

bladetooth wedge *Xolotrema fosteri*

Kingdom: Animalia

Division/Phylum: Mollusca

Class: Gastropoda

Order:

Family: Polygyridae

ILLINOIS STATUS common, native

FEATURES

Five-eighths inch is the largest shell dimension of this species. Snails have a complex system of organs. The mouth contains a radula, a flexible, ribbonlike structure lined with rows of teeth, used to scrape food. On the head are tentacles. Most snails in Illinois have an eye at the tip of each upper tentacle. A snail's shell develops in the egg along with the rest of its body and continues to grow until the snail reaches sexual maturity. The shell is formed by deposits of calcium laid down by the mantle. As the shell grows in its coiled shape, whorls are added. A snail cannot leave its shell. It has a strong muscle inside that is firmly attached to the shell. Snail shells grow in a variety of shapes. Shell shape, number and type of whorls and shell ornamentation, such as ribs or hairs, aid in identification of species. Snail shells may persist long after the snail has died and often can be used to identify species. The bladetooth wedge is named for its prominent denticle, or toothlike structure, on the parietal surface of its shell. It is one of the most common land snails in the state.

BEHAVIORS

Snails need to seek sheltered places to live, eat and rest. They prefer to live in moist areas and are commonly found under logs, loose bark or coarse woody debris, and in leaf litter on the forest floor. In general, snail populations are greatest in areas that have high soil calcium levels. Calcium is needed by snails to produce the shell and to regulate body functions. Most land snails are hermaphrodites, possessing both male and female sex organs and gametes. When snails mate, fertilization often occurs in both individuals, and both lay a clutch of from one to at least 20 eggs. Clutch number varies by species. Generally, the larger the snail, the more eggs it will lay. Snails lay their eggs in spring and fall. Eggs are deposited in a cool, damp place, often just under the soil's surface. The adult snail provides no care for the eggs. Hatching takes place in about seven to 10 days. The young snails emerge and begin to search for food immediately. Young snails have one body whorl at first. A snail's external skin contains glands that produce mucus. The mucus prevents the snail from drying out and helps it move. During very hot, dry weather and during very cold periods, snails may become inactive. Most Illinois land snails are detritivores, eating decaying vegetation.

HABITATS

Aquatic Habitats

none

Woodland Habitats

upland deciduous forests

Prairie and Edge Habitats

none

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