

SMART

Angler's Notebook

by Laurel Garlicki

Snails



Snails, with clams and mussels, are members of the second largest group of animals, the mollusks. Mollusks vary in appearance from tiny snails to giant squids 20 feet or longer. Worldwide there are about 100,000 species of mollusks. In Pennsylvania, we have members from two smaller groups of the mollusks, the gastropods and bivalves. Clams and mussels are bivalves. We explored them in the September/October 1999 "SMART Angler's Notebook."

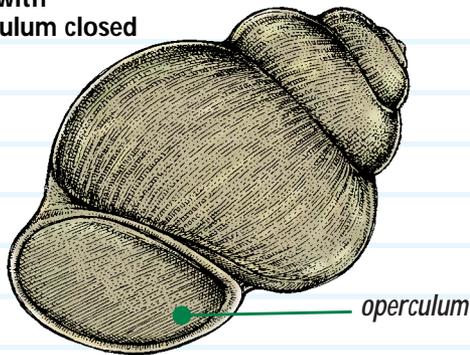
Snails are members of a group of animals called "gastropods." The word "gastro" means "stomach," and "pod" means "foot." Snails and slugs appear to be moving around or "walking" on their stomachs! Snails abound in shallow, slow-moving waters where food is abundant. They are found slowly moving about on the substrate, or scraping algae from rocks and plant stems using their rasp-like "tongue," or radula.

Most aquatic snails in Pennsylvania are hermaphroditic. This means that single snails have both the male and female reproductive organs. In some species, an isolated snail can self-fertilize and produce young. However, it is more common for each snail to act as male and female during the mating process. Eggs are laid in jellylike masses on rocks and plants in the spring. Egg-laying continues into summer and even early fall. The tiny snails develop within the egg mass. When the young snail leaves the egg, it has the basic features of an adult snail. It even has a shell with one or two whorls (twists). The typical life span of a snail is nine to 15 months. Some species may live two to four years.

The greatest natural predator of snails is fish. In Pennsylvania, snails make up a significant portion of the diet for suckers, perch, cutlips minnows, freshwater drums and sunfish. Snails are also preyed on by ducks, shorebirds and occasionally amphibians. Leeches, beetle larvae, water bugs, and dragonfly and damselfly nymphs may also feed on snails.

Snails burrow in mud and hibernate in areas where shallow ponds freeze solid during the winter. Some snails become dormant during dry periods in summer. ☐

snail with operculum closed



A snail's shell is composed of calcium carbonate (or lime), which is secreted by the snail's body. The largest numbers of snails are found in alkaline, or hard-water, habitats.

