

The Non-Pesticide Advisor

PAN's Guide to Alternative Pest Management



Pull the Plug on Slugs

U.S. gardens are home to snails and 40 different kinds of slugs (including gray, tawny, dusky, black, red, spotted, banded and banana), only half of which are considered significant garden pests.

Snails deserve respect for the role they play in the Great Ecological Dance. They process vegetation into soil-enriching by-products and provide bite-sized snacks for raccoons, possums, birds, snakes, toads and turtles. But snails and slugs are hermaphroditic, which means any snail or slug couple can wind up laying up to 100 eggs—as many as six times a year—and some can even self-fertilize.

So what's a gardener to do? Here are some hints. Remove damp, sheltered snail hangouts under boards, stones, hedges, and low-growing branches. Cover the soil with dry mulch and broken eggshells or barriers of wood ash, coal soot, sawdust or diatomaceous earth to deter the critters. USDA research has shown that caffeine kills and repulses slugs and coffee grounds provide an aromatic mulch.

Plant flowers that repel snails: begonias, California poppy, fuchsias, geraniums, impatiens, lantana, nasturtiums, purple robe cup, lavender, rosemary and sage. Remove vulnerable plants: basil, beans, cabbage, dahlia, delphinium, lettuce, marigolds and strawberries.

A couple hours after sunset, don rubber gloves, follow the shiny trails with a flashlight, and hand-pick the snails. Start out daily and you can soon cut back to once-a-week.

Some other tricks: Trap snails and slugs in inverted melon rinds, flowerpots, and flat boards raised off the ground by one-inch strips. Scrape 'em off, bag 'em, crush 'em or dump them into a bucket of water. Cans filled with beer attract slugs, which drink up and fall in. (Note: removing piles of dead, drunk snails isn't everyone's cup of tea.) Gardens and trees can be snail-proofed with two-inch-wide strips of copper sheeting. The copper reacts with the slug's mucous to produce an electric shock. Get a duck, chicken or goose. (But watch out: they like seedlings as well as snails.)

Many home-use molluscicides contain the neurotoxin metaldehyde. While most metaldehyde

baits degrade rapidly in sunlight, PAN United Kingdom notes that metaldehyde is toxic to birds, wildlife, pets, fish and humans. Swallowing snail bait can kill a dog in a few hours. Common agricultural molluscicides often contain the active ingredients methiocarb or thiodicarb—dangerous carbamate pesticides that disrupt the production of cholinesterase, an essential nervous system enzyme.

Sluggo and Escar-Go are two pet-safe iron-phosphate alternatives. The U.S. EPA has determined that iron phosphate shows a “lack of toxicity [to] birds, fish and non-target insects” and has “no unreasonable adverse effects to human health.” Snails and slugs eat the bait and lose their appetites. They start to die within three-to-six days. The iron phosphate eventually breaks down into soil-enriching nutrients. One pound of Sluggo should cover 1,000 square feet.

And there's one last technique to keep snails from devouring your garden—devour them first! North America's common garden snails (*Helix aspersa*) are descendents of European brown snails imported by a French businessman during California's Gold Rush.

Victor Yool, sales manager at the Berkeley Horticultural Nursery in California, explains that before you can snack on snails, you need to “purify” them for two weeks on a diet of greens or corn meal. Then you boil them for 10–15 minutes. “This forms an incredibly disgusting scum that you must keep cleaning off,” Yool notes. “When the scum is gone, you know the snails are done.”

“Dice them up fine and mix them with olive oil, garlic, butter and parsley,” Yool recommends. Pop the mash back into the shells and bake until “they're hot and bubbly.” Yool swears the result is “absolutely delicious” but he does concede: “Tennis shoes would taste good with those ingredients.”

When offering snails as an appetizer, Yool recommends “a white wine like chardonnay or a mellow red wine like merlot.”

ON THE WEB PANNA's Pesticide Advisor offers useful tips on safely dealing with specific pest problems at panna.org/resources/advisor.dv.html. Also see NCAP's website, www.pesticide.org