RECORD OF MEETING

Meeting #1, 25 June 2024

VFA Queenscliff

CHAIR: Ian Knuckey

MEETING COMMENCED: 1:00 pm

Present	
Ian Knuckey	Chair
Ewan Flanagan	Victorian Fisheries Authority / Executive Officer
Klaas Hartmann	Institute of Marine and Antarctic Studies (IMAS)
Scott Hadley	Institute of Marine and Antarctic Studies (IMAS)
Anthony Ciconte	Giant Crab Fishery industry member
Clint Rollins	Department of Primary Industries and Regions South Australia
Apologies	
John Olver	Giant Crab Operator
James Parkinson	Department of Natural Resources and Environment Tasmania
David Reilly	Victorian Fisheries Authority

1. Preliminaries

1.1. Welcome

Ian welcomed everyone and advised that this meeting is run as a sub-committee of the Rock Lobster and Giant Crab Resource Assessment Group (RLRAG). Outcomes of the meeting will be reported at the next RLRAG meeting.

2. Research Program Updates

2.1. FRDC Enhanced Data Collection Project

Scott Hadley provided an overview of the FRDC-funded Giant Crab Enhanced Data Collection project. In summary, this project focuses on developing an artificial intelligence platform for data collection on crab and rock lobster catches on-board fishing vessels. The project is specifically important to the giant crab fishery due to the lack of available data on which to inform decision making. It aims to combat the expenses and difficulties associated with on-board observing for offshore fisheries. Scott noted that the project has developed from initially utilising a 2D camera system to incorporating a 3D system considered more accurate and fit-for-purpose. Throughout the project, the focus has been on developing a system that is simple and easy to use at sea.

Initial testing results have demonstrated strong accuracy in determining size and sex identification. Scott noted that determining the unique identification of individual crabs requires further review in relation to changes in shell size and pattern that may occur following moulting. The system is also instantaneous for users. The next stage is to conduct testing on-board commercial vessels across the jurisdictions with results expected over the next six months.

Scott further provided an overview of the costing. Building the physical unit is the largest overhead cost, estimated at $17,000 for the initial unit. These costs reduced to approximately $8,000 for the second unit built. The vessel mounting equipment added an additional $1,000. Scott noted that costs are likely to be reduced further if these units are produced on a larger scale. Additionally, the systems will require ongoing data storage costs. As the project is due to conclude in August this year, there needs to be consideration as to how it is funded if development is to continue.

Anthony queried the required power draw from the fishing vessel. This is estimated at 30-40 watts. The unit has its own power source for a period of time but also plugs into the vessel power supply. Anthony noted the vessel capacity to run this unit will require greater consideration.

A query was raised regarding the ability to record discards. Scott noted this was considered but not incorporated in the current prototype. Currently, the unit assumes any giant crabs under the legal minimum length are discarded. It was noted that this does not consider high-grading practices in which fishers return unwanted legal-sized crabs to the water. The room agreed this was an important consideration and Scott noted he will include a discard button in the prototype. Scott further confirmed there is an option to record crabs in berry.

Anthony noted he is supportive of utilising this technology and willing to consider funding

arrangements provided the data is incorporated into the stock assessment.

Action: Scott to consider including a discard button on the unit.

Action: Scott to provide progress report at next RLRAG.

2.2. Electronic monitoring program

Ewan Flanagan provided an overview of the electronic monitoring program currently underway. This project commenced in 2022 and is due to conclude in September this year. It is funded as part of a Commonwealth project grant to improve understanding of fishing activity in Australian Marine Parks. It further aims to improve the VFA's validation of eCatch reporting for offshore fisheries. Two systems were introduced to VFA vessels, one of which is currently operating on a Victorian Giant Crab Fishing vessel.

The results of the project have indicated that less fishing activity occurs in the Zeehan Marine Park than has been previously estimated using eCatch reporting data. Additionally, the monitoring equipment offers strong capabilities in assessing reporting accuracy including the ability to assess the sex in approximately 50% of giant crabs caught.

Ewan summarised the costs of the project noting that the initial equipment and installation costs, totalling approximately $20,000, were covered by the project funding and that the units are now owned by the VFA. Ongoing costs are estimated to include $1,000 per trip reviewed; and $2,000 in storage costs per season.

Anthony raised concerns regarding the expenses to licence holders if every trip is to be reviewed, considering there are approximately 30 trips per season. It was noted that compliance cost recovery targets are structured based on the expectation that a proportion of total trips will be inspected.

Anthony further raised concerns regarding the ownership of the video footage and how long it is likely to be retained. Furthermore, if this is to become an ongoing requirement, details should be outlined in a Terms of Reference agreement. Anthony agreed to provide an example of a terms of reference for similar data agreements in another jurisdiction.

Action: David Reilly to provide clarification on satellite airtime cost.

Action: Anthony to provide a Terms of Reference example from another fishery/jurisdiction.

