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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 over-fertilizing 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 (i.e., to include proper mowing, watering, and fertilizing) rather than a one-shot cure. One power-raking or core-aeration will seldom solve the problem.

Oak Galls

A number of tiny non-stinging wasps, mites and flies cause abnormal growths to develop on the leaves, twigs or branches of oak trees. These galls can include growths that are round, spiny, flattened, elongated or star-shaped. There are hundreds of different types of galls, each of which is caused by a specific insect. Galls form in response to a chemical that the insect injects into the plant tissue. Mature females lay eggs that hatch into legless grubs. Galls form around them. Larvae feed, develop, and pupate inside these galls. Adults may emerge either the same season or may overwinter inside the gall depending on the life history of that specific insect.

Generally, these gall insects do not cause significant damage to their hosts, though some of the leaf galls can cause enough deformity to make a tree unsightly. Also, severe infestations of twig galls can cause twig dieback or, rarely, tree death. However, just because a twig is covered with galls does not mean it is dead. I have seen twigs that looked like a solid mass of galls leaf out in

the spring. Insecticide sprays applied when galls are noticed are ineffective because damage has already occurred. Also, larvae are unaffected because of the protection afforded by the gall. Insecticide sprays can kill emerging adult wasps and flies, but long periods of emergence and short residuals of most contact insecticides make this impractical. Stem and twig galls can be pruned if deemed to be practical and necessary. In short, this is a problem that is best ignored unless pruning is done to improve the appearance of the tree.

Deadheading Flowers

Some plants will bloom more profusely if the old, spent flowers are removed, a process called deadheading. Annuals especially, focus their energy on seed production to insure that the species survives. If you remove old flowers, the energy normally used to produce seed is now available to produce more flowers. Perennials can also benefit by lengthening the blooming season. However, some gardeners enjoy the look of spent flowers of perennials such as sedum or purple coneflower. Also, the seed produced can be a good food source for birds. Not all plants need to be deadheaded, including sedum 'Autumn Joy', melampodium, impatiens, most flowering vines, Lythrum, periwinkle (Catharanthus), and wishbone flower (Torenia). Those that do increase bloom in response to deadheading include hardy geraniums, coreopsis, petunias, marigolds, snapdragons, begonias, roses, campanulas, blanket flowers, delphiniums, zinnias, sweet peas, salvia, scabiosa, annual heliotrope, geraniums (Pelargonium), and yarrow. Deadheading is easily accomplished by removing spent flowers. With some plants, pinching between a thumb and finger can do this, but tough, wiry stems will require a scissors or pruning shears.

'Tip' Blackberries, Black Raspberries and Purple Raspberries

The growth and fruiting habits of blackberries and raspberries are the same. The root system is perennial, surviving many years, but canes are biennial and only live two years. First-year canes are called primocanes. They emerge from the soil and grow but with most varieties, the primocanes do not fruit. Primocanes become floricanes the second year. Floricanes fruit and then die. Each cane lives only two years. Pinching (tipping) the top 2 to 3 inches of the primocanes increases branching and fruiting the next year. Tipping can improve yield by 3 to 5 times and is vital if you wish to have good yields. The height and frequency of tipping varies with species and whether the variety fruits on primocanes or not. Those that do fruit on primocanes are often referred to as "everbearing." Those that only produce fruit the second year, we will call "traditional." Below is a listing of the different methods used.

Blackberries: Traditional - Tip at 4 feet

Blackberries: Everbearing - Tip at 25 to 30 inches high. Tip laterals when they reach 25 to 30 inches.

Black Raspberries: Tip at 3 feet

Purple Raspberries: Tip at 36 to 40 inches

Red Raspberries: Do not tip.

Sidedressing Annual Flowers

Modern annual flowers have been bred to flower early and over a long period of time. They are not as easily thrown off flowering by high nitrogen levels as vegetables are. As a matter of fact, providing nitrogen through the growing season (sidedressing) can help maintain an effective flower display for warm-season flowers. Apply a high nitrogen sidedressing four to six weeks after flowers have been set out. Additional fertilizations every three to four weeks can be helpful during a rainy summer, or if flower beds are irrigated. 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 1/3 pound (.75 cup) fertilizer per 100 square feet.

Blood Meal (12-1.5-.6): Apply 7 ounces (7/8 cup) fertilizer per 100 square feet.

Urea (46-0-0): Apply 2 ounces (1/4 cup) fertilizer per 100 square feet.

Ammonium Sulfate (21-0-0): Apply 4 ounces (1/2 cup) fertilizer per 100 square feet.

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 3 ounces (3/8 cup) per 100 square feet. Do not use a fertilizer that contains a weed killer or weed preventer.

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