Weathering the storm

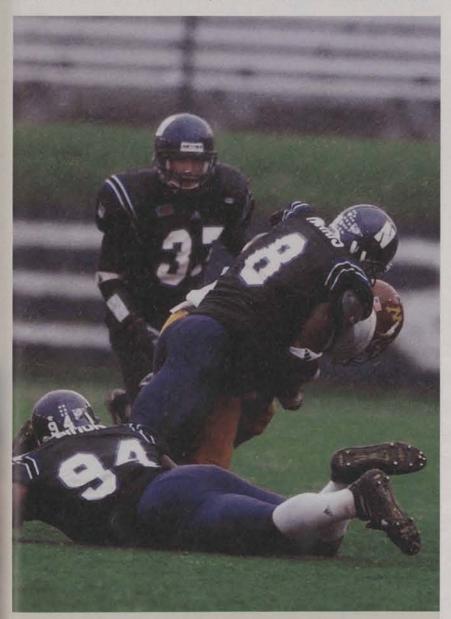
BY NATHAN ODGAARD

Though the rain continued to fall—heavier as the game progressed—Eric Adkins remained relatively calm.

Adkins, an agronomist at Northwestern University in Evanston, IL, watched with uneasiness, but confidence, October 13 as Ryan Field took a pounding from both Mother Nature and the Northwestern and University of Minnesota football teams. Storm cells produced steady, at times heavy, rain that drenched the field 1 hour before and nearly the entire 3 1/2-hour game. In that period, the field collected 2 inches of rain.

Ken Kraft, senior assistant athletic director, said the rain briefly stopped on a couple occasions, but otherwise, "It was just a mess. The rain got heavier throughout the game. At times it was coming down in sheets."

Panic-stricken? Not Adkins. Renovations to Ryan Field in April 1999 (the 2000 Collegiate Field of the Year by the Sports Turf Managers Association, see ST Aug), which included the application of Profile™ porous ceramic soil amendment, angular sand and peat, were designed to enhance drainage and stabilize the field. Still, Adkins was concerned. Since the renovations, Ryan Field, which Adkins has looked after for 4



Northwestern's Napoleon Harris makes a tackle vs. Minnesota during a driving rainstorm that Ryan Field survived beautifully.

years, hadn't seen a rainfall amount close to that which fell on October 13.

It was Ryan Field's greatest test of durability—and as it turned out, it easily passed. It can be a ground crew's worst nightmare: persistent rainfall during a game.

Trampling by 300-plus lb. football players for a 3-hour period alone takes its toll on any football field. Add drenched sod, and the consequences can mean thousands of dollars in time and product to repair divots or replace sod. But at Ryan Field following Northwestern's 23-17 win, there were no such consequences.

The sand-based natural turf field sustained only scuffmarks, Adkins said.

Divots and tears, common scars left behind after games played in inclement weather, were non-existent. Therefore, the field maintenance crew's post-game duties were, for the most part, no more demanding than had the game been played in dry conditions.

"It's a relief knowing you don't have to spend thousands of dollars to renovate again," Adkins said. "The money we spent (on the April 1999 renovation) paid off for this game. Adding Profile and then doing drill-and-fill this spring has paid dividends. We endured 2 inches of rain, and nothing happened. It was like a normal game."

Said Kraft: "The field held up extremely well. A lot of rain had fallen. We didn't have the big chunks that are standard in these conditions."

Ryan Field's durability surprised even Randy Walker, the Wildcats' head coach: "It was incredible. When I looked at the field the next day, I didn't see any significant damage. I don't think I've ever played a game in those conditions and had the field hold up so well."

Ryan Field's ability to withstand the elements on October 13 was in stark contrast to the beating it took in a 1998 Northwestern-Michigan game. The field suffered heavy turf damage, Adkins said, requiring major and costly stripping and replacement of battered and shredded sod.

The following spring, renovation began to improve turf drainage and soil stability.

Based on recommendations from a Profile agronomist, the existing root zone was amended with a combination of the product, a porous ceramic, and a more angular sand than was in place. The old sod was stripped off and removed, and 15 truckloads of angular sand and 88 tons of soil amendment were spread over the field surface and tilled in to a depth of 6 in. In incorporating the new material with the original soil, the field's top 6 in. of soil profile consisted of 80 percent sand, 15 percent Profile, and five percent Dakota Reed Sedge Peat.

Last spring, the Ryan Field crew performed a drill-and-fill aerification that placed 1-in. diameter and 12-in. deep columns of the soil amendment spaced 5 in. apart into the sand to enhance drainage. The drainage rate was 6-7 in. per hour during the Northwestern-Minnesota game. Adkins said the product also increases the nutrient-and water-holding capacities of the rootzone, which help stabilize the roots.

"Basically, after the (Oct. 13) game we spent a half hour pushing the scuff marks together, and the next day we rolled the field and it was ready to go for next week's game, a 2:30 p.m. contest against Penn State in front of a national television audience," Adkins said. "I don't think anybody could tell that it had rained the previous week."

Following the Penn State game, the crew aerated and broadcast 1 1/2 tons of Profile onto the field.

"We did so based on the downpour that we had," Adkins said. "I wanted to get a little bit more air into the field and smoothness on the field.

"We got a couple of comments from players and coaches (following the October 13 game)," Adkins said. "But mainly they were quiet, which was good. The field wasn't involved in the outcome of the game. I saw a couple slips, but for the most part the footing held up fine throughout the whole game."

As did Adkins' confidence. As the game proved, the sound drainage and stability features of Ryan Field have made the maintenance crew's job easier and illustrate its worthiness as the 2000 Field of the Year.

Nathan Odgaard is a writer for Swanson Russell Associates.