THATCH CONTROL IN WARM-SEASON LAWNS

Thatch control for cool-season lawn grasses such as bluegrass and tall fescue is usually done in the fall but now is the time we should perform this operation for warm-season turfgrasses such as bermudagrass and zoysiagrass. Because these operations thin the lawn, they should be performed when the lawn is in the best position to recover. For warm-season grasses that time is June through July. Buffalograss, our other common warm-season grass, normally does not need to be dethatched. When thatch is less than one-half inch thick, there is little cause for concern; on the contrary, it may provide some protection to the crown) growing point (of the turfgrass. However, when thatch exceeds one-half inch in thickness, the lawn may start to deteriorate. Thatch is best kept in check by power-raking and/or core-aerating. If thatch is more than 3/4-inch-thick, the lawn should be power-raked. Set the blades just deep enough to pull out the thatch. The lawn can be severely damaged by power-raking too deeply. In some cases, it may be easier to use a sod cutter to remove the existing sod and start over with seed, sprigs or plugs. If thatch is between one-half and a 3/4-inch thick, core-aeration is a better choice. The soil-moisture level is important to do a good job of core-aerating. It should be neither too wet nor too dry, and the soil should crumble fairly easily when worked between your fingers. Go over the lawn enough times so that the aeration holes are about 2 inches apart. Excessive thatch accumulation can be prevented by not overfertilizing with nitrogen. Frequent, light watering also encourages thatch. Water only when needed, and attempt to wet the entire root zone of the turf with each irrigation. Finally, where thatch is excessive, control should be viewed as a long-term, integrated
process, to include proper mowing, watering, and fertilizing, rather than a one-shot cure. One power-raking or core-aeration will seldom solve the problem.

* Remove fruit from heavily loaded apples and peaches to improve fruit size and prevent limbs from breaking. Apples should be spaced every 4 inches and peaches every 6 to 8. Note that is an average spacing. Two fruit can be closer together if the average is correct.
* Remove sucker growth from the base of fruit trees and grape vines.
* Remove water sprout growth from fruit trees. Water sprouts grow straight up.
* "Comb" new growth on grape vines so the new shoots hang for greater exposure to sunlight.
* Continue disease and insect control to prevent fruit damage up to within 2 weeks of harvest.

**Herbicide Damage to Trees, Shrubs and Gardens**

Every year we see damage caused by exposure to herbicides. Symptoms vary with herbicide applied, plants exposed, concentration of product and environmental factors. Here is a list of the types of damage commonly seen.

**Broadleaf herbicide drift.**
A number of herbicides used on farms and on home lawns are essentially plant growth hormones. These include 2,4-D, triclopyr, and dicamba and are commonly used to control broadleaf weeds in lawns, pastures, or grassy crops. These products may become a gas) volatilize (at high temperatures, causing them to drift and damage nontarget plants such as trees and shrubs. Symptoms may include twisting and distortion of plant foliage, leaf yellowing, and, in severe cases, branch dieback. One of the trademark signs of this damage is the Curly-Q twisting of leaf petioles or stems. Though tomatoes, redbud trees, and grapes are sensitive to these herbicides, a number of species will show some damage if drift has occurred. If you see twisting on more than one species, chances are that herbicide drift has occurred. **Damage to vegetable gardens.**

Though drift is the most common cause of herbicide damage on vegetables, other potential problems exist as well. Cattle fed prairie hay from pasture treated with picloram) Tordon (can have manure tainted with the herbicide. If this manure is used on a vegetable garden, plants may sicken and die. Also, lawn clippings treated with quinclorac) a crabgrass killer (and used as mulch can have the same effect. Both products can remain active for up to 24 months.

**Do Not Over-Fertilize Tomatoes**

Though tomatoes need to be fertilized to yield well, too much nitrogen can result in large plants with little to no fruit. Tomatoes should be fertilized before planting and sidedressed with a nitrogen fertilizer three times during the season. The first sidedressing should go down one to two weeks before the first tomato ripens. The second should be applied two weeks after the first tomato ripens and the third one month after the second. Common sources of nitrogen-only fertilizers include nitrate of soda, urea, and ammonium sulfate. Blood meal is an organic fertilizer that contains primarily, but not exclusively, nitrogen. Use only one of the listed fertilizers and apply at the rate given below.

- Nitrate of soda 16-0-0(; Apply 2/3 pound )1.5 cups (fertilizer per 30 feet of row.
- Blood Meal 12-1.5-.6(; Apply 14 ounces )1.75 cups (fertilizer per 30 feet of row.
- Urea 46-0-0(; Apply 4 ounces )½ cup (fertilizer per 30 feet of row.
- Ammonium Sulfate 21-0-0(; Apply 0.5 pounds )1 cup (fertilizer per 30 feet of row.

If you cannot find the above materials, you can use a lawn fertilizer that is about 30 percent nitrogen) nitrogen is the first number in the set of three (and apply it at the rate of 1/3 pound )3/4 cup (per 30 feet of row. Do not use a fertilizer that contains a weed killer or weed preventer.

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