



Australian Government

Australian Fisheries Management Authority

**Bass Strait Central Zone Scallop
Fishery Resource Assessment Group
(ScallopRAG) Meeting 31**

Meeting minutes

Date: 20 June 2018

Park Royal, Melbourne Airport

Meeting Minutes

1 Preliminaries

1.1 Welcome and apologies

The Chair opened the meeting 9:05 am and welcomed members and observers, and noted apologies.

Attendees	Membership
Brendan Kelaher	Chair
Nic Marton	Scientific Member
Jayson Semmens	Scientific Member
Allan Barnett	Industry Member
Sally Weekes	AFMA Member
Claire Taylor	Executive Officer
Toby Jeavons	Invited Participant, Fisheries Victoria
James Parkinson	Invited Participant, DPIPWE, Tasmania
Robert Curtotti	Observer, ABARES
Matt Koopman	Observer, Fishwell Consulting
Ross Bromley	Observer, Girella Fisheries Services

1.2 Declaration of interests

The RAG followed the conflict of interest declarations as outlined in Fisheries Administration Paper 12. Members and observers reviewed and updated the Declarations of Interest included at Attachment B. Allan Barnett notified the RAG of a change of declared interactions, as he owns a processing facility and no longer operates it, however, his daughter operates the facility.

The following participants took turns leaving the room while the RAG considered their respective interests and how they should be managed.

- Ross Bromley – declared a potential conflict with agenda item 6 ‘2018 TAC and closures recommendations’ in that his clients are concession holders in the fishery. The RAG decided he could be part of the discussion and that as an observer he was not part of the recommendation decision making.
- Jayson Semmens - declared a potential conflict with agenda item 8 ‘research priorities’ in that he / his organisation submits research proposals from time to time in relation to this fishery. The RAG decided he could be part of the discussion for research priorities but should not participate in forming the RAG recommendation.
- Nic Marton - declared a potential conflict with agenda item 8 ‘research priorities’ in that he / his organisation submits research proposals from time to time in relation to this fishery. The RAG decided he could be part of the discussion for research priorities but should not participate in the recommendation decision making if a research priority was relevant to ABARES.
- Robert Curtotti - declared a potential conflict with agenda item 8 ‘research priorities’ in that he / his organisation submits research proposals from time to time in relation to this fishery. The RAG decided he could be part of the discussion for research priorities but as an observer he was not part of recommendation decision making.

- Allan Barnett – declared a conflict with agenda item 6 ‘2018 TAC and closures recommendations’ in that he is a concession holder in the fishery. The RAG decided he could be part of the discussion but should not participate in forming the RAG recommendation.

1.3 Adoption of Agenda

The agenda at Attachment A was adopted by the RAG as final, with the addition of the following items:

- Three letters AFMA had received from industry about TAC setting (to be discussed under agenda item 6 ‘2018 TAC and closure recommendations’).
- Ageing methodology of scallops done as a part of the Eastern Victorian Ocean Scallop Fishery 2017-18 Abundance Survey (to be discussed under agenda item 8 ‘research priorities’).

Members were advised that the meeting was being recorded to assist with the preparation of the meeting minutes.

2 Meeting administration

2.1 Minutes of previous meeting

The RAG noted the final minutes of the ScallopRAG meeting of 25 October 2017 are available on the AFMA website.

2.2 Actions arising from previous meetings

The RAG noted there were no outstanding action items from previous meetings.

3 Fishery update

3.1 AFMA management

The AFMA member provided an update on matters relevant to the MAC and the Bass Strait Central Zone Scallop Fishery (BSCZSF).

- Commercial catch/effort data for the BSCZSF 2017 season. The RAG noted the commercial scallops TAC was 98.8 per cent caught and zero bycatch and protected species information was reported.
- A review of season end date had been raised as a high priority by industry on a number of occasions. However to date there has not been agreement between industry and scientist on the approach required to support a change. The AFMA Commission has encouraged industry to work with scientists to develop a solution.
- A new ecological risk assessment for the BSCZSF is scheduled for 2019-20.
- AFMA is expanding its Lakes Entrance office and the management of the BSCZSF is expected to move there in 12 months’ time.

