

Colorado Mollusk of Interest

Brown Garden Snail

European Brown Snail

Scientific Name: *Cornu aspersum* (Muller)
(= *Helix aspersa*; = *Cyptomphalus aspersa*; = *Centareus aspersum*)

Phylum: Mollusca
Class: Gastropoda
Order: Pulmonata
Family: Helicidae



Figure 1. Brown garden snail.

Identification and Descriptive Features: The brown garden snail is the largest snail one may find in Colorado. It has a globular, whorled shell that may be 28-32 mm in diameter (1 - 1 1/4-in) in full-grown adults. The shell is finely wrinkled and yellow or horn colored with darker brown banding. The opening of the shell is oval or crescent shaped and has the lip turned up. Immature snails resemble the adults but are smaller.



Figure 2. Brown garden snail. Photograph courtesy of Bob Hammon.

Distribution in Colorado: The brown garden snail is native to Britain, western Europe and regions that surround the Mediterranean and Black Seas. It has been distributed widely worldwide, intentionally (as an escargot species) and accidentally. It has been repeatedly introduced accidentally into Colorado, most frequently on nursery stock. Establishment appears to have occurred in some locations in Boulder and Jefferson counties; it is likely present in many other areas of the state. Dry conditions and extreme winter cold will determine the ultimate distribution of this species within the state.

Life History and Habits: The brown garden snail is normally active at night, although may be observed feeding during wet, overcast periods. Eggs are laid in moist soil, deposited in a mass of several dozen in a cavity scooped 2-3 cm deep by the “foot” of the snail. Multiple masses of eggs may be laid by an individual snail, with egg laying periods separated by a month or more. As with other snails, the brown garden snail is a hermaphrodite, possessing both male and female sex organs. It is capable of self-fertilization but fertilization with another snail regularly occurs.



Figure 3. Brown garden snail laying egg mass in soil chamber nest. Photograph courtesy Ken Gray Collection/Oregon State University.



Figure 4. Brown garden snails after egg hatch. Photograph courtesy of Ken Gray Collection/Oregon State University.

The young snails have a very thin shell and are tiny, but generally resemble the adults. They feed on a wide variety of vegetable matter, including many garden plants. In some areas of the US, notably California, they are considered important pests of gardens and citrus crops.

Under favorable conditions the brown garden snail may mature within a year and adults can normally live about a year. However, development will be slowed by unfavorable conditions of dryness and cold. During dry conditions the snails will go dormant and seal themselves in the shell with a parchment-like covering over the shell opening. In this dormant state they can suspend activity for many months, resuming when favorable conditions return.

Feeding normally occurs when temperatures range between 5-21⁰C (40-66⁰F), being slower at cooler temperatures and suspended when very warm. Winter temperatures below -5⁰C (24⁰F) may be lethal.

Special Note: The brown garden snail is an edible species and was originally introduced into California for escargot dishes. It subsequently escaped confinement and established as a pest.