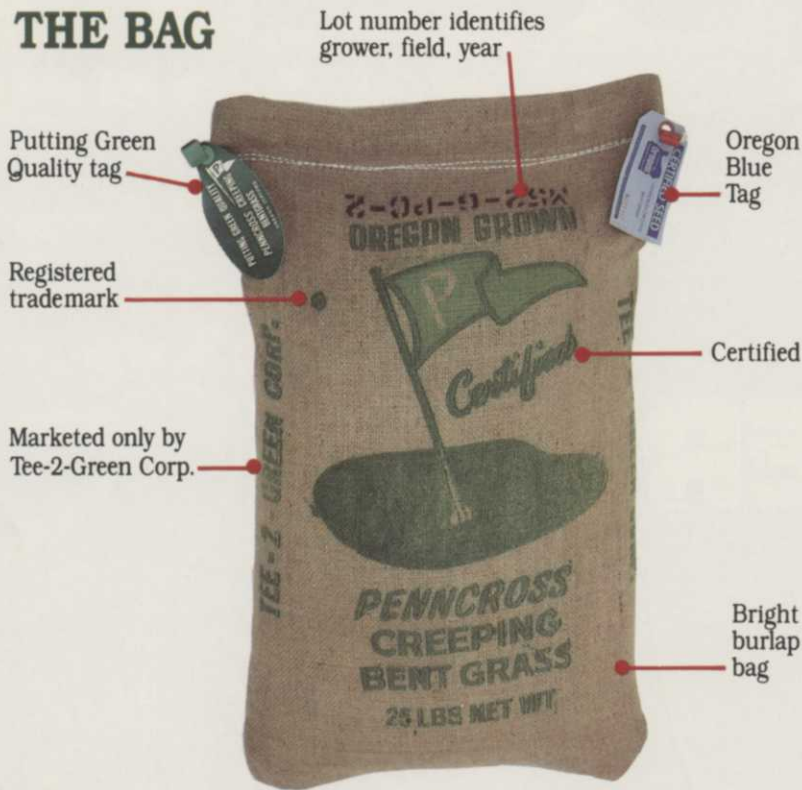


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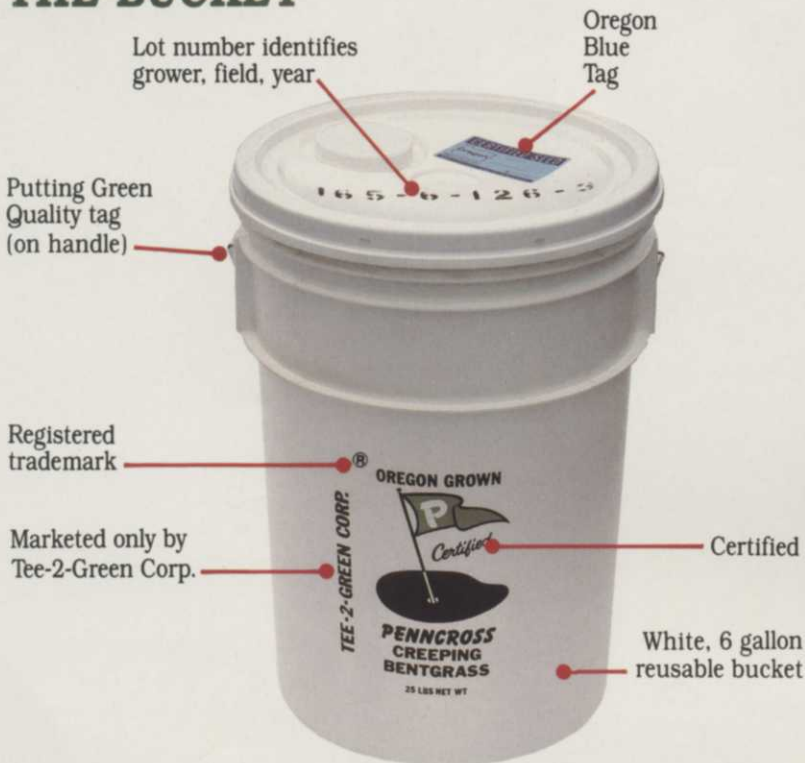
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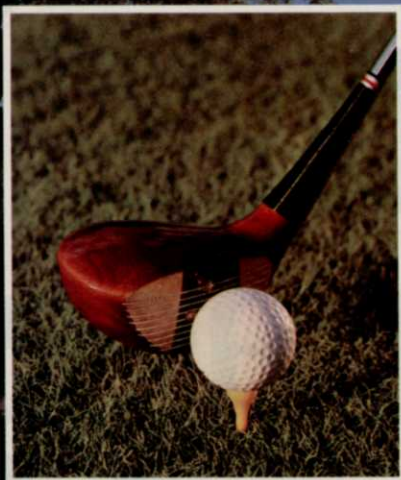
