



Australian Government  
Australian Fisheries Management Authority

# Southern and Eastern Scalefish and Shark Fishery Shelf Resource Assessment Group (ShelfRAG)

*MINUTES*

*CHAIR: MR SANDY MORISON*

DRAFT

23-24 SEPTEMBER 2014  
Freycinet Room  
CSIRO Marine Labs  
Castray Esplanade TAS

## **PARTICIPANTS**

### **Chair**

Mr Sandy Morison

### **ShelfRAG Members**

Mr Robert Curtotti (ABARES economic member)

Mr Tom Bibby (industry)

Mr Simon Boag (SETFIA CEO)

Dr Marcus Finn (AFMA fisheries manager)

Mr Malcolm Poole (Recreational member)

Dr Geoff Tuck (CSIRO)

### **ShelfRAG Observers and Invited Guests**

Dr Matt Flood (ABARES scientific member)

Dr Sally Wayte (CSIRO) – Tuesday only

Dr Malcolm Haddon (CSIRO)

Dr Jemery Day (CSIRO) – Tuesday only

Mr John Jarvis (Industry)

Dr Robin Thomson – Wednesday only

### **ShelfRAG Executive Officer**

Ms Michelle Wilson (A/g Executive Officer)

### **Apologies**

Dr Ian Knuckey

Mr Tony Lavelle

Mr Ross Bromley

# 1. Preliminaries

## 1.1 Welcome, Introductions and Apologies

1. The Chair opened the meeting at 1.30pm and welcomed all attendees. The Chair informed the group that the meeting is being recorded for the purposes of minute taking.
2. The RAG noted apologies from Mr Ross Bromley (EO) and Dr Ian Knuckey.

## 1.2 Declarations of Interest

3. All in attendance introduced themselves and declared any interest pecuniary or otherwise.

<u>Members</u>	<u>Declarations of Interest</u>
Mr Sandy Morison	SlopeRAG and ShelfRAG Chair, member of SEMAC and SESSFRAG. Consultant with an interest in funding for research purposes. Conducts fisheries related work consultancies for industry, companies and other Government departments.
Dr Marcus Finn	AFMA. Manager of Commonwealth and GAB Trawl Fisheries section. No conflicts of interest pecuniary or otherwise.
Ms Michelle Wilson	A/g Executive Officer AFMA. Demersal and Midwater Trawl Fisheries section. No pecuniary interest or otherwise.
Dr Geoff Tuck	CSIRO. Involved in Stock Assessments. Interest in obtaining funding for future research. Principle investigator on the SESSF stock assessment project and marine closures project.
Dr Matt Flood	ABARES. Interest in obtaining funding for future research. No pecuniary interest.
Mr Robert Curtotti	ABARES. Interest in obtaining funding for future research. Also member of SquidRAG. No pecuniary interest.
Mr Tom Bibby	Commonwealth Trawl Sector boat and quota SFR holder. Chairman of SETFIA.
Mr Simon Boag	SETFIA CEO, CFA vice-Chair, runs a consultancy firm. Sits on boards of Commonwealth Trawl Sector boat and quota SFR holding companies as a non-beneficiary director. Commonwealth Marine Reserve review panel member for the Temperate East. Member Victorian fisheries advisory council. Other unrelated committees and groups.
Mr Malcolm Poole	Recreational fisher. Treasurer and Board member Recfish Australia, member of Australian Recreational Fishing Foundation, Chairman Recreational Fishing Alliance of NSW, committee member on NSW Maritime Advisory Council. No pecuniary interest.



<b>Invited participants</b>	
Dr Jemery Day	CSIRO stock assessment scientist. Involved in Stock Assessments. Interest in obtaining funding for future research.
Dr Sally Wayte	CSIRO stock assessment scientist. No pecuniary interest.
Dr Robin Thomson	CSIRO stock assessment scientist. Involved in Stock Assessments. Interest in obtaining funding for future research.
Mr John Jarvis	Commonwealth Trawl Sector boat and quota SFR holder. Director of SETFIA.
Dr Malcolm Haddon	CSIRO stock assessment scientist. Involved in Stock Assessments. Interest in obtaining funding for future research. Member of SESSFRAG, Northern Prawn RAG and sub-Antarctic RAG. No pecuniary interest.

### *1.3 Adoption of Agenda*

4. The Chair noted that since the RAG last met, a revised version of the Fisheries Administration Paper (FAP) 12 has been released which outlines the roles and responsibilities of RAGs and RAG members. The Chair proposed adding an item to the agenda to receive an update and discuss the revised version. The RAG agreed and adopted the remainder of the agenda.

### *1.4 Action items from November 2013 Meeting*

5. The status of action items from the November 2013 ShelfRAG meeting was discussed. Remaining uncompleted action items carried over from the previous meeting are listed in Table 1.

