

Economic indicators for 1979: What lawn care businessmen think

The inflation rate will be higher next year than it was this year, but the unemployment rate will stay about the same.

Partly because of ever-increasing inflation, cash outlays for both essential and discretionary capital expenditures will be substantially higher next year than it was this year.

Unfortunately, total expenses will also be up, although administrative and sales expenses will show little if any change.

And both time and money expenditures on promotion efforts will be significantly higher next year.

Those views are the opinions of experts. No, not the usual ivory tower types of experts, but those who really should know — actual lawn care businessmen in the field.

In an exclusive nationwide survey commissioned by LAWN CARE INDUSTRY, 300 lawn maintenance firms, including everything from one-man operations to million-dollar companies, were interviewed. The survey was conducted by Laurencom Writers.

The respondents were selected on a random sample, population-weighted basis. They were located in and around 12

major metropolitan areas: Boston, New York, Philadelphia, Atlanta, Miami, Dallas, Los Angeles, San Francisco, Seattle, Denver, Chicago, and Detroit.

Their opinions on the 12 key economic indexes are summarized in Table 1. They also provided supplementary reasons for their economic views. The most representative of those statements are quoted below in the same order as the indexes are listed in the table. There is also an average figure shown which is the percentage change expected by the majority in each index during 1979.

1. Inflation rate. Majority opinion: Up an average of 2% over 1978.

"I'm afraid we still haven't come close to whipping this problem," said a Detroit lawn maintenance operator.

to page 10

CHANGES

Davey execs exit; form own company

Three former executive managers with Kent, Ohio-based Davey Lawnscape Service have left to form their own company.

The new company, Erbaugh & Associates, Hudson, Ohio, is headed by J. Martin Erbaugh, Frederick J. Fassett and Patrick C. McCafferty.

Erbaugh told LAWN CARE INDUSTRY that the company was organized to provide marketing, financial and production counsel to firms or persons planning to enter the chemical lawn care field or to firms presently in business looking to increase their market penetration.

Gordon Ober, one of Davey's

to page 19

PESTICIDES

Researcher updates the furor over dioxin

The implication on a national television program that the herbicide 2,4,5-T is being used by lawn care companies has caused a considerable backlash in the lawn care industry, says University of Maryland turf specialist Dr. Charles Darrah.

"Numerous lawn care operators have reported lost accounts and complaints which

to page 8

LAWN CARE INDUSTRY

Serving lawn maintenance and chemical lawn care professionals.

DECEMBER 1978 • VOL. 2, NO. 12 • A Harvest Publication

EQUIPMENT

Tractor, mower shipments register sharp increases

Manufacturers' shipments of lawn tractors, riding mowers and walk-behind power mowers registered sharp increases in the model year just concluded, according to estimates by the Outdoor Power Equipment Institute (OPEI).

Paced by an 18.1 percent increase in front engine riders, shipments of lawn tractors and riding mowers surged an overall 11.9 percent to 750,000 units from

to page 19

GOVERNMENT

CPSC asks comment on mower safety standard

The federal Consumer Product Safety Commission (CPSC) received more than 100 comments — including ones from companies like Toro, Deere, FMC and Gale Products and the Outdoor Power Equipment Institute — on its proposed safety standard for power lawn mowers, and now is asking for comments on those comments.

Specifically, the CPSC is

seeking comment on data it received concerning the reliability of brake-clutch mechanisms for power lawnmowers, and also comment on several questions it has concerning the reliability and safety of brake-clutch mechanisms.

The request for comment was published in the Nov. 2 *Federal Register*. Deadline for comment was the 22nd of last month.

One part of the proposed standard would require all walk-behind mowers to have a blade control system that would

to page 19

LCI SURVEY

Lawn care businessmen predict industry growth of 30% next year

In a recent survey, the majority of lawn care businessmen predicted that their gross revenues will grow 30 percent between this lawn care season and next.

In the survey, conducted by LAWN CARE INDUSTRY, 77 percent of the respondents said their revenues would grow by the 30 percent figure. One percent of the respondents said their revenues would decrease by an average of 10 percent. Ten percent of the respondents said their revenues would remain the same.

In the same survey, the respondents said that their average number of accounts was 690, up from 610 last year. The average response for gross

revenues of the companies surveyed was \$199,000.

Seventy-five percent of the businessmen said their revenues increased an average 25 percent this year over last. One percent said they decreased an average 21 percent over last. Eleven percent said their business remained the same.

A total of 952 questionnaires were mailed in July to readers of LAWN CARE INDUSTRY. More than 232 usable responses were returned, or 24.4 percent of the mailing. Tabulations were made by computer. Sample percentages should be within six percent of true percentages, according to LAWN CARE INDUSTRY market research manager Clarence Arnold.

Business growth and expectations, 1977-79:



QUICK STARTS

Lawn Doctor and the New York Times	page 2
Ataenius beetle given common name	page 2
Green Lawns announces spray seminars	page 8
NFSA forms lawn/turf task force	page 9
Lawn care in the 80's	page 12
More million dollar lawn care companies	page 10
MEMOS	2
MEETING DATES	4
TOOLS, TIPS & TECHNIQUES	6
NEWSMAKERS	6
COST CUTTINGS	8
MARKETING IDEA FILE	11
MONEYWISE	17
PRODUCTS	19

lawn care industry in Indianapolis is part of a continuing series of articles where the lawn care profile of the city, potential that operate there and how

Ataenius spretulus given common name; similar turf-damaging beetle discovered

The *Ataenius spretulus* beetle — which has wrecked havoc on home lawns and golf courses across the country in the last few years — has been given a common name.

At its recent annual meeting in New York City, the Entomological Society of America dubbed it the "black turfgrass ataenius."

Dr. Harry D. Niemczyk, professor of turfgrass entomology at the Ohio Agricultural Research and Development Center, Wooster, told LAWN CARE INDUSTRY that he and other researchers have discovered

another beetle that damages turf at the same time of the year that black turfgrass ataenius larvae do. The insect has been determined to be *Aphodius granarius*. Dr. Niemczyk found larvae of this species at locations in Boulder, Colorado and Detroit.

At first glance, Dr. Niemczyk said, adults appear identical to the black turfgrass ataenius. But the larvae of the *Aphodius* are slightly larger and have a somewhat darker head capsule. The most outstanding identifying feature of the larvae is a V-shaped series of spines located in the rastal pattern.

MEETINGS

Lawn talks highlight Virginia turf show

Eight presentations related specifically to the lawn care industry will highlight the annual Virginia Turfgrass Conference Jan. 24-25 in Williamsburg.

Fairfax County extension agent C. L. Hall will speak on "What the Homeowner Expects;" Jerry Faulring, president of Hydro Lawn, Gaithersburg, Md. will speak on "What a Lawn Service Company Can Provide;" Dr. Houston B. Couch of Virginia Polytechnic Institute and State University (VPI) will speak on

"Critical Management Practices for Virginia Lawns."

Also, Dr. Bob Reynolds of VPI will speak on "Financial Management Concepts;" and Bob Earley, editor of LAWN CARE INDUSTRY will speak on "Lawn Service: The Exploding Newcomer in the Turf Industry," and "Effective Advertising and Promotion for a Lawn Care Company." There will also be a session on "Developing Timely, Effective and Flexible Customer Programs."

For further information, contact: Dr. John F. Shoulders, Department of Agronomy, 419 Smyth Hall, VPI, Blacksburg, Va. 24061, 703-951-5797.

LAWN CARE INDUSTRY

Publisher: **HUGH CHRONISTER**

General Manager: **RICHARD J. W. FOSTER**

Executive and editorial offices: 9800 Detroit Ave., Cleveland, Ohio 44102

Editor: **ROBERT EARLEY** Executive Editor: **DAVID J. SLAYBAUGH**

Associate Editor: **BRUCE SHANK**

Technical Editor: **RON MORRIS**

Assistant Editors: **SCOTT SCREDON, MIKE CASEY**

Graphic Director: **RAYMOND GIBSON**

Research Services: **CLARENCE ARNOLD**

Advertising Production Manager: **PATRICIA KELLEY**

MARKETING/SALES

Advertising Director: **STEVE STONE** (212) 421-1350

757 Third Avenue, New York, N.Y. 10017

Circulation & List Rental: **TERRI HUTSENPILLER** (216) 651-5500

Marketing & Merchandising Services: **FRAN FRANZAK** (216) 651-5500

Midwest Office: **JOE GUARISE** (312) 236-9425

333 N. Michigan Ave., Chicago, Illinois 60601

Southern Office: **DICK GORE** (404) 252-4311

3186 Frontenac Court, N.E., Atlanta, Ga. 30319

Northwest Office: **BOB MIEROW** (206) 363-2864

1333 N.W. Norcross, Seattle, WA 98177

Classified: **DOROTHY LOWE** (216) 651-5500

9800 Detroit Ave., Cleveland, Ohio 44102



LAWN CARE INDUSTRY is published every month by The Harvest Publishing Company, a subsidiary of Harcourt Brace Jovanovich, Inc. at 9800 Detroit Ave., Cleveland, Ohio 44102 (216) 651-5500. Copyright © 1978 by The Harvest Publishing Company. All rights reserved. The contents of this publication may not be reproduced either in whole or in part without consent of copyright owner. Controlled circulation postage paid at Cleveland, Ohio.

SUBSCRIPTIONS: to Lawn Care Industry are solicited only from owners, managers, operators, buyers, merchandisers, agronomists, technicians, dealers, distributors and manufacturers of products associated with the lawn care and maintenance business. Position and company connection must be indicated on subscription orders. Publisher reserves the right to approve all subscription requests. Single copy cost \$1.00 for current issue. All back issues \$1.25 each. Foreign \$1.25. Subscription rates: \$10.00 one year, \$18.00 two years, \$23.00 three years. Group and foreign air mail rates available on request.

SUBSCRIBERS: Send change-of-address notices, correspondence regarding subscription service to Fulfillment Manager, Lawn Care Industry, 9800 Detroit Ave., Cleveland, Ohio 44102. Change of Address notices should be sent promptly, provide old as well as new address, attach address label from recent issue. Please allow one month for change of address to become effective.

POSTMASTER: Please send form 3579 to Fulfillment Manager, Lawn Care Industry, 9800 Detroit Ave., Cleveland, Ohio 44102.

The Harvest Publishing Company, a subsidiary of Harcourt Brace Jovanovich, Inc., publishers of WEEDS TREES & TURF, PEST CONTROL, NPCA Extra, GOLF BUSINESS and the Scientific Guide to Pest Control Operations.