3.2 Tasmanian management

The Tasmanian Government participant provided an update on the Tasmanian fishery.

- Following poor survey results in April and May 2017, the Minister approved the closure of the fishery for two years along with a decrease in license costs. The Tasmanian fishery is not expected to open until 2020 subject to a biomass survey being undertaken. Until then,

fishers can take opportunistic surveys when they transit to and from other fisheries. To do this they need to apply to Tasmania for approval and they will not be allowed to keep scallops.

- The fishery management plan will be reviewed while the fishery is closed.
- Biotoxins continue to be a concern.

3.3 Victorian management

The Victorian Government participant provided an update on the status of the Victorian scallop fishery.

- Following a 2009 biomass survey the fishery was closed for 2010, 2011 and 2012.
- A 130 tonnes TAC was set for 2014 to 2017 for exploratory fishing and data collection.
- A survey was undertaken in December 2017 and January 2018 and estimated a biomass of 4000 to 5000 tonnes across a very large area, which is not commercially viable. Consequently, a TAC was set at 130 tonnes for exploratory fishing and data collection.
- The Victorian Government is developing a harvest strategy for the fishery.
- More seismic surveys are expected for 2018.

3.4 Industry update

The Industry Member provided an update on the BSCZSF 2017 season.

- At the start of the season industry found the King Island Bluedot bed had high catches of small scallops that weren't the best quality, so industry organised a voluntary closure of the Bluedot bed.
- 2017 was a successful year for fishing and exports.
- The beach price stayed high at \$16 throughout the season.

4 Economic data

ScallopRAG noted the table of BSCZSF economic data that had been collated by industry members on ScallopMAC, AFMA and ABARES. ABARES run economic surveys of Commonwealth fisheries that outline the average profit and loss of boats to calculate the net economic return. A survey has not been done for the BSCZSF for a number of years. The RAG discussed how the available economic data could be further developed to show profitability trends for the fishery.

The RAG noted:

- lease price is based on approximately 15 per cent of beach price
- meat weight to shell weight is about 13 to 14 percent.

The **RAG recommended** the following changes to the economic data table:

- Include a conversion factor to enable the calculation of whole weight. This would show how quality is changing over time and help to understand changes in beach price. ABARES advised they can provide this data on an annual basis.
- Include effort data.
- Exclude reference to Tasmanian beach price for 2006-08. This was when the BSCZSF was closed and including the Tasmanian beach price is misleading.

<p>Action item 1 – AFMA to work with ABARES to include a conversion factor in the economic data table to enable the calculation of whole weight.</p>

5 Biomass survey results

Dr Koopman from Fishwell Consulting presented the results from the 2018 biomass survey. Dr Koopman thanked the owners and crew of the four vessels used to conduct the survey, whose contribution to the survey was highly valued and noting the high standard to which the survey was completed.

The 2018 stratified random survey was conducted during late May and early June 2018 and aimed to estimate the commercial scallop biomass, potential commercial catch rates, measure size frequency and calculate densities of 12 scallop beds (seven previously surveyed beds and five exploratory beds). The methods were similar to previous surveys except the dredge width was calculated using the outermost teeth instead of the internal width which was used for 2015-17. Exploratory fishing did not yield appreciable densities of scallops in three of the exploratory beds, so a total of nine beds were surveyed to obtain a biomass estimate. A summary of the survey results are at Table 1.

ScallopRAG noted the following for each bed:

