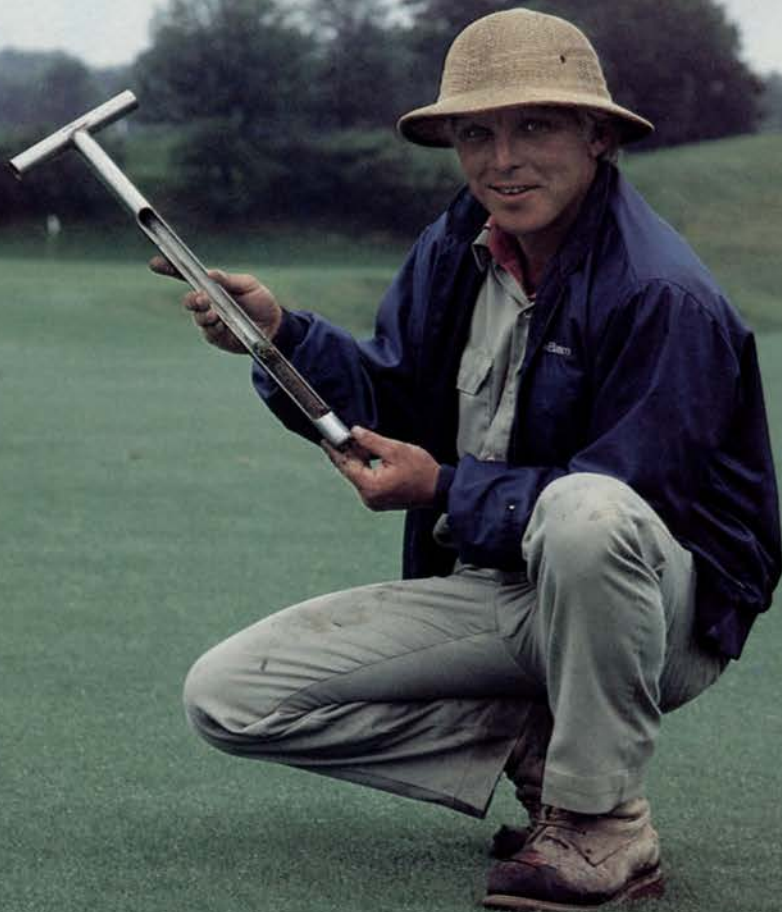


**Penneagle/Penncross
Right on Course**



David Riedman, Superintendent, Crooked Stick GC, Carmel, Indiana.

When the 1991 PGA comes to Crooked Stick, the pros will be playing on 27 acres of Penneagle/Penncross fairways.

Superintendent David Riedman is preening this exciting Pete Dye designed course for one of the major events in golf. His job: provide them with the best playing conditions possible. The turf the pros, as well as the club members, are pleased to play: Penneagle and Penncross.

To find out how David prepares 27 acres of Penn Pals bentgrass fairways for the PGA, call or write Tee-2-Green Corp. for a copy of our new 16 page booklet "Focus on Fairways", with comments by Byron Nelson and Patty Berg.

CROOKED STICK PREENS PENNEAGLE AND PENNCROSS FOR THE 1991 PGA

FOCUS ON

Fairways

Tee-2-Green Corp.
PO Box 250
Hubbard, OR 97032
1-503-981-9574
FAX 503-981-5626
1-800-547-0255

LANDSCAPE MANAGEMENT



On the cover: Soil aeration is practiced by Grayling Ross of Custom Lawns in Olmsted Falls, Ohio. Photo by Wayne Rayburn, HW/R Productions.

22 COVER STORY: SOIL AERATION EQUIPMENT
by Jack Simonds. A wide variety of soil aeration tools have entered the market in recent years, filling every conceivable turf aeration need.

30 LEVELLING THOSE LOWBALLERS
by Terry McIver. In the Northeastern U.S., a 12-week season means that normal problems with lowballers are compressed and magnified. Successful landscapers still compete, though.

32 LATE-SEASON FERTILIZATION
by L.B. McCarty, Ph.D. Objectives of proper fertilization include year-round turf production, adequate vegetative growth and quality shoot growth.

