

STOP WEED POLLUTION PROBLEMS!



- Slash maintenance costs • Cut fire hazards
- Reduce equipment losses • Improve plant appearance

Use of a chemical control program based on Du Pont weed and brush killers is a fast, effective and cost-saving way to eliminate unwanted weeds and brush . . . and the many problems they cause.

To help you solve these problems, Du Pont has developed recommended weed- and brush-control programs designed for your area. The base of these programs is, of course, time-proven and dependable Du Pont HYVAR® bromacil weed killers. They are available in wettable powder form as HYVAR X, in easy-to-use liquid form as HYVAR X-L and as dry pellets as HYVAR X-P. Du Pont approved products containing bromacil also may be used to provide excellent control.

Let us show you how HYVAR bromacil weed and brush killers can work into your vegetation control programs. Write today for printed

With any chemical, follow labeling instructions and warnings carefully.

recommendations of programs designed specifically for your geographic area. Get the facts now and put a stop to weed pollution.

Du Pont Company
Industrial and Biochemicals Dept.
Room N-22316-2
Wilmington, Delaware 19898

I need more information about
Du Pont chemical control of weed pollution.

- Send literature and industrial weed control recommendations for my area
- Have Du Pont representative call

Name

Company/Dept.

Street

City/State

Zip



For More Details Circle (136) on Reply Card



How light and small should a chain saw be?

A professional logger would select his saw in relation to its power and performance. If the saw and engine are too small they quickly overheat and have neither the power nor durability to handle a lengthy cutting job. The new STIHL 030 AV Deluxe is a professional-type of lightweight chain saw. A real top-performance tool with more than twice the power of some saws, near its lightweight class... and with many real deluxe features. Like Stihl's exclusive AV anti-vibration system to absorb fatiguing vibrations from chain and engine... an extra-large muffler to quiet your saw and neighbors... automatic chain oiling with quantity control and many others. Try the new STIHL 030 AV Deluxe. The saw that is light enough to suit the occasional-user and powerful enough to satisfy the professional.

STIHL American, Inc.

194 Greenwood Ave., Midland Park, N. J. 07432, Code 201-445-0890
7364 Lee Industrial Boulevard, Mableton (Atlanta), Georgia 30059,
Code 404-941-1730
23962 Clawiter Road, Hayward California 94541, Code 415-785-9100



For More Details Circle (109) on Reply Card

WEEDS TREES and TURF®

Volume 10, No. 4 April, 1971

Gene Ingalsbe
Editor

Arthur V. Edwards
Editorial Director

A. J. Michel
Advertising Production

Hugh Chronister
President and Publisher

Dan M. Humphrey
Vice-President, Advertising

D. D. Langley
Director of Circulation

ADVERTISING SALES OFFICES

Cleveland, Ohio 44102
9800 Detroit Ave./216+651-5500
William Schmunk

Chicago, Illinois 60601
333 N. Michigan Ave./312+236-9425
John Kielp

**Shawnee Mission (Kansas City),
Kansas 66202**
6811 W. 63rd St./913+722-5900
Austin Schnacke

New York, New York 10017
757 Third Ave./212+421-1350
Russell Bandy

Columbus, Ohio 43212
1350 W. Fifth Ave./614+486-9638
James Murney

Lansing, Michigan 48906
4415 N. Grand River/517+372-5254
Paul Bundschu

Los Angeles, California 90005
The Eschen Company
3142 Wilshire Blvd./213+382-8391
Henry Eschen

San Francisco, California 94104
The Eschen Company
57 Post St./415+781-7440
Al Pierce

