

RECORD OF MEETING

Meeting #41, 6 March 2024

VFA Queenscliff

CHAIR: Ian Knuckey

MEETING COMMENCED: 09:30 am

Present	
Ian Knuckey	Chair
Ewan Flanagan	Victorian Fisheries Authority / Executive Officer
David Reilly	Victorian Fisheries Authority
Klaas Hartmann	Institute of Marine and Antarctic Studies (IMAS)
Genevieve Phillips	Institute of Marine and Antarctic Studies (IMAS)
Ross Bromley	Industry member (EZ)
Zeb Johnston	Industry member (WZ)
Gary Ryan	Industry member (WZ)
Peter Galvin	Recreational fishing representative/ VRFish
Robert Timmers	Scuba Divers Federation Victoria representative
Craig Starrit	Recreational fishing representative observer
Naomi Barry	Coastal Indigenous Representative
Len Joyce	Observer
Apologies	
Wayne Dredge	Industry member (EZ)
Ben Scullin	VRFish
Matthew Harry	Industry member (EZ)
Matthew Wassnig	Seafood Industry Victoria
Anthony Ciconte	Giant Crab Fishery industry member
Alex Haberfield	Industry member (WZ)
Lawrence Moore	Recreational fishing representative/ VRFish
George Brocklesby	Industry observer

1. Preliminaries

1.1. Welcome

Ian Knuckey, the Chair, opened the meeting with an Acknowledgement of Country and welcomed all attendees to the 41st 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 the public, via meeting minutes published on the Victorian Fisheries Authority (VFA) webpage. Ian noted apologies and asked that all attendees introduce themselves and disclose any potential conflicts of interest. People may be asked to leave the room during discussions where a conflict of interest is identified.

Ross Bromley disclosed that he has been engaged by Atlantis Advisory to assist its client, Southern Rock Lobster Ltd, with the Marine Stewardship Council (MSC) pre-assessment of the South Australian, Tasmanian and Victorian rock lobster fisheries.

1.2. Adoption of agenda

Ian provided an overview of the meeting and called for additions to the agenda. Ian confirmed that, at the request of a committee member, items eight and nine would be switched. The agenda was otherwise adopted as circulated.

Ian also noted that a meeting had taken place with Anthony Ciconte the day prior to the RLRAG to discuss the Giant Crab stock assessment results due to Anthony being an apology on the day. Ewan Flanagan, Executive Officer, and Klaas Hartmann, IMAS scientist, also attended the meeting. Ian advised that anything raised during that meeting will be discussed with the RLRAG today in agenda item nine.

1.3. 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.

Ewan ran through the action items from the previous meeting, noting actions 2, 4, 5, 7, 8, and 9 would be covered in today's agenda. Additionally:

- In response to Action 3, discussions have commenced with the New South Wales Department of Primary Industries to discuss the impacts of a separate Eastern Rock Lobster quota allocation in Victoria. In summary, the low expected catch in Victoria is not considered a concern for Eastern Rock Lobster stock management.
- In response to Action 11, Klaas noted that while it is accepted that improved vessel efficiency has occurred, it is difficult to provide further assessment without ongoing data inputs. Members noted it is still an important consideration and the room agreed to include it as an annual discussion item at the September or December RLRAG.

Action: Add vessel efficiency factors as ongoing discussion items for September or December RLRAG.

2. Management Update

2.1. Overview of 2023 RLRAG Discussions

Ewan provided an overview of the key discussion items from 2023 RLRAG meetings. In summary, the key discussion points included:

1. Development of the new Rock Lobster Management Plan.
2. Development of the new Rock Lobster Harvest Strategy.
3. Introduction of the Australian Rock Lobster Model and its ongoing development alongside the current model.
4. Giant Crab e-Monitoring project which is trialling the use of electronic monitoring on-board vessels to assist with monitoring and compliance capabilities in offshore fisheries.
5. Giant Crab FRDC data collection project which focuses on using camera technology to collect data on length frequency, sex and species identification whilst at-sea.
6. Amendments to the new the Rock Lobster Recreational Reporting Program, including a new reporting app aimed at simplifying the process for recreational fishers.
7. Development of a new recreational measuring device as part of the Rock Lobster Recreational Reporting Program.
8. Eastern Zone fee relief for the commercial sector, including a reduction in the provision of stock assessment services, compliance inspections and observer coverage during the 2023/24 season.
9. Updates to the Puerulus Monitoring Program, and the decision to retire crevice collectors in favour of the basket collectors.
10. AVG outbreaks and the ongoing management interventions that directly and indirectly affect the Victorian rock lobster fishery.