38 SUPERS IN WARM-SEASON AREAS BEWARE!
by Jack Simonds. Bentgrass establishment in warm regions has never been—and probably never will be—easy. No matter how many golfers ask for it.

44 MANAGING STRESS
by Rudd McGary, Ph.D. Job stress is one of the banes of being a manager. But there are ways to relieve the day-to-day stress the job causes. Here are some suggestions.

48 SELF-SUFFICIENT CREWS
by Phil Christian. Front line people need to be empowered to respond to changes in our businesses. Highly productive, on-site crews can work to a higher standard than ever before.

DEPARTMENTS

- 4 As I See It...
- 8 Green Industry News
- 11 News Briefs
- 14 Athletic Turf
- 18 Info Center
- 20 Events
- 50 Jobtalk
- 53 Products
- 56 Classified
- 58 Ad Index
- 60 Problem Management

LM

Editorial Staff



Jerry Roche
Editor-in-Chief



Terry McIver
Mg. Editor

LM

Editorial Advisory Board



Doug Chapman
Horticulturist
Dow Gardens
Midland, MI



J.R. Hall
Extension Agronomist
VPI & SU
Blacksburg, VA



Kent Kurtz
Professor
Horticulture
Cal Poly-Pomona



Harry Niemczyk
Professor
Ohio State University
Wooster, OH



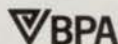
A. Marty Petrovic
Assoc. Professor
Cornell University
Ithaca, NY



A.E. Dudeck
Professor
Univ. of Florida
Gainesville, FL

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, 233 North Michigan Avenue, 24th Floor, Chicago, Illinois 60601 and 3475 Lenox Road, N. E., Suite 665, Atlanta, Georgia 30326. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: \$30 per year in the United States; \$55 per year in Canada, all other countries: \$100 per year. Single copies (pre-paid only): \$3.00 in the U.S.; \$6.00 in Canada; elsewhere \$10; add \$3.50 per order for shipping and handling. Back issues, if available, \$10; add \$3.50 per order for shipping and handling (pre-paid orders only). 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 © 1991 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.
Canadian G.S.T. number: R-124213133.

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







He gave our 1200 the test we couldn't

We couldn't go out and build 27 golf holes to test the durability of our 1200 Bunker and Field Rake. That's why we went to talk to John McWhite. Because that's exactly what McWhite did at the Buck Creek Golf Plantation near Myrtle Beach, South Carolina.

"The 1200 has been unbelievable," says McWhite. "I first looked at it wondering if it could even handle an 8-foot drag. We found it worked so well that we wound up

shaping much of the course with it before we were through.

"I used the 1200 to float all 27 greens.

I rough shaped them with a bulldozer and then went immediately to the 1200. It stood up to a tremendous amount of work and punishment.

"Nothing has the power or versatility of the 1200. You can use three implements at the same time with a blade in front, scarifier in the



The 1200's mechanical transmission and ability to carry a blade, cultivator and rake at the same time make it well-suited for both construction and bunker work.

middle and rake in the rear. A hydrostatic machine simply can't do what the 1200 can here.

"I've used the 1200 to move soil, prepare seedbeds, dig up roots, spread sand, smooth bunkers, and pull aerators. I still don't know what its limits are. I've never even seen its belt slip!"

For the name of your nearest distributor, or free literature on John Deere's Golf and Turf Equipment, call 1-800-544-2122 toll free or write John Deere, Dept. 956, Moline, IL 61265. Like John McWhite, we know you're going to like what you see.



NOTHING RUNS LIKE A DEERE®



A season for change?

"Turn, turn, turn," wrote The Byrds. "There is a season..."

The recent U.S. Supreme Court decision signals what could become an immense change in the way pesticide applicators are allowed to do business. Unless you've been on Mars, or had your head stuck in the sand for the past couple of months, you know that the high court ruling allows states and municipalities to enact regulations to supplement the Federal Insecticide, Fungicide and Rodenticide Act (see "Green Industry News").

This is not good news. As a matter of fact, it could put many small lawn care and landscape companies out of business.