- **Flinders Island (FI-1)** – this bed has the largest amount of small scallops. The biomass has decreased since the 2015 survey but the proportion of dead scallops in the catch has not increased.
- **King Island 5 Small (KI-5S)** – this bed has the most scallops >85 mm. The biomass has decreased since 2016 and the proportion of dead scallops in the catch has increased. The bed was not fished in 2017 because the density was not as high as other beds open to fishing.
- **King Island Bluedot extended (KI-BDE)** – this bed has the highest mean density. The RAG noted the density was so thick that if there were small scallops then they should be caught in dredge, which wasn't seen in the size-frequencies. The proportion of dead shell has increased.
- **King Island Middle (KI-Mid)** – this bed has the lowest density and has a small biomass. The survey had numerous zero shots. ScallopRAG noted a decline in the biomass and an increase in the proportion of dead shell.
- **King Island New (KI-New)** – the RAG were concerned that the size frequency did not show signs of recruitment. In 2017 most of the fishing effort was on other beds.
- **King Island 6 (KI-6)** – this was the first time the site was surveyed. Results showed many large scallops. The pattern of size frequency was most similar to the Apollo Bay beds than the King Island beds.
- **King Island 7 (KI-7)** – this was the first time the site was surveyed. Results showed many large scallops.
- **Apollo Bay 1 (AB-1)** – the size of scallops in this bed had grown since 2017. There was no sign of recruitment. Apollo Bay has deeper water so potentially the growth is slower in this region.
- **Apollo Bay 2 (AB-2)** – results were similar to that of AB-1 and showed no signs of recruitment. AB-3 and AB-4 were surveyed in 2017 but the density was low so they were not surveyed in 2018.

Table 1. Summary of biomass estimates, density, mean size and meats/kg for the 2018 survey. Note that densities have been adjusted for a 33% assumed dredge efficiency (Fishwell Consulting, Bass Strait Central Zone Scallop Fishery Survey 2018).

Area	Bed	Estimated biomass (t)	% weight > 85 mm	Estimated biomass (t)>85 mm	Density (ind/m ²)	Mean size	Meats / kg
FI	FI-1	2521.9	67.7	1707.1	0.269	86	72
	Sub-total	2521.9		1707.1			
KI	KI-5S	3529.4	99.9	3526.9	0.372	110	41
KI	KI-BDE	14617.3	96.4	14095.2	2.882	94	68
KI	KI-Mid	16.3	99.7	16.2	0.014	112	44
	KI-New	2780.5	100	2780.5	0.406	110	38
KI	KI-6	2360.5	97.1	2291.7	2.368	97	69
	KI-7	2036.5	97.6	1987.8	1.293	99	55
	Sub-total	25340.5		24698.2			
AB	AB-1	1892.3	99.9	1890.5	1.502	103	67
AB	AB-2	1803.8	100	1803.8	1.408	104	69
	Sub-total	3696.1		3694.3			
	Total	31558.5		30099.6			

The RAG also noted:

- Scallops grow slower as they get bigger so as they age, the size frequency distribution becomes bunched together which is the current pattern being observed for a number of the beds. Overall there were not many beds with small scallops. The size frequencies of FI, KI-BDE and KI-6 showed there were some small scallops in those beds, however, the pattern did not indicate strong recruitment. The RAG noted concern that there was no evidence of recruitment in the area surveyed and that if recruitment was occurring then it should show up in the beds. However, the RAG also noted that it is possible recruitment could be occurring outside of the known beds and is not being detected.
- Meat weights were compared across all surveyed beds. KI-BDE had the highest biomass and highest meats per kilogram.

Action item 2 – Dr Koopman to check the meats/kg calculations in the biomass survey report.

For bycatch, the RAG noted that live scallops dominated most beds, and agreed to discuss the survey results at agenda item 7 ‘data requirements for bycatch’.

ScallopRAG thanked industry for the efficient survey and Fishwell Consulting for the presentation and for compiling the report quickly.

RAG recommendation: future biomass surveys should start around 1 May to provide more time for members to consider the results before discussion at the RAG meeting.

6 2018 TAC and closure recommendations

The RAG noted the results of the survey and carefully examined the data. This included noting that the biomass of scallops greater than 85mm was 30,100 tones. From this, they considered Tier 2 of the Harvest Strategy was the most appropriate way forward.

ScallopRAG were notified of three letters AFMA had received in relation to setting the TAC.

