Home Lawn Maintenance

► A properly maintained lawn not only provides aesthetic value and curb appeal to your home but also provides many benefits to the environment.

A well-maintained lawn will prevent soil erosion, serve as a living filter for water and air pollutants, act as an air conditioner during the hot summer, and provide oxygen to the atmosphere.

The quality* of a home lawn varies depending on the level of maintenance provided. A good-quality home lawn receives the essential scheduled maintenance, such as mowing and fertilizing, and may have multiple turf species and a few weeds. A minimum amount of maintenance, money, time, and effort can achieve this level of lawn quality.

Superior-quality lawns give the appearance of overall uniformity and have a minimum number of weeds. Additional turfgrass maintenance practices, such as supplemental watering, thatch removal, and regular pest monitoring, are required to maintain this lawn. Homeowners can manage this level with a do-it-yourself approach, or they might hire a lawn care service company to maintain the lawn for them.

Whatever you desire, the objective should be to have a healthy, dense stand of turfgrass that serves as a permanent vegetative ground cover. Correctly implementing proper turfgrass maintenance can reduce the need for supplementary practices such as pest control (weeds, insects, disease). Following these home lawn maintenance tips should help you achieve your desired lawn.

(**Quality* is a subjective term based on personal preferences. It is often defined by the uniformity of green color, growth density, and leaf texture across the turfgrass area. Many people prefer a medium to dark green turfgrass color, depending on genetic capability, dense growth, and fine leaf texture. Some people prefer a coarse, wide-leafed turfgrass.)

Essential Maintenance Practices

Mowing and fertilizing are the most essential maintenance practices, and each significantly affects the lawn's appearance and health. These routine

maintenance practices are normally done when it is convenient for the homeowner. However, they should be done regularly and at the proper time to be most effective.

Mowing

Mowing is probably the most important maintenance practice for the lawn, but it is often overlooked. Fertilizers, pesticides, turfgrass seeds, and other treatments will accomplish very little if lawns are not mowed at a healthy height for the turfgrass plant. Mowing is often taken for granted unless you realize that it directly affects the health and quality of a lawn and has measurable effect on how a turfgrass plant grows. The ability of a grass plant to sustain itself after frequent close mowing is one factor that distinguishes a specific grass species as a turfgrass versus just a grass. Grass plants such as corn or wheat cannot tolerate frequent close mowing. Mowing is the process that creates a lawn rather than a pasture or a meadow.

Proper mowing is essential in creating a good-quality lawn because it encourages a dense stand of turfgrass plants, which keeps out weeds through competition for nutrients and sunlight. Frequent mowing provides control of many weeds that might find an opening in the lawn

Table 1. Recommended Mowing Heights for Lawn Turfgrasses

Turfgrass	Optimum Mowing Height (inches)	Mowing Frequency (days)	Mower Type
Bermudagrass	1 to 2	5 to 7	Manual or robotic rotary, or reel*
Centipedegrass	1 to 2	7 to 14	Manual or robotic rotary**
St. Augustinegrass	2 ½ to 4	7 to 14	Manual or robotic rotary
Tall fescue	2 to 3 ½	7 to 14	Manual or robotic rotary
Zoysiagrass	1 to 2	7 to 14	Manual or robotic rotary, or reel*

*When properly adjusted and sharp, reel-type mowers provide a superior quality of cut regardless of the grass species. Proper maintenance of these is critically necessary. Reel mowers are more expensive to purchase and maintain.
**The benefits of robotic rotary mowers are still under investigation. It is suspected that the removal of less plant material at each cutting may be less stressful, resulting in enhanced turf rooting and better conditioning to withstand periodic stresses (drought, pests, etc).

canopy. Mowing is especially effective in controlling broadleaf weeds. Important factors to consider are mowing height, mowing frequency, and the type of mower used.

