

**A Perfect Plug  
for PennLinks**



DJ Pakkala, Supt.  
The Vintage Club  
Indian Wells, CA

## **“PennLinks survives 126° heat and below freezing temperatures here in the desert”**

“Here at The Vintage Club, we pride ourselves on our 36 flawless Penncross greens, so when Dr. Joe Duich at Penn State University asked me to test his experimental bentgrass PSU 126, now PennLinks, I jumped at the chance. After three years of extreme desert temperatures, this chipping green looks absolutely perfect, and I get raves from the membership.

I have found that PennLinks has a more upright growth habit and more

uniform color than Penncross and that fast, true putts are the standard.

While I'm not given to praising products loosely, here I am plugging PennLinks ... and what better place than on our perfect pitching green!”

PennLinks PVP 8700030



Warren Bidwell is available to speak to your superintendents' group about the Penn bentgrasses. Call our toll free number for details.  
**TEE-2-GREEN Corp., PO Box 250 Hubbard, OR 97032 1-800-547-0255 FAX 503/981-5626 TWX 510-590-0957**



When good shots end up in bad lies on dollar spotted fairways, it can spot your course's reputation.

That's good reason to put Rubigan® in play. Dollar for dollar, nothing controls dollar spot better.

Just one Rubigan application controls even resistant strains of dollar spot for up to 28 days. And one case of Rubigan will treat up to 8 acres of greens and fairways.

Rubigan is the only fungicide labeled to treat and prevent all these other turf spoilers, too: Fusarium leaf spot, necrotic ring spot, summer

patch, take-all patch and spring dead spot — plus large brown patch with a Daconil 2787® tank mix.

Keep your fairways, tees and greens dollar spotless — looking clean and beautiful all season long. Get Rubigan from your Elanco distributor. Or call toll-free: **1-800-352-6776.**

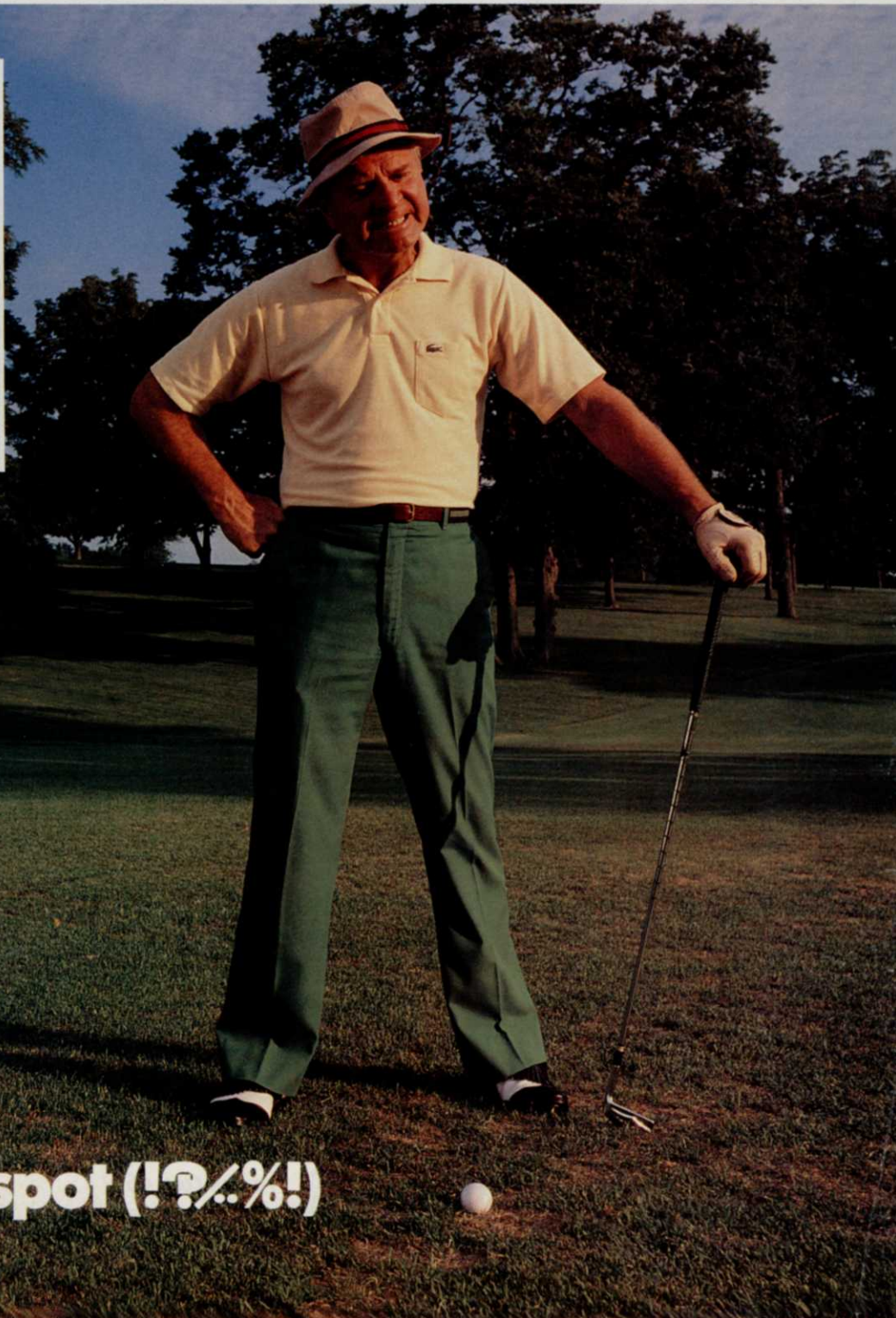
Elanco Products Company  
A Division of Eli Lilly and Company  
Lilly Corporate Center  
Dept. E-455, Indianapolis, IN 46285, U.S.A.  
Rubigan® — (fenarimol, Elanco)  
Daconil 2787® — (chlorothalonil, SDS Biotech)



