

Chinese mitten crab *Eriocheir sinensis*

In October 2015, a verified sighting of *Eriocheir sinensis* near Bristol, Severn Estuary was recorded. Chinese mitten crabs are native of freshwater and estuarine habitats along the east coast of Asia. Non-native populations have existed in northern Europe since the early 20th century and the most likely pathway of introduction is from ballast water associated with shipping¹. The first record in the UK was from the Thames Estuary in 1935, where it has now established². Since, the distribution of Chinese mitten crabs within the United Kingdom has spread (Figure 1). In the South West, isolated individuals have been recorded in the River Teign (near Newton Abbot), River Tamar (near Plymouth) and River Torridge (North Devon).

Chinese mitten crabs are known to cause damage to fishing gear, erosion to river banks by burrowing, block intake screens, modify natural habitats and compete with native species³. The economic and ecological damage caused by the species resulted in it being officially listed as one of the '100 of the World's Worst Invasive Alien Species'⁴.

The full extent of Chinese mitten crabs in English and Welsh waters is unclear and possible sightings are needed to clarify the distribution of the species.

Identification:

- Body (carapace) olive-green-brown colour.
- Squarish carapace up to 86mm across (figure 2).
- Carapace has 4+4+4 pattern of spines around front of shell (figure 2).
- Long walking legs, which can be hairy on edges.
- Dense brown mat of 'fur' on the white-tipped claws (figure 1), although juveniles may lack 'fur'.
- Habitat: rivers, brackish water estuaries, rarely along the marine inshore coast. Adults migrate to estuaries and the sea to breed.
- Similar native species are the common shore crab (*Carcinus maenas*) – but lacks 'fur' on claws, shell shape more triangular and found in marine intertidal and estuaries, but never in freshwater rivers.

Record any possible sightings by email, phone or online at www.mittencrabs.org.uk
For South West England Tel: 01752 633 291 or
Email: recording@mba.ac.uk

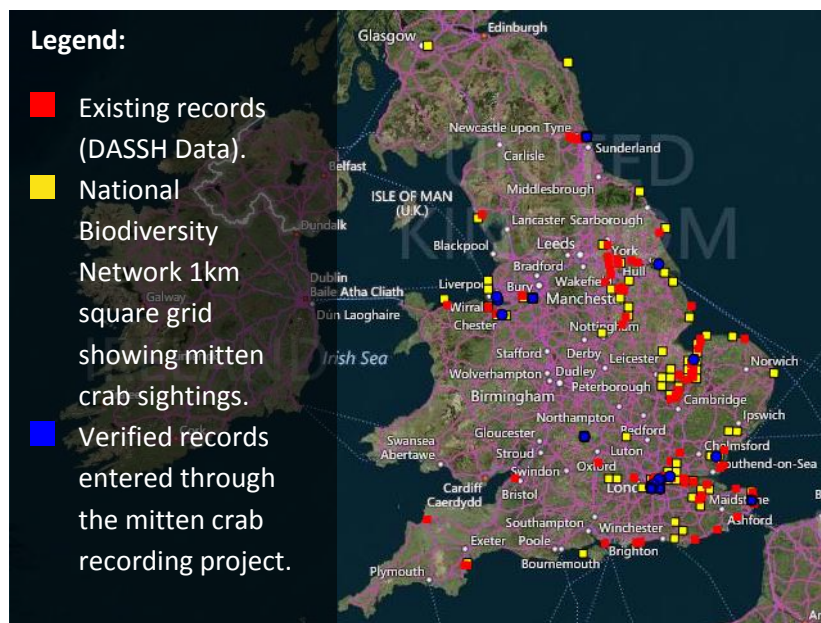


Figure 1 – Chinese mitten crab *Eriocheir sinensis* distribution. Map available from: <http://mittencrabs.org.uk/distribution> [accessed 09/11/15]



Figure 2 and 3 - Images of Chinese mitten crab *Eriocheir sinensis* showing carapace with 4+4+4 pattern of spines, and 'Fur' or mittens on claw of an adult male crab. Images ©Natural History Museum (NHM).

¹ Dittel, A. I. and Epifanio, C.E. (2009). Invasion biology of the Chinese mitten crab *Eriocheir sinensis*: a brief review. *Journal of Experimental Marine Biology and Ecology*, 374(2): 79-92.

² Gilbert, V., Attrill, M.J. and Coleman, R.A. (2007). Juvenile Chinese mitten crabs (*Eriocheir sinensis*) in the Thames estuary: distribution, movement and possible interactions with the native crab *Carcinus maenas*. *Biological Invasions*, 10(1): 67-77.

³ Herborg, L.M., Rushton, S.P., Clare, A.S., Bently, M.G. (2005) The invasion of the Chinese mitten crab (*Eriocheir sinensis*) in the United Kingdom and its comparison to continental Europe. *Biological Invasions*, 7: 959-968.

⁴ IUCN Invasive Species Specialist Group (ISSG), (2009). 100 of the World's Worst Invasive Alien Species. [Online] Available from: <http://www.issg.org/database/species/ecology.asp?si=38&fr=1&sts=&lang=EN> [Assessed 09/11/15].