



Australian Government
Australian Fisheries Management Authority



**Bass Strait Central Zone
Fishery Management Advisory
Committee (ScallopMAC)**




Meeting 29

Minutes

**Date: 15 June 2017
Park Royal, Melbourne Airport**

Attendance

Name	Membership
Mr John Pollock	Chair
Mr Bill Talbot	Invited participant – interim Scientific member
Mr Allan Barnett	Industry member
Mr John Hammond	Industry member
Mr Steve Mantzaris	Industry member
Mr Stuart Richey	Industry member
Mr Andrew Watts	Industry member
Dr Sylvia Zukowski	Environment member
Ms Sally Weekes	AFMA member
Mr James Parkinson	Invited Participant, Tasmania
Ms Toby Jeavons	Invited Participant, Victoria
Mr Anthony Harding	Executive Officer, AFMA
Dr Brendan Kelaher	Scientific member – via teleconference
Mr Nicos Matheou	Observer – industry
Mr Peter Mellios	Observer – industry
Mr Louis Hatzimihalis	Observer – industry

1. Preliminaries

1.1 Welcome and apologies

The Chair opened the meeting and welcomed members, invited participants and observers.

The Chair noted that the meeting would be recorded for the purpose of accurate minutes.

1.2 Declarations of interest

A table of previously declared conflicts of interest was distributed to the MAC prior to the meeting and is available at **Attachment 1**.

The Chair asked members to declare any specific conflicts of interest with items on the agenda or to declare conflicts of interest that were not recorded in the provided table. Following any specific conflicts of interest, the Chair requested that each member leave the meeting while the MAC discussed whether the conflict should preclude them from participating in the relevant agenda item. Following consideration by the MAC, the member was invited to re-join the meeting.

Mr Richey, Mr Hammond, Mr Barnett, Mr Mantzaris and Mr Watts all declared potential conflicts of interest with agenda item 6 in that they are concession holders in the fishery. The MAC noted these conflicts of interest and recognising their knowledge and valuable

contribution to the discussions though should abstain from any recommendations under Agenda Item 6 and all five were invited to re-join the meeting.

The MAC decided that the observers could also participate in the discussions on agenda item 6. Observers Louis Hatzimihalis, Nicos Matheou and Peter Mellios stated their conflicts of interest, which were added to the list at **Attachment 2**.

1.3 Adoption of Agenda

The MAC adopted the agenda with the following items for discussion under Other Business (if they did not come up prior to that):

- consideration of extending the scallop season to 31 January rather than the current end date of 31 December;
- providing qualitative updates that can be circulated to all industry members about how the biomass survey is progressing (rather than keeping all information confidential until the RAG/MAC meeting);
- compliance regarding quota evasion;
- non-destructive biomass surveying of the Boags Commonwealth Marine Reserve; and
- consideration of making the Executive Officer of the Tasmanian Scallop Fisherman's Association an invited participant to Scallop MAC given the role he plays in the industry.

2. Meeting Administration

2.1 Confirmation of record of previous meeting

The MAC adopted the minutes of the ScallopMAC meeting of 21 February 2017 noting they had been finalised and will be posted on the AFMA website within the next week.

2.2 Actions arising from previous meetings

The MAC noted the status of action items.

2.3 Correspondence

ScallopMAC noted correspondence since the last meeting.

3. Fishery update

3.1 AFMA management

The AFMA member provided an update on matters relevant to the MAC and the fishery including:

- The Commonwealth Fisheries Harvest Strategy Policy and Bycatch Policy currently out for public consultation.
- AFMA is working with CSIRO to update the Ecological Risk Assessment for each Commonwealth fishery.

Recommendation: The MAC recommended that any ecological risk assessment should take into account external factors affecting the fishery, not just assess the impact of fishing

- Observer market testing - AFMA is currently working on the final stage of market testing AFMA's Scientific Observer Program to confirm that industry and the government are receiving value for money from this important activity.
Quota trading price - from 3 July 2017 all concession holders must report the price of all transferred or leased quota and gear SFRs on the transfer form (GoFish or paper form).
- The current scallop logbook is being updated with the key changes being the insertion of a protected species interaction form and updating the requirement for spatial information from broad scale grids to finer scale latitude and longitude (consistent with current practice). Commercial catch/effort data for the 2016 BSCZSF season. The MAC noted that zero bycatch data for the 2016 season.

Action: That ScallopRAG consider and provide advice regarding the data needs for bycatch species to inform a discussion about the most cost effective way of collecting that information.

3.2 Tasmanian State Government management

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

- As of 1 April, Tasmania had three vessels participate in pre-season survey. To date, no commercial viable beds had been located. As a result, it does not look like Tasmania will have a scallop season.
- Tasmania has conducted a video survey of Great Oyster Bay, data is being processed but the method of survey looks promising.

3.3 Victorian State Government management

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

- The TAC has been set at 135 tonnes again for 2017/18 season, which is open from 1 April; and
- The Victorian Government is undertaking a review of the quota system including investigating the permanent transferability of quota in an attempt to reduce licenses in the fishery. The timeframe is uncertain given the approval process.

3.4 Industry

The scallop industry members agreed that the fishery is in currently in a good position with good export prices and reasonable fuel prices.

3.5 Environment

The Environment Member provided a summary on the outcomes of several scientific research papers recently published that are of relevance to the scallop fishery including:

- A study that found seismic pulsing causes a significant development delay in scallop larva and 46 per cent of larva had physical abnormalities.

Aguilar de Soto, N., Delorme, N., Atkins, J., Howard, S., Williams, J., Johnson, M., *Anthropogenic noise causes body malformations and delay development in marine larvae*. Scientific reports 3 : 2831 | DOI: 10.1038/srep02831 (2013)

- Imagery-based surveys are being used to assess scallop shell height and abundance. These surveys are a cost effective method that can be used to cover large areas. When compared to dredge surveys, there was a six per cent difference in shell height between the two methods (i.e. it was relatively small).

Walker, J., Trembanis, A., Miller, D., *Assessing the use of a camera system within an autonomous underwater vehicle for monitoring the distribution and density of sea scallops (*Placopecten magellanicus*) in the Mid-Atlantic Bight*. Fish. Bull. 114:261–273 (2016)

- Multi-scale image processing is currently being assessed for its capability to determine the growth rate of scallop shells.

Xing, Q., Wei, T., Chen, Z., Wang, Y., Lu, Y., Wang, S., Zhang, L., Bao, Z., *Using a multiscale image processing method to characterize the periodic growth patterns on scallop shells*. Ecology and Evolution 2017; 7: 1616–1626 (2016)

4. Biomass estimate survey results

Dr Koopman and Dr Knuckey from Fishwell Consulting presented the results from the 2017 biomass survey. The survey started in early May but due to bad weather did not get completed until early June. Two boats participated which enabled the survey to be completed faster than had they just used one. The methods were similar to previous surveys with (i) the addition of a number of exploratory sites surveyed and (ii) the collection of morphometric measurements of scallops to allow for comparisons between areas.

The survey plan was developed based on advice from participants at the Scallop Research Workshop in March 2017, and subsequent advice from the Industry Co-Management Committee and ScallopRAG.

A total of 256 random, non-targeted tows were undertaken during the survey across the Flinders Island (two known survey beds and two exploratory beds), Apollo Bay (four exploratory beds) and King Island (four known survey beds) areas.

The exploratory tows off both Flinders Island and King Island returned very small catches of scallops and these sites were subsequently not considered worth getting a biomass estimate from. The exploratory tows undertaken in the area off Apollo Bay showed potential

for commercial scallop beds and consequently these beds were mapped and random tows allocated in real time to obtain biomass estimates.

ScallopMAC noted:

- based on a morphometric analyses, the Apollo Bay scallops appear to be similar to those off King Island. By comparison, the scallops off Flinders Island appear to be smaller in both height and length than those off King Island and Apollo Bay.
- meat weight at King Island was on average higher per kg than Apollo Bay and Flinders Island (i.e. King Island had fewer meats to the kg).
- using previous years commercial catch data would be helpful to design and inform future survey noting that there are issues relating to confidentiality (e.g. the survey vessel could potentially be given the co-ordinates of one fishers 'secret spot'. Industry members were generally supportive of the idea and suggested that advice regarding the use of commercial catch data to inform the survey should be considered by the co-management committee but that authority to release an individual's effort data would need to be sought on an individual basis.

Action: The contractor undertaking the biomass survey will provide brief, qualitative daily updates to AFMA about how the survey is progressing. AFMA will post these on AFMA's website so they are available to anyone who is interested.

5. ScallopRAG advice for the 2017 TAC and closed areas

The ScallopRAG Chair presented RAG advice from its meeting 14 June 2017 in relation to arrangements for the 2017 season.

Area closures

The RAG agreed that in terms of considering the spawning potential of scallop beds, generally the higher the density the greater the spawning potential and a density of > 0.2 individuals per metre² has been associated with a productive, viable bed.

The RAG maintained the position from 2016 that it would be beneficial to the fishery if area closures were located in both eastern and western Bass Strait given that there is evidence that there may be some stock structuring between scallops from these regions and consequently a closure in each area offered some protection to scallops in each area. That there may be some structuring is further supported by analysis of the 2017 survey results by Fishwell Consulting that showed that scallops from these two regions do differ morphologically. The same analysis also showed that the scallops from the Apollo beds are similar to those from the King Island beds and consequently, the RAG found no need to treat the beds off King Island and the Apollo area as separate regions.

On that basis, the RAG recommended to close the following beds:

1. Flinders Island beds 1-4 (1090.8 tonnes >85mm)
2. Apollo beds 1-4 (5464 tonnes >85mm)

Apollo 1 and 2 have the second and third highest density of any of the beds surveyed during 2017 and the scallops from this area appear to be slightly younger than those from the majority of King Island beds. The closure of the Flinders Island beds afford protection to the 'eastern' scallops and despite low densities, they could still add some value in terms of spawning potential given that they are the only known beds in that area. This leaves the King Island beds open, the majority of which are all aging but are better from a commercial perspective given the larger meat size.

The RAG recognised that combined the closures recommended include more than double the required tonnage under Tier 2 of the Harvest Strategy.

TAC recommendation

Given the biomass estimate of 22 786 tonnes from the surveyed areas (for scallops > 85 mm), current market demand and the 2016 season catch, the RAG recommended:

TAC = 3000 tonnes stepping up to a maximum of 5000 tonnes by 500 tonne increments if catches reached the following triggers:

Triggers:

- once 2600t is taken the TAC will increase to 3500t
- once 3100t is taken the TAC will increase to 4000t
- once 3600t is taken the TAC will increase to 4500t
- once 4100t is taken the TAC will increase to 5000t
- no stepping up of TAC after 31 October 2017 (as the season closes 31 December 2017).

In recommending that limit the RAG considered:

- A maximum TAC of 5000t is conservative compared to the total estimated biomass in the fishery (less than 22 % of the known spawning biomass). This also takes into consideration what the market can potentially handle. If more product is landed than what the market can handle it can drive the prices down. This approach also assists in encouraging industry to be more efficient.
- The requirement in the Harvest Strategy for Industry to close beds voluntarily if the discard rate is not met:

Scallop beds fished that do not meet the discard rate of less than 20% of scallops less than 85mm in size will be closed to fishing under voluntary arrangements applied by industry via the co-management committee.

6. ScallopMAC recommendation on the TAC and closed areas for the 2017 season

The MAC considered the RAG advice and supported its recommendations.

Recommendation

Taking into consideration the advice of the RAG, the MAC recommended the following:

TAC:

- 3000 t stepping up to a maximum of 5000 t (if required) by 500 t increments.

Triggers:

- once 2600t is taken the TAC will increase to 3500t
- once 3100t is taken the TAC will increase to 4000t
- once 3600t is taken the TAC will increase to 4500t
- once 4100t is taken the TAC will increase to 5000t
- Co-management committee in consultation with industry to review catches in relation to TAC triggers on 31 October 2017 and if a trigger is about to be reached, advise AFMA if the increase should occur.

Area closures:

The MAC recommended closing the following beds:

	Closed Beds	% of scallops > 85mm	Estimated biomass (t) > 85mm	Density (ind/m ²)
Apollo beds 1-4	Apollo Bay 1	99.5	2842.0	2.331
	Apollo Bay 2	99.8	2178.2	1.604
	Apollo Bay 3	99.9	300.9	0.987
	Apollo Bay 4	99.2	142.9	0.273
FI beds 1-4	Flinders Island 1	80.8	595.4	0.153
	Flinders Island 2	66.0	385.9	0.167
	Flinders Island 3	77.6	43.9	0.095
	Flinders Island 4	78.1	65.6	0.114
	Total closed estimated Biomass		6554.8	

Industry Proposed Voluntary Closure

ScallopMAC industry members recommended that the Co-management Committee should explore if industry want to introduce a voluntary industry closure of the Blue Dot east of King Island effective from the season opening and until meat size increases to a commercial size.

7. BSCZSF Strategic Research Plan (2017-2021) and the Annual Statement (2018-19)

The MAC considered the draft Strategic Research Plan, which AFMA had put together based on the outcomes of the Research Workshop and recommendations from the RAG. The MAC made the following comments on the draft research plan:

1. The annual biomass survey is a high priority for the fishery and needs to be done annually.
2. Review of the season end date – ScallopMAC recommended the addition of a research project to support a review of the scallop season end date from 31 December until 31 January. Given that the timing of spawning can vary year to year the extension will provide industry with the flexibility to capitalise on peak market times while still minimizing disturbance to spawning scallops because scallops become unmarketable immediately after spawning thereby bring the fishery to a natural close. The MAC noted that the current season end date was based on minimizing disturbance of peak spawning and settlement periods and there is no new research to support an extension of the season. Consequently if an extension is to be considered a scientific research project to determine if the peak spawning and settlement periods has changed is required. ScallopMAC noted this was a high priority for industry but that it was unlikely to be achievable for completion by the end of the 2017 season.
3. Regarding the development of ageing techniques, the MAC considered this a low priority but that longer term it should be done.
4. Regarding the project I to improve the predictability of the scallop fishery in terms of where scallop beds may grow by modelling environmental factors that influence the spawning, dispersal and settlement of scallop larvae and recruitment dynamics (e.g. oceanographic currents, tides and winds and scallop genetics) – ScallopMAC considered that this project is important but not a priority for 2018-19
5. ScallopMAC recommended that when undertaking the annual biomass survey that non-destructive survey techniques should be considered to allow the biomass of scallops contained inside marine parks to be assessed.

8. Economic indicators

ScallopMAC noted the table of economic indicators for the Scallop fishery that would now be a standing, annual item on the MAC's agenda from now on. This information allows tracking of the economic performance of the fishery and will sit alongside any advice from the MAC when providing recommendations to AFMA.

9. Commonwealth Fisheries-related Policies

The AFMA member noted that the Department of Agriculture and Water Resources was currently consulting publically on the following three policies and provided a summary of the comments provided by RAG.

Commonwealth Fisheries Bycatch Policy

The RAG recommended that the current definition of bycatch should be revised so that 'bycatch' relates only to the unintended mortality of species that are caught by fishing gear, not individuals that simply come into contact with gear and survive (as a lot of fishing gear is designed to minimise the unintended capture of species), and that cryptic mortality should also be excluded (from the definition) and dealt with separately.

Commonwealth Fisheries Harvest Strategy Policy

The RAG noted that there could be implications for doughboy scallops arising from the new species categorization in the HSP for byproduct species. This is likely to be in terms of how this species is assessed, monitored and greater justification of how the TAC is set, particularly if the contribution of doughboy scallop to the commercial fishery increases. The RAG made no formal comments regarding the actual policy.

Draft National Plan of Action for Minimising the Incidental Catch of Seabirds in Australian Capture Fisheries

The RAG noted that this policy has limited relevance to the scallop fishery, given that there is no processing of fish guts and anything that is returned to the water generally sinks quickly (old shell etc.). There is also very little aerial extent of any cabling that attaches the dredge to the stern of the boat that may pose a risk to seabirds. Consequently, the RAG made no comments on this policy.

ScallopMAC recommendation: That ScallopRAG's recommendation be supported in relation to the Commonwealth Fisheries Bycatch Policy, that is that the current definition of bycatch should be revised so that 'bycatch' relates only to the unintended mortality of species that are caught by fishing gear, not individuals that simply come into contact with gear and survive (as a lot of fishing gear is designed to minimise the unintended capture of species), and that cryptic mortality should also be excluded (from the definition) and dealt with separately.

10. Consultation schedule for 2017

The MAC noted the proposed consultation schedule for the 2018 season (**Attachment 2**). Members agreed that the timing proposed for the 2018 season was appropriate.

Action: AFMA to send the proposed timeline of key events for the 2018 BSCZSF to MAC members.

11. Other Business

Compliance

The MAC discussed the introduction of tags on scallop bins upon landing that clearly identify the boat, date and tonnage of scallops in the bin. This system was suggested by some industry members as a cost-effective way of reducing the risk of quota evasion.

Some industry members supported the idea while others did not think there was a quota evasion problem in the first place that required further steps to be taken.

The AFMA member noted that maintaining the integrity of the quota system is the highest priority for AFMA and that AFMA would consider this option internally as part of the broader management / regulatory framework.

Observer and invited participant

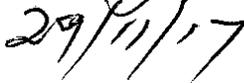
ScallopMAC noted the important work the Bob Lister, the Executive Officer of the Tasmanian Scallop Fishers Association did and that the work was of benefit to Victorian scallop fishers, not just the Tasmanian sector.

Action: The ScallopMAC Chair to invite Bob Lister to be an ongoing invited participant to ScallopMAC.

The Chair thanked all members for their contribution and closed the meeting at 3:30pm.

Signed (Chairperson):

Date:

List of Attachments

1. Declarations of interest
2. Proposed timeline of key events for the 2017 BSCZSF

Attachment 1

ScallopMAC members updated and confirmed their interests as follows:

Participant	Membership	Interest declared
John Pollock	Chair	No interest, pecuniary or otherwise, in the fishery.
Bill Talbot	Research Member	ScallopRAG Chair. No interest, pecuniary or otherwise, in the fishery.
Allan Barnett	Industry Member (Tasmania)	Holds Commonwealth and State concessions, a Commonwealth fish receiver permit and operates a scallop processing plant.
John Hammond	Industry Member (Tasmania)	Holds Commonwealth and State concessions.
Steve Mantzaris	Industry Member (Victoria)	Operates a scallop processing plant.
Stuart Richey	Industry Member (Tasmania)	Holds Commonwealth and State concessions.
Andrew Watts	Industry Member (Victoria)	Holds Commonwealth and State concessions.
Dr Sylvia Zukowski	Environment Member	No interest, pecuniary or otherwise, in the fishery.
Sally Weekes	AFMA Member	AFMA Manager for the BSCZSF. No interest, pecuniary or otherwise in the fishery.
James Parkinson	Invited Participant (Tasmanian government)	Fisheries Management Officer in Tasmania. No interest, pecuniary or otherwise, in the fishery.
Toby Jeavons	Invited Participant (Victorian government)	Manager of the scallop fishery in Victoria. No interest, pecuniary or otherwise, in the fishery.
Anthony Harding	Executive Officer	AFMA Senior Management Officer. No pecuniary interest in the fishery.
Dr Brendan Kelaher	Scientific members – via teleconference	No pecuniary interest in the fishery.
Nicos Matheou	Observer	Director, Diamond Fisheries PTY. LTD and Doriale PTY. LTD.
Peter Mellios	Observer	Director, Steve and Con Seafoods, a scallop processing plant
Louis Hatzimihalis	Observer	Skipper of a BSCZSF boat

Attachment 2

Table 1: Proposed timeline of key events for the 2017/18 BSCZSF

Proposed Date	Meeting/event/process	Purpose
November 2017	Co-management committee	Co-management Committee to advise AFMA how to proceed with the 2018 season: <ol style="list-style-type: none"> 1. open with 150 tonnes on 1 April 2016, or 2. proceed directly to biomass survey
If proceed directly to biomass survey, the following schedule would apply		
February 2018	Co-management committee (teleconference)	Provide input into the survey areas for 2018 to be considered by ScallopRAG.
February 2018	ScallopRAG (teleconference)	Recommend survey areas and Research Catch Allowance (RCA) for 2018 survey.
February 2018	Survey EOI (letter)	Call to all concession holders and active fishers for Expressions of Interest to participate in 2018 survey.
March 2018	Vessel/s selection (teleconference)	Survey vessel selected by an independent panel.
April 2018 ?	Survey undertaken	Survey undertaken
May 2018	ScallopRAG (in person)	RAG meeting to provide TAC and closure advice, set research priorities for 2019-20
May 2018	ScallopMAC (in person)	MAC meeting to provide TAC and closure advice to the AFMA commission, set research priorities for 2019-20.
OOS late May	Commission decision	Consider RAG and MAC advice and set TAC
June 2017	Fishery opened or closed.	

