

ASK THE EXPERT

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Returning clippings to turf

Problem: The pickup and disposal of turfgrass clippings present a problem with our contract mowing operations. We have thought of leaving the clippings in the lawn. What are your comments, and are there any other options to manage clippings and recycle nitrogen? (Pennsylvania)

Solution: Reports suggest that grass clippings, when left in the turf, tend to reduce turfgrass quality over time, when it is intensely managed. Clippings should be removed when the grass is too long, or they will have a higher potential for further development and spread of disease.

If the turfgrass is growing too rapidly, excessive clippings or heavy deposits of clippings should be removed.

This is particularly important with golf courses because heavy deposits of clippings may interfere with play. However, on lawn turfgrass, clippings may not present a problem unless they remain as large clumps on the surface.

Do not let the turfgrass grow too tall. Mow regularly at the recommended height, depending on the particular turfgrass cultivar. You may have to mow more often within different months of the growing season. For example, in the spring and fall, you may have to mow more often than you do during summer months.

As a rule, mow the turf when the blades grow a half-inch above the recommended cutting height and do not remove more than a third of the growth at a given time.

Avoid mowing the grass when it's wet.

Generally, properly cut clippings do not contribute to thatch development. Instead, they can decompose, release nitrogen and help reduce the total nitrogen needed for the season. Turf grown under a low-intensity fertilizer program can benefit by returning the clippings. Clippings should be removed if the blades are too long to decompose quickly, or have the potential for spreading diseases.

Mulching mowers are another option. Mulching mowers shred the clippings so they can decompose and release nitrogen quickly.

Mulching mowers are more difficult to use when turf is too tall or wet. The nitrogen content of dried clippings normally ranges between three percent and five percent. The source of the nitrogen from clippings would be a slow-release from microbial decomposition of blades. Proper moisture and temperature will enhance this process.

When possible, consider using growth regulators, such as Cutless 50W, Embark 2S or Primo, to reduce turfgrass growth and reduce the total amount of clipping biomass. Growth regulators are used more often on low quality turf such as banks and along roads.

However, these can also be used on residential and commercial turfgrass. For contract mowing, Primo is particularly helpful in recycling clipping volume while maintaining turf color. These plant growth regulators can play an important role in a yard waste clipping disposal problem.

Avoiding degradation

Problem: We recently learned that Oftanol can be broken down by certain bacteria in the soil, and that scientists recommend that you not use the product each year. How often do we switch or rotate these insecticides. Do we rotate every year or once in a while? (Michigan)

Solution: Bacterial degradation of sensitive organophosphate insecticides has been known in the scientific community for a number of years. It is best not to use any one organophosphate insecticide such as Oftanol or Dursban year after year.

Switching products once every year or every two years should reduce bacterial buildup and the insecticide degradation problem. To alternate with sensitive organophosphates, which are subjected to bacterial degradation, consider using products such as Dylox (or Proxol), which are not known to be affected by rapid bacterial degradation. Reports have indicated that carbamates, such as Sevin (carbaryl) may be affected by the same bacteria that degrade Oftanol.

Will oils work against woolly adelgids?

Problem: We have severe problems with hemlock woolly adelgid in our area. How effective is horticultural oil? (Missouri)

Solution: Hemlock woolly adelgid can become a destructive pest if not managed.

The adelgids can cause premature leaf drop and twig dieback, and cottony sacs are found attached to twigs.

A two percent solution of highly refined horticultural oil will help. Treat the hemlocks in late April to early May and again in mid-July. Or try two percent insecticidal soap. Neither has a long residual, so provide additional applications as needed.

Avoid treating when the plants are under drought stress to reduce phytotoxicity.

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Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.