2.2. Recreational Reporting Program Update

Ewan provided an overview of the rock lobster reporting program results since the season opened on 16 November 2023. In summary, as at the 4 February 2024, a total of 2,459 participants had signed up to report catch. A total of 536 and 916 rock lobster had been caught in the Eastern Zone and Western Zone respectively. Of these, an average length of 16.27cm was recorded, which equated to 864kg landed in the Eastern Zone and 1,327kg landed in the Western Zone.

Peter Galvin advised that the app has received positive feedback in relation to its simplicity. Several in the room noted that there are contributing factors to the low participation record on the app this year. These include the season's weather conditions not being conducive to rock lobster fishing; lower fishing effort resulting from the sentiment that rock lobster is difficult to catch at the moment; and that fishers are choosing other recreational fisheries, such as tuna fishing, over rock lobster due to success rates.

Rob Timmers queried why Victoria uses a different weighting system comparative to Tasmania. It was confirmed that the length-weight relationship utilised in Victoria has been previously endorsed by the RLRAG over other methods. A request was made for the length-weight model to be provided to the group.

Action: David to provide length-weight relationship model.

2.3. Recreational Measuring Device Update

Ewan provided an update on the proposed rock lobster measuring device. An order of stainless-steel tools has recently been received by the VFA and a limited distribution will commence shortly. The VFA will work with VRFish to assist in distribution to groups.

Generally, there was positive feedback regarding the new tool. Gary Ryan raised whether it would be possible to integrate the tool into the observer program. Ewan confirmed this is possible, albeit with revised measurements that allow for measuring undersized rock lobster.

Craig Starrit queried whether it was going to be a requirement to carry this tool. In short, recreational fishers will not be required to carry this tool when fishing for rock lobster.

Action: VFA to consider tool prototypes for observer program.

3. Monitoring Program Update

Ewan provided an update on the monitoring program noting David had arranged a meeting with Klaas and industry to discuss the Eastern Zone sampling strategy. While this meeting was unable to proceed, David and Klaas met to discuss the minimum requirements of the program. Klaas advised that the initial discussion included the numbers of pots to be sampled, considered on a per fisher and per day basis. Importantly, Klaas noted that it must be a random sample, and the sample size and pots must be locked in prior to commencing a fishing trip. This will aim to ensure there are no conscious or sub-conscious biases when sampling. Ewan confirmed there is still an intention to meet with industry in the near future and that further discussions will be held with broader industry members at the upcoming port meetings.

Ewan further provided an update on the Western Zone fixed site surveys noting that there had been a low willingness to participate in some areas for the upcoming season. David is continuing to work on this and will utilise upcoming port meetings to discuss this in further detail.

The chair called a 15-minute tea break

4. Rock Lobster Stock Assessment Preliminary Results

4.1. Rock Lobster Western Zone Stock Assessment Results

Klaas Hartman presented the Western Zone stock assessment results, noting that the assessment was based on the new management plan and harvest strategy that is yet to be finalised. While catch has been generally consistent for over a decade effort has significantly reduced highlighting increased efficiency across the zone. This is further presented in the comparison between nominal and standardised catch rates. The standardised catch rate is adjusted based on factors such as where and when fishing occurs during the season. Gary Ryan commented that he would expect catch rates at the commencement of this timeseries to be considerably better than those represented if the current technologies were available at that point.

Ross Bromley raised the possibility of including error bars in the assessment, noting it is required in the Marine Stewardship Council (MSC) certification assessment. Klaas noted this would be worthwhile to include in the appendix to avoid over complicating the main document. Klaas further advised that the Limit Reference Point and Target Reference Points have been set with consideration given to the standard required by the MSC.