Circle No. 117 on Reader Inquiry Card



**From  
sweet spot**



**...to dollar spot (!?/%!)**



**ONLY  
\$3399\*\***



# LANDSCAPING WITH

The new John Deere AMT™ 600 All Materials Transport treads so lightly, it'll barely bend your bent grass.

That's because even with a 600-pound\* payload and a 200-pound operator on

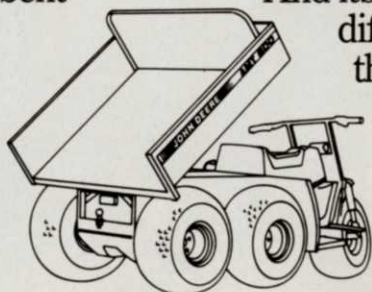
board, the AMT transport only puts down an average of 17 psi of ground pressure.

And its automotive-type differential allows the inside wheels to

turn slower than the outside wheels. So the 600 won't tear up your turf turning either.

But for all the features that won't leave a bad impression on your turf, there are even more that'll leave a good impression on you.

Like the way the AMT



*The 48¼ x 43-in. box manually raises to a 45 degree angle.*





Location courtesy of the Arizona Billmore.

# OUT LANDSCUFFING

transport's powerful drive system provides a 62-to-1 torque ratio for tremendous pulling power.

Or the way its box holds 12.5 cubic feet of material—and dumps too.

So if you're looking for a utility machine that won't sink into your landscape or

your budget, see your John Deere dealer. Or write John Deere, Dept. 84, Moline, IL 61265.

*AMT 600 vehicle transports easily in a standard size pickup.*

*\*On level ground*

*\*\*Manufacturer's suggested list price not including sales tax.*

*Price may vary with dealer.*

Nothing Runs Like a Deere®



Circle No. 113 on Reader Inquiry Card



# LANDSCAPE MANAGEMENT

Formerly WEEDS TREES & TURF



8

## 28 A LANDSCAPERS' HOME LIBRARY

Every once in a while, landscape managers must confront problems for which they don't have immediate answers. If they knew the vast array of books, brochures, video tapes and pamphlets available for turf and tree care, references would be no problem.



