

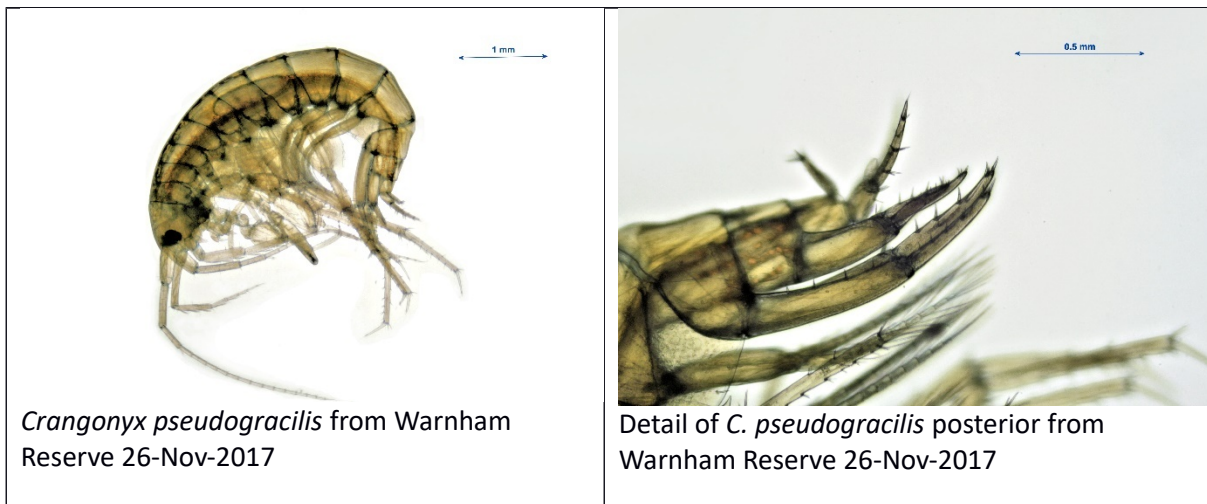
# Invasive alien shrimps!

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*Crangonyx pseudogracilis*, from Warnham Reserve 26-Nov-2017

If you look up freshwater shrimps in most guides to UK freshwater life you will most likely find *Gammarus pulex* as the common cited species, at least in southern England. Since the 1930s another very similar invasive alien has established itself in the UK, *Crangonyx pseudogracilis*. To the casual observer the two species are almost indistinguishable, however, if you watch a shrimp walking over a stone *G. pulex* moves on its side, whereas *C. pseudogracilis* walks upright. Microscopically, they can be distinguished by their tail parts or uropods, which are distinctive. I recently obtained water samples from the wetland at Warnham Local Nature Reserve, here in Horsham, West Sussex, taken from a starwort filled channel that had been cut under a boardwalk and found an abundance of *C. pseudogracilis*. Going back over my older records, I realise I had prepared a permanent mount of *C. pseudogracilis* from the Reserve back in 2015, mistakenly identified as *G. pulex*.



*Crangonyx pseudogracilis* from Warnham Reserve 26-Nov-2017

Detail of *C. pseudogracilis* posterior from Warnham Reserve 26-Nov-2017

Although *C. pseudogracilis* is an alien invader, the GB Non-native Species Risk Assessment states “There is little evidence of harm to the invaded habitat or community.”, but notes the potential for the species acting as a host for parasites. The overall assessment states “Although widespread and likely to spread further, there is little likelihood of economic or societal impacts and the environmental impact is likely to be low.” [2]

As something of a speculative aside, I did wonder whether there is a clue as to the apparent lack of threat to our native *Gammarus* species in the in their style of walking. As a small boy I spent many hours around the ponds and streams of Havant in Hampshire. There were many *Gammarus* shrimps swimming on their sides, particularly in stony or gravelly streams but rarely in sluggish or still waters. *Crangonyx pseudogracilis* seems to prefer these calmer habitats where walking upright would presumably be easier than in running water where a more streamlined posture might be

advantageous. Maybe the two are adapted to different habitats and therefore are not in direct competition.

Hopefully, this non-native species is not much to worry about, but an interesting find, anyway.

For those interested in the technicalities of my images, they were taken with the following setup:

Microscope: Leitz Dialux with trinocular head

Objective: Zeiss 1.5/0.03 - 5/0.1 variable zoom

Brightfield

Camera: Canon EOS 500D with Tominon 1:4.5 50mm lens in afocal configuration with Zeiss KPL 8 ocular in Dialux phototube.

## References

[1] [Identifying Invasive Freshwater Shrimps and Isopods, Michael Dobson, Freshwater Biological Association, May 2013](#)

[2] [GB Non-native Species Risk Assessment for \*Crangonyx pseudogracilis\*, Non-native Species Secretariat \(NNSS\)](#)

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