Mussel Life Cycle

1. Sex for the mussel is an anonymous affair, as males shed clouds of sperm into the water, which enter the female through her incumbent siphon with water that the mussel filters for its food. Fertilization of the eggs takes place in the female's gills.

2. The fertilized eggs are retained within the gills of the female while they develop into specialized larvae known as glochidia. A small mussel may harbor several thousand embryos, whereas larger mussels can contain millions. In many species a section of gill is expanded to form a brood pouch called a manspium.

3. Some mussels have a feature that improves the odds of infecting fish with their glochidia. Paps of mantle protrude beyond the edge of their shells and look, flapping in the current, like tiny, tasty fishies. When larger fish strike at this lure, the mussel closes its shell and squirts a stream of glochidia into the fish's mouth.

4. Once attached to a gill filament, the glochidium becomes surrounded by host tissue, forming a small cyst. Glochidia do little or no harm to their hosts, since an infected fish usually only harbors a few of them. Some mussels can successfully parasitize only one or a few species of fish, if a glochidium attaches to the wrong host or to a fish that has developed immunity, it soon drops off.