

Athletic fields: Art or science?

Art: Human effort to imitate, supplement, alter or counteract the work of nature.

Science: The observation, identification, description, experimental investigation and theoretical explanation of natural phenomena.

Which definition best fits athletic field management? "Right now, it's an art," says Steve Wightman, field manager of Denver's Mile High Stadium. "But it's time to start applying scientific knowledge to it."



Wightman is right. Mowing, aerating, and watering are like carefully implemented brush strokes bringing texture and character to the overall picture. Good field management supplements the work of nature. It is an art.

But in this month's issue we examine the scientific aspect of field management. Many of you have never heard of an oscilloscope or a G-max before. But by the turn of the century, they will be words as common as mowing heights when discussing good field management.

Some field managers already are applying the concepts. I recently met with Lakewood, Ohio school officials who are installing a synthetic Balsam surface on two fields at the high school. They had done the research and assured me that artificial was the only way to go. I wasn't convinced. "I plan to have an independent lab test the field annually," explained Jim Stanton, director of operations. "It's written into the contract that the G-max can't exceed 95 or they'll replace the field."

That was the first time I heard a field manager refer to a G-max value. I'm still not convinced. But if Stanton follows through with that plan, I am somewhat relieved.

The Lakewood fields are synthetic, but the same technology can be applied to natural fields. "Every field manager needs to know about G levels," says Jim Watson, Ph.D., vice president of the Toro Co. Watson says that "shear strength" of the turf is an equally important issue in need of an accurate and available measuring system.

Eliot Roberts, Ph.D., of the Lawn Institute points out that the Stimpmeter is used to measure the speed of golf greens, so an instrument to measure playability of an athletic field is not far-fetched.

The argument against such measurements is the weather which changes field conditions. But if a manager knows what the optimal G-max level and shear strength of the field is, then weather can be a tool, not a hindrance, in keeping the field in good condition. Managers need to look at both perspectives in caring for a field. By creatively nurturing a field, it is an art. By technically measuring playability, it's a science.

By doing both, it's safer for young athletes.

Heide Aungst
Heide Aungst, managing editor

LM Editorial Advisory Board



Doug Chapman
Horticulturist
Dow Gardens
Midland, MI



J.R. Hall
Extension Agronomist
VPI & SU
Blacksburg, VA



Kent Kurtz
Professor
Horticulture
Cal Poly-Pomona



Harry Niemczyk
Professor
Ohio State University
Wooster, OH



A. Marty Petrovic
Asst. Professor
Cornell University
Ithaca, NY



Robert Shearman
Assoc. Professor
University of Nebraska
Lincoln, NE

Questions and comments are encouraged.

Write or call editor Jerry Roche:
7500 Old Oak Blvd.,
Cleveland, OH 44130.
Phone: 216-243-8100.