

Blue Crab Fact Sheet

The blue crab has a life cycle that includes several different stages. Females laying eggs and the earliest larval stages of the crab, called **zoea**, are found in the estuary channels where the high salinity is necessary for their development, they are protected from many predators, and food sources are readily available. The zoea eat phytoplankton and zooplankton in the estuary channels. The zoeal stage usually last between 31 and 49 days. In the latter end of this stage, the zoea migrate out to more open waters.

The blue crab larva (zoea) sheds its external skeleton (exoskeleton) and changes to the next stage, called the **megalops**. These return to the estuaries and bury themselves in the sediment where they begin eating organisms in a manner similar to the adults. This stage lasts between 6 and 20 days. Both megalops and zoea are fed upon by other planktonic organisms, by many species of fish, and by jelly fish.

The megalops then sheds its exoskeleton again (a process called molting), and it becomes an immature crab. These immature crabs, or **juveniles**, migrate into the shallow waters of bays and estuaries. They like to bury themselves in muddy or sandy sediment, often next to sea grasses or micro algae. The juveniles will feed like the adults and will eat whatever is available: clams, oysters, mussels, fish other crabs, detritus, etc. The juveniles will molt 18 to 20 more times, growing larger each time they shed their exoskeletons. This process takes between 10 to 12 months.

The **adult** crab is found in most of the same areas as the juveniles, burying themselves in muddy or sandy sediment in shallow to deeper waters in the bay. The males have a T-shaped abdomen that is easily distinguished from the female's triangular abdomen.

Blue crab reproduction is a two-stage process. First, the female receives the male's spermatozoa during the June-to-September mating season. The females migrate to shallow estuary areas with submerged and protective vegetation. It is here that they molt. The male joins the female and mates with her only when she is in her soft-shelled state. The male will carry the female and protect her until her shell hardens again. Males may mate 4 to 5 times in their life, but females will only mate once. Spawning is the second stage of reproduction, when the female releases fertilized eggs. The spermatozoa cells may live in the female for a year or more and be used for repeated spawnings. Blue crabs usually produce between 1.75 and 2 million eggs per spawn. When the female releases the fertilized eggs, they are attached to her abdomen where they remain for about two weeks before starting their own life cycles as zoea. The months during which the crabs are mating are the same months that the crabs are the most abundant in near-shore waters.