28

## 35 1989 BUYER'S GUIDE

As you begin to get ready to purchase equipment, chemicals and seed for the 1989 season, you'll want to refer to the annual Landscape Management Buyer's Guide, 34 pages of jam-packed information.

- 35 Equipment
- 58 Equipment companies
- 70 Chemicals
- 87 Chemical companies
- 92 Seed companies
- 96 Miscellaneous

### DEPARTMENTS

- 6 NEWS/TRENDS
- 8 GREEN INDUSTRY NEWS
- 100 PRODUCTS
- 110 CLASSIFIED
- 116 AD INDEX



ON THE COVER: Some of the products available to landscapers and golf course superintendents through the 1989 LM Buyer's Guide

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; \$50 per year in Canada. All other countries: \$100 per year. Single copies (pre-paid only): \$2.50 in the U.S.; \$5.00 in Canada; elsewhere \$10; add \$3.00 for shipping and handling per order. Office of publication: Edgell Communications, Inc., 1 East First Street, Duluth, Minnesota 55802. 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

BPA ABP EDGELL COMMUNICATIONS



**Citation II • Birdie II • Manhattan II**  
**Perennial Ryegrass Blend**



*The Rose Bowl at Pasadena, CA, January 1, 1988*

# Ferry-Morse Gold Tag Brand Covers the 1988 Rose Bowl

New generation ryegrasses provide perfect playing surface on return to the Collegiate Football Classic.

PASADENA, CA – It's a thrill to earn your way into the Rose Bowl, the oldest and most prestigious collegiate football classic; but to return again and again is a mark of a tough competitor.

The Rose Bowl turf management team needed a fast-germinating, uniform growing and appearing ryegrass blend to overseed the dormant bermudagrass base. Because of its superior performance in the 1986 Rose Bowl, the combination of improved varieties Citation II, Birdie II and Manhattan II produced by Turf-Seed, Inc. were re-called to duty. Seeding

began on November 16, 1987 and was 'perfect' for the kickoff on New Year's Day.

The dark green color and density provided a base that set off the colorful graphics in the Rose Bowl tradition. And after hard use, the playing surface looked great . . . even under television scrutiny. Ferry-Morse gave it their best . . . Gold Tag Blend, and the rest is history.

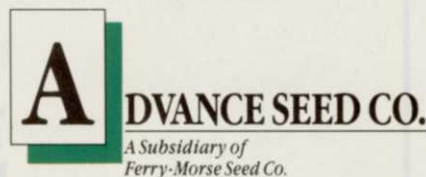
If this blend can look and perform this well under the most critical of conditions, think of what it will do for your athletic field!

Citation II, Birdie II and Manhattan II are products of



PO Box 250, Hubbard, OR 97032  
503/981-9571 TWX 510 590 0957  
1-800-247-6910  
FAX 503 981-5626

Gold Tag Brand is distributed by



1150 N. Red Gum Ave., Suite A  
Anaheim, CA 92806  
714/666-8600 / In CA, 1-800-572-7333  
Fulton, Kentucky  
502/472-3400 1-800-626-3392



## A new perspective on chemicals

■ Why are federal health agencies pouring so much time and energy into regulating chemicals that pose less of a health hazard than peanut butter? That's the question being asked by Dr. Bruce Ames, a scientist in the biochemistry department at the University of California, Berkeley. Ames, creator of the Ames Test and one of the foremost consumer advocates of the 1960s, is again in the national spotlight since publishing *Ranking Possible Carcinogenic Hazards*, which challenges the government's method of assessing a chemical's potential risk.

According to Ames, researchers need to take into account how many people are likely to be exposed to a chemical and its threat at low doses, not merely what happens when you pump it into a rat. Case in point: Ames points out that the EPA banned EDB after determining it could cause three cases of cancer in 1,000 (about one percent of all cancer in the United States). "It would be more reasonable," writes Ames, "to compare the possible hazard of EDB residues to that of other common possible hazards. For example, the aflatoxin in the average peanut butter sandwich, or a raw mushroom, is 75 to 200 times, respectively, the possible hazard of EDB."

