



Government of Western Australia
Department of Fisheries

Freshwater pest fact sheet

Indistinct river shrimp



**PROTECTING OUR
WATERS FROM AQUATIC
PESTS AND DISEASES**

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Have you seen this shrimp?

The indistinct river shrimp, *Caridina indistincta* (B1), is an introduced pest that may be mistaken for our native freshwater species, the glass shrimp (*Palaemonetes australis*), unless examined under magnification. It is a species native to the eastern states of Australia and has the potential to compete with the native glass shrimp for food and habitats.

Key features

Distinguishing features of *Caridina indistincta* (B1) without magnification:

- Smaller and less robust than the native *Palaemonetes australis*.
- Shorter rostrum with many more dorsal teeth (upper spines of rostrum).
- May have faint red speckled pigmentation.



What you can do?

If you have found or seen *Caridina indistincta* (B1):

- Make a note of when and where you saw it, including GPS readings if possible and photographs, and report these details to the Department of Fisheries.
- Do not return it to the water.
- If you are able to collect a specimen for the Department of Fisheries, dispatch the shrimp humanely and please keep the dead sample frozen.
- Let the Department of Fisheries know you have a frozen sample when reporting the details to the Department.
- Contact FishWatch on **1800 815 507**

Distinguishing features under magnification

Native vs. Introduced

Glass shrimp

(*Palaemonetes australis*)



Rostrum:

- 4-7 dorsal teeth
- 2-4 ventral teeth

Indistinct river shrimp

(*Caridina indistincta* (B1))



Rostrum:

- 20-32 dorsal teeth
- 4-8 ventral teeth



Telson (tail):

- 2 pairs of dorsal spines
- 2 pairs of terminal spines

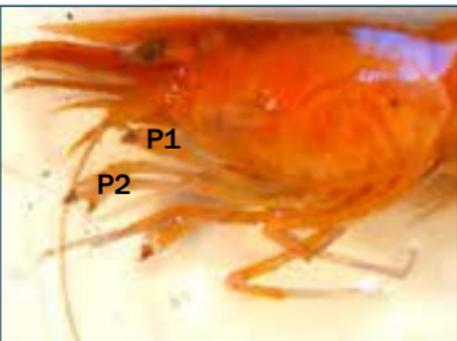


Telson (tail):

- 5 pairs of dorsal spines
- 6 terminal spines



1st and 2nd Pereiopod (appendage) (P1 & P2): chelate (claw) has no setae (hair)



1st and 2nd Pereiopod (appendage) (P1 & P2): chelate (claw) has setae (hair)

Biosecurity risk

In mid-2013, populations of *Caridina indistincta* (B1) were detected at three locations, all within close proximity of the Swan River:

- Centenary Park, Belmont;
- The creek line along Severin Walk, near Cleaver Terrace, Belmont; and
- Bennett Brook's Lanius Drain, Beechboro.

