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#### 72

#### **COVER STORIES: SAFER ATHLETIC FIELDS**

WEEDS TREES & TURF takes an in-depth overview of quality control of turfgrass on athletic fields, hoping to provide tips to make your field safer for young athletes.

40 THE KILLING FIELD50 AN ACT OF GOD?56 FOR SAFER TURF ...58 ARE YOU LIABLE?

- 60 ONE WHEELCHAIR IS TOO MANY62 PREVENTING, NOT PROMOTING, THE INJURY
- 64 FOR MORE INFORMATION ...

#### **67 HIGH SPEED**

The ever-popular hydroseeding technique is a fast and economical method of seeding that can save you money. Here are the hows and whys.

#### 72 1987 BUYER'S GUIDE

As you begin to get ready to purchase equipment, chemicals and seed for the 1987 season, you'll want to refer to the annual WEEDS TREES &TURF Buyer's Guide, 34 pages of jam-packed information.

9 ELANCO PRODUCTS COMPANY Presents, A GUIDE TO LANDSCAPE MANAGEMENT

#### DEPARTMENTS

- 6 TRENDS
- **8** GREEN INDUSTRY NEWS
- **36 SHORTCUTS**
- **135** PROBLEM SOLVERS
- **136** PRODUCTS
- 137 JOB TALK
- **138** CLASSIFIED
- 141 AD INDEX
- 142 OUTLOOK



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durable equipment. Parts and service support must be efficient efficient Groundsmaster

Groundsmaster 217-D

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Groundsmaster 117

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For more information on the Toro Groundsmaster advantage and the name of the distributor near you write to The Toro Company, Dept. GM, Commercial Marketing,

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### NEWS/TRENDS

#### Good planning can make budget fight easier

■ The problem with many athletic turf managers is they don't do a good enough job selling themselves and, consequently, they aren't taken seriously when they place their supply orders on their superior's desk.

The reason they aren't taken seriously? Poor planning, according to Bill Bedrossian of Servicemaster Industries in Downers Grove, Ill. Bedrossian told his audience of athletic turf managers at the Midwest Sports Turf Institute they must "plan, execute, and review."

An athletic turf manager must document items such as manpower (total hours available versus total hours needed, scheduling, seasonal fluctuations), equipment (purchase date, condition, scheduled replacement, replacement cost), supplies (on hand, annual needs, cost effectiveness), and grounds (turf areas, paved surfaces, irrigation systems, trees and shrubs, bleachers).

An effective sports turf manager, says Bedrossian, has a planning calendar that includes items such as routine seasonal requirements, and regular annual events such as graduations, town fairs, and special sporting events. He also keeps a long-term calendar, perhaps a year in advance, of projects in the works.

Credibility is most important, he says, noting that written and photographed documentation is a must. "Show the superiors the condition of the fields when you started versus the condition they are in today," Bedrossian says.

And finally he says you must follow through by establishing expectations, providing inspections and documentations, making revisions when necessary, being flexible, and promoting yourself. Bedrossian says if you don't let anyone know you're doing a good job, your work will go unnoticed. And your budgeting battles will be losing ones.

#### Low-maintenance California grass on horizon

■ El Toro—not the tequila, but a low maintenance zoysiagrass expected to prosper in the warm California climate—should be available for home lawn, park, and other uses within two years, according to Dr. Vic Gibeault, cooperative extension turfgrass specialist at the University of California-Riverside.

El Toro, says Gibeault, is heat and salt tolerant, requires less water and nitrogen fertilizer than other turfgrasses, has few insect or disease problems, has good density and resistance to foot traffic, and grows in light to moderate shade.

It shows good cool season color but goes dormant during the cooler winter months, says Gibeault. He notes it produces less thatch than other zoysiagrasses.

El Toro is a UC-patented selection developed from the breeding program of the late UC-R professor Dr. Victor B. Younger.

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### **GREEN INDUSTRY NEWS**

# **Robot lawnmower: just around the corner?**

Dr. Ernest Hall spent years calling equipment companies trying to convince them to manufacture his robot lawn mower. This year, companies are calling him.

Hall, director of the Center for Robotics Research at the University of Cincinnati, has turned an 11-hp Snapper riding mower into a robot mower. Now, Snapper is among several companies vying to manufacture the space age mower.

"I'm negotiating with six companies," Hall says. "Snapper is the one I've talked to the longest and in the most detail."

But Hall also mentions Honda as a possible manufacturer. "It's a product that's been developed in America, but the Japanese may be more interested in manufacturing it," he says.

Hall describes another company looking into the mower as "a major corporation in the United States which works with race cars and challenging technological things."

The mower could be ready to market in two or three years. "But the possible manufacturers have a lot of questions."

One new question, which seems to be choking many industries, is liability. Although, Hall says, the robot lawn mower is potentially safer than today's mowers, the issue cannot be ignored.

Already, people have won cases against mower manufacturers despite the fact that the consumer was misusing the product. In one case, someone was using a push mower as a hedge trimmer. In another, a man died of a heart attack trying to start a mower with a clogged system.

"If you were worried all the time, nobody would do anything," Hall says.

The mower is safer, primarily because it decreases human contact with the machine. Lawn mower acci-



The robot mower: a niche in the Green Industry's future?

dents hurt more than 50,000 Americans annually.

It works in one of three ways: remote control (a human would watch the mower and guide it); trainable mode (a computer program would teach the mower boundaries of a lawn); fully automatic mode (the mower would be able to detect boundaries, flower beds, trees).

For added safety, the mower features a warning light and safety bumper which stops when the machine encounters an object; sonar detectors which locate and avoid stationary and moving objects; and an omni-directional vision system which allows the robot to avoid obstacles and monitor progress while cutting the lawn.

Studies have shown the robot mower to be economical for either domestic or professional use. It is ideal for an older or handicapped consumer who can't do strenuous work. With homeowner use, the mower pays for itself in three years.

A lawn care company which mows less than 100 acres weekly will pay for it in a year and a half. And, in large commercial use such as a municipal airport or highway, it can be paid off in less than a year.

Lawn care employes shouldn't be threatened by the robot. Hall says the machine will free up people to work on other areas of the landscape. Besides that, it will create a cottage industry for people to program or repair the robots.

The robot lawnmower is only the beginning. "I see people having not only the robot lawnmower, but indoor robots such as a vacuum cleaner," Hall says. The vision is reminicent of the old Jetsons cartoon.

The first step is for Hall to secure a deal with a manufacturer who can make the product economically. "As Henry Ford once said: 'If I can make it cheap enough for people to afford, I'll make a fortune.'

# **Water management a problem out west**

Although water usage is not considered the primary problem faced by landscape managers in Southern California, it rates as "very important."

According to Janet Hartin, Cooperative Extension agent at the University of California, a survey taken at a horticultural short course noted that over-watering was most often cited as the major water-related problem.

"Water management, water quality programs and irrigation system design problems were frequently cited second water-related problems," says Hartin. "And almost all respondents said there was not sufficient information on water conservation available."

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