Ames adds that the alternatives to chemicals should be considered. That way, he says, regulators can set more realistic priorities for concern.

## Arizona legalizes sterile carp

■ Golf course superintendents in Arizona have won the battle of the white amur. The fish, commonly known as a grass carp, had been used to control vegetation in course ponds and streams until the Arizona Game and Fish Department banned it last October. Citing its threat to the limited vegetation in the state's game rivers and fears that it would reproduce, the Department ordered the fish destroyed and created stiff penalties for those failing to comply.

A compromise was reached this summer when the state legislature approved the use of genetically altered variety of the fish, called a triploid, which is sterile.

"There has been no evidence that the triploid white amur has any environmental impact on the game fish population or waterfowl," said Dennis M. Wesseldine, a regional superintendent with the American Golf Corporation. "We must encourage all superintendents and golf organizations in the states where the amur is illegal to lobby with local state legislators to encourage the complete biological control of aquatic weeds."

### LM Editorial Staff



Jerry Roche



Will Perry



Jeff Sobul

### EDITORIAL STAFF

**Jerry Roche**, Editor

**Will Perry**, Managing Editor

**Jeff Sobul**, Associate Editor

Office: 7500 Old Oak Blvd.

Cleveland, OH 44130

(216) 243-8100

### MARKETING STAFF

**Dick Gore**, Publisher

Office: 455 E. Paces Ferry Rd.

Suite 324

Atlanta, GA 30305

(404) 233-1817

**Jon Miducki**, National Sales Manager

**Marsha Dover**, Midwest Sales Manager

**Gloria Cosby**, Eastern Sales Manager

**Bob Earley**, Group Vice President

Office: 7500 Old Oak Blvd.

Cleveland, OH 44130

(216) 243-8100

**Robert Mierow**, W. Coast Representative

Office: 1515 NW 51st Street

Seattle, WA 98107

(206) 783-0549

**Tom Greney**, Senior Vice-President

Office: 111 East Wacker Drive

Chicago, IL 60601

(312) 938-2344

### SUPPORT STAFF

**Carol Peterson**, Production Mgr.

**Marilyn MacDonald**, Prod. Supervisor

**Deb Georges**, Graphic Design

**Becky Gothner**, Circulation Super.

**Bonnie DeFoe**, Directory Coordinator

**Gail Parenteau**, Reader Service Manager

Office: 120 West Second St.

Duluth, MN 55802

(218) 723-9200

**David Komitau**, Graphics Coordinator

**Ted Matthews**, Promotion Director

Office: 7500 Old Oak Blvd.

Cleveland, OH 44130

(216) 243-8100

**EDGELL**  
COMMUNICATIONS

Robert L. Edgell, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Ariand Hirman, Vice President/Treasurer; Thomas Greney, Senior Vice President; Ezra Pincus, Senior Vice President; Joe Bilderbach, Vice President; James Gherna, Vice President; George Glenn, Vice President; Harry Ramaley, Vice President.



# BEHIND EVERY GREAT PERFORMER IS A GREAT COACH



That's why so many winning equipment manufacturers sign Onan to their team. For almost half a century, Onan engines have been the first round choice of leading manufacturers.

Onan engines perform. Hundreds of thousands proving themselves every day. Performing under adverse conditions. Performing with power. Performing for years of trouble-free operation.

Onan builds winners by building winning relationships with equipment manufacturers. Partnerships based on common goals and dedication to customer service.

Great performance, great teamwork. An unbeatable combination.

**Onan**  
**Engines**

Built in the U.S.A. 

Onan Corporation  
Engine Division  
1400 73rd Ave. N.E.  
Minneapolis, MN 55432



## PEOPLE

### This water lady hits the jackpot in Oregon

Color Maryann Mangucci's Cushman scooter any colors you want. Just use lots of them. Color its owner enthusiastic.