Consider the plight of the company that applies pesticides to four or five large properties in each of six or seven communities. A worst-case scenario would have that company lobby its cause with six or seven city councils, comply with six or seven different sets of regulations, and maintain six or seven sets of application records.

How does the green industry cope with this action? Legally, there is no recourse to a Supreme Court decision. Well, maybe there is a viable alternative.

What the justices said with this decision is that the intent of FIFRA is to allow local regulations. This, then, is the law.

What we can read into the decision—a 9-0 whitewash at that—is that the judges are giving our U.S. Senators and Congressmen a much-needed kick in the pants. Since 1972, FIFRA has been a comprehensive regulatory statute that has been largely unworkable on many levels. The government's legislative branch has potted around for nearly six years now with proposed amendments that would make it a much more effective piece of legislation. But our law-makers have not yet been able to push through any of the much-needed changes.

The Supreme Court justices are telling the Senate and House: "You made the law. You don't like it, you change it."

It's the same message our legislators have been hearing for years from the agricultural community, the Environmental Protection Agency, the green industry, agricultural and chemical manufacturers, and just about everyone else with a vested interest in the application of pesticides.

Maybe one of these days our legislators will get the message. Until then, all the professional pesticide applicator can do is cross his or her fingers, then comply with the legislation that is bound to be passed by the Podunk Centers and Burgervilles of the country.

It's the law.

Jerry Roche, editor

EDITORIAL STAFF

Jerry Roche, Editor-in-Chief

Terry McIver, Managing Editor

Maureen Hrehocik, Group Editor

Office: 7500 Old Oak Blvd.

Cleveland, OH 44130

(216) 243-8100

FAX (216) 891-2675

MARKETING STAFF

Jon Miducki, Associate Publisher

Ann Langhenry, Central Sales Manager

Cynthia Gladfelter, Inside Sales Rep.

(216) 891-2658

Judy Allen, Group Marketing Manager

Bob Earley, Group Vice President

Office: 7500 Old Oak Blvd.

Cleveland, OH 44130

(216) 243-8100

FAX (216) 891-2675

Dick Gore, E. Coast Representative

Office: 3475 Lenox Rd. N.E.

Suite 665

Atlanta, GA 30326

(404) 233-1817

FAX (404) 261-7022

Bob Mierow, W. Coast Representative

Office: 1515 NW 51st Street

Seattle, WA 98107

(206) 783-0549

FAX (206) 784-5545

SUPPORT STAFF

Carol Peterson, Production Mgr.

Rosy Bradley, Sr. Production Mgr.

Ken McShane, Production Director

Dave Lynas, Graphic Design

Marilyn Copp, Circulation Super.

Lynn Viele, Directory Coordinator

Gail Parenteau, Reader Service Mgr.

Office: 120 W. Second St.

Duluth, MN 55802

(218) 723-9200

FAX: (218) 723-9223

David Komitau, Graphics Coordinator

Office: 7500 Old Oak Blvd.

Cleveland OH 44130

(216) 243-8100

Richard B. Swank, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Arland Hirman, Vice President/Treasurer; James A. Adler, Vice President; Joe Bilderbach, Vice President; David T. Mayer, Vice President; Brian Nairn, Vice President; Phil Stocker, Vice President

A BLEND OF FOUR PREMIUM PERENNIAL RYEGRASSES FROM TURF-SEED, INC.
FOR WINTER OVERSEEDING, LAWN RENOVATION, ATHLETIC FIELDS AND PARKS.

Alliance

BLEND

*Dark Green, Drought Tolerant, Insect
and Disease Resistant Turf... Naturally!*

Citation II

- Contains a high level of endophyte that enhances insect resistance.
- Very good resistance to leaf spot, brown patch, crown and stem rust, tolerance to red thread.
- Rich dark green color with good mowing quality.
- Excellent heat and wear tolerance.

