



The new turf field at Arkansas Razorback Stadium has been discussed locally as "the most beautiful field in America." Photo courtesy: University of Arkansas.

# Razorbacks Take Command on Enhanced "Natural" Turf

**T**he new turf field at Arkansas Razorback Stadium has been discussed locally as "the most beautiful field in America" (*Arkansas Democrat-Gazette*). Arkansas replaced its artificial surface with natural turf for the 1995 season and went on to win the Western Division of the Southeastern Conference.

The University of Arkansas (UA) Razorbacks play on two home fields, the War Memorial Municipal Stadium in Little Rock and the Razorback Stadium on the UA main campus in Fayetteville. In 1994, university officials became interested in converting the Razorback Stadium field to a natural playing surface.

Natural turf fields create a much cooler playing surface and, in hot climates, can make a big difference for the athletes. (Artificial turf underlain with asphalt can reach temperatures of 120-plus degrees on hot summer

days.) However, natural turf certainly has its own inherent problems with divoting and soil compaction, but fortunately, those effects can be minimized through the use of soil additives.

## Searching for Service

Arkansas officials searched for a company to handle the field conversion service. To design the field, they chose Turf Diagnostics & Design, based in Olathe, KS. Five-year-old Turf Diagnostics provides design, testing and maintenance consulting to architects and field managers of golf courses and athletic fields. Chuck Dixon, president of Technical Operations and an agronomist with the company, welcomed the project. One reason is he's a UA alumnus.

Under Dixon's direction, the existing artificial turf was removed to another part of the facility. The underlying asphalt was then excavated, and the field was dug to accommodate necessary trench drainage. A layer of

crushed gravel was laid as a sub-base and topped with 10 to 12 inches of a sand and peat mix.

## Blending Natural Turf and Plastic

Next a mixture of engineered fibers, Turfgrids, was incorporated into the soil to stabilize the sand base of the football field — an important factor because a stabilized base increases turf durability. Dixon has discovered that the plastic, net-like fiber reinforcement creates a resistance to rutting. The field also becomes divot resistant and more readily "self-healing" when exposed to high traffic and weather conditions.

Dixon already had experience with fiber installations at several other football stadiums. He has been testing fibers for three years and has found they add durability and consistency to playing surfaces.

"Further, creating a natural turf



A layer of crushed gravel was laid as a sub-base and topped with 10 to 12 inches of a sand and peat mix.

using...fibers makes sense economically, environmentally and aesthetically. It is very player-friendly and requires low field maintenance," he says.

To ensure optimal performance, the fibers were roto-tilled into the soil at a depth of four inches and at a rate of

to Dixon, "We had to make sure the blend between the artificial turf borders and the natural turf was smooth for both safety and aesthetic reasons."

The field was then row planted and surface broadcasted with sprigs of 419 (Tifway) bermudagrass. Preparation was complete by the spring of 1995,

one pound per 12 square feet. The field was then laser graded to a smooth crown. The surface grading was adjusted to transition from the natural turf field to the artificial turf perimeter smoothly, ensuring there was no discernible lip between the two.

According

and the Razorback field was fully grassed by mid-August, in ample time to begin fall practice.

### A Season Later

The turf required little irrigation during the first season, often going seven to ten days without watering even during the summer heat. In fact, it was in such good condition at the end of the season that it did not require the typical overseeding to maintain stability during the dormant season.

As part of his on-going diagnostic/maintenance contract with UA, Dixon is now waiting to see if turf fibers can solve another long-term problem common to grass surfaces: rhizomes. Rhizomes are the central source of both the blade and roots.

"After two to three years, natural fields typically have a problem where the rhizomes start to come to the surface," he explains. "I want to see if the...fibers help to slow or prevent this from happening. Only time will tell." □



Go deep  
to the  
root zone.



For more information call:  
1-800-336-2468



Painting copyright 1996 Volta Gallery, Scottsdale, AZ.