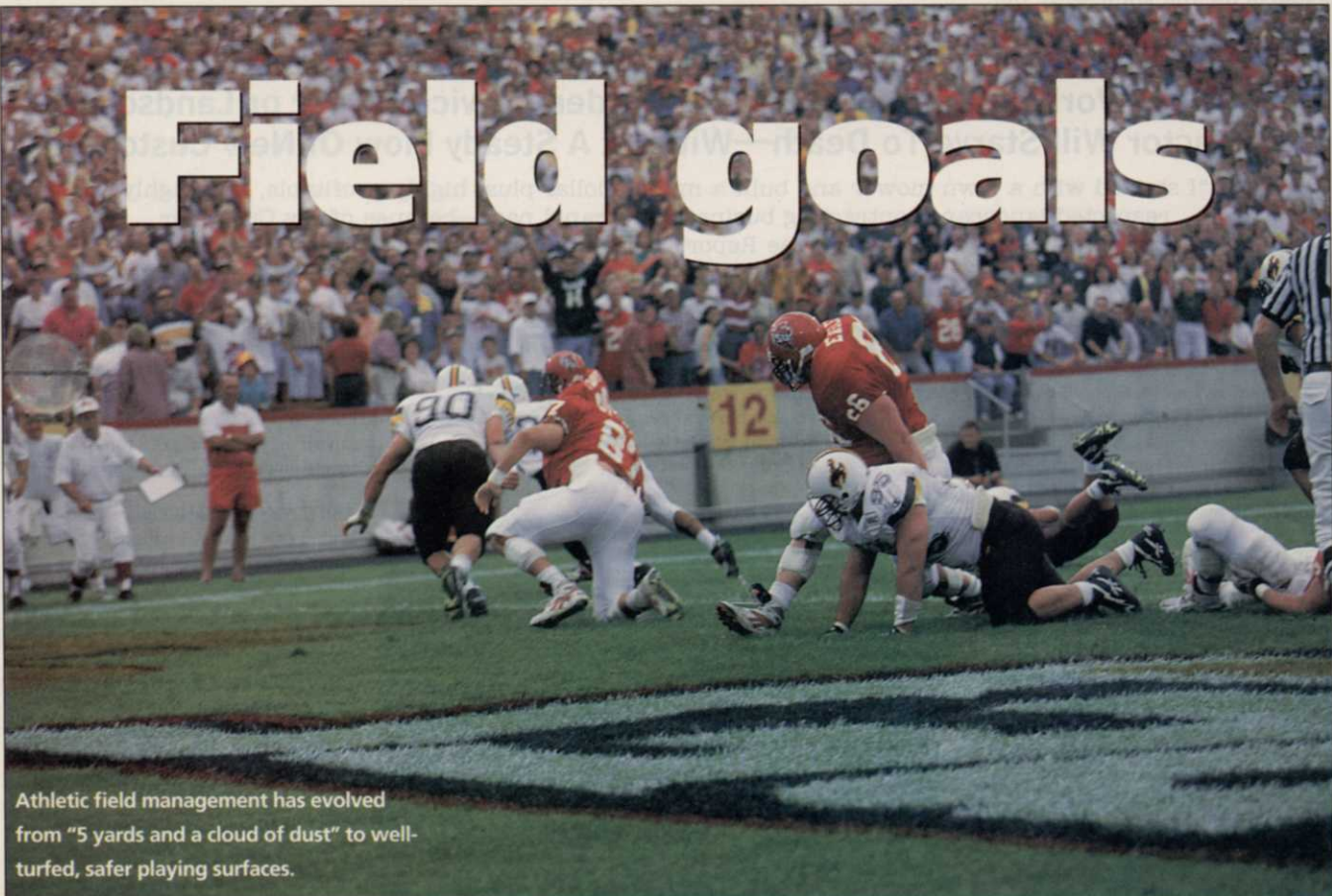


Field goals



Athletic field management has evolved from "5 yards and a cloud of dust" to well-turfed, safer playing surfaces.

PHOTO COURTESY MIKE ANDRESEN, IOWA STATE UNIVERSITY

Great strides have been made in sports turf, but we are still in our infancy. We look forward to more change in methods of construction, renovation and management of sports turf.

