RECORD OF MEETING v1

Meeting #39, 21 September 2023

Swan Bay Room, VFA, Queenscliff

CHAIR: Ian Knuckey

MEETING COMMENCED: 10:00 am

Present	
Ian Knuckey	Chair
Ewan Flanagan	Victorian Fisheries Authority (Executive Officer)
David Reilly	Victorian Fisheries Authority
Melissa Schubert	Victorian Fisheries Authority
Klaas Hartmann	Institute of Marine and Antarctic Studies (IMAS) - Online
Genevieve Phillips	Institute of Marine and Antarctic Studies (IMAS)
Ross Bromley	Industry member (Eastrock) (EZ)
Wayne Dredge	Industry member - Online (EZ)
Matt Wassnig	Seafood Industry Victoria
Peter Galvin	Recreational fishing representative/ VRFish
Lawrence Moore	Recreational fishing representative / VRFish
Craig Starrit	Recreational fishing representative / VRFish
Robert Timmers	Recreational fishing representative / SDFV
Apologies	
Matt Phillips	Industry member (WZ)
Mathew Harry	Industry member (EZ)
Gary Ryan	Industry member (WZ)
Alex Haberfield	Industry member (WZ)
Zeb Johnston	Industry member (WZ)
Anthony Ciconte	Giant Crab Industry Member
Ben Scullin	VRFish
George Brocklesby	Industry Observer
Rafael Leon	Institute of Marine and Antarctic Studies (IMAS)
Caleb Gardner	Institute of Marine and Antarctic Studies (IMAS)

1. Preliminaries

1.1. Welcome

Ian Knuckey, the Chair, opened the meeting with an Acknowledgement of Country and welcomed all attendees to the 39th meeting of the Victorian Rock Lobster and Giant Crab Resource Assessment Group (RLRAG). Ian advised that discussion held at the RLRAG is confidential until released to public, via meeting minutes published on the Victorian Fisheries Authority (VFA) webpage. People may be asked to leave the room during discussions where a conflict of interest is identified.

Ian welcomed Len Joyce (recreational fisher) as an observer to the meeting.

1.2. Membership update

Ewan Flanagan, the Executive Officer, provided an update of membership and confirmed that all members of the RLRAG had been appointed for 24-months. Ewan also confirmed the new membership of Robert Timmers, recreational fishing representative for the Scuba Divers Federation of Victoria.

Ewan noted the VFA was in the process of appointing a new Coastal Indigenous Representative. A recommendation of appointment has been submitted to the VFA's CEO for approval.

1.3. Adoption of agenda

Ian provided an overview of the meeting and the agenda was adopted as circulated. Ian called for additions to the agenda but none were added.

1.4. Minutes and actions from last meeting

The minutes from the last meeting had been circulated and revised out of session after the last meeting and were accepted as a true and accurate record. The chair confirmed Ewan would take the minutes for this meeting. Key actions from the previous meeting are addressed in agenda items.

2. Management Update

2.1. Management Plan Review and Timelines

Ewan provided an update of the draft Rock Lobster Management Plan (The Plan). The Plan is currently progressing through internal VFA approvals process prior to being released for public consultation. Ewan advised that the VFA's executive has requested consideration for early monitoring triggers in managing recreational allocation. Despite the delay in releasing The Plan for consultation, Ewan confirmed the consultation process and successive review by the Rock Lobster Management Plan Review Steering Committee (RLMPRSC) would be unaffected.

Ian noted the importance in differentiating between the roles of the RLRAG and RLMPRSC throughout this process. The core function of the RLRAG is to operate as a scientific assessment body for the rock lobster and giant crab fisheries. Ian recommended all members utilise the consultation period for submissions regarding The Plan.

2.2. AVG Update

Ewan provided an update on the recent outbreak of the abalone viral ganglioneuritis (AVG), now considered endemic to Victorian abalone stocks. The virus was detected in a small sample of abalone located in the Point Danger area near Portland. Due to the high mortality rate associated with AVG, an immediate control area was implemented prohibiting high-risk fishing activities, including rock lobster fishing. Additionally, a control area surrounding the local abalone farm was put in place to prevent the virus entering the facility.

Ewan confirmed AVG surveillance diving commenced immediately following the outbreak to assess the broader Portland region for further signs of the outbreak. At this time, no further infected abalone had been located.

Ewan confirmed the current control areas are initially in place for three months, with the expiry coinciding with the opening of the next rock lobster season. The state of the outbreak will be assessed at this time.

Ewan advised that the VFA is investigating research opportunities with the Fisheries Research and Development Corporation to assess the risk of rock lobster pots as vectors of transmission for AVG. This is important in gaining further understanding of how the virus spreads and the future potential impacts on the rock lobster fishery. Ian noted the abalone industry is very appreciative of the rock lobster industry's ongoing support.

