

Social justice imbalance between fishing sectors: a case study of a blue-swimmer crab estuarine fishery in south-western Australia



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The blue swimmer crab (*Portunus armatus*) fisheries in Western Australia (WA) are described as small-scale. This species is found from Cape Naturaliste in Western Australia to the Northern Territory and across to the east coast of Australia. It is present across Queensland, New South Wales east coast and extends south and west into Victoria. Blue swimmer crabs are also be found in the major embayments of South Australia (Johnston et al. 2012). In WA, it occurs along the western coast from the Perth region to Cape Leeuwin and Cape Naturaliste.

The City of Mandurah (~80 000 people), located about 100km south of Perth, developed around the shoreline of the Peel-Harvey Estuary, has become the main location for blue swimmer crab fishing in south-western Australia. The commercial and recreational fisheries for blue swimmer crabs in the Peel-Harvey Estuary became the first fishery in the world to be jointly certified (i.e., certification of both sectors) as sustainable by the Marine Stewardship Council (MSC) in 2016. However, the increase in population growth in the area has resulted in greater urbanisation, and with it, increased numbers of recreational fishers targeting blue swimmer crabs. The number of blue swimmer crab commercial fishers in the estuary has decreased over time. This, combined with other anthropogenic activities, is progressively adding pressure on the blue swimmer crab populations, as well as on other natural resources.

Photo: Blue swimmer crab commercial crab fisher sorting his catch. Peel-Harvey Estuary, Mandurah (Western Australia). 2016. ©MSC

Location:

Mandurah, Southern Western Australia

Ecosystem type:

Marine, brackish

Main gear:

Recreational fishing gears, traps, scoop nets

Target species:

Blue swimmer crab (*Portunus armatus*)

Vessel type:

Open deck aluminum vessels

No. of small-scale fishers:

6

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Justice in context

Types of justice:

- Distributive
- **Social**
- Economic
- Market
- Infrastructure/wellbeing
- **Regulatory**
- Procedural
- Environmental
- COVID-19 related

Influence of recreational fishing

The commercial sector has reported issues of power imbalance and inequality compared to the recreational sector. They suggest three main reasons for this:

1. Conflict between the commercial and recreational sector over resource allocation has previously been reported between sectors in this region (FRDC 2001). Commercial fishers have reported damage to personal property as well as physical harm from recreational fishers. Furthermore, some recreational fishers support the elimination of the commercial sector in the region, claiming that the commercial sector eradicates the crabs from the system;
2. The Government of WA is promoting an increase in the number of recreational fishers to 30% of the population in the state. This contrasts with the decrease in the number of commercial fishing licenses over time; and
3. One of the measures in the recent management review includes a buy-out of commercial blue-swimmer crab fishers, which will further marginalize the commercial fishing community.

Blue swimmer crab fisher perception

Currently, crab fishers in the Peel-Harvey estuary require a license to fish, only if fishing from a boat with traps, whereas the shore fishers using scoop nets do not require a license. No universal recreational fishing license was incorporated into the 2019 revised management plan. Such a license would provide a much more accurate picture of fishing effort and participation from the recreational sector. The lack of data on recreational fishing activities is a barrier for estimating the recreational catches and effort. Furthermore, despite the common call by recreational and commercial sectors for improved compliance in the region, no action towards better monitoring illegal recreational activities in the region has yet been taken.

Definition of small-scale fisheries

Australian small-scale fisheries are generally defined as fisheries i) contributing under 5 million AUD to GDP overall; ii) producing an annual average salary of less than 100,000 AUD per operator, iii) a catch of less than 5 tonnes of shellfish or 10 tonnes of wet finfish; iv) with vessels < 10 m in size, and a maximum of three crew members per vessel; and finally v) run by either owner operators or as a family business (FRDC 2014). Recreational fisheries are also small-scale by nature.

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Dealing with justice

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To this date, no studies have been conducted on fisheries social justice, or fisher well-being in WA. In fact, there is little information on the human dimensions of Australian fisheries. In 2016, a study analyzed the performance measures for 120 Australian fisheries. Results showed that only 28 of 120 studied fisheries had measures for social dimensions, none of these in WA (Hobday et al., 2016). To our knowledge, only one study in Australia has allowed blue swimmer crab fishers to articulate their voice and report their perceptions and concerns, as well as their views on management approaches for the fishery (Obregón et al. 2020). Results showed that, recreational and commercial fishers often differed in their perceptions on specific fishery changes and management approaches used. Yet, generally both sectors showed concerns on the status of the stocks, and the management of the fishery (Obregón et al. 2020). In fact, some concerns appeared important for both sectors, such as illegal recreational fishing, and the increase in fishing pressure.

The increasing influence of the blue swimmer crab recreational sector and the resulting power imbalance between sectors is marginalizing small-scale blue swimmer crab commercial fishers in the southwest of WA. Despite the recognition through the MSC certification of the Peel-Harvey fishery for its sustainability, commercial fishers feel concerned about the future of this small-scale commercial fishery as they watch the recreational sector grow as population increases. Results from the study on the well-being of Australian commercial fishers showed that fishers have higher incidences of mental health and physical issues than the general Australian population, and were thus classified as an occupation-related issue (King et al. 2019).



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