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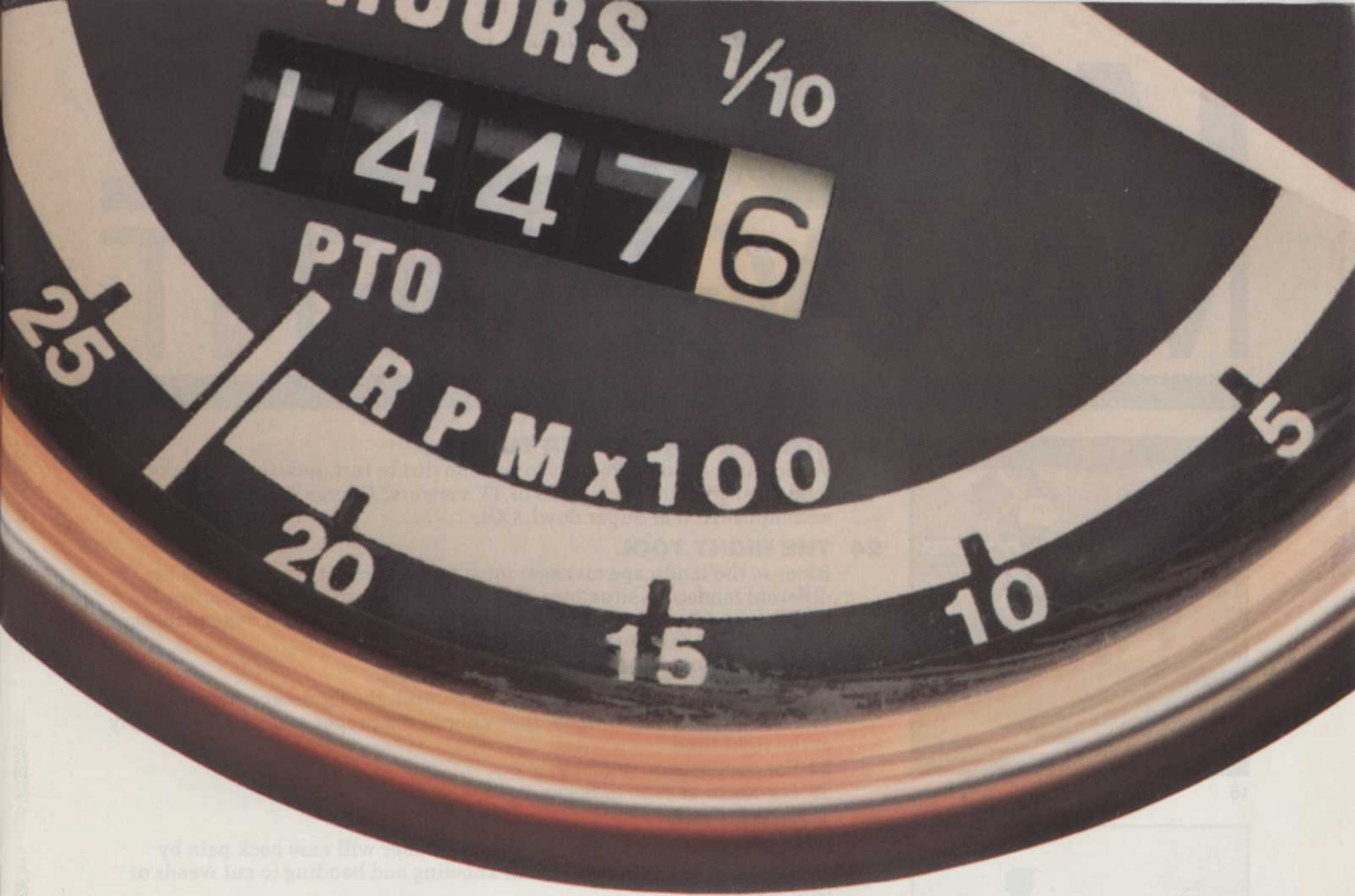
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Source: National Farm & Power Equipment Dealers Association Official Guide, 1979 original list prices from Spring 1980 edition, resale value Fall 1987.

