Spider crabs a NO-TAKE BREAK IN MOULTING SEASON

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Often seen decorated in seaweed and sponges, spider crabs gather material to shed their shell armour and grow a new one. *PT HIRSCHFIELD*

What is a spider crab?

Australian Giant Spider Crabs (*Leptomithrax gaimardii*) are a native crustacean that can reach to the size of a basketball (up to 40 cm). It is their long spidery legs which give them their name. Every year thousands of Australian Giant Spider Crabs, in the largest-known crab migration on the planet, march into the shallows of Port Phillip Bay to moult and seek safety in numbers.

We only see the spider crabs when they emerge from the deeper water each year to moult in South Australia, Tasmania and Victoria. Some think they march in from the depths of Port Phillip Bay, others think they arrive from Bass Strait. These 'moulting aggregations' are an important food source for wildlife such as seabirds, octopuses, sting rays and seals.

Seeking safety in numbers

Spider crabs congregate at a similar time each year in Port Phillip Bay, typically around the full moon in June. They form huge mounds, a veritable mass of legs and claws piling over the top of one another in a hectic battle for position. Once a crab has shed its hard protective shell, it waits for its new shell to emerge and harden. During this time, the crabs are more vulnerable to predators, which may explain why they seek safety in numbers.

What's the problem?

The moulting aggregations of spider crabs have become easy fishing targets in recent years.

Large numbers of crab pots and nets have been dropped in small and shallow areas, scrapping the marine rich pylons and capturing vulnerable marine life such as seahorses. Offensive bait (such as chicken carcasses) is being discarded in the heart of a popular snorkelling and diving site. Intensive and unprecedented harvesting practices like these damage the marine ecology and broader ocean habitats.

There are minimal records of how many spider crabs individual fishers catch. As we still have so much to discover about spider crab population, this lack of insight is problematic. Current fishing rules allow for 15 crabs to be harvested per person per day. While this can help reduce overall catch, it's challenging to enforce without a constant presence of fisheries officers during peak moulting season.

It is unclear what efforts will be made by the Victorian Fishing Authority to support education and policing (in various relevant languages) to ensure the new limit is successfully implemented.

A freshly moulted spider crab BRYCE NICHOL





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Spider crab pyramid BRYCE NICHOL

Spider crabs aggregating in the shallows of Port Phillip Bay for their annual moulting season BRYCE NICHOL

The science

Deakin University, with a grant from the Port Phillip Bay Fund, <u>ran a pilot science</u> <u>program</u> using both traditional research and citizen science activities. They deployed crab cameras, tagged spider tags, and used ecological monitoring and reports through the citizen science platform <u>iNaturalist</u>. A social science research to determine the value of the crabs is currently being conducted in a separate study.

Whilst the project saw an increase in the quantity and quality of spider crab sightings compared to previous years, more funding is required for consistent monitoring. To answer questions around the timing, duration, and triggers of the aggregation and moulting, as well as their ecological role, long-term data collection is essential. Until then, a no-take period should be rolled out until consecutive years of data collection has been completed.

The solution: a no-take moulting break

A no-take period between May-July each year in Port Phillip Bay would protect the spider crabs during their most vulnerable time of their lifecycle. The local community, ocean visitors and business groups have indicated support for a notake season. It would be a valuable intervention while we learn more about the spider crabs' ecology, distribution and habitat use. VNPA has a formal policy objective that supports recreational and commercial fishing. Healthy oceans and shores are possible when management is consistently guided by marine plans and policies. This means fishing and harvesting practices need to be subject to careful and thorough monitoring and management arrangements.

Given the global status of this incredible natural and significant event, we are advocating for a window of protection during their moulting season, with harvesting to be opened for the rest of the year.

Part of the community

For decades, this spectacular animal migration has been celebrated by Mornington Peninsula locals and interstate and international visitors.

The community gains great benefits from the influx of spectators and the opportunity to come together and celebrate the local marine landscape.

For many people, viewing the crabs is an important tradition. Highly acclaimed film crews (including Sir David Attenborough), underwater photographers, scientists and journalists come to dive and snorkel to experience this natural wonder.

There is a collective desire to promote tourism around this unique underwater spectacle. Whyalla, South Australia, <u>CuttleFest</u> celebrates the annual Winter migration of the Australian Giant Cuttlefish. This festival is a great success and an inspiration for a similar event on the Mornington Peninsula.

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How to protect the spider crab aggregation

- Write to decision makers to ask them to give spider crabs a no-take break during their moulting season. Visit: www.vnpa.org.au/protect-action/ spidercrabs
- Contribute to citizen science by recording your sightings to the <u>iNaturalist Spider Crab Watch</u>.
- Record your observation of the spider crab aggregation when at the Peninsula's piers or jetties. Simply fill in <u>this online survey</u>.
- Show your support by adding a bumper sticker. Email your postal address to vnpa@vnpa.org.au.

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Find out more at vnpa.org.au/campaigns/crabs

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