

CHALKBOARD

TIPS FROM THE PROS

Aeration Can Reduce Player Injuries

By Harry O. Wilcox

Injuries to football players are being reduced as more coaches and turf managers realize the importance of maintenance, but there is no universal solution to poor athletic fields. The management of turfgrass for athletic fields varies from East to West, North to South, seashore to mountain, swamp to desert. In short, no two fields are alike, so how do you develop a turfgrass management for your specific fields?

When seeking advice, you must remember that the needs of sports turf are different from home lawns or utility turf. Many may offer advice, but you must locate someone who is familiar with your special needs and conditions. Even local gardeners and golf course superintendents who are experienced turf managers may not fully appreciate your needs.

Local extension agents are usually familiar with an assortment of local sports fields. Furthermore, they are able to get assistance from state extension specialists versed in sports turf. In many cases, they have developed specialized guidelines for sports turf in your area.

One area of prime importance is aeration, also called core cultivation. The soil of most athletic fields contains some clay or silt which favors soil compaction. The soil on sports areas should have a granular structure with space for both air and water. A healthy soil is well supplied with microorganisms. They help break down organic matter and make it suitable for plant use. Air is needed for microorganisms to thrive and reproduce.

The following story illustrates the value of aeration. While setting up a demonstration on a football field in Ridley Township, PA, I laid out 30-foot-wide plots across the field using the 10 yard lines as dividers. Four pounds of nitrogen per 1,000 square feet were applied to one section and no fertilizer was applied to another section. Half of both sections was aerified four times.

The results were amazing. Some of the aerified, unfertilized plots compared favorably with adjacent fertilized plots that had not been aerified. The plots that received both fertilization and aerification were definitely better than those receiving just fertilization or aerification.

Timing of maintenance operations can affect results. Aeration before fertilization or seeding will speed up response of the turf. Aerating helps water penetration and

Protecting Bench Turf



A bench tarp can protect natural turf underneath and preserve the appearance of the sideline areas of a football field.

The worst damage to a natural turf football field is not between the hash marks, it's on the sidelines in front of the bench. Pacing coaches and players can turn the turf in front of both benches into bare low spots in just a few games. Rain and irrigation will then turn these areas to mud.

One solution developed in the last two years and installed at a number of professional stadiums is the bench tarp. These are made of bonded polyester which allows both air and water to pass through. The fabric cushions the turf and distributes the weight of players and equipment on it.

The tarp can be placed over the bench area in wet or very hot weather without suffocating the turf. The idea is to install

it before the game and remove it afterward. It is best to remove the tarp no later than the morning after the game. Six-inch 60D nails with washers are used to anchor the tarp through grommets along its front edge. Tape is available to stick the tarp to the turf along its sides and back, but benches and equipment on the tarp usually keep it in place.

Emory Hunter of Warren's Turf, the manufacturer, recommends that no chemicals or pesticides be applied to the bench turf area within seven days of installation of the tarp. Hunter says the tarp should last several seasons and can be washed with soaps or detergents.

conserves costly irrigation water in dry times. The effect of lime can also be improved by aerification.

EDITOR'S NOTE: Harry Wilcox is a retired turfgrass extension specialist living in Wellsboro, PA. He has been a consultant to sports turf managers for more than 40 years.

White Grub Control

If you are following a regular program of fertilization, aeration, irrigation and mowing and still find thin, yellow turf, James Jarratt, extension entomologist for Mississippi State University, says the culprit might be white grubs. These are the larva of insects such as June beetles, Japanese beetles and the black turfgrass atenioid beetle. During late spring and late summer these larva feed on the roots of a wide variety of

turfgrasses. Severe infestations damage so many roots the grass can be easily lifted out of the ground.

Jarratt says you can make sure if white grubs are the problem by removing cores of soil three inches wide and four inches deep and examining them. Remove enough cores to make a total of one square foot of soil. If you find more than four grubs in one square foot of soil, Jarratt says you should apply pesticides.

The strategy is to get the pesticide in the rootzone when the grubs are nearest to the surface, generally late spring and late summer. Jarratt says pesticides must be irrigated into the soil with 1/2 to 1 inch of water if they are to be effective against white grubs. Effective pesticides include Diazinon, Dylol/Proxol, Oflanol and Sevin. Never apply pesticides without carefully reading the label and following label instructions exactly.