Saturn

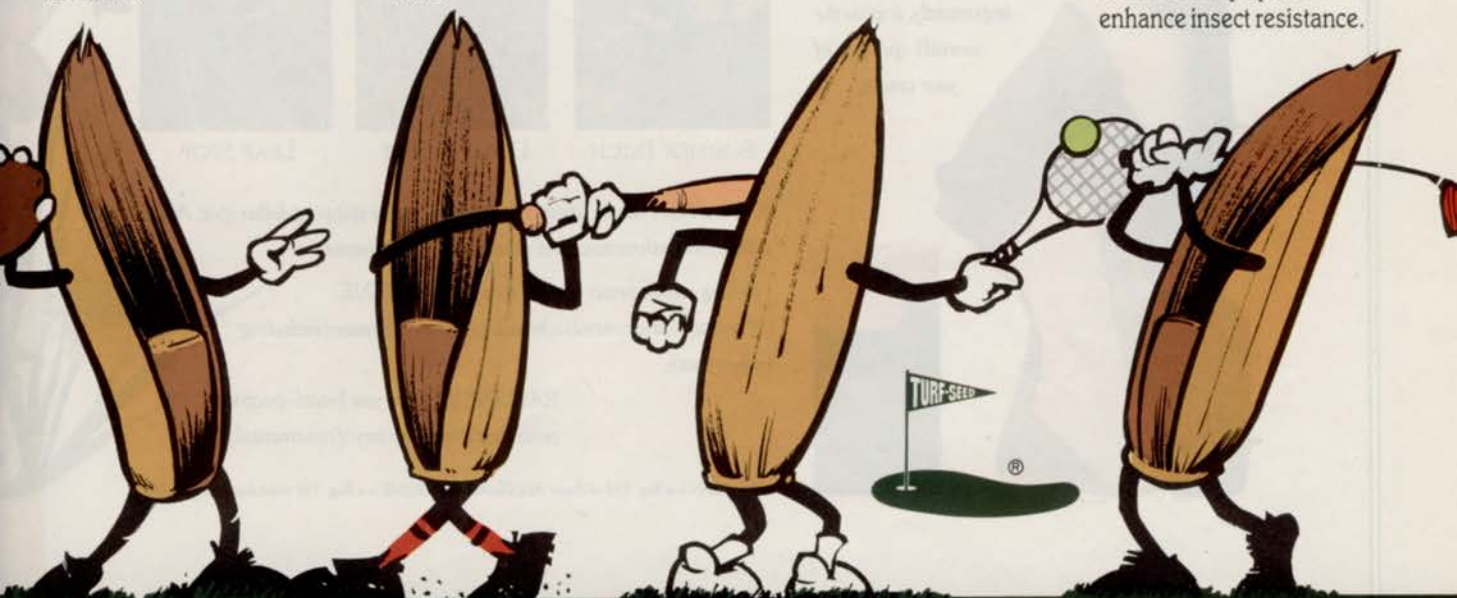
- The number 1 variety in the 1986 National perennial ryegrass trial.
- Dark blue-green colored low growing variety.
- Improved heat tolerance, and resistance to leaf spot, brown patch and stem rust.
- Very good performance in California overseeding trials.

Charger

- Improved resistance to leaf spot, brown patch, stem and crown rust. Tolerance to red thread.
- Good performance under low fertility and improved color and growth under cool weather conditions.
- Early maturity and tested as 2HH.

246 Sunrye

- Very dark blue-green colored turf-type variety.
- Dwarfier growth habit than other varieties in overseeding trials in Palm Springs area.
- Improved resistance to leaf spot, brown patch, and stem rust.
- Contains a moderately high level of endophyte to enhance insect resistance.



A BAYLETON AND DYRENE ALSO TURN YOUR



Treat your fairways with BAYLETON and DYRENE. It keeps your customers from tracking disease up on your tees and greens. More importantly, it raises the overall quality of your course.



For summer patch, nobody beats Mobay. BAYLETON provides superb control. And, Mobay can give you the information and practices to help keep this disease from coming back.



SUMMER PATCH



DOLLAR SPOT



LEAF SPOT

BAYLETON has an unequalled reputation for stopping dollar spot. And, it controls anthracnose and other major turf diseases.