And that colorful combination has helped Mangucci become a successful businesswoman in just three years.

On any given summer day, you can see Mangucci putting around Silverton and Mount Angel, Ore., watering hanging baskets which have been placed in public areas.

The two chambers of commerce wanted to beautify their cities, so they erected the baskets and had flowers planted in them. Someone had to water the flowers, too, and Mangucci was in the right place at the right time.

It was husband Phillip's idea to purchase the 1971-model scooter; she has registered more than 800 miles in it. The scooter ("my efficient little workhorse") has a 55-gallon Cushman stainless steel tank, a pump hooked into the scooter's 12-volt battery, and a 13-foot wand made of conduit for lightness. Mangucci waters 25 hanging baskets in each city once a day—twice a day when the temperature gets over 90 degrees.

Why the brightly-painted scooter? "I wanted to be visible as well as pretty-looking," she says. "And it's worked out beautifully. I've been very successful. I've even had quite a few requests for landscape work, but I don't do that kind of work, so I refer them to my friends."

Before going into her own interiorscaping business, Mangucci spent 16 years working in a business office. "This beats it all together," she notes.

And then she's off again, in search of more baskets to water.



## RESEARCH

### Ohio State professors take to the road to address drought concerns of supers

Four members of the Ohio State University Agronomy Department toured areas of Ohio in mid-July to personally address drought concerns of golf course superintendents.

Participants in the tour were Ph.D.s John Street, Karl Danneberger, Harry Niemczyk and Bill Shane.

One of the final stops was at Quail Hollow Resort in Painesville, where superintendent Jim Loke assembled about a dozen superintendents from the northern Ohio area. Where the courses got their water and how it was used was a sore spot for some neighbors of golf courses.

Don Sweda, superintendent at Beechmont Country Club in Pepper Pike, said he received a crank phone call in the middle of the night from someone ordering him to stop watering. He uses water from lakes on the course to irrigate.

Jean Esposito of Hinckley Hills Golf Course in Hinckley, had her own experience which included the Cleveland Water Department, members of the local television media and crank phone calls (see related story).

Nearly all of the courses in the region ceased irrigating roughs early on, if they even had the capability to start with. Most public courses—without the large budgets of some of the private clubs—stopped watering fairways. These, too, were brown.

Danneberger noted that "the Cincinnati area was hit hard" because courses using municipal water were cut back severely.

One of the concerns expressed by the superintendents was whether this turf would recover with rainfall and green up again in the fall as conditions moderated.

Esposito, whose Hinckley Hills course has no fairway irrigation system, was optimistic after the first significant rainfall in weeks graced her course the previous weekend. "I can see some green coming back into them," she told the group—not much, but it was there.

"The grass must get some water," Danneberger noted. "Dormancy does not mean it won't die. But with this kind of year, there is stress on the grass we haven't seen in 50 years. There will be problems," he





Circle  
the  
Reader  
Service  
numbers  
of those  
items of  
interest  
to you.

For fastest response, use the peel-off label from the front cover.

NAME \_\_\_\_\_  
 TITLE \_\_\_\_\_  
 FIRM \_\_\_\_\_ **PLACE COVER LABEL HERE** \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ **PRINT PHONE NUMBER BELOW** \_\_\_\_\_  
 CITY \_\_\_\_\_  
 STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 TELEPHONE (        ) \_\_\_\_\_

