# fluted-shell

*Lasmigona costata*

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| Kingdom: | Animalia |
| Division/Phylum: | Mollusca |
| Class: | Bivalvia |

## Features

The fluted shell mussel is elongate, moderately thick, and compressed to slightly “inflated.” The anterior and posterior ends are sharply curved. The dorsal and ventral margins are straight. About 10-20 heavy, rounded ridges or folds are found on the posterior portion of the shell. The sides of the shell also are “wavy” near the middle. The outside of the shell is green or yellowish green with numerous green rays in small individuals, becoming chestnut or dark brown in older individuals. The inside of the shell is white or bluish white and often salmon-colored, especially in the cavity near the hinge. The fluted-shell may grow to seven inches long.

## Natural History

The fluted shell often is found in medium to large rivers in sand, mud, or fine gravel in areas with slow to moderate flow. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Hosts for this mussel include the common carp. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

## Habitats

interior rivers and streams

## Iowa Status

uncommon; native

## Iowa Range

Eastern two-thirds of Iowa

## Bibliography

Iowa Department of Natural Resources. 2001. *Biodiversity of Iowa: Aquatic Habitats* CD-ROM.