A great ryegrass is handsome, tough, mows nicely and germinates in 5-7 days.

turf-type perennial ryegrass

is a great ryegrass.

Of course, the beauty, durability and mowing qualities of Derby turf-type perennial ryegrass aren't its only fine qualities.

Over the years, in a variety of locations and under widely varying conditions, Derby has proven itself a very consistent performer – a grass that will flourish without pampering.

Derby produces a dense, persistent turf when cut to ${}^{3}\!{}_{16}$ inch for specialized uses such as golf greens, at standard cuts of 1 - $1{}^{1}\!{}_{2}$ inches for home lawns, parks and playgrounds, or ${}^{3}\!{}_{4}$ inch on golf course fairways or tees.

It also mixes well with bluegrass or fine fescue, tolerates a wide range of soil types from heavy clay to sandy and retains its deep green color when used as a winter overseeding grass for dormant native Southern grass.

Derby is registered with the Plant Variety Protection Office. PVA No. 7500009.



P.O. Box 168, Halsey, Oregon 97348 U.S.A. Telephone (503) 369-2251 TWX 510/590-0765 Circle No. 117 on Reader Inquiry Card

Tough movers... from rough cut to smooth finish.



The H Series



The SlopeMaster

Built for the commercial user, to assure lowest operational cost through efficient design, low fuel consumption, low maintenance, and long life. Built to take the hard usage of the commercial mower operator and the environment in which the commercial mower functions.



Circle No. 121 on Reader Inquiry Card



"When I bought this John Deere tractor, I wasn't sure it would be big enough to do the job."

When E. J. Stringer decided to buy a tractor for his construction business, he started by looking at some pretty big tractors. Which was only fair, considering the kind of work he had in mind.

"We do heavy mowing jobs, industrial cleanup, but mostly all kinds of leveling," says Stringer.

All big jobs. So he compared big-tractor features and finally got down to the big-tractor price.

"We just couldn't afford a big tractor," says Stringer.

So he bought a John Deere 950 Diesel.

Says Stringer of his purchase, "I thought at the time it might be a little bit too small, but the 950 worked out just fine."

Big enough to do the job The fact is, all John Deere Compact Utility Tractors are big enough to handle many construction and most landscaping jobs.

Whether you try the 950 Tractor with 27 PTO hp, the 850 with 22 PTO hp, or the 1050 with 33 PTO hp* they have the power you need for mowing, landscaping, loading, backfilling, and just about any other job you want to do.

They're well built, affordable tractors that just keep going.

Big-tractor features To look at them, John Deere Compact Utility Tractors don't seem that big. Nonetheless, they have features you usually find only on bigger tractors.

Like liquid-cooled, wet-sleeve diesel engines that are fuel efficient.

The transmission has 8 forward speeds. Starting with a gear that lets you "creep" along at less than 1 mph, to a transport speed of around 12 mph.

There's a 3-point hitch (Category 1), 540-rpm rear power takeoff, differential lock, an adjustable drawbar, and more than 20 power-matched attachments.

And, you can choose highflotation turf tires or tractiontread tires. Tractors that can take it Of course, like all John Deere Tractors, these are built to withstand a lot of hard work.

"We haven't had any trouble with our 950 yet," says Stringer.

Ask your John Deere dealer for a demonstration. See for yourself how solidly they're built. How smoothly they run. How simple they are to service. And how much work they can do.

We think you'll see why the E. J. Stringer Tractor Service Company decided that a smaller tractor was big enough.



For more information, write John Deere, Dept. 67, Moline, Illinois 61265.

*Maximum PTO horsepower at 2600 engine rpm for the 850 and 2400 engine rpm for the 950 and 1050 by official test.



Circle No. 110 on Reader Inquiry Card

CONTENTS

JULY 1981/VOL. 20, NO. 7

Bruce F. Shank Editor John Kerr

Associate Editor Robert Andresen

Graphics Director

Maxine Hagen Production Manager Marilyn MacDonald

Production Supervisor Agnes Aspling

Circulation Supervisor

Business

ATLANTA

Dick Gore, Publisher Ron Kempner, Regional Sales Manager 3091 Maple Drive Maple Center One Building Atlanta, GA 30305 (404) 233-1817.