6. In discussing Action Item 14 from the November 2013 ShelfRAG meeting, the Chair noted that he could not find the updated species summaries on the AFMA website.

#### **ACTION ITEM #1 – AFMA**

The AFMA Manager to check that species summaries are on the AFMA website and to upload if not already done.

## **2. Redfish Tier 1 preliminary assessment**

### *2.1 Critically evaluate available data, assumptions and inferences*

7. The Chair noted that the RAG previously decided to undertake a Redfish Tier 1 assessment as a means to attempt to reconcile contradictory outcomes of previous Tier 3 and Tier 4 assessments.

8. Dr Geoff Tuck presented a preliminary Tier 1 assessment of Redfish. Dr Tuck reminded the RAG that it is working towards a base case and therefore CSIRO are seeking agreement on the assumptions to use in the models and that the data used is appropriate. The following key points were covered:



### **History of previous Redfish assessments:**

9. The first integrated quantitative assessment (Tier 1) was performed in the late 1990's and more recently in 2002 and 2005.
10. This assessment adopts a similar model structure used in the previous assessments such as using a single trawl fleet and splitting the stock into north and south regions.
11. The biomass trajectory from the 2002 assessment showed a significant decline in stock biomass from 1975 to 2001 for both northern and southern regions.
12. The 2005 assessment noted the effect of changes in mesh selectivity on the future stock status of Redfish, using the assessment platform Coleraine.
13. Issues found in previous assessments:
  - uncertainty surrounding historical catch and discard data, discard rate and length compositions
  - fits to length data show a pattern of overestimating the young fish in the early days and overestimating the number of larger fish in the later days
  - both assessments showed that the stock was in decline
  - quantifying the effects of gear selectivity.

### **Current assessment - Catches**

14. This assessment incorporated catch and discard rate information provided by the previous assessment with updates of recent catch rate, catch and discard estimates to 2004. The results also showed a declining trend with stock status of less than 20 per cent of initial biomass.
15. The time series of catches for the north from NSW, Commonwealth and data estimated by the then Redfish RAG was presented to the RAG.
16. Looking at catch data, initially there were concerns around how to plot State and Commonwealth data together. It was noted that state landings data prior to 1997 was recorded in the logbook and after 1997 was added into Commonwealth data.
17. The Commonwealth data series was used in the preliminary assessment.
18. It was noted that there is still more work that needs to be done on catch data and how State and Commonwealth can be worked together.
19. Industry informed the RAG that:
  - trip limits were applied in NSW state waters from 1998
  - there had previously been a loop hole which saw fishers not reporting particular landings or for dual endorsed vessels saw landings in different jurisdictions to balance trip limits and quotas
  - in 1998, historical Redfish grounds saw an increase in the number of Leatherjackets and by 2005 fishermen reduced effort on these grounds due to the degree of Leatherjacket catches
  - after 2005, there were approximately two boats targeting Redfish – one in Bermagui and one in Ulladulla.



20. Northern and southern region and combined Redfish catches from the Commonwealth data series were presented to the RAG
21. Mr Boag questioned the relationship between the two data sets given that they are different stocks.
22. There was discussion around whether there are two stocks of Redfish. The Chair gave a presentation on research undertaken by Morison (himself) and Rowling in 2001 on Redfish and variation between locations based on data from 1991 to 1998. Results showed that mean length-at-age (and other measures) differed between the regions and were much more variable in the south than the north. This suggested that there were potentially two stocks **or** a periodic influx of fish in the southern region that had different growth histories to those present in other years.
23. The recreational fishing representative informed the RAG that:
- the charter boat sector is concerned about Redfish stocks and there are charter boat data of Redfish catches that could be included in the Redfish assessment
  - NSW fisheries have records from the State commercial sector showing stable Redfish catches between 1958 and 1969 but showed signs of catches increasing in the early 1970's.
  - NSW will be doing a stock assessment next month and there are concerns about conflicting management decisions for the stock between State and Commonwealth governments
  - he has concerns about the RAG's knowledge of the stock including spawning behaviour
  - five years ago, Redfish were the fifth largest species caught in the charter boat sector
  - Redfish data suggests the stock is heading towards becoming a conservation dependent species.
24. The RAG agreed that the assessment should be based on a one stock model rather than being based on a north/south stock split. This is based on the reasoning that the basis for the original split is not considered sufficient to justify dealing with two stocks.
25. There were concerns around how Redfish can be managed appropriately in the future given the uncertainty around the stock structure. It was noted that more research needs to be undertaken either biological or genetic to distinguish variations within the stock.
26. Mr Poole provided Dr Haddon with the historical landings of Redfish from the NSW commercial catch records which were observed by the RAG. The following key points were made:
- The data set was from 1946/7 to 2012/13 financial year.
  - Approximately 2500 tonnes were caught in 1948/9 and again in 1978/9 which instigated discussion around potential cyclical behaviour in catch rates.
  - CSIRO noted that they have the data for commercial catches from 1975. Catch data prior to 1975 is not used due to a lack of confidence in the catch data and particularly there is uncertainty around discarding.



