



Snails & Slugs are THUGS in the Garden

by Thea Fiskin, UC Master Gardener

My garden is under attack by nasty creatures that leave their calling card of slimy film and leaves with ragged holes. Yes, I'm talking about snails and slugs. While I believe most creatures big and small have some benefit in the world, I have yet to find anything beneficial about these slimy thugs with a voracious appetite.

The brown snail came to California during the gold rush when some misguided soul thought he was going to make his fortune selling escargot to the residents of San Francisco. Not only did he go bankrupt, but he left us with a creature that is munching its way throughout the west coast. I'm not sure how slugs got here; I just know they are here to stay.

Thank goodness these thugs go dormant during the cold winter and hot summer and their activity is barely noticeable. I wish I could say that it makes up for the havoc they wreak on my luscious new plants during spring's cool, moist weather, but I can't.

These slimy creatures live and hide in dark moist spots beneath benches, boards, pots, and garden debris. Certain plants are favorites, like agapanthus, iris, and ivy to name a few. One article I read said they don't care for daffodils; unfortunately my snails savor the blossoms, leaving stumps in their place. They lay in wait on sunny days, then emerge at sunrise and dusk on their search and destroy missions.

Control is difficult and I favor using several methods at a time to keep pest populations at manageable levels. The various methods are barrier tapes, handpicking, pesticides, and predators.

Barriers made from copper flashing can be used along raised beds and around tree trunks or special plants. Snails and slugs get an electrical charge when they cross the copper so they make a quick U-turn or just sit there. Look in the roofing section of hardware stores for various types, but realize it's a little pricey, although it will last.

Handpicking works well, if you're thorough and consistent. Yes, I know they are really gross, but don't use your bare hands, instead wear plastic gloves or use tongs. Start by keeping a tidy garden; keep all debris picked up and routinely inspect all their hiding places.

You can also trap the critters. Try using a board elevated a couple inches off the ground, it offers a hiding place from which you can collect and dispose of them relatively easily. Overturned grapefruit or orange rinds also attract them; you just throw them away, rind and all. Beer traps are supposed to work, but I don't think they work all that well and it's a terrible waste of beer, according to my husband. Dump them into a pail of soapy water, since plain water won't kill them, or crush and add them to your compost pile, bury them or toss them in the waste can. You can usually entice children between four and eleven to go on "snail hunts" with you, especially if there is some reward involved. You can forget that game with toddlers and teenagers.

Only two bait ingredients are available and they are very different from each other. These baits are formulated as emulsions, meals and pellets. Choose and use wisely:



Copper flashing acts as a barrier to snails

1. Baits containing 2-4% metaldehyde (there are many brands) are poisonous to children and pets, if ingested. Dogs are more attracted to the pelleted form. Metaldehyde baits are most reliable when temperatures are warm and dry. Snails and slugs usually die from desiccation within one day of getting the chemical on their foot (it destroys mucus production). If cool, wet weather follows the baiting, they can recover, if they get a sublethal dose. Most metaldehyde baits break down rapidly when exposed to sunlight and high irrigation; however, some formulations (e.g. Deadline) hold up longer.
2. Baits containing iron phosphate (such as Sluggo or Escar-Go) are much safer and less toxic to humans and pets, birds, fish, and other wildlife, making them a good choice for an integrated pest management program in your garden. Ingesting even small amounts of bait causes snails and slugs to stop feeding and die in 3 to 6 days. Snails and slugs tend to hide before they die, so you won't see scattered empty shells or dead snails and slugs as you would if treating them with metaldehyde. Iron phosphate (a plant fertilizer) bait can be scattered on lawns or on soil around any vegetable, ornamental, or fruit tree that needs protection. Iron phosphate baits are more effective on snails than slugs. They are more effective than metaldehyde during periods of high humidity, but they do break down and wash into the soil with irrigation.

Whether you use metaldehyde or iron phosphate, be sure to water your plants before applying a bait to promote snail/slug activity, and apply the bait in the late afternoon or evening. Three applications at two week intervals are usually required of any bait product.

Snails and slugs have many natural enemies including beetles, crows, frogs, jays, lizards, and opossums. Another predator is the decollate snail, whose carnivorous appetite prefers snails to plants. These are being used in local citrus orchards, but since they also feed on seedlings, small plants, and flowers when the brown snail is not around, they are less useful in home gardens. I'm not sure I'm sold on the value of trading in one snail for another.



The decollate snail is a predator to the brown garden snail



Gray garden slugs with chewing damage and slime trails on leaves

Hopefully you can reduce the thug population in your garden and keep plant damage to a minimum by combining several of these methods. Good luck, happy hunting, and try not to swear out loud.

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