CHICAGO

Bill Scheible 111 East Wacker Drive Chicago, IL 60601 (312) 938-2344

NEW YORK

757 Third Ave., New York, NY 10017 (212) 421-1350

SEATTLE

Robert A. Mierow 1333 N.W. Norcross Seattle, WA 98177 (206) 363-2864

(HBJ)

HARCOURT BRACE JOVANOVICH PUBLICATIONS Robert L. Edgell, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Arland Hirman, Treasurer: Thomas Greney, Group Vice President; Ezra Pincus, Group Vice President; Larry Witchel, Group Vice President; Joe Bilderbach, Vice President; James Gherna, Vice President; George Glenn, Vice President; Harry Ramaley, Vice President.

WEEDS TREES & TURF (ISSN 0043-1753) is published monthly by Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 757 Third Avenue, New York, New York 10017. 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: \$15 per year in the United States and Canada. All other countries: \$40 per year. Single copies: \$2 in the United States and Canada; all other countries: \$4.50. Controlled circulation postage paid at Duluth, Minnesota 55806 and additional mailing offices. Copyright ©1981 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.

POSTMASTER: Send address changes to WEEDS TREES & TURF, P.O. Box 6198, Duluth, Minnesota 55806.

Outlook	6
Landscape Contractor News	12
Government Update	13

GREEN INDUSTRY NEWS

California landscape show to go national in 1982 . . . MoBay launches new Specialties Chemical Division with introduction of two new products . . . Interior Plantscape Association and ALCA discuss joint ventures . . . ISA show set for Michigan 12

FEATURES

Drought Tests Standard Turf Recommendations

Lack of water will alter typical turf recovery from a summer dormancy and will alter the species composition of polystands. Opportunity for renovation is great. 14

Consider New Cultivars for Post-Drought Renovation

The Lawn Institute's Director Robert Schery covers basic advantages and disadvantages of turf cultivars. Renovation provides an opportunity for improved varieties. 18

Six Firms Capture Residential Design Awards

Award winning solutions to landscape challenges. Background on six awardwinning projects. 24

Sun-Loving Ground Covers Add Texture

Woody ground covers which thrive in full sun. Horticulturist Doug Chapman lists choices and characteristics. 30

Performance Bonds and Penalty Clauses

Special attention is required to detect the costs and liabilities of performance bonds and penalty clauses. Equipment columnist Dave Johnstone explains. 36

Arborists, Treat the Tree, Not the Customer

Dr. David Nielson of the Ohio Agricultural Research and Development Center in Wooster, Ohio, urges arborists to consider treating only real tree damage. 40

Vegetation Management	47
Letters	55
Events	58
Products	61
Classifieds	70
Advertisers Information	72

Cover: Heavy-duty spreader is a fast way to topdress a large area in a short amount of time. Photo courtesy Lely Corp.



Member; American Business Press, Business Publications Audit, National Golf Foundation, American Sod Producers Association, Associated Landscape Contractors of America, National Landscape Association, Horticultural Research Institute.

Touchdown Kentucky Bluegrass



Sod growers specify Touchdown for profit

Rapid development of marketable turf is the key to profitable sod production. That's why sod growers prefer Touchdown.

An aggressive turf that fills in quickly, crowds out weeds and undesirable grasses, even under low mowing heights, Touchdown is a must in any turf program. Touchdown's strong and vigorous rhizome system means tough turf and quick healing from traffic and machine damage. Whether you seed or sod, specify Touchdown.

Touchdown KENTUCKY BLUEGRASS

Pickseed also produces







WT&T OUTLOOK By Bruce F. Shank, Editor

Associations, Manufacturers Wrestle With Segmentation

Regional landscape-related shows have been outdrawing many national shows and this is discouraging to national associations trying to build larger memberships and to gain more support from manufacturers at their shows. Manufacturers, trying to get the most out of their show budgets, are also torn between regional and national shows.

