Mowing practices

Mowing is the most important cultural practice in determining turf quality and performance on golf courses. There are three important aspects of mowing to consider: mowing height, mowing frequency and mowing pattern.

Each grass species has an optimum mowing height tolerance range. Regular mowing within this tolerance range will help lead to high quality turf with the desired golf playing characteristics. As the mowing height is lowered toward the low end of the optimum tolerance range, the turf begins to endure more stress and management becomes much more intense. At mowing heights below the optimum mowing height tolerance range, the turf will begin to thin out and die. Plant begin to die because they need green leaves to conduct photosynthesis. Photosynthesis is the process used by all green plants to produce food or energy. At extremely low mowing heights, turfgrass plants do not have enough leaf area to carry on photosynthesis at the rate necessary to meet the energy needs of the plant. Without sufficient energy, the turfgrass plants will gradually die. Therefore, it is important turfgrasses be mowed at the highest acceptable height to encourage a healthy turf that will flourish and provide an excellent playing surface.

Mowing frequency is the number of times per week a green, tee, fairway or rough is mowed. There is a general rule of thumb that states no more than one-third of the leaf area should be removed in a single mowing. An example of this concept is a rough that is mowed at two inches in height should be allowed to grow no higher than three inches before being mowed. When three-inch tall turf is mowed to the desired two-inch height, one-inch of leaf area or in this case, one-third of the total leaf area, has been removed. By following the one-third rule, the turf does not undergo a physiological shock when mowed.

The shorter the desired mowing height, the more frequently the turf must be mowed. This is because very closely mown turf regrows the lost leaf area rapidly. Also, closely mown turf needs to be mowed several times per week or daily during the growing season to provide excellent playing surfaces for golfers.

Mowing pattern or mowing direction is another important aspect of mowing. Golf course superintendents alter mowing direction regularly to prevent the grass from laying over rather than being cut. Grass that is always mowed in the same direction will tend to lay over. This results in tall, unmowed grass and unacceptable playing conditions.

The light and dark alternating stripes that can be seen on a green, tee or fairway indicate the mowing pattern or mowing direction. The mower causes the grass to lay all in one direction. When the grass in the adjacent strip is mowed in the opposite direction, the grass blades in this strip will lay in the opposite direction of those in the strip next to it. Light striking these strips will be reflected differently creating light and dark striping in the grass.