

Prawns

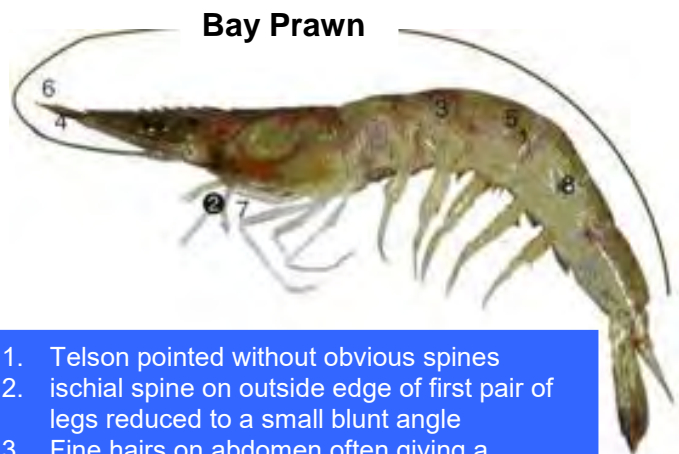
Although prawns can be found in fresh and salt water, it is the marine prawn that is by far the most commercially sought after.

Mangrove forests and adjacent areas are nurseries for many kinds of prawns.

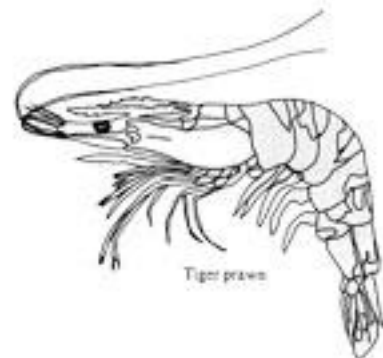
Prawns belong to the class Crustacea and order Decapoda. The skeleton or shell providing support is an outside or exoskeleton. All decapods have 10 legs (5 pairs). The body of the prawn tends to be cylindrical with a well developed abdomen. Located above and between the eyes is a keel-shaped serrated rostrum. Five pairs of pleopods, usually large and fringed, are the principal swimming organs and are located under the abdomen or tail.

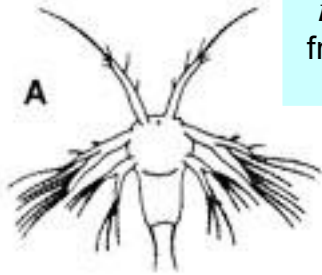
Of the 50 species of prawns found in Australian waters all have a unique biology but some generalizations can be made.

There are two sexes in marine prawns (male and female). The female prawn usually grows bigger than the male prawn. They live from one to two years. Prawns migrate from estuaries seaward as growth and maturation proceed. The reproductive cycle is synchronized with the moult cycle. Males deposit spermatophores on females just after the females have moulted – when their new skeletons (shells) are soft. Most prawns spawn at sea where females lay 100,000 to 500,000 eggs. Eggs are fertilised outside the female in the water column and sink to the bottom where they hatch about twelve hours later.

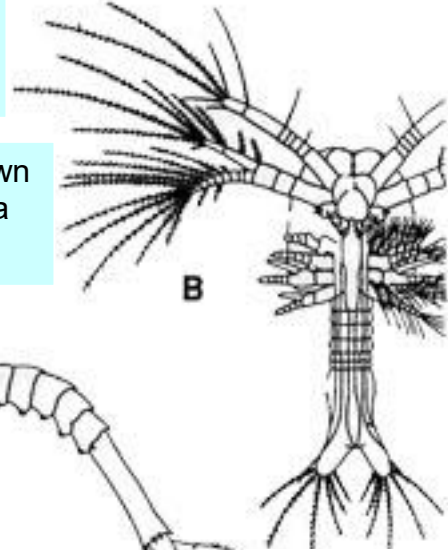


1. Telson pointed without obvious spines
2. ischial spine on outside edge of first pair of legs reduced to a small blunt angle
3. Fine hairs on abdomen often giving a 'greasy' feel
4. Lower margin of rostrum without spines
5. Body translucent brown or green with dark brown speckling
6. Antennule flagella shorter than carapace
7. Second pair of legs not differing dramatically in size from first pair
8. Body compressed





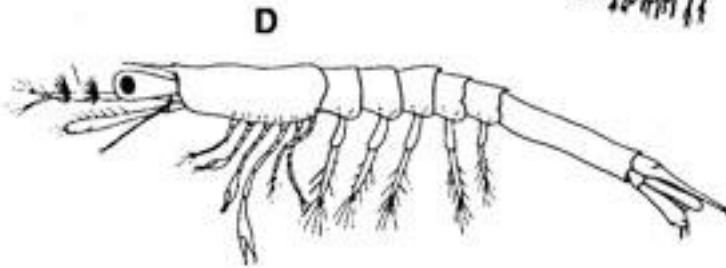
A. A non-feeding *nauplius* stage emerges from the egg and becomes part of the plankton



B. The young prawn passes through a *zoeal* stage



C. The young prawn then goes through the *mysis* stage



D. The young prawn becomes a *postlarva*

Postlarvae are no more than 15mm in length when they stop living in the water column, become bottom dwellers and approach the shallow nursery areas which are part of the coastal wetlands. They continue growing in these areas for up to three months, and then they swim out to sea to begin the breeding process.

The exoskeleton of the prawn hardens and limits its growth. The prawn must shed the exoskeleton to allow for growth. This process is called moulting. The new shell is soft to start with, but gradually hardens.

While the prawn has a soft shell, it does not feed. They become vulnerable to attack by large, predatory fish. Moulting tends to happen more frequently in smaller, younger prawns during periods of rapid growth.



Prawns being caught in a cast net