Apparently, segmentation has not only increased among the various landscape markets, but regional segmentation is growing. Most recent examples are the lawn care show in Memphis, and the regional nursery and landscape shows in California, Florida, Texas, Ohio, and the Northwest. Some of these shows are drawing thousands of attendants and hundreds of exhibitors while national shows attract perhaps 30 exhibitors and 400 attendants. Obviously, the GCSAA show is an exception.

Manufacturers are adjusting marketing efforts to this segmentation although their marketing budgets may not increase accordingly. 1981 has been a year of change for many Green Industry suppliers in regard to marketing.

I've spent most of my time the past five weeks visiting associations and manufacturers. The subject of shows was on the minds of both groups. Many manufacturers are relying on regional shows. Chemical companies selling products under Special Local Needs labels may pull out all stops for particular regional shows. However, with these exceptions, manufacturers would prefer to concentrate on national shows.

Chemical makers with limited production, especially manufacturers of preemergence herbicides, find it convenient to sell basic chemicals to large regional distributors for reformulation and marketing. Equipment manufacturers, aware of weaknesses in depressed regions, direct marketing efforts at growth regions and assist distributors in those regions. Clearly recession has encouraged segmentation. As a result, regional associations are receiving more support from national manufacturers.

Meanwhile, national associations are strongly opposed to further segmentation on the national level. Groups that have developed in the last two years, the Professional Lawn Care Association of America and the Interior Plantscape Association, have irked the officials of existing national associations.

Some national associations have chosen to reduce services in light of economic conditions. Others are



sharing resources to provide member services. The Interior Plantscape Association and the Interior Landscape Division of the Associated Landscape Contractors of America met in May to discuss areas of duplication in service and to plan for future cooperation. The American Institute of Landscape Architects is currently voting on the issue of joining with the American Society of Landscape Architects.

The concern is most obvious when regional groups attempt to become national. A recent case is the announcement by the California Landscape Contractors' Association that it has changed the name of its Landscape Industry Show to National Landscape Industry Show for 1982. I can understand 'Southwest Landscape Industry Show,' but 'national' makes show organizers look somewhat bigheaded. Granted California is probably the biggest market, but the regional association should make an effort to be more cooperative on a national scale.

I just feel that regional groups should remember their roots. There are many things that depend upon national impact which regional groups can't supply by themselves. These include lobbying for and against Federal legislation, financial support of needed research, and supplying national data to support the registration of needed chemicals and the development of needed equipment. Believe me, manufacturers and government officials won't accept a person's word anymore. They need proof before they act. One regional group may influence two senators and a few congressmen, but that won't get a Federal bill passed. It takes national effort to influence Federal legislation and product decisions by national manufacturers.

Segmentation is justified only by changes in the market. Since the onset of recession changes have been minimal with the biggest shift toward sunbelt cities. Cooperation and consolidation, where practical are needed to maintain integrity and a healthy level of growth.

Nursery Business Up in Midwest, Northeast

Drought and insects have taken their toll and homeowners and professionals are buying plant material in dramatically improved volumes, report nurserymen in the Midwest and Northeast. Homeowners are making the decision to fix up what they have rather than buy new homes with 16 percent mortgage rates. Perhaps there is also new awareness of the energy benefits of landscaping. We'll get specific information on the first two quarters of 1981 and pass it on as soon as possible.



Roundup helped Dave Portz save a cool 50% on watering costs when the weather was hot.

When grounds superintendent Dave Portz renovated with Roundup[®] herbicide, he wanted to knock out a near-100% infestation of poa annua without inconveniencing his golfers.

He got what he wanted-and a great deal more.

When Dave renovated 14 fairways at Brookside Country Club with Roundup, the members played as soon as the treated area was dry.^{*} And he now has an 80% ryegrass, 20% bluegrass mix which looks great, stands up in dry weather, AND costs a lot less to manage than the old poa.

