GEHR Watershed Minute #47

Blue Crab Reproduction: (275 words)

Blue crabs are edible salt water invertebrates that have a rigid exoskeleton or hard shell instead of a spinal column. In order for a blue crab to grow larger, it must periodically shed its smaller shell through a process known as molting. Early in its molting cycle, the crab slowly begins to form a new soft shell underneath its existing hard shell. Blue crabs can molt 20 times or more and live 2 or 3 years.

Female blue crabs mate only once in their lives during a molt when they first reach sexual maturity. Mating occurs primarily in relatively low-salinity waters in the upper areas of estuaries and lower portions of rivers. The female releases a scent to attract a male, and then the male stays closely with the female before, during and after the molt to protect her and mate. Once the female's shell has hardened, the male will release her and she will migrate to higher salinity waters in the lower estuaries to spawn.

Although a female will mate only once, she may produce 7 to 18 fertilized egg masses of about 2 million eggs each during her lifetime from this single mating. On the average, only one out of every million eggs survives to become a mature adult.

After the females mate and migrate to spawning areas, they either remain there for the rest of their lives or move only short distances out to sea. Males generally stay in low-salinity waters such as creeks, rivers, and upper estuaries. Since it takes almost 2 years for the Blue Crab to reach sexual maturity, adult crabs live an average of less than one year.