

## World Cup 1994 Project Update

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This June brought the successful completion of the World Cup 1994 research project. Over one billion people around the world watched four historic soccer games take place inside the Pontiac Silverdome *on natural grass*. This was the first time in history that the World Cup, the world's largest single sports event, was played indoors. It was only the second time that a major sporting event was played indoors on natural grass—the first time being in June 1993 when the U.S. Cup final match was played at the Pontiac Silverdome on the same portable turfgrass field.

After three additional games on the grass in June 1993 proved to World Cup officials that the portable field worked, all 2000 turf modules were moved back to the parking lot. During the summer of 1993 the field was maintained as an athletic field, with regular mowings, fertilizations and other chemical inputs, and irrigation. A snow cover was placed on the field during the winter to prevent winter desiccation on the wind-swept parking lot. The field survived the winter without any problems. The cover was removed in mid-March, 1994. By April 1, 1994, regular fertilizations and mowings were being performed. MSU staff and students continued to maintain the field throughout the spring, mowing and irrigating daily. Simon Jacob, a turf student from Lancashire College in England, was brought on board as an intern. Trevor Monreal and John Sorochan, both MSU turf students, rounded out the daily crew. May and June brought long working days, 12-17 hrs/day, six to seven days per week. However, everyone pulled together, realizing the importance of the historic event, especially as media endlessly converged from all around the world to cover "the historic grass."

From June 10-12 the field was moved into the stadium (30 working hrs in 1994 vs 44 hrs in 1993 for the U.S. Cup). In less than 24 hrs from completion of the installation the surface was ready for play. World Cup turf evaluators from California tested the surface for ball roll and bounce—with fine results. Mr. George Toma, brought in to help stripe the field for play, pronounced the field as "the best field he'd ever painted."

On June 18 the U.S. national soccer team made its World Cup 1994 debut in a well attended, highly internationally televised debut, tying Switzerland 1-1. On June 22 Switzerland soundly defeated the Romanians 4-1. July 24 saw Sweden (Sweden later advanced to third place in overall World Cup standings) defeat Russia 3-1. The final game ended with a 1-1 tie between Switzerland and Brazil (Brazil went on to win the World Cup 1994 championship). Tens of thousands of fans from these respective nations thronged the Silverdome stands, filling the stadium with banners, songs, and the Brazilian *samba* dance.

The turf held up well throughout the four games and six practices of World Cup 1994. The first week the turf was indoors the weather was exceptionally hot and humid, with temperatures and humidity in the 90s. Portable fans were used to provide air movement over the turf to prevent air stagnation and to promote transpiration. No indoor irrigation was required due to the relatively low evapotranspiration rates. After the first week cooler temperatures prevailed, and the turf, a mixture of 85% Kentucky bluegrass and 15% perennial ryegrass, responded brilliantly.

On June 29 began the dismemberment of the historic field. Within 48 hours after the final game, the field had been removed from the stadium grounds. The sod was stripped off the modules and used to build a public soccer field on Belle Isle, Michigan, for children. The soil and some of the modules were sold by the Michigan Host Committee to help defray field expenses (the rest of the modules remain for sale).

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However, the groundwork for indoor sports turf has been laid. Inquiries for indoor turfgrass continue to develop from around the world and within the U.S. Japan especially is attempting to develop indoor turfgrass fields now that the concept has been proven.

Research is continuing at Michigan State University to provide management schemes for turf in reduced light situations. Efforts are underway to secure funding to maintain the 6500 ft<sup>2</sup> indoor turfgrass research dome at the Hancock Turfgrass Research Center. The dome was built in August 1992 to simulate the Pontiac Silverdome environment and is ideal for year-round research on turfgrass response to reduced light situations. Results from these experiments will be especially helpful to golf courses, lawn care companies, and homeowners struggling to maintain turf in shaded situations.

Special thanks go to the Michigan turfgrass industry for donation of the equipment and labor for the research and field construction.

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