

Crustaceans are a sub phylum of the phylum Arthropoda meaning 'joint-legged'. The arthropods also include insects, spiders, scorpions and centipedes.

Crustaceans are animals:

- covered with a protective outer shell or exoskeleton;
- which have a segmented body consisting of several separate plates connected by thin flexible membranes;
- that shed their exoskeleton in order to grow, a process known as 'moulting'; and
- that at some stage of their life cycle have two pairs of antennae. Unlike other arthropods, which only have one pair (Insecta & Myriapoda) or none (Chelicerata).

Crustaceans range in size from the massive Japanese spider crab, which has a leg span of close to four meters, to tiny crustaceans that drift about as part of the plankton. The most recognised crustaceans include prawns, lobsters and crabs. Some of the less familiar crustaceans include barnacles, water fleas and sea lice.

Crustaceans can be divided into the following groups (classes):

Malacostraca

Malacostracans are the most familiar group of crustaceans and include shrimps, crabs, krill, amphipods (sand hoppers) and isopods (sea lice and sea slaters). It is also the largest class containing over half the known crustaceans. All crustaceans in this group have a head (six fused segments), a thorax (eight segments), and an abdomen (six or seven segments) plus a tail (or telson).

Cirripedia

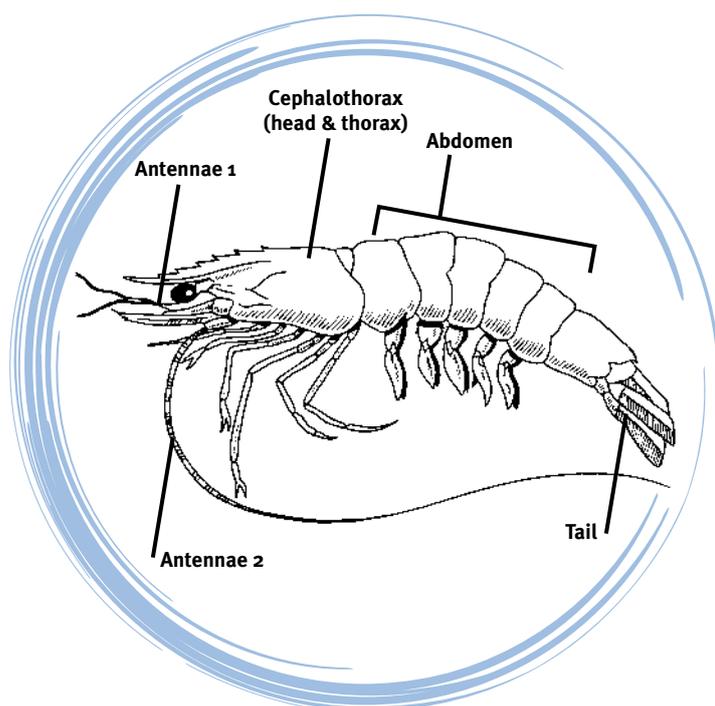
Barnacles have free-swimming larvae that attach themselves head-down onto hard surfaces including rocks, jetties, boat hulls and even other marine animals and plants. As they grow, their external shell becomes a series of plates, and their jointed legs develop into feathery appendages to feed on plankton.

Copepoda

Copepods are found in both freshwater and marine habitats. They are small crustaceans, most less than 1 mm long and are generally planktonic. That is, they drift with the currents along with other organisms, forming part of the rich food supply on which many marine species rely.

Ostracoda

Ostracods or seed shrimps are small crustaceans (typically only a few millimetres long) with a hinged bivalve carapace enclosing the entire body. They are found throughout marine and freshwater environments, sometimes in a planktonic form, however most are benthic, living on the seabed.



Sub Phylum: Crustacea continued...

Branchiopoda

Branchiopods such as water fleas (Cladocera), tadpole shrimp (Notostraca) and brine shrimp (Anostraca) are usually small crustaceans, although some species can reach 10 cm in length. The class is highly variable, most groups have a large, well developed carapace, sometimes enclosing the entire body. They are predominantly restricted to inland water environments, either permanent or temporary, and over all salinity ranges. There are only a few branchiopods found in the ocean.

Some of the lesser-known classes include:

Mystacocarida

The majority of this group are approximately 0.5 mm in length and are adapted for living between intertidal sand grains.

Tantulocarida & Branchiura

These groups are strictly parasitic. The Branchiura live on the skin or gill cavities of fish, feeding on the mucous and blood, while the Tantulocarida are tiny, approximately 0.3 mm, and infest deep-sea crustaceans such as copepods and isopods.

Remipedia & Cephalocarida

The Remipedia are represented in Australia by a single species found inside caves in the Cape Range, Western Australia. The Cephalocarida have not been found in Australia at all, and only 12 species have been described. Commonly known as horseshoe shrimps, they are found intertidally to depths of 1500 m.

