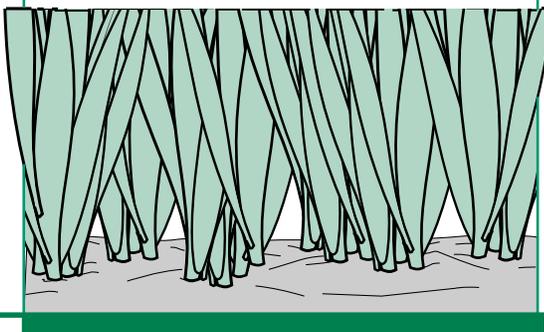


MOWING YOUR LAWN

Turfgrass



Mowing is a fundamental practice in maintaining a good lawn. Correct mowing produces a neat, even, well-groomed appearance that is a source of personal pride and satisfaction. A lawn’s density, vigor, water consumption, weed infestation and resistance to weather stress is largely affected by how it is mowed.

The effectiveness of all other lawn maintenance—fertilizing, watering and weed control—depends on proper mowing. But there is more to proper mowing than just cutting the grass.

Important Mowing Considerations

- Mowing Height
- Mowing Frequency
- Blade Sharpness
- Clippings
- Mowing Pattern
- Mower Operation
- Mower Selection
- Mowing Safety

Mowing Height

Mowing at the proper height is critical to the development of a healthy lawn. The correct mowing height is primarily determined by the species of grass. The various species have varying growth habits requiring different mowing heights. Be sure the mower is set at the right height for the species of grass you are mowing.

Cool-season grasses—bluegrass, tall fescue and perennial ryegrass— generally are mowed higher than warm-season grasses because of their erect growth habit. Because hot weather is stressful for cool-season grasses, they should be cut at the higher end of their tolerance range (Table 1) during the summer. The additional height helps insulate the ground against heat, furnishes more food-producing area, and encourages deeper penetration of roots. Stay within the tolerance range, however, or the grass will become coarse, stemmy and may lodge.

Mowing cool-season grasses too low during hot weather places the turf under stress, requiring excessive watering. Repeated short, infrequent mowing produces thin, weak turf which is highly susceptible to weed invasion. Avoid sudden and drastic lowering of the cutting height (scalping) as this seriously diminishes root growth.

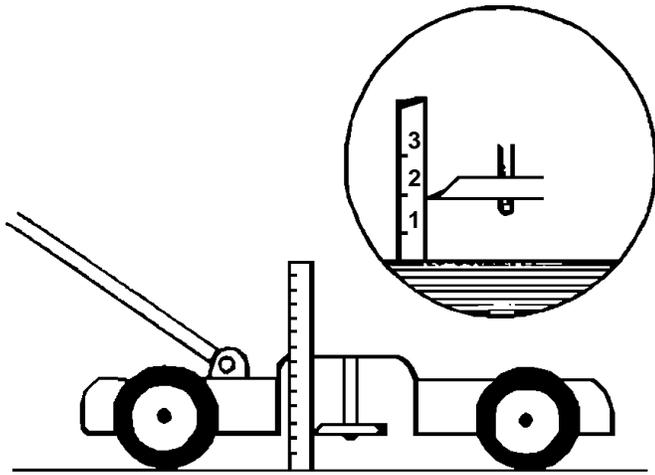
Mowing heights for warm-season grasses, particularly bermudagrass and zoysiagrass, generally are shorter than for cool-season grasses because their leaves are produced on runners (stolons) which grow close to the ground. Bermudagrass and zoysiagrass build up excessive thatch when mowed higher than recommended. There is a strong correlation between

Table 1. Recommended Mowing Heights for Home Lawns

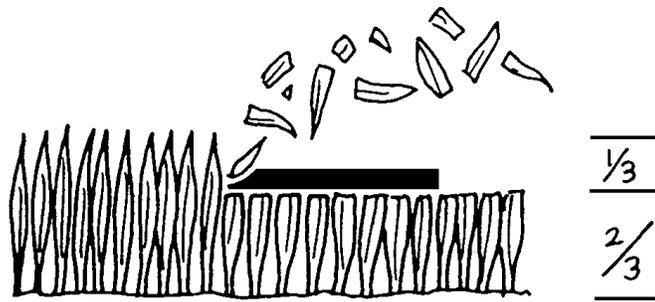
Bermudagrass	1–2 inches
Bluegrass	2–3 inches
Buffalograss	2–3 inches
Perennial ryegrass	2–3 inches
Tall fescue	2½–3½ inches
Zoysiagrass	1–2 inches

Ranking of Tolerance to Short Mowing

Bermudagrass	Best
Zoysiagrass	
Perennial ryegrass	Least
Buffalograss	
Kentucky bluegrass	
Tall fescue	



Check the cutting height on a sidewalk or drive.



Don't cut off more than one-third of the grass.

mowing height and thatch accumulation. Turfgrasses with a thick layer of thatch (greater than one-half inch) are less drought resistant.

Mowing Frequency

Along with mowing at the correct height, mowing with adequate frequency is crucial to producing a high quality, attractive lawn. The "one-third rule" is a guideline for deciding when to mow. Very simply, this rule says to never remove more than one-third of the canopy height at any one mowing. Failing to follow the one-third rule results in the removal of excessive leaf tissue, shocking the grass. The result will be a thin, stemmy turf with a poor root system. Further, mowing excessively tall grass is hard on the mower, takes more time, and produces an abundance of clippings that must be removed.

Following the one-third rule means that you will not mow on a set time schedule. Mowing frequency will be determined by the growth rate of the grass, which varies with seasonal changes in the weather and with the amount of water and fertilizer applied. At certain times of the year, you may need to mow more often than once per week, and at other times, less. Additionally, the height of cut has a dramatic effect on mowing frequency. The shorter a lawn is maintained, the more often it must be mowed to follow the one-third rule.

Use the following table as a guide in determining when to mow for your mowing height. If mowing is delayed because of weather conditions or vacations, raise the mowing height for the first mowing and gradually decrease the height in subsequent mowings until the original height is attained.

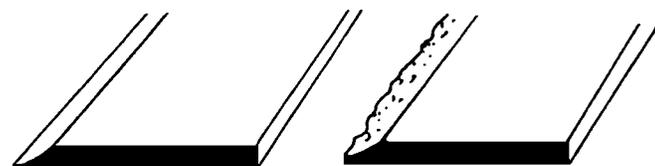
Following the One-Third Rule

Your Mowing height	Mow when grass gets this tall	Amount of grass removed (one-third)
1"	1½"	½"
1½"	2¼"	¾"
2"	3"	1"
2½"	3¾"	1¼"
3"	4½"	1½"
3½"	5¼"	1¾"
4"	6"	2"

Keep the Mower Blade Sharp

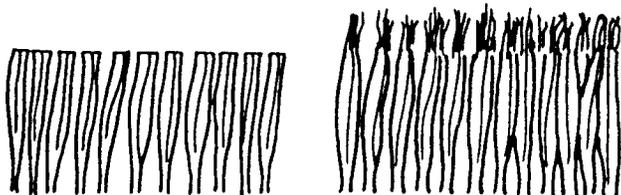
A sharp blade is absolutely critical to a quality mowing job. Dull blades beat and tear the grass leaving frayed leaf tips which give a whitish cast to the lawn. A sharp blade cuts cleanly and easily, requiring less fuel. Sharp blades are especially important for tough-bladed grasses such as zoysiagrass, ryegrass and tall fescue.

Inspect the blade after each mowing checking for sharpness and for the presence of nicks. The frequency with which the blade must be sharpened is obviously affected by the amount of mowing you do, but also by



Sharp Mower Blade

Dull Mower Blade



Sharp blades cut cleaner, quicker, and require less energy.

the grass species and by the presence of debris (e.g., rocks, sticks, etc.) in the lawn. It is a good idea to have an extra sharp blade on hand.

What About Clippings?

If you follow the one-third rule, there is no need to remove clippings. The short clippings will quickly shrivel and filter down into the turfgrass canopy. Excess clippings from infrequent mowing exclude sunlight and favor disease development.

Mulching mowers are another way to deal with clippings. Mulching mowers cut the grass and then recut the clippings. This makes the clippings smaller and lets them filter more easily into the turf. However, mulching mowers do not work well on tall or wet grass. You still must follow the one-third rule for a healthy lawn.

A common misconception is that leaving clippings on the lawn contributes to thatch formation. In fact, clippings do not contribute to thatch because they are 85 to 90 percent water; thus, they shrink and decompose readily. Additionally, clippings are a source of nutrients to the lawn. Where clippings are routinely removed, annual nitrogen fertilizer applications must be increased by about 25 percent to provide the same amount of nutrient.