Dave saved 50% to 60% on watering costs alone during the hot, dry summer of 1980. He watered only when he absolutely had to, and found that the new turf resists drought much better than poa.

Nothing works like Roundup.

What's more, Dave saved roughly \$5,000 on fungicide treatments (from 12 down to just *one*), plus more on labor, electricity and wear and tear on pumps. It added up to huge savings.

You can also use Roundup for general cleanup around trees, sandtraps, fence lines, tennis courts—most places weeds are a problem.

For fast, clean, manageable turf renovation—and general weed control work—nothing works like Roundup.



Call 800-643-5599 (in Arkansas, 800-482-9097) to hear Dave Portz tell you why he renovated with Roundup.

ALWAYS READ AND FOLLOW THE LABEL FOR ROUNDUP. Roundup[®] is a registered trademark of Monsanto Co. © Monsanto Co.1981. *Apply Roundup to fairway; reseed 7 days after application. While Roundup goes to work, golfers keep playing over treated turf. RUP.SPI-113D Circle No. 127 on Reader Inquiry Card



California landscape show will go national in 1982

After the tremendous success of this year's Landscape Industry Show — 6,150 attendees and 200 exhibitors from all over the U.S. and overseas — the Calfornia Landscape Contractors Association has decided to make the 1982 show national. The 1982 show will be called the National Landscape Industry Show.

The 6,150 people attending the show, an increase of 23 percent over the 1980 attendance, included 2,660 registered as contractors. Hundreds of others registered as architects, designers, maintenance personnel, and parks/recreation personnel from various city, county, and state agencies.

The 200-plus exhibitors from the U.S. and Britain covered the entire exhibition hall of the Long Beach Convention Center. They represented plant materials, spas, financial services, light and heavy equipment, insurance services, irrigation and landscape supplies, decorative supplies, tools, and communication services.

During the final day of the show, exhibitors signed up for 71 percent of the space that is available for the 1982 National Landscape Industry Show, scheduled for April 29-May 1 at the Long Beach Convention Center. An expansion of the exhibiting time to three



Officers and directors of the American Society of Consulting Arborists selected for 1981-82 are: front row (I. to r.) Jack Kimmel, Ontario, Canada-secretary-treasurer; Arnold Webster, Iowa-vice president; John Duling, Indiana-immediate past president; Edwin Irish, Michigan-president-elect. Back row: Jack Siebenthaler, Florida-director; Edward Collins, New York-director; William Griffin, California-president; Erik Haupt, Massachusetts-director; and Kenneth Funk, Ohiodirector. Dr. Spencer Davis (not shown) was reappointed executive director.

days should allow more opportunity to travel and shop the floor.

This year's show opened with a ribbon cutting ceremony by Long Beach Mayor Eunice Sato assisted by committee representatives from the California Landscape Contractors Association who sponsored the show. The opening night, March 26th, was highlighted by the upbeat sounds of the wandering Mariachi Band.

On Friday morning those who were judged to have the most appealing exhibits were awarded trophies. The winners were: Stone-Age Creations of Orange, CA, in the 10x10 booth category; Hydro-Dig, Inc. of Anaheim for the 10x20 booth category; and C & E Lumber, L & S Stakes, and Nightscaping for combining on the 20x20 booth for the second straight year. Marlin Industries of Huntington Beach, CA, won the open space category.

For information on the new National Landscape Industry Show, contact David Concannon at the CLCA headquarters, 1419 21st St., Sacramento, CA 95814, 916/448-2522.

PESTS

Budworm outbreak hits 143 million acres

The current outbreak of eastern spruce budworm, now in its seventh year, exceeds 143 million acres in the United States and Canada, according to Dr. David Thorud, director of the Northeastern Forest Experiment Station, USDA Forest Service.

Losses of spruce and fir timber are conservatively estimated to be 7.8 billion cubic feet, Thorud said. Recent research by the Canadian Forestry Service indicates that even if the outbreak were to collapse now, losses from the death of weakened trees may still triple in the next three to five years.

