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Shaping Lives...
Empowering Communities...

Breeding Biology of shellfish

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Breeding Biology of *Penaeus monodon*

Stage I, underdeveloped

Stage II, developing stage

Stage III, nearly ripe stage

Stage IV, ripe stage



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Decapod Crabs - Reproduction and Development

When a male and female crab mate, many female decapod crabs can store the male sperm until her eggs are ready to be released.

When the eggs are released, the stored sperm flows over them and they become fertilised.

The female crab holds the fertilised eggs in a big spongy mass between its abdominal flap and the body.

To keep the eggs healthy, the female crab continually "waves" water over the eggs with the pleopods.



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Molluscs

Molluscs are primarily of separate sexes, and the reproductive organs (gonads) are simple. Reproduction via an unfertilized gamete (parthenogenesis) is also found among gastropods of the subclass Prosobranchia.



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CLASS BIVALVIA

The majority of bivalves are dioecious (two sexes).

Their two gonads are very closely situated next to each other and they encompass the intestinal loops.

A few bivalves such as the Cockles (*Cardiidae*), *Poromyidae*, a few of the oysters and scallops (*Pectinidae*), some of the fresh water clams *Sphaeriidae* and *Unionidae* are hermaphroditic (one sex).



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In a few of the bivalves, such as the common oyster *Ostrea edulis* L., fertilization occurs within the suprabranchial chamber itself when sperm is drawn in along with the inhalent current.

The fertilized eggs then develop in the gill filaments.



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CLASS CEPHALOPODA – (ceph-a-lo-poda)

Cephalopods usually are usually dioecious (two sexes), and fertilization is internal.

In some species, males can be distinguished by the modified sucker discs found at the tips of his longer two tentacles.

The pelagic Cephalopod family Argonautidae, commonly know as the paper nautilus, have a remarkable adaptation for egg deposition.