

RECORD OF MEETING v0

Meeting #37, 14 February 2023 Swan Bay room, Queenscliff

CHAIR: Ian Knuckey

MEETING COMMENCED: 9:30am

1. PRELIMINARIES

Present	
Ian Knuckey	Chair
Toby Jeavons	Victorian Fisheries Authority (Executive Officer)
Klaas Hartmann	Institute of Marine and Antarctic Studies (IMAS)
David Reilly	Victorian Fisheries Authority
Lachlan Smith	Victorian Fisheries Authority
Ross Bromley	Industry member (Eastrock)
Gary Ryan	Industry member
Mathew Harry	Industry member
Wayne Dredge	Industry member
George Brocklesby	Industry Observer
Ben Scullin	VRFish
Lawrence Moore	Recreational fishing representative / VRFish
Craig Starritt	Recreational fishing representative / VRFish
Guests	
Matt Wassnig	Observer (incoming CEO of Seafood Industry Victoria)
Robert Timmers	Observer (Scuba Divers Federation of Victoria)
John Hawkins	Observer (Scuba Divers Federation of Victoria)
Alex Haberfield	Industry observer
Apologies	
Peter Galvin	Recreational fishing representative/ VRFish
Matt Phillips	Industry member
Zeb Johnston	Industry member
Anthony Ciconte	Giant Crab Industry Member
Joanne Butterworth-gray	Seafood Industry Victoria
Rafael Leon	Institute of Marine and Antarctic Studies (IMAS)
Caleb Gardner	Institute of Marine and Antarctic Studies (IMAS)
Steven Rust	Institute of Marine and Antarctic Studies (IMAS)

1.1. Welcome

Ian Knuckey, as Chair, stated an Acknowledgement of Country and welcomed members and guests to the 37th meeting of the Victorian Rock Lobster and Giant Crab Resource Assessment Group (RLRAG). Ian welcomed Matt Wassnig who was attending the RLRAG for the first time as an observer and noted that he is the incoming CEO of SIV (commencing in the position on 27 February 2023). Toby noted the apologies to the meeting. All people present introduced themselves and registered any potential conflict of interest. Ian advised that discussion held at the RLRAG is confidential until released to the public via meeting minutes published on the VFA webpage and that people may be asked to leave the room during discussions where a conflict of interest is identified.

The VFA, IMAS and the Chair met separately with GC industry member Anthony Ciconte (who was an apology for this meeting) to discuss the giant crab stock assessment on 10 February 2023. Ian advised that there is a preference from the current GC member to meet separately in regards to the giant crab fishery, but that they would be happy for the Chair to bring a summary of the discussion to feed into the formal RLRAG meeting. The VFA is supportive of this approach moving forward. However, it noted that it does not intend to set up a formal resource assessment group for giant crab separate to the RLRAG given the historical context and the fact that it would require unnecessary additional administration.

1.2. Membership update

Lachlan advised that the membership for the RLRAG is currently being considered and will be renewed ahead of the next meeting. He noted that it is likely a vast majority of the memberships currently in place will be rolled over given the current status of the harvest strategy development, however he would like to recognise Scuba Divers Federation of Victoria (SDFV) as a formal member in future which may require amendment to the Terms of Reference. The VFA will be in touch with members about this process over coming weeks and noted that any changes will be subject to the approval of the VFA CEO. A member suggested that the VFA consider extending membership terms to two or three years to reduce administration and allow new members to become effective.

1.3. Adoption of agenda

The agenda was adopted.

1.4. Minutes and actions from last meeting

Minutes from last meeting were accepted as true and correct. The actions list was covered at the end of the meeting.

2. Management update

2.1 Management Plan review and timelines (for information)

Toby noted the significant progress that has been made in reviewing current management arrangements for the fishery and the development of draft Rock Lobster Fishery Management Plan over the last 18 months. This has occurred through the Rock Lobster Management Plan Review Steering Committee (RLMPRSC) and the harvest strategy work has occurred primarily through the RLRAAG. Toby noted that a first preliminary draft was sent out to RLMPRSC members in late 2022 for their feedback and that this would be discussed further at Meeting 8 of the RLMPRSC on 15 February 2023. RLMPRSC meeting summaries are publicly available following each meeting at: <https://vfa.vic.gov.au/commercial-fishing/commercial-fisheries/rock-lobster/rock-lobster-management-plan-review-steering-committee>

Toby advised that he hopes to commence public consultation by mid-2023 and will also raise this matter at upcoming port meetings as well. Toby encouraged those commercial fishers not involved in this process to get in touch with industry representatives of Matt Harry, Ross Bromley, Wayne Dredge, Gary Ryan, Alex Haberfield and Les Feast.

