THE SPORTS TURF INDUSTRY (Part II)

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In my career spanning 40 years, I have yet to meet a sports turf manager who wasn't excited about and dedicated to his job. Today more than ever, sports turf managers are concerned professionals who strive to provide quality, safe playing fields. Many times their desire for excellence is limited by a lack of funding for adequate equipment, irrigation, soil amendments and pest control. In spite of these limitations, sports turf managers are appreciated and praised for the job they do in providing superior playing surfaces no matter what the sport is. A recent survey shows who compliments and criticizes sports managers for their efforts (Table 1).

Table I. Source of praise and criticism for the condition of playing field(s)

	Compliments come from	Criticism* comes from	
Most	Coaches	Coaches	*Most*
↑	Players	Press	↑
	Press	Owners	
	Parents	Athletic Directors	
	Peers	Players	
↓	Owners	Trainers	↓
Least	Fans	Self	*Least*

**Sports Turf Managers also reported criticism from STMA, outside groups and fans.*

Managers reported significantly more praise than criticism from all parties.

"Every coach is a turf expert" was one quote received in the survey. While such attitudes may cause sports turf managers consternation - it is best if coaches do have an understanding of turf quality, it makes for better communications between turf managers and users.

When sports turf managers were asked about the most rewarding aspect of their job some responses were memorable:

Table II. Factors cited most often as giving greatest job satisfaction

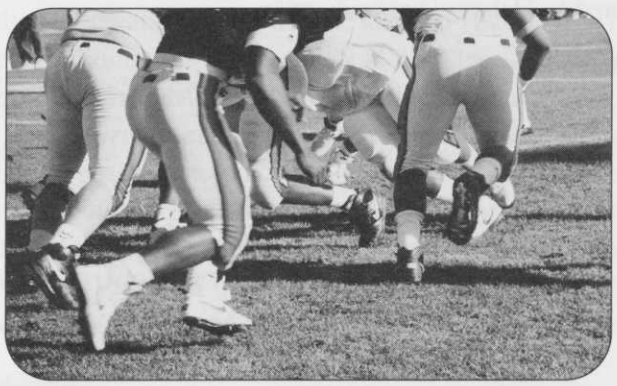
1. The opportunity to provide safe, quality turf
2. Appreciation by coaches, players and fans
3. Having a plan come together
4. Seeing fields hold up to heavy traffic
5. Receiving compliments from opposing players and coaches
6. Being outdoors

Having a 300 pound line man say, "My knees feel so good on your turf," Ken Mrock, Grounds Superintendent, Chicago Bears Football Club.

"My greatest satisfaction is when after 10 games, the field goes on TV looking like it was prepared for its first use. It is satisfying to finish the season with good solid turf despite the efforts of others to destroy what was created," Wayne Williams, Wake Forest University

NEW TURFGRASSES FOR SPORT TURF FIELDS

"Our future is in the hands of turfgrass breeders," a recent quote from Gary T. Grigg, Golf Course Superintendent, Royal Poinciana Golf Club, Naples, FL, is as true for sports turf managers as for golf course superintendents. No segment of the turf industry has seen more advancement in the past decade than has occurred in the development and release of new improved turf cultivars. Greater progress lies ahead as conventional plant breeders team-up with genetic engineers to splice genes through recombinant DNA techniques to create even better turf grass cultivars.



Today's University and Professional football players are larger than ever putting extra demands on turfgrasses.

New warm season sports turf cultivars

In the last half of the decade of the 1990's, new seeded and vegetatively propagated cultivars of the Cynodon, Paspalum and Zoysia genera have been released for sports turf. Some examples are:

Bermudagrass (Cynodon spp) vegetatively propagated

Tifsport	A new hybrid bermudagrass developed by Dr. Wayne Hanna, University of Georgia. A strong producer of stolons, good fall color, mole cricket resistance and superior cold tolerance are but a few of its attributes.

Seeded Bermudagrass

Cultivars	Compared to Arizona Common
Jackpot	Greater cold tolerance and finer texture

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Mirage	Greater cold tolerance
Princess	Much finer texture
Sultan	Better color and texture

Paspulam vaginatum

This new-comer is a low growing, vigorous tropical grass which has remarkable salt tolerance and good recuperative ability. Dr. R.R. Duncan, Turfgrass breeder, University of Georgia, is the leading developer of this species. Look for several new cultivars from his program and from commercial programs such as Southern Turf Nurseries (STN) of Woerner Group Resources. This August, an exhibition professional football game between the New Orleans Saints and Green Bay Packers will be played in the Super Dome, on "big roll sod" of STN's 'Salam' paspalum, which represents the first use of this grass for a sports event in the U.S.A. It was chosen for this event by Saints' players who preferred it in test plots compared to 'Tifway' bermudagrass.

Zoysiagrasses

Zoysiagrass cultivars such as 'Meyer', 'El Toro' and 'Jamur' are being used on golf course fairways and tees, While strongly advocated by some enthusiasts, the zoysiagrasses have yet to gain acceptance as a turfgrass for sports fields. These cultivars have great wear tolerance but lack acceptable recuperative capacity. Breeders are actively selecting for superior regrowth potential of the zoysiagrasses.

Well groomed Neyland Stadium, home of the National Championship football team.