MEMOS

Gauging the Maryland/Virginia/D.C. market: Dr. Charles Darrah of the University of Maryland and lawn care businessmen in his area have decided that they really don't know too much about the nature of the lawn care industry in their region. What's more, they have decided to do something about it. With hoped-for money from the Maryland-Virginia Agricultural Reporting Service, they are planning a detailed survey of the lawn care industry in the Mid-Atlantic.

Mis-measuring in Indiana: One of the biggest problems facing the lawn care industry as a whole is the sometimes commonplace practice of undermeasuring or overmeasuring customer lawns. The customer always loses out, whether he is being overcharged, or whether he is not receiving the proper amount of fertilizer and pesticides. Plus it does nothing but give a big black eye to the lawn care industry.

Jerry Hartsough, president of Agrilawn Corp., Goshen, Ind., says he has run up against customers receiving competitive estimates anywhere from 2,000 to 8,000 square feet different than his own measurements. And he says he and his field men take great pains in getting the truest estimate they can.

He says that this is one area that he foresees government regulation taking over if the industry does not clean up its act, and when that day comes, "there are going to be a whole lot of unhappy people in this industry."

Group seeks minor pesticide labels: The work of a little-known inter-regional group of state agricultural experiment stations around the country is beginning to pay off. The group's project, called IR-4, is to coordinate nationwide efforts to gather scientific data necessary to add minor-use authorizations, many for turf and ornamentals, to restricted-use pesticide labels.

Earlier this year, data on minor uses for the following chemicals were turned over to the EPA, which is studying data and will decide individually which to register and add to pesticide labels. Insecticides are oxamyl, manufactured by Du Pont Co., Wilmington, Del.; Diazinon, manufactured by Ciba-Geigy Corp., Greensboro, N.C.; aldicarb, manufactured by and marketed under the trade name Temik by Union Carbide Corp., Jacksonville, Fla.; acephate, manufactured and marketed under the trade name Orthene, by Chevron Chemical Co., San Francisco, Calif.; oxydemeton-methyl, manufactured and marketed under the trade name Metsystox-R by Chemagro Agricultural Div., Mobay Chemical Corp., Kansas City, Mo.; methomyl, marketed under the trade name Nudrin by Shell Chemical Co., Houston, Texas, and by Du Pont Co. under the trade name Lannate; and carbaryl, manufactured and marketed under the trade name Sevin by Union Carbide Corp.

Herbicides are glyphosate, manufactured and marketed under the trade name Roundup by Monsanto Agricultural Products, St. Louis, Mo.; napropamide, manufactured and marketed under the trade name Devrinol by Stauffer Chemical Co., Westport, Conn.; alachlor, manufactured and marketed under the trade name Lasso by Monsanto; oxadiazon, manufactured and marketed under the trade name Ronstar by Rhone-Poulec Inc., formerly Rhodia, Inc., Monmouth Junction, N.J.; oryzalin, manufactured and marketed under the trade name Surflan by Elanco Products Co., Indianapolis. A fungicide is chlorothalonil, manufactured and marketed under the trade name Bravo by Diamond Shamrock Corp., Cleveland.

Lawn care and the New York Times: Fred Diegtel, vice president of operations for Lawn Doctor, Inc., Matawan, N.J., has been writing letters to the New York Times since June, and has yet to receive a reasonable response to a question he has about an article that appeared in that newspaper.

In the June 4 issue of the Times, columnist Fred Ferretti wrote a flippant article about lawn care, attributing apparently fabricated quotes to the lawn care businessman such as: "I am your lawn specialist. We tend to the sick and bald. What can I do for you?" and: "You're getting hysterical. Calm down. Are you telling me that you hope we can cure your sick, bald and obviously diseased lawn?"

Although Lawn Doctor was not mentioned by name, the article uses the term "doctor" often, and it turns out that Kim Herud, Lawn Doctor of Verona-Cedar Grove, did indeed make a sales call to columnist Ferretti just before the article was written. Herud admits he was a bit late for his appointment, but did not treat the columnist in the manner described in the article.

Diegtel feels that the article took an unnecessary cheap shot at the industry in the interest of nothing more than providing grist for a column on a slow news day. He has even written Times executive editor Abe Rosenthal a number of times. But the paper is not writing back.



Short story of great beauty.

This little bluegrass came to market from Sweden and became a best seller. Fylking Kentucky bluegrass forms a luxurious, low-growing, fine-textured thick turf. It establishes fast, develops a greater density of rhizomes and roots. Fylking is tough, with improved resistance to many diseases, and better tolerates drought, heat, cold, smog and foot traffic. Greens up early, stays green through summer and late into fall. Great as the backbone bargain for lawn turf seed mixes.

Fylking performs well when cut low (even low as one-half inch).

Fylking Kentucky bluegrass costs less than most other elite blues. In short, insist that this best seller be included in every lawn seed mix. Fylking Kentucky bluegrass.

**FYLKING KENTUCKY
BLUEGRASS** U.S. Plant
Patent 2887

Another fine, quality-controlled product of Jacklin Seed Company.

MEETING DATES

Turfgrass '79, Baltimore Hilton, Baltimore, Md., Jan. 8-10. Contact: Dr. Charles Darrah, Department of Agronomy, University of Maryland, College Park, Md. 20742, 301-454-3715.

Nebraska Turfgrass Conference, Nebraska Center, University of Nebraska, Lincoln, Jan. 8-10. Contact: Dr. Robert C. Shearman, 105 Plant Industry Building, University of Nebraska, Lincoln, Neb. 68583.

ProTurf Seminar, Holiday Inn North, Newark, N.J., Jan. 9. Contact: O.M. Scott & Sons, Marysville, Ohio, 800-543-006.

ProTurf Seminar, Lantana, Randolph, Mass., Jan. 10. Contact: O.M. Scott & Sons, Marysville, Ohio, 800-543-006.

ProTurf Seminar, Holiday Inn, Westbury, New York, Jan. 11. Contact: O.M. Scott & Sons, 800-543-006.

New Hampshire Turf Seminar, Sheraton-Wayfarer Motor Inn, Bedford, N.H., Jan. 11-12. Contact: George Estes, Department of Plant Sciences, University of New Hampshire, Durham, N.H. 03824.

Chemicals for Turf Use Seminar, sponsored by Midwest Regional Turf Foundation, Purdue University, West Lafayette, Ind., Jan. 15-19. Contact: Dr. William H. Daniel, Department of Agronomy, 2-443 Lilly Hall, West Lafayette, Ind. 47907, 317-749-2891.

Michigan State University Turfgrass Conference, Kellogg Center, MSU Campus, East Lansing, Jan. 16-17. Richard W. Chase, Department of Crop and Soil Sciences, East Lansing, Mich. 48824.

Southeastern Pennsylvania Turf School, and Trade Show, Westover Country Club, Jeffersonville, Pa., Jan. 16-17. Contact: William H. White, SE Corner Broad and Grange Streets, Philadelphia, Pa. 19141.

Green Lawn 11th Annual Lawn Spraying Seminars, Hilton Airport Inn, St. Louis, Mo. Jan. 17. Contact: Jim McCurdy, Green Lawns, Inc., 633 W. Monroe St., Belleville, Ill. 62221, 618-234-2141.

Western Pennsylvania Turf and Grounds Maintenance School-Trade Show, Howard Johnson Motor Lodge, Monroeville, Pa., Jan. 23-25. Contact: Phil Sellers, 311 Jones Law Building Annex, 311 Ross St., Pittsburgh, Pa. 15219.

ProTurf Seminar, Troy Hilton, Troy, Mich., Jan. 23. Contact: O.M. Scott & Sons, 800-543-006.

ProTurf Seminar, Holiday Inn, Cleveland, Ohio, Jan. 24. Contact: O.M. Scott & Sons, 800-543-006.

ProTurf Seminar, Sheraton Valley Forge, King of Prussia, Pa., Jan. 25. Contact: O.M. Scott & Sons, 800-543-006.

Pump and Pump Controls Short Course, St. Louis, Mo., Jan. 23-25. Contact: Irrigation Association, 13975 Connecticut Ave., Silver Spring, Md. 20906, 301-871-8188.

VPI & SU Annual Turfgrass Conference, Colonial Williamsburg Conference Center, Williamsburg, Va., Jan. 24-25. Contact: Dr. John F. Shoulders, 419 Smyth Hall, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061, 703-951-5797.

15th Annual Northern California Turfgrass and Environmental Landscape Exposition, San Mateo County Fairgrounds, Jan. 24-25. Contact: Marilyn Heinrichs, NCTC, P.O. Box 268, Lafayette, Calif. 94549.

Professional Turf and Landscape Conference, Tappan Zee Inn, Nyack, N.Y., Jan. 31. Contact: Frank Claps, 136 Laurel Ave., Larchmont, N.Y. 10538, 914-834-6846.

The Fertilizer Institute Annual Meeting, Hyatt Regency, Chicago, Ill., Feb. 4-6. Contact: Doug Calkin, TFI, 1015 18th St., N.W., Washington, D.C. 20036, 202-466-2700.

50th International Turfgrass Conference and Show, Georgia World Congress Center, Atlanta, Ga., Feb. 4-9, 1979. Contact: Conrad L. Scheetz, GCSAA, 1617 St. Andrews Dr., Lawrence, Kan. 66044, 913-841-2240.

Associated Landscape Contractors of America 1979 Annual Meeting and Trade Exhibit, Galleria Plaza Hotel, Houston, Texas, Feb. 4-9, 1979. Contact: John Shaw, ALCA, 1750 Old Meadow Rd., McLean, Va. 22101, 703-893-5440.

ProTurf Seminar, Thunderbird Hotel, Bloomington, Minn., Feb. 6. Contact: O.M. Scott & Sons, Marysville, Ohio, 800-543-006.

ProTurf Seminar, Holiday Inn No. 4, Milwaukee, Wis., Feb. 7. Contact: O.M. Scott & Sons, Marysville, Ohio, 800-543-006.

ProTurf Seminar, Hyatt Regency O'Hare, Rosemont, Ill., Feb. 8. Contact: O.M. Scott & Sons, Marysville, Ohio, 800-543-0006.

ProTurf Seminar, Hilton Inn North, North High Street, Worthington, Ohio, Feb. 12. Contact: O. M. Scott & Sons, 800-543-0006.

Penn State 50th Anniversary Turfgrass Conference, Sheraton Penn State Inn, State College, Pa., Feb. 13-16. Contact: Dr. Joseph M. Duich, 21 Tyson Building, Penn State University, University Park, Pa. 16802.