By Dr. KENT W. KURTZ,
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The turfgrass industry was a sleeping giant prior to and shortly after WW II as there was no grass seed, fertilizer, herbicides or equipment available, and fields were "dirt" and mud, with a smattering of grasses and weeds.

The "Renaissance", or awakening, occurred just after the war, with the introduction of 2,4-D, urea formaldehyde and natural organic fertilizers. Most of the advancements in the sports turf industry are the direct result of the golf course industry which funded research and product development.

Great strides have been made in sports turf, but we are still in our infancy, and look ahead to more change in the methods of the construction, renovation and management of sports turf. Changes such as better fund-

ing, elimination of the low-budget, low-bid contractor, more pride in the quality and safety of the field as well as a movement for additional education and stronger recognition for those directly responsible for caring for and maintaining athletic fields.

► Many significant contributions have been made in the past few years in the research and development of new and improved warm-season and cool-season grasses, that are adapted to the heavy use of and rigors of sports turf.

These new grasses have burst upon the scene and are continually arriving from plant breeders.

► Mowers have been adapted to cut wider swaths of turf with better quality of cut.

► Improvements in reel, rotary and flail mowers have been possible with the advent



Kurtz: Quality fields, winning attitudes, successful programs.

of the hydraulic motor-driven cutting blades, which no longer require ground speed to improve the cut.

► Advances in aerifiers equipped with hollow or solid tines and machines that reach deeper into the soil and pull cores are a great improvement.

► Topdressers that apply measurable quantities of material onto the turf surface and ones that can handle less than a cubic yard of material to several yards are now available.

No need for phony turf

Synthetic turf came along in the 1960s because we lacked the necessary technology in soils and playing surfaces. These artificial surfaces are now being replaced by sophisticated, sand-based soil profiles that use clean, uniform sands, soil warming technology and moisture sensors.

Prescription Athletic Turf—The PAT System—was developed at Purdue University and the first field to use the system was built by the late William Daniel in 1974. The system is still being installed, with the patent now held by The Motz Group of Cincinnati, Ohio.

Next plateau: turf under glass

We are about to reach another plateau with the development of grasses and environmental systems for growing turf in domed stadiums. Improvements in soil amendments to stabilize sand fields using mesh elements, various types of fibers and improvements in water infiltration, drainage and surface resiliency with soil additives, such as crumb rubber and other products have been quite successful. New materials for topdressing turf to protect the grass plant's crown and growing parts under heavy use, like finely ground crumb rubber, have shown success in the 1990s.

Other advancements include:

► more diversified fertilizers, weed, disease and insect control products.

► new, improved drainage equipment from Europe and Canada. We must recognize the drainage factor, and better utilize physical soil analysis as a means to develop a good base for sports fields.

Further, we must use this information to design the best facility within budget constraints and develop sound and functional specifications for the construction and/or renovation. Poor design, old specifications and resistance to change continue to

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contribute to failed projects within our industry.

Share information

We must continue to learn, try new products and equipment, gain more pride in the workplace, work together as a team and network with other professionals. Probably the greatest advancement in the sports turf industry has been the establishment and successful participation by sports turf managers in their own national association, the Sports Turf Managers Association, founded in 1981. State chapters are being formed throughout the country.

Membership and participation in STMA is critical for self-improvement through education, fellowship, networking and the goal of making fields safer and more aesthetically pleasing. A quality athletic field results in a winning attitude and successful program for sports teams and sports turf managers.

—*Dr. Kent Kurtz is a sports turf advisor and professor of turfgrass science at California State Polytechnic University at Pomona, Calif.; a founding member of the STMA; and a past member of the LANDSCAPE MANAGEMENT editorial advisory board.*

'Back to grass' begins

Artificial turf is hurting athletes, say an overwhelming number of college athletic directors. The athletic directors, from schools in the National Collegiate Athletic Association (NCAA), cited increased injuries to knees, ankles and elbows as the main reason they preferred natural fields.

Fifty-three percent see a trend back to natural fields.

Comments from respondents characterized artificial surfaces as "too hard, abrasive, and no give."

Besides knee, ankle and elbow injuries, burns and contusions also topped the list.

Several coaches favored synthetic turf. A service academy official said, "The main problem is footwear, not the turf."

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