Mowing Height

For the best appearance and quality, mow turfgrasses at the optimum mowing height for the proper growth and health of the specific turfgrass species in the lawn. Each turfgrass species has a range of mowing heights recommended for optimum performance. Turfgrass species that spread or grow horizontally, such as bermudagrass, can usually be mowed at a lower mowing height than an upright growing bunch-type turfgrass, such as tall fescue. Turfgrasses with smaller leaves (fine-textured), such as zoysiagrass, can usually be mowed lower than turfgrasses with larger leaves (coarse-textured), such as St. Augustinegrass. Turfgrasses under environmental stress, such as drought, heat, or shade, should be mowed at the higher recommended height for that grass. Table 1 outlines the suggested mowing heights for each turfgrass species used for Alabama home lawns.

Mowing Frequency

How often should a lawn be mowed? Mowing frequency should depend on the growth rate of the turfgrass plants, but it is often based on a service contract or when a convenient opportunity presents itself. The rate of turfgrass growth depends on the type of turfgrass (turfgrass species) in the lawn, soil fertility (especially nitrogen), and weather or environmental conditions.

Another factor in mowing frequency is the mowing height maintained (table 1). A good rule of thumb is to mow your lawn regularly and never remove or mow off more than one-third of the turfgrass height in any mowing event. For example, if you are maintaining your lawn at a mowing height of 2 inches, you should mow the lawn when or before the turfgrass reaches 3 inches in height. Also, by following this one-third rule of thumb, you will have fewer and smaller turfgrass clippings to deal with. No bagging is necessary. If the turfgrass becomes too tall between mowing, raise the mowing height and gradually reduce it with subsequent mowing until the recommended height is reached.

Type of Mower

Another essential factor in mowing is the type of mower used. Most homeowners mow their lawns with a rotary-type mower. Rotary mowers are the most popular because of their low cost, easy maneuverability, and simple maintenance. Most rotary mowers cannot give a quality cut when mowing at heights less than 1 inch. However, they are versatile and effective for turf mowing heights 1 inch and higher, mowing weeds, mulching turfgrass clippings, and general trimming.

Reel mowers are for highly maintained turfgrass, such as sports fields and surfaces, and are more often used by turf management professionals. These cut with a scissorlike action that can produce a clean, even cut. They are used on turfgrasses where mowing heights of 1 inch or lower are desired. Reel mowers require a smooth, level surface to obtain a quality cut. Using reel mowers on uneven surfaces will result in scalped areas and possible blade damage. They are best suited for fine-textured turfgrass like hybrid bermudagrasses and zoysiagrass.

The newest technology in mowing is the rapid evolution of autonomous or robotic mowers. These rotary mowers are generally battery powered, quiet, and engineered for continuous mowing, day or night, rain or shine. With conventional mowing, the grass is typically allowed to

grow several days before it is cut. With autonomous mowing, the mower is always mowing and removing only the tips of the grass. The lawn always appears just mowed.

Autonomous mowing may offer significant labor savings. Its physiological impact on grass plants is still under investigation. Removing less plant material may be less stressful (i.e., the continuous operation removes a small amount with each cut), resulting in enhanced turf rooting and better conditioning to withstand periodic stresses, such as drought, heat, pests, etc.

Regardless of the mower type chosen, the blades should be kept sharp. Sharpening might be needed several times per growing season, depending on the frequency of use, lawn type, and surface debris during mowing events. Dull mower blades tear leaves instead of cutting them, thus producing a ragged and brown leaf edge, reducing aboveground and belowground plant growth, and increasing mower fuel consumption. Sharp mower blades cut the turfgrass leaves cleanly, ensuring rapid healing and regrowth.