## **Current assessment - Discards**

27. Discard rates prior to 1998 in the north and 1992 in the south were estimated by the Redfish RAG and after these dates, rates were estimated from on-board data. These data indicate that discard rates are quite variable over time.
28. A time blocking assumption was explained using information from Rowling (1999) and based on discussions between Mr Rowling and CSIRO:

### **1975 – 1985 – Market Driven discarding**

- discards largely across all size ranges, but with more small fish discarded

### **1986 – 2000 – Surimi Market period**

- 1986 – 1992 – discarding rates lower, mainly small fish
- 1993 – 1995 – quantity of fish sent to surimi market declined. The Geelong surimi market closed which consequently led to an increased rate in discarding
- 1996 – 2000 – discarding declines “as Redfish became less available”. Close of Hacker surimi processor in 2000

### **2001 – 2013 – Size based discarding period and assumes mostly small fish discarded**

29. Based on the available information, the discards are estimated in these time periods.

30. Other options to the time blocking assumption could include using the upper and lower limits for discard estimates used in the model in the Rowling’s (1999) work.

31. Dr Tuck presented two scenarios that could be used for the 1975 – 85 period where it is believed that the length composition of discards is the same as the retained catch:

- Scenario 1 – Discard rates are estimated and it is assumed that the retention rate does not reach one.
- Scenario 2 – Use the same process as that used in the Thomson (2002) assessment i.e. use a discard rate of 40 per cent, note what the retained catch was, calculate the discarded mass based on the discarding rate and add that mass for that year into the retained catch. This provides us with a total kill for that year. This is then applied to each year for the 1975 – 85 time period.

32. The RAG agreed to use Scenario 1 in the base case assessment.

33. The Chair highlighted to the RAG that this is a complex assessment and although the RAG is hoping to get an agreed assessment by the next meeting, it may not be possible to achieve a full assessment this year.

## **Current assessment – Selectivity function**

34. It was noted that time block selectivity has occurred before whereby the selectivity function has been allowed to change shape such as in times of gear change.

35. Given that there is no particular year where change occurred, the model was allowed to decide how to change over time. This allows for a gradual change over time and is based on a combination of a selectivity and availability function.



36. Industry noted that there was a legislated increase in minimum codend mesh size in early 2000's.
37. The AFMA member noted his concern that the model-selected selectivity function appeared to be selecting for smaller fish more recently, and that this seemed to be at odds with increased in mesh-size and other gear modifications for the trawl fleet in more recent years.
38. It was noted that for the selectivity function, the data prior to 1975 will not be used based on the uncertainty around discarding.
39. For the base case the RAG agreed to keep the selectivity simple and to use time blocks for retention but not selectivity.

#### **Current assessment – Fishery Independent Survey (FIS) and Kapala data**

40. It was noted that the FIS data was not included in the preliminary model. Redfish CVs from the FIS are reasonably high and for this reason the RAG agreed not to include the FIS data in the assessment.
41. It was noted that Kapala data was not used in the 2002 or 2005 assessments or this preliminary assessment. However, Dr Tuck noted that abundance indices from the Kapala data for 1977 and 1997 show a decline of 24:1.
42. The RAG agreed to do a sensitivity with Kapala data but not for it to be included in the base case

#### **Current assessment – Biological parameters**

43. It was noted that the preliminary assessment assumes:
  - M fixed at 0.10
  - steepness is 0.75
  - recruitment is estimated between 1970 and 2012 (south) or 2011 (north)
  - all growth parameters estimated except for the k growth parameter which is taken from the 2002 and 2005 assessment.
  - Maturity 50% female maturity at 19cm (north) and 18cm (south)
44. It was noted that what has been presented has been based on the north/south split however the RAG agreed that the base case will have use a single stock model.
45. The RAG agreed to fix M at 0.1 but run a sensitivity around growth.

#### **Current assessment – Data weighting**

46. It was noted that the data weighting method used is based on what was done in previous assessments whereby catch rates inform the abundance trends rather than length and age data.
47. Data weighting will not be based on the Francis method but this will be considered in future iterations. This decision to continue with the previous method of data weighting was taken based on technical issues with implementing the Francis method of data weighting at this time. There was some RAG discussion about the SESSFRAG's stated preference for stock assessments to use the Francis weighting method where possible.



48. C.V.'s for the catch-rate data will be adjusted to ensure the residual variance is consistent with the input C.V.'s.
49. The RAG agreed to use traditional data weighting rather than the Francis model for the base case assessment until the technical details of its application to the Redfish model were overcome.
50. Dr Tuck undertook to consider the best way to include the CPUE series in the model and he would advise the RAG at the next meeting.

## ***2.2 Develop specification for a Tier 1 assessment for Redfish***

51. This was addressed in conjunction with Agenda Item 2.1.

## **3. Redfish cont.**

52. This was addressed in conjunction with Agenda Item 2.1.

*Meeting closed at 5.45pm*

## **Day 2 – Meeting commenced at 9am**

The Chair invited participants to discuss any further thoughts regarding the previous day's discussion on Redfish. The following key points were raised:

53. Mr Boag noted concerns around assessing Redfish as one accessible stock when there is potential for it to be a single shelf stock with a periodic influx of an oceanic or other inaccessible stock. He explained that this was evidenced by the work that the Chair had completed (cited above) suggesting that there may be a periodic influx of fish in the southern region. Also, that the assessment may not produce a result that is representative of the entire stock or stocks for this reason. Dr Tuck explained that the assessment models the resident stock but will still take account for a transient stock if there is one. There was agreement that there was uncertainty about potential transient stocks, how frequently they may occur and that they are hard to measure.
54. The Chair noted that if the assessment is not picking up on an occasional increase in availability of Redfish, then at least the output should be a conservative estimate.
55. The recreational fishing representative noted concerns regarding the level of understanding of basic biology of Redfish by the RAG. Dr Tuck noted that there is considerable data informing the assessments and that there are no major gaps in our knowledge that will cause problems for the assessment.
56. The Chair suggested it may be worth looking at more recent age data and seeing if there is any evidence of a transient stock occurring again in other years by looking at the variation in mean length of age across years.

### **ACTION ITEM #2 – CSIRO**

CSIRO to look at more recent age data and identify if there is evidence of a transient stock occurring in other years by looking at the variation in mean length of age across years.



57. Participants and members noted that it may be worthwhile looking at the distribution of effort for Redfish as well as providing a background document to the assessment with the data considering the RAG ran out of time to analyse to a desired level.

## **4. General updates**

### *4.1 Manager's report on management issues*

The AFMA Manager presented the following management issues:

#### **Catch vs TAC**

58. A table was presented comparing catch to date against TAC and the equivalent for the same time last year and end of last year, flagging any species that are of concern including species that are under caught.
59. Industry noted that a lot of effort has been made to avoid Blue Warehouse and Eastern Gemfish and reduce catches.
60. Industry suggested that when presenting this type of comparison it would be useful to include the amount of fishing effort to better align with a shift in fishing effort.

#### **Under caught TACs**

61. It was noted that the issue of under caught TACs was originally brought up at the most recent SEMAC and consequently to SESSFRAG. SESSFRAG suggested that the issue may best be dealt at the individual RAG level on a species by species basis.
62. AFMA noted that the issue of under caught TACs had been noted more broadly, and that their intention is to initially address this issue at a higher level with the Commonwealth Fisheries Association before engaging in more detail with individual fisheries.
63. AFMA noted that their aim is to identify any management measures that may be acting as impediments to catching the TAC of any particular species.
64. Industry noted the following potential reasons for under caught TACs for some species:
- quota availability
  - cost of leasing quota
  - market availability and functioning
  - maintenance of an aging fleet
  - Skipper skill loss
  - bad weather
  - lost markets
  - low prices due in part to amount of imports into the market
  - costs of fishing vs. expected market returns



65. It was suggested that it is not abnormal for the industry to have boom and bust periods and the subsequent change in behaviour of fishers to adapt to these variables may skew the data which is used in assessments.

#### **Rebuild species – Blue Warehouse**

66. It was noted that AFMA has reviewed the rebuilding strategy for Blue Warehouse.

67. A draft has been through the Department of Agriculture and the Department of the Environment and it will be distributed to the RAG for comment as well as for public consultation in the coming weeks.

68. Blue Warehouse has recently been considered by the Threatened Species Scientific Committee (TSSC) for listing.

69. The RAG was advised that TSSC considerations have been finalised and will be provided to the Minister for the Environment. The Minister has three months to make a decision.

70. The TSSC has been provided a copy of the draft rebuilding strategy and this has formed part of the advice to Minister with regards to AFMA's future management strategies. (further discussion of this was held under agenda item 5)

#### **Consideration of a single jurisdiction**

71. It was noted that the Commonwealth and NSW are discussing a single jurisdiction management model under Commonwealth management in NSW trawl, south of Barrenjoey.

72. It is believed that there is in principle agreement from the Commonwealth and the NSW Department of Primary Industries to pursue this model, and that both industries appear supportive of the move. However, it is noted that this process may take approximately two years.

#### **SETFIA/World Wildlife Fund/Coles Fishery Improvement Program**

73. It was noted that this is a potential SETFIA project and that AFMA is not a direct signatory but is supporting with data and information.

74. The RAG was advised that information and questions from this project may come through the RAG for consideration.

75. It was noted that questions have been put to AFMA that may need RAG input at a later meeting. These include questions about the potential for an Ocean Jacket assessment, what data is required and what would be the cost of an assessment?

76. The Chair noted that recommendations surrounding multiple MYTACs were well received by the AFMA Commission and that the Commission had agreed with the AFMA MYTAC recommendations.

#### **4.2 Commission's comments on 2013 SESSF TACs**

77. This was covered under Agenda Item 4.1.

#### **4.3 ABARES Fishery Status Report 2013**

78. Dr Matt Flood informed the RAG that the 2013-14 Fishery Status Report is due for release on 22 October 2014. It was noted that overall there has been an



improvement in biological and economic status for a number of stocks. However, further information is confidential until the release date.

#### **4.4 SESSFRAG update**

The Chair gave an update of the two SESSFRAG meetings that have been held since the last ShelfRAG meeting and made the following key points:

79. Following the Pink Ling assessment and external reviews SlopeRAG noted the benefit of independent reviews of Tier 1 assessments. However, the cost constraints associated with this were noted. It is intended that AFMA will develop a paper on the mechanisms surrounding independent review.
80. The SESSF Harvest Strategy Framework has been revised and changes have been flagged including the potential for probabilistic advice.
81. There was acknowledgement that work needs to be done to improve understanding of the risks involved in moving towards MYTACs and multi-year RBCs.
82. As part of the move to multi-year RBCs, the role of the large change limiting rule was discussed and whether it is still appropriate.
83. SESSFRAG questioned what the breakout rules mean and what we should do if a species does break out. There were questions surrounding the usefulness of the breakout rules and how they are currently formulated.
84. There was agreement at SESSFRAG that if the breakout rules are based on CPUE then they should be based on the same CPUE series that was used to set the MYTAC.
85. Discount factors were discussed and agreed by SESSFRAG that they are to remain in their current form until the RAG comes up with something better.
86. It was noted that the error level around the assessments is being explored as a basis for getting species specific discount factors.
87. It was agreed that exemptions from discount factors should remain with regard to closures.
88. Stock regionalisation was discussed and it was noted that ShelfRAG had already provided comments on which species should be considered.
89. Research priorities were considered and agreed that the highest priorities were the FIS, the ISMP data, aging data and assessments.
90. It was noted that the RAGs need to consider the timing of MYTACs so the assessments do not coincide.

#### **4.5 Observer Report (Tabled)**

91. The 2013 calendar year observer report was distributed to all members prior to the meeting. The Chair noted that SESSFRAG agreed that observer coverage had improved and more targets were being met. ShelfRAG had no further comments.

## **5. Blue Warehouse and Eastern Gemfish Rebuilding Strategy**

The AFMA manager presented the Blue Warehouse and Eastern Gemfish Rebuilding Strategies to the RAG and made the following points:



92. Both Eastern Gemfish and Blue Warehouse have rebuilding strategies which were developed in 2008 and are due to be reviewed every five years.
93. Eastern Gemfish is listed as conservation dependent but Blue Warehouse is not.
94. Both strategies have been reviewed and draft revised strategies provided to the Department of Agriculture and the Department of the Environment for comment. The revised strategies will be distributed to the RAG for comment as well as for public consultation in the coming weeks.
95. A reporting table for the performance of the strategy against the objectives is included at the back of the document. AFMA are seeking advice from the RAG on this table.
96. To aid in representation CSIRO suggested including a graph showing the number of Blue Warehouse shots greater than 250kg compared to previous years.
97. It was noted that the intention of the reporting table is to maintain the focus on what needs to be done and create conversation within the RAG.
98. The RAG agreed that it would be more time efficient for comments to be provided when the rebuilding strategies are distributed to the RAG rather than in this meeting.

**ACTION ITEM #3 – Marcus Finn**

Marcus Finn to confirm that length frequencies of Blue Warehouse have been received by a specific AFMA employee and entered into the AFMA database.

