

# What is "Grasscycling?"

Grasscycling, or grass mulching, is the natural practice of leaving clippings on the lawn when mowing. It is obvious how this practice can save resources like landfill space, but there are additional benefits as well. The clippings quickly decompose, returning nutrients to the soil. Grasscycling, in conjunction with the practice of reducing water and fertilizer inputs, can reduce mowing time in addition to disposal costs.

Grasscycling can be practiced on any healthy lawn as long as responsible turf management guidelines are followed.

## Grasscycling Saves Lawn Care Costs

- **Fertilizer** — Grass clippings can supply up to one-third of a lawn's nitrogen fertilizer needs.
- **Time** — Recent trials confirmed leaving grass clippings on the lawn saves one-third of the mowing time.
- **Water use** — Clippings shade grass roots, cool the soil, return moisture, add moisture holding organic matter, and thereby reduce lawn watering needs.
- **Soil health** — Clippings decompose rapidly, feeding soil organisms that keep soil healthy and help prevent turf diseases.
- **Thatch** — Studies prove grass clippings do not cause thatch build-up. (DJ)

Proper mowing, watering, and fertilizing practices result in more moderate turf growth yet still produce a healthy, green lawn.

The nitrogen contained in grass clippings removed from a lawn almost equals the recommended application rate for healthy turf (about five pounds of nitrogen per year per 1000 square feet). While some of this nitrogen is lost through the decomposition of the clippings, leaving the clippings on the lawn by grasscycling can have the overall impact of reducing fertilization requirements by 15–25 percent or more. Similar savings on water use are possible.

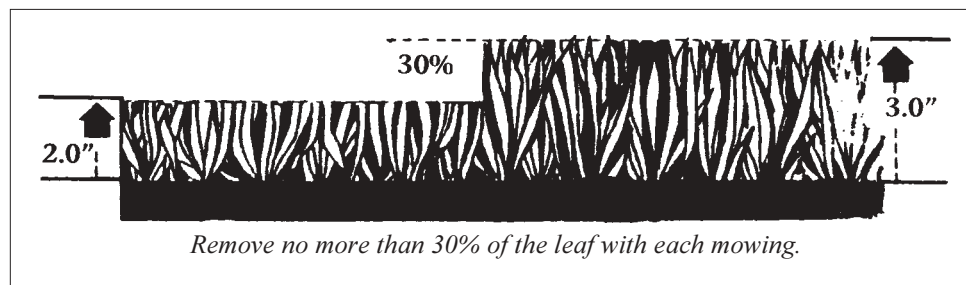
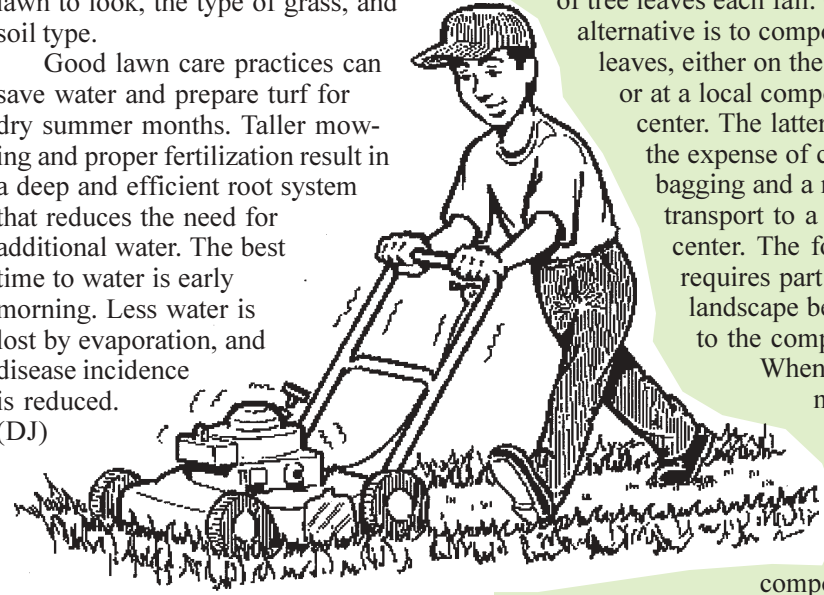
Returning clippings to the lawn usually means mowing more than once a week during the few weeks of rapid growth in spring and early summer. Grass clippings should be less than one inch, or no more than one-third of the total plant height, to ensure rapid decomposition. Mowing more frequently is not as much extra work as you might think, because lawns mowed at the proper height cut more easily and quickly. Mowing infrequently damages the lawn by removing too much of the plant at one time. When mowed regularly, clippings

filter down through the grass, decompose rapidly and recycle nutrients back into the soil.

Fertilize your lawn to provide uniform, moderate growth throughout the growing season. A properly fertilized lawn will have a healthy, dense stand of turf that reduces weeds and recovers quickly from insect or disease injury. The number of fertilizer applications you make will depend on how you want your lawn to look, the type of grass, and soil type.

Good lawn care practices can save water and prepare turf for dry summer months. Taller mowing and proper fertilization result in a deep and efficient root system that reduces the need for additional water. The best time to water is early morning. Less water is lost by evaporation, and disease incidence is reduced.

(DJ)



## Mulching Tree Leaves into Lawns

The state regulation that prohibits sending yard wastes to landfills has created a problem for grounds managers and homeowners who need to dispose of tree leaves each fall. One alternative is to compost the leaves, either on the premises or at a local composting center. The latter requires the expense of collection, bagging and a means of transport to a compost center. The former requires part of the landscape be devoted to the composting.

When there are many trees on the grounds, leaf clean-up and composting can

be a time-consuming chore.