# LANDSCAPE MANAGEMENT

Formerly WEEDS TREES & TURF



16

**16 COVER STORY: SUPER TURF**

When there are only 25 days to go from dirt to turf, how do you make a field good enough for millions of TV viewers? George Toma and his crew accomplished it at Super Bowl XXII.

**24 THE RIGHT TOOL**

Because the landscape manager must mow different types of grass in different landscape situations, selection of the most efficient mower is paramount. Most of the green industry relies on those old dependables, reels and rotaries. But there are others.

**34 POST-EMERGENCE WEED CONTROL**

For successful post-emergence weed control, the landscape manager must first identify the target weed, then choose the proper material, then apply at the right time.

- 34 For cool-season grasses
- 38 For warm-season grasses

**50 A GOOD LINE**

It might not get you a date, but a line trimmer will ease back pain by eliminating the need for stressful kneeling and bending to cut weeds or trim grass.

**60 WARM-SEASON INSECT CONTROL**

New in insect control: the spittlebug, high-pressure injection systems and biotechnology. This guide offers old stand-by cures and new advances in insect control.

**70 THE TIME MACHINE**

That's what the busy executive is asked to be on a daily basis. If your 'time machine' is sputtering along, here are some tips designed to get it hitting on all eight cylinders again.

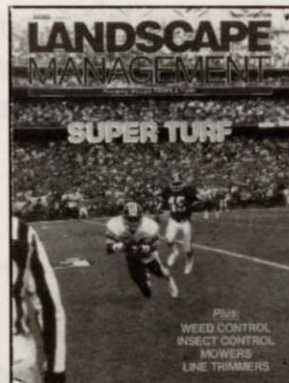
**74 MANAGE YOUR TURF**

Although the turf is what you see, you might have to get to the root of your problems through the soil.



24

<b>DEPARTMENTS</b>	<b>80</b> JOBTALK
<b>6</b> NEWS/TRENDS	<b>84</b> PRODUCTS
<b>8</b> GREEN INDUSTRY NEWS	<b>89</b> PROBLEM MANAGEMENT
<b>14</b> SHORT CUTS	<b>92</b> CLASSIFIED
<b>30</b> ON DESIGN	<b>96</b> AD INDEX



On the cover: Action at the Super Bowl, reproduced with permission from 'Sports Illustrated' magazine.

LANDSCAPE MANAGEMENT (ISSN 0894-1254) is published monthly by Edgell Communications, Inc. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising Offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130, 111 East Wacker Drive, Chicago, Illinois 60601 and 3091 Maple Drive, Atlanta, Georgia 30305. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: \$25 per year in the United States; \$35 per year in Canada. All other countries: \$70 per year. Single copies (pre-paid only): \$2.50 in the U.S.; \$4.50 in Canada; elsewhere \$6.00; add \$3.00 for shipping and handling per order. Second class postage paid at Duluth, Minnesota 55806 and additional mailing offices. Copyright© 1988 by Edgell Communications, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

POSTMASTER: Send address changes to LANDSCAPE MANAGEMENT, P.O. Box 6198, Duluth, Minnesota 55806.

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
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## Fertilizer prices rise. . . .

■ Fertilizer prices have gone up anywhere from five to 10 percent this year, after a two-year fall. A Lawn Care Industry survey of suppliers reveals bulk urea prices have jumped 20 to 30 percent in the last six months, meaning a five to 10 percent increase for finished products, depending on urea content. Raw material bulk prices fell five to eight percent last February through April. This year, they jumped 22 percent in a similar period.

## . . . .while LCO pesticide use appears down

■ A trend appears to be developing in the chemical lawn care industry away from the use of pesticides. ChemLawn, the country's largest such company, expects to start using biological insect controls on customers' lawns within two years, a report in *Organic Gardening* claims. ChemLawn scientists are studying nematodes and other biologicals for use against lawn pests.

And Davey Tree & Lawn Beauty, in a press conference Feb. 29 in Cleveland, announced its intent to use considerably fewer pesticides in 1988 (see "Green Industry News").

## Architect sees golf growth continuing

■ Landscape architect and golf course designer F. Truitt Rabun, Jr., of Edward Pinckney/Associates, Ltd., agrees with National Golf Foundation figures painting a rosy picture for the future of golf, especially in construction of golf course communities. Golf will grow in relation to residential development in order to increase the value of land, he says, sometimes as much as \$20,000 to \$30,000 per lot.