## **6. RAG RBC/TAC advice sought for Tier 3 and 4 species**

### ***6.1 Blue Warehouse (rebuilding paper attached for information)***

The RAG discussed Blue Warehouse and made the following key points:

99. Currently, year to date, landings of Blue Warehouse are 12 per cent of the TAC whereas for the same time last year, landings were 49 per cent of the TAC. Industry representatives mentioned that two particular boats which are likely to have caught approximately 45 per cent of the landings for this time last year have since left the fishery.
100. CSIRO noted that current discard estimates had not been received.
101. The RAG noted that given the importance of discard estimates, final advice for Blue Warehouse will be delayed until the October ShelfRAG meeting.
102. Mr Boag questioned whether a targeting analysis would be undertaken for Blue Warehouse and was concerned how the RAG would make an informed decision about the bycatch TAC for the species without a targeting analysis.
103. The Chair noted that updating the targeting analysis was apparently not included in the CSIRO workplan and that it was hoped that the combination of catch and discards would allow the RAG to make reasonable inferences about the level of targeting that has occurred.

**ACTION ITEM #4 – AFMA**

AFMA to discuss with CSIRO as to whether a targeting analysis should be performed every year for Blue Warehouse and whether it fits into the current contract.



## 6.2 Mirror Dory

104. It was noted that last year the RAG rejected the Tier 3 for Mirror Dory due to concerns around the representativeness of the size and age composition data. Consequently, the observer section made concerted effort to increase data collection for this species from the winter fishery.
105. Dr Robin Thomson presented data summaries for Mirror Dory East and Mirror Dory West. The following key points were presented to the RAG:

### Mirror Dory East

106. TAC and landings graph is for all stocks (east and west combined).
107. A change in emphasis in the catch curve from younger fish to older fish in the Tier 3 caused the TAC for Mirror Dory East to decrease.
108. The 2014 data summaries show that landings and CPUE are not showing a lot of change but the catch depth increased slightly in 2013.
109. The port length frequencies show a bimodal distribution. It was suggested that this may represent recruitment.
110. The age frequency data shows that samples have not been taken since 2011.
111. The data is showing a good spread of samples.

### Mirror Dory West

112. TAC and landings graph is for all stocks (east and west combined).
113. The 2014 data summaries show that CPUE is not showing a lot of change but depths are slightly shallower.
114. No discard estimates are showing for Mirror Dory west
115. The age frequency data shows that samples have not been taken since 2011.
116. The data is showing relatively good representativeness.

### **ACTION ITEM #5 – CSIRO**

CSIRO to plot available Mirror Dory and John Dory age composition data.

Dr Thomson presented the preliminary Tier 3 assessments for Mirror Dory. It was noted that:

117. The catch curve plot varied in steepness across the last couple of years based on the data provided. However, the only data that we currently have is catch curve plots and do not have a plot for age composition.
118. It was noted by the RAG that the new age data from the winter sampling has not shown up in the data yet as it would be collected during the winter of 2014.
119. The RAG agreed that due to this reason, the assessment will remain at Tier 4 and the Tier 3 will not be accepted.

Dr Haddon presented the preliminary Tier 4 assessment for Mirror Dory. It was noted that:

120. Only an approximate assessment could be developed because discard estimates were yet to be finalised and CSIRO had not yet received all the State data.



121. Dr Haddon had used discard and state data from last year as an indication for this draft assessment.
122. Total removals were down slightly last year but catch rates were up slightly.
123. State data was minimal last year.
124. The draft assessment is representative of the whole of Mirror Dory and not split into East and West.
125. The RAG agreed that to be able to provide further advice, Mirror Dory data needs to be separated into East and West. Mirror Dory will be readdressed at the October meeting.

**ACTION ITEM #6 – Malcolm Haddon**

The RAG agreed that to be able to provide further advice, Mirror Dory data needs to be separated into East and West. Mirror Dory will be readdressed at the October meeting.

***6.3 John Dory***

Dr Robin Thomson presented the data summaries for John Dory. The following key points were made:

126. John Dory has been on a three year MYTAC and is due to be assessed this year.
127. The TAC, landings, CPUE and catch at depth have all remained relatively steady in recent years.
128. Zones and method are similar in previous years.
129. There are no discard estimates for 2013 yet and no new aging data.
130. There is only age data for 2010 and 2011 with smaller fish appearing in 2011.
131. NSW is highly under represented.
132. Based on port length frequency data and earlier age sampling, the RAG agreed to use a Tier 3 assessment again. CSIRO will update catches and will give a final version of the Tier 3 at the October meeting.

**ACTION ITEM #7 – CSIRO**

CSIRO to update John Dory catch data and present a Tier 3 assessment at the October meeting.

133. The Chair advised that it is expected that advice would also be given for another MYTAC.
134. Industry proposed to move to longer term MYTAC depending on the results from this year's assessment.
135. The RAG agreed that it is something that could be suggested depending on the results presented at the October meeting.

***6.4 School Whiting***

136. The RAG agreed that the School Whiting assessment should be deferred until the October meeting because state data has not yet been obtained.



### **ACTION ITEM #8 – CSIRO**

CSIRO to update State catches and present a School Whiting assessment at the October meeting.