Greens Lawns 11th Annual Lawn Spraying Seminars, Hilton Airport Inn, St. Louis, Mo., Feb. 14. Contact: Jim McCurdy, Green Lawns, Inc., 633 W. Monroe St., Belleville, Ill. 62221, 618-234-2141.

Illinois Landscape Contractors Seminar, Indian Lakes Country Club, Bloomington, Ill., Feb. 14-16. Contact: Carole Rachesky, 665 Forest, Glen Ellyn, Ill. 60137, 312-858-8356.

Capital Area Turf School, Hershey Motor Lodge, Convention Center, Hershey, Pa., Feb. 20-21. Contact: Harold E. Stewart, 75 S. Houcks Rd., Suite 101, Harrisburg, Pa. 17109.

ProTurf Seminar, Holiday Inn 9009 East Arapahoe Rd., Denver, Colo., Feb. 20. Contact: O. M. Scott & Sons, 800-543-0006.

ProTurf Seminar, Hilton Airport Plaza Inn, 8001-112th St., N.W., Kansas City, Mo., Feb. 21. Contact: O. M. Scott & Sons, 800-543-0006.

ProTurf Seminar, Holiday Inn, I-279 at St. Charles Rock Road, St. Louis, Mo., Feb. 22. Contact: O. M. Scott & Sons, 800-543-0006.

American Sod Producers Association Midwinter Conference, Doubletree Inn-Mall, Scottsdale, Ariz., Feb. 25-27. Contact: Bob Garey, ASPA, Association Building, 9th and Minnesota, Hastings, Neb. 68901, 402-463-5691.

Northeastern Pennsylvania Turf School, Master Host Motel, Wilkes-Barre, Pa., Feb. 27-28. Contact: Cy Chadwick, Court House Annex, 5 Water St., Wilkes-Barre, Pa. 18702.

30th Annual Canadian Turf Show, Chateau Halifax, Halifax, Nova Scotia, March 4-7. Contact: Canadian Golf Course Superintendents Association, 698 Weston, Rd., Suite 32, Toronto, Ontario M6N 3R6, 416-767-2550.

Reinders Turf Conference, includes irrigation seminars, equipment show and service clinic, Elm Grove, Wis., March 6-8. Contact: Ed Devinger, Reinders Brothers, Inc., 13400 Watertown Plank Rd., Elm Grove, Wis. 53122, 414-786-3300.

Midwest Turf Conference, Purdue University, West Lafayette, Ind., March 12-14. Contact: Dr. William H. Daniel, Department of Agronomy, 2-443 Lilly Hall, West Lafayette, Ind. 47907, 317-749-2891.

Northcentral Pennsylvania Turf School, Smethport Country Club, Smethport, Pa., March 20. Contact: Clarence E. Craver, Court House, Smethport, Pa. 16749.

Symposium on Turfgrass Diseases, sponsored by Ohio State University, Ohio Agricultural Research and Development Center, ChemLawn Corp., University Holiday Inn, Columbus, Ohio, May 15-17. Contact: Dr. P. O. Larsen, 2865 E. Orange Rd., Galena, Ohio 43021, 614-422-6987.

THE LITTLE TRACTOR THAT DOES BIG TRACTOR JOBS.



A lot of landscaping and construction jobs are too big for a lawn and garden tractor, yet too small for a large industrial tractor.

And that's where our John Deere "little-big" tractors come in.

At 22 and 27-PTO-hp, they have the power you need for loading, digging, grading, posthole digging, transporting, trenching, tilling and just about any other job you do.

Yet they're still small enough so they're not too expensive to buy or operate.

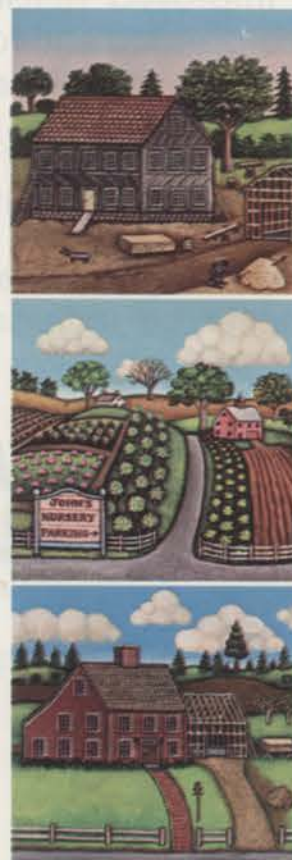
Both the 22-PTO-hp 850 and the 27-PTO-hp 950 are equipped with liquid-cooled diesel engines that give you excellent fuel economy.

And both offer a versatile 8-speed transmission plus a 3-point hitch (Category 1) that accommodates a family of more than 20 tractor-matched implements.

We also offer a choice of tire sizes and styles to fit your needs. And your John Deere dealer is a man you can count on for parts, service and good advice.

So if you're looking for a real workhorse that's just right for the jobs you do, see the 850 or 950 at your nearby John Deere dealer. Or, for a free brochure, write: John Deere, Dept. 63, Moline, Illinois 61265.

**THE JOHN DEERE
"LITTLE-BIG" TRACTORS.**
Nothing runs like a Deere.®



THE BIGGEST VALUE IN CONTROLLED RELEASE NITROGEN!

Magnification of sulphur coated urea granule

**If you're a lawn
applicator . . .**

**If you're not using
Sulfur Coated
Urea . . .**

READ THIS!

Then call us toll-free at:

East of the Mississippi

1-800-321-5951

In Ohio Dial 1-800-362-7413

Or Call Collect 216-323-7544

If you're a lawn applicator and you're not using LESCO 36 Sulfur Coated Urea in your program, it's costing you money, it's costing you performance, and maybe it's costing you customers.

LESCO 36 Sulfur Coated Urea is a giant leap for turf management. This controlled release nitrogen source delivers a guaranteed minimum of 36% nitrogen and 12% sulfur. Between 10 to 20% of the nitrogen is available within the first 7 to 10 days, with the remainder available over a period of several months. This means quick greening, sustained feeding and reduced application costs. And because you buy from Lakeshore, you buy from the manufacturer. And that means quality and savings.

If you are a truckload buyer, take advantage of our toll-free information service and call Barb today. She'll have our representative contact you immediately. Those east of the Mississippi can reach her by dialing 1-800-321-5951. (In Ohio, dial 1-800-362-7413.) If you're west of the Mississippi, call Barb collect at 216-323-7544.

Take that small step and call today. We'll be glad to tell you about LESCO 36 and our other fine LESCO Products, such as LESCOSAN (Betasan*), the liquid pre-emergence crabgrass control that outsells all the competition. Our LESCO Quality Products and Friendly Service are always as close as your phone.

*(Betasan—Registered TM of Stauffer Chemical Company.)

LESCO PRODUCTS

Division of Lakeshore Equipment & Supply Co.
300 S. ABBE ROAD, ELYRIA, OHIO 44035

A FAMILY OF FINE PRODUCTS—Lescosan 12.5G—Lescorene—Lesco 4—Lescobor—Lescopar—Lescopex—Lesco Non-Selective Herbicide
Lesco MSMA—Lesco Thiram 75W—Lescozyme—Lakeshore Chinch Bug & Sod Webworm Control

NEWSMAKERS

After one full lawn care season, **Agrilawn Corp.**, Goshen, Ind. has developed a strong business position in that community, which is 40 miles east of South Bend. Jerry Hartsough is president of the company, which is a spin-off of his landscaping business. David Miller is vice president, D. Robert Corson is secretary-treasurer, and Truman Miller is assistant secretary-treasurer.



Newsom



Jensen

Peter Loft, chairman of **Lofts Pedigreed Seed, Inc.**, Bound Brook, N.J. has announced the opening of a branch in Landover, Md. to serve the Mid-Atlantic region. Products from this branch are marketed under the name of **Lofts/Maryland**. Strick Newsom has been named vice president and general manager, and Vanessa Jensen has

been named assistant vice president and assistant manager.

John Morrissey was elected president of the **Atlantic Seedsmen's Association** at its annual meeting recently in Boston. He is vice president of the Wholesale and Institutional and Professional Turf Division of **Loft's Pedigreed Seed, Inc.**, Bound Brook, N.J. Other officers are: Charles Kindsvater, **Otis S.p.Twilley Seed Co.**, Trevoise, Pa. first vice president; D. L. Gruenbaum, **O.M. Scott & Sons**, Marysville, Ohio, second vice president; Robert Wetsel, **Wetsel Seed Co.**, Harrisonburg, Va., secretary; and Randy Pope, **John Zuelzer & Son**, Manhasset, N.Y., treasurer. Executive committee members include John Zajac, **Garfield-Williamson, Inc.**, Jersey City, N.J.; Charles Walkiewicz, **Vaughan-Jacklin Corp.**, Bound Brook, N.J.; and Hugh MacWilliam, **Agway, Inc.**, Syracuse, N.Y.

Paula Dietz has been named western representative for **L & E Chemicals**, Royal Oak, Mich., according to company president Donald Benham. She was formerly turfgrass extension specialist at **Michigan State University**.

H.J. Baker & Bros., Inc. has been appointed as sales agent to the fertilizer manufacturing industry for **Ag Industries Mfg. (AIM) Corp.**'s production of sulfur-coated urea. AIM is owned by **Lakeshore Equipment & Supply Co.**, Elyria, Ohio.

Lakeshore has announced a number of appointments. Don Frihauf will be the company's Lake Erie representative, covering eastern Cleveland to Buffalo, N.Y. He was formerly assistant golf course superintendent at The Pepper Pike Club in the Cleveland area.

Paul Morgan will serve the company in product development. He is a past president of the **Midwest Regional Turf Foundation** and the **Ohio Turfgrass Foundation**.

Clifford Belden will be the company's Hudson Valley representative. This includes most of the northeastern counties of New Jersey and all of Fairfield County, Connecticut. He is a graduate of **Eastern Kentucky University**, holding a B.S. degree in turf.

Stanford Seed Co., Buffalo, N.Y., has named Richard S. Bell manager of the company's Philadelphia division, which is headquartered in Plymouth Meeting, Pa. Bell has been with the company since 1965 in an executive position for finance and administration, and currently serves as corporate secretary-treasurer. He began his career in the seed trade with **Seaboard Seed Co.**, Bristol, Ill. Stanford Seed Co. is a producer and distributor of Old English brand turfgrass seed and lawn products for industrial and residential use.



Bell



Bergen

Robert E. Bergen has been named division manager of **FMC Corp.'s Outdoor Power Equipment Division**, Port Washington, Wis., manufacturers of Bolens lawn equipment. Bergen joined the company in 1977 as assistant division manager. He replaces Dave Hill, who will be relocating to Arizona before retirement at the end of next year.

