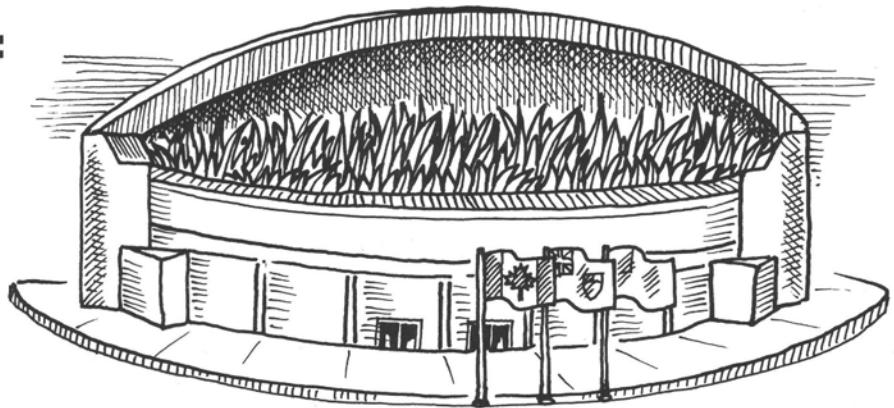


Research proves turf can grow in dome stadiums



Research funded by three U.S. dome stadiums showed that natural grass can grow well enough under a dome to support world-class soccer play. Two dome stadiums remain in the race for a chance to hold preliminary 1994 World Cup soccer matches.

Dr. James B. Beard, a turfgrass scientist at Texas A&M University, was a member of the three-man research team that tested the ability of turfgrass to grow in a dome stadium. According to international rules, World Cup soccer matches must be played on natural grass. In order to bid on a preliminary soccer match in the World Cup tournament, dome stadiums had to prove to the World Cup U.S.A. Committee that they could provide an acceptable natural grass surface.

"The bottom line was that we demonstrated it could be done and it was a very acceptable playing surface," Beard said.

The Houston Astrodome, the Louisiana Superdome and the Pontiac Silverdome jointly sponsored the research. Dr. C.H.M. Van Bavel, an environmental physicist and Professor Emeritus from Texas A&M University, and Arthur Milberger of Milberger Turf Farms were on the research team with Beard.

The researchers conducted the tests at the Louisiana Superdome in early July 1991, the same time of year the soccer matches would be held. They tested a variety of warm season and cool season turfgrass sods on several different rootzone systems. They also studied the lighting levels from the existing building lighting to substantial supplemental lighting of varying duration.

To best emulate the conditions the groundskeeper actually would be under, the researchers were allowed just six days to establish the field - two days for installation and four for grow-in. They then tried to maintain the surface for at least 22 days, the amount of time necessary to play two or three games at one stadium.

Beard said they tested the turf for quality, ball bounce, density, turf rooting, and stability. They also had world-class soccer players play on the field and evaluate it.

The specific results will be made available later, Beard said. However, he said both the test results and the soccer players gave certain grass and lighting combinations full approval. This opens the door for dome stadiums to consider natural grass events.

"It's one of the few tests that has

been conducted in dome stadiums. It confirms to the sports world the feasibility of growing natural grass indoors. Modern turfgrass research has developed techniques and cultural systems that could usher in a new era of natural indoor sports turf maintenance," Beard said. □

REAL OR ARTIFICIAL?

KANSAS CITY, Mo. - Did you know that dirt tends to accumulate in artificial turf?

George Toma decided to sow some Ph.D. ryegrass into the mat and dust it lightly with sand. The pre-germinated seed sprouted within four days and is nourished with Bov-A-Mura organic fertilizer and Ferromec liquid iron. The real grass/turf mat can be playable within a couple weeks, after which a high pressure hose can be used to blast the grass out, says Toma. This novel grass-growing approach is one of several possibilities for re-turfing artificial surfaces to meet the World Cup Soccer standards.