

PORT PHILLIP BAY ISSUES PAPER : SPIDER CRABS



This paper outlines recent problems with spider crab fishing litter and a potential NO-TAKE period during crab aggregation. Additionally, this paper identifies stakeholders and initiatives that might help address these problems

Species Background

Spider crabs are a large, native crustacean species found in the bays of Victoria. They can reach up to 70 centimeters in diameter across both their legs.¹ Each winter, spider crabs migrate inwards from deep waters and gather by the thousands to molt in Port Phillip Bay.² They gather in large numbers to protect themselves from predators by sticking algae and seaweed to their old shells to stay camouflaged. Then, the spider crabs molt by transferring shells. During this molting process, spider crabs are particularly vulnerable to predators.³

During the spider crab gathering, scuba divers and snorkelers flood to Port Phillip Bay to observe the molting process. Anglers also gather to go crabbing, but in the process they often litter the bay with used bait including chicken carcasses, netting, and miscellaneous fishing gear. Discarded bait attracts rays and sharks to the bay; along with other fishing refuse, this creates a danger to scuba divers and swimmers, and the debris threatens the 1500+ marine species that live in Port Phillip Bay.

The rising tension between fisheries and scuba divers has led to a proposal created via a joint effort between the Spider Crab Alliance and Spider Crabs Melbourne.⁴ They circulated a petition for a NO-TAKE fishing period for the crabs during the molting season, a petition which, as of present, garnered 35,000 signatures. This restriction would be implemented through April-July. The petition also calls for increased funding for government research into the Giant Spider Crab population in order to benefit the natural ecosystems. To achieve these objectives, vested stakeholders will need to unite and initiate communication in order to come to a resolution for the NO-TAKE period and spider crab waste management before it becomes a crisis.

Existing Fishing Policies

The Victorian Fisheries Authority has specific policies and guidelines targeting spider crab anglers. The current bag limit is defined as “1 litre or a combined total of 30 whole or parts of crab.”⁵ Spider crab collection is also prohibited in water less than 2 metres deep, and the only allowed means of crabbing are via hand, spear, use of up to 2 bait traps, or use of 2 hoop nets per angler during the molting season.⁶ The VFA encourages anglers to have properly labeled gear and reminds them that officers will be out during the spider crab aggregation to monitor the adherence to fishing rules. The Victorian Fisheries Authority directs anglers to put used or unwanted bait (in this

case, chicken carcasses) along with frames, nets and other fishing equipment, in bins, and to take these materials home and dispose of them properly bins are unavailable or full.”⁷

Causes of and Barriers to the Problem

The problem with spider crab fishing stems from the lack of adherence to VFA catch and disposal policies, which are often not enforced.

Fishing Malpractice

During the molting season, chicken carcass bait is often left to rot in the waters of Port Phillip Bay, which is dangerous for the marine ecosystem and attracts sharks and rays, putting divers at risk.



Rye pier littered with discarded bait.⁸

A large component of the crabbing issue is varying priorities among stakeholders. There are sensitivities around crabbing because anglers support less regulation around fishing, given that the species is not threatened. Certain cultural groups value spider crabs as a part of their cuisine, while tourists and divers are fascinated by spider crabs and flock to view their aggregation to the bay. There is a conflict of interest in the way that different groups enjoy the spider crabs. One way to bring these different groups together is to celebrate the wider ecosystem of the Bay is to hold nature-based events in Port Phillip Bay each year during molting season. Such events could

promote tourism, initiate conversations about crab fishing, crab cuisine and the value of the crabs.

There is also an overall lack of data to prove that the spider crab species or the greater ecosystem has been affected by fishing malpractice. Although there are photographs indicating the severity of spider crab fishing related litter, there has yet to be a widespread study tracking the amount of litter identified or collected in the bay.

Solutions

The idea for a series of nature-based events in Port Phillip Bay stemmed from a recognition that stakeholders and organisations all want to celebrate nature in the bay but have different ways of doing so. A series of nature-based events would allow for multiple means of celebration including educational events, showcases, boat tours, among others. The events would also be a large draw for tourism in the bay which has dwindled due to COVID-19.

Some specific solutions to problems surrounding a NO-TAKE period include:

- Writing to environmental ministers to advocate for a NO-TAKE period and emphasize its significance. The Victorian National Parks association has a step-by-step guide to help citizens write to ministers.⁹ <https://vnpa.org.au/protect-action/spidercrabs/>
- Spider Crabs Melbourne and the Spider Crab Alliance created a petition advocating for a NO-TAKE period during the spider crab aggregation. The petition is still open and can be signed using the link below.¹⁰ <https://www.change.org/p/victorian-fisheries-authority-save-the-iconic-australian-spider-crabs-from-rampant-overfishing-02538fbc-6c2c-4463-9b28-7a6b7a8acf72>
- Developing a unified planning group of interested organisations interested in creating a series of nature-based events and selecting a few individuals to lead the group. Ongoing meetings will be held to begin planning for a series of nature-based events in Port Phillip

Bay. A schedule for events, permits, and ensuring that multiple sectors (fisheries, non-profits, tourism) will be vital to the event's success. If you have any questions or your organisation would like to be involved in the initiatives, reach out to the Port Phillip Baykeeper: baykeeper@ecocentre.com

In terms of a solution for crabbing related litter, developing a strategy to communicate and educate others on the effects of litter would be the next step. An event centered around cleaning and educating others on fishing litter could be incorporated into the series of nature-based events.