Previously, it was thought that turfgrass clippings must be removed from the lawn because they can cause thatch buildup. Recent research has shown that this is wrong. In fact, turfgrass clippings contain up to 58 percent of the nitrogen we need to apply to our lawns, so removing the clippings is equivalent to sweeping up almost one-half of the nitrogen fertilizer you would buy. In addition to containing about 4 percent nitrogen by volume, turfgrass clippings contain ½ to 1 percent phosphorus, 2 to 3 percent potassium, and smaller amounts of other essential plant nutrients. Therefore, turfgrass clippings should be returned, or recycled, to the lawn because these nutrients will return to the soil as the clippings decompose. This reinforces mowing with the one-third rule in mind.

However, turfgrass clippings should be removed if they form clumps on the lawn surface after mowing. These clumps of clippings block necessary sunlight from the turfgrass plants and can cause dead or thin lawn areas. Clumping occurs with infrequent or inconsistent mowing and when turfgrass plants are mowed when wet.

Fertilizing

Understanding the nutritional requirements of your lawn and the baseline soil nutrient levels is an important step in lawn maintenance. Fertilization is essential for the production of a good-quality turfgrass stand. However, applying more than the recommended amount of fertilizer or applying it at the wrong time can create problems, such as groundwater contamination. A well-planned and environmentally sound fertilization program considers several factors:

- Native soil fertility levels
- Amount and source of nutrients in the fertilizer
- Fertilizer application frequency
- Fertility requirements of the specific turfgrass species
- Time of fertilizer application

All plants require certain nutrients or elements for proper growth. There are 16 known essential elements required by turfgrasses for their growth. All of these essential elements except carbon, hydrogen, and oxygen are obtained from the soil and absorbed by turfgrass plant roots. Insufficient nutrients in the soil may limit turfgrass growth and the overall quality of the lawn. However, these essential elements can be added

to the soil through fertilizer applications. The elements that turfgrasses require in the greatest quantities are nitrogen, phosphorus, and potassium.

Nitrogen is probably the most important element you can apply to a lawn. This nutrient affects turfgrass plants in several ways, including color, density, leaf growth, root growth, tolerance to environmental stresses, susceptibility to pests, and recuperative potential of the lawn after pets, athletic play, environment, etc., have damaged it. A proper nitrogen fertility program should allow for a slow, steady growth rate of the turfgrass. Applying excessive amounts of nitrogen fertilizer leads to excessive leaf growth at the expense of root growth and may even cause a reduction in root mass. Fertilizing with high levels of nitrogen may increase the incidence of diseases and thatch accumulation and reduce cold tolerance, making the lawn more prone to winter damage.

Several factors influence the nitrogen requirement of your lawn, including the turfgrass species present in the lawn, the soil type, and the area's environmental conditions. The timing of lawn fertilization is also important. Fertilizing warm-season turfgrasses too early in the spring can cause a reduction in root mass as the turfgrass plants emerge out of winter dormancy, and fertilizing them too late in the fall may increase the chance of winter injury. Fertilize cool-season turfgrasses during the early spring and fall because fertilizing them with nitrogen during the summer increases the chances of disease and heat stress problems (table 2).

Phosphorus is also needed for turfgrass growth. It is required in smaller amounts than nitrogen or potassium and plays a critical role in establishing a new lawn. On soils that are low in phosphorus, applying this element will increase the growth rate during the establishment of turfgrasses. Once turfgrasses are mature, they require very small amounts of phosphorus. Established, healthy lawns only need phosphorus fertilizer if a soil test recommends it.

Potassium is almost as important an element as nitrogen to turfgrass growth. Potassium affects how well a turfgrass plant can withstand environmental and mechanical stresses. When potassium levels are adequate, most turfgrasses will better tolerate cold, drought, and heat stresses. Soil sampling and testing should be performed to determine the amounts of phosphorous and potassium in the soil and how much of each needs to be applied to reach the recommended level.

Soil Testing

The best philosophy for a successful turfgrass fertilization program is to have an annual plan. The basis of that plan should be soil sampling and testing to determine the soil nutrient levels and then test again every 2 to 3 years to ensure that you maintain the proper levels.