New officers of the **Professional Grounds Maintenance Society** elected at its annual meeting in Indianapolis are: Fred A. Lennertz, Jr., president; J. Alton Enloe, vice president; and John R. Van Vorst, treasurer. Lennertz is superintendent of grounds and transportation for Indiana University/Purdue University at Indianapolis. Enloe is supervisor of landscape and grounds maintenance for the University of Houston. Van Vorst is supervisor of parks for the borough of Tenafly, N.J.

Robert H. Yarborough has been named a chemical sales representative for **TUCO, Division of The Upjohn Co.**, Kalamazoo, Mich., by marketing manager Owen B. Lewis. Yarborough will be responsible for sales in

Michigan, Indiana and Ohio. He received his B.S. degree in agronomy and turf management from **Delaware Valley College of Agriculture** at Doylestown, Pa.

P.C. Kleyla has been named new product specialist for Sevin carbaryl insecticide for **Union Carbide Corp.**, Jacksonville, Fla. Also, Frank J. Gonzales has been named field development representative in the West and Daniel P. Veileux in the Midwest.



Staples



Staats

Clark Staples has been named field sales manager for **OMC-Lincoln's Cushman and Ryan** turf care equipment lines. Also, Gary Staats has been named eastern U.S. service manager for Cushman-Ryan turf care equipment.

Steve Tubbs has joined the sales staff at **Great Western Seed Co.**, Albany, Ore. He will assist in marketing the company's established brands and in opening markets for newly developed grass seed.

George Swoboda has been appointed sales manager for national accounts of **Lofts Pedigreed Seed, Inc.**, Bound Brook, N.J. He will operate from Cambridge, N.Y., traveling throughout the United States and working directly with national accounts.

Grand Junction Pipe & Supply Co., Grand Junction, Colo. has been named a full-line franchised turf distributor for **Rain Bird Sprinkler Mfg. Corp.**, Glendora, Calif. The new distributor is involved in the sale of irrigation equipment for residential, industrial and golf course applications. Sales manager is Ron Jaynes.

The appointment of Hal G. Dickey as turf seed marketing manager at **North American Plant Breeders**, Mission, Kan., has been announced by L. C. Nelson, business director. Only recently re-entering the turf market with a national launch of Regal fine-textured ryegrass, the firm announced its plans to introduce other elite grasses in the near future.

Toro Co., Minneapolis has named Walter J. Wilkie, president of **Wilkie Turf Equipment, Inc.**, Pontiac, Mich. as its outstanding United States distributor for 1978. The company's purchases of Toro equipment this past year topped the \$12-million mark, double the value of his preceding year's purchases. A close competitor of Wilkie for the top award was E. D. McConkey, president of **Chicago Toro Turf-Irrigation, Inc.**, Itasca, Ill. Others receiving awards were Lee Strebel, president of Gulf Shore Turf Supply, Inc., Pensacola, Fla.; Leonard L. Johnson, president of **L. L. Johnson Distributing Co.**, Denver; and Roy W. Simpson, president of **The Norton Corp.**, Phoenix.

TOOLS, TIPS & TECHNIQUES

Hydraulic seeding of existing lawns

Jerry Faulring, president of Hydro Lawns, Gaithersburg, Md. feels that overseeding existing lawns by hydraulic seeding is a very economical approach to reestablishment — and it has proven very successful for his company.

"We introduced our Program IV this spring to fill a large void in the kind of services offered to the market," he told **LAWN CARE INDUSTRY** recently. "We did not reach our sales goal for Program IV this spring due to the long winter causing a late start and equipment delivery delays. But we did overseed another 600 lawns this fall in a geographic area about 100 miles by 75 miles. I think that is pretty efficient."

For the overseeding program, Hydro Lawn uses a 3,000-gallon hydraulic seeder manufactured by Finn Equipment Co., Cincinnati, Ohio. Two other hydraulic seeders on the



Hydro Lawn's 3,000-gallon hydraulic seeder

market are manufactured by Reinco, Plainfield, N.J. and Bowie Industries, Inc., Bowie, Texas.

Faulring started Hydro Lawn in the fall of 1975 after several years of experience in sod production and the lawn care industry. With one truck, he signed up 344 customers that first fall. The next year he ended with three trucks and 2,100 customers on the books. Last year he ended with 5,000 customers and 12 trucks.

He ended this lawn care season with more than 20,000 customers, serviced by seventeen 1,300-gallon spray rigs, four 300-gallon manager spray rigs and the hydraulic seeder (gross receipts were \$1.5 million, see "Million Dollars Lawn Care Companies, **LAWN CARE INDUSTRY**, Nov., 1978, page 4)

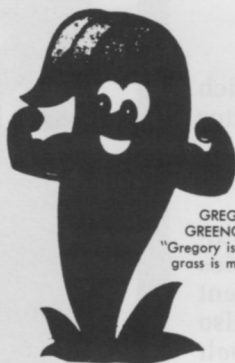
INCREASE YOUR PROFITS AND BUSINESS

While Building a Strong
Professional Image
Be Able to Create
Better Lawn Results
than your Competition

HERE'S HOW



CAN HELP . . .



Such soil reports with complete recommendations are truly the soundest and most practical way of managing outdoor areas scientifically and exactly. They are well worth their initial costs as they will repay with savings in material, time, and expenses that are usually created by faulty guessing.

Sample Soil Test Form Provides the Following Essential Information Necessary for Professional Management

TESTS	Value Found	Desired Value	Too High Amts In Soil (Toxic)	L E V E L O B L E O. M. S.	Too Low Amts. in Soil (Deficient)	Total Corrective Quant. For Restoration	Primary Appli. No. Appli. Req. =		Mat. Cost Per Unit	Secondary Appli. No. Appli. Req. =	
							Safe Quant. To Apply Per Acre Per Appli.	Mat. Cost Per Acre Per Acre		Safe Quant. To Apply Per Acre Per Appli.	Mat. Cost Per Acre Per Acre
Total Exc. Cap.											
pH of Soil											
Organic Matter %											
Nitrogen No./Acre											
Sulfates No./Acre											
Phosphates No./Acre (P ₂ O ₅)											
Calcium No./Acre											
Magnesium No./Acre											
Potassium No./Acre											
Sodium No./Acre											
Base Saturation %											
Calcium (60-70%)											
Magnesium (10-20%)											
Potassium (2-5%)											
Sodium (.5-3%)											
Other Bases (Variable)											
Exc. Hydr. (10-15%)											
Salt Conc.											
Chlorides											
Boron											
Iron											
Manganese											
Copper											
Zinc											
TOTAL COST FOR MATERIAL PER ACRE											

PRESCRIPTION FORMULATING—Putting your soil test recommendations to work for you in the exact manner required by your soil and lawn. In the past, Soil Testing was almost useless because very few people could obtain the exact materials required. Now, due to our computerized prescription blending plant, we formulate exactly to soil test recommendations or to your specifications. These formulations can contain the Primary Nutrients (NPK), the Secondary and Micro Nutrients (Ca, Mg, S, Fe, Zn, Mn, Cu, Bo) along with Soil Looseners, and/or Rebuilders, Mat and Thatch Decomposers and other required products — all can usually be formulated into one easy to use product.

Most formulating can be had as:
A. Natural organic forms
B. Synthetic Form
C. Both Organic and Synthetic Forms

By applying materials exactly as required by your soil and grass, you will be able to obtain superior results over standard products or other formulating procedures. Superior Professional Results = More Business, Higher Recognition, + Greater Profits.

MANAGEMENT PROGRAMS—Tailored to your Soil-Plant Requirements and to the dollar cost you desire to pay for materials.

TECHNICAL HELP AND ASSISTANCE from Experienced Degreed Professionals that will bring added profits and business.

MATERIALS INCLUDING:—Fertilizers, Herbicides, Fungicides, Seed Insecticides and Special Problem-Solving and Preventing Products. We can formulate any product to your specifications — Tell us what you want and what you want to pay and we'll formulate to your specifications.

APPLICATION EQUIPMENT—Specially designed application equipment that is inexpensive to purchase, and most important, easy to use. We can build units to your specifications or will supply the components so you can build units yourself.

THE AGE OF PROVIDING PROFESSIONAL ADVICE AND RESULTS IS UPON US NOW! BE PREPARED TO ACCEPT THIS RESPONSIBLE POSITION — PLAN TO ATTEND LEARN THE NEWLY DISCOVERED SECRETS OF MOTHER NATURE, NEW TECHNIQUES, NEW PROBLEM AND LABOR SAVING PRODUCTS AND EQUIPMENT ACQUIRE A TOTALLY NEW CONCEPT OF THE SPRAY BUSINESS.

SPRAY DEALER TRAINING CLINICS—Designed especially for the man desiring to become a high quality professional capable of producing positive results with the ability to spot problems, diagnose their cause, cure and prevent their recurrence. The subject matter is presented in an "Eyeball to Eyeball" basis in a digestable and immediately useable form so everyone understands all concepts and will be able to profit from this knowledge immediately by being able to put the acquired information to use in his daily business operation.

Special purpose products for solving and preventing problems are introduced as are new types of application equipment and techniques. Individual questions and problems are answered and solved.

Clinic Courses cover the following:

The secrets of Plant Growth Characteristics that will bring you success.

Fertilizers—Primary, Secondary, and Micro Nutrients. Their function in soils and plants. Raw Material Sources — Natural and Synthetic. Costs and choosing the best for your purpose. How Fertilizers are manufactured and the results achieved.

Soils—The Key to Your Success — Problem Solutions Mechanical vs Natural Chemical rectifiers Soil Aids and Rebuilders that can be sprayed.

Natures Rhythm—understanding it so that you can make Mother Nature work for you instead of working against your efforts.

Soil Testing—Testing Methods available - Understanding the value and interpretation of results - value of research - evaluating the soils in your area - what should be used on the lawns in your area.

Lawn Care—Listing problems, objectives, budgets and programming to meet the requirements of your area. Offering a

spray service in your area - requirements, etc. Surveying, Scheduling, selecting proper materials.

Weed Control—Contact, Selective, Total, Soil Sterilization Lawn Weeds. Industrial Weed Control. Fence Line Spraying. Chemical Weed Picking. Aquatic Weed Control.

TREE, ORNAMENTAL AND SHRUB CARE—Root Feeding, Spraying. Equipment—Selection, calibrating, special purpose and multi-purpose units. How to equip a truck rig. Large area spraying units.