2.2 Recreational reporting program update

Toby noted that the VFA had already provided an update on catch statistics at the most recent meeting (RLRAAG36). He confirmed that the VFA has since transitioned away from the existing app development company to a new provider 'SRA' who are based in Australia. The VFA will have a strong focus this year on simplifying the app and undertaking a road show to help promote the revamped platform once available.

3. Harvest strategy development

3.1 Harvest strategy progress summary

Klaas provided a recap on progress made by the RLRAAG to date. The key framework agreed to includes a limit reference point of 20% of the pre-fishing level of egg production, a target reference point of 28% and 28.8% of the pre fishing level of biomass (+60mm) for the western zone and eastern zone, respectively, and for the biomass target to be reached by 2043. The benefits of this approach forecast a 67% CPUE increase in WZ and 80% CPUE increase in EZ and would help meet MSC certification criteria.

Wayne Dredge updated the RLRAAG as to SRL Limited's strategic priority to actively pursue MSC certification for southern rock lobster and noted that all three relevant states are supportive. He noted that FRDC has endorsed the use of IPA funds for SRL to pursue full accreditation under MSC. Toby noted the importance of this direction in development of Victoria's new harvest strategy to position the State to satisfy the MSC assessment. The Chair reiterated that MSC certification will position the fishery well with regard to market diversification and political uncertainty. It was noted that Western Rock Lobster have MSC certification already.

Klaas noted there has also been endorsement to utilize the 2008-2015 PRI reference period, to require a single year above the PRI threshold to support a future TACC increase, and two consecutive year's below the PRI threshold to trigger a review by the RLRAAG. The RLRAAG has also been working through potential trajectories with the use of ratchet tables.

3.2 Revised ratchet tables (for discussion)

Klaas noted that when the RLRAAG agreed target reference point was determined, the decision did not include this year's stock assessment information and so these have now been updated and resulted in some changes. He presented these to the RLRAAG.

Ian clarified that the ratchet tables tighten up the fishery behind us as we rebuild biomass. In effect, the RLRAAG

had endorsed this approach so that the fishery zone can drop two CPUE bands before having a TACC reduction (i.e 2 blue bands below current TACC). However, if the TACC immediately goes up, the fishery zone would move across to the next column. The ratchet component of this strategy is that you cannot go back a column.

Western Zone

Klaas advised that the updated tables allow for slightly higher TACC in the western zone than previously shown with inclusion of the latest data.

The RLRAAG endorsed the revised ratchet table for the western zone including a revised TACC cap of 242t (up from 240t) which resulted from inclusion of data from the most recent (2021/22) stock assessment data.

A member queried whether the fishery would go up to 270t given the harvest strategy that is already in place while noting the proposed TACC cap of 242t. Toby clarified that the RLRAAG will need to provide a recommendation in consideration of the progress that has been made on revision of the current harvest strategy and this will be discussed later in the agenda.

Eastern Zone

Klaas advised that the updated tables for the eastern zone result in a reduced TACC than previously shown with inclusion of the latest data and would require a reduction in the TACC that had been previously agreed (down to 32t under the rebuild timeframe of 20 years). Klaas advised that this is because the new modelling shows that under such low catches, we should have seen the catch rate increase more than it did in 2021/22 and the outlook for future recruitment is also reduced. We are not seeing the catch rate increases as anticipated from the higher 2016 year of recruitment. He noted that data in the eastern zone is much more limited than the western zone and the fleet is much smaller.

An industry member raised their concerns with the resulted changes for the eastern zone that have occurred as this level of impact probably would not have been supported by them due to impacts on businesses under current management costs. The Chair advised that another year of data should not impact the decision to pursue the agreed rebuild target, regardless of the trajectory under rebuild target, as the key principles are the same to help rebuild the fishery.

Another industry member noted that the eastern zone fishery is at the edge of the southern rock lobster stock, it is in the south-eastern Australia hotspot for climate change, it has had recruitment issues for a number of years, and the 2008-2015 recruitment assumption is considering data from a minimum of 8 years ago. They raised their concerns that the fishery is not resilient and the risk of recruitment failure is reasonably high and noted it may be appropriate to give the fishery a rest with a complete moratorium.

