

DON'T BAG IT!

Recycle Your Grass Clippings

Grass clippings have been banned from landfills by approximately half of the states in the United States. Regardless of bans, however, there are no good reasons to collect and dispose of lawn grass clippings. In the collection system, grass clippings are a costly nuisance. Yet when recycled at home, grass clippings are a resource of valuable plant nutrients and organic matter for your soil. The best way to manage grass clippings is to leave them on the lawn. Grass clippings left to decompose (in place) will improve your turf.

Why Recycle Grass Clippings?

Grass clippings are too valuable to waste! When left on the lawn, properly mowed grass clippings filter down to the soil and decompose rapidly, usually within a few weeks. During the breakdown process, the clippings feed soil organisms, recycle plant nutrients, and contribute organic matter to the soil. As a result, water is conserved and less fertilizer is needed.

Grass clippings contain about 4 percent nitrogen (N), 0.5 percent phosphorus (P), 2 percent potassium (K), plus small amounts of other plant nutrients. As much as 50 percent of the N that you apply as fertilizer is removed when grass clippings are collected. Research at the University of Missouri shows that grass clippings can supply 25 percent of a lawn's total fertilizer needs. A study conducted by the University of Connecticut found that the N from grass clippings began showing up in the growing grass within 2 weeks. By the end of the third year of the study, researchers estimated that about one-third of the N found in grass came from previously recycled clippings. Annually, this could add nearly 2 pounds of N to each 1,000 square feet of lawn. Grass clippings only become wastes when they are collected and taken to the landfill. As they decompose in landfills, the nutrients they contain are not only wasted, but they also contribute to landfill leachate and groundwater contamination. Grass clippings typically comprise 10 to 20 percent of the solid waste collected by communities on a year-round basis. During the summer months, grass clippings can account for nearly half the weight of the waste collected in some communities! Curbside collection of grass clippings increases trash, handling, and hauling costs, while burying grass clippings reduces available landfill space.

Mowing and Mowers

Lawns are usually most healthy when mowed correctly with the grass clippings left on the lawn. The height of your lawn greatly influences the performance of your turf. Cutting lawns too short weakens the grass plant and makes it more susceptible to diseases, pests, and weeds. On the other hand, when you set your mower at a higher cutting height, the grass plant produces a deep efficient root system that reduces the need for watering. Taller mowing also helps to shade out many weeds. Grass clippings normally contribute little to thatch buildup.

How high and how often you mow your lawn will depend on the grass species, environmental conditions, and the desired maintenance level. Set your mower to a height of 1 to 3 inches. As a general rule, mow frequently enough so that no more than one-third of the grass blade is removed at any one mowing. This may mean mowing every 5 days instead of waiting a full week. Although you will be mowing more frequently, you will spend less time doing it. Several studies have shown that it takes 30 to 38 percent less overall time to mow often and leave the clippings than to mow weekly and bag the clippings.

With proper mowing, clippings will be short enough to quickly decompose within the lawn. Avoid mowing when the grass is wet as this produces clumps that smother the lawn and clog the mower. If this occurs, or if grass becomes excessively long in between mowings, you have three options: (1) mow over the clippings a second time only if small sections of the lawn are wet or overgrown, (2) sequentially remove one-third of the grass blade then wait a day. Remove one-third again to get down to the desired height over several mowings, (3) bag or rake the clippings to use as mulch, a soil additive, or an ingredient in your compost pile. Any type of mower can be used. A mulching mower has an extra blade that finely chops and distributes clippings across the lawn surface. Mulching mowers promote faster decomposition but they are not necessary. In most cases, you can use common rotary mowers simply by removing the grass catcher. Regardless of mower type, the key to a quality cut is keeping the mower blade sharp and properly adjusted. Dull mowers use more gasoline, give the lawn an undesirable frayed appearance, and can allow leaf diseases to get started. Mower blades require sharpening at least every second mowing season for bluegrass lawns, and at least once per year for tall fescue or perennial ryegrass lawns.

Other Choices for Recycling Grass Clippings

Usually the easiest and best way to handle grass clippings is to leave them on the lawn. Sometimes, this is not desirable, such as when the grass is mowed long. Fortunately, there are other good methods to recycling grass clippings at home, including using them as a mulch or soil additive in gardens, or as an ingredient in a compost pile.

Do not use grass that has been treated with weed killers as mulch or incorporate it into garden soil as these could harm your desirable plants. Leave herbicide-treated clipping on the lawn or compost them. Be particularly cautious when the long-lasting herbicide called dicamba (Banvel) has been used. Most herbicides used on grass break down in the compost pile. Dicamba is an exception. Compost made with dicamba-treated grass should be used only for lawn applications. A better alternative is to leave dicamba-treated grass clipping on the lawn.

Mulching

Grass clippings can serve as a garden mulch to discourage weeds, retain soil moisture, and reduce erosion. The grass eventually decomposes, adding organic matter and plant nutrients to the soil. Place grass mulch around plants in layers of about 1 inch and allow it to dry before you add more clippings. Thicker applications of clippings can become slimy and matted, impeding air and water movement into the soil.

Soil Incorporation

Incorporating grass clippings directly into the soil captures more of the N and organic matter than mulching, though without the benefits of surface mulch. As the grass decomposes, nutrients gradually become available to the garden plants. After collection, work 2 to 3 inches of clippings into the top 6 to 12 inches of soil. Do not use clippings containing a large amount of mature grass or weed seeds. These will eventually sprout weeds in the garden.

Home Composting

Grass is a good ingredient for a backyard compost pile. Grass clippings decompose rapidly and provide both moisture and N, which are often lacking in backyard composting piles. Compost piles begin to heat soon after grass clippings are added. The resulting higher pile temperatures destroy more weed seeds and plant diseases and generally speed the composting process.

These are a few cautions to observe when composting grass clippings. Rapidly decomposing grass quickly consumes oxygen from the surrounding pile. Oxygen-carrying air cannot penetrate grass clippings very well because grass clippings tend to stick together forming clumps and mats. Consequently decomposition occurs without oxygen, which promotes offensive odors. The remedy is to mix grass clippings with other drier materials that are bulky and decompose more slowly.

In general, grass clippings should make up no more than one-half (by volume) of the material in the pile. Watch a compost pile containing a large proportion of grass and then turn it if the pile begins to compact or emit an odor. When you add grass clippings to an existing compost pile, turn them into the pile within 24 hours.