Special for This Issue

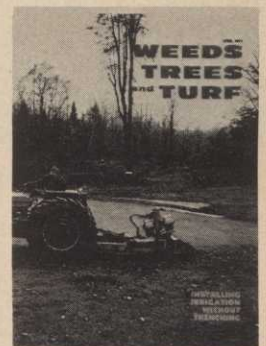
| | |
|--|----|
| Irrigation by Saber Slice | 16 |
| <i>Contractor Jack Soderstrom installs irrigation systems with practically no turf renovation being necessary. He uses a Saber plow to slice in plastic pipe.</i> | |
| How to Evaluate a Fertilizer Bid | 18 |
| <i>The lowest bid may not always be the most economical, says Ron Smith, Bowling Green University horticulturist. He provides a formula for getting your money's worth — and justifying your buying decisions with the boss.</i> | |
| Flame Weeding | 22 |
| <i>Mae D. Aucello of Suburban Propane Co., describes the principles of controlling weeds with propane torches.</i> | |
| To Trim a Tree Artistically | 24 |
| <i>If you aren't born with the talent, Bill Johnson of Phoenix, Ariz., says you can learn. He lists 10 hints.</i> | |
| Weed Science Society Report | 26 |
| National Arborist Association Report | 34 |
| Virginia Turfgrass Conference Report | 40 |
| Golf Course Superintendents Association of America Report | 44 |
| Michigan Turf Conference Report | 49 |
| Midwest Turf Conference Report | 60 |

Regular Features

| | |
|---|-------|
| Editorial: <i>Your Competition Has the Edge</i> | 10 |
| The National Greenscape | 12 |
| Book Review | 20 |
| Insect Report | 47 |
| Meeting Dates | 51 |
| New Products | 54-57 |
| Industry People on the Move | 59 |
| Classifieds | 61 |
| Trimmings | 62 |
| Index to Advertisers | 62 |

The Cover

If the tractor driver were willing to risk getting hit by a golf ball, play could go on uninterrupted during the installation of an irrigation system — the way Jack Soderstrom does it. He puts in plastic pipe, down to 3½ feet, without digging a trench. From a beginning hole, he works with a machine called a Saber Plow that slices the ground. At the bottom of the slit, not wide enough for a golf ball to fall into once following wheels squeeze it shut, the plow pulls in irrigation pipe. The operator on the cover is slicing around a green. More about this kind of irrigation installation is reported beginning on page 16.



WEEDS TREES and TURF is published monthly by The Harvest Publishing Company, subsidiary of Harcourt Brace Jovanovich, Inc. Executive, editorial headquarters: 9800 Detroit Ave., Cleveland, Ohio 44102.

Single Copy Price: \$1.00 for current and all back issues. Foreign \$1.50.

Subscription Rates: WEEDS TREES AND TURF is mailed free, within the U.S. and possessions and Canada, to qualified persons engaged in the vegetation care industry and related fields in controlled circulation categories. Non-qualified subscriptions in the U.S. and Canada are \$10.00 per year; other countries, \$12.00 per year. Controlled circulation postage paid at Fostoria, Ohio 44830.

© The Harvest Publishing Company, 1971, subsidiary of Harcourt Brace Jovanovich, Inc.



Member
American Business Press
Business Publications Audit



Why it pays to specify

SEVIN[®]

carbaryl insecticide

for better

SEVIN is safer to use than many other insecticides because of its relatively low toxicity to humans, animals and fish. People can use the grounds soon after application. Drift is less of a problem with SEVIN insecticide and residues do not build up in the soil or streams.

long-lasting

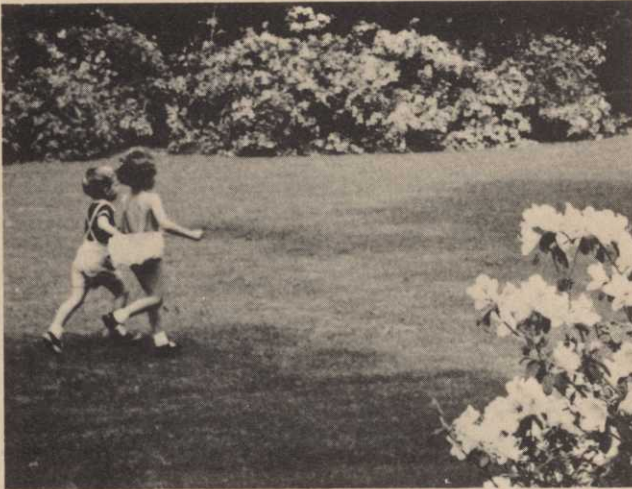
SEVIN provides long-lasting insect control with a minimum number of applications. It works well in cool weather and in heat or bright sun. SEVIN controls 160 different insects, including major pests of lawns, trees, shrubs, flowers, fruits and vegetables. On food plants it can be used close to harvest.

insect control

SEVIN insecticide is ideal for use by the amateur as well as the expert gardener. You can recommend it widely. It pays to stock and sell SEVIN, the safer, better insecticide. Union Carbide Agricultural Products, P.O. Box 1906, Salinas, California 93901.



