

# Birth of new Mussels

Fertilized eggs develop inside the female parent's shell. The parent releases the young (called glochidia), through the exhalant siphon. They are the size of a period on this page. Some mussel species put their fertilized eggs in tiny packages called conglomerates, while other species release individual *larvae*. Some fish think the packages are food and swallow them.

The individual or packaged larvae may sink to the bottom and wait until a "host" fish brushes against the bottom. The larvae may also float in the water column until they are eaten

or touched by a fish. Each larva then attaches to a fish.

Some mussel species attach only to certain fish species. For example, the salamander mussel is a rare Pennsylvania species that attaches to a specific amphibian host species—the large salamander known as the mudpuppy. To increase the chances of their young making contact with a fish host, some females "go fishing." By displaying specially adapted tissues that look like a tiny minnow, they lure fish to swim near them. Sensing a fish nearby, the female releases her young toward the fish. The young then attach to the fish's gills or fins.

Biologists believe that the selection of specific fish hosts helps the mussel species spread its young to areas most likely to have the type of habitat they need to survive. If the glochidia attach to the wrong fish host, they typically die. After they attach to the host fish, the tissues of the fish grow over the tiny larvae and create a cyst. When ready, the young mussel breaks out of the cyst and falls to the bottom to live the rest of its adult life.

