



Cover: Efficiency is the driving force behind new products for 1984. Shown are Ryan's Ride-Aire, Jacobsen's walk-behind rotary, Toro's Groundsmaster, and Mobay's Oftanol.



Certain trees do well by water, see page 22.

## 22

### Plants Adapted to Watersides Ease Care

Douglas Pullman of Dow Gardens evaluates plants for success along lakes, streams, and ponds. Why manage a plant which is not suited to waterside conditions when many plants are?



More maneuverable mowers, see page 25.

## 25

### New Product Roundup: Emphasis on Efficiency

If you still are using belly mowers on tractors, trim mowers to do medium-sized lawns, or small, slow aerifiers, your work is not as efficient as it can be. Manufacturers have given the professional landscape market a new look and have started making more efficient equipment for 1984.



Getting nutrients to tree roots, see page 32.

## 32

### Fertilizer Guide: Part 3, Trees & Shrubs

In this third and final section, Davey Tree Expert Company's

Funk and Rathjens outline the fertilizer needs of trees and shrubs and the practical methods to meet them. Determining fertilizer needs for an area rather than for each tree is helpful to commercial applicators.

## 41

### 1983 Index of Articles and Authors

We want you to save your back issues and also save you the trouble of paging through them each time you are looking for a specific article or author. Each year we provide an index like this to make your research work easier. Make sure your library includes the December index of articles and authors.

## DEPARTMENTS

Outlook	6
Green Industry News	8
Golf Update	10
Landscape Update	14
Government Update	16
Problem Solver	19
Jobtalk	44
Events	48
Products	51
Classifieds	54
Advertiser Index	56

Robert L. Edgell, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Arland Hirman, Treasurer; Thomas Greney, Senior Vice President; Ezra Pincus, Senior Vice President; Pat O'Rourke, Group Vice President; Joe Bilderbach, Vice President; James Gherna, Vice President; George Glenn, Vice President; Harry Ramnaley, Vice President.

WEEDS TREES & TURF (ISSN 0043-1753) is published monthly by Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising Offices: 757 Third Avenue, New York, New York 10017, 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: \$16 per year in the United States; \$20 per year in Canada. All other countries: \$45 per year. Single copies (pre-paid only): \$2 in the U.S.; elsewhere \$4.50; add \$3.00 for shipping and handling per order. Second class postage paid at Duluth, Minnesota 55806 and additional mailing offices. Copyright © 1983 by Harcourt Brace Jovanovich, 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. Microfilm copies of articles are available through University Microfilm, International, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

POSTMASTER: Send address changes to WEEDS TREES & TURF, P.O. Box 6198, Duluth, Minnesota 55806-9898. **HBJ** A HARCOURT BRACE JOVANOVIICH PUBLICATION