Brush-clawed crab, *Hemigrapsus takanoi*

**Overview**

Short description of *Hemigrapsus takanoi*, Brush-clawed crab

A small crab with a square carapace up to 25 mm wide, with three lateral spines on each side. Variable colour; commonly dark grey-green to brown-orange, banded legs and tiny dark spots on parts of the body and pincers (never on the abdomen). Males exhibit a yellow-brown fuzzy growth at the base of the pincers.

**Description of *Hemigrapsus takanoi*, Brush-clawed crab status in GB**

First recorded in the UK in 2014 from the River Medway, Kent and the River Colne, Essex. In 2016, the species was recorded as very abundant in the River Orwell, Suffolk.

**Habitat summary: *Hemigrapsus takanoi*, Brush-clawed crab**

The brush-clawed shore crab inhabits muddy sediment in the intertidal areas of mudflats, estuaries, harbours, lagoons and sheltered bays. It tends to occupy low energy, sheltered sites and is found under boulders and other hard structures.

**Overview table**

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<tr>
<th>Environment:</th>
<th>Marine</th>
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<tbody>
<tr>
<td>Species status:</td>
<td>Non-Native</td>
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<td>Native range:</td>
<td>Northwestern Pacific</td>
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<tr>
<td>Functional type:</td>
<td>Predator</td>
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<td>Status in England:</td>
<td>Non-Native</td>
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<td>Status in Scotland:</td>
<td>Non-Native</td>
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<td>Status in Wales:</td>
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<td>Location of first record:</td>
<td>Colne Point</td>
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**Invasion history: *Hemigrapsus takanoi*, Brush-clawed crab**

**Origin**

The brush-clawed shore crab is native to the western Pacific Ocean, from northern Japan and some areas of Russia’s Pacific coast to China.

**First Record**

The brush-clawed shore crab was initially mistakenly identified as the sibling species *Hemigrapsus penicillatus* at La Rochelle on the Atlantic coast of France in 1994. In the English Channel it was first reported in Le Havre in 1997. First recorded in the UK in 2014 from the River Medway, Kent and the River Colne, Essex.

**Pathway and Method**

Brush-clawed shore crabs are thought to have been introduced to European waters in their larval form through discharge of ships’ ballast water. Further introductions and spread may have occurred unintentionally with transportation of oysters for aquaculture, or associated with hull fouling communities. Natural range expansion following initial introductions occurs when pelagic larvae are dispersed by currents.
Species Status
Since initial records in La Rochelle, France in 1994 the brush-clawed shore crab has been reported in increasing numbers on French, Spanish, Belgian and Dutch coasts. It is now present along approximately 1,000 km of coastline from the western part of the Bay of Seine in France to Lower Saxony in Germany, and is common in at many sites within this area.

Ecology & Habitat: Hemigrapsus takanoi, Brush-clawed crab

Dispersal Mechanisms
The larvae are planktonic (free swimming in the water column) for up to one month. During this period, before the larvae develop into juvenile crabs, they may be transported considerable distances by currents. Larvae may also be transported in ships' ballast water, being released into harbours or bays.

Reproduction
Little information specific to the brush-clawed shore crab was found. However, sibling species H. penicillatus can produce up to 50,000 eggs up to six times over its 8 month reproductive period. One batch of sperm may fertilize successive batches of eggs. Once hatched, larvae are planktonic for up to one month, and growth and maturation are rapid.

Known Predators/Herbivores
Potential predators would include some bottom feeding fishes, birds and other crabs.

Resistant Stages
None known.

Habitat Occupied in GB
Not currently known in GB, however suitable habitats are widespread around GB coasts.

Distribution: Hemigrapsus takanoi, Brush-clawed crab
The native range stretches from northern Japan, some regions of Russia’s Pacific coast, Korea, China and Hong Kong. Since initial records in La Rochelle, France in 1994 the brush-clawed shore crab has been reported in increasing numbers on French, Spanish, Belgian and Dutch coasts. It is now present along approximately 1,000 km of coastline from the western part of the Bay of Seine in France to Lower Saxony in Germany, and is common in at many sites within this area. First recorded in the UK in 2014 from the River Medway, Kent and the River Colne, Essex. In 2016, the species was recorded as very abundant in the River Orwell, Suffolk.

Impacts: Hemigrapsus takanoi, Brush-clawed crab

Environmental Impact
On a Dutch shore where the brush-clawed shore crab has reached high densities, a drastic reduction in the number of juvenile native common shore crabs has been observed. Similarly in Dunkirk harbor this species appears to have replaced the common shore crab as the dominant and most abundant shore crab species. A similar impact on native crabs may occur were the brush-clawed shore crab to become established in GB.

Health and Social Impact
None known.

Economic Impact
None known.

References & Links: Hemigrapsus takanoi, Brush-clawed crab

Identification

sanguineus (De Haan, 1835) in Belgium (Crustacea, Brachyura, Grapsoidea). De Strandvlo, 26, (3), 74-82.

**Biology, ecology, spread, vectors**


**Management and impact**


**General**