Mowing Wet Grass

Although it is best to mow when the grass is dry, during rainy weather it is better to mow wet grass than to let it get too tall. Dry grass is easier to mow and doesn't stick to the mower as badly. Additionally, wet clippings stain buildings, concrete and clothing and clump together on the lawn.

Mowing New Lawns

Newly planted Kentucky bluegrass, tall fescue and perennial ryegrass lawns should be mowed at 2 inches as soon as the grass becomes 3 inches tall. It does not hurt new grass to mow it unless the mower blade is dull. In fact, just as it is with established lawns, it is harmful to let the new grass get tall and then cut it back.

New zoysiagrass, bermudagrass and buffalograss lawns should be mowed at 1 to 1½ inches as soon as the height reaches 1½ to 2 inches. The idea is to make it spread rather than grow upright.

New grass is quite succulent and tends to stick to the mower for the first few mowings. Try to mow on a warm, dry afternoon or evening. Avoid watering a day or two before mowing. Mow frequently to encourage the grass to spread and fill in.

Be Careful When Mowing Around Trees

Bumping young and thin-barked trees with a lawnmower causes serious injury, especially if the tree is young or has thin bark. What seems like only a minor bruise can later enlarge into a deep wound

destroying the cambium (growth) tissue just under the bark. Repeated bumping each time the lawn is mowed may result in eventual death of the tree. Nylon cord trimmers also can injure young and thin-barked trees. Tree injury can be prevented by maintaining a cultivated or mulched area 2 to 3 feet in diameter around the trunk, or by hand-trimming around trees with a pair of grass shears.

Mowing Pattern

It is a good idea to alternate mowing direction from one mowing to the next so that soil compaction and wear from the mower wheels will be more uniformly distributed over the lawn. Grass blades also tend to lean in the direction of mowing; this can be prevented by mowing in different directions.

Establish several mowing patterns that result in as few turns as possible. This not only speeds up mowing time, but reduces damage to the turf from the turning mower wheels.

Mower Operation

Operate the mower at a safe speed (3 to 5 mph). This will cut the grass cleanly and thoroughly. Excessive speed leads to a poor cut. Slow down when making sharp turns to avoid damage to the turf. Make wide, gradual turns when possible.

Keep the mower properly adjusted and watch for loose or broken parts. Check the engine oil level each time you mow. Change the oil and grease wheels, bearings, chains and shafts according to manufacturer's recommendations. Air cleaners need frequent cleaning, especially when mowing in dusty conditions. Become thoroughly familiar with your mower by studying the operator's manual.

Clean dirt and grass from the mower housing immediately after mowing or it will become dry and hard to remove—a putty knife is handy for this purpose. Also, wash off the mower, but do not get water on a hot engine.

Mower Selection

Select a mower large enough to mow the lawn in a reasonable amount of time, but small enough to be maneuverable. Be sure the mowing height is adjustable within the range recommended for your grass. Select an engine with sufficient power and check for availability of parts and service.

Two basic types of mowers are used for lawns—the reel mower and the rotary mower. Both types have certain advantages and disadvantages. The reel mower produces a smooth cut, runs quietly, is more energy efficient, usually doesn't scalp on uneven ground and doesn't throw objects. They are especially good for close-cut turf (1 inch or less). Reel mowers are generally not suited for mowing heights above 1½ inches. On the negative side, reel mowers are relatively expensive.

Rotary mowers are relatively inexpensive and are easy to sharpen and maintain. They are not suitable for mowing heights below 1½ inches. They are noisy and require more fuel than reel mowers. They also may scalp close-cut turf on uneven ground.

Safety

Power mowers can be dangerous and can cause serious injury if not used properly. Become familiar with the equipment, use good judgement and be safety minded.

- Read the operator's manual for safety instructions.
- Pick up all debris before each mowing.
- Keep children and pets a safe distance away from mowers.

- Keep feet and hands away from blades when starting and running engine.
- Wear sturdy shoes and long pants.
- Operate mower at a safe speed of travel.
- Always push mower rather than pull it toward you.
- Watch your footing on steep slopes and wet grass.
- Don't leave a running engine unattended.
- Refuel the engine only when it is shut off and cool.
- Wear goggles when operating cord trimmers and power edgers.
- Stop engine and disconnect spark plug wire before working on engine or blade.
- Keep the mower in good repair and adjustment.

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Turfgrass Specialist

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