Cool Season Grasses for Sports Turf

Cool season grasses are inferior in wear tolerance and recuperative potential as compared to bermudagrass for sports fields, however, bermudagrass is not suited to areas with severe winters. Public, and commercial plant breeders have recently developed many new cool season cultivars which have improved color, drought, heat, disease and insect tolerances, all of which add up to superior turf for athletic fields. Almost all of these new cultivars can be established from seed. Several new cultivars of Kentucky bluegrass, the fine leaved fescues and tall fescue are released annually. Major improvements in Kentucky bluegrass and fine fescue cultivars include superior disease resistance and heat tolerance; for perennial ryegrass, greater heat and drought tolerance and persistence can be cited; the new tall fescue cultivars have greater tillering, hence are denser, mow cleaner and have greater heat and drought tolerance. Because of their regional adaptation, it is best to consult your state extension turf specialist for a list of the best adapted cool season cultivars for your area.

The Haves and Have Nots

The status of sports turf facilities at the professional and collegiate level is light years ahead of most middle school, high school and municipal facilities. The basic reasons for this gap are the lack of funding and the greater number of events on each field. Two examples; case #1: I have a 13 year old grandson in Indianapolis, who has played organized soccer since age five. He is now on an all-star team. I recall watching him play on a compacted field of Kentucky bluegrass - ryegrass mowed about 4" high. Dandelion seeds floated like a snow storm, surprisingly no player inhaled the seeds. Case #2: my 11 year old grandson in Nashville, TN is an all-star baseball player. The fields on which he plays have highly compacted, rough surfaces, and weak turf. Rainfall exceeding 1/4" results in standing ponds of water on the base paths which causes cancellation of games. In both cases, volunteers, often ignorant of agronomics and player safety, struggle to deal with the playing conditions.

What's the solution? First is recognition by parents, school administrators and civic leaders of the risks of injury their children face playing under these unsafe conditions. Second, there is a need for municipalities and schools to provide funds to employ qualified turf managers who could greatly improve playability of the fields and safety of the players. Help may be on the way because turf management curricula at colleges and universities are placing more emphasis on sports field management. In addition, more students are being encouraged to do their internships under qualified sports turf managers.

A portion of the survey, reported here, asked sports turf managers and University turf teachers and researchers for their views on career opportunities for graduates in turf management. A summary of their responses is given in Table III.

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Table III. Career Opportunities for Turf School Graduates in the 21st Century

Predicted Job Availability in the Industry

Survey Respondents	Turf Sod Production		Golf Course Superintendents		Sports Field Managers		Sales Positions in Turf Industry	
	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease
Sports Turf Managers	-	-	-	-	**90% * expect some increase**	**10% say fewer jobs**	-	-
University Teachers/Researchers	**50% increase in production**	**None**	**40%**	**None**	**60% increase in jobs**	**None**	**50% increase in service oriented jobs**	**None**

Actually predicted 27% increase in jobs in next decade; range was 5% to 100% increase.

As you can see, university turf management teachers and researchers are more optimistic about job opportunities in the turf industry than are turf professionals. Educators project more opportunities in sports turf than in other segments of the industry.

Consultation

It is important for turf managers to solicit the views of coaches and players about playing conditions. They can tell you whether your fields are better or not as good as competing high schools, universities or professional stadiums. Its up to you to assess whether the views of coaches are realistic. Coaches are often biased in their views about turfgrass species, height of mowing, and type of clay used on the skinned infield and the pitching mound. For this reason, it is often advisable to bring in a consultant or peer to discuss agronomics with your coach(es). Table IV shows where the turf managers surveyed, turn for assistance with turf problems.

Table IV. Where Sports Turf Managers Turn for Consultation on Problems

1st	Other turf managers (50%)
2nd	University specialists (42%)
3rd	Sales representatives (21 %)
4th	Professional consultants (13%)

What's Ahead for Sports Turf

The future for sports turf managers is bright but not without a nationwide effort for more recognition. The need for improved playability and safer athletic fields must continuously be emphasized. Since 95% or more of sports fields are built on native soils, much more research must be directed toward their improvement. Too much of the research budget at universities is being spent on solving problems of sand based rootzones.

Turf management is a relatively new science and many questions remain to be answered. With the new technologies available to research scientists, the next decade should provide sports turf managers with better guidelines for management of athletic fields.

Turf managers were asked to rate the importance of 10 potential research breakthroughs in turf management by the year 2020. Here is how they ranked the proposed breakthroughs:

(1) Better techniques for sports field rootzone construction
(2) Fungicides with longer span of efficacy
(3) Positive selective control of Poa annua
(4) Good biological control of turf pests (diseases, insects and weeds)
(5) Seeded bermudagrass cultivars equal or superior in quality to vegetatively propagated cultivars
(6) Superior growth regulators for turfgrasses
(7) Turfgrass cultivars tolerant of glyphosate and/or other non-selective herbicides.
(8) Positive, safe control of parasitic nematodes
(9) An effective soil fumigant to replace methyl bromide
(10) Practical electric and/or other non-combustion powered mowers

In summary, turf managers of the future would do well to emulate the philosophy of David Mellor, Assistant Director of Grounds for the Milwaukee Brewers. David, a 4-year graduate of Ohio State feels that, "a formal education combined with experience will not only open doors for future jobs, but also help make our industry a more professional and respected occupation."