1. Bob Lister to AFMA – asked if the TAC trigger could be reached at any time during the season and not just by 31 October. Or if a full TAC can be set for the season.
2. Wayne Davis et al. to AFMA – outlined reasons why there should be a full TAC instead of a step up TAC with triggers. Reasons included business certainty, reducing AFMA staff time, limited access, health and wellbeing, markets need consistency, and difficulty in keeping skilled employees if there is a stop in fishing. Larger quota holders have a buffer against some of these issues. ScallopRAG noted these issues should be considered by ScallopMAC.
3. John Cull to AFMA – AFMA should consider beds that had previously been fished for closure. ScallopRAG noted their closures recommendations is based on the biomass survey results.

In formulating its advice, the RAG considered:

- the consistent lack of recruitment across surveyed beds;
- that most of the surveyed beds were ageing and the King Island Middle bed had substantially declined;
- that most beds had a density of >0.2 individuals/m², which the RAG considers high enough for viable spawning potential.

Given the above points, the RAG considered that the closure of substantial areas that included some of the higher density beds was very important. They also thought it was important to protect the spawning biomass in different regions, given evidence of differing growth rates and localised recruitment. Based on location and similar length frequency distributions, the RAG considered the key regions to be Flinders Island, King Island and Apollo Bay, and aimed for a closure in each.

The RAG also considered the stepped approach to TAC setting, which was driven by low TACs and market considerations in the past. After extensive discussion, they concluded that there was no real biological basis for a stepped approach. The ABARES economist advised that a step up may distort the market and also increase transaction costs which could create inefficiencies in the market. Further, if economic factors were to be considered, then the best approach would be to examine marginal revenue to marginal cost.

Action item 3 – ABARES to do a preliminary analysis of the available economic information to see if simple economic triggers could be developed (e.g. looking at marginal revenue to marginal costs under a few different scenarios) to inform the BSCZSF TAC setting process.

In light of limited the economic data, the RAG agreed that the 2018 TAC recommendation should be based primarily on biological considerations.

Given all this, the RAG recommended a 4000 tonnes TAC (with no step up) and the following closures:

Scallop beds	Estimated biomass > 85 mm (tonnes)	Density (individual/m ²)
Flinders Island (area of 2017 closure)	1 701	0.269
Apollo Bay 2	1 803	1.408
King Island 5 Small	3 527	0.372
Kind Island New	2 781	0.406
King Island Bluedot East	5 888	Average of whole bed 2.8
TOTAL closed biomass	15 707	

7 Data requirements for bycatch

AFMA introduced this item, seeking advice from ScallopRAG about the data needs for bycatch in the fishery. The data needs for bycatch will subsequently inform the data collection and monitoring strategy for the fishery.

ScallopRAG noted that the new Commonwealth Fisheries Bycatch Policy is expected to be published soon which is more prescriptive than the current policy and following its release, AFMA will develop a bycatch strategy for the BSCZSF that needs to detail:

- a) the bycatch species or groups of species
- b) the ERA methodology and results for each species, or groups of species
- c) consideration of cumulative impacts on bycatch populations
- d) management responses for areas of identified risk, including relevant quantitative approaches and indicators
- e) data collection, reporting and monitoring processes and minimum requirements that support the assessment, monitoring and management of bycatch
- f) performance and evaluation processes and outcomes.

Regarding bycatch, ScallopRAG previously advised that adequate information could be collected via biomass surveys which identify bycatch to the greatest taxonomic specification possible, in combination with weights of species groups collected via logbooks. The idea of species groups in logbooks is to simplify reporting for fishers, however, it requires changes to logbooks to be made which have not been made to date.

The biomass survey is now collecting valuable information regarding bycatch in that it is to a taxonomic level that fishers would not achieve in a standardised format and it is generating a good time series of information that is relatable to fishing effort given the areas surveyed are areas that are or will be commercially fished. One limitation is that given it is only once per year generally around May/June, it will miss seasonal information if there are bycatch species that move in or out during the season.

To inform the RAGs advice regarding the data needs for bycatch in this fishery, the **RAG recommended:**

1. Ensuring the bycatch data continues to be collected to the same level of detail in future biomass surveys.
2. That an analysis to explore how useful the bycatch data collected from the surveys is, be presented at the next RAG meeting.
3. Subject to the outcomes of (2), the RAG can provide advice about any additional data that may be required.

Action item 4 – AFMA to request Fishwell Consulting to undertake a detailed analysis of the bycatch data collected from the biomass surveys to date to explore its usefulness and assist the RAG identify if any additional data may be required. In particular, the analysis should include species identified as high risk through the ecological risk assessment process.

Action item 5 – ScallopRAG to provide advice on what bycatch data is sensible and reasonable and meets AFMA's requirements for the BSCZSF.

8 Research priorities

The RAG considered the annual research statement and made the following **recommendations**.

- AFMA funding (for AFMA Research Committee consideration)
 - 1) The annual biomass survey including reference to bycatch data remains a high priority.
 - 2) A project to age scallops, including a validation of the technique is a medium priority. There could be opportunities to work with other states and/or fisheries on this project. Ageing is important from a management perspective given that it will assist in succession planning of beds to fish/open under the harvest strategy.
 - 3) The review of season end date is not a high priority for ScallopRAG but it may still be important for ScallopMAC. The RAG agreed that any change to the season closure would need to be evidence based.
- No items for FRDC funding noting the project regarding impact of seismic activity on scallop larvae will be provided to the Commonwealth Fisheries Research Advisory Body for consideration in 2019-20.

The RAG considered the strategic research plan (2017 to 2021) and made the following **recommendations**.

- The research priority 'improve the understanding of the larval and recruitment dynamics of the scallop fishery' is an aspirational research item with no set time for funding.
- The timing assigned for a number of projects in the plan need to be revised.
- The ageing project was moved from 'aspirational' projects into the priority table.

9 Other business

The RAG agreed that it would be prudent to consider scheduled seismic activity on an annual basis when providing advice regarding closed areas. This is to ensure any important areas for the scallop fishery are considered in the consultation process required by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA). ScallopRAG **recommended** there should be a set agenda item to discuss planned seismic work at future meetings.

Action item 6 – AFMA to include schedule of planned seismic work to be undertaken in the next 12 months on agenda for subsequent ScallopRAG meetings (this will require getting update from NOPSEMA prior to meeting).

The Chair thanked Fishwell Consulting for the biomass survey presentation and the RAG for their contributions to the meeting. The meeting was closed at 3 pm.

Signed (Chairperson):



Date: 24/07/2018

Attachments

Attachment A: ScallopRAG 31 final agenda

Attachment B: Declarations of interest

Attachment C: Action item status



Australian Government

Australian Fisheries Management Authority

Bass Strait Central Zone Scallop Fishery Resource Assessment Group (ScallopRAG)

Meeting 31 – Park Royal, Melbourne Airport

Agenda

Wednesday 20 June 2018

Time (EDT): 9.00am

Participants	
Members	Membership
Brendan Kelaher	Chair
Nic Marton	Scientific Member
Jayson Semmens	Scientific Member
Allan Barnett	Industry Member
Sally Weekes	AFMA Member
Claire Taylor	Executive Officer
Toby Jeavons	Fisheries Victoria representative
James Parkinson	DPIPWE, Tasmania representative
Robert Curtotti	Observer, ABARES
Matt Koopman	Observer, Fishwell Consulting
Ross Bromley	Observer
Apologies	
Ian Knuckey	Observer, Fishwell Consulting
Dan Corrie	AFMA

Approximate time	Agenda item
9:00am	1. Preliminaries <ul style="list-style-type: none"> 1.1. Welcome and apologies 1.2. Declaration of interests 1.3. Adoption of agenda
9:15am	2. Meeting Administration <ul style="list-style-type: none"> 2.1. Minutes from previous meeting 2.2. Actions arising from previous meeting
9:30am	3. Fishery update <ul style="list-style-type: none"> 3.1. AFMA management 3.2. Tasmanian management 3.3. Victorian management