Also, community leaders, especially in southern metropolitan areas, are calling for more country clubs because existing ones are full. A factor in drawing business to an area is the availability of country club membership for executives. "Community leaders are pulling for new country clubs for these newcomers," Rabun says.

Another trend Rabun sees: a need for more public courses built by private developers, based on demographics and profit potential. Courses will be more suited to new players, retirees and women. He cited quality of tee placement as an example in the case of women. Lower maintenance costs and less management-demanding designs. "The pendulum is swinging," he says. Designs will pay more attention to land form and existing vegetation, and thus be less expensive to maintain.

Rabun spoke at the first Southern Grounds & Turf Maintenance Expo in Myrtle Beach, S.C. in February.



Rabun

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## RIGHTS-OF-WAY

### Landscaping lures developers and tenants

In California's Silicon Valley, where competition for new industry is intense, the City of San Jose is building roads with attractively landscaped median strips to enhance land value and help lure developers and tenants.

In one such median strip project, on a 1.5-mile extension to Hellyer Avenue in South San Jose, the Oakland-based landscape architecture firm of Singer & Hodges has created an instant landscape, using 36-inch boxed trees and other large specimens.

But the landscape would not have flourished for long in the native serpentine soil, a real problem on the northern portion of the project, says landscape architect Ron Hodges. With too little calcium and too much magnesium, the soil stunts plant growth and distorts foliage.

B&B Landscaping of Mountain View, which installed the landscape, removed 12 inches of subsoil, says Hodges. "They ripped the bottom and added gypsum. The calcium in the gypsum displaces the excess magnesium."

An irrigation system was laid and a new soil mix imported. Hodges specified a sandy loam topsoil and CompGro, a sewage sludge-based soil amendment produced by the East Bay Municipal Utility District at its wastewater treatment plant in Oakland. A composted mixture of organic solids and fir and cedar bark chips, CompGro contains high amounts of humus needed for building good soil structure. It also adds nitrogen, phosphorus, potassium and essential minerals to the soil.

The medians were mounded in the middle, sloping gently to the edges. Explains Hodges: "We wanted to maximize the amount of soil so that the plants—particularly the coast live oaks—would be well-established before hitting the serpentine subsoil." To protect the oaks from excess moisture, the landscape architects designed a sub-drainage system, with a perforated drain to each tree.

"Since the oaks are slow-growing, we used 36-inch boxed specimens to make an immediate impact. Everything else we planted was in scale with that," Hodges says.

Where it is difficult to maintain ground cover, Hodges opted for seeding a drought-resistant tall fescue.

Plantings throughout the project are drought-tolerant.



Shown above is a strip of right-of-way along Hellyer Avenue in San Jose that was designed to attract industry and residents to the area. This tract was designed by Ron Hodges of Singer & Hodges.

## PESTICIDES

### EPA kills special review of 2,4-D

The Environmental Protection Agency will not conduct a special review of 2,4-D because further research could not confirm suspicions that it causes cancer.

EPA spokesman Al Heier said additional studies suggest 2,4-D is not a carcinogen. "Some of the best toxicologists in the country looked at the data" and could not verify the link between 2,4-D and human cancer.

The possibility of a special review arose in 1986 after release of a National Cancer Institute (NCI) study of Kansas farmers using 2,4-D more than 20 times a year and mixing their own formulations. The study said farmers were eight times more likely to con-

tract non-Hodgkins lymphoma, a cancer of the lymph systems.

However, a followup study by NCI in western Washington found no increased incidence of cancer.

The EPA decision averted the possibility of new label restrictions or a banning of the herbicide.

"This is probably the best news I've heard in a long time," says Doug Fender, executive director of the American Sod Producers Association. "The significance of an effective herbicide on a sod farm cannot be overstated."

EPA will seek out long term studies of the effects of 2,4-D done by universities or manufacturers. "We will be

asking registrants (2,4-D manufacturers) to conduct some additional long-term studies," adds Steve Johnson, deputy director of EPA's pesticide hazard evaluation division.

The *New York Times* quoted staff scientist Diane Baxter of the National Coalition Against the Misuse of Pesticides (NCAMP) as calling the decision "outrageous," saying that results of the human studies conducted by the NCI should outweigh animal studies which the EPA has referenced.

In the meantime, EPA has classified 2,4-D as a Category D pesticide, one which displays no evidence of human carcinogenicity.