

A New Threat to Our Waters







## ABOUT THE ASIAN SHORE CRAB



#### What is the Asian shore crab?

The Asian shore crab is an invasive marine pest that originates from the Northwest Pacific, ranging from Russia to China, Japan, and Korea. Asian shore crabs outcompete native species, driving them out of their habitat.



### How did it get here?

The Asian shore crab was only spotted in Victoria in late 2020, although it has likely been here since 2016. It is thought to have arrived in Port Phillip Bay through ballast water from shipping vessels.

### Why is the crab so harmful?

The Asian shore crab feeds on a wide variety of foods, including mussels, oysters, scallops and other species of economic importance. It also has the potential to bring disease to native species, risking substantial damage to aquaculture.



# The crab has a bad track record

Although the Asian shore crab is quite new to Victoria, many other parts of the world have seen the crab destroy native populations. The crabs have been present on the east coast of the United States since the early 90's, and have been in European waters since 1999.



## IMPACT ON LOCAL ECOSYSTEMS

#### **Ecosystems in danger**

The Asian shore crab has the potential to drive native species from their habitats and to extinction, as it directly competes with them for space and food. They also eat other crabs. Their populations are known to expand rapidly if left unmanaged: Asian shore crab females can lay 2-4 clutches of eggs every year with an average of 15,000 eggs per clutch.

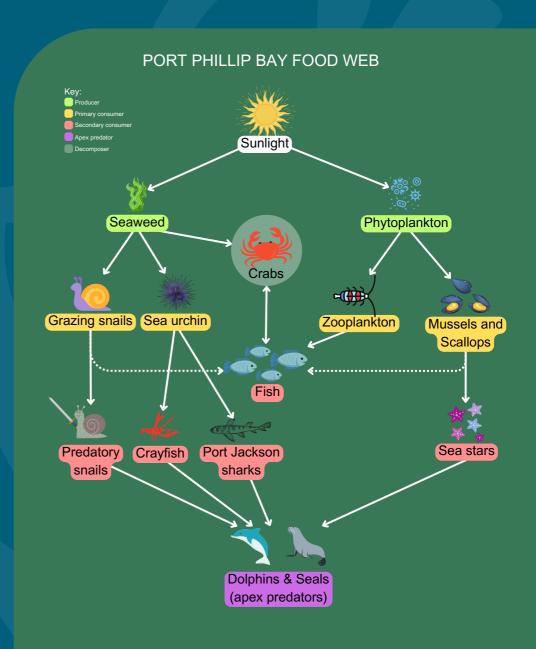
# How does the crab affect local species?

The Asian shore crab feeds on a wide variety of species, and can cause their populations to decline over time. In addition, it competes for habitat with native shore crabs, such as the mottled shore crab, purple mottled shore crab, and the smooth-handed crab. It can even affect algal cover by overfeeding on it.

# What role do crabs play in the ecosystem?

Crabs are one of the main 'decomposers' in the marine ecosystem. They help to clean up oceans by feeding on dead plants and fish on the sea-floor, recovering important nutrients such as carbon and nitrogen stored in plant and animal matter.

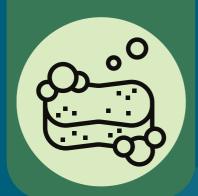
The Asian shore crab, however, eats just about anything it can find. If the Asian shore crab displaces native crabs and drives them to extinction, it would affect the food web and push it out of balance by reducing the number of native decomposers.



## **HOW TO HELP**

#### Check. Clean. Dry.

After spending time in the water, whether by boating, diving, swimming or surfing, cleaning your gear is critical before entering another body of water. Eggs and larvae can easily be carried on clothing and equipment, spreading crabs to new parts of the bay.



#### Report it.

If you see an Asian shore crab, report it. Without people reporting, it's almost impossible to know where the Asian shore crabs are, which makes makes them much harder to manage. The next pages of this pamphlet will help you identify the Asian shore crab.



#### Let people know.

The help of the community is essential in caring for the bay. The more eyes on the bay reporting marine pests, the better. If you know someone who uses the Bay often, or anyone who loves our unique marine life, let them know about the Asian shore crab!



Scan here to learn more about cleaning equipment to stop the spread of invasive species





Scan here to report a marine pest sighting, or to learn more about other marines pests in the bay

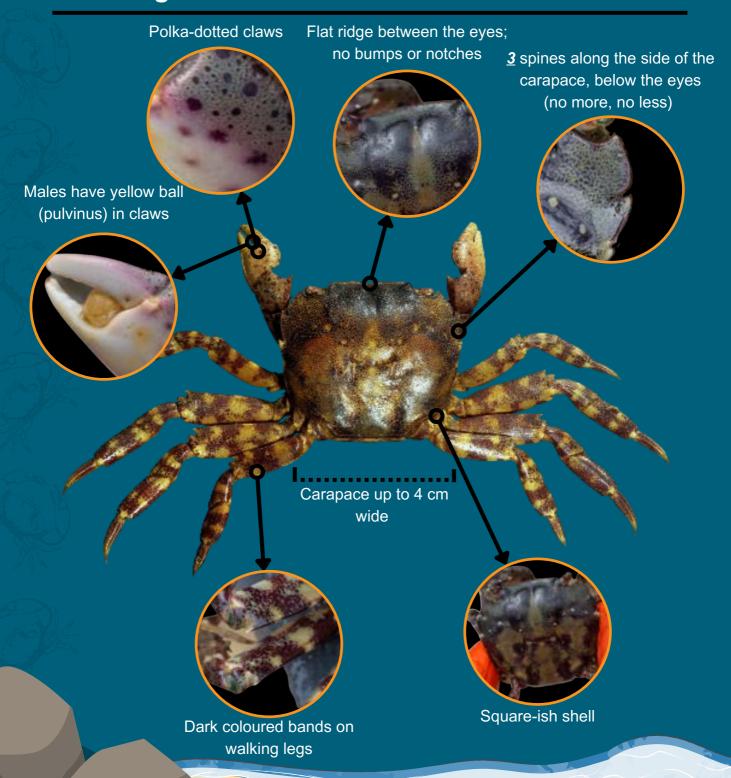
### Can we ever remove the Asian shore crab completely?