Proper soil sampling ensures representative soil test results and proper fertilizer and lime recommendations. Soil test results supply a wealth of information concerning the nutritional status of your soil and may aid in detecting potential problems that could limit turfgrass growth and lawn quality. A typical soil test report will supply information about soil pH, lime requirements, and soil nutrient levels for phosphorus, potassium, calcium, magnesium, manganese, and zinc. See Extension publications "Home Soil Testing: Taking a Sample" and "Home Soil Testing: Using the Soil Test Report" available at www.aces.edu.

A soil test cannot reliably evaluate the nitrogen requirements for a lawn, as it is rapidly depleted. Therefore, the soil test report will not contain a nitrogen recommendation. The type of turfgrass in the lawn will determine the amount of nitrogen that should be applied (table 2). The recommended maximum amount grows a high-quality lawn while protecting the environment. The standard recommended amount maintains a healthy, good-quality lawn. Contact your county Extension office if you have questions regarding the soil test report or recommendations.

Fertilizer Analysis

Fertilizers are often recommended or described by their analysis—three nutrient percentages or numbers, such as 10-10-10 or 16-4-8. These three numbers represent the percentage by weight of nitrogen (N), phosphorus (P_2O_5), and potassium (K_2O). For example, in a bag of 16-4-8 fertilizer, nitrogen makes up 16 percent of the total weight, phosphorus makes up 4 percent, and potassium accounts for 8 percent. The remaining weight of the fertilizer (total = 100 percent) is comprised of secondary nutrients, such as calcium, iron, magnesium, manganese, copper, sulfur, molybdenum, and zinc. The remaining weight may also include filler materials such as clay or corn cob. A fertilizer that contains all three nutrients (N-P-K) is considered a complete fertilizer.

Fertilizer analysis is also referred to in terms of the nutrient ratio. If the fertilizer analysis is 16-4-8, the fertilizer ratio is 4:1:2; similarly, a 10-10-10 fertilizer has a 1:1:1 ratio. Mature lawns generally require equivalent levels of nitrogen and potassium, especially if the soil type is of sandy texture and needs little to no additional phosphorus. Therefore, fertilizers with ratios of 1:0:1 or 4:0:3 are commonly seen in recommendations for mature lawns.

Nitrogen Sources

The nitrogen source in a fertilizer influences its immediate or delayed availability to the plants and their growth response. There are two basic categories of nitrogen sources: (1) fast or quick-release and (2) slow or controlled release. Fast-release nitrogen sources are water soluble and can be readily used by plants; however, these can cause foliar burn if not applied properly.

These fast-release nitrogen sources are also susceptible to leaching and have a short availability or nitrogen release period. Fast-release nitrogen sources include ammonium nitrate, ammonium sulfate, and urea. Slow

Table 2. Recommended Fertilization Schedule for Lawn Turfgrasses in Alabama

Turfgrass	Standard/ Maximum for Healthy Lawn	Total pounds Nitrogen/ year	*Pounds of nitrogen per month, per 1,000 square feet											
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Common & Hybrid Bermudagrass	Standard	3					1		1	1				
Common & Hybrid Bermudagrass	Maximum	5					1	1	1	1	1			
Centipedegrass	Standard	1					½			½				
Centipedegrass	Maximum	2					½	½	½	½				
St. Augustinegrass	Standard	2					1		1					
St. Augustinegrass	Maximum	4				1	1		1	1				
Tall Fescue	Standard	3		1		1					1			
Tall Fescue	Maximum	4		1	1						1		1	
Zoysiagrass	Standard	2					1		1					
Zoysiagrass	Maximum	3					1		1	1				

*Pounds of nitrogen, per month, per 1,000 square feet. A fertilizer calculator is available through Auburn University's Soil Testing Lab, https://aaes.auburn.edu/soil-forage-water-testing-lab/ .

or controlled-release nitrogen sources release nitrogen over an extended and, therefore, can be applied at higher application rates on a less frequent basis than fast-release nitrogen sources.

