



# TURF AERATION

## Beautiful, Healthy Turf

Turf is an integral component of common area landscape. Its aesthetic qualities and value as a recreation surface make it a desirable part of many communities. Beautiful, healthy turf is always the goal in any maintenance plan, and this goal can only be attained with an intelligent approach to horticultural practices. Turf areas that are utilized frequently often suffer from soil compaction. Prolonged physical compaction of the soil results in a hard surface that does not allow efficient water penetration, oxygen absorption by the roots and movement of nutrients from the surface into the root system, which are needed for healthy turf. The effects of compaction can be mitigated by aeration, a valuable but often overlooked, horticultural practice that is a very effective tool for maintaining healthy turf.

## Aeration Methods

The aeration process is achieved by different methods; all of them involve creating holes (3 to 6 inches deep) in the turf soil. One common method of aeration involves forcing a solid tine into the soil through the use of gravity (weight), hydraulic down-pressure or vibration. This is a fast, clean process in that no soil cores are removed and litter the turf. Another method of aeration involves driving a hollow core tine into the soil and removing a small cylindrical-



shaped soil “plug”. These plugs are left on the turf surface and are broken up by subsequent mowing. Golf course greens are aerated utilizing this method several times each summer.

Prior to aeration, common area soil samples are collected and analyzed. Laboratory findings may indicate that soil amendments such as nitrogen, sulfur and/or gypsum are needed to address deficiencies. The best time to apply soil amendments is immediately after aeration while the holes are fresh. Amendments fill the holes and are quickly absorbed and distributed to the turf’s root zone. Through aeration, water and oxygen penetrate the soil and roots and promote healthy turf. At home, apply a turf fertilizer after aeration to achieve the same nutrient balance in your soil.

## Did You Know?

Compacted soils offer an ideal environment for a fungus known as Fairy Ring.

