

# ATHLETIC TURF

## Working on the ideal surface

"When you come in contact with the surface as much as you do in football, poor field condition has to be a concern." That's Penn State University head football coach Joe Paterno talking about his favorite playing surface, natural grass.

To improve athletic field conditions Don Waddington, Ph.D. and Trey Rogers have been working to develop the ideal surface. They gave results of their research at the annual meeting of the American Society of Agronomists late last year.

Most recently the pair (Rogers has since earned his Ph.D. and is an assistant professor of turfgrass science at Michigan State University) looked at cutting height and soil compaction and how they affect impact.

"There are two critical interactions between the player and the ground that determine the quality of a sports surface—hardness and traction," claims Waddington.

To measure traction, compaction and impact absorption, the researchers used a portable Clegg impact tester that drops weights from 18 inches and measures how quickly they stop.

"The Penn State research indicates that differences in cutting height of the grass are not as important in absorbing impact as the mere presence of the turfgrass itself," Waddington reports.

It is not the height of the grass so much as the amount of moisture in the ground that determines the surface's hardness. As soil moisture decreases, the importance of grass as a shock absorber increases. Practices that reduce soil compaction also become more important as the soil becomes drier.

The study concludes that for traction, field managers need to be looking at how well-developed the root system is. The deeper the roots, the better the traction. And to minimize injury from impact, managers need to be concerned about how much moisture is in the soil.

## Timpanaro's field wins award

Ron Timpanaro, head groundskeeper at Jack Russell Stadium in Clearwater, Fla., won the "Baseball Diamond of the Year Award" for having professional baseball's outstanding baseball diamond.

The award is presented each year to three outstanding, well maintained and safe baseball facilities in the United States by the Sports Turf Manager's Association (STMA). Jack Russell Stadium is home to the Clearwater Phillies of the Florida State League.

Others accepting awards at the STMA's January presentation in Vero Beach, Fla., include Greg Petry, superintendent of the Waukegan, (Ill.) Park District, for his work on Al Grosche Field and Joe Ardolino, assistant athletic director, for Towson State University's Burson Field in Towson, Maryland.

## Grau: Mediocrity is not enough!

We're happy to pass on this short essay by Fred Grau, who passed it on to us:

"We who bear or share the responsibility for the condition of sports turf can no longer continue with just good enough when players expect excellence.

"For those we serve we want to provide excellence. If the purse strings are drawn too tightly let the parents know the situation. They are fundraisers personified.

"We can do it— just loosen the reins and say Giddyap. No athlete who has enjoyed excellence will ever again be satisfied with good enough.' "

homeowner does reflect directly on the LCO.

● Don't oversell your service. You only control half of it.

● Work with your regulatory agencies to develop favorable water-use regulations. "Without good water-use regulations, many of today's companies will be out of business in five to 10 years. Sufficient water must be there," Carrow concluded. □

## PESTICIDES

### What kills most sells the best

MIDLAND, Mich. — The single most important consideration when buying a herbicide is percentage of broadleaf weeds controlled, according to lawn care operators (LCOs) surveyed recently by the Dow Chemical Co.

About 100 LCOs responsible for selecting chemicals and materials for their lawn care operations were surveyed. Eighty six percent of the respondents were from the Midwest and the rest from the Northeast.

The spectrum of weeds controlled was the second most significant consideration, accounting for 18 percent of their buying decisions and nearly 20 percent for purchasing spot chemicals. In both instances, LCOs preferred herbicides that provide total control for both difficult and easy-to-control weeds, to those giving only partial control.

The participants also indicated that a chemical's ability to reduce callbacks was the third most important factor in their purchasing decision, accounting for about 12 percent of their decisions to buy broadcast and spot herbicides.

Chemical cost per acre was reported to be significantly less important than efficacy, sales support and safety. Cost accounted for nine percent of the broadcast chemical decisions and four percent for spot herbicides. The results indi-