

Sustainable Turf Management

Lawns Produce Waste!

California lawns generate more than 300 pounds of grass clippings per 1,000 square feet annually. This is more than 6 tons per acre each year! Significant quantities of water, fertilizer, and labor go into producing all those clippings. It's a shame to see those resources go to waste if the clippings are not reused. By practicing sustainable turf management, including "grasscycling," landscapers and homeowners can reduce resource inputs while eliminating or reducing green waste.

What Is Grasscycling?

Grasscycling is the natural practice of leaving grass clippings on the lawn when mowing. It is obvious how this can save resources like landfill space, but there are additional benefits as well. The clippings quickly decompose, returning valuable nutrients to the soil. Grasscycling, along with the practice of reducing water and fertilizer inputs, can lessen maintenance and disposal costs and mowing time.

What Is Sustainable Turf Management?

Sustainable turf management refers to installing and maintaining a lawn in an environmentally sound and cost-effective manner. By doing it right from the start, turf can be managed with moderate water and fertilizer requirements. Problems with thatch, lawn diseases, and pests can also be reduced.

Lawns Are Not Crops!

Many people treat their lawns like crops—watering and fertilizing to encourage maximum growth. But then the harvested "crop" (grass clippings) is bagged and sent to a landfill! Using mowing, watering, and fertilizing practices that result in moderate turf growth will produce a healthy, greener lawn using less water and fertilizer.

Any lawn can be grasscycled as long as the sustainable turf management guidelines described in the following sections are used.

Installation

By preparing the planting bed correctly before laying turf or seeding, long-term management problems can be eased significantly. The site must have good drainage, achieved through proper grading and underground conduits. Avoid installing turf on berms or severe slopes unless absolutely necessary.

Where native soils are sandy or clay, new turf will benefit from the addition and deep tilling of well-composted organic material. This helps the soil and grass plants better manage water and nutrients. Allowing for deep root growth will contribute to overall turf health and resilience.

Watering

Overwatering is not only wasteful, it causes lawns to grow faster, which requires more mowing. Overwatering also produces conditions favorable for the growth of some turf diseases and pests.

While turf grasses vary in their need for water, most grasses used in California lawns need about 1 inch of water every five to seven days during the growing season and much less during slow-growth months. Lawns watered too frequently tend to develop shallow root systems, which makes them susceptible to stress and disease. Deep, infrequent watering will produce a deeper, extensive root system.

The best time to water is early morning, as less water is lost due to evaporation, and water pressure is at its peak. Try to avoid watering in the evening because prolonged damp conditions may encourage disease development. It's a good idea to check irrigation systems for even coverage. Adjust sprinkler heads to avoid dry or soggy spots.

Fertilizing

Proper fertilization is essential in maintaining a healthy lawn. Overfertilization will weaken a lawn by causing excessive and succulent top growth. For moderate, even growth, use a combination of fast-acting fertilizers (ammonium nitrate, ammonium sulfate, or urea) and slow-release nitrogen sources, such as sulfur or polymer-coated ureas, urea formaldehyde, isobutylidene diurea (IBDU), or natural organic-based fertilizers.

Avoid using large quantities of fast-acting fertilizers, which produce very fast growth for short periods. As a general rule, it is better for the lawn, and for grasscycling, to apply smaller quantities of fertilizer more frequently, rather than larger amounts less frequently.

The recommended application rate of nitrogen for most turf grasses is 4 to 6 pounds of nitrogen per year per 1,000 square feet. While some nitrogen contained in grass clippings is lost through decomposition, on average, grasscycling reduces nitrogen fertilization requirements by 25 percent.

Mowing

Successful grasscycling requires mowing techniques that will produce very short clippings that will not lay on top or cover the lawn. Cut the grass when it is dry (no drops of moisture on the grass surface). Keep mower blades sharp. Follow the “one-third” rule: mow the lawn often enough so that no more than one-third of the length of the grass blade is removed in any one mowing.

In many areas of California, raising the mowing height in the summer encourages deeper roots and protects grass from drought and heat damage. (See recommended mowing heights to the right.)

Sometimes collecting the clippings is necessary, such as when there are excessive leaves on the turf or when the grass is too wet. Also, when turf grasses are growing very fast in the spring and require more frequent mowing, you may have to

double-cut the lawn (mow twice at different heights) and bag some of the clippings.

Additional Benefits

Studies have shown that seasonal mowing time can be reduced 25 percent or more when grasscycling by eliminating bagging and disposal of clippings. And there are other, hidden benefits. Using sustainable turf management practices will produce a healthier lawn, which can fight off most pests and diseases on its own.

Using Mulching Mowers

While you can grasscycle with most regular mowers, most lawnmower manufacturers have developed mulching (or recycling) mowers, which cut grass blades into small pieces and force them into the turf. Using mowers that are specifically designed to mulch and recycle grass clippings makes grasscycling easy. There are many models of recycling mowers currently available, so instead of “bagging it,” consider purchasing a mulching mower. You and your lawn will benefit!

Mowing Heights for Common California Turf Grasses

Grass Type	Mower Setting (inches)	Mow When Grass Is: (inches)
Bent grass	½–1	¾–1½
Bermuda grass (common)	1–1½	1½–2¼
Bermuda grass (hybrid)	½–1	¾–1½
Kentucky bluegrass	1½–2½	2¼–3¾
Kikuyu grass	1–1½	1½–2¼
Perennial ryegrass	1½–2½	2¼–3¾
Tall fescue	1½–3	2¼–4½
St. Augustine grass	1–2	1½–3
Zoysia grass	½–1½	¾–2¼

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