**THE DISCOVERY
COMPANY**



SEVIN is the registered trade mark of Union Carbide Corporation for carbaryl insecticide.

For More Details Circle (146) on Reply Card

If beautiful, weedless turf is a status symbol...so is BANVEL.[®]

It follows because Banvel is an elite product, a top quality product, an economical product (9¢/1000 sq. ft.). The product you can count on to do the important job of eliminating the commonest and toughest broadleaf weeds in a broad range of tolerant turf species.

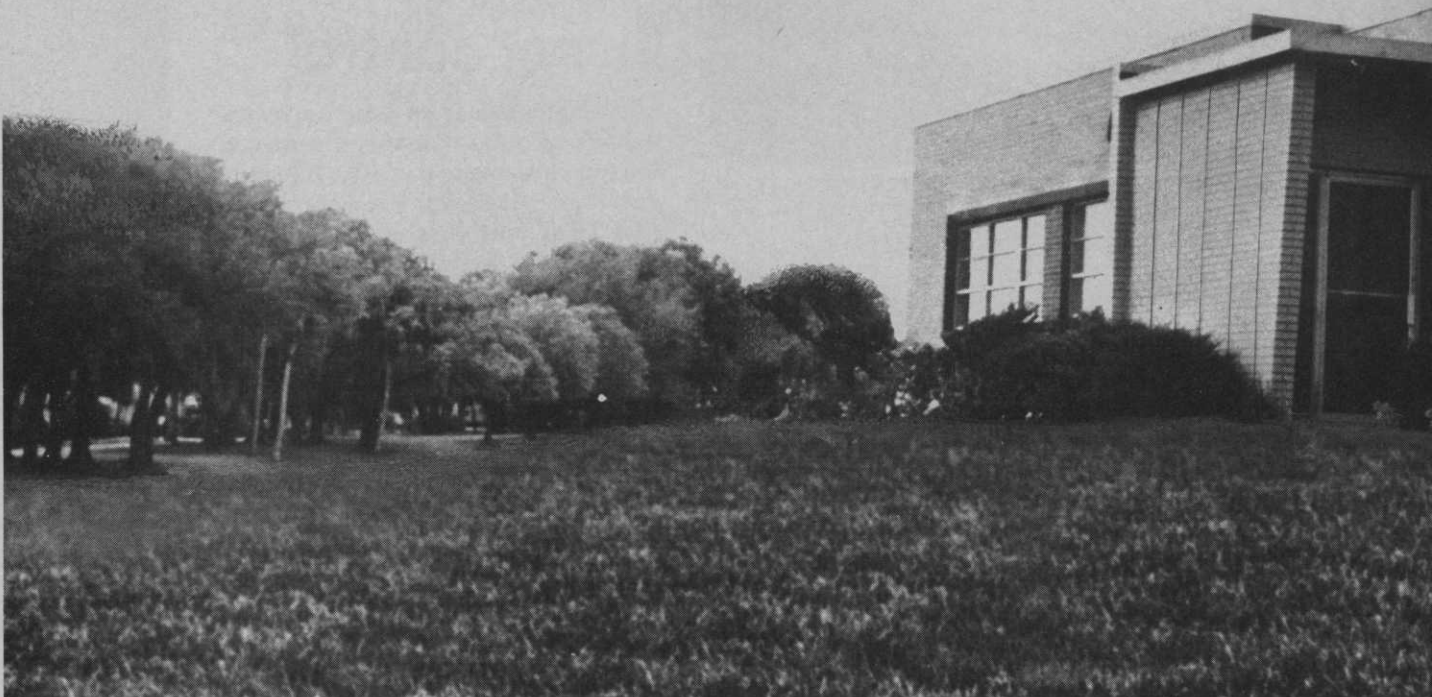
Banvel 4-S, for instance. Developed specifically to kill "2,4-D tolerant" weeds like knotweed, chickweed, white clover, red sorrel, carpetweed, etc. The weeds that seem to survive other control methods... even rooting out by hand!

