Slugs and Snails

By Susan Camp

A few weeks ago, I borrowed a little book, titled “The Sound of a Wild Snail Eating” by Elisabeth Tova Bailey, from Gloucester Master Gardener and friend Sandy Riggin. Over the course of a year, the author, bedridden as a result of a mysterious neuro-immunological disorder, observed a common garden snail, brought to her in a pot of violets by a friend. Bailey studied the snail’s behavior, and her tiny, sole companion provided hours of comfort against overwhelming loneliness. The author’s thoughts and emotions counter the scientific facts she learned from a variety of sources, current and historical.

Most gardeners would not write so poetically and philosophically about the creature described in the University of California Integrated Pest Management Program (UCIPM) publication “Snails and Slugs” as “among our most despised pests.” Snails are mollusks of the class Gastropoda, meaning “stomach foot”, which aptly describes the snail’s brownish-grey, soft, slimy body. Snails produce thick mucus that allows them to glide easily over rough terrain. They can hang upside down, travel any incline, and even move across a sharp edge without injury because of the mucus. Slugs, which are snails without shells, possess few endearing attributes, while snails travel in delicately designed, spiral mobile homes, into which they can retract when threatened.

After reading Bailey’s book, I decided to learn more about snails and slugs. The common garden snail, Cornu aspersum, formerly known as Helix aspersa, is a European native that now resides on all continents except Antarctica. Garden snails have four tentacles. The longer, upper tentacles contain “eyespots”, which are sensitive to light and the lower tentacles contain organs for touch and smell. The snail’s mouth contains a kind of tongue, equipped with thousands of razor-sharp, microscopic teeth that allow the snail to devour your fruit and flowers using a rasping technique. Snails prefer moist, dark places and are active at night, sleeping in their shells during the day. During periods of drought, the mucous forms a light, protective covering over the shell opening. In winter, the snail seals its shell for protection.

While this discussion is no doubt as enlightening to many of you as it was to me, the fact remains that we still don’t like snails and slugs. We don’t like the damage they do to our plants and we really don’t like stepping on them.

Snails and slugs eat living and decaying plant material, especially succulent, young seedlings. Most resources recommend a combination of methods for successful snail and slug management. Garden beds should be located in sunny areas, away from snail and slug habitats. Lists of snail resistant plants, including impatiens, lantana, nasturtium, lavender, and rosemary are available online. Slugs and snails prefer moist, humid environments, so drip irrigation is preferable to a sprinkler system, as the drip system deposits less moisture on plants. Copper barriers around garden beds, trees, and shrubs are helpful, as copper is thought to react with chemicals in the snail’s mucus, giving it an electrical shock.
Snails and slugs can be handpicked and destroyed in late afternoon or after dark, if you are brave enough. I will not be using this method. Traps baited with beer or yeast and sugar water will attract slugs and snails, causing them to drown. Slug bait is another alternative, although baits containing metaldehyde are toxic to humans, dogs, cats, and other animals. Bait containing iron phosphates is a safer choice. The UCIPM publication “Snails and Slug Management” contains discussion of various management methods. Before you use any commercial product, consult the 2015 Virginia Cooperative Extension (VCE) Integrated Pest Management Guide at pubs.ext.vt.edu and follow product directions for safe application.

The wildlife in our gardens is fascinating and diverse. Some creatures, like snail and slugs, wreak destruction on our flowers and fruit and are not welcome to stay and eat. One snail, confined to a terrarium, might be a pleasant guest.

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