

# Shrimp Life Cycle



## 1. Eggs

Shrimp eggs are thought to sink to the bottom at the time of spawning. Egg diameter is less than 1/64 in. Most spawning is believed to occur in high salinity oceanic waters



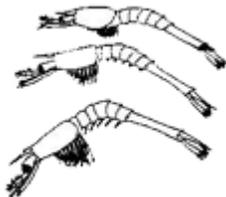
## 2. Nauplius

There are five naupliar stages. The first stage is about the size of the egg and succeeding stages are slightly larger. Nauplii have limited swimming ability and usually are a part of the oceanic plankton.



## 3. Protozoa

The three protozoal stages range in size from 1/25 to 1/12 in. These planktonic forms are found in oceanic waters. Protozoa have undergone development of their mouth parts and the abdomen has begun to develop.



## 4. Mysis

There are three mysid stages ranging in size from 1/8 to 1/5 in. These are planktonic in the ocean. Mysids have early development of legs and antennae.



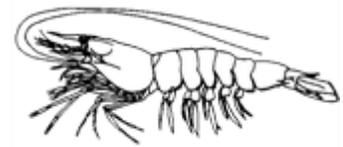
## 5. Postlarva

The two postlarval stages for white shrimp are about 1/6 to 1/4 in. Brown shrimp postlarvae are larger, up to 1/2 in. The walking and swimming legs have developed and the postlarvae appear as miniature shrimp. The second postlarval stage rides the flood tides into the estuaries, apparently becoming active during flood tide and settling to the bottom during ebb tides. The postlarvae ultimately settle in the upper parts of tidal creeks.



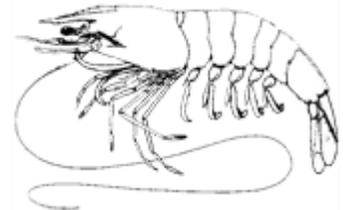
## 6. Juvenile

Postlarval shrimp develop directly into juvenile shrimp. Growth is rapid, up to 2 1/2 in. per month. Juveniles are similar to adults except they are characterized by a much longer rostrum (horn). Juveniles typically remain in the marsh creeks until reaching about 4 to 4 1/2 in. before moving into the deeper rivers.



## 7. Sub-adults

Sub-adults move into the deeper waters of the estuaries and may remain there for a month or more before moving seaward. These shrimp continue to grow but at a slower rate than juveniles. Sub-adults usually do not exhibit any signs of ovarian maturity.



## 8. Adults

Adults may be 5 to 8 inches in length. Adults are usually found in the ocean, but in dry years may delay migration until cold weather occurs. Spawning females are characterized by brightly colored ovaries that can be seen under the shell on the upper side of the body. Adults may be found near the beaches out to 5 or 6 miles from shore. Some species are known to migrate hundreds of miles along the coast.