When properly applied, these slow-release nitrogen sources reduce the chance of foliar burn to the turfgrass plants. Foliar burning occurs due to the fertilizer acting like a salt and extracting moisture from plants. To minimize the risk of foliar burn, apply all fertilizers to dry turfgrass plants, and water or irrigate the lawn immediately after fertilizing. Slow-release nitrogen sources are also preferred because they are less susceptible to leaching and runoff, especially for sandy soils and lawns near surface water (lakes, streams, rivers). Slow-release nitrogen sources include sulfur-coated urea (SCU), polymer-coated urea (PCU), isobutylidene diurea (IBDU), urea-formaldehyde (UF), methylene urea (MU), and natural organics such as manure. Read more about protecting water quality, water sheds, and Smart Yards on the Alabama Extension website, www.aces.edu.

Fertilization Scheduling

The application timing for nitrogen fertilizers is also important. Because they have different growth cycles, cool- and warm-season turfgrasses need to be fertilized at different times. Nitrogen fertilizers are used to simulate leaf growth; therefore, they should be applied only during periods of optimum growth for the turfgrass. For example, fertilize warm-season turfgrasses during the summer when they grow most rapidly. In contrast, fertilize cool-season turfgrasses during the early spring and fall. Table 2 shows the recommended fertilization schedule for lawn turfgrasses in Alabama.

To calculate the amount of a particular fertilizer needed to supply 1 pound of actual nitrogen per 1,000 square feet, you must read and understand the fertilizer analysis on the product. Because nitrogen is the first of the three numbers in a fertilizer analysis, it will be used to make the necessary calculations. To make this calculation, multiply bag's weight by the percentage of nitrogen in the fertilizer. This will give the number of pounds of actual nitrogen in that fertilizer bag.

Example:

- The fertilizer product bag weighs 50 pounds
- The fertilizer analysis is 16-4-8 (16 percent nitrogen)
- 50 pounds product x 0.16 = 8 pounds of nitrogen
- Answer: There are 8 pounds of nitrogen in this 50-pound bag.

If you have 8,000 square feet of lawn to fertilize (1 pound N/1,000 square feet), you will use the entire 50-pound bag, evenly spread over this area. However, a second calculation is needed to determine how much product to use per 1,000 square feet if your lawn is larger or smaller.

Example:

- 50 pounds product ÷ 8 pounds of total nitrogen = 6.25 pounds product/1,000 square feet

Fertilizers marketed specifically for turfgrass will often describe how many square feet the bag will cover. This is always based on a rate of 1 pound N per 1000 square feet. If the product's label says it covers 10,000 square feet, it contains 10 pounds of nitrogen.

It is essential to spread the fertilizer product evenly over the total lawn area. Apply one-half of the total fertilizer rate in one direction and then apply the remaining half perpendicular to the direction of the first application. This uniform application reduces the chances of skipping a section of the lawn. Always sweep or blow fertilizer products back into the lawn or other planted areas if they land on solid surfaces. This reduces runoff contaminants.

Warm-season turfgrass lawns overseeded with a cool-season turfgrass, like perennial ryegrass for winter color, can benefit from applying low amounts of nitrogen fertilizer during the winter months. Between October and March, a maximum of 3 pounds of nitrogen per 1,000 square feet total can be applied for the overseeded cool-season turfgrass. Apply between ¼ and ½ pounds of nitrogen per 1,000 square feet per month.

Additional Maintenance Practices

Besides mowing and fertilizing, additional maintenance practices can take a basic, good-quality lawn to a higher level. These additional maintenance practices include supplemental irrigating, monitoring soil compaction and thatch, topdressing, and regular pest monitoring.

Supplemental Irrigating or Watering

Turfgrasses, like all plants, require water for growth and survival. Due to the variable rainfall patterns and rainfall distribution in Alabama, it is not uncommon to experience seasonal droughts during the year. In these drought periods, a homeowner can (1) apply supplemental water to the lawn to keep the turfgrass green or (2) not water the lawn and allow the turfgrass to turn brown, going into a state of summer dormancy. If the lawn is a warm-season turfgrass, such as bermudagrass, centipedegrass, St. Augustinegrass, or zoysiagrass, choosing not to water the lawn would not result in the death or loss of the lawn. These turfgrasses can go dormant under such stress, and when more favorable growing conditions occur, recover, and prevail. However, if the lawn has cool-season turfgrass, such as tall fescue, and the decision is not to water, then the

result may be significant injury or death of the lawn. If the tall fescue is well established and has a deep root system, it may be able to go dormant during the stress period without serious injury. Recovery time and potential lawn injury are based on the root depth of the lawn before this dormancy and the turfgrass species.

The most efficient way to irrigate a lawn is to apply water only when the lawn starts to show signs of drought stress from the lack of moisture. One of the first signs of drought stress is that the color of the turfgrass turns from green to a bluish gray to even a white cast. Another indication of drought stress is the appearance of footprints on the turfgrass. If you walk across your lawn late in the afternoon and see that your steps have left footprints, the lawn is likely dehydrated. When your feet compress the turfgrass leaf blades, the plant tissues' low water levels prevent the leaf blades from springing back up after being pushed down. If the footprints remain for an extended time, water the lawn to prevent the turfgrass from turning brown and becoming dormant. The visual condition of the turfgrass leaves can also be used to evaluate drought stress. Turfgrass leaves respond to drought stress by folding, rolling, and possibly wilting.

Another means of evaluating drought stress on a lawn is the screwdriver test. Push a screwdriver down through the lawn and into the soil to do this test. If the soil is very dry, pushing the screwdriver down into the ground will be difficult. Use this screwdriver test to confirm the results of the other visual indicators to help you determine when a lawn needs supplemental water.

If your lawn exhibits the visual symptoms of drought stress, apply about ½ to 1 inch of water, which will moisten the soil to a depth of 4 to 6 inches, depending on the soil type and degree of soil compaction. Scatter a few shallow empty cans, such as from canned chicken or tuna, around the irrigated area to measure the length

of time your system takes to apply ½ to 1 inch of water. After watering, use the screwdriver test to determine the depth of water penetration. These tips will help determine how much water should be applied the next time it is needed.

When watering, avoid applying water to the point of runoff. Allow the water to soak into the lawn and soil. If needed, apply less water and allow it to soak in before continuing the watering process. Once you have watered the lawn, do not water again until you observe similar drought stress symptoms. Never water a lawn every day except during the establishment phase or renovation. Frequent watering only encourages shallow rooting of the turfgrass plants, making the lawn less drought tolerant. The best time of the day to irrigate or water is early in the morning because it minimizes the potential for water loss through evaporation. In addition, watering in the morning prevents the conditions that promote fungal disease occurrence.

Reducing Soil Compaction

Very few homeowners understand soil compaction or the hazards it presents. Other culprits—diseases, insects, improper watering, lack of fertilizer—are often blamed for a lawn's decline when the real problem could be compaction. The problem starts when the soil particles in the top few inches are compressed from traffic and overuse, reducing the air space between them and thus impeding the flow of air, nutrients, and water to the turfgrass roots. This causes stress to the turfgrass, making the lawn less able to compete with weeds and recover from damage and stress. In time, a compacted lawn will require some form of renovation. Soil compaction can also contribute to other lawn problems, such as thatch accumulation and weed invasion.

If you conclude that you have a soil compaction problem with your lawn, the solution is straightforward—you need to initiate soil aeration as part of your lawn maintenance program. The most effective type of soil aeration is called *core aerification*, in which cores of soil are removed mechanically, leaving holes in the lawn. This aerification procedure loosens compacted soil and increases water flow into the soil. Other benefits include enhancing the oxygen levels in the soil and stimulating new turfgrass growth.

