

How to Grow LAWNS



Capital Nursery

GENERAL MAINTENANCE

In maintaining an established lawn, attention should be given to proper fertilizing, watering and mowing. Most lawn problems can be prevented or at least reduced in severity if basic maintenance requirements are followed. Good nutrition is essential in any living organism, plant or animal. Good nutrition for grass requires applying a fertilizer with organic or slow release nitrogen every 6 to 8 weeks. Many of the turf fertilizers also contain weed controls or insecticides. The cost of these multipurpose products is usually little more than the cost of fertilizer. Along with saving money they also save time, requiring only one application to do several jobs. They do require a good spreader to achieve the proper dosage and precise coverage of the area. Always check with a nurseryman for the proper product for your specific lawn. The wrong product can wipe out things that didn't need wiping out. There are also selective controls for pests such as oxalis, spurge, crabgrass, dallisgrass and nutsedge.

WATERING - The most frequent and often fatal problem in summer lawns is watering too often. Under average Sacramento conditions a lawn will require about 1 inch of water to soak the root area. Remember, the goal is to have water penetrate to a depth of 4 to 6 inches each time you water. To check the length of time to operate your sprinklers, you can try these tests. Place coffee cans or pie tins in the area, turn on the sprinklers and check the time necessary to fill to a depth of 1 inch. The sprinklers should be run for this length of time about every 3 to 4 days, as early in the day as possible. The soil will gradually dry out from the surface down, but there will always be water in the root zone, right where it is needed. If excessive run-off occurs, divide the watering time in half or thirds allowing an hour between. For improved accuracy, dig into the lawn to visually verify that the water has penetrated to the proper depth. Regular aeration, removal of thatch and the use of soil penetrant products will reduce run-off. Often you will notice that the delivery rate of the sprinklers exceeds the acceptance rate of the soil. Consider installing low volume sprinkler heads. Impulse or "rainbird" type sprinkler heads cover an enormous area, but usually need to be run for a long time to give a penetrating soak. The standard type heads are notorious for gushing water too fast resulting in run-off before soaking in.

MOWING - Most grass lawns should be mowed at a height of 1 3/4 to 2 1/2 inches during the summer. Cutting lower than this removes too much of the leaves for the grass to maintain good health and produce food. Hybrid Bermuda can be mowed at 3/4 inch without damage. Never mow off more than 1/3 of the total height of a grass blade at one time. Cutting heights should be reduced to 1 1/2 inches during cooler months. Heavy amounts of the clippings should not be allowed to accumulate as this provides a "nesting place" for fungus and produces a permanently "cloudy" condition. This perpetual darkness can kill the underlying grass plants. You may also find thatch building up beneath the grass blades. This functions like a "thatched roof" shedding water. Thatch is naturally produced by the grass and is not the result of accumulated clippings. For best results, dethatching can be done annually each autumn. If mowed often enough, catching the clippings is not necessary and these naturally break down and release nutrients back into the soil.

DIAGNOSING PROBLEMS - with the arrival of the first hot weather of summer, brown spots, that are not helped by watering or fertilizing, suddenly appear in lawns. There are a number of insects or diseases that could be causing the brown spots. There is no "cure all" spray, and, if you use the wrong spray, there is no cure at all.



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Insect or Disease? This is important to ascertain. Statistically, diseases comprise over 90% of the turf sample problems brought in for diagnosis at Capital Nursery, while most folks presume insects to be the culprits. Insect damaged turf is conspicuous; in most cases the bugs themselves are evident. Common Insects infesting lawns in our area include:

White Grubs: These are the larva of robust beetles known as June Bugs and May Beetles. Appropriately named to coincide with the activity of the adult phase, white grub feeding damage causes patches of turf to turn brown around the end of July through mid September. This is an easy one to diagnose because the damaged turf can be pulled up like a piece of carpet with fat and happy grubs feeding beneath. Skunks and opossums often find the insects before you do. They will sniff them out and dig up your lawn as effectively as any rototiller. Diazinon or Dursban in granules or spray formulations will control white grubs.

Armyworms: These are the larval phase of the fat, dusty brown moths that fly around the porch light at night. These insects will graze on the leaf blades. Close inspection of the turf can reveal feeding damage on the blade edges. They typically feed at night and hide at the soil level during the day. Use Diazinon or Dursban.

Leafhoppers: These small insects are best seen during mowing in that they flit and dash about whenever the area is disturbed. These are rarely damaging to turf. There is no questioning the annoyance factor with these insects, but controls are usually not needed. If you can't stand them any more, Orthene is labeled to control leafhoppers, but the benefit is for you, not the grass.

DISEASES: Fungus diseases in lawns have an extremely high fatality rate in comparison to diseases in shrubs and trees. Part of the death rate can be attributed to the lack of woody stems or roots that can withstand the infection. The majority of the problem is caused by over crowding the grass plants, mowing off most of their leaves once a week, poor nutrition, and general neglect. Early detection and treatment is the only way to save the lawn. Common turf diseases in the Sacramento area include:

Dollar Spot: First stages of the disease appear as bleached or yellowish spots about the size of a silver dollar. As the disease progresses the spots turn a dull tan color. Grass blades at the edge of the spots often show straw-colored, hour glass shaped bands. Left untreated, the spots can merge into large areas. Conditions that favor dollar spot fungus are nitrogen deficiency, watering too frequently and excess thatch.

Brown Patch: During high temperature periods, the disease starts as small, irregular dead areas that spread into circular patterns from a few inches to several feet in diameter. Close inspection within these areas shows the leaves become water-soaked, wilted, turn purplish-green, then brown and die. Grass plants within the infected areas can remain upright, though dead. Some individual plants may remain undamaged. Roots are often unaffected and the grass shows some recovery when temperatures moderate. The conditions favoring brown patch are too frequent watering when high daily temperatures are in the 80+ degree range. When maximum temperatures exceed 92 degrees, this disease becomes widespread. Soft growth from fast release fertilizers like sulfate of ammonia, poor soil aeration or mowing too closely encourage the spread of this disease.

Melting Out: Blades of infected grass show straw-colored, oval spots with dark margins. Crown and root systems of infected plants are damaged. The spots die when stress situations occur. The fungus is most prevalent in lawns in cooler months, in heavy shade, too frequent watering and mowing lower than 1 1/2 inches.

Rust: During cool weather yellow-orange lesions appear on the blades. The blades then turn yellow starting from the tip. In the final stages, small orange pustules cover the blades giving the lawn an overall 'rusty' appearance. The spores from these pustules are transmitted by wind, feet of man or animals or lawn tools. Usually seen in spring and autumn, rust fungus is favored by cool temperatures and moisture from dew or rain in an under-fertilized lawn.

Proper watering practices are the best long term solution to lawn disease problems. Fungicidal materials can be applied to control the appropriate disease, but these should be considered half of the answer. Fungicide product registrations are always changing in California. With this in mind, we recommend that you ask your nurseryman for the specific product for your problem and the best timing and method of application.



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