework	AFMA/GABIA	Prior to 2017/18 season	Addressed as part of Agenda Item 11 – western gemfish Harvest Strategy Triggers and Assessment.

	Agenda Item	No.	Action Item	Agency/Person Responsible	Timeframe	Progress
	3.1/Aug 2017	2	Dr Knuckey to review the logbook data for consistency in discard reporting since the implementation of e-logs and discard grouping changes.	Ian Knuckey (Fishwell Consulting)	As soon as practicable	<p>SERAG recommended Fishwell and AFMA review the reporting of discard groups since implementation of bycatch groups in elogs. This item will be addressed as part of that work.</p> <p>Dr Knuckey asked to provide an update.</p>
	1.4/Nov 2017	1	Follow up on alternative options to Fish Ageing Services for storage of Orange Roughy otoliths from 2006 onwards so that transfer from Fishwell can occur	Christian Pyke	As soon as practicable	<p>As per Action item 1 (1.4 2016) FAS have indicated the existing samples can be archived within the existing budget</p> <p>Fishwell asked to provide the samples to FAS.</p>
	1.4/ Nov 2017	2	If still archived, check original data sheets for 2014-15 crew collected data for Deepwater flathead to see if the data contains a combination of Flathead and Redfish.	AFMA	As soon as practicable	<p>Data sheets are species specific and so it is unlikely that Bight redfish were 'mixed up' in the deepwater flathead data sheets.</p> <p>It could be that a Bight redfish datasheet was punched as a flathead sheet. AFMA are investigating.</p>
	4/ Nov 2017	8	AFMA and Dr Haddon to develop a research project outline for age frequency sampling project to evaluate the uncertainty in stock	AFMA and Malcolm Haddon	As soon as practicable	<p>Not yet started.</p> <p>DW Flathead assessment schedule for 2019. Could this be investigated</p>

		assessments caused by reducing the frequency of age sampling for deepwater flathead and circulate to the RAG.			as a sensitivity analysis as part of the stock assessment?
4/ Nov 2017	12 & 14	<p>Professor Tisdell to provide a draft research project outline and guidance on cost/benefit analysis of the Bycatch Research and Development Plan.</p> <p>Dr Knuckey to provide Professor Tisdell with relevant bycatch paper that includes economic content of interest</p>	John Tisdell and Ian Knuckey	As soon as practicable	
5/ Nov 2017	16	Investigate what orange roughly otoliths (number and location per year) have been collected for Albany/Esperance zone and determine the cost of ageing additional otoliths.	AFMA and GABIA	As soon as practicable	FAS has been asked for an overview of what has been collected and aged from the Albany Esperance area.

	7.1/ Nov 2017	18	GABIA to explore alternative options for observer positions to the GABTF	GABIA	As soon as practicable	<p>To be discussed as part of agenda item 7 – Orange Roughy research program.</p> <p>This item will be removed.</p>
	2.1/ June 2018	1	GABIA and AFMA to work together to locate the results of the dogfish hook survey mentioned in the GABIA submission and circulate to the RAG. Also to ensure that the data is made available to the committee conducting the review of the Strategy.	AFMA and GABIA	As soon as practicable	<p>http://www.frdc.com.au/Archived-Reports/FRDC%20Projects/2009-024-DLD.pdf</p> <p>There were two vessels, the Sarda and Riba, that undertook hook surveys in 2009/10. The Sarda undertook surveys south of Mount Gambier and the Riba west of Port Lincoln. AFMA and GABIA have not been able to find any reports of surveys in the Kangaroo Hill closure at this stage.</p> <p>AFMA and GABIA will continue to look for additional data to inform the review and will keep GABRAG informed on progress.</p>
	3.1/June 2018	3	GABMAC and SEMAC to consider advice regarding delineation of Eastern and Western gemfish stocks between zone 40 and 50 prior to the 2019 assessment.	AFMA	ASAP, but prior to the 2019 assessment	

Action items arising from GABRAG 6 December 2018

Action Item	Description	Person Responsible	Timeframe
1	<p>Professor Tisdell to provide a draft research project outline and guidance on cost/benefit analysis of the Bycatch Research and Development Plan.</p> <p>Dr Knuckey to provide Professor Tisdell with relevant bycatch paper that includes economic content of interest.</p>	Professor John Tisdell and Dr Ian Knuckey	As soon as practicable
2	AFMA to provide Industry with a paper that outlines the requirements that must be met in order for an Orange Roughy closure to reopen to fishing in the GAB.	AFMA	As soon as practicable
3	AFMA member to raise Industry's recommendations for an increase in boat hire cost with AFMA staff responsible for setting the 2019-20 Financial Year budget	AFMA	As soon as possible
4	Dr Ian Knuckey to check the catch of Bight redfish recorded in logbooks for 2016 to confirm the accuracy of the large catch reported at 190m in the GABT FIS Report.	Dr Ian Knuckey	As soon as practicable

5	AFMA and Dr Knuckey to communicate with FAS about the use of FIS/commercial collected otoliths for use in the 2018-19 assessment to ensure it is representative of length-frequencies.	AFMA and Dr Ian Knuckey	As soon as practicable
6	AFMA to enquire about the absence of 2017 length data in the 2017 Draft Data Summary ISMP, Port and GAB Industry length frequency graphs for both Bight redfish (page 232 of Data Summary) and deepwater flathead (page 239 of Data Summary). Investigate whether 'length frequencies' and ISMP Onboard' data have been labelled incorrectly on the above graphs.	AFMA	As soon as practicable
7	AFMA to check the discrepancy between landed catch reported in the Data Summary vs that reported within the Catch and Discard Report for deepwater flathead.	AFMA	As soon as practicable
8	AFMA to investigate the feasibility of issuing 12 month scientific permits. If this is not possible, are two six month scientific permits issued to the same applicant a possibility?	AFMA	As soon as practicable
9	AFMA and GABIA to investigate the possibility of using a non-AFMA observer. Observers would need to possess relevant credentials to undertake the same sampling as AFMA observers.	AFMA and GABIA	As soon as practicable
10	AFMA and GABIA to work together to establish a set of guidelines for orange roughy samples required from	AFMA and GABIA	As soon as practicable

	crew based collection. Samples collected by crew and through port based sampling will substitute for having an observer onboard. If these guidelines are not complied with, the vessel will be prohibited from undertaking future roughy trips without an onboard observer. These guidelines will be reviewed after 12 months and amendments made as necessary.		
11	AFMA to confirm the accuracy of the retained catch of ornate angelshark reported in the ERA.	AFMA	As soon as practicable
12	AFMA to confirm the accuracy of the retained catch of sharpnose sevengill shark and piked spurdog reported in the ERA.	AFMA	As soon as practicable
13	AFMA to investigate if and when gonad staging is recorded in Western gemfish and where the data is stored.	AFMA	As soon as practicable
14	AFMA to amend the table in Appendix A of western gemfish Harvest Strategy Triggers paper such that the third column from the left reads 'Trigger for implementing an ageing plan (incl. ageing of otoliths).'	AFMA	As soon as practicable