

Lawn Mowing

Mowing is one of the most important cultural practices performed in lawn maintenance. Regardless of whether the lawn is fertilized, irrigated, or receives applications of control products, proper mowing practices are essential if a high quality lawn is to develop. Properly mowed lawns will have fewer weed populations, better moisture stress tolerance, and generally better quality than lawns not properly mowed.

Cutting Heights

Mowing height is probably the most important parameter of mowing. Turf grasses, like other plants, must manufacture sugars through photosynthesis in the leaves if they are collectively to develop into a high quality lawn. Turf grasses mowed at low heights have limited leaf area to sustain photosynthesis rates necessary to maintain good plant vigor.

In addition to leaf area, a direct relationship exists between the height of the turf grass and the depth and total mass of the root system. Research with Kentucky bluegrass has shown root growth was more than twice as great when the grass was mowed at a 2-inch height verses a 0.75-inch height. In general, a lawn mowed too short will have a shallow root system with little total root mass. The impact of shallow, weak root systems is most apparent during summer stress periods. When soil moisture becomes limiting, the closely mowed lawns usually exhibit stress first and the loss of turf grass plants is more likely. Higher mowing heights during the summer period will keep soil temperatures cooler, preserve soil moisture, and help maintain turf grass quality.

Recommended mowing heights of cool season turf grasses cultured in Ohio include:

Turf Grass Species	Spring and Fall	Summer Stress Periods
Kentucky bluegrass	2.0 - 2.5	2.5 - 3.0
Perennial ryegrass	2.0 - 2.5	2.5 - 3.0
Fine Fescues	2.0 - 2.5	2.5 - 3.0
Tall Fescue	2.5 - 3.0	2.5 - 3.0

Turf grass mowed at the recommended height will have deeper, stronger root systems. Mowing height can play an important role in prevention of lawn weed establishment. Research has shown higher mowing heights result in fewer weeds per unit area. This is due to higher grass providing more shading and competition to the weed seedlings during the initial establishment phases.

Mowing Frequency

The lawn should be mowed frequently enough so that no more than 1/3 of the leaf blade length is removed during any one mowing. For example, if Kentucky bluegrass is normally mowed at 2

inches, the height should not be allowed to grow beyond 3 inches before it is mowed back to 2 inches. If 1 inch is mowed, $\frac{1}{3}$ of the total blade length is removed and the $\frac{1}{3}$ mowing rule has been followed. During periods of active turf grass growth, many lawns will require mowing more than once per week if this recommendation is to be followed. Proper mowing frequency is key to successful implementation of the "Don't Bag It" clipping return program. If extended wet periods prevent timely mowing and the turf grass gets excessively tall, move the mower height adjustment to the highest setting and mow the lawn. Once the clippings dry, lower the height adjustment to the desired height and mow the lawn a second time in a different direction.

Additional Mowing Considerations

Mowing Directions

The direction of mowing should be altered every 1 to 2 mowings. Mowing at right angles (90°) to the previous direction will help prevent the grass from repeatedly being pushed in one direction and laying over, an important consideration at high mowing heights.

Mower Maintenance

All mowing equipment should be kept in good working condition. Having the mower serviced prior to the heavy spring mowing period will help ensure routine, maintenance-free mowing. Mower blades should be sharpened each spring and as needed during the season. A dull mower blade frays the ends of blades and results in brown tips which are unsightly and indicate damaged turf grass.

Mow When Dry

Turf grass should be mowed when it is dry. Wet grass is more difficult to cut and has the tendency to clog under rotary mowers. Mowing should not, however, be delayed for long periods of time because the grass is wet.

Fall Mowing Practices

During the fall, mowing should continue as long as the turf grass is actively growing. If the maintenance height is 2.5 inches during the fall, it is permissible to lower the height to 2 inches during the last 1 to 2 mowings of the year. A lower mowing height going into the winter is important if the lawn is in a region susceptible to outbreaks of winter diseases.

Clipping Return

Turf grass clippings contain measurable amounts of nitrogen, phosphorus and potassium. Research has shown when clippings are removed, 20 to 25% more fertilizer was necessary to maintain comparable color and quality as areas where clippings were returned. Contrary to popular belief, turf grass clippings do not contribute to thatch accumulation if proper mowing practices are followed.

Source: OSU Ext., William E. Pound, John R. Street