Application Techniques—Mixing and applying materials Educating, communication, informing your customers. Planning and programming. Plus much, much more.

A total concept you can't afford to miss. A very affordable program, packaged with all of the materials you are taught on so you can use the methods and the products immediately after training to prove to yourself and your customers that you can provide better results with your service. This unique Dealer package is designed to train you in the most effective way of providing a professional service, provide you with the necessary materials plus you will receive your total investment back with a profit. A deal that can't be matched. A variety of Dealer Packages for you to choose from to match your needs, expansion, market and available funds. Advance training available. This is not a Franchise. No fees or royalties. You are your own boss.

The above Dealer Package represents the 4 day training package. Other packages available. Training available in Jan., Feb., and March, 1979. Seating is limited. Reservations made on a first come first served basis. For complete information call Mr. C. Gregory. 312-455-6900.

YOUR TOTAL SOURCE FOR PROFESSIONAL MANAGEMENT

YOU CAN EXPAND INTO THE SPRAY BUSINESS — INEXPENSIVELY and PROFESSIONALLY

AGRO CHEM'S

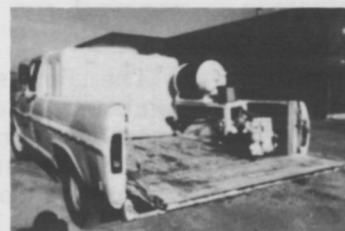
Professional spray unit for the small, new applicator, and — it is expandable For the larger established applicator.

The basic unit includes (as pictured)

- 1—Rectangular 300 gallon holding tank — 110 lbs. w/4" fill cap & man way
- 1—250' light weight pressure hose
- 1—Electric hose reel
- 1—Gas engine & special Pump
- 1—Lawn gun with assorted nozzels
- 1—Pressure regulator and bi-pass unit
- 1 each—Suction & Bi-pass hose
- 1—Root feeder



This basic 300 gallon unit can be expanded to whatever size spray rig desired by simply adding more tanks — eliminates purchasing new equipment as business expands.



This basic spray rig is designed to fit in a pick-up truck, the tank situated between the rear wheel well and cab of truck. The motor, pump and hose reel on the right side leaving the remainder of the truck bed for other equipment and supplies.



Van pictured shows the basic spray unit in the van, leaving the entire rear area for storage of products.

As you will see, these sprayer units have been designed with a great deal of thought, research, and years of experience. They are designed and built by professionals, for professionals. For more details, either call or write Mr. Pierce.

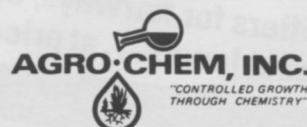
Pictured:
16' Flat bed truck carrying 5 — 300 gal. tanks + 1500 gals.

2 — 500' hose reels & ability to apply as many as 5 different products or any combination required.



With advertisement signs

Without signs



Phone: 312-455-6900

11150 Addison
Franklin Park, Ill. 60131

Please send me more information on: ☐ 2 day
☐ 3 day ☐ 4 day dealer training clinics
☐ Spray Units
☐ Root Feeding
☐ Problem I would like to solve in _____

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone _____ Area Code _____

COST CUTTINGS

Saving money with the "PUD" concept



Fishman

They are not doing it yet, but when Rich and Gail Fishman, co-owners of Lawn Doctor of Northampton in the Philadelphia area, switch to the "PUD" concept, they hope it will save them quite a bit of money and time.

The idea is simple, and not unlike the routing system that most lawn care companies use. A "PUD" is a Planned Unit Development type of housing development that often also includes condominiums, apartments and common green belt and recreational green areas. The idea is to have a single truck and manager for each large development, or for two developments if they are smaller.

A common tactic on the West Coast and in other areas across the country is for lawn care companies to offer a relatively cut-rate price for care of common green belt areas in exchange for promotion of a company's lawn care services to individual home owners in any given PUD.



Lawn and Garden Manufacturers Association board of directors elected recently in Chicago are: (From left) Robert B. Nichols, Jr., Nursery Specialty Products, Inc., Greenwich, Conn.; Karl J. Boehm, Jr., Warp Brothers, Chicago; Willis R. Barrett, Phillips Products Co., Inc., Streamwood, Ill.; Jane McAlpine, Carefree Garden Products, West Chicago, Ill.; LAGMA president C. Edward Scofield, RA-PID-GRO Corp., Dansville, N.Y.; and Eugene Olshansky, Science Products Co., Inc. Not pictured are: Norman Rivkees, Melnor Industries, Moonachie, N.J. and George E. Perry, Plantabbs Corp., Timonium, Md.

11TH YEAR

Green Lawns sponsors annual spray seminars

Green Lawns, Inc., Belleville, Ill. will sponsor its 11th Annual Lawn Spraying Seminars in the St. Louis area early next year.

Company president Jim McCurdy told LAWN CARE INDUSTRY: "My seminar will give you all the information you need to start a lawn spraying business."

Topics include: All formulas for two-through-five-application programs, equipment requirements and specifications, application techniques, advertising copy and layouts ready for media, and "solutions to problems before they become problems."

The lawn spraying seminars will be held January 17th and February 14 at the Hilton Airport Inn, across from Lambert International Airport in St. Louis. Cost is \$550.

For information, contact: Jim McCurdy, Green Lawns, Inc., 633

W. Monroe St., Belleville, Ill. 62221, 618-234-2141.

MEETINGS

New York conference moved up a week

The Professional Turf and Landscape Conference, sponsored by a number of New York metropolitan area green industry groups, has changed its date from February 7 to January 31.

The conference is scheduled for the Tappan Zee Inn, Nyack, N.Y.

For further information, contact: Frank Claps, 136 Laurel Ave., Larchmont, N.Y. 10538, 914-834-6846.

EDUCATION

Georgia Turfgrass Foundation formed

The Georgia Turfgrass Foundation recently was formed to support research and educa-

tional programs in the state, according to Timothy H. Bower, extension turf specialist at the University of Georgia, Athens.

The Foundation's first action was a campaign to educate home owners to the advantages of proper lawn grass choice, maintenance and methods of renovation during a special "Turfgrass Week."

MEETINGS

Lawn maintenance session featured at Mid-Am show

A special session on "Making Money in Lawn Maintenance" will headline the Mid-America Trade Show Jan. 14-17 at O'Hare Exposition Center in the Chicago area.

More than 1,000 persons are already pre-registered for the show, and more than 220 exhibitors will fill 365 exhibit spaces.

The lawn maintenance session will be held between 10 and 11 a.m. on Tuesday, Jan. 16. Panel speakers will be Charles

McGinty, president of McGinty Brothers, Long Grove, Ill.; Tyrrell Hughes, president of American Lawn Service, Menomonee Falls, Wis.; and William Fischer, president of Spring-Green Lawn Care Corp., Naperville, Ill.

For further information, contact: Donn Sanford, managing director, Mid-America Trade Show, 4300-L Lincoln Ave., Rolling Meadows, IL 60008. 312-359-8160.

BUSINESS

Toro sales up 41%; earnings nearly double

Toro Co. sales — sparked by a 33 percent product category gain in professional turf equipment and a 42 percent gain in turf irrigation equipment — topped out at more than \$227.4 million for fiscal year 1978 ended recently.

Earnings were a record at more than \$11 million. Primary and fully diluted earnings per share were \$4.12 and \$4.05, almost twice the \$2.14 and \$2.13 recorded in 1977.

Sales were \$66.4 million higher — 41 percent — than the \$161 million recorded in the preceding year.

MAINTENANCE

ALCA annual meeting is February 4-9 in Houston

The 1979 annual meeting of the Associated Landscape Contractors of America will be held February 4-9 in Houston.

The week-long program will feature a wide variety and full schedule of business sessions and technical workshops. There will also be an equipment demonstration and exhibit.

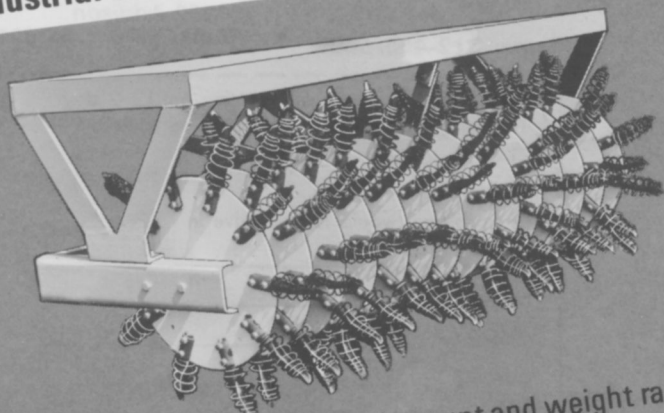
Last year's sessions were strong on lawn maintenance and also featured a special chemical lawn care session.

For further information, contact: John Shaw, ALCA, 1750 Old Meadow Road, McLean, Va. 22102, 703-893-5440.

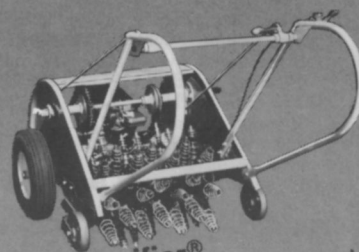
Hahn

THE TURF PROFESSIONALS

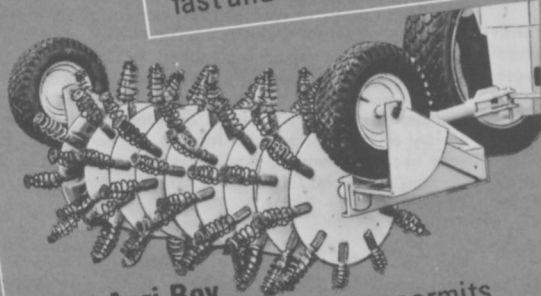
A complete line of Aerifiers for fairways, athletic fields, industrial and institutional lawns... at prices you will like!



TM-140
6 ft. swath. Three-point hitch mount and weight rack. Also available with wheels and hydraulic lift.



JR-3 Aerifier®
2 ft. swath. Self-propelled, fast and maneuverable.



AB-1 Aeri-Boy
4 ft. swath. Simple flip-over permits quick transport.

Optional Spoons and Blades for double utility.
Also available — a complete line of Thatchers.

Hahn 1625 N. Garvin St., Evansville, In. 47711

DEALERS WANTED (812) 424-0931

Circle 112 on free information card

NFSA lawn turf task force meets; may provide services to industry

At a special meeting held last month in Chicago, the National Fertilizer Solutions Association decided to do a test mailing to lawn care companies to determine interest and what kind of services it could provide to the industry.