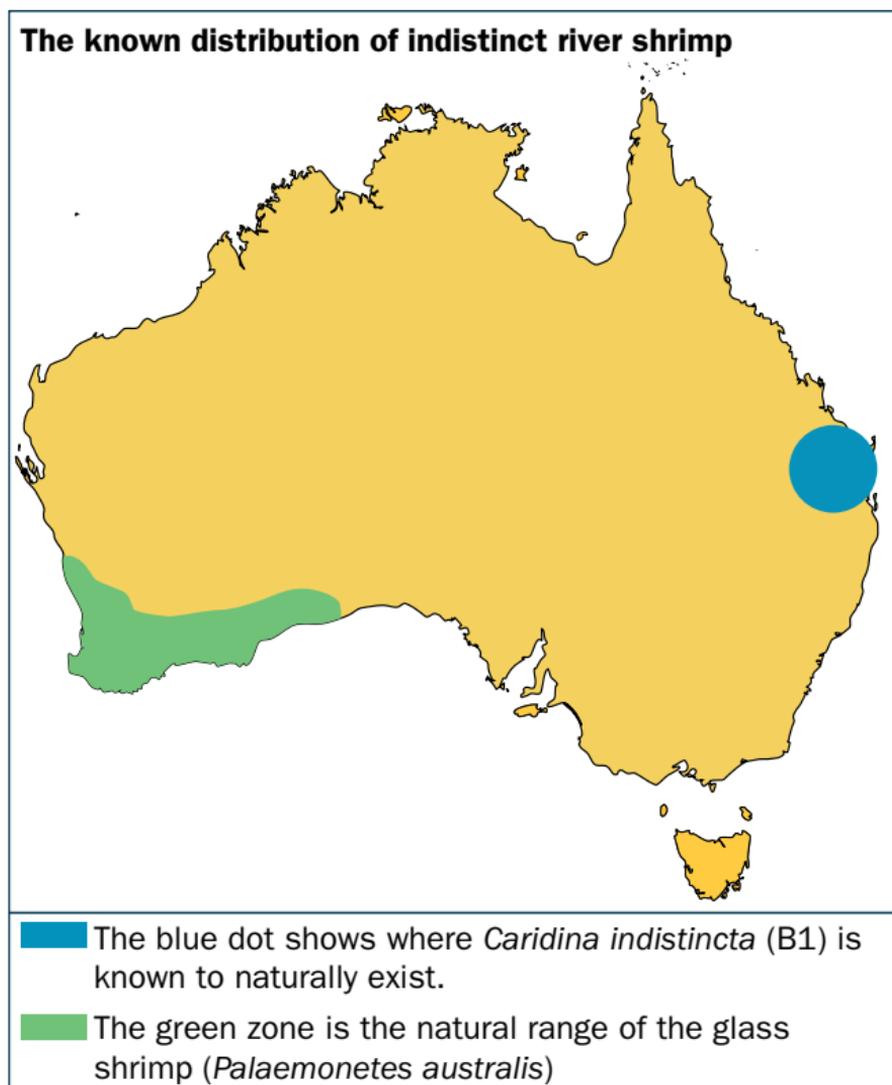
It is worth noting that the native *Palaemonetes australis* was absent from all three locations in which *Caridina indistincta* (B1) was detected. *Caridina indistincta* (B1)'s ability to exploit habitat very similar to that of *Palaemonetes australis*, paired with the overlap in each shrimp's life history characteristics, is likely to result in strong competition between the two species.

The hardy nature of *Caridina indistincta* (B1) to survive long periods without feeding and its ability to spread quickly through flowing waterways makes this species a risky invader to our native *Palaemonetes australis*.

Based on combined phylogenetic-morphological studies, there are at least five indistinct river shrimp subspecies of *Caridina indistincta* (A-E) that, until recently, were all considered *Caridina indistincta*. The status of the numerous species and subspecies has not yet been resolved. *C. indistincta* (B) is constituted by at least four distinct sub-groups (*C. indistincta* (B 1-4)).

Distribution and environment

While *Caridina indistincta* (B1) is native to Australia, it is not naturally found in Western Australia. Its known natural range is limited to south-eastern Queensland, throughout the south-east coastal drainage.



The native *Palaemonetes australis* and the introduced *Caridina indistincta* (B1) display almost identical environmental preferences. Both prefer fresh to brackish water temperatures of 20-24°C and feed on plant and animal detritus.

It can therefore be expected that *Caridina indistincta* (B1) is able to occupy similar range to that of *Palaemonetes australis*, in the South-west Coastal drainage.

If you keep fish

Fish should never be released into the wild. Fish tanks and ornamental fishponds should be designed so that fish cannot escape. Unwanted fish should be taken back to suppliers or disposed of humanely. The RSPCA has further details on their website at www.rspca.org.au – search the site using the term ‘humanely euthanase fish’.

WA Pestwatch

Help us by using WA PestWatch to report suspected aquatic pests – visit WA PestWatch on our website or search for the WA PestWatch app for smartphones and tablets, downloaded free of charge from the iTunes App Store and Google Play Store.



Further information

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