2.3. Recreational Reporting Program

Ewan provided an update on the recreational reporting program. The reporting app., GoFishVic, is currently undergoing amendments to reduce reporting requirements and simplify functionality. These changes are being made in response to the feedback provided from recreational rock lobster fishers. The VFA accepts the previous version reduced the willingness to report catch and that changes to the reporting mechanism are required.

A question was raised as to the validity of a reporting program comparative to recreational phone surveys. In response, it was noted that there is a far greater potential to obtain quality data through a compulsory tagging program. Victoria is recognised as leading the charge with this program and other jurisdictions are now implementing similar programs. It was further noted the RLRAG had previously agreed with and supported the continuation of the rock lobster reporting program.

A question was raised asking whether all persons were required to report recreationally caught rock lobster. Ewan advised that the regulations require all persons aged 18 years and over to report. The regulatory reporting requirements for recreationally caught rock lobster do not apply to a person under the age of eighteen that is directly supervised by a person to whom those reporting requirements apply.

Ewan also provided a summary of the reported recreational catch for the 2022/23 season but acknowledged issues with the app had likely impacted reported levels.

2.4. Development of Recreational Measuring Device

David Reilly provided an update on the development of a new recreational measuring device. A prototype had been sent out to members of the recreational fishing community, in addition to VFA compliance staff, and David thanked everyone for their contributions. David provided a summary of the feedback received and noted that the clear response was that the tool was too big and cumbersome to carry whilst diving. In terms of measurement accuracy, the feedback suggested the tool had an acceptable level of accuracy, with some

noting it was easier to obtain an accurate measurement than when using callipers.

David also recognised that some feedback supported reporting rock lobster numbers only, using an average commercial weight to estimate total recreational catch. Most in the room agreed this was not the best approach. The RLRAG has previously discussed this and decided length measurements from the recreational fishery provide greater accuracy of data and estimated recreational catch weights.

In summary, David advised that the VFA would continue to provide the current gauge as a tool to use whilst diving. In addition, the VFA is producing a simplified measuring device for fishers to measure rock lobsters at landing.

A concern was raised regarding compliance issues relating to reporting inaccurate length measurements. The VFA confirmed that the current regulatory requirement is to ensure that each rock lobster retained is above the legal minimum length for the corresponding sex. While it is a requirement to provide the carapace length, there is no specification for length accuracy. The reporting app., however, will request reporting accuracy to the nearest millimetre.

2.5. Length/Weight Conversion Discussion

Klaas Hartmann provided an update of the length to weight conversion data. In total, observations from approximately 159,000 rock lobsters were used to derive these relationships, of which one third were female. The data was recorded from 1998 to 2017 and was predominantly sourced from the western zone.

Klaas considered the effects of depth/shell colour, region and month on the length/weight relationship of rock lobsters. Rock lobsters are categorised by three broad shell colours, namely red, strawberry and white. Generally, shell colour is related to depth. Darker, red shelled lobsters tend to inhabit shallower, inshore waters and shell colour becomes progressively lighter with increasing depth. In the absence of depth data, shell colour was used as a proxy for depth. A significantly lower length to weight relationship was observed for white lobsters, primarily as a result of depth. Klaas also suggested that different moulting patterns could have an effect. An industry member suggested it may be related to more muscle mass being required for lobsters to exist in the increased wave motion and surge in shallower waters. Despite the above, the difference was small (approximately 2%) so it was considered that accounting for the effect of depth/colour was not necessary.

Regional and monthly variability in length/weight was low and not considered to require further quantification.

Klaas provided an update on the differences between the length/weight relationship derived from the long-term data set and the length/weight relationship used in the current stock assessment model. The largest difference was observed for female rock lobsters, with consistently higher weights observed based on the relationship used in the model. The length to weight relationships for male rock lobsters were more closely aligned, with slight variation only in the larger sized lobsters.

The members in attendance agreed to utilise the updated length-weight relationship given its improved accuracy. Klaas confirmed that the relationship inaccuracies, particularly for females, would likely have negligible impact on the stock assessment for the fishery.

The Chair called morning tea 11:45am.

3. Australian Lobster Model

Genevieve Phillips provided an update on the OzLob model and advised it was currently being tested in collaboration with Western Australia.

Genevieve provided responses to questions raised during the initial OzLob presentation at the previous RLRAG.

1. **Why does the new model estimate higher egg production with a lower estimated legal biomass**?
   The reasoning behind this is likely due to the model allowing for all parameters to be sex-based. It is expected that this model estimates a greater number of larger females in the population compared to males. A greater understanding of the number of females in the fishery is important in assessing the accuracy of OzLob.