## **7. Summary of breakout species and resultant actions from SESSFRAG**

The AFMA Manager presented to the RAG a summary of breakout species addressed at SESSFRAG and the decisions reached for each species.

### ***7.1 Tiger Flathead***

137. This is the first year of a three year MYTAC.

138. A Tier 1 assessment is due in 2016.

139. The RAG noted that the latest CPUE point for trawl fitted within the 95 percent confidence interval however Danish seine CPUE was lower than the 95 percent CI. SESSFRAG recommended continuing with the current MYTAC and if Tiger Flathead CPUE breaks out next year, do the assessment a year early. The RAG agreed with this approach.

140. It was noted by industry that:

- a change in CPUE could be attributed to the management arrangements for Pink Ling which has caused industry to fish alternative grounds.
- trawl vessels avoided Tiger Flathead in 2013 due to increased quota lease prices.
- water temperatures decreased significantly in Eastern Bass Strait in 2013 which could attribute to decreased catch rates.

### ***7.2 Jackass Morwong***

141. NSW/Vic trawl CPUE has been declining and fell below the 95 per cent confidence interval.

142. Tasmania trawl CPUE is within the confidence interval. However, three years ago it was Tasmania trawl CPUE which broke out.

143. This species is due for reassessment next year.

144. SESSFRAG recommended that there is no requirement to bring the assessment forward as it will be done in 2015 for the 16/17 TAC setting process. The RAG agreed with this approach.

## **Agenda Item 8 – Eastern Gemfish**

### ***8.1 Report on recreational fishing of Eastern Gemfish***

The recreational fishing representative gave a presentation on recreational fishing for Eastern Gemfish. The following topics and key points were covered:

145. Daily combined bag and boat limit and individual possession limits apply to the recreational fishing sector



146. Eastern Gemfish are not as much of an important species for the charter fishing sector in NSW due to operational issues.

147. The 2013/14 Recreation Fishing 12 month diary survey is currently underway

- Results are expected later this year.
- Involves analysis of approximately 2000-3000 diaries from the recreational and charter boat fisheries.
- It is anticipated that catch will be within 0 and 20 tonne.

148. The NSW Fisheries Scientific Committee proposed to list Eastern Gemfish as a vulnerable species in May 2014 under the NSW Fisheries Management Act 1994.

149. Issues surrounding recreational catches of Eastern Gemfish include predation from Mako Sharks and Blue Whalers as well as compliance from other recreational fishers.

150. Recreational fishers observe various environmental conditions to make an informed judgement as to where to fish and when such as weather, currents, sea surface temperature, chlorophyll levels. It was noted by Dr Haddon that this demonstrates the increased catchability and efficiency of recreational fishers compared to traditional fishing.

151. Tackle and boats used by recreational fishers.

152. Gemfish caught this year by recreational fishers have been in the 15-18kg range.

153. It was suggested that recreational fishers could assist government in data collection of Eastern Gemfish.

154. Mr Boag noted that according to the ISMP report, in 2013 we achieved 148 per cent of our target for length frequencies for Eastern Gemfish and 133 per cent of our target for otolith collections which is more data than planned.

155. The Chair noted a key problem for updating the assessment is that we no longer have a reliable index of abundance and unfortunately this is something that recreational fishers may not be able to assist with.

## ***8.2 Industry views on what is happening***

156. The AFMA Manager noted that the attention of the AFMA Commission has been focussed on Eastern Gemfish. It was noted that this season, Eastern Gemfish did not occur in commercial catches when they were expected to. However, Eastern Gemfish is being caught in recreational catches. The AFMA Manager invited industry members to share their thoughts on Eastern Gemfish.

157. Industry members mentioned to the RAG that they did not target Eastern Gemfish last season. However, it was noted that:

- in open areas outside the 700m line near Flinders Island, it was the first time industry had caught Eastern Gemfish at approximately 500 fathom.
- at approximately 80 fathom around Flinders Island, many juvenile Eastern Gemfish were sighted in the nets.



### **8.3 A report from AFMA Compliance Branch and 8.4 Rebuilding strategy presentation**

158.The RAG ran out of time to address these agenda items.

#### **Agenda items 8.5 to 8.8**

159.It was noted that the RAG does not have an updated assessment for Eastern Gemfish. It was noted that this is something to bring up at the October meeting after the rebuilding strategy has been provided to the RAG for comment.

*ABARES participants left the room at 12.10pm*

### **Other business - Revision of FAP 12**

The AFMA Manager gave a summary of the revised FAP 12. The key points are highlighted below:

160.FAP 12 was updated in early 2014 to try and clarify relative roles and responsibilities between MACs and RAGs and how advice flows through the relevant committees. More specifically:

- The RAG is an advisory body not a decision making body.
- Advice from the RAG goes to the MAC, AFMA Management and the AFMA Commission directly.
- The RAG has a role in providing advice on strategic research priorities to the ARC.