Possible services NFSA could provide include: exposing companies in the lawn care industry to potential sources of fertilizers and chemicals, provide seminars and educational sessions at NFSA functions, provide grants for research on lawn fertilizers, introduce fertilizer application equipment suppliers to the lawn care industry.

Attending the meeting were: Richard L. Gilliland, executive

vice president of NFSA; T.C. Tupper, manager of specialty fertilizers for Ashland Chemical Co., Columbus, Ohio; Peter D. Shoemaker, Jr., The Valley Fertilizer — Chemical Co., Inc., Mount Jackson, Va.; Richard Farst, president of Blank's Agri-Service, Marion, Ohio; Richard Fetter, president of Morral Chemical C., Morral, Ohio. F. J. Ranstead, marketing manager for Hawkeye Chemical Co., Clinton, Iowa, a division of Getty Oil, chaired the meeting.

"There are more corn and soybean dealers providing fertilizer for lawn care companies than you might imagine," Fetter said at the meeting.

Tentative plans call for NFSA



Members of the National Fertilizer Solutions Lawn/Turf Task Force, meeting last month in Chicago: (From left, back to camera) NFSA executive vice president Richard Gilliland, Peter Shoemaker, Tully Tupper, Richard Fetter, Richard Farst, and (also back to camera) committee chairman F. J. Ranstead.

to possibly hold lawn workshops at its mid-year meeting in July in Indianapolis, and at its annual meeting next December in St. Louis. The association's 1978 annual meeting was earlier this month in Atlanta.

Major lawn care companies that belong to NFSA include: ChemLawn Corp., Columbus, Ohio; Liqui-Green Lawn Care

Corp., Peoria, Ill.; Sears Lawn & Leaf, Wheeling, Ill.; and Singature Lawns, Ltd., Davenport, Iowa.

For further information about NFSA, contact: Richard L. Gilliland, NFSA, 8823 N. Industrial Rd., Peoria, IL 61614, 309-691-2870. The association has 1,500 corporate members.

PESTICIDES

DBCP curbs proposed; restricted lawn use OK

The federal Environmental Protection Agency (EPA) has proposed ending some uses of the pesticide DBCP, but allowing other uses — including on home lawns and golf courses — under strict precautions.

The proposal would make permanent an action the EPA took last year when it temporarily suspended most uses of DBCP on vegetables but permitted other crop and commercial treatments, if made by certified applicators wearing protective clothing.

The pesticide has been used in the U.S. since 1955 to control nematodes that damage numerous crops, home lawns and golf course turf.

The EPA last year gave approval for Occidental Chemical Co., Lathrop, Calif., Dow Chemical Co., Midland, Mich., Shell Chemical Co., Houston, and Amvac Corp., Los Angeles, to sell DBCP products in the U.S. because they added the necessary precautions to their products' labels.

MEETINGS

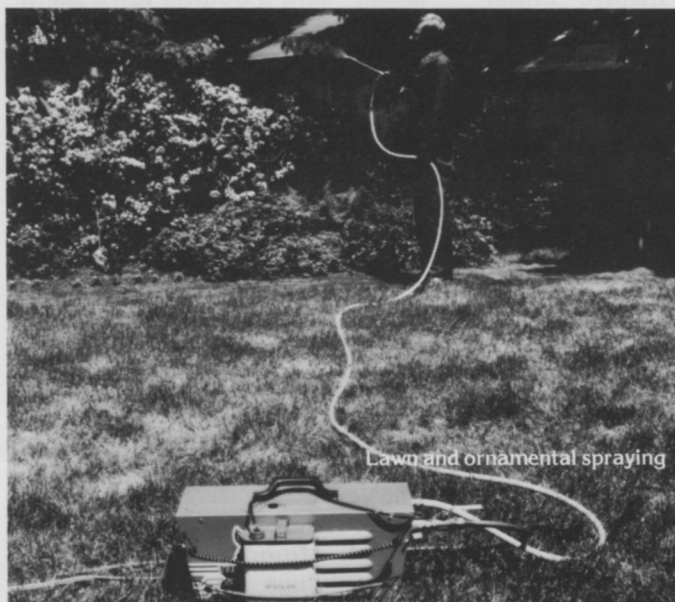
Lawn talks featured at Maryland turf show

Four special lawn care presentations will highlight Maryland's Turfgrass '79 to be held Jan. 8-10 at the Baltimore Hilton.

Lawn care consultant J. Martin Erbaugh of Erbaugh & Associates, Hudson, Ohio will speak on lawn care marketing techniques; Jerry Faulring of Hydro Lawn, Gaithersburg, Md., will speak on professionalism; Robert Earley, editor of LAWN CARE INDUSTRY, will speak on lawn care advertising.

For further information, contact: Dr. Charles Darrah, Department of Agronomy, University of Maryland, College Park, Md. 20742, 301-454-3715.

TANKS FOR THE MEMORY!



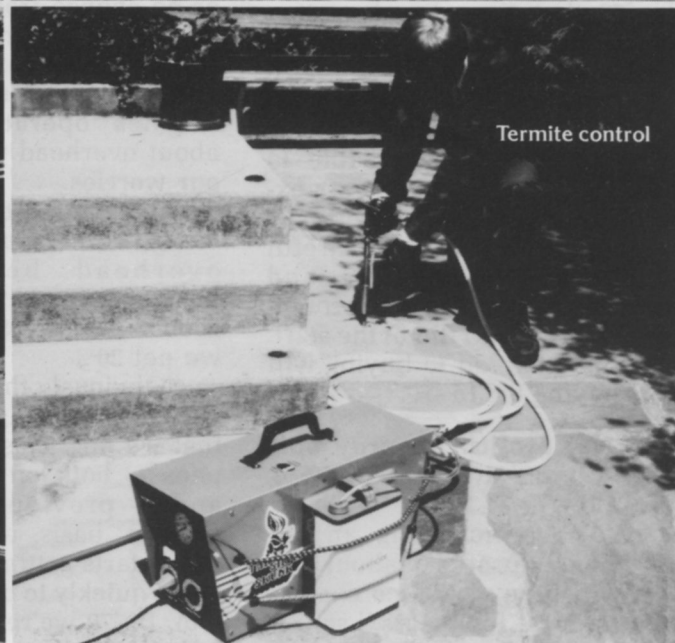
Lawn and ornamental spraying



The complete unit with its accessories



Complete portability



Termite control

For the first time in pesticide history, "The Silver Skunk" gives you the convenience and precision required for urban and industrial spray operations. It is a revolutionary new portable high-pressure pesticide sprayer. Utilizing the exclusive Micro-Injection System, "The Silver Skunk" accurately meters small amounts of pesticide concentrate directly into the high-pressure water flow. You may eliminate bulky mixing tanks, for "The Silver Skunk" allows you to couple

directly to a garden hose for a water source. "The Silver Skunk" features portability, simple calibration, allows the operator to easily switch from one concentrate to another, records total gallons used on each job and is designed for extended service life. The unit comes complete with 100 feet of high-pressure spray hose, a wand, three nozzles and adapters. You're ready to go to work the moment "The Silver Skunk" walks through the door.

See me at your nearest dealer!



Power Spray Technology, Inc.

Suite 8, Township Square Building
Hook and Calcon Hook Roads
Sharon Hill, PA 19079

Phone: (215) 461-6331

Circle 148 on free information card

Economic indicators for 1979: What lawn businessmen think

from page 1

"Everyone — including all levels of government — keeps talking about ways to slow or stop it but nothing to date seems to be really working. But stop it we'll have to, or else we'll have exactly the same type of economic disaster which other countries have gone through."

2. Unemployment rate. Majority opinion: Little or no change from '78.

"It now appears that the worst of this may be behind us," a Boston operator said. "For 1979 I expect the unemployment situation will stay about what it is now."

"One problem with this index is that I'm not sure it accurately measures those people really looking for work. I believe there are many people included in the statistics like students, housewives, and retired people who are not really looking for full time work."

"At least I know from our own experience that it's not easy to get good employees, even if you're basically looking for beginners and you're prepared to train them. Too many people apparently are happy to collect unemployment pay rather than going to work."

3. Gross profits. Majority opinion: Up an average of 6% over 1978.

"I've been in business for almost five years," said a New York operator. "During that time my gross profit percentage really hasn't increased. I've done far more work each year, of course, but the gross percentage hasn't moved upward."

"But based on advance orders for '79 that I've already gotten booked, I'm forecasting an increase of between 6 and 7% in gross profits. Part of that increase will result from higher prices which I'm now able to charge — with several years experience behind me — and part will come from more careful purchasing of supplies and equipment. I now shop around much more than I did at the start, and this attention to buying will start paying off in '79."

4. Net profits. Majority opinion: Up an average of 4½% over '78.

"We're anticipating an increase in net profits of about 5%. That will be a very nice change from the past few years," said a Chicago lawn maintenance company owner.

"Since 1976 — no, actually '75 — our net hasn't moved upward a bit. In fact we thought ourselves lucky to keep it where we did."

"But starting then we really started watching expenses. That's really a pain; I'd sooner be out in the field estimating or selling, but the chore has to be done."

"It takes time for expense cuts to filter down to the black ink at the bottom of a profit statement, but in the past few months that lovely color has been appearing more and more. In 1979 we're really expecting to see a lot of it."

5. Essential capital expenditures. Majority opinion: Up an average of 5% over '78.

"In the last few years we didn't purchase anything which was not literally required to keep the firm afloat," a Philadelphia operator said. "We read and believed all the economic doomsday predictions, and we thought it would be far better to keep as much cash on hand as possible for the crunch."

"Now it looks like doomsday may be postponed for awhile, so in '79 we have a fair amount of catching up to do, including buying one, maybe two, new pickups."

6. Discretionary capital expenditures. Majority opinion: Up an average of 8%.

"For the past two years we just put the lid on discretionary capital goods purchases," a Denver lawn maintenance firm partner said.

"The general economic situation just didn't inspire either confidence or purchases of anything which could be put into abeyance. The problem with that type of action, however, is that it also makes expansion difficult. You can't really expand if you haven't got the tanks and trucks."

"About a month ago my partner and I sat down and figured out the business we already had on the books for '79. When we added up the total it was surprising; we couldn't possibly service it all adequately with our current equipment. So in '79 we're budgeting for about 9 or 10% more spending for capital goods of a discretionary nature."

7. Administrative/sales expenses. Majority opinion: Little or no change from 1978.

"When we first got started in 1973 we were pretty concerned with getting business," said a Los Angeles operator. "Worrying about overhead was the least of our worries."