Approximate time	Agenda item
	3.4. Industry
10:15am	4. Economic data <i>ScallopRAG to discuss economic data for the fishery.</i>
10:30am	Morning tea
10:45am	5. Survey results (Fishwell Consulting) <i>Fishwell Consulting will present the results of the 2018 scallop bed survey to estimate biomass and density in beds.</i>
11:45pm	6. 2018 TAC and closure recommendations <i>ScallopRAG to discuss the survey results and to develop advice for ScallopMAC and the AFMA Commission for the 2018 TAC and closures.</i>
12:30pm	Lunch
1:15pm	7. Data requirements for bycatch <i>ScallopRAG to discuss and provide advice on data requirements for bycatch species in the fishery.</i>
1:45pm	8. Research priorities <i>ScallopRAG consider and provide advice on the strategic research priorities for the fishery (the Strategic Research Plan) and identify projects for funding in 2019-20 (the Annual Statement).</i>
2:15pm	9. Other business
2:30pm	Close

Attachment B – Register of interests

Name	Membership	Declared interests
Associate Professor Brendan Kelaher	Chair	ScallopRAG Chair, ScallopRAG member and SharkRAG member. No interest in the fishery pecuniary or otherwise.
Nic Marton	Scientist	ABARES employee. Organisation is known to submit research funding applications for consideration by ScallopMAC.
Associate Professor Jayson Semmens	Scientist	Scallop Research Group Leader, Institute for Marine and Antarctic Studies. Organisation is known to submit research funding applications for consideration by ScallopMAC.
Allan Barnett	Industry	Holds Commonwealth and State fishing concessions and a Commonwealth fish receiver permit. Owns a scallop processing plant and daughter operates the plant.
Sally Weekes	AFMA member	AFMA employee. No interest in the fishery pecuniary or otherwise.
Claire Taylor	Executive Officer	AFMA employee. No interest in the fishery pecuniary or otherwise.
Toby Jeavons	Observer	Manager Victorian scallop fishery. No interest in the fishery pecuniary or otherwise.
James Parkinson	Observer	Manager Tasmanian scallop fishery. No interest in the fishery pecuniary or otherwise.
Robert Curtotti	Observer	ABARES employee. Manager of economics section. ABARES does status reports for the fishery and is known to submit research funding applications for consideration by ScallopMAC.
Dr Matt Koopman	Observer	Fishwell Consulting. Company known to submit research funding applications for consideration by ScallopMAC. Undertook the 2018 scallop survey.
Ross Bromley	Observer	Owner of Girella Fisheries Services that has been engaged by a group of quota holders to attend Scallop RAG and MAC as observer. No personal pecuniary interest in the Bass Strait Central Zone Scallop fishery, however, clients hold quota in the fishery.

Previous action items

RAG meeting #	Agenda item	Action item #	Action item	Agency/person	Timeframe	Progress
<i>Nil</i>						

New action items

RAG meeting #	Agenda item	Action item #	Action item	Agency/person	Timeframe
31	4. Economic data	1	AFMA to work with ABARES to include a conversion factor in the economic data table to enable the calculation of whole weight.	AFMA and ABARES (Robert Curtotti)	As soon as practicable
31	5. Biomass survey results	2	Dr Koopman to check the meats/kg calculations in the biomass survey report.	Matt Koopman	As soon as practicable
31	6. 2018 TAC and closure recommendations	3	ABARES to do a preliminary analysis of the available economic information to see if simple economic triggers could be developed to inform the BSCZSF TAC setting process.	ABARES (Robert Curtotti)	Prior to start of 2019 season
31	7. Data requirements for bycatch	4	AFMA to request Fishwell Consulting to undertake a detailed analysis of the bycatch data collected from the biomass surveys to date to explore its usefulness and assist the RAG identify if any additional data may be required. In particular, the analysis should include species identified as high risk through the ecological risk assessment process.	AFMA and Fishwell Consulting	Prior to next RAG meeting
31	7. Data requirements for bycatch	5	ScallopRAG to provide advice on what bycatch data is sensible and reasonable and meets AFMA's requirements for the BSCZSF.	ScallopRAG	Next RAG meeting
31	9. Other business	6	AFMA to include schedule of planned seismic work to be undertaken in the next 12 months on agenda for subsequent ScallopRAG meetings (this will require getting update from NOPSEMA prior to meeting).	AFMA	Prior to next RAG meeting