



## **Concert on the Grass**

BY DR. DAVE MINNER, PH.D., ASSOCIATE PROFESSOR, IOWA STATE UNIVERSITY

## **Have Questions?**

SEND THEM TO DAVE AT: ISU, HORTICULTURE DEPT., AMES, IA 50011

where the provided state of the provided sta

Allan Gibson University of Utab- Rice Stadium Salt Lake City, UT

Covering grass during summer concerts makes everybody nervous and it is important to have a plan to minimize injury to the field. Most of the covering materials do protect grass from mechanical damage. It's the growing condition created under the protective cover, high temperature and disease, combined with poor air movement and lack of light, that injures grass. Here are some strategies used by managers faced with covering grass during concerts.

Control Moisture-avoid covering when there is free moisture on the grass blades and in the thatch (i.e. during the rain or immediately after irrigation). Water is a good conductor of temperature and speeds heat and disease build-up under the cover. Soil moisture should be adequate but not excessive. Water one or two days before covering and leave at least 24 hours with no watering before covering the field. Try to get the top inch of the soil and thatch dry so that the grass doesn't cook when it gets hot and sunny. If excessive rains are anticipated, then dry the field down even more before covering.

• Control Air-create air space between the cover and the grass surface. Terraplas covering creates a 2.5inch air space that keeps the grass blades from being flattened together. Enkamat Flatback is often used under plywood to created air space between the plywood and the grass. Core aerification before covering also helps improve air movement and to increase water penetration if a heavy rain occurs during the concert. Grass blades that lay over or contact the under side of the covering are damaged more than grass that stands upright and is surrounded by air.

Control Light and Temperature-you can't really control light and temperature, but you can minimize the amount of time the field is covered. Don't cover too early because it is more convenient for the concert company. Remember, the field comes first and somebody is using your facility. Set some clear rules in the contract. Cover the field as close as possible to concert time and make sure the floor covering is the first thing to be removed. Depending on the floor covering type, the concert company should be given between 8 and 10 hours to lay down the floor. Make them hire more people if they can't meet your designated time. Think of it like this: the grass starts dying as soon as you lay the first flooring section. Try to keep the total covering time under 48 hours. To minimize heat build up cover at night, 10 p.m. to 6 a.m., when the surface is coolest. Covering when the grass surface is above 90 degrees Fahrenheit is just asking for trouble.

• **Prevent Disease**—high temperature and humidity combined with stagnant air is a real invitation for Pythium and Brown Patch.

Fungicides may not be needed during spring and fall concerts or in dry climates where disease pressure is low. However, the cost of fungicides can certainly be justified as a precaution to minimize a devastating loss of the entire field. I recommend the use of fungicides when protective covers are used for concerts. A frequently fungicide combination is used Heritage (1/3 oz/1000 square feet), Subdue Maxx (1/2 oz/1000 square feet), and Banner Maxx (1.0 oz/1000 square feet. This mixture will cost you about \$800 for a 65,000 square foot area. A less expensive combination is Chipco (3 oz/1000 square feet) and Teremec SP (4 oz/1000 square feet), which will cost about \$350.

Terraplas and Portafloor are the most popular rigid covers for concerts. Enkamat can also be used in combination with Portafloor or plywood to produce a better cushion of air over the grass and under the rigid floor surface. There is nothing more discouraging than the smell of dead grass when a stadium field is uncovered following a concert. Having a well thought out plan will help you minimize the chance of having such an unforgettable experience.

It's your job to be as prepared as possible, but it will be the weather that dictates the amount of injury. Rain that wets the ground as the covering is being laid, followed by hot and sunny conditions during the concert, presents the greatest chance of turf injury. Dry conditions followed by a cloudy and cool concert greatly reduce your chance for turf injury.

David D. Minner, PhD, is an associate professor with the Department of Horticulture at Iowa State University.

## No other infield conditioner maintains the game readiness of your playing field better than Diamond Pro.



Call 1-800-228-2987 for more information or click on www.diamondpro.com.

Call 1(800)817-1889 use Fast Fax #1290800 and/or Circle 131 on Inquiry Card