Regarding egg production, Klaas noted with high confidence that the zone sits above the limit reference point of 20% of the virgin biomass level.

Action: Klaas to add proxy's to CPUE graphs and an appendix item to include error bars.

On a regional basis, Klaas advised the Portland region results followed very similar trends to the broader zone. The zone has experienced consistent catch levels and declining effort; and has increasing CPUE, slightly lower when standardised. In the Warrnambool region, catch has remained consistent with decreasing effort; and while the region has recently experienced a significant jump in nominal CPUE, the standardised CPUE is steadier. This is due to the corrected seasonal effort. The Apollo Bay region has followed similar trends to the Warrnambool region.

Klaas advised that vessel numbers have declined through time, as is consistent in a fishery with transferable quota. Klaas confirmed that this applies only to active fishers with catches above a minimum level. Ewan further noted that one vessel can be listed on numerous access licences. Craig queried whether there were any latent pots in the fishery, to which Gary Ryan noted it was approximately half. Klaas clarified that output controls, including the number of vessels, is not a concern from a biomass perspective. Gary raised that there are social implications associated with a reduction of vessels operating and that output controls are important to maintain the structure of the fishery. Ian Knuckey noted there has been important work over the past decade to improve CPUE. Gary further noted that there was a two-year lag in Warrnambool prior to quota reductions affecting CPUE. This is an important consideration when assessing recovery in the Eastern Zone.

Klaas provided an overview of the catch per vessel trend comparative to days fished per vessel. This analysis has been adjusted and replaces the figure in previous versions. Klaas advised that this is the average tonnage per vessel and noted that consolidation may naturally occur due to feasibility per tonnage available. Zeb Johnston noted this may be counterbalanced by operators fishing in multiple zones or states.

Klaas provided an overview of the results produced during the observer program. The program has progressively seen a greater size distribution in recent assessments meaning lobsters are growing through to larger sizes. Previous assessments demonstrated lobsters were being harvested heavily around the legal minimum length, suggesting less stock was making it through to larger size classes. This trend has occurred across male and female data, however, females have a smaller distribution due to their growth stopping at an earlier age. The Fixed Site Surveys produced very similar results.

In reviewing the Pre-Recruit Index (PRI) results, Klaas noted the PRI is calculated individually for the Observer Program and Fixed Site Survey results. Despite being completely independent, the two datasets have followed the same trend. Consistently, the Observer Program trend is slightly behind the Fixed Site Survey results, likely due to the inclusion of closed escape gaps. Klaas noted there are positive signs in the trend demonstrating consistent increases in recruits leading to increases in the number of lobsters reaching legal minimum length. The PRI threshold in the new draft harvest strategy has been set lower due to that strategy having a greater reliance on overall stocks and less reliance on pre-

recruits. As it currently stands, the zone is sitting right on the existing harvest strategy PRI threshold but well above the new harvest strategy PRI threshold. Gary queried whether the Fixed Site Survey results are standardised. Klaas noted they are not, however, there is weighting applied to each fixed site.

Klaas further advised that while the exploitation rate has fallen over the last decade, biomass in the zone has been trending upwards, with the exception of the last two years. Zeb queried whether this recent dip could be due to changes in fishing habits, specifically less deep-water fishing. Klaas noted that was a possible reason and Genevieve added it was potentially also caused by reduced spatial distribution. Gary noted that there should be a greater discrepancy between nominal and standardised CPUE early in the timeseries (1980) to account for the significantly higher biomass. Genevieve noted a further consideration may be that there was less targeted fishing effort around 1980 due to less reliance on technologies. In response to a query, Klaas clarified that biomass refers to exploitable, or legal-sized, biomass. Ian added total overall biomass is never considered in assessments.

Finally, Klaas advised that recruitment across the zone had been consistently lower in recent years. This decrease in productivity is a key component of the rebuild plan outlined in the new draft Harvest Strategy. Klaas noted that this data cannot be considered with confidence in recent years, hence the timeseries finishing earlier than other datasets.

4.2. Application of Harvest Strategy for the Western Zone

Based on the stock assessment results, Klaas outlined the application of the data under the new harvest strategy. Klaas confirmed that the Harvest Control Rule 1 pertaining to the egg production limit reference point was met for the Western Zone.

Under Part 2, the TACC determination, the current CPUE allows for the zone to progress to the next CPUE band. While the TACC remains at 242 tonnes, this band ensures action will be taken earlier in the event that declines occur. The Western Zone is capped at 242 tonnes under this Harvest Strategy despite CPUE increases. Klaas confirmed that the Western Zone is well above the rebuilding model's estimated trajectory.

4.3. Rock Lobster Western Zone Stock Discussion

The response to these results was generally positive. Gary Ryan noted that this progression would be good to present at port meetings. Ewan agreed and confirmed that while the rebuilding strategy is outlined for 20 years, the Harvest Strategy will be in place for the next 5 years. At this point the status of the fishery will be reassessed. Zeb added that this had been a strong couple of years for the fishery.

4.4. Rock Lobster Eastern Zone Stock Assessment Results

Klaas provided an overview of the Eastern Zone stock assessment results. In summary, both catch and effort levels have continued to trend downwards. Across the zone, while the nominal CPUE is down slightly, the standardised CPUE has trended upwards over the last few seasons, albeit with a very slight rise in the last year. This trend is likely driven by the operators currently fishing as well as the changes to spatial distribution.

In the Queenscliff region, catch was slightly lower than the previous couple of years and effort continues to decline. Each CPUE indicator is slightly down this season. Collectively, the Queenscliff results are very similar to the zone overall, due to the majority of catch coming out of this region. Overall the San Remo region followed similar trends across all datasets. Zeb queried why nominal CPUE is greater in the Western Zone but lower in the Eastern Zone. Klaas noted the Eastern Zone result is likely due to there not being enough

vessels operating to detect efficiencies. Ian added that the Eastern Zone data is becoming more difficult to assess given the low levels of activity.

In the Lakes Entrance region catch has reduced to almost nothing in recent years due to minimal fishing effort. Klaas noted that the CPUE figures for this region essentially don't contribute to the overall zone analysis due to the weighting applied. Rob advised that an annual citizen science program is due to complete a survey west of Wilsons Promontory. In response to a query from the Chair, Rob noted the data collected over the past four years can't be released at this time.

Across the zone, Klaas advised that the catch per vessel and days per vessel were both very low. Gary recognised that the TACC per vessel is extremely low to the point where this is on the verge of being a part-time fishery.

Klaas advised that the Fixed Site Survey results suggested there was a strong spread of sizes alongside low exploitation. While the level of undersize a couple of years ago was producing strong results, this has dropped off recently. The PRI has followed a similar trend and is effectively at its lowest levels to date. Naomi Barry queried whether this could be due to the runoff and sediment in the water column. Klaas noted it is likely due to a range of contributing factors influencing the habitat in which puerulus settle. Naomi noted a seagrass project in Westernport and the Gippsland area presented similar results. Klaas advised that understanding the influences of these factors can be difficult. Ian added that it is difficult to implement fisheries management strategies capable of affecting change across such a wide variety of influences. Klaas also advised that due to the large larval dispersal process, recruitment is not necessarily coming directly from this area.

Action: Naomi to send through seagrass index

4.5. Application of Harvest Strategy for the Eastern Zone

Klaas discussed the application of the harvest strategy for the Eastern Zone noting that as there is no assessment model, it can't be applied as defined in the Harvest Strategy.

Under the Harvest Control Rule 1, the egg production is evaluated based on the limit reference point proxy of 0.25 kg/pot lift. As such, this rule is met. Under the Harvest Control Rule 2, the CPUE has remained consistent at 0.49kg/pot lift. This results in the zone remaining in the same band and maintaining the same TACC of 21 tonnes.

Ross Bromley queried what the ongoing management strategy was for the Eastern Zone stock assessment. Ewan confirmed that the VFA had committed to reduced services for one year only. This will be reviewed on an annual basis. Klaas added that the limited data may make it not worthwhile to run a stock assessment next year.

Rob queried whether the VFA was open to discussions with the Australian Marine Conservation Society (AMCS) following its offer to provide resources for environmental research. The AMCS representative raised this during the final Rock Lobster Management Plan Review Steering Committee meeting. Ewan advised that the VFA is open to considering all data collection options and noted discussions on this topic had commenced between the VFA and AMCS. Ian noted that this is likely to be broader data collected and is less likely to directly affect the rock lobster modelling.

In terms of the Eastern Zone's rebuilding strategy, Klaas advised that the zone is slightly under the modelled trajectory but generally on track.

4.6. Eastern Zone Stock Assessment Discussion Summary

While no Eastern Zone commercial fishers were in attendance representatives from the recreational sector agreed that these results are reflective of their observations.

In summary, Ian confirmed that the RLRAG is supportive of the perspectives and outcomes provided in applying the draft harvest strategy, and the recommendation to maintain the TACC at 21 tonnes. Finalisation of the stock assessment is dependent on the Ministerial approval and confirmation of this harvest strategy.

5. Zonal Trajectory Under the Rebuild Strategy

This item was discussed as part of the stock assessment results in the previous agenda item.

6. Australian Lobster Model Update

Genevieve Phillips provided an update on the development of the Australian Lobster Model (OzLob). OzLob is now a fully updated model with current data that can be compared to the existing model. A full season of data is available, commencing in September, and length frequency data is included from December. Additionally, an estimated initial biomass can now be determined using forward projections.

Genevieve presented egg production estimates from the OzLob model providing a comparison with the current model. Estimates follow a very similar trend to the current model but are consistently higher through the times series. Genevieve advised that this is the result of OzLob predicting a higher initial biomass. A query was raised as to whether the intention was to bring the lines together. Genevieve advised that the main objective is to have confidence in the model outputs. If the trend between the two models differs, it would be important to investigate why that has occurred. In response to a further query, Genevieve noted that the two models differ mathematically, despite being applied to the same data. Ian noted that despite the OzLob producing consistently higher results, the TACC setting would not be affected as it is determined based on depletion. It was noted that the two models follow different trajectories over the last couple of years. Klaas advised that neither model necessarily presents accurate projections when considering the last two years.

A query was raised regarding the process for determining which model is more accurate. Statistical analysis is utilised in each model to assess how accurately it projects known data. The next step is to determine why there are differences in the two models.

Genevieve further presented the biomass estimates produced by OzLob. While OzLob presented a significant higher biomass estimate than the current model, the trends demonstrate that the two models are very similar. This presents confidence in the OzLob model outputs. The higher biomass estimate can be attributed to the differing estimates of virgin biomass. In response to the discrepancies in the most recent years between the models, Ross queried whether this would naturally resolve itself. Klaas advised that the OzLob model is more optimistic for new recruit levels based on catch rate data.

Genevieve further presented a comparison of length-frequency data, noting the model is generally comparable to the actual data. Ian requested that the current model be added to the graph presented for further comparison.

Ian queried when this model is expected to be finalised. Klaas confirmed that the intention is to have the model available for next stock assessment, at least to be presented alongside the current model. Rob queried whether the OzLob model would include additional mortality considerations. This model has no additional elements assessing mortality, however, additional parameters can be included. Ian noted that the data is not available for inclusion at the current time.

7. RL Management Plan Perspective

Len Joyce provided a presentation proposing to investigate new methods to improve biomass. Specifically, this proposal considered developments in capturing and relocating puerulus; and utilising land-based facilities to assist in hatching, growing and releasing mature puerulus. Len noted the intention of this proposal is to respond to the risks impacting rock lobster, separate to fishing pressures. In summary, Len provided a recommendation that the VFA conduct research into the viability of these options.

Klaas advised that while there have been successful results in aquaculture product for tropical rock lobster, southern rock lobsters have a considerably longer life cycle making it less economically feasible. Research in Tasmania has suggested it is possible to utilise oyster pots to harvest puerulus, however, this process requires significant resources and knowledge. In Victoria, there are constraints in the opportunity for puerulus collection as well as the availability of land-based facilities for the growth stage. A more economically viable option is to consider only utilising facilities during the most vulnerable growth period.

Ian noted that there are considerable resources required to carry out this work and it would likely need to be an industry-led project. Ewan further confirmed that the VFA did not have the available resources to lead this research at the current time. A suggestion was made for a research proposal to be submitted to Southern Rock Lobster Limited. The general consensus was that further information was required before the RLRAG could formally endorse this proposal.

8. Giant Crab Stock Assessment Results

8.1. Stock Assessment Results and TACC Recommendation

Klaas provided an overview of the Giant Crab Fishery stock assessment results. The fishery experienced very high catches in its early season before a considerable reduction. Since the introduction of quota, the fishery has remained very consistent in catch levels. In assessing the CPUE trend, CPUE was corrected to account for under-reported effort in recent years and was estimated considerably lower than initially reported. This decline was confirmed in the 2020/21 season based on a known lower CPUE. In the last two years, CPUE has recovered considerably.

Klaas advised that the Giant Crab fishery CPUE is difficult to assess given the low number of fishers and changes to operators in recent years. However, due to the slow growth rate of this species, a significant seasonal increase in CPUE is considered unrealistic. Klaas noted that further data is required to improve the assessment and management of this fishery. Length-frequency data is important and may be improved by the current FRDC project developing an electronic length-frequency data collection system. Ultimately, the source of the data, whether electronic or observer-based, is less important so long as that data is obtained.

Klaas further provided an overview of the proposed tiered system recommended in the draft Harvest Strategy. The tiered system enables greater opportunity for increased TACCs and relaxed input controls when there is a greater provision of data. Klaas noted that the Level 2 option, based on CPUE trends and observer data, is considered the most achievable for this fishery.

Craig queried whether the Giant Crab Fishery biomass is currently known. Klaas noted that the data is not currently and consistently available to determine biomass.

Ian proposed to the group that a subcommittee be formed to further develop the draft Harvest Strategy and present the findings back to the main group. The room supported this motion.

Ian further noted that under the current Harvest Strategy, the RLRAG can only support maintaining the current TACC or recommend a reduction in the TACC. The room supported maintaining the Giant Crab Fishery TACC at 7.5 tonnes.

Action: Ewan to arrange Giant Crab subcommittee meeting.

9. Other Business

9.1. Southern Rocklobster Limited (SRL) Update

Ross Bromley provided an update on the Marine Stewardship Council Certification noting that SRL had signed contracts with the three jurisdictions to continue the assessment. Ross confirmed that MSC certification is assessed against three core principles: sustainable fish stocks, minimising impacts, and effective fisheries management. It will be completed as three separate standalone assessments for each jurisdiction to ensure one jurisdiction isn't impacted by the other jurisdictions. Despite this, Australian Southern Rock Lobster is assessed as one stock.

Action: Add Naomi Barry as a standing item to meetings, as with SIV and SRL.

The Chair called the meeting closed at 15:30.

Schedule 1: Actions from meeting 41

Action	Responsibility	Timing
06 March 2024 Actions		
1. Ewan to Circulate the draft minutes.	Ewan	March
2. VFA, SIV and an industry representative to meet and discuss monitoring program targets	David	May
3. VFA to provide length-weight relationship model details.	David	May
4. VFA to consider RL tool prototypes for observer program	David	May
5. Klaas to add proxy's to CPUE graphs and an appendix item to include error bars.	Klaas	April
6. Naomi to provide seagrass project data to Ewan for circulation amongst the RLRAG.	Naomi	April
7. VFA to consider data agreement with the fishers in the San Remo region (if required)	Ewan	January
8. VFA to setup Giant Crab working group to discuss Harvest Strategy progression	Ewan	April
9. David to follow up with Eastern Zone fishermen regarding voluntary observer data.	David	December
Ongoing Actions		
1. Genevieve to provide update on OzLob model at September or December RLRAG.	Genevieve	September/ December
2. Vessel Efficiency Factors to be considered annual at September/December RLRAG	David/Klaas	September/ December
3. David to raise future enhancement to Vic e-Catch to include functionality to report under voluntary pot program.	David	Ongoing <i>(Scheduled for 28 November)</i>