

European shore crab

Carcinus maenas

(Linnaeus, 1758)

- Phylum:** Arthropoda
- Subphylum:** Crustacea
- Class:** Malacostraca
- Subclass:** Eumalacostraca
- Superorder:** Eucarida
- Order:** Decapoda
- Suborder:** Pleocyemata
- Infraorder:** Brachyura
- Superfamily:** Portunoidea
- Family:** Portunidae
- SubFamily:** Carcininae



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Description

Carcinus maenas is a medium-sized crab that attains a width across the carapace of up to 80mm, but more typically 65mm. The crab has five distinct spines on the outside edge of the carapace on either side of the eyes. The colour of the upper surface in adults is distinctively green but tends to red-orange on the under surfaces of larger animals. Juvenile crabs are generally lighter in colour than adults. The ends of the fourth walking legs are slightly flattened with acute tips.

Reproduction & Growth

C. maenas pairs form when the female moults during summer. A few months later, the egg sac (or plug) appears, which the female carries for several months. A female can carry up to 200,000 fertilised eggs. The eggs hatch from the egg mass into free swimming planktonic larvae, which can last in the water column from anywhere between 17-80 days. Crabs mature at 2-3 years of age, can breed up to 3 times per year, and live to 5 years. Males are larger than females, the average male size is 36mm, with females averaging from 20-30mm. It requires ~10 moults for the crab carapace width to reach 20mm.

Habitat

C. maenas is an extremely tolerable and hardy species, showing few limitations of the type of habitat it prefers. It is found in both the intertidal and shallow subtidal zones of bays and estuaries rather than exposed, rocky or sandy open coasts. In Tasmania, it has been found in a wide range of habitat types within estuaries and bays, occupying both heavily sea-grassed areas through to non-vegetated areas with a clean sandy bottom. In the USA, it is abundant on sand and mudflats in the intertidal zone.

Feeding Omnivore

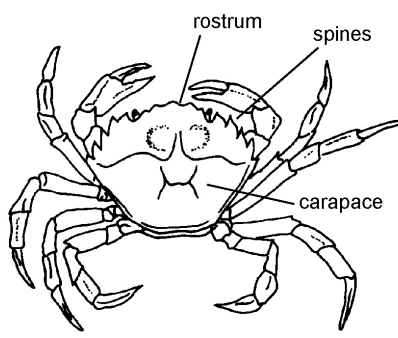
C. maenas feeds on many species of sessile and mobile epifauna and readily detect and capture shallow infauna. Food is generally found in the top few centimetres of sediment, although they have been observed digging pits up to 15 cm deep to extract large clams.

Predators

C. maenas is consumed by a variety of species. While the majority of predators are smaller animals such as fish and birds, seals and otters have been recorded consuming this crab. In Europe, *C. maenas* is a highly regarded food species by humans.

Impacts

C. maenas is a voracious predator with a broad diet and has been implicated in the decline of native shellfish populations, some of commercial importance. In the northwest Atlantic it consumes a wide variety of native species, outcompeting most for food and habitat. On mainland Australia, *C. maenas* has been present for many years, however impact is difficult to establish due to the lack of pre-invasion knowledge. Based on its invasion history around world, the impacts that it may have had when it first reached Australia are likely to have been substantial. In Tasmania, *C. maenas* has been present for about 15 years and is a major cause of mortality in native crab and mollusc populations.



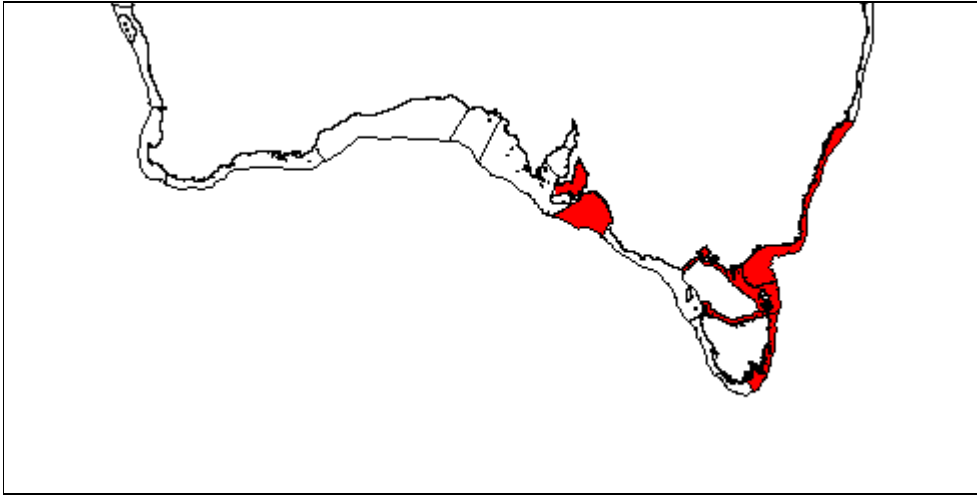
KEY FEATURES

- 5 developed spines on both sides of the carapace near the eyes
- Colour varies. Underside & legs may be red/orange or green
- Broad triangular carapace, deeply sculpted on top
- 4th walking leg has no swimming "paddle"
- Can grow to 9 cm carapace width, common size is between 5-7 cm

Similar species

C. maenas has a sibling species - *C. aestuarii* - which is native to areas of the Mediterranean Sea and introduced into areas of Japan and South Africa. There are only slight differences between the two species, and these relate to the pleopods (paired appendages found under the male's abdominal flap). In *C. maenas* the two pleopods curve outward, touching each other in the central part of the curve; in *C. aestuarii* the pleopods are straight and parallel and do not touch.

Australian IMCRA BioRegion Infection Status



Control Options

For control information see the web site: <http://crimp.marine.csiro.au/nimpis>

Likely Vectors - Class/Vector

Fisheries

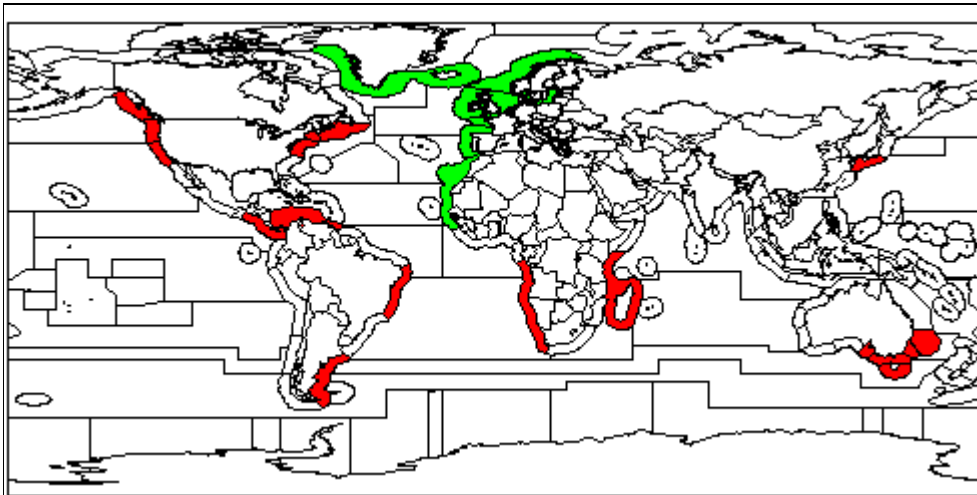
Fisheries: accidental as bait

Shipping

Ships: accidental with ballast wat

Ships: accidental as attached or fr

Worldwide BioRegion Infection Status



Key References

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