

July 20-22

Outdoor Power Equipment Institute's (OPEI) 18th annual International Lawn, Garden & Power Equipment Expo (EXPO 2001), Kentucky Exposition Center, Louisville, KY. Contact Sellers Expositions, at tel. (800) 558-8767, or tel. (812) 949-9200. Web site: <http://expo.mow.org>.

July 31

Midwest Regional Turf Field Day, Purdue University, West Lafayette, IN. Contact Bev Bratton, at tel. (765) 494-8039. Web site: <http://www.agry.purdue.edu/turf>.

August 5

Cornell University Field Day, Ithaca, NY. Contact Joann Gruttadaurio, at tel. (607) 255-1792.

August 22

Michigan Turfgrass Field Day, Hancock Turfgrass Research Center, Michigan State University, East Lansing, MI. Contact Kay Patrick, at tel. (517) 321-1660 or e-mail: mtfturf@man.com. Web site: <http://www.michiganturfgrass.org>.

September 2-4

GAFA Koln International Garden Trade Fair, Cologne, Germany. E-mail: gafa@koelnmesse.de. Web site: <http://km.nexum.de/gafa>.

October 16-17

Garden Expo, Toronto Congress Centre, Toronto, ON, Canada. For more information, contact Landscape Ontario Horticultural Trades Association, Special Events Dept., at tel. (905) 875-1805 or e-mail: showinfo@landscapeontario.com. Web site: <http://www.hort-trades.com>.

October 31-November 1

The Turfgrass Landscape & Equipment Expo, Fairplex, Pomona, CA. Contact Southern California Turfgrass Council, at tel. (800) 500-SCTC, or tel. (818) 764-5016, or e-mail: expo@turf council.org. Web site: <http://www.turf council.org>.

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Zones & Layers

Although I'm not an expert on the rootzones and sub-surface layers of athletic fields, I do feel it's important to point out the research findings of others who are experts.

One such expert, Dr. Lloyd M. Callahan—professor emeritus, grass physiologist, molecular geneticist and agronomist at the University of Tennessee (UT)—has recently completed a seven-year research study to evaluate the use of various geotextiles as an intermediate layer between the rootzone of the athletic field or golf green and the sub-drain coarse aggregate. The two main findings of the study are that A) there needs to be an intermediate layer, and B) the intermediate layer should not be sand.

"Many sports fields are being constructed using USGA and USGA-type profiles," Callahan notes. "Many individuals in the turf industry and researchers support the need for an intermediate layer between the rootzone and sub-drain coarse aggregate in USGA green profiles. However, the need for an intermediate layer has often been questioned and is a major ongoing controversy."

According to Callahan, USGA guidelines (1960, 1973, 1989 and 1993) have some serious and expensive flaws built into them, the last three revisions being only arbitrary, non-research-based revisions. "Our greatest concern is in directing people to the most reliable field guidelines known," he explains, "and that appears to be a USGA profile on the order of the 1960 and 1973 specifications, but with a reliable geotextile in place of the very coarse sand intermediate layer. A rootzone profile with no intermediate layer is a recipe for disaster."

The seven-year study, conducted by Dr. Callahan and his associates at UT, evaluated the effectiveness, reliability, durability and performance of ten geotextiles as intermediate layer drainage separators in comparison to a USGA profile with and one without, a coarse sand layer. These treatments (trt) were: trt 1, sand intermediate layer; trt 2, no intermediate layer; trts 3 through 6, Typars; trts 7 through 10, Terrabonds; trt 11, Pro 5; and trt 12, Duon.

Study results found that the optimum field water infiltration and percolation rate was exhibited by trts 5, 6, 7, 9 and 12; the optimum field water retention range was shown by trts 7, 8, 9, and 10; and the optimum available water holding capacity trts were 7, 8, 9 and 10. "The study found that the most effective, reliable and durable geotextiles were the Terrabond treatments 8, 9 and 10," Callahan notes.

Free copies of the full 67-page study—"Geotextiles As An Intermediate Layer In USGA and USGA-Type Greens," Bulletin 699, February 2001—are available by calling (865) 974-7324.

Michael Oswald
Editor