

High school field care a balancing act between traffic and turf management

With lots to do in little time, these sports turf managers keep the turf healthy despite many extra-curricular activities.

by Steve and Suz Trusty

■ In the busy world of high school athletic field management, optimum turf growth and field playability must coincide with the turf's natural cycles of growth and recovery.

Across the U.S., athletic field managers—at what must be some of the country's busiest high school fields—rely on a variety of sure-fire techniques to ready their fields for the crunch of competition.

Slit seed, overseed—Lonnie Berg's work as grounds supervisor for Hinsdale



Manatee High's football field is used for football and soccer play.

(Ill.) South High School includes the extra challenge of spring activities. Varsity and junior varsity soccer, graduation ceremonies and the senior picnic are concluded by June, but football practice starts the second week in August.

Soccer play leaves distinctive wear patterns around the goal areas and at the center line of the game field. New soil was spread onto the worn sections, and the field was aerated and topdressed.

"We used a combination of slit seeding and overseeding twice; once on June 12th and once toward the end of July," says Berg. "We used the same mix of Kentucky bluegrasses and perennial ryegrass as the established turf. Each seeding was followed by an application of starter fertilizer."

Fertilization was reduced during the summer, and irrigation was increased—to twice a week for eight hours—to combat the hot, dry conditions.

The turf is reel-mowed every other day at two inches. Fertilization rates are increased and the turf is mowed every day as the first game approaches.

"During the season, we'll overseed with a blend of perennial ryegrasses and let the player's cleat it in," says Berg. "Irrigation depends on natural rainfall and the game schedule. We don't want to stress the turf, or do anything to encourage compaction."

Deep rooting tactics—Bill Antons, superintendent of buildings and grounds for Boone (Iowa) schools, has to shore up

the turf after a similar number of activities, and then some. The stadium is the game field for junior high and high school play, and also must endure flag football games on Saturdays. Include varsity practice and band practice, and you have more traffic than any field should endure.

"We keep the bluegrass field at 3½ inches during the summer to encourage deep rooting and for protections from the heat," says Antons. "With this year's hot, dry summer, we mowed a little less and irrigated a little more."

Antons says he will lower the mowing height gradually, starting about the first of August, to hit the game height of 1½ inches by August 20th.

Four pounds of nitrogen are applied between June and November. An overseeding of Kentucky bluegrass varieties is made every spring.

Antons' crew applies liquid chelated iron a day or two before the first game of the season to get a deeper green color. The product is also used for a boost of color for special games.

"The only problem with all this," laughs Antons, "is the field looks so good on the night of that first game that everyone wants to use it."

Washington State's North Thurston School District has one field for three high schools, South Sound Stadium. That's a total of 12 teams: boys junior varsity and varsity football and girls junior varsity/var-



Paul Greenwell: four men mow 44 athletic fields. Aeration, topdressing, irrigation repairs and some fertilization is contracted.

sity soccer. On Saturdays, the Thurston City Youth Football Association uses the field for seventh- and eighth-grade games.

"It's an old-style sand-based field with a crown and sub-surface drainage," says grounds supervisor Matt Johns, "though the drainage system really isn't needed. The turf is a blend of three perennial ryegrass varieties. We run an above-ground piping system for irrigation. Though rains here are usually adequate, because of the intense summer heat this season, we've had to irrigate frequently."

Aeration—For fall soccer, Johns' crews aerate and top-dress at the end of the school year. Three or four passes with a core aerifier are done in July and in August; cores are left on the field.

Reseeding follows those aerations. "We'll overseed with the same three-variety blend at the end of the season, too, usually in late November or early December."

Johns says his fields' fertilization program is high in potassium—to encourage deeper turf rooting and boost hardiness—and low in phosphorus, because current levels are adequate.

"We're using a slow release nitrogen at the rate of 1 lb./1000 sq. ft. per month.

"We keep the turf at 2½ inches, alternating directions each mowing to keep the grass standing upright. Before the first game, we'll mow in two directions. During the season, we mow three or four days before a game and, if temperatures warrant it, we'll irrigate up to the day before the game."

Closed for the summer—Paul Greenwell is grounds coordinator for Georgia's Gwinnett County Public Schools. The county has 12 high schools and 44 athletic fields, 10 of which are stadium fields.

"This region has been growing so fast," says Greenwell, "the system's practice and stadium fields have been used for PE classes at some sites. To balance wear, we



Verticutting fields helps control thatch and compaction caused by high use and heavy athletes.



Trailers make equipment transport easy for large school systems with many fields.

Photos courtesy Paul Greenwell

move practice areas within the available field space and combine varsity and junior varsity practices. Ninth-grade practices are held on the outfields of the baseball fields. Still, a few of the schools must practice on their stadium field."

In what some might consider a bold move, the county closes football game fields during the summer for renovation.

This year, the fields were sprigged with Tifway 419 bermudagrass in mid-June. "We generally mow three times a week, vacuuming at each mowing, and keep the turf at 1¼ inches," explains Greenwell. "The pre-game mowing is on Thursday."

It really helps that the coaches and booster clubs paint the fields before practice on Thursday, then do a touch-up painting on Friday mornings.

Greenwell applies fertilizer two or three

times a month to boost growth and strengthen the turf for the impending traffic stress.

"We'll fertilize on Thursday, one week before the first game, then go to a schedule of 1 lb. of N per month. We irrigate on Wednesday, with a follow-up irrigation after the last game of the week. If junior varsity teams play on Saturday nights, the first irrigation is Sunday.

"As temperatures cool, we'll aerate, fertilize and overseed with perennial ryegrasses. Fields must keep growing because, as soon as football is completed, soccer moves in and with both guys and gals playing. There are six soccer teams per high school."

Time/money concerns—Jim Corcoran, grounds manager for the Albuquerque (N.M.) Public Schools, shares responsibility for the school system's 103 fields. Forty-six of the fields are used for practices and physical education classes for the system's 11 high schools. These 11 schools also share two stadium "game" fields, both of which are artificial. The decision two years ago to forego natural surfaces was based on time and money.

"Though I'd personally prefer to have all games played on natural turf, within our current staffing and budget levels, the artificial turf stadiums are a practical solution," explains Corcoran.

"The large number of games each field must handle was definitely the greatest concern," says Corcoran about the decision to stay with artificial turf. "The two fields are used by each school's varsity and junior varsity football teams, guys and gals varsity and junior varsity soccer teams" and freshman soccer club.

Corcoran says the school district continues to grow beyond its current roster of more than 90,000 youngsters. "Our turf fields are used for team and club practices, PE and the after-school practices and play of the city's soccer clubs. Our biggest field problem is traffic."