Lawn Mowing Tips

1. Mow tall (3 to 4 inches). Mowing tall can reduce annual weeds by 80% and conserve soil moisture.
2. Let clippings fall. Put nutrients (30% nitrogen & 50% potassium) back into the lawn. Reduce waste.
3. Keep mowing blades sharp. Leaf cuts made by a sharp mower blade are cleaner, heal faster, and reduce disease potential. Observe leaf tips, since shredding or tearing indicates a dull blade.
4. Frequency of cutting should be determined by the “1/3 Rule.”
5. Avoid mowing wet grass. Distribute grass clippings as evenly as possible.
6. Change direction of mowing each time you mow.
7. Avoid using grass clippings in compost when treated with chemicals.
8. Use steel bladed trimmers to edge sidewalks and curbs. String trimmers scalp turfgrasses and promote weeds.

Measuring Lawns:

Area measurements and mapping a lawn should be the first step in any home lawn care program. It is essential to know the square footage of your lawn in order to make accurate applications of fertilizers and other lawn care products. The most commonly used area measurements are square feet (sqft) and acres (ac). Most home lawn products are based on units of 1,000 sqft.

Soil Testing:

A routine soil fertility test (pH, neutralizable acidity, phosphorus, potassium, calcium, magnesium, organic matter, and cation exchange capacity) is recommended under the following circumstances:

- Before establishing a new lawn, whether from seed, sod, or sprigs.
- Every three years on established lawns (early spring or early fall).
- Annually when attempting to correct a nutrient deficiency or change the soil pH.
Other Cultural Practices

Apply Products Correctly

Proper use of fertilizers and other lawn care products, whether synthetic or natural origin, contributes to healthy plant growth. Applying too much of a synthetic fertilizer may cause foliar burns or injury to the plant. Using too little may result in inadequate pest control or nutrient deficiencies.

The only way to know just how much fertilizer or pest control product is being applied to your lawn is to calibrate your application equipment. Calibrating simply begins with knowing the total square footage of your lawn and making sure you apply the correct amount of material for that square footage according to the manufacturer’s recommendation. Always read and follow the product label. Always sweep or blow sidewalks and driveways back into lawn areas.

Follow Proper Watering Methods

Apply only as much water as the soil can absorb. Simply match the output of your irrigation with the infiltration rate of the soil. Most soil only infiltrate 0.25 to 0.50 inches per hour. Early morning watering will: 1) Reduce evaporative losses due to cooler morning temperatures; 2) Provide an even distribution due to calm winds; and 3) Reduce disease potential by removing morning dew.

Benefits & Timing of Aeration

Aeration is a practice of pulling soil plugs to open the soil surface for better air, water and nutrient movement. It is a practice that also helps to reduce compaction and thatch by spreading soil plugs on the surface. Soil plugs are crumbled and fall freely into aeration holes as well as spreading some soil into the thatch layer where soil microbes can feed on thatch debris. Aeration is a practice that can be done in both spring and fall.

Aeration is the very best way to begin a fall fertilization program. Applications of fertilizer after aeration will move nutrients immediately into the root-zone of your lawn. This practice has shown excellent results in the density and color of cool-season turfgrasses on their way to recovery from summer stresses.

Why We Over-seed

Aeration is also an excellent practice prior to fall overseeding. If lawns show some thinning from a stressful summer, over-seeding is recommended to maintain the density desired for a quality lawn. Aeration prior to seeding will help ensure better seed/soil contact for improved germination.

A thick lawn mowed tall (3 ½ to 4 inches) is your best natural weed control. Over-seeding of cool-season grasses should occur in September to maintain the density required for competition against weeds. Lawns showing some thinning from summer stress can be over-seeded with half the amount of seed used in a normal establishment or renovation. Normal seeding rates for turf-type tall fescue blends range from 7 to 9 pounds/1,000 square feet. Mixtures of tall fescue with Kentucky bluegrass in a 90/10 ratio should be seeded at the same rate for a normal seeding. Therefore, over-seeding rates for these grasses should range between 3.5 to 4.5 pounds/1,000 square feet.

Follow Good Fertility Programs

Feed turfgrasses when they are actively growing. Cool-season grasses should be fed primarily in the fall (September through November) with some fertilizer applications made in spring. Late-season fertilization has become popular because of many agronomic and aesthetic advantages, which include: better fall and winter color, earlier spring green-up, increased shoot density, improved fall, winter and spring root growth, and enhanced storage of energy reserves (carbohydrates) within the plant. Many spring applications are in the form of fertilizer impregnated with pre-emergent herbicides for annual grassy weed control (crabgrass preventers – applied by April 15th). Warm-season grasses should be fed after initial green-up in the spring. They can be given N fertilizer during each month of active growth (May through August for nitrogen only; potassium applications in September).

It is important to remember that the nitrogen source used for fall application be a type that is not heavily dependent on microbial activity to cause the nitrogen to release. This means that fertilizers containing urea, sulfur-coated urea (SCU), IBDU, shorter-chain methylene urea and ammonium sulfate are ideal N sources for the late-season applications.

Although SCU and IBDU are referred to as controlled-release fertilizers, the rate at which nitrogen is released from these fertilizers mainly depends on soil moisture and not on the degree of microbial activity. The use of microbe-dependent N sources for late-season applications may not elicit the desired fall/winter color response because they do not provide enough available nitrogen for plant uptake when temperatures are low. However, these slow-release N sources would be ideal for spring and summer use. Examples of these would be natural organic nitrogen sources and fertilizers consisting mostly of longer-chain methylene-ureas (low in cold-water soluble N). Research has shown at several universities that natural organic fertilizers, such as Bradfield, Milorganite, Sustane, Ringer, Nature’s and Organica, perform well in home lawn fertilization programs. A product like Organica, a corn gluten-based fertilizer, can also provide some pre-emergent activity for annual grass and broadleaf weed control.

Why Do We Have Pest?

Turfgrass pest (weeds, diseases, insects) are there for a reason. It is often related to a weakness in the plant or some deficiency in the soil (often related to microbial activity). Identification still remains the first step in pest management. However, instead of looking how to instantly control the pest; ask yourself, “Why is it there?” Majority of our pest problems can be controlled by selecting resistant varieties of turfgrass species, following best management practices, and maintaining a healthy, balanced soil.

Whatever pest problem you are having, there are five basic steps to effective pest management: 1) Properly identify the key pest and the damage it may cause, 2) Monitor pest populations regularly, 3) Determine the potential economic loss from the pest, 4) Select the proper pest control tactic, such as modifying cultural practices, selecting biological or chemical controls, 5) Evaluate the control measure used.

Turfgrass Science Website— http://turf.missouri.edu