"Now, almost six years later, we give far more attention to overhead, because we've learned that saving \$100 is just as good as doing a \$500 job on which we net 20%."

"Obviously that doesn't mean we ignore selling. It does mean that we now closely monitor expenses, both on a year-to-date, and a previous year's comparison, basis, and when overhead starts getting out of hand we move quickly to correct the problem. In '79 we're hoping to keep our administrative and sales expense ratio to the same level as in '78."

8. Payroll expenses. Majority opinion: Up an average of 4½%.

"There's really very little we can do about this index," a Miami operator said. "Most of the components are beyond our control."

"For example, with the most careful budgeting possible we still can't do anything about increased costs due to higher Social Security and workmen's compensation contributions. Nor, within broad limits, can we do much about ever-increasing costs of fringe benefits which we've already negotiated with our employees."

TABLE 1: EXPECTATIONS FOR 1979

	Up over	Down from	Little/ Nochange
Inflation rate	42%	19%	39%*
Unemployment rate	38	21	41
Gross profits	48	17	35
Net profits	43	18	39
Essential capital expenditures	44	19	37
Discretionary capital expenditures	49	18	33
Administrative/sales expenses	34	25	41
Payroll expenses	42	22	36
Total expenses	40	23	37
Administrative/sales personnel	39	20	41
Payroll personnel	42	18	40
Promotion efforts	63	13	24

*All respondents were asked to respond to each Economic Index so each horizontal line = 100% of survey group.

"But for 1979 we're planning for an increase of 5% or less. If we achieve that we'll be happy. Increases in this index for the last several years have been running far more than that; in '78 they were almost 9%, for example. So we'll be pleased to hold the line — if we can — at 5%."

9. Total expenses. Majority opinion: Up an average of 4% over '78.

"Not too long ago there were only two sure things: death and taxes," said a Seattle lawn maintenance company manager. "Now you have to add increasing expenses to that list."

"I read every good business and trade magazine. Whenever I see a cost cutting idea I give it a try; many of them do work for us, but even with those savings our total expense figure keeps rising."

"It isn't, however, rising as fast as it was a few years ago, so perhaps we're finally coming to the surface. For '79 we're budgeting for a 5% increase, and if that proves accurate it will be down from about an 8% increase last year."

10. Administrative/sales personnel. Majority opinion: Little or no change from 1978.

"Our plans for 1979 call for a 9% increase in sales volume, but we're going to try to handle that with existing employees," said a Dallas operator.

"Rather than get involved in all the paperwork and fringe benefit costs of new people, we're going to set aside one-quarter of any increase in company net profits. At the end of '79 we'll split that among the entire staff. We've discussed this with them and they're happy with the idea. We are too, because a relatively small firm like ours just can't handle all the extra time and money factors of

adding new people."

11. Payroll personnel. Majority opinion: Up an average of 2%.

"Our '79 estimates call for an increase in sales volume, both to new and existing accounts, of about 4%," said a very large San Francisco lawn maintenance operator. "We figure we can handle that increase by bumping up field crews by about 2 or 3%. We train all our own people, and productivity has been growing since we started using semi-annual refresher courses in conjunction with a local state college. I know from talking with several other operators in this area that they're concerned about the output of their people. Those refresher courses in both technical and business subjects have almost eliminated that problem for us."

12. Promotion efforts. Majority opinion: Up an average of 8½% over '78.

"We want more volume. So does our competition. That means that in '79 we're going to have to work harder and be more creative at our promotion activities," said a Philadelphia operator. "We're budgeting for an increase of about 9% in both dollar and time. We're also going to re-examine our media. I think we'll be using more direct mail and weekly newspapers — which have produced excellently for us — and less daily paper and radio advertising."

Summing up for the other 299 respondents, a Chicago operator said, "While we don't anticipate that 1979 will win any gold medals, we think that in comparison with the last couple of years it will qualify for at least a bronze, maybe even a silver. You could say we're pleasantly optimistic about '79."

BUSINESS

More "million dollar" lawn care companies

Three more lawn care companies have been added to LAWN CARE INDUSTRY's list of "million dollar lawn care companies" published in these pages last month.

The three companies — one each from Ohio, Texas and Washington state — bring the total to at least 41 companies grossing more than or just under a million dollars this year.

The survey was based on questionnaires filled out by companies, estimates by lawn care businessmen across the country, and estimates by the editors and

marketing staff of LAWN CARE INDUSTRY. Questionnaires by the following three companies were received after the November issue deadline.

Signature Lawns, Ltd., Davenport, Iowa has well over 10,000 lawn care customers serviced by 14 employees from five outlets. John S. Freemire is the company president.

Greenlon, Inc., Cincinnati, has sales of just under a million dollars with 7,500 customers being serviced from one outlet with 20 employees. Richard Steinau is president.

Ford's Chem Service, Inc., Pasadena, Texas, has sales of just under a million dollars working out of three outlets with 16 employees. Richard E. Boyd is manager.

Virginia Field Days draw 280. More than 280 turf professionals from 13 states — including many lawn care businessmen — viewed the latest turf equipment, products and research at the 1978 Virginia Tech Field Days and Trade Show recently. At right, Jack Kidwell (left) owner of Kidwell Turf Farms, Culpeper, Va.; Robert J. Peterson, (center) agronomist at E. F. Burlingham and Sons, Forest Grove, Ore., and Harry Stalford, agronomist at International Seeds, Halsey, Ore., compare the effects of various Kentucky bluegrass seed blends on sod quality. Comparisons of herbicides, pesticides, fertilizers, irrigation systems, seed varieties and soil types were made at field day stops at Blacksburg facilities by Virginia Tech faculty members. There were 35 exhibitors.



DIOXIN FUROR from page 1

were later resolved when the facts were presented," he said recently.

In early August, ABC-TV's "20-20" newsmagazine format television show aired an account of "the domestic harms that may now be traced to what was the deadly component in Agent Orange — dioxin." Agent Orange, a mixture of the herbicides 2,4-D and 2,4,5-T, was used in the Vietnam War as a defoliant.

Although the program dealt with the present agricultural uses of 2,4,5-T, the component containing dioxin, in one of the telecast lead-ins a ChemLawn Corp. truck was shown.

Columbis, Ohio-based ChemLawn has entered into litigation against ABC for what ChemLawn claims was a misrepresentation. The company said it does not use the herbicide because it is not labelled for home lawn use (see "ChemLawn Files Suit Against ABC Network for Misrepresentation on '20-20' TV Show," LAWN CARE INDUSTRY, September, page 1).

Background on the "furor over dioxin," as Dr. Darrah calls it, might be useful to the lawn care businessman who may have come up against complaints touched off by the television show.

"The herbicide 2,4,5-T is in the class of herbicides known as the phenoxy compounds," he said. "Several of the phenoxy herbicides have been or are used in turf for broadleaf weed control."

He said 2,4,5-T was used on turf up until the early 1970's when it was banned for home lawn use. It was barred partly because of its dioxin content and partly because other herbicides were as effective for broadleaf weed control in turf and were also less phytotoxic.

Several relatives of 2,4,5-T, however, are still widely used on turf. The closest relative is 2,4,5-TP, or silvex, as it is commonly known.

Because of similarities in the manufacturing process, he said, dioxin would be expected to be found in 2,4,5-TP. Recent analytical procedures have detected dioxin in silvex in the range of .020 - .070 parts per million (ppm). The federal Environmental Protection Agency (EPA) allows no more than 0.1

ppm dioxin content of the active ingredient in 2,4,5-T or 2,4,5-TP.

Thus far no dioxin has been detected in 2,4-D or MCP, he said. These two phenoxy herbicides are manufactured using different starting products and the occurrence of the highly toxic dioxin — TCDD — is unlikely.

According to a recently published Council for Agriculture Science and Technology (CAST) report, the ABC television program consistently confused the toxicity of the compound with the dose. Annual applications of dioxin in Agent Orange in Vietnam were 3,000 to 30,000 times greater per acre than in current applications of 2,4,5-T in the United States. Dr. Darrah said that researchers point out that to obtain a toxic dose of dioxin, from 200 to 2,000 toxic doses of the moderately toxic 2,4,5-T would have to be ingested (depending on the test species).

Spraying a turf area with 2,4,5-TP containing the maximum allowable dioxin content at a rate of one pound per acre would result in only 4.5 micrograms of dioxin per acre.

The CAST commentary cites an incident in which fallout from an accidental release of chemicals from an Italian factory

MARKETING IDEA FILE

How about free calendars for advertising?

Free calendars, one of the oldest advertising gimmicks, still abound. In fact, say their makers, their use is growing 10 to 20 percent a year, despite soaring costs. The Specialty Advertising Association International reports that stores, banks, gasoline stations, insurance companies and the like bought \$330 million worth of calendars to give away last year, up from \$174 million only five years ago.

Most cost between 50 cents and a dollar apiece, and some even have a price tag of six or seven dollars. Jim Donahue, sales manager for Shaw-Barton Co., a Coshocton, Ohio calendar maker says: "But how else can you capture that wall space 365 days a year?"

Perhaps some of the larger lawn care companies should be using this type of advertising of their services, and as a marketing idea to keep their current customers reminded of what mowing and watering practices they should be following for their lawn at different times of the year. If any companies are already doing this, let LAWN CARE INDUSTRY know.

contaminated an area with amounts of dioxin in excess of 52,000 micrograms per acre. The medical records from 623 pregnant women in the contaminated area showed that the number of spontaneous abortions and the number of children born with birth defects were below normal.

In this instance, exposures were more than 10,000 times greater than those that could be expected to occur with the prudent use of 2,4,5-TP on turf.

"Nevertheless," Dr. Darrah said, "there is always the argument that introducing any amount of a toxic substance into the environment is not good. Fortunately, there are other weed control alternatives that could replace the use of 2,4,5-TP without seriously affecting the degree of weed control obtained."

He said MCP is active on most of the same winter annual weeds as 2,4,5-TP, but in some cases to a lesser degree. In many of the more resistant winter annuals, however, combining MCP with 2,4-D and/or dicamba will provide excellent weed control, he said.

EDUCATION

Michigan turf conference set for January 16-17

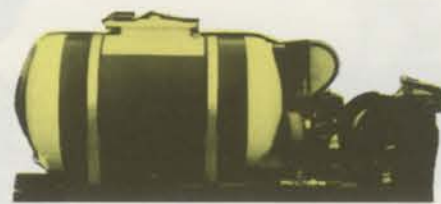
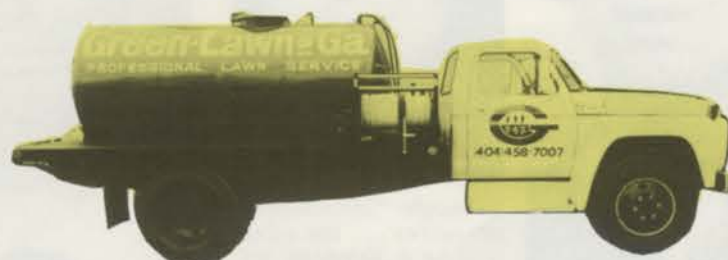
Slow-release nitrogen carriers, *Fusarium* blight, equipment updates and a discussion of the energy crisis as it relates to the turf industry will be discussed at the Michigan State University Turfgrass Conference to be held January 16-17 at the Kellogg Center in East Lansing.

Of particular interest to lawn care businessmen should be the session on slow-release nitrogen carriers, where fertilizer company representatives will debate the merits of each carrier. Also, the equipment session, which will discuss nozzles, tanks, pumps and other spray equipment.

For further information, contact: Richard W. Chase, extension specialist and project leader, Cooperative Extension Service, Michigan State University, Department of Crop and Soil Sciences, East Lansing, Mich., 48824.

Dependability, Service & Long Life mean Better Profits with TORCO

QUALITY LAWN CARE EQUIPMENT BUILT TO RUN AS LONG AND AS HARD AS YOU DO!



TS 1250: 1250 gal. stainless steel tank w/20 G.P.M. FMC turf pump.

TC 1250: same as TS 1250 with lower-priced carbon steel tank.

- Designed and built to outlast second chassis.
- Mechanical agitation — 7 paddles, 6 bearings.
- Jet sweep eliminates tank settlements.
- Easy access for pump and filter service.
- PTO driven — only 2 belts involved.
- Calibrated sight gauge — 18" leak-proof hatch.
- Choice of electric or lower-priced, belt-driven reels.
- Special light-weight turf hose — easy pull-out.
- Metered gun with unique TORCO spray nozzle.

TF 300: 300 gal. fiberglass tank w/10 G.P.M. FMC turf pump. 500 gal. also available.

Skid mounted for ¾ ton pick-up. Same TORCO features as TS 1250. (Self-contained engine.)

IMPROVE YOUR IMAGE (EYE APPEAL) WITH UNIFORMED PERSONNEL AND TORCO'S SLEEK, LOW PROFILE EQUIPMENT.



TORCO EQUIPMENT COMPANY

207 Eiler Ave., Louisville, Ky. 40214

Distributors of ASPLUNDH aerial baskets and chippers, RO digger derricks, utility bodies and fabricators of complete lawn care equipment.

FOR FURTHER INFORMATION CALL TOLL FREE
800/626-1818 or 502/366-1415 (collect in KY.)

exclusive area dealerships available — contact Ed Weimer

Lawn care in the 80's

What you have to look forward to — specialization, stabilization, reappraisal of dry, mergers, longer-residual pesticides, special equipment, government regulation and more.

by Bob Earley
Editor

What changes will take place in the lawn care industry in the next five years?

Liquid application will dominate, but there will be a serious reappraisal of dry, particularly as new and improved products come on the market. There will be a thinning of profit margins as increased competition and inflation take a greater hold. Many "gardeners" who hoped to cash in on chemical lawn care will be forced back to their specialty.

Also, serious use of growth retardants will begin. Fewer independent lawn care companies will open their doors — but there will be more franchises. More pest control operators will offer lawn care as part of their services. Lawn care businessmen will have more year-round help being paid better wages.

Finally there will be better

equipment available — maintenance businessmen won't have to rely as much on having to "commercialize" common garden tractors, and there will be more opportunities for small companies manufacturing equipment, especially spray equipment.

These are some of the opinions of people who should know — successful lawn care businessmen across the country. Their ideas about what the future will be like for their industry touch on the areas of marketing, competition, management, chemicals, turf varieties, labor, equipment, government regulation, the economy, irrigation and the possible formation of a lawn care association.

Small towns, specialization and stability. Dick Deering, president of Perf-A-Lawn Corp., New Carlisle, Ohio sees the major metropolitan markets expanding and also sees the emergence of a new small-town market.

"Small towns pattern themselves after the big city, and as lawn service becomes a more established and well-accepted practice in major metropolitan areas, the small-town areas will soon follow," he told LAWN CARE INDUSTRY.

Matt Stano, Stano Landscaping, Milwaukee, feels there will be an upsurge in the demand for qualified landscape maintenance firms to handle both residential and commercial accounts. Consequently, there will be a greater need for landscape maintenance people to satisfy that demand — particularly quality landscape maintenance.

"Commercial accounts will turn in increasing numbers to the landscape maintenance contractor because they will see that their own in-house people would be better employed in the other areas and because they won't want to hire specialized help and buy specialized equipment," Stano said.

"Hopefully, the role of the landscape maintenance contractor will increase in importance in

an industry already considered one of the fastest growing in the country," he said.

Tyrrell Hughes of American Lawn Services, Menomonee Falls, Wis. agrees with this.

"We believe the full-service approach will continue to provide stable and sensible growth not dependent on economic cycles," he told LAWN CARE INDUSTRY. "The industry as a whole will come into much greater public recognition and acceptance."

Specialization is a key to the future of the industry, according to Bret Goodman, senior partner of Quality Lawns, Milwaukee, and the dramatic growth of ChemLawn Corp., Columbus, Ohio is living proof of the lawn care specialist.

"ChemLawn has taken the lead in mass marketing the lawn care professional," Goodman said. "I foresee further specialization, not only in fertilizing, but in tree work, disease control, mowing, erosion control, renovating and design."

He said that "ripping out, refurbishing and renovation of existing lawns and landscaping" offers one of the most dramatic opportunities for profit and growth in the coming year.

"Our business has taken a strong position in this segment of the industry," he said. "With the increasing move to the outdoors and nature, people are taking a closer look at their yards and feel the need to enhance that part of their homes. Also, with the increased velocity of home sales in recent years, a new generation of home owners is taking over existing homes that had been neglected in the past."

Stano also agrees that because of complexities of the maintenance business and technologies required to solve new problems that there will be a greater degree of specialization. On the other hand, he feels that there will be some companies who will capitalize on this and incorporate all aspects of the business within the scope of their work.

Reappraisal of dry. Although he still sees the liquid application approach dominating for the next few years, Jerry Faulring of Hydro Lawn, Gaithersburg, Md. also feels there will be a "serious reappraisal of the dry approach for the application of lawn care products."

"I see a lot of new technology surfacing regarding material handling," he said. "There will be a lot of technology borrowed from agriculture, specifically in the area of developing complete products — including pesticides — that are marketed as suspensions for liquid applicators."

He said there will be more specific complete products developed for dry applications too. And these dry products will be manufactured in several locations so as to reduce distribution costs and allow the dry applicator to be more competitive.

Gary Weaver, president and general manager of Turf Gard Co., Troy, Ohio, also says that there will be several more dry material products introduced within the next few years. He said companies like The Andersons, Maumee, Ohio and Lakeshore Equipment & Supply Co., Elyria, Ohio will be in the forefront of this kind of development.

He also said that a new dry combination material of blended fertilizer, Balan and Dursban may be available for purchase by the spring of 1980.

"A bagged product such as this would further increase the flexibility for custom applications for both dry and liquid services," he said.

The "gas station" approach. John Wright, vice president of ChemLawn Corp., says there are a few directions the industry may take within the next few years in terms of structure.

First, there is the possibility that one, or two or three, large companies might dominate the industry. Secondly, a number of smaller — but still relatively large — regional companies might develop.

Thirdly, he sees the possibil-



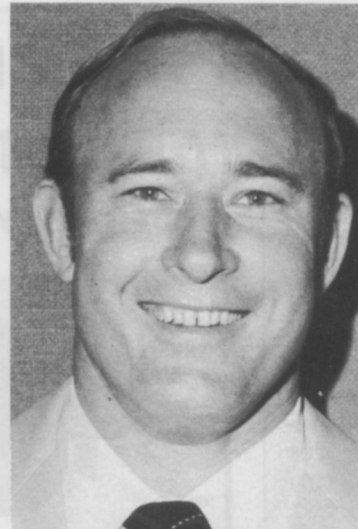
Dall: "Computers will be used more and more for material and service control..."



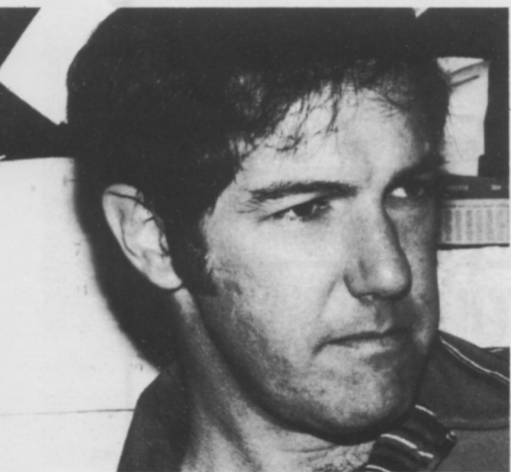
Weaver: "There will be fewer independent companies and more franchises..."



Erbaugh: "Inflationary pressures... the effect will be a 'thinning' on profit margins..."



Franklin: "I look and hope for the availability of more satisfactory slow-release nitrogen sources for use as liquids..."



Cohen: "Gardeners who have hoped to cash in on chemical lawn care will be forced back to their specialty..."



Sandler: "Many independents will... be absorbed by others... so that they can operate more efficiently and economically..."

ity of many small companies developing to service the home owner, much like the "gas station on every corner" type of marketing similar to the oil industry.

Quite likely, all three types of development will take place within the next five to 10 years.

Faulring does not see many, if any, more successful giant national companies emerging for a long time.

"The industry will be comprised of strong, regional leaders with numerous, small but effective companies working in small market segments," he said, "We will probably go the way of the American farmer — minimum size for survival will not be much beyond the five-man company or outlet."

Bob Cohen, president of The Green Scene, Los Angeles, believes that in the eastern states the "trend of recent years will continue, with the 'ease of entry' improving to the point that price competition will eventually force the less efficient, less professional operators back into landscape and gardening-related functions.

"That is," he said, "the 'gardeners' who had hoped to cash in on the chemical lawn care process will be forced back into their original specialty. The survivors will be the large, specialty suppliers . . . probably offering less-than-custom service, but at very competitive rates."

In the West, Cohen sees attempts by certain eastern companies to penetrate the huge market, but with "considerable frustration.

"The more temperate regions, especially the Pacific Southwest, look so appealing," he