2. **Why do estimates of biomass deviate at higher levels but are consistent at lower levels?**
   This is linked to length-frequency data and selectivity estimates of pots.

3. **What data is needed to get better estimates of female proportions?**
   This is dependent on selectivity parameters, which currently includes pots with gaps and pots without. Selectivity estimates are likely to differ between males and females. It was noted that additional selectivity paraments, such as pot design and bait, will further affect selectivity and catchability. Overall, the length-frequency data presented in the model is generally accurate. This can fluctuate depending on the season.

4. **How can we provide quantitative performance of the new model?**
   The two models cannot be compared directly due to differences in the mathematical basis. As the current model is optimised, there will need to be an optimised version of the OzLob model prior to any comparison between the two. Ultimately, the best model will be determined based on improved best-fit to the available data.

Genevieve also recognised that a request had been made for an update on the Tasmanian model. This is not currently available but should be ready for the RLRAG meeting in December.

A question was raised as to how this model will practically fit into the Victorian Harvest Strategy. Genevieve confirmed that this model aims to provide greater confidence in the accuracy of the strategy. Currently, the harvest strategy is based on standardised CPUE levels and so it won't be directly impacted by changes in the model.

A further question was raised regarding the timeframe for predictive capabilities. Genevieve noted that while the model has the capacity to provide significant predictions (over 100 years into the future), the accuracy decreases as this time period increases. This is due to predictions being made based on what has already happened. It is easier to make predictions using this model, however, than using the current model.

Action: Genevieve to provide update on the Tasmanian model at the December RLRAG.

4. Stock Assessment and Continual Improvement

4.1. Consideration of Vessel Efficiency Factors

Klaas advised that the vessel efficiency analysis considers why nominal and standardised catch rates have diverged over time. Current data suggests that nominal catch rates have improved by approximately 33% (0.6%-0.8% per annum) in the Western Zone since 1978/79. This is more difficult to quantify in the Eastern Zone due to the low number of fishers. Improvements in fishing catch efficiency is considered a primary reason for this change. Klaas noted the theory is that catch rates increase with efficiency improvements. Generally, vessel efficiencies are expected to continually improve over time and have shown to do so in other fisheries. As such, it would be ideal to remove these influences to improve accuracies in catch rate standardisation.

Klaas advised that there is currently very little data regarding vessel efficiencies. It would, therefore, be beneficial to gather annual data from fishers, including bait usage; 3D sounding equipment; high-grading activity; basic vessel characteristics; and the number of crew members. Klaas noted these are general categories and that the data would need to be collected fleetwide in order to be effective.

It was noted that some of these parameters could possibly be collected in e-Catch. David commented that there are historic annual surveys that would have collected some of this data. Wayne Dredge noted items such as bait can make a significant difference to catch rates, however, the variables in bait usage would make it complicated to record in e-Catch.

The room supported gathering greater data for this analysis, however, the chair recognised the small number of commercial representatives in attendance. A process to determine the relevant efficiency measures, which can be feasibly collected, is required.

Action: Dave to provide historic vessel survey data to Klaas.

Action: Klaas to raise discussion at next RLRAG meeting with a larger commercial presence.

The Chair called lunch at 12:40pm.

5. Deckhand App. Discussion

Simon Dick provided an overview of the Deckhand application highlighting its capabilities for use in a variety of fisheries. During the presentation, Simon confirmed that data collected using the Deckhand application is owned by the user group and that all data is stored on the Deckhand device. Simon also confirmed environmental indicators cannot currently be fed into the app, however, this is something that could be added in the future.

6. Puerulus Monitoring Program Review

David provided a brief overview of the discussion held at the last RLRAG meeting regarding the puerulus program. The decision was made to discontinue the crevice collector portion of the project and proceed only with the oyster baskets. David provided an update on the proposed possibility to continue calibrations of the two methods by utilising the crevice collector program run by the South Australian Research and Development Institute (SARDI) in South Australia. SARDI has confirmed it does not have the resources to assist in this

manner but can provide data from its program for comparison.

David provided an overview of the recent results from this year, detailing a significant spike in August that returned over four puerulus per collector. At approximately the same time during 2022, a spike returned results of over two puerulus per collector. It was noted that this could be related to temperature or wind patterns and could also be affected by moon phases at the time of the spike. A question was raised regarding desired results from the program. David confirmed that, despite a good correlation being observed in the western zone, there is no guarantee of a correlation between egg production, puerulus counts and recruitment to the fishery for southern rock lobsters.

The Chair asked the room whether the RLRAG supported dropping the crevice collectors from the puerulus program and proceeding only with the basket collectors. Attendees agreed with this notion. In addition, David added there is greater benefit in focusing more intently on expanding the voluntary pot sampling program, particularly in the Eastern Zone. Matt Wassnig advised that Seafood Industry Victoria (SIV) is happy to assist in encouraging fisher participation.

Action: David to finalise the use of crevice collectors in the puerulus collection program.

Action: David to provide Matt with details of what is needed from fishers when participating in the voluntary pot sampling program.

7. Giant Crab

7.1. Monitoring Program Update

David provided an update on the Giant Crab e-monitoring program currently underway. The monitoring equipment is currently installed on one rock lobster vessel and one giant crab vessel in the Victorian commercial fishing fleet. David confirmed reporting accuracy had generally been high based on current data. Identified discrepancies in the external review process were generally due to inaccuracies in the third-party review component. As such, David confirmed there would still be an ongoing need for VFA reviews.

A question was raised as to whether this monitoring program intended to is e-Catch. David confirmed that is not the case and that the intention of this project was to collect additional data and improve compliance capabilities in offshore fisheries. Given the cost, it is unlikely this project would be rolled out to the entire rock lobster fleet in addition to giant crab vessels.

7.2. Monitoring Program Update

Ewan provided a brief update on the FRDC Giant Crab Enhanced Data Collection project. This is a cross-jurisdictional project between Tasmanian, South Australia and Victoria, led by the Institute of Marine and Antarctic Studies. It has recently been extended to include the Western Australian Crystal Crab fishery.

Ewan advised that the project has now moved to the development of a 3D camera system providing greater accuracy and a faster recording process. The project is scheduled to conduct trials in a Western Australian crystal crab processing facility as part of the International Conference and Workshop on Lobster Biology. Following this, it is due to commence on-water testing in November this year.

8. Other Business

8.1. Southern Rocklobster Limited Update

Wayne Dredge provided an update from Southern Rocklobster Limited (SRL) advising that the Marine Stewardship Council certification process was ongoing. Wayne confirmed that FRDC funding can be used for the full assessment process if that is desired.

Wayne also advised that SRL is moving towards becoming a three-state peak body within southern rock lobster fisheries.

8.2. Seafood Industry Victoria Update

Matt Wassnig provided an update from SIV, advising that there is currently a heavy industry focus on the renewable energy sector and the associated effects on commercial fisheries. Matt advised that offshore wind farms are raising concerns in terms of the impact to fishers and to stock health. Research studies and overseas experiences suggest that wind farms can have significant effects on commercial coastal and marine fisheries

Matt noted the effects of seismic testing for oil and gas exploration are also of concern to the Victorian rock lobster fishery, particularly given the lack of current understanding. Matt advised that offshore wind farms, and the placement of turbines, are raising concerns in terms of the impact to fishers and to stock health. Matt advised that compensation is often provided as a solution during these projects but is not necessarily the most appropriate action given that the priority is to protect healthy and productive fisheries. A participant added that while wind farms can potentially cause stock aggregation, this does not necessarily encourage breeding. The question was raised as to whether the industry would consider carbon credits if wind farms were to reduce fishing ground. Matt clarified that the industry's initial position is to avoid impact on commercial fishing but acknowledged that items such as carbon credits had been raised in industry forums.

Matt also advised that SIV is considering opportunities to develop career pathways in the Victorian seafood industry.

The Chair called the meeting closed at 2:30pm.

Schedule 1: Actions from meeting 39

Action	Responsibility	Timing
14 June Actions		
1. Ewan to Circulate the workplan with the draft minutes.	Ewan	October
2. Create standing item to review the previous year at first RLRAG meeting.	Ewan	February 2024
3. Genevieve to attend the next RLRAG to present update on the ARL development. • Include comparison with Tasmanian preliminary results if available	Genevieve	December
4. Genevieve to provide optimal OzLob model alongside next year's stock assessment. • Review different input parameters / sensitivity analyses	Genevieve	February 2024
5. David to raise future enhancement to Vic e-Catch to include functionality to report under voluntary pot program.	David	Ongoing *(Scheduled for 28 November)*
6. David to discuss setting up length/weight conversion with processors.	David	December
7. Vessel Efficiency Factors • David to provide historic vessel survey data to Klaas. • Klaas to raise discussion at next RLRAG meeting with a larger commercial presence.	David/Klaas	December
8. David to follow up with Eastern Zone fishermen regarding voluntary observer data.	David	December
9. Puerulus Program • David to finalise the use of crevice collectors in the puerulus collection program. • David to provide Matt with details of what is needed from fishers when participating in the voluntary pot sampling program.	David	December / Ongoing