3. South Australian Harvest Strategy Development Update

Clint Rollins provided an overview of the South Australian Giant Crab Fishery including its background, existing arrangements, recent TACC reductions and the new draft harvest strategy development. In summary, the new draft harvest strategy separates management arrangements into two zones: the Northern Zone and Southern Zone; employs a 3-year average catch per unit effort (CPUE), comparative to the existing 5 years; uses a reference period between 2000 to 2012, based on stability and strong fishing results during that time; and uses a standardised CPUE that factors in the season, month, licences, marine fishing areas and depth.

The final Total Allowable Commercial Catch (TACC) setting is based on a graded approach that applies CPUE bands to a defined TACC, similar to the Victorian Rock Lobster Fishery TACC setting process. In line with the Status of Australian Fish Stocks protocols, a status is applied to these bands as either Sustainable, Depleting or Depleted, which results in a fishery closure. Ian suggested that the Depleting status be adjusted to recovering when the CPUE level is improving but remains below the set level of Sustainable. Clint further noted that the draft harvest strategy also needs to incorporate a reopening plan in the event that the fishery reaches the Depleted stage.

Anthony queried whether there were any observed trends in the harvest of giant crab by rock lobster licences, given each licence is entitled to retain 5 giant crabs. Clint advised no significant change has been observed.

Action: Clint to send through presentation from SARDI

4. Victorian Draft Harvest Strategy Review

Klaas Hartmann provided an overview of the existing draft harvest strategy, developed during 2021. The draft strategy utilises a tiered approach with four progressive stages, whereby the provision of more data enables improved assessments and greater flexibility in the TACC. Klaas summarised each of these stages as follows.

Level One is very similar to the existing strategy employing the same Harvest Control Rules based on low levels of data collection. Consequently, the strategy offers limited flexibility in allowing TACC increases.

Level Two incorporates verified data collection to increase confidence in the assessment utilising on-board cameras or at-sea observers. The TACC remains capped at 10.5 tonnes when below the target reference point but can increase up to 20% every three years when CPUE indicators are above the target reference point.

Klaas noted it is difficult to determine the exact tonnages based on current data availability. Anthony questioned why input controls exist when the fishery is already output controlled. Ewan noted input controls need to be reviewed as part of a Management Plan Review that considers broader community views through public consultation. There are additional factors to consider in addition to the direct management of the Victorian Giant Crab Fishery. The room agreed that it was appropriate to consider current input controls as part of the next Giant Crab Management Plan review.

Level Three of the strategy builds on Level Two by incorporating a regular independent survey to provide key size structure. In doing so, the fishery may be eligible for up to 20% increases in the TACC annually, provided CPUE has remained above the target reference point during the previous three years.

Level Four is considered the highest possible standard for the fishery and unlikely to be feasibly achieved. It builds on the provisions in Level Three by including a regular stock assessment model. Consequently, this results in a flexible TACC setting method.

Further discussion considered whether an independent survey was realistic for a fishery this size and whether providing length-frequency data could lead to running a stock assessment.

Klaas agreed this was possible, however, data would need to be collected for at least three years prior. Ian suggested moving the independent survey to Level Four and replacing it with the requirement for a CPUE- and size-based stock assessment in Level Three. The room agreed that this was more realistic.

Anthony raised the idea that if the fishery meets data controls, it should trigger a Management Plan review. The room agreed that the Management Plan needs to be reviewed anyway and should not be limited by a requirement to collect data. A suggestion was made to conduct this review within the next three years. In addition, the next harvest strategy review should be conducted at the same time. The group agreed that this was appropriate.

In considering whether to incorporate the standardisation of CPUE, Klaas advised the standardisation process offers limited benefit at this stage, given the nature of this fishery. The group supported maintaining the use of raw CPUE as the key indicator but requested a comparative standardisation be conducted to consider any anomalies. Klaas further noted this value does already account for soak time.

Considering the reference points, Ian suggesting utilising a reference period commencing at 1995/96, after the introduction of legal minimum lengths; and ending at 2009/10, before the issues surrounding compromised data. This proposal was supported.

The group agreed to develop the target reference points at the next review meeting,

Action: Management Plan – conduct review of management plan in next three years including the next harvest strategy review.

Action: Update Draft Harvest Strategy in line with discussions above.

The Chair called the meeting closed at 15:50.

Schedule 1: Actions from meeting

Action	Responsibility	Timing
25 June 2024		
1. Circulate the draft minutes.	Ewan	July
2. Review adding a 'discard' switch to the enhanced data collection unit develop under the FRDC project.	Scott	Update at next RLRAG
3. Provide a progress report on the FRDC Enhanced Data Collection project as the next RLRAG.	Scott	Next RLRAG meeting
4. Provide clarification on the satellite airtime cost associated with Electronic Monitoring Program.	David	August (Next meeting)
5. Provide Terms of Reference example from other Jurisdiction in relation to Electronic Monitoring Program.	Anthony	September
6. SARDI to email presentation regarding new South Australian Giant Crab Harvest Strategy	Clint	July
7. Seek recommendation from RLRAG to conduct Giant Crab Management Plan Review with next three years.	Ewan	Next RLRAG meeting
8. Update Harvest Strategy and set follow up meeting	Ewan/Klaas	July