Nothing works better on leaf spot than DYRENE. Of course it also controls a broad spectrum of diseases including brown patch.

BAYLETON gives you broad-spectrum control on a wide variety of ornamental plants.

BAYLETON is a Reg. TM of Bayer AG, Germany. DYRENE is a Reg. TM of Mobay Corporation.

FUNGICIDE PROGRAM WILL COLLEAGUES GREEN.



JUNE '91						
S	M	T	W	T	F	S
						1
	3	4	5	6	7	8
14	11	12	13	14	15	
21	22	18	19	20	21	22
28	29	30	26	27	28	29

BAYLETON is a powerful systemic. DYRENE is the only contact fungicide with its type of chemistry. Apply both as a program during the summer months.



Envy. You can see it in their eyes as they look at your tees, greens, and fairways. They may even start comparing. But deep down, you know they can't touch your course.



This kind of satisfaction starts with BAYLETON® 25 Turf and Ornamental Fungicide and DYRENE® 4 Turf Fungicide. Both have a long history of unparalleled performance.

Team them up for your premium fungicide program. They'll keep your course and colleagues turning green.

For more information contact your Mobay representative or Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120. (800) 842-8020.



Circle No. 110 on Reader Inquiry Card

LANDSCAPE MANAGEMENT

LEGISLATION

High court says localities may regulate pesticides

WASHINGTON, D.C.—The U.S. Supreme Court ruled unanimously that local governments may regulate pesticide use on public lands, private lands subject to public use, or in aerial applications, as the final act of *Wisconsin Public Intervenor v. Mortier* was played out June 24th.

What does this mean for the professional pesticide applicator? According to Deb Strohmaier, director of public relations for ChemLawn: "It might not be as difficult to manage (for companies that) are just servicing one or two communities," but ChemLawn, for one, must be concerned about "all the individual possibilities in 45 states."

In two preceding court battles, representatives for the lawn care industry had argued that the 1972 Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) pre-empted such local regulation.

Allen James, executive director of Responsible



"Trouble" states where localities have tried in the past to pass local legislation, according to the PLCAA.

Industry for A Sound Environment (RISE), says the court determined that neither FIFRA's language nor its history "provided sufficient justification for pre-empting local regulation of pesticides."

"The decision creates an unworkable framework for the regulation of pesticides," says Ralph Engel, president of the Chemical Specialties Manufacturers

Association (CSMA). "Jurisdictions by the tens of thousands now have the authority to impose regulations."

Tom Dawson of the victorious Wisconsin Public Intervenor's office calls that "a garbage argument." He says that many town supervisors are themselves farmers, who would not inflict undue hardship on their own livelihoods.

Case Western Reserve University law professor William Marshall in Cleveland, Ohio—who is familiar with the case—says a salvo of new regulations will not necessarily follow the decision.

"All the opinion does is say that the federal law allowed for localities to engage in additional kinds of restrictions if they wanted to," says Marshall. "That's neither an incentive nor a disincentive for localities."

Strohmaier doesn't expect a rash of local action, but suspects certain areas of the U.S. previously active against pesticides to now be motivated further. Strohmaier suspects that more legislative activity will occur next spring, as companies gear up for the new season.

Dawson says he hopes that perhaps now the pesticide industry will agree to "help draft model ordinances."

—Terry McIver □

WASHINGTON, D.C.—What remains to be seen in the epilogue to the Wisconsin/Mortimer courtroom drama is the amount of legislative action to be taken by communities.

"The ruling," says CSMA's Ralph Engel, "makes it extremely important that Congress

Congress may intervene

once and for all closely re-examine the issue of local preemption, and expressly state in FIFRA that local jurisdictions are preempted from regulating pesticides—products that are already heavily and effectively regulated on a

national level."

Congress would certainly be pressured further to amend FIFRA, if what results is indeed a "patchwork quilt" of divergent laws. Justice Byron White, in writing for the court, concluded that "Congress

is free to find that local regulation does wreak havoc, and enact legislation with the purpose of preventing it."

Allen James says RISE will consider whether it will seek a FIFRA amendment immediately, or wait for localities to begin passing laws.

—T.M. □

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

NAME _____
 TITLE _____
 FIRM _____
 ADDRESS _____
 CITY _____
 STATE _____ ZIP _____

 TELEPHONE () _____

HAVE A SALES REP CALL ME (A)

101	118	135	152	169	186	203	220	237	254	271	288	305	322	339	356
102	119	136	153	170	187	204	221	238	255	272	289	306	323	340	357
103	120	137	154	171	188	205	222	239	256	273	290	307	324	341	358
104	121	138	155	172	189	206	223	240	257	274	291	308	325	342	359
105	122	139	156	173	190	207	224	241	258	275	292	309	326	343	360
106	123	140	157	174	191	208	225	242	259	276	293	310	327	344	361
107	124	141	158	175	192	209	226	243	260	277	294	311	328	345	362
108	125	142	159	176	193	210	227	244	261	278	295	312	329	346	363
109	126	143	160	177	194	211	228	245	262	279	296	313	330	347	364
110	127	144	161	178	195	212	229	246	263	280	297	314	331	348	365
111	128	145	162	179	196	213	230	247	264	281	298	315	332	349	366
112	129	146	163	180	197	214	231	248	265	282	299	316	333	350	367
113	130	147	164	181	198	215	232	249	266	283	300	317	334	351	368
114	131	148	165	182	199	216	233	250	267	284	301	318	335	352	369
115	132	149	166	183	200	217	234	251	268	285	302	319	336	353	370
116	133	150	167	184	201	218	235	252	269	286	303	320	337	354	371
117	134	151	168	185	202	219	236	253	270	287	304	321	338	355	372

LANDSCAPE MANAGEMENT
 AUGUST 1991
 This card is void after Oct. 15, 1991

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
- 0112 Custom Chemical Applicators
- 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

What is your title? (please specify) _____

I would like to receive (continue receiving) LANDSCAPE MANAGEMENT each month: YES NO

Your Signature: _____ Date: _____

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

NAME _____
 TITLE _____
 FIRM _____
 ADDRESS _____
 CITY _____
 STATE _____ ZIP _____

 TELEPHONE () _____

HAVE A SALES REP CALL ME (A)

101	118	135	152	169	186	203	220	237	254	271	288	305	322	339	356
102	119	136	153	170	187	204	221	238	255	272	289	306	323	340	357
103	120	137	154	171	188	205	222	239	256	273	290	307	324	341	358
104	121	138	155	172	189	206	223	240	257	274	291	308	325	342	359
105	122	139	156	173	190	207	224	241	258	275	292	309	326	343	360
106	123	140	157	174	191	208	225	242	259	276	293	310	327	344	361
107	124	141	158	175	192	209	226	243	260	277	294	311	328	345	362
108	125	142	159	176	193	210	227	244	261	278	295	312	329	346	363
109	126	143	160	177	194	211	228	245	262	279	296	313	330	347	364
110	127	144	161	178	195	212	229	246	263	280	297	314	331	348	365
111	128	145	162	179	196	213	230	247	264	281	298	315	332	349	366
112	129	146	163	180	197	214	231	248	265	282	299	316	333	350	367
113	130	147	164	181	198	215	232	249	266	283	300	317	334	351	368
114	131	148	165	182	199	216	233	250	267	284	301	318	335	352	369
115	132	149	166	183	200	217	234	251	268	285	302	319	336	353	370
116	133	150	167	184	201	218	235	252	269	286	303	320	337	354	371
117	134	151	168	185	202	219	236	253	270	287	304	321	338	355	372

LANDSCAPE MANAGEMENT
 AUGUST 1991
 This card is void after Oct. 15, 1991

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
- 0112 Custom Chemical Applicators
- 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

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

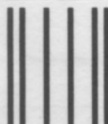
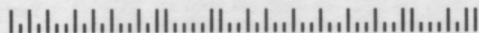
**LANDSCAPE
MANAGEMENT**

POST OFFICE BOX 6049
DULUTH, MINNESOTA 55806-9843

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



GET
MORE
FACTS



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 55806-9843

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



GET
MORE
FACTS

