Marbled crab, *Pachygrapsus marmoratus*

**Overview**

**Short description of *Pachygrapsus marmoratus*, Marbled crab**

A small crab with an almost square carapace up to 4.5 cm across, bearing three conspicuous teeth on each side of the front margin and a distinct diagonal ridge across the back. Colour varies from deep purple on a whitish background to almost completely black with a marbled yellowish-brown pattern.

**Distribution map**

| GB Distribution from | NBN Atlas |

**Description of *Pachygrapsus marmoratus*, Marbled crab status in GB**

There have been three confirmed records of the marbled shore crab in GB; from Southampton Water, Falmouth and the Teignmouth region.

**Habitat summary: *Pachygrapsus marmoratus*, Marbled crab**

The marbled shore crab inhabits the intertidal areas of rocky shores and estuaries. It is semi-terrestrial, occurring throughout the intertidal zone but commonly in the middle to upper reaches of the shore, and in the crevices of piers, breakwaters, and similar habitats.

**Overview table**

| Environment: | Marine |
| Species status: | Non-Native |
| Native range: | Europe |
| Functional type: | Predator |
| Status in England: | Non-Native |
| Status in Scotland: | Non-Native |
| Status in Wales: | Non-Native |
| Location of first record: | Southampton water |
| Date of first record: | 1996 |

**Invasion history: *Pachygrapsus marmoratus*, Marbled crab**

**Origin**

The native range of the marbled shore crab includes the Mediterranean Sea, the Black Sea and Atlantic coasts of southern Europe and Morocco.

**First Record**

The marbled shore crab was first found in GB at Netley, Southampton Water, Hampshire in 1996.

**Pathway and Method**

Probably introduced by shipping traffic; with shellfish movements or amongst fouling communities on ships’ hulls. Planktonic larvae may be transported in ballast water. It has also been suggested that unusually warm waters may be enabling a range expansion.

**Species Status**
The marbled shore crab is reported from the Mediterranean Sea, Black Sea, the Canary Islands, the Azores and Madeira, and the Atlantic coast of Morocco, Portugal, Spain and France. Concarneau in Brittany, France is considered the northern limit of established populations in Europe, with scattered records occasionally reported to the northeast in Normandy. The marbled shore crab was found in the German Wadden Sea in 2006; this occurrence is not considered to be an introduction, but the result of a range expansion enabled by unusually warm waters.

**Ecology & Habitat: Pachygrapsus marmoratus, Marbled crab**

**Dispersal Mechanisms**
Adults are relatively sedentary, tending to remain faithful to a specific area. Larval dispersal occurs during a four week planktonic stage, and is influenced by tidal and wind-driven currents.

**Reproduction**
The marbled shore crab is highly prolific, females produce multiple broods during a long breeding season; the main reproductive period is during the summer months - in Portugal, the breeding period occurs between late March and early September. Incubation of eggs takes about 25 days, and larvae develop in the open sea for up to 31 days prior to settlement. The life span is thought to be about four years.

**Known Predators/Herbivores**
The marbled shore crab may be eaten by a variety of species including gulls, fishes, and by other crabs.

**Resistant Stages**
None known.

**Habitat Occupied in GB**
The marbled shore crab inhabits the intertidal areas of rocky shores and estuaries. The specimen recorded near Teignmouth was found beneath a crab tile in intertidal low water mud with patches of weed.

**Distribution: Pachygrapsus marmoratus, Marbled crab**
Native range from the Mediterranean and Black Seas, the Canary islands, the Azores, Madeira and the Atlantic coasts of Morocco, Spain, Portugal and France. In GB three records exist; from Falmouth, Teignmouth and Southampton Water.

**Impacts: Pachygrapsus marmoratus, Marbled crab**

**Environmental Impact**
No ecosystem impacts have been reported; however, should the marbled shore crab become established in GB it could compete with native shore crabs for space and food.

**Health and Social Impact**
None known.

**Economic Impact**
None known.

**References & Links: Pachygrapsus marmoratus, Marbled crab**

**Identification**


**Biology, ecology, spread, vectors**


Management and impact

General