No. Once an invasive species becomes established, as the Asian shore crab is, it becomes nearly impossible to completely remove. Since the Asian shore crab reproduces so quickly, it is unlikely that it will ever disappear from Australia. This makes effective management all the more necessary, as that helps prevent the Asian shore crab from spreading further and hurting even more native species.

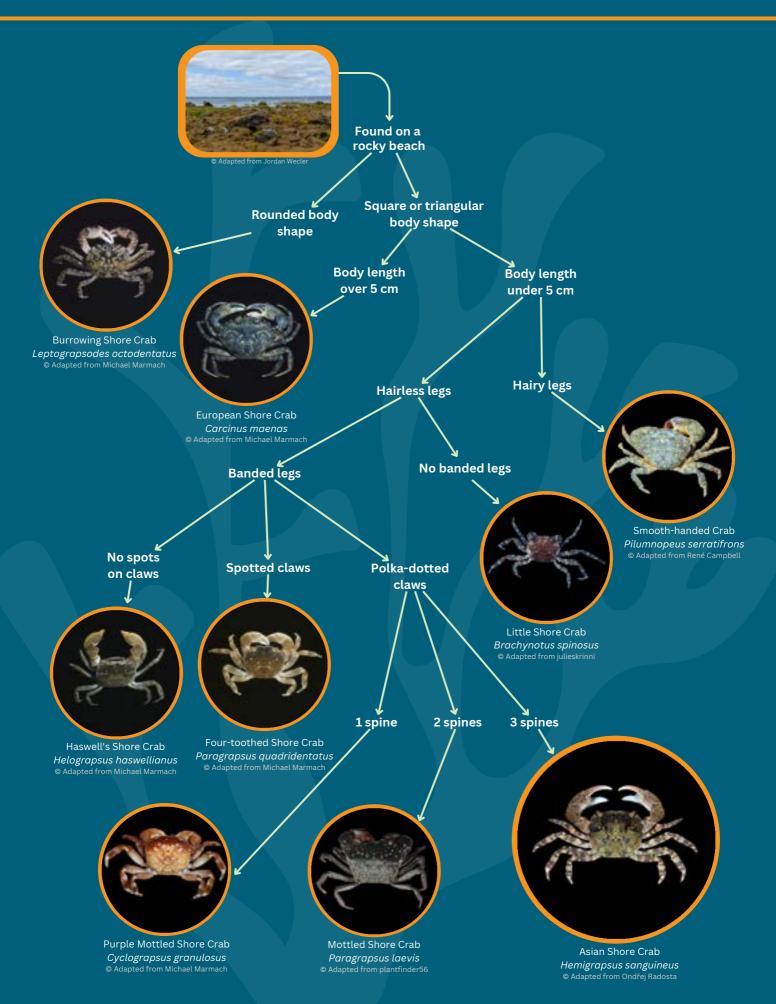
## IDENTIFYING THE ASIAN SHORE CRAB

Asian shore crabs can be difficult to tell apart from native crabs. Use the below characteristics for a positive identification, and report it if you think you see one.

## **Defining characteristics of the Asian shore crab**



## ASIAN SHORE CRAB FEATURE KEY



## Native species easily mistaken for the Asian shore crab

**Burrowing Shore Crab** Leptograpsodes octodentatus © Adapted from Michael Marmach



Smooth-handed Crab Pilumnopeus serratifrons © Adapted from René Campbell



Purple-Mottled Shore Crab Cyclograpsus granulosus © Adapted from Michael Marmach



Haswell's Shore Crab Helograpsus haswellianus © Adapted from Michael Marmach



Mottled Shore Crab Paragrapsus laevis



Four-Toothed Shore Crab Paragrapsus quadridentatus © Adapted from Michael Marmach

When submitting photos in a report:

- Make sure the crab is in focus
- Include an object for scale, such as a
- Ensure that any identifying features (claw spots, banded legs, etc.) are

#### **Habitat**

Asian shore crabs are often found along rocky beaches near the water, typically under rocks, shells or debris, as well as near built structures such as piers.





What should I do if I see an Asian shore crab?

If you see an Asian shore crab, **DO NOT REMOVE IT!** Take a picture instead and report the sighting to Agriculture Victoria through one of the following:

- Emailing marine.pests@agriculture.vic.gov.au
- Calling the Agriculture Victoria Customer Service Centre at 136 186
- Following the QR code to the Agriculture Victoria sightings report form



Little Shore Crab Brachynotus spinosus





The EcoCentre develops community-wide understanding of the Port Phillip Bay environment. We deliver specialist education, science-based research and community action projects. This work stimulates people to connect with their local habitats, to protect the environment and to influence decision-makers, so all life can flourish. We are a hub that links people and organisations. Our programs include teaching in schools, running seminars and excursions, conducting research and implementing on-ground activities.

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The EcoCentre acknowledges the Kulin Nation, including the Yalukut Weelam clan of the Boon Wurrung language group, traditional owners of the land on which we are located. We pay respects to their Elders past and present, and extend that respect to other First Nations and Elder members of our multicultural community.