

Aeration is one of the turf maintenance operations that are the most dreaded. The golfers hate it because it disrupts their pleasant day at the golf course. The golf pro hates it because he is the one who hears most of the griping from the golfers. The club house manager hates it because the golfers coming into the clubhouse drag dirt and sand from the greens into the clubhouse on their shoes. The golf course superintendents hate it because aeration is a time consuming operation, it's labor intensive and hard on equipment.

Given the fact that everyone involved with the aeration process hates it, why does anyone bother doing it? The simple answer, of course, is because of the tremendous agronomic benefits derived from it. The aeration process removes some of the thatch and other objectionable organic matter that builds up in the top few inches of the soil. It relieves compaction and helps the plant produce a better root system that will help it survive stressful times during the season.

It would make sense to derive the maximum benefit from aeration and that is where Nature Safe comes into the picture. There is no other product that can produce the results that are achieved with Nature Safe when used in conjunction with aeration. The two products of choice on greens and tees are NS 8-3-5 or NS 5-6-6. Both formulations contain the highest levels of amino acids of any organic product available on the market. These readily digestible amino acids feed the beneficial soil microbes and cause their populations to explode. They have life cycles that last about 20 minutes, but they multiply so rapidly that a single bacterium can multiply to over 1,000 in less than three hours. As they die off, nutrients are released in forms that can be used by plants. However, while they are alive, they help to protect the roots of the plant from many soil borne pathogens such as fungi and nematodes that would normally be detrimental to root development.

From the standpoint of root development, the most important element provided by 5-6-6 or 8-3-5 is chelated calcium. Nature Safe 5-6-6 contains 7% calcium and 8-3-5 contains 3% calcium. All of the calcium in Nature Safe comes from bone meal which is released in a chelated form. That is, it is hooked to an amino acid that greatly increases the availability of the calcium to the plants without radically altering the pH of the soil. Readily available calcium in the soil will aid in the elongation and branching of the roots, which contributes to producing a bigger, more fibrous root mass that will be better able to make use of available nutrients and water.

Both 8-3-5 and 5-6-6 contain humic acid derived from the highest quality Leonardite humus, which helps to hold nutrients and water in sandy soil by increasing the cation exchange capacity without plugging up the pore spaces. In heavier soils, the humic acid helps soil particles bond together, creating a soft, crumbly soil rather than an adobe brick soil. Humic acids also have chelating properties that increases the availability and uptake of many nutrients including phosphorus.

When used during aeration, Nature Safe should be applied at the rate of 1 lb. N/1,000 sq. ft. It should be applied after the aeration cores have been harvested and prior to the application of top dressing material. When the top dressing is drag matted into the surface of the green, some of the fertilizer will be dragged into the holes and some will remain on the surface between the holes. Applying the fertilizer after the topdressing is applied will result in too much of it being moved into the holes and not enough of it remaining on the surface of the green.

The benefits derived from using Nature Safe at aeration will accrue for the entire season. The increased root mass will give the turf the ability to withstand the rigors of summer and result in better turf with less need for irrigation. The increased populations of beneficial microbes will help suppress many types of diseases for months to come and results in a lesser need for fungicides and other plant protectants. Healthier roots, less irrigation and fewer chemicals result in budgetary savings that will more than offset any additional costs for Nature Safe. When all is said and done, Nature Safe proves to be not only the most effective way to manage fine turf, but also the most cost effective.