

Natural Solutions for Pests and Weeds

By Bobbi Gustafson

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When the undesirables come knocking, think twice before you create a “chemical reaction.”

The green season is coming upon us, and with it, weeds that are springing up, growing to maturity by June, ready to lay siege to your garden and flower beds. Moths will soon take wing, laying eggs that will develop into cutworms. Weevils will eat foliage by night and lay eggs that will hatch into hungry little worms that will chomp on your plant roots. Since the dawn of the new year, baby slugs have been hatching, gathering, hiding out of the freezing weather, ready to devour everything in sight. Baby spiders soon will hatch and grow into big ones. Are you overwhelmed yet?

I don't blame you. The natural response is to grab the popularly advertised chemicals to help you fight the battle. Before you do, though, consider the possible repercussions.

According to the U.S. Environmental Protection Agency (EPA), almost 5 billion pounds of pesticides were used in the U.S. in 2000 and 2001. In March 2001, the Centers for Disease Control and Prevention reported it had found pesticides in the blood and urine of the people it studied. These products are in the form of herbicides, fungicides, lawn chemicals, and poisons for insects and other pests.

Dealing with bugs

So let's start with those pesticides, which are used to control or eradicate insects and other animals that are in the wrong place, to paraphrase the dictionary definition. When we spot these insects, we often see them as roadblocks to our idea of perfection. We apply pesticides because we want these undesirable insects gone—and gone quickly. We don't always know what all the consequences are going to be. Sometimes we find out much later that we should err on the side of caution. Sometimes, it's a good idea to learn to just “let it be” or, at the very least, to “wait and see” before leaping to choose a chemical solution.

If you are patient, a predator insect often will move in, wiping out the undesirable species. In June 2008, the *Yakima Herald-Republic* reported on a WSU research station in Prosser, Wash., where researchers were examining the chemistry of plants and how it seemed to attract predator insects that fed on the unwanted bugs that would harm the plants. Preliminary findings seem to indicate that you might have every reason to be patient! But if you use soaps and poisons, you run a very real risk of either killing or “running off” your beneficial insects.

What's a beneficial insect? Start with centipedes, ground beetles and their larvae, which are your friends. Leave vegetation for them to hide under. Lady bugs, soldier beetles, lacewings, dragon and damsel flies, big-eyed bugs, damsel bugs, minute pirate bugs, predacious stink bugs, spiders,

hover flies, predatory wasps are all beneficial and will save you from buying bug sprays. Make these beneficials happy by including lots of plants with tiny flowers in your landscape.

Being bird and bat friendly is a great strategy, too, since these animals eat tremendous amounts of moths and other insects.

Another way to battle insects is to interrupt their life cycles or habits. Take weevils, for example. Nocturnal creatures, they stay in the soil until dark, then up your plant stalks they go to munch the edges of leaves. Strips of sticky material around the stalk of the plant will keep them from getting there. If you are concerned about toxins, there are sticky traps for spiders in your house instead of bombs and bug sprays. There also are sticky traps for fruit trees, which will interrupt the life cycles of apple maggots and coddling moths. Apple maggot traps can be purchased at the WSU Skagit County Extension office.



Katie Ford of Sedro-Woolley prefers to use spider traps instead of chemical insect controls in her house, especially now that her son, Olie Phillips, 1, is on the scene. Photo by Bobbi Gustafson.

Grow thyme, rosemary, and anything else with a small flower that blooms early near your Orchard to bring in predators.

The time to start battling slugs and snails is before they multiply heavily in the fall. Go to war again in January when they are hatching, then again in March. You can turn those black food containers upside down next to plants and check them in the morning. A plastic pot with some refuse in it will draw them in on the underside; pick them up in the morning. Upside-down skins of grapefruit and cantaloupe also will attract slugs. You even can use beer in a sunken pie tin! If you have to use slug bait, choose one with a pet-safe active ingredient such as iron phosphate.

Adelgids and scale insects on your shrubs? Pear slugs? Knock them off your plants with a stream of water from a hose in early spring. Aphids generally will attack stressed plants; let the ladybug larvae and adults eat them. (If they don't eat fast enough, you can spray off the aphids with a hose.) If your plants begin to struggle under drought conditions, spider mites may move in. Spray them off and keep the plant watered. And, use row covers on your crops to keep cutworms and similar pests out of your radishes and cruciferous veggies.

Another strategy to thwart bug pests is to study their habits. Find out what friendly bugs like and add those plants to lure them in and keep them around. And remember: Spiders are the good guys. You may not want them in your house, but if you have moths, flies, carpet beetles or drugstore beetles, you might want to think twice before setting out sticky traps in your house. If you can let a couple of spiders live with you, the beetles will be gone—guaranteed.

Worrisome weeds

When battling weeds, if you weed and mulch early it will reduce your work later in the year. Apply compost around the plants you want, keeping it off the stems. You can use paper in areas that you don't want anything to grow and put wood chips, straw, bark or sawdust on top. Later in the season, if you get behind, keep an eye peeled for weed seed heads and cut them off before they drop or fling their seeds.

If you usually use chemicals to control or eradicate weeds, and are worried about toxins, consider products that are safe for humans and animals, and will not move through the soil. Such products include formulations made with citrus, clove oil, vinegar.

If you decide to use a product with glyphosate as its active ingredient, it is very important that you follow the directions on the packaging.

If you use lawn chemicals and are concerned about children and pets playing in the yard, there are organic fertilizer formulations available. If you do decide to use a synthetic chemical product as its active ingredient, it is very important that you follow the directions on the packaging.

Another approach to weed control is to make life miserable for them by planting a crop that chokes them out. You might consider allowing your lawn to grow a little bit longer this year allowing it to increase photosynthesis. This will strengthen the grass and roots, allowing it to overcome diseases, weeds, pests and, a big one this time of year, moss. You might also consider a cover crop. A cover crop is a crop planted in the offseason that reduces erosion and puts valuable nutrients back into the soil when it is tilled in. Cover crop seed is available to purchase at your feed store. You could plant a cover crop to improve the tilth, texture and nutritive value of the soil while crowding out future unwanted weeds from an area. Before the cover crop sets seed, turn it under. Or, spray under a fence line with an organic weed killer, and the next week sow wildflowers and alyssum before anything else can move in. Or cover the fence-line area with four layers of paper and pile chips on top.

Fix problems before they start

A plant in the wrong place, lack of nutrients, drought and improper pruning can cause susceptibility to mildew, mold and fungus. By the time the signs are apparent, sprays are useless; they do not cure the root of the problem. So is there a magic pill?

Proper placement is the first key. Does the plant prefer sun or shade? Lots of water or good drainage? Acid soil or alkaline?

Start by pruning for good air circulation. Water under the plant instead of on top. Adding a little compost a couple times a year is a good idea, as is mulching to keep in moisture. Give good bugs a place to live and something to eat. Do these things and you will have less need of chemical treatments and above all don't be afraid to ask questions. The Skagit County Master Gardeners are here to answer your questions every Wednesday from 10-2 pm at the WSU Skagit County Extension Office. For more information please call (360) 428-4270.