161.It was noted that invited participants are obliged to adhere to the same requirements as members.

162.The main role of the RAG is to peer review scientific data and information and provide advice on fish stocks, non-target species and the marine environment. This advice needs to pursue AFMA's legislative objectives.

163.Where relevant the RAG should advise on maximising net economic return for the fishery.

164.Key outputs of the RAG are RBCs and where relevant, the RAG should consider alternative harvest strategy options and identify information gaps.

165.It was noted that the responsibilities for RAG members include:

- Act with the best interests for the fishery as a whole rather than advocating for any particular organisation.
- Act impartially and consider and base their decisions on the best available scientific information.
- Advice provided should be relevant to management strategies.
- Be prepared to observe confidentiality and act with tact with sensitive issues.
- Act with integrity, care and diligence.

166.The Chair noted that participants should be aware that RAG conversations are confidential until the minutes have been made public.



167. It was noted that the main change reflected in the revised FAP 12 is that conflict of interest is not just pecuniary but other interests also.

168. The Chair encouraged members to read the revised document.

169. It was noted that there are specific requirements surrounding the membership of the RAG and an issue for this meeting is that we have not formally met our requirement of two scientific members. However, AFMA are undertaking the necessary processes to rectify this.

*Meeting closed at 12.00pm.*

*The Chair thanked all participants and closed the meeting, noting that we will finalise advice for all species at the next meeting.*



**Table 1: Uncompleted action items carried over from ShelfRAG November 2013**

No	Action item	Action person	Result
1.	Liaise with ABARES to obtain price data for use in the companion species work.	Neil Klaer	To be re-allocated to Robin Thomson to complete
2.	Ensure any change in coding of data is communicated to the stock assessment scientists.	AFMA (via Marcus Finn)	Ongoing action item
5.	Liaise with AFMA (George Day) to determine when the Danish seine codend mesh size was implemented and investigate the selectivity change for any significant difference in the Tiger Flathead assessment. For consideration in the next flathead assessment.	Jemery Day	To be completed when Tiger Flathead is due for assessment.  Jemery Day to follow up with Malcolm Haddon and Simon Boag initially.
7.	Send AFMA the port sampling data table (particularly for Nungurna) to flag the issues with the AFMA observer section.	Neil Klaer	To be re-allocated to Judy Upston and follow up as part of discard work
9.	AFMA observer section to increase age and length sampling of Mirror Dory in the ISMP plan/quarterly report, particularly from NSW over their winter spawning time. The RAG recommended using a coring device due to the difficulty in collecting Mirror Dory otoliths.	AFMA Observer Section	To be reviewed when discussing mirror dory
12.	Write a comment in the catch by gear figure for Blue Warehou stating that gillnet data is missing prior to 1997.	Neil Klaer	To be re-allocated to Robin Thomson to complete
13.	Add an Ocean Jacket tab to the catch history spread sheet.	Neil Klaer	To be re-allocated to Robin Thomson to complete
14.	Request the final stock assessments for the Southern and Eastern Scalefish and Shark Fishery from Geoff Tuck for publication on the AFMA website.	AFMA	Stock assessments received from Geoff and to go up on the AFMA website when the new website goes live.



**Table 2: Table of action items from ShelfRAG September 2014**

No.	Action Item	Person Responsible	Timeframe
1.	AFMA Manager to check that species summaries are on the AFMA website and to upload if not already done	AFMA Manager	By the October 2014 ShelfRAG meeting
2.	CSIRO to look at more recent age data and identify if there is evidence of a transient stock occurring in other years by looking at the variation in mean length of age across years.	CSIRO	
3.	Marcus Finn to confirm that length frequencies of Blue Warehou have been received by a specific AFMA employee and entered into the AFMA database	Dr Marcus Finn	By the October 2014 ShelfRAG meeting
4.	AFMA to discuss with CSIRO as to whether a targeting analysis should be performed every year for Blue Warehou and whether it fits into the current contract.	AFMA and CSIRO	By the October 2014 ShelfRAG meeting
5.	CSIRO to plot available Mirror Dory and John Dory age composition data.	CSIRO	By the October 2014 ShelfRAG meeting
6.	The RAG agreed that to be able to provide further advice, Mirror Dory data needs to be separated into East and West. Mirror Dory will be readdressed at the October meeting	Dr Malcolm Haddon	By the October 2014 ShelfRAG meeting
7.	CSIRO to update John Dory catch data and present a Tier 3 assessment at the October meeting.	CSIRO	By the October 2014 ShelfRAG meeting
8.	CSIRO to update State catches and present a School Whiting assessment at the October meeting.	CSIRO	By the October 2014 ShelfRAG meeting