Two approaches are currently used to cope with the pest: aerial application of chemical and biological pesticides to protect trees; and expanded salvage efforts. A demonstration project in Maine led by station scientist D. Gordon Mott, University of Maine scientist John Dimond, and a project management group composed of industrial, private land, and state forest managers, showed that if pesticides are applied in conjunction with harvesting substantial savings can result. Pest managers in Maine saved more than two million dollars in 1980 by applying these principles, said Thorud.

The Canada-United States Spruce Budworms Research and Development Program (CANUSA) sponsors the project. The U.S. and Canadian forestry agencies conduct their own research and the Northeastern Station, which administers the eastern CANUSA program, sponsors a competitive grants program. Since the program started in 1978, a total of 46 investigations have been initiated at 16 universities, according to Thorud.

CHEMICALS

Mobay launches group with 2 new products

The Agricultural Chemicals Division of Mobay Chemical Corporation has announced the formation of the Specialty Chemicals Divison to direct the promotion and distribution of two new products, Bayleton systemic turf fungicide and Oftenol insecticide for white grubs. These new products will be combined with the company's Dylox, Sencor, Baygon, and Dasanit to serve the professional turf market.

Bayleton is a newly released fungicide for turf and ornamentals which has the advantage of extended control periods, up to 28 days. This length of time is more in line with routing for lawn care and landscape contracting firms. Researchers have recognized that fusarium blight control is high. The wettable powder should now be arriving at distributors.

Inquiries serviced for 90 days from date of issue. For those countries outside the U.S., please apply appropriate postage before mailing. CARD 7-81 1 For more information on products or services mentioned in this issue, circle the corresponding

numbers below, fill in appropriate information and mail today.

102 116 130 144 158 172 103 117 131 145 159 172 104 118 132 146 160 174 105 119 133 147 161 175 106 120 134 148 162 176 106 120 134 148 162 176 107 121 135 149 163 177 108 122 136 150 164 176 109 123 137 151 165 173 110 124 138 152 166 183 111 125 139 153 167 181 113 127 141 155 169 183 114 128 142 156 170 184 Your primary business at this location is: (c) 160 160 160 176	1 188 202 216 2 1 189 203 217 2 1 190 204 218 2 1 191 205 219 2 1 192 206 220 2 1 193 207 221 2 1 195 209 223 2 1 195 209 223 2 1 195 209 223 2 1 197 211 225 2 1 198 212 226 2 heck one only in A, B or C) :: :	0055 GODSPITAL/HEALTH CARE INSTITUTIONS 0065 GMILITARY INSTALLATIONS & PRISONS 0065 GMILITARY INSTALLATIONS & PRISONS 0065 GMILITARY INSTALLATIONS & PRISONS 0070 MULTIPLE GOVERNMENT/MUNICIPLE FACILITIES 0070 MULTIPLE GOVERNMENT/MUNICIPLE FACILITIES 0070 GMILITARY INSTALLATIONS & PRISONS 0070 MULTIPLE GOVERNMENT/MUNICIPLE FACILITIES 0070 GMILITARY INSTALLATIONS & PRISONS 0070 GMILITARY INSTALLATIONS & MAINTENANCI 00120 GMILITARY INSTALLATIONS (GROUND) 00120 GMILITARY INSTALLATIONS (GROUND) 00120 GMILITARY INSTALLATIONS (GROUND) 00120 GMILITARY INSTALLATIONS (GROUND) 00120 GMILITARY INSTALLATIONS FOR HORTICULTURE 00130 GMILITARY INSTALLATIONS FOR HORTICULTURE 00140 GMILITARY INSTALLATIONS FOR HORTICULTURE 00140 GMILITARY INSTALLATIONS ON SERVICE (PLEASE SPECIFY) C SUDDINES:
BUSINESS NAME		ADDRESS
	STATE	IPTELEPHONE_()

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



FIRST CLASS PERMIT NO. 665 DULUTH, MINNESOTA

POSTAGE WILL BE PAID BY ADDRESSEE

POST OFFICE BOX 6049 DULUTH, MINNESOTA 55806 GET MORE FACTS

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES