Northern River Crangonyctid, *Crangonyx pseudogracilis*

**Overview**

Short description of *Crangonyx pseudogracilis*, Northern River Crangonyctid

This amphipod shrimp is of bluish-white colour, has well developed black eyes and a length of 4-7 mm. It can be recognised by its distinctive locomotory behaviour as unlike other amphipods, it does not crawl on its side but walks upright like a talitroid.

Description of *Crangonyx pseudogracilis*, Northern River Crangonyctid status in GB

The Northern River Crangonyctid is established and widespread across England, Scotland and Wales, and also Northern Ireland and Ireland.

Habitat summary: *Crangonyx pseudogracilis*, Northern River Crangonyctid

This shrimp inhabits a wide variety of aquatic habitats including lakes, permanent and temporary ponds, rivers, streams and even interstitial habitats. It often occupies the most polluted areas of a river where no native freshwater shrimp can be found.

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<td>Non-Native</td>
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<td>Native range:</td>
<td>Northern America</td>
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<td>Functional type:</td>
<td>Herbivore</td>
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<td>Location of first record:</td>
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**Invasion history: Crangonyx pseudogracilis, Northern River Crangonyctid**

**Origin**

North American (USA and Canada).

**First Record**

1935 in London (Hackney), and 1936 in filter beds at Lea Bridge Waterworks.

**Pathway and Method**

The means of introduction into GB are unclear but it may have been accidentally introduced on garden(pond) plants. Introduction into Scotland was probably independent via timber imported from Canada.

**Species Status**

After its introduction into England in the mid 1930s, it has continuously spread across England and Wales, and is probably still expanding its range. It was probably independently introduced into Scotland, where it was first discovered in 1958 in a timber seasoning pond at Grangemouth. In 1960, it was found in Windermere, and
occupied a variety of littoral habitats throughout the entire lake within just 4 years. First discovered on Isle of Man in 1995, where it has spread since. In the mid 1980s, it was first discovered in Northern Ireland and has spread there since. Other European countries invaded by this species include the Netherlands, Belgium, France, Germany and Ireland.

**Ecology & Habitat: Crangonyx pseudogracilis, Northern River Crangonyctid**

**Dispersal Mechanisms**
Live specimens have been observed in holding tanks for ornamental aquatic plants, so transfer of such plants may provide an ideal mode of dispersal for the species. Its ability to colonise temporary ponds is probably facilitated by its ability to survive and disperse in shallow groundwater.

**Reproduction**
Life span of about 2 years, with one female producing up to 8 broods. Sexual maturity is reached at about 60-100 days. Unlike native species, females engage in brood care by flushing the brood with water and cycling the eggs within the brood pouch. Amelioration of environmental conditions in the brood pouch in situations of high temperatures and low oxygen levels enables this species to maintain a high reproductive output even under adverse and fluctuating environmental conditions.

**Known Predators/Herbivores**
It is eaten by fish such as Brown trout and some native gammarids such as *Gammarus pulex*. As all freshwater shrimps, it is also host to a range of parasites.

**Resistant Stages**
The species' ability to survive for a short time out of the water may have assisted its spread.

**Habitat Occupied in GB**
It inhabits rivers, canals, ponds, lochs, lakes and reservoirs, and can tolerate saline and/or poor quality water of low oxygen content. It is particularly common in shallow eutrophic waters, often occupying the most polluted areas of a river where no native *Gammarus* species can be found. Consequently, invasions by this species and subsequent replacement of native amphipods are frequently accompanied by environmental degradation.

**Distribution: Crangonyx pseudogracilis, Northern River Crangonyctid**
The species is established in England, Wales and Scotland. It is also known from Northern Ireland and Ireland, and several other European countries including the Netherlands, Belgium, France and Germany.

**Impacts: Crangonyx pseudogracilis, Northern River Crangonyctid**

**Environmental Impact**
Observations that it may replace native amphipod species (e.g. *Gammarus pulex*) have been reported from Loch Lomond and Loch Ness. However, evidence for co-existence with native amphipod species has also been reported from several other British freshwaters.

**Health and Social Impact**
None known.

**Economic Impact**
None known.

**References & Links: Crangonyx pseudogracilis, Northern River Crangonyctid**

**Identification**

**Biology, ecology, spread, vectors**


Management and impact


General