How does Banvel 4-S do it? *Translocation*. Banvel uses two avenues of attack; through the leaves and through the roots. By each avenue it then travels *throughout* the weed, no matter how deep-rooted, because it uses the weeds'

circulating fluid systems to move into every living cell.

Although Banvel also kills many of the same broadleaves as 2,4-D, there are some against which it is not as effective. Banvel + 2,4-D, a completely compatible and water soluble Velsicol combination, provides broad spectrum control of this long list of turf-destroying weeds:

Dandelion, plantains, curly dock, chickweeds (common mouse-ear and perennial or stitchwort), dog fennel, knotweed, sheep sorrel, clover, knawel, chicory, henbit, ragweed, pigweed, burdock, poison oak, poison ivy, ground ivy (creeping charlie), wild garlic, wild onion, English daisy, spurge, purslane, pepperweed, lawn burweed, hawkweed, spurry and carpetweed.



**CHLORDANE... AMERICA'S LEADING TURF
INSECTICIDE FOR BUGS WITH BAD EATING HABITS**

Soil insecticides come and go but Chlordane goes on forever. The reasons are clear-cut. Chlordane kills most common insect pests of turf; also many harmful or annoying insects that live on the surface: white grubs, Japanese beetle larvae, mole crickets, wireworms, ticks, chiggers, cutworms, ants, mosquitoes, sod webworms (lawn moths), earwigs and many others.

Although Chlordane has long-lasting action, *it does not magnify biologically*. Residues have seldom been detected in foods, water, fish, or wildlife. When detected, they have been insignificant.

Chlordane can be applied with standard equipment, in either liquid or dry form. Exact rates and directions for application appear on package labels.

OTHER VELSICOL TURF CHEMICALS AVAILABLE:

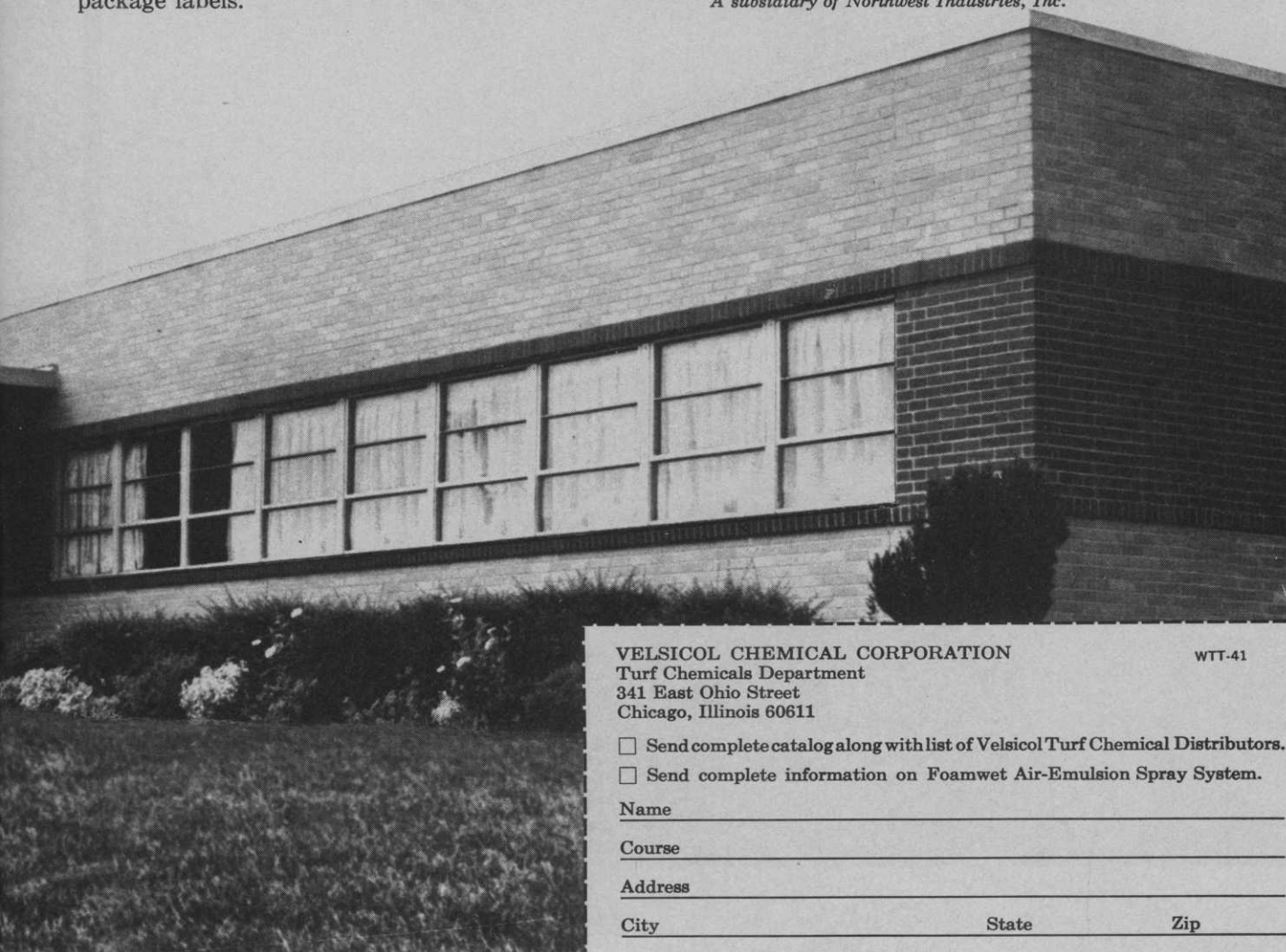
- Bandane®** pre-emergence crabgrass control, 15% granules.
-
- 2-1** liquid or dry fungicide.
-
- PMA 10** phenylmercuric acetate liquid fungicide.
-
- Thiram 75** non-mercurial wettable powder fungicide.
-
- Thiram-PMA** broad-spectrum wettable powder fungicide combination.
-
- Foamwet™** spray adjuvant.
-

NEW FROM VELSICOL

FOAMWET™ Air-Emulsion Spray System

... a new precision spray system that lets you see where you spray, minimizes drift, sharply reduces amount of material required. Get the details today. Check the coupon.

VELSICOL CHEMICAL CORPORATION
341 E. Ohio Street
Chicago, Illinois 60611
A subsidiary of Northwest Industries, Inc.



VELSICOL CHEMICAL CORPORATION
Turf Chemicals Department
341 East Ohio Street
Chicago, Illinois 60611

WTT-41

- Send complete catalog along with list of Velsicol Turf Chemical Distributors.
 Send complete information on Foamwet Air-Emulsion Spray System.

Name _____

Course _____

Address _____

City _____ State _____ Zip _____

Meet a sharp new redhead from Oregon

This sharp redhead is new Oregon Micro Chisel saw chain. It's bound to become the new favorite of the man who wants top performance from his chain saw. Oregon's exclusive red coating protects this chain's factory sharpness against shipping damage. The first cut you make removes the protective coating. You'll like Micro Chisel's high production—speed and efficiency that only a chisel-type

chain can give. Cut more wood per chain, more wood per day. Its cutters slice through wood faster and more smoothly than other styles of chain. Easier on you and your saw. You can file this chisel-type cutter with a round file—quickly and easily. Ask your Oregon dealer about new Oregon Micro Chisel chain. Now available in sizes to fit all popular saws.

Omark Industries, Inc.,
9701 S.E. McLoughlin Blvd.,
Portland, Oregon 97222.



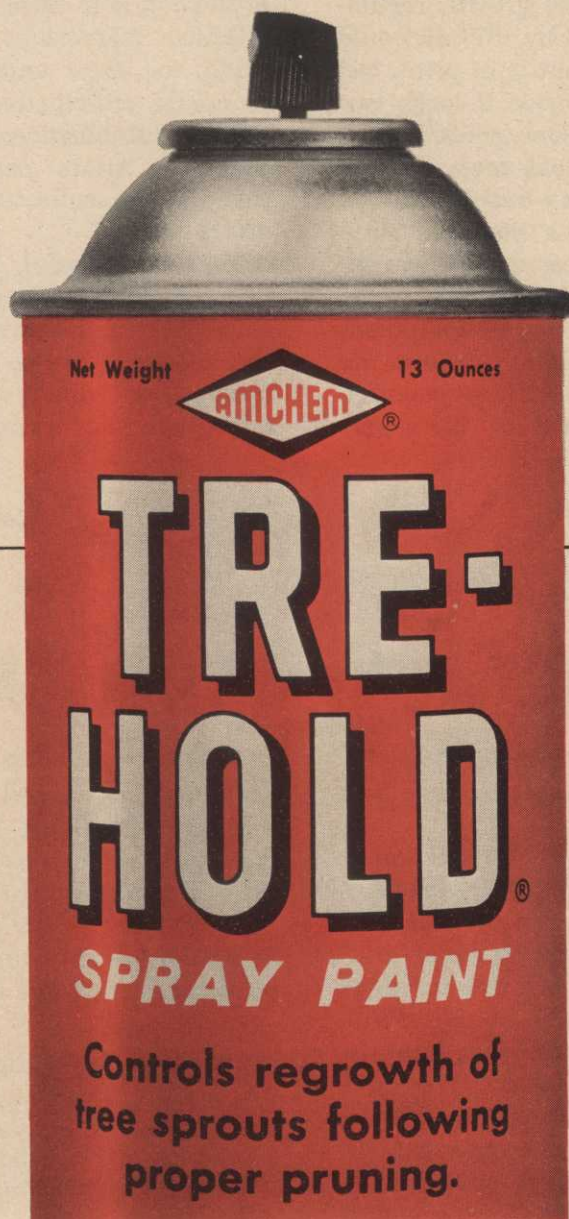
OREGON Saw Chain
Division



For More Details Circle (116) on Reply Card

**This product can save
up to \$200,000 a year
*and we can prove it.***

Ask your Amchem representative or write
Amchem Products, Inc., Ambler, Penna.



For More Details Circle (132) on Reply Card

Your Competition Has the Edge

WHAT A WEALTH of information was wasted at the barrage of conferences in recent months! We say it was wasted because you weren't there. Like money, information has to be used to really be worth something.

Since you support this magazine, however, we felt obligated to warn you that your competition has a keen edge on you—the competition that was represented at the meetings.

At one conference, a fellow thumbed this magazine and told his listener: "You hardly need to go to these meetings; you can read it all in here." Well, we appreciate the compliment, but have to confess that we just aren't physically capable of telling it all.

One company described a new growth regulator that should be on the market by 1973. It would be premature for us to talk about it in print, but you could have witnessed how good it looks two years before you could buy it. One poolside conversation overheard was about one man and one truck getting \$60,000 of tree spray business in one year. And he was working in a northern state with a short growing season. Most conferences include a session on pesticide regulation that's pertinent to the region. There is new equipment galore—and nothing's better than "getting the feel of it" in a relaxed atmosphere. Latest research is always a part of these conferences. We report

what we believe is significant. However, we can't always hit upon what's significant to each of you.

Couldn't afford to go? Could you afford **not** to go?

We believe it is vital for a trade magazine to be present at as many conferences as we can. How else could we keep attuned to the industry? True, we rarely see other magazines there. But then, we feel we, too, have an edge on the competition.