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 101 | 115 | 129 | 143 | 157 | 171 | 185 | 199 | 213 | 227 | 241 | 255 | 269 | 283 | 297 | 311 | 325 |
| 102 | 116 | 130 | 144 | 158 | 172 | 186 | 200 | 214 | 228 | 242 | 256 | 270 | 284 | 298 | 312 | 326 |
| 103 | 117 | 131 | 145 | 159 | 173 | 187 | 201 | 215 | 229 | 243 | 257 | 271 | 285 | 299 | 313 | 327 |
| 104 | 118 | 132 | 146 | 160 | 174 | 188 | 202 | 216 | 230 | 244 | 258 | 272 | 286 | 300 | 314 | 328 |
| 105 | 119 | 133 | 147 | 161 | 175 | 189 | 203 | 217 | 231 | 245 | 259 | 273 | 287 | 301 | 315 | 329 |
| 106 | 120 | 134 | 148 | 162 | 176 | 190 | 204 | 218 | 232 | 246 | 260 | 274 | 288 | 302 | 316 | 330 |
| 107 | 121 | 135 | 149 | 163 | 177 | 191 | 205 | 219 | 233 | 247 | 261 | 275 | 289 | 303 | 317 | 331 |
| 108 | 122 | 136 | 150 | 164 | 178 | 192 | 206 | 220 | 234 | 248 | 262 | 276 | 290 | 304 | 318 | 332 |
| 109 | 123 | 137 | 151 | 165 | 179 | 193 | 207 | 221 | 235 | 249 | 263 | 277 | 291 | 305 | 319 | 333 |
| 110 | 124 | 138 | 152 | 166 | 180 | 194 | 208 | 222 | 236 | 250 | 264 | 278 | 292 | 306 | 320 | 334 |
| 111 | 125 | 139 | 153 | 167 | 181 | 195 | 209 | 223 | 237 | 251 | 265 | 279 | 293 | 307 | 321 | 335 |
| 112 | 126 | 140 | 154 | 168 | 182 | 196 | 210 | 224 | 238 | 252 | 266 | 280 | 294 | 308 | 322 | 336 |
| 113 | 127 | 141 | 155 | 169 | 183 | 197 | 211 | 225 | 239 | 253 | 267 | 281 | 295 | 309 | 323 | 337 |
| 114 | 128 | 142 | 156 | 170 | 184 | 198 | 212 | 226 | 240 | 254 | 268 | 282 | 296 | 310 | 324 | 338 |

## LANDSCAPE MANAGEMENT

SEPTEMBER 1988

This card void after

Nov. 15, 1988

MY PRIMARY BUSINESS AT THIS LOCATION IS:  
(PLEASE CHECK ONE ONLY IN EITHER  
A, B OR C)

**A. LANDSCAPING/GROUND CARE AT ONE OF THE  
FOLLOWING TYPES OF FACILITIES:**

- 0005  Golf courses  
 0010  Sport complexes  
 0015  Parks  
 0020  Rights-of-way maintenance for highways, railroads & utilities  
 0025  Schools, colleges & universities  
 0030  Industrial & office parks/plants  
 0045  Condominiums/apartments/housing developments/  
hotels/resorts  
 0050  Cemeteries/memorial gardens  
 0060  Military installations & prisons  
 0065  Airports  
 0070  Multiple government/municipal facilities  
 Other type of facility (please specify) \_\_\_\_\_

**B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS:**

- 0105  Landscape contractors (installation & maintenance)  
 0110  Lawn care service companies  
 0125  Landscape architects  
 0135  Extension agents/consultants for horticulture  
 Other contractor or service  
(please specify) \_\_\_\_\_

**C. SUPPLIERS:**

- 0205  Sod growers  Other supplier (please specify)  
 0210  Dealers, Distributors \_\_\_\_\_

Approximately how many acres of vegetation do you  
maintain or manage? \_\_\_\_\_

What is your title? (please specify) \_\_\_\_\_

I would like to receive (continue receiving)

LANDSCAPE MANAGEMENT each month: YES  NO

Your Signature: \_\_\_\_\_ Date: \_\_\_\_\_





**BUSINESS REPLY MAIL**

FIRST CLASS PERMIT NO. 665 DULUTH, MINNESOTA

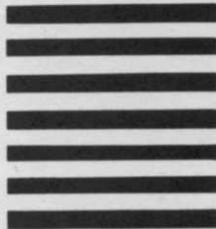
POSTAGE WILL BE PAID BY ADDRESSEE

READER SERVICE DEPARTMENT

**LANDSCAPE  
MANAGEMENT**

POST OFFICE BOX 6049  
DULUTH, MINNESOTA 55806-9749

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



**GET  
MORE  
FACTS**