Klaas confirmed there is a lot of uncertainty in the eastern zone model. Ian confirmed that SE Australia is a hotspot for climate impacts and we are seeing large scale changes across a number of fisheries. The Chair sought further comment from the other EZ stakeholders about their views, noting that we are using the best available science which is still uncertain and that we need to form a view of how precautionary an approach is appropriate for the fishery. Multiple industry members advised that they think a conservative approach is good while keeping the fishery open (recognising income to families and continued fishery data) and would like to get ahead of the curve. Multiple recreational fishing representatives including VRFish confirmed reports of decreased fishing satisfaction resulting from low abundance. The Chair summarised that there is significant concern amongst the group for the levels of the stock in the east for both sectors and even greater concerns about the level of recruitment. In light of these concerns, there was consensus that the RLRAAG would like to pursue a more precautionary approach for the EZ than what Klaas has presented.

Klaas then presented more precautionary alternatives for the RLRAAG to consider including starting at 21t at the current CPUE band, with a 10-12 year rebuild trajectory under current recruitment assumptions. He noted that this is a way of building in extra precaution, including half the rebuild timeframe for the eastern zone.

The group then broke for lunch 12:30 – 13:00

Ian sought views from the group on the more precautionary alternatives that Klaas has presented. It was noted that this more precautionary approach would ensure a quicker rebuild. An industry member who had earlier raised concerns with the ratchet tables suggested this would be more palatable if the VFA would support some fee relief for eastern zone licence holders. Toby confirmed that the VFA is open to supporting licence holders with fee relief if an aggressive rebuild strategy is endorsed. An industry member also queried whether the VFA would have appetite for a partial buyout of the fishery. Toby advised this had not been discussed to date but could investigate further and update the group at the next meeting.

The RLrag endorsed the 21t starting point for the EZ commercial fishery if the VFA can support licence holders with appropriate fee relief.

Action – Klaas to revise EZ ratchet table and prepare two alternative tables:

1. proposed EZ TACC of 21t for the first three years, with 2-3t max increases each year after that up to the cap to achieve the rebuild target, while reducing the 'green zone'.
2. proposed EZ TACC of 21t for the first five years, with 2-3t max increases each year after that up to the cap to achieve the rebuild target, while reducing the 'green zone'.

Action – RLrag to meet out of session to review updated table.

Action – Toby to investigate feasible options for fee relief to support the more precautionary rebuild strategy and also provide feedback to the group on whether there is any appetite from the VFA to consider a partial buyback.

An industry member queried whether the recreational catch estimate is built into the ratchet table. Klaas confirmed that the current table assumes recreational catch is constant and is based on the most recent reliable estimate. He confirmed that if rec catch happened to increase by 1 tonne, then generally 1 tonne would need to be taken away from somewhere to ensure to rebuild is effective.

Ian reiterated that this is an important point and that any harvest strategy here interacts with the rec sector. Toby raised that given where the fishery is at, all options should be on the table to help rebuild the fishery and sought views on whether a reduction in the recreational bag limit of 2 to 1 in the eastern zone as an appropriate and fair precautionary measure given what the RLrag has endorsed for the commercial fishery. Concerns were raised by a recreational fishing observer regarding this proposal and was not supportive as it would have flow on effects for the community. There was a divergence of opinions as to whether a response to the rec sector was necessary.

3.3 Drafting of harvest strategy (section 7 of management plan)

This item was not discussed given the further work that will be undertaken by Klaas and the RLrag and will be included on the next meeting's agenda to ensure effective communication of the harvest strategy.

4. Rock lobster stock assessment

4.1 Presentation of DRAFT 2021/22 stock assessment results

WESTERN ZONE

Klaas presented the draft stock assessment results for the western zone.

Klaas noted there has been a significant increase in CPUE in the Warrnambool and Apollo Bay areas. An industry member noted that there has been a few new operators fishing the Warrnambool area that may explain the deviation between the standardised and nominal data.

With regard to the male length frequency data from the observer program, Ian noted the very healthy improvement of the fishery which is demonstrated in this data by the broadening of the length frequency range.

Industry members noted that the reduction to 246t has resulted in retaining larger mature biomass rather than big pulses of recruitment occurring. Klaas noted the reduction in estimated biomass is due to a modelling artefact likely arising from a mismatch in number of smaller lobster with legal size growing through. This impact is being investigated as part of ARL work. An industry member also commented that this could be due to longer fishing hours which results in more smaller fish escaping pots during the day

EASTERN ZONE

Klaas presented the draft stock assessment results for the eastern zone.

Nominal and standardized catch rates have slightly improved in the assessment period. A small uptick in biomass has been observed and it appears that egg production has stabilised. Klaas noted that standardized catch rates are significantly higher than nominal and this will most likely be related to seasonality/region of fishing conducted. Klaas questioned industry members as to the reasoning behind the lack of fishing in Lakes Entrance. Industry members noted that fishing costs and certainty of beach prices are not worthwhile and it is therefore better to leave rock lobster in the water.

4.2 Application of harvest strategy

WESTERN ZONE

Decision rule 1 is satisfied as the lower 90% confidence interval for egg production is above the 20% limit reference point (Currently at 22%).

Decision rule 2 is satisfied with standardised CPUE increasing to 0.7kgg/potlift.

Decision rule 3 is satisfied as the PRI is above the trigger reference point at 1.81 undersize/pot lift.

A direct application of the decision rules in the harvest strategy specifies that the TACC can increase to the higher CPUE band resulting in a 270t TACC. Klaas noted that an increase to 270t would result in an exploitation rate of 37% (well in excess of 26.3% target in HS) and that this increase is not consistent with the new management plan.

Ian questioned how the misalignment occur between TACC and exploitation rate. Klaas explained that as more data is available in the model it considers what catch rate relates to biomass but it doesn't consider what is coming through (e.g. undersize).

RLRAG recommendation – PRI is on the threshold and the fixed sites are declining over the past two years. The exploitation rate resulting from taking an increase is 10% above the target. The increase does not align with the new management plan and the RLRAG recommends adjusting to a 242t TACC (aligning with the new management plan).

EASTERN ZONE

Decision rule 1 is satisfied as the lower 90% confidence interval for egg production is above the 20% limit reference point (Currently at 22.9%).

Decision rule 2 is satisfied with standardised CPUE increasing to 0.49kilograms/pot lift in 2021/22.

Decision rule 3 is satisfied as the PRI is slightly above the trigger reference point at 0.26 undersize/pot lift.

RLRAG recommendation – Consensus on aligning with the new harvest strategy (noting this is still in development) with reduction to 20t subject to the VFA providing fee relief.

4.3 Consideration of results and sector perspectives

Sector perspectives were discussed and noted throughout Agenda items 4.1 and 4.2.

Giant Crab stock assessment results (for consideration)

Klaas provided an overview of the giant crab stock assessment for the 2021/22 period.

5.1Presentation of DRAFT 2021/22 stock assessment results

Klaas presented the draft stock assessment results including catch and effort information for the giant crab fishery. There has been a significant increase in the catch rate during the 2021/22 stock assessment period, however the change in operator makes interpretation of the data very difficult. He noted that the current research project investigating artificial intelligence/3D Camera, once implemented, will provide valuable information on length-frequency data to improve the assessment of the fishery.

Ian clarified that there has been only 1 predominantly active operator to inform the latest assessment year, and this creates difficulty in interpreting the relationship between the current catch rates and historical catch rates as a proxy for changes in biomass (and to what extent this may be related to efficiency of the new operator). He noted that it would be wise for a precautionary approach to be taken for this fishery for a while and maintain the low while further data is collected. Toby agreed and noted that an electronic monitoring trial is currently underway for this fishery which will provide confidence in accuracy of reporting and data validation.

A pre-meeting with the RLRAG Giant Crab member (Anthony Ciconte) was held due to his inability to attend in person. Anthony noted that the narrative around data reliability is confusing. Klaas confirmed he would take a closer look at the wording in the report to make sure nothing is misconstrued. Klaas suggested that we are going to need more data from the current operator to improve our understanding of the reliability and validity of the data going forward. Toby noted the uncertainty in the current data available to inform the stock assessment and Anthony as supportive of adopting a precautionary approach in maintain the TACC whilst data collection is improved.

Action – Klaas to update stock assessment report.

5.2 Application of harvest strategy

Klaas noted that giant crab catch rate are above the current reference points and as such there is no decision rules that would suggest change to the TACC.

5.3 Consideration of results and sector perspectives

The Chair sought whether there was any comments or if there was consensus on the proposed approach to maintain the current TACC.

The RAG recommended maintaining the current TACC at 7.5t for the 2023/24 quota period given uncertainty in data.

6. Stock Assessment continual improvement

6.1 Exploring PRI weighting – clarifying comparisons with industry observations

Klaas noted the principles for use of the PRI are that:

- It is an index that is most representative of undersize abundance in **trend**;
- Observer based data is adjusted to be comparable to fixed site data;
- Changes in spatial distribution of catch should not influence the PRI; and
- In practice, there is insufficient data to perform spatial adjustment in Eastern Zone

Klaas also noted that weighting is applied so that location is representative of overall productivity. Observer data is also weighted to be representative of contribution from the region to the overall catches. Spatial weighting is applied to make sure representation is consistent. Klaas explained this gives us the fixed site and observer index. The observer data is then multiplied so they line up (Due to fixed sites having escape gaps shut).

Klaas noted that the PRI generally observed seemed to be too high compared to what fishers were seeing in practice. There is a document that explains the PRI calculation in the RLRAG archives.

Action – Klaas to include description of PRI weighting in stock assessment reports

6.2 Considering weather impact on catch rate (for information)

Klaas has analysed data from global weather models to obtain wave characteristics for each logbook record. Inclusion of this data in catch rate standardisation demonstrate that several factors were highly significant, however overall impact at annual level was negligible. Klaas summarised that overall, there is little value in considering weather due to minimal impact on overall trend and time taken to incorporate into the standardisation process.

Ian noted that the current model standardises by month which largely accounts for some of the weather variation. Ian also noted a project that he is leading to better understand temperature and depth that over time will help understand the relationship with what is happening on the bottom

Wayne queried whether it is worth pursuing a project looking at historical weather patterns and recruitment. Klaas noted the Katie Creswell project that is underway and the possible extension.

The RLRAG endorsed not pursuing inclusion of weather impact on catch rate further at this stage.

6.3 Comparative analysis of summer data subset – (for discussion)

Klaas presented a comparison of a summer data subset compared to annual trends to answer questions previously raised as to whether this can be used moving forward and if this will allow us to use the current seasons partial data. Klaas raised concerns with issues in variability, volatility of EZ and potential data limitations if there is an issue mid-season.

Industry members noted concerns with the current time lag of assessment and Ian agreed that this approach removes the lag and may be beneficial. Industry members also noted that 60% of catch is caught in summer and therefore typically representative of how the stock is performing.

RLRAG direction – Continue discussion of this agenda item

ACTION – Further action/consideration required at next RLRAG

6.4 Australian Lobster Model (for information)

Klaas presented the ARL project that is being led by Andre Punt. Klaas informed the RLRA that a comparison of egg production and biomass projections is currently matching quite well with the existing model. Klaas noted the benefits of the new model in that it runs faster, has a larger user group, is easier to investigate parameter sets and provides the best option for ongoing continual improvement.

Klaas noted that we cannot integrate at whole of stock level. However, there are benefits for SAFs reporting given all using the same model. Klaas expects to be in position to run ARL model in parallel for Western Zone in next years assessment

Ian questioned why we are struggling to get egg production higher. Klaas clarified significant that a significant amount of eggs comes from undersized female lobsters, and as we have not been seeing an increase in the recruitment of small female lobster, this is not reflecting despite building adult biomass.

Action – Genevieve to attend the next RLRAG to present ARL development.

7. Other business

7.1 SRL update

Wayne Dredge provided a brief SRL update. Wayne informed the RLRAG that the main focus is Marine Stewardship Council certification. FRDC have committed to provide funds for pre assessment and assessment, and for identified research gaps throughout the process. Wayne also noted projects underway on developing a carbon footprint baseline for the harvest sector and investigating the feasibility of translocation for the Northern Zone in South Australia.

7.2 2023 Workplan

Action: Toby to circulate the workplan with the draft minutes

The key focus for 2023 will be completing a review of the rock lobster management plan and harvest strategy.

7. 3 Giant Crab e-monitoring trial update

David Reilly provided an overview of the giant crab e-monitoring trial. Funding has been made available from Australian Marine Parks (AMP) to trial e-monitoring on giant crab vessels. The project is looking to provide an alternative to on-board observers to verify and validate data. Two have been fitted with cameras. The system is triggered when the haul starts and the cameras turn on for around 12 minutes. The VFA is in the early days of reviewing preliminary footage and understanding limitations. The project has also been extended to collect some data for rock lobster. The data is not limited to capturing retained/discarded but also protected species and bycatch information.

(Delayed Agenda item)

1.4 Actions from last meeting

Toby presented the action list and confirmed that all outstanding harvest strategy development actions have been delivered. Outstanding actions related to exploring PRI weighting and considering weather impact on catch rates have been addressed.

Further actions arising from Meeting 37 and the status of existing actions are outlined in the attached 'Actions List' circulated with the meeting minutes.

Note: the following items were not included in the agenda due to time constraints and will be included in the next RAG meeting

- Considering a vessel efficiency factor
- Strategic plan for tag recapture program

The Chair closed the meeting by thanking members for their efforts in joining for this discussion and concluded the 37th Rock Lobster and Giant Crab Resource Assessment Group meeting.

Action – VFA to include all agenda items not discussed at RLRAAG#37 for next meeting.

Action – Toby to send out calendar invite for next meeting.

Meeting concluded at 4:30pm.