Another means of disposal is simply mowing the turf/tree leaves with a rotary mower often enough to pulverize the leaves so they fall into the turf.

It appears returning the leaves to the turf is not harmful to the grass if the mulching/mowing is done at appropriate times. When oak leaves are predominant, it will be necessary to mulch them into the turf later in the fall because they are held on the trees longer than most other trees.

For best results, leave the mower set at the same height as you have been mowing the turf. It is important to use a rotary mower that pulverizes the leaves well and that the leaves are dry when

mowed. Sharpening the mower blades and a slow movement with the mower will help to grind the leaves

finer. It may be necessary to make as many as three or four passes over the area to grind the leaves fine enough. The finer the leaf particles, the more easily they fall into the turf, leaving grass leaves exposed to the sunlight.

The pulverized leaves will settle into the turf within a day or two, particularly if followed by rain. Take care that the pulverized leaves do not cover the grass blades entirely. It is best if the tree leaves are "mowed" regularly, not allowing them to lie on the turf more than three or four days.

Fall is a very important time for the turf to photosynthesize and store carbohydrates, particularly under trees where the turf receives limited sunlight during the summer. It is suggested to add 1/2 pound nitrogen per 1,000 square feet in addition to the normal fall nitrogen fertilization to enhance decomposition of the tree leaves.

Mulching leaves into the turf is a reasonable means of disposing of the leaves. (DJ)

## Mulching Mowers

Everyone wants to do something good for the environment, and the new breed of yard equipment that allows you to recycle debris right in your own backyard makes it easy. If your refuse hauler doesn't accept lawn clippings or leaves anymore without an extra charge, there are new tools that will help. The idea behind recycling yard waste is that your lawn clippings and leaves are not debris at all, but a valuable organic resource that should be put back into the soil to help build a healthy lawn and garden.

The most popular piece of lawn-care equipment is the walk-behind mower. More than 85 percent are now labeled as "mulching mowers" to respond to the public's environmental concerns. Mulching mowers — like food processors for your lawn — use a special blade and enclosed deck to slice up your grass clippings (and dried leaves) numerous times before depositing them back deep into the turf, where they decompose in a few days. The result, if conditions are right and the mower is designed well, is a clean, vacuumed appearance without any unsightly clumps or hedgerows of grass. And don't worry about creating thatch. Thatch is not made up of dead grass blades left on the lawn, but excess surface roots caused by over watering and over fertilizing.

Using a mulching mower saves in several ways. It saves time, since you don't have to repeatedly stop the mower to empty and reattach the bag. It saves money, since the nitrogen in the clippings fertilizes the lawn, reducing the amount of supplemental fertilizer you have to apply. And it leaves more room in the local landfill for real garbage.

Here are a few things to look for in a quality mulching mower:

**Convertibility** — Can you easily convert the mulching mower to a bagging

mower or a side-discharge mower? This is important, since it's sometimes difficult for the mower to cope with thick, lush, rapidly growing grass. You may want to temporarily switch to a side-discharge mode to avoid clogs and prevent stalling out the mower. A bagging mower is useful in the fall, when you may want to collect your leaves for use as mulch for your vegetable garden or flower beds.

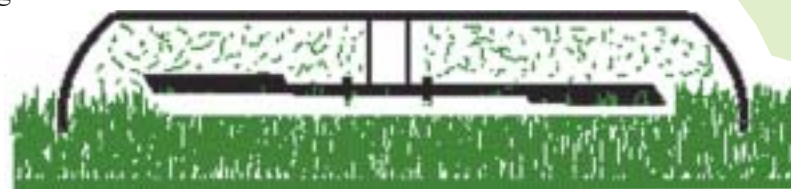
**Engine type and horsepower** — A mulching mower should have at least five horsepower, preferably six. Low-cost mowers with 3.5-horsepower engines may not have sufficient power to chop up clippings thoroughly. Automotive-design overhead-valve engines on premium mowers are powerful, efficient and tend to have larger and quieter mufflers. For mowing over hilly terrain, you may want to consider a mower with a two-cycle engine, since they are constantly injected with lubricating oil and don't have the problem of oil starvation that standard, splash-lubricated four-cycle engines do.

**Electric/cordless models** — In recent years, major manufacturers have introduced innovative electric corded and cordless mowers, some with mulching capability.

**Mulching technology** — If you take a look at some competitive mowers, you'll see some distinct differences in how they solve the problem of chopping up grass fine enough so that it disappears. Most manufacturers design the mower's deck and blade so that the clippings will be stirred up and cut several times before being blown back into the grass. Some manufacturers add baffles or fans to the inside of the deck to enhance the process.

**Build quality** — As with other consumer products, "you get what you pay for" when you buy a mulching

mower. To take advantage of some of the advanced features discussed above, such as overhead-valve engines and high-efficiency decks, you'll pay around \$400 or more. There are some good, solid



Mulching Mower

values out there for less than \$300, but make sure the products are supported by a dealer network that will be able to fix them if they break down. Many dealers refuse to touch bargain-basement machines.

### Mulch-Mowing Tips

- Mow when the grass is dry, to avoid clumping.
- Raise cutting height to 2 to 2-1/2 inches to hide clippings better and make a healthier lawn.
- Remove only one-third of grass length, or one inch maximum, per mowing.
- If the grass is overgrown, mow twice: first at a high setting, then lower.
- Mow every five to seven days in the spring. (Every two weeks may be enough in the summer.)
- Water and fertilize less. Grasscycling holds moisture better and also recycles fertilizer to your lawn.
- Sharpen mower blades at least once a month to increase mower efficiency.