Guest speaker Don Santy, addressing the Pacific Northwest Pesticide Applicators, offered some of the reasons for joining an organization that holds periodic conferences. Among them: To establish a professional image (a speaker at another conference said the way to raise the level of your profession is to raise your level of knowledge); to establish friendships with peers; to learn something; for sheer enjoyment of a new adventure; to create anticipation of better things to come, through establishment of goals, and plans to reach them; to attain personal or business security through the collective strength an organization offers.

To be successful, Santy said, an organization must provide motivation, enthusiasm, membership growth, leadership and planning. Most of the meetings we've attended provide all these things. See what you've been missing. See the advantage your competition has on you.

Gene Ingalsbe

TIME TO RENEW: Your Renewal Card Is Bound In Above

(Second Notice)

We need your okay to continue sending you WEEDS TREES and TURF magazine on a *free* basis. In fact, we must have it.

We—and other publishers—have been somewhat remiss in the past in that we've sent your copy of the magazine whether or not you sent your card in. This can no longer be done.

As you know, subscriptions are free to bona-fide members of the industry. You qualify. But economics has again reared its head and we must stabilize our circle of readers. We shall maintain the magazine circulation at 33,000—the number which constitutes the basis for our advertising rate. No additional magazines will

be sent except at the published rate of \$10 per year in the U. S. and Canada.

MAY WE HEAR FROM YOU—by way of the bound in card above? Simply tear it out—**SIGN** and check your answers. **DO NOT LOSE YOUR FREE SUBSCRIPTION TO SOMEONE ELSE.** We want your continued support and we need you on our list.

Thank you.

Art Edwards, Editorial Director

(This renewal notice is a requirement of our national auditing service to verify that you are a member of the industry and that you wish to receive the magazine.

Use this convenient card if
you wish to continue to receive
your **FREE** subscription
to **WEEDS TREES and TURF**
Magazine



BUSINESS REPLY MAIL

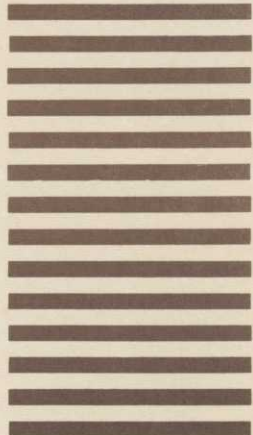
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

FIRST CLASS
PERMIT NO. 665
DULUTH, MINNESOTA

POSTAGE WILL BE PAID BY

**WEEDS
TREES
and TURF**

POST OFFICE BOX 6049
DULUTH, MINNESOTA 55802



IMPORTANT NOTICE

IN ORDER TO CONTINUE YOUR FREE SUBSCRIPTION, FILL OUT, SIGN AND RETURN THIS CARD TODAY. NO POSTAGE IS REQUIRED. THANK YOU.

ART EDWARDS
EDITORIAL DIRECTOR

COMPLIMENTARY SUBSCRIPTION QUALIFICATION CARD

4/71

I would like to receive (continue receiving) WEEDS TREES & TURF free of charge each month:

YES NO

A. Please check below the one item which best describes your primary type of business:

- (1) Sod Grower
(2) Tree Service Company
(3) Aerial Applicator
(4) Contract Applicator
(5) **VEGETATION CARE:**
(pls. specify below)
(a) Rights-of-way Maintenance
(b) Golf Course
(c) Parks and Grounds (federal, state municipal)
(d) Parks and Grounds (industrial)
(e) Armed Forces Installations
(f) Airports
(g) Hospitals, Schools, Colleges, Shopping Centers
- (h) Cemeteries
(i) Athletic Fields
(j) Other Vegetation Care (pls. describe)
- (6) Turf Specialist
(7) Irrigation Contractor
(8) Consultant
(9) Industrial Research
(10) Institutional Research and Teaching
(11) Formulator of Herbicides, Insecticides, and Related Compounds for Vegetation Maintenance and Control

- (12) Retailer or Wholesaler of Chemicals used in Vegetation Maintenance

- (13) Regulatory Agency
(14) Other (pls. describe)

B. Your Title

C. Date

D. Your Signature
Please fill in those items below

Your Name

Title

Company Name

Mailing Address

City State Zip