



Turf Tips

Managing Yard Waste to Preserve Water Quality

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In 1994, a law banned grass clippings, tree leaves, branches and twigs from all landfills in Michigan. These items are considered yard waste, and prior to 1994, it accounted for approximately 20 to 25 percent of Michigan's throw-away trash. A few municipalities and private businesses have developed composting centers to process this material. This has provided a disposal mechanism for some Michigan residents. For those who would like to handle yard waste on their own property, the techniques listed below can transform grass clippings and tree leaves into resources for lawns and gardens.

Recycling Grass Clippings

When you mow, return the grass clippings to the turf whenever possible. Mulching mowers are specifically designed to accommodate this procedure, but any mower can return clippings to the lawn. Grass clippings begin to break down quickly after mowing, releasing the water and nutrients contained in the tissue. The nutrients (particularly nitrogen) can be returned to the soil and used by the lawn. Recycling nutrients will reduce the total amount of nitrogen fertilizer needed by the turf each growing season.

Returning clippings to the lawn will not harm the grass plants or contribute to thatch buildup. Thatch is the accumulation of dead and decomposing turf stems, leaves and roots intermixed with live plant roots and soil that occurs at the soil surface. It can be viewed by cutting downward into the lawn, peeling the sod back and examining the cut piece from the side. A thatch layer of approximately 1/2 inch is beneficial because it acts as a buffer at the soil surface and protects the plants from extreme weather. Thatch that builds up over 1 inch, however, can inhibit water and air movement and weakens the turf stand. If you have a thatch layer of 1 inch or more, you may want to consider a core cultivation of your lawn to alleviate the thatch

problem. (Refer to Turf Tips E12TURF, "Cultivation of Lawns" for more details.)

Excessive grass clippings left in piles on the lawn surface will smother and severely injure the turf. Simply spread them out over a larger area using a rake or the mower, use them as mulch in gardens or landscape beds, or put them in your compost pile. If excessive clippings are a routine problem on your lawn, try mowing more frequently and raise the mowing height. Mowing heights of 2.5 to 3.5 inches are recommended for most lawns. (Refer to Turf Tips E13TURF, "Mowing Lawn Turf" for more details.)

Grass Clippings as Mulch

Grass clippings can effectively be used as mulch for gardens or landscape beds. Be careful when placing the clippings around tender young plants — the clippings can heat up as they decompose, and this may injure young transplants. Also, refrain from using clippings for mulch that were recently treated with weed control products (herbicides). MSU research indicates that the herbicide can volatilize from clippings and injure sensitive plants such as tomatoes, beans and annual flowers. Allow at least two weeks after application of weed control products before using treated clippings as mulch.

Grass Clippings as Compost

Grass clippings make an outstanding contribution to compost piles because of their high nutrient content. Efficient composting is accomplished by layering green material such as grass clippings, weeds or kitchen scraps with brown materials such as leaves and soil. The compost is a valuable resource for landscape and garden beds as a soil amendment or mulch.

Tree Leaves

Raking, hauling, bagging and disposing of tree leaves has been an annual event for homeowners and turf managers for many years. MSU researchers have found that mowing these leaves back into the turf is an appropriate alternative. In these studies, more than 6 inches of tree leaves have been mulched into lawn turf. Several types of leaves have been used, such as oak and maple, with no adverse effects on lawn turf. Reports from professional turf managers who have been practicing this technique on golf courses and commercial turf have been positive. Homeowners inter-

ested in an alternative to raking leaves might want to try mowing them. A couple of passes with the mower breaks the leaves down into small pieces. The leaf residue will be evident after mowing, but it will sift into the turf within a few weeks and will be unnoticeable in the spring. You can even rake leaves that accumulate in planting beds, fence lines or other areas out into the lawn and mow them. For best results, use a mulching mower, raise your mowing height to better accommodate the tree leaves and mow when the leaves are dry.



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