

Backyard Habitat

By Janet Marinelli

Greening Your Fall Garden Cleanup

Before you send fallen leaves to the dump and cut down dead stalks in your yard, consider the many benefits for wildlife and the environment of leaving plant debris in place

ONCE THE AUTUMN foliage spectacle has ended, most homeowners dutifully head outdoors, brandishing rakes and clippers, to engage in the annual ritual known as garden cleanup. Clearing out the year's worth of plant debris, we're told, helps prevent outbreaks of pests and diseases. But perhaps the real reason many people do it is their aversion to having dead stalks and fallen leaves messing up their yards.

Overzealous cleanup has some significant environmental consequences, however. It results in an avalanche of clippings and leaves at landfills, adding to the nation's pollution problems. And trashing leaves and trimmings is—literally—a waste because this valuable organic matter can be used in a variety of beneficial ways in the garden. What's more, fall cleanup leaves a barren landscape for birds and other creatures at a time when food supplies and vegetative cover are becoming sparse. The solution: Think of fallen leaves and withered stalks not as waste but as an organic windfall for your garden and potential wildlife habitat.

In his recent book *The Green Gardener's Guide*, author Joe Lamp'l marshals some rarely mentioned facts on the environmental costs of bagging and disposing of plant material. According to the Environmental Protection Agency, he reports, landscape debris comprises more than 13 percent by weight of all solid waste generated in the United States—or an astonishing 32 million tons a year. It's widely known that most landfills still leak toxic pollutants into waterways and aquifers. What isn't commonly acknowledged is that collecting, transporting and consolidating all of these leaves and clippings consumes a considerable amount of energy and generates carbon dioxide (CO₂), the major heat-trapping greenhouse gas. "This massive amount of organic material creates an even greater problem in a landfill," writes Lamp'l. "As organic matter attempts to decompose, in the absence of sufficient oxygen, methane is created. A powerful greenhouse gas, methane is 23 times more effective at trapping heat in the atmosphere than carbon dioxide." Perhaps not surprisingly, solid waste landfills are the single largest man-made source of methane in the United States.

Raking leaves is the gardening task most synonymous with autumn in many areas of the country. But if you simply leave the leaves where they fall in your planting beds to form natural mulch, you can provide your plants with a protective blanket in winter, conserve water year-round and enrich your soil as the plant matter decomposes. And you won't be adding more leaf matter to our solid-waste flow.

Michael Goatley, Jr., an agricultural extension turfgrass specialist based at Virginia Tech University, points to recent studies that show you can even keep the fallen leaves on your lawn, as long as you pass over them once or twice with a mulching or rotary mower to chop them into small pieces. You can use this same method to shred leaves for use in your flower beds if you think whole leaves look unruly.

The "leave-them-alone" method also applies to flower heads and stalks. When autumn approaches, stop removing spent flowers and instead allow them to go to seed. And don't go to town with your clippers; remove only diseased plant parts and leave the rest standing. If the sight of brown stems gives you the shudders, start viewing them as cozy winter nests for wildlife. Lady beetles, butterflies and other insects will bed down among the stalks during the cold season. Siskins and other birds will dine on the seeds of sunflowers, coneflowers, grasses and other plants.

Another way to enhance habitat in the fall is to create a few brush piles. They will provide snug winter quarters for lizards, frogs, toads and small mammals such as chipmunks and rabbits, as well as bumblebees and other native bees. The leaves and other dead vegetation, notes NWF Chief Naturalist

Craig Tufts, are like a “down comforter” for winter wildlife. Start a brush pile with a layer of loosely stacked or crisscrossed branches, and add stalks and leaves on top.

If you have an overabundance of leaves and clippings in your yard, composting is a sensible solution to disposing of them. In a compost pile, the natural process of decomposition is speeded up and you are left with a rich form of organic matter for your flower bed or vegetable patch. Compost also helps soil retain water. And it can substitute for organic or synthetic fertilizer, which not only can produce polluted runoff but also releases nitrous oxide, another significant greenhouse gas, with 300 times more global warming potential per molecule than CO₂.

In fact, autumn is a great time to make compost since there is a good mix of leaves, some spent plants and grass clippings. This means you will have a combination of carbon (leaves and other “brown” material) and nitrogen (grass clippings and other “green” material), which produces compost quickly. Keep the pile moist and turn it often, and you will have compost to use in your garden come spring. Or just leave it alone to decompose slowly.

Greening up your fall cleanup is a win-win situation. You will not only produce less of the waste clogging up landfills and generating destructive methane. You also will protect your plants and enrich your soil safely, all the while laying out a winter welcome mat for wildlife. And it will involve a lot less hard work, enabling you to look forward to autumn gardening with anticipation rather than dread.

New York writer Janet Marinelli blogs about sustainable landscaping on her website, www.janetmarinelli.com.