Stakeholders, including responsible management agencies and vested organisations

Key stakeholders that are affected by the current spider crab fishing related issues are non-profit organisations, government organisations, and businesses involved with ecotourism. Ministers at the Victorian Fisheries Authority that hold a large responsibility in shaping fishing policy and regulation. The Victorian National Parks Association encourages organisations and individuals to write to The Hon. Melissa Horne (Minister for Fishing & Boating), Hon. Lily D'Ambrosio (Minister for Environment), and Hon. Martin Pakula (Minister for Tourism).¹¹ These ministers work to put policies into action and can be influential in the implementation of a NO-TAKE period.

Some stakeholders identified are displayed in Figure 1. Highlighted stakeholders indicate organisations that contributed input to the development of solutions in this paper.



Figure 1: Brief List of Stakeholders in Port Phillip Bay related to Spider Crab Fishing & Advocacy

Other Links and Important Information

This paper will be reviewed every 2 years and published by the PPB Baykeeper Organisation. If you have a correction or further information, contact the Baykeeper at baykeeper@ecocentre.com

Endnotes

Photos (Header)

Give spider crabs a no-take break in moulting season
[Photograph found in Victorian National Parks Association].
(n.d.). Retrieved from <https://vnpa.org.au/protect-action/spidercrabs/>

Roberts, M. (2020, October 7). [Photograph found in Spider Crab Alliance]. Retrieved from <https://www.facebook.com/photo?fbid=10221029087130245&set=p.10221029087130245>

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1. Victorian Fisheries Authority. (2020, June 23). *Giant Spider Crabs*. Retrieved September 17, 2020, from <https://vfa.vic.gov.au/science-in-fisheries/spidercrabs>
 2. Staufenberg, J. (2016, June 17). *Thousands of giant spider crabs gather in Australian port*. Retrieved September 17, 2020, from <https://www.independent.co.uk/news/world/australasia/giant-spider-crabs-gather-their-thousands-melbourne-port-a7087281.html>
 3. Staufenberg, J. (2016, June 17). *Thousands of giant spider crabs gather in Australian port*. Retrieved September 17, 2020, from <https://www.independent.co.uk/news/world/australasia/giant-spider-crabs-gatherS-their-thousands-melbourne-port-a7087281.html>
 4. Sign the Petition. (n.d.). Retrieved September 18, 2020, from <https://www.change.org/p/victorian-fisheries-authority-save-the-iconic-australian-spider-crabs-from-rampant-overfishing-02538fbc-6c2c-4463-9b28-7a6b7a8acf72>
 5. Victorian Fisheries Authority. (2020, August 04). Giant Spider Crab Fishing Rules. Retrieved December 07, 2020, from <https://vfa.vic.gov.au/science-in-fisheries/spidercrabs/giant-spider-crab-fishing-rules2>
 6. Victorian Fisheries Authority. (2020, August 04). Giant Spider Crab Fishing Rules. Retrieved December 07, 2020, from <https://vfa.vic.gov.au/science-in-fisheries/spidercrabs/giant-spider-crab-fishing-rules2>
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 8. *Dead crabs next to a chicken carcass*. [Photographs found in The Sydney Morning Herald]. (2020). In 1110946286 839784218 M. Perkins (Author). Retrieved from Perkins, M. (2020, June 16). Hunt for nature's bounty turns Rye Pier into a 'chicken cemetery'. Retrieved December 07, 2020, from <https://www.smh.com.au/environment/sustainability/hunt-for-nature-s-bounty-turns-rye-pier-into-a-chicken-cemetery-20200616-p5537g.html>
 9. Give spider crabs a no-take break in moulting season. (2020, October 24). Retrieved December 07, 2020, from <https://vnpa.org.au/protect-action/spidercrabs/>
 10. Sign the Petition. (n.d.). Retrieved September 18, 2020, from <https://www.change.org/p/victorian-fisheries-authority-save-the-iconic-australian-spider-crabs-from-rampant-overfishing-02538fbc-6c2c-4463-9b28-7a6b7a8acf72>
 11. Give spider crabs a no-take break in moulting season. (2020, October 24). Retrieved December 07, 2020, from <https://vnpa.org.au/protect-action/spidercrabs/>