



Bermudagrass in 70 days AT DePauw University

DEPAUW UNIVERSITY is the pride of Greencastle, IN. Nestled just 3 hours south of a homonymously similar school in Chicago, the NCAA Division III institution sits at the northern edge of the transition zone.

Its location makes the school's choice to switch from cool-season turf on its soccer field to bermudagrass all the more notable, although part of what is becoming a trend in and around the Midwest.

The 2011 project started a year and a half before when Assistant Director of Facilities and Grounds, Rob Harper, and I drove an hour west to Terre Haute, IN to step foot on the Patriot bermudagrass (*cynodon dactylon*) football fields of the Fightin' Engineers of Rose Hulman Institute of Technology in the fall of 2010. The trip was a fact-finding mission for Harper to see if bermudagrass was an option for his athletic fields in the transition zone.

Harper saw a healthy, strong stand of bermuda on the practice fields in the height of use of the football season. DePauw's practice

>> **TURF** in late August 2012.

football field would be converted to Patriot bermudagrass.

The other major decision would be to seed or sprig. The primary benefit of seeding is cost effectiveness. Most assume that a sprigged field will have 100% cover quicker than does seeding. As such, DePauw opted for the safer bet of sprigging.

The field was sprigged in early June and ready for play by August 1, 2011. On-time, on-budget and better rooted to handle the rigors of 300-pound linemen than its previous cool season version had ever been, the practice football field was a success. In fact, DePauw's women's field hockey coach opted to vacate her varsity field using instead the football practice field for not only her team's practices but also its games.

In the ultimate testament in support of bermuda fields, DePauw's Harper liked the results of the 2011 project so that he decided to go it again this year. Harper said, "The Patriot field was a tremendous success in 2011. The field was easier to manage, and provided a far superior surface to the existing bluegrass/ryegrass surfaces." In the spring of 2012, DePauw's varsity soccer fields began renovation to bermudagrass. For this project, coated Riviera bermudagrass from

>> **DEPAUW UNIVERSITY** practice field, November 2010



Johnston Seed Company was the cultivar of choice. Riviera was chosen because of the cost savings from sprigs, the ability to overseed with more Riviera in future years, and the ability to more successfully overseed the bermudagrass with ryegrass.

In early April 2012, glyphosate was applied to the existing bluegrass/ryegrass surface. Two weeks later, another application was applied and the soccer field was scalp mowed. The first 2 weeks of May consisted of the tilling of the old turf to blend the old biomass of the field into the topsoil. Minor irrigation adjustments were made. Finally, the rootzone was laser-graded to ensure positive drainage. The field was crowned with a .75% grade.

The field was seeded less than 6 weeks into the process on May 15. The rate for the coated Riviera seed was 3 lbs/1,000 sq ft and a starter fertilizer (16-28-12) at a rate of .73 lbs of nitrogen per acre. The seed was spread with a rotary spreader and dimpled into the soil using a Frontier dimple seeder.

After seeding, irrigation was applied frequently at short intervals. The goal of the irrigation frequency was to wet the rootzone just short of standing water.

On June 10, germination was evident across the field. As expected, better germination was found in areas that were receiving the most irrigation. Starting in mid-June, the field was cut with a fairway unit at 7/8 inch and fertilized every 2 weeks with ammonium sulfate (21-0-0) at a rate of .5 lbs/N/1,000 sq ft.

The field was topdressed every 2 weeks from June 15 to September 1 with 25 tons of USGA rootzone sand. In the northern transi-

Bermudagrass in transition zone

THE PATRIOT AND RIVERA BERMUDAGRASS FIELDS have both performed well at DePauw. As expected, the Patriot field in year two has two times more shear strength than the 4-month old Riviera field. Rob says, "I am looking forward to next year on year number two of the Riviera. When establishing Riviera, this should be considered when looking at traffic and scheduling for the first year."

Looking forward, the ryegrass will be sprayed with Katana in April. Following the application, the field will be on a consistent aerification program with core aerification taking place monthly in June, July and August. Topdressing will also continue to take place every 2 weeks at a rate of 25 tons per application. The fertilizer program consisting of ammonium sulfate (21-0-0) at a rate of .5 lbs/N/1,000 sq ft. will continue as well.

Bermudagrass definitely has a fit in the northern transition zone. If seeding a field is considered, timing of the seeding is critical for success. A seeding window from May 15 - June 15 is the best time to seed. Irrigation is critical to success and well as a well graded rootzone as a sand cap will be developed quickly. Finally, overseeding with ryegrass should be considered if late fall or early spring play will take place on the field. ■

tion zone, bermudagrass responds extremely well to frequent topdressing during grow-in. The sand on the surface allows the field to retain heat, mimicking the conditions of warmer climates where bermuda is the norm for high-performance athletic fields.

A positive byproduct of the topdressing is a sand cap is developed over time. When considering conversion, first consider laser grading the existing rootzone before renovations begin.

DePauw's soccer fields made tremendous strides from June 10 to July 1. Not uncommon, the field began to show signs of crabgrass and goosegrass. Two applications of MSMA easily took care of the problem without slowing down the bermuda's progress.

The soccer field benefited from an un-

usually hot and dry weather pattern in central Indiana during the summer of 2012, as did the bermudagrass practice football field installed in 2011. Consistent with other bermudagrass fields in this area, both fields were overseeded with perennial ryegrass at a rate of 20 lbs per 1,000 sq ft. on September 1. At the time of overseeding, a starter fertilizer application (16-28-12) was applied at a rate of .73 lbs of nitrogen per acre. Finally, one last topdressing event was applied. The cutting height for the two bermuda fields is maintained at 7/8 inch. ■

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>> **DEPAUW PRACTICE FIELD**, November 2011.



TILLED FIELD before laser grading.



GROW-IN period.



STILL growing in.

