K-STATE Research and Extension

Recycling Grass Clippings

MF2110

Why Recycle?

The average lawn generates about 1,500 pounds of grass clippings per year, accounting for about 10 percent of curb waste. People bag clippings believing they cause thatch. In fact, clippings have no bearing on thatch, which is made up of decay-resistant surface roots, runners, and stems found close to the soil surface. Grass clippings are beneficial and best recycled by letting them fall back to the turf. Clippings also can be composted, used as mulch, or taken to a recycling center.

Clippings

By letting clippings fall to the turf you can:

- reduce mowing time by a third;
- return up to 25 percent of fertilizer nutrients that would be lost if clippings were to be removed; and
- reduce household waste by about 10 percent, sending fewer plastic bags to the landfill.

The key is not to let the grass grow tall between cuttings. Avoid removing more than a third of the total leaf length at one time. Keep the mower blade sharp. A sharp mower blade cuts more efficiently and with less power.

Recommended Mowing Heights for Lawns

Bermudagrass	1–2 inches
Bluegrass	2–3½ inches
Buffalograss	2–3 inches
Perennial ryegrass	2–3 inches
Tall fescue	2½–3½ inches
Zoysiagrass	1–2 inches

Grass clippings are about 85 to 90 percent water and shrink by about the same amount when left on the turf to dry. Once clippings settle, it does not take long for them to decompose because they are mostly soft tissue. Grass clippings contain approximately 4 percent nitrogen, 0.5 percent phosphorus, and 2 percent potassium. Avoid overwatering or over fertilizing, which can lead to excessive growth and more frequent mowing. Without regular mowing, clippings stay on top of the turf instead of filtering down to the soil surface.

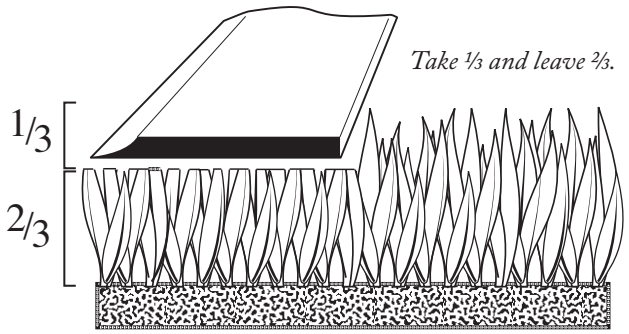
Mowers

Certain mowers work well for recycling clippings. The deck and blades of the mulching mower are designed to suspend clippings so they can be chopped into smaller pieces and deposited evenly on the turf. There is no clipping discharge vent, so this type of mower does not work well on tall or wet grass.

Another option is to use a regular side-discharge (side-bagging) or rear-discharge (rear-bagging) system. These mowers can be fitted with a mulching kit over the discharge opening to function like a mulching mower. They do not cut grass a second time or distribute it as uniformly as a true mulching mower. A side-discharge mower can be used without the shield if turf is mowed on schedule. Without the shield or a bag attached, the rear-discharge mower throws clippings onto the operator. Some rear-discharge mowers can be fitted with a curved chute to discharge clippings to the side. Regardless of the type of mower, adhere to the one-third removal rule described below.

When to Mow to Remove One-Third

Your mowing height	Mow when grass gets this tall	Amount of grass removed (one-third)
1″	1½″	½″
1½″	2¼″	¾″
2″	3″	1″
2½″	3¾″	1¼″
3″	4½″	1½″
3½″	5¼″	1¾″
4″	6″	2″



When mowing without a catcher, it is a good practice to mow three or more rounds in a clockwise direction, throwing the grass away from buildings, walks, and drives. Then mow counterclockwise, throwing the clippings away from the uncut grass. Alternate mowing direction from one mowing to the next so soil compaction and wear from the mower wheels will be distributed over the lawn. Remove clippings from hard surfaces such as sidewalks and drives. A blower works well for this purpose. Even a mulching mower deposits some clippings on drives and walks.

Composting

One ton of grass clippings results in 200 pounds of degradable fibrous matter after composting. While composting is better than taking clippings to the landfill, it is more beneficial to return grass clippings to the turf. Grass clippings provide moisture and nutrients, with a carbon-to-nitrogen ratio of 12–25:1. But because of the high nitrogen content, composted grass clippings decompose quickly and require special care. To avoid odor problems, clippings must be turned frequently at first, and sometimes twice a day. In addition, composting increases time spent on mowing and bulk handling, and dry piles of clippings can become a fire hazard.

Mulch

Using recycled grass clippings as mulch is not recommended. Besides creating a fire hazard, clippings are lightweight and susceptible to being blown or washed away. Wet grass does not breathe like other types of mulch. Clippings from grass treated with weed killer can harm other plants.

Take Clippings to a Recycling or Transfer Station

Another option for discarding grass clippings is to take them to a recycling center. This may be a designated place at a landfill, a vacant city lot, or a neighbor's compost pile. Kansas landfills are regulated locally, but many have areas designated for grass clippings and other organic waste.

For more information, see *Mowing Your Lawn*, MF1155.

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