Soil aeration to a home lawn is generally used to correct a soil compaction problem rather than as a routine maintenance practice. Highly maintained turfgrass, such as for athletic uses, might plan for soil aeration every year as a routine maintenance practice. The best time to aerify a lawn is when the turfgrass plants are actively growing to allow for their rapid recovery. The best time to aerify a warm-season turfgrass lawn is during the summer. The best time to aerify cool-season turfgrass lawns is early spring or fall.

Thatch Control

Thatch is defined as a layer of living and dead turfgrass plant parts located between the soil surface and the green vegetation of the turfgrass. Thatch consists of a loosely interwoven collection of this living and dead plant matter that can impart a sponginess when walking. Thatch originates from old turfgrass plant stems, stolons (aboveground stems), rhizomes (underground stems), and roots that the plant sheds during its growth and development of new plant parts. This sloughed off plant matter collects at the soil surface and gradually decomposes. A thatch layer develops when this plant matter accumulates faster than it decomposes.

Thatch is not always present with all turfgrasses or lawns. Certain turfgrass species have a greater propensity to produce thatch than other turfgrasses. Turfgrass species that are vigorous in growth rate, such as bermudagrasses, have a greater tendency to produce thatch than slower-growing turfgrasses. However, slower-growing turfgrass species, such as zoysiagrass, may also produce thatch because their plant tissues do not decompose quickly.

Lawn maintenance practices can also contribute to the development and accumulation of thatch. If lawns are overfertilized, overwatered, or mowed too infrequently or too high, thatch accumulation may become a problem. Excessive thatch (more than 1 inch) can create many problems for the lawn. For example, the turfgrass plants may begin to grow within the thatch layer instead of the soil, disease and insect problems may increase, and air and water movement may be restricted. The sponginess associated with a thatch layer can cause the mower to sink into the lawn and cause the turfgrass to be scalped when mowed. Excessive thatch may also increase winter injury. The rate of thatch accumulation can be reduced and somewhat controlled by reducing the nitrogen fertility applied, watering properly (deep not shallow), following the correct mowing schedule, and applying annual topdressings of either sand or soil (or both) to the lawn.

Thatch can be physically removed using a hand rake or various types of mechanical equipment. The two most common types of mechanical equipment used are core aerifiers and vertical mowers. These mechanical operations are sometimes referred to as dethatching. These mechanical dethatching treatments work by

physically removing as much of the thatch layer as possible. After the thatch debris has been removed, collect and remove it from the lawn. Apply a light topdressing of either sand or soil (or both) to the lawn. This will further aid in the decomposition of the thatch layer.

As with soil aerification, the best time of year to dethatch a lawn is when the turfgrass is actively growing. This will allow the turfgrass to recover quickly from this physical stress.

Topdressing

Topdressing is a turfgrass maintenance practice used to help decompose thatch, reduce surface compaction, improve the soil, and smooth the lawn surface. Topdressing involves spreading a thin layer of topsoil or other soil mixture (sand) on the soil surface. The topdressing material should be of similar composition and texture as the underlying native soil. Topdressing rates may range from ½ to 2 cubic yards per 1,000 square feet of lawn. These amounts will produce a layer from ⅛ to ⅝ inch in depth. After applying the topdressing, work it into the lawn by brushing, dragging, or raking it.

Pest Control

Diseases, insects, and weeds are the primary pests of home lawns. Chemical controls for most of these pests are not necessary when recommended maintenance has been applied, but chemical control products are available at many retail outlets. If you follow the proper mowing, fertilization, watering, soil compaction, and recommendations outlined here, you will have a healthy, vigorous turfgrass capable of withstanding most pest problems.

Remember the Alabama Master Gardener Helpline: (877) 252-4769

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For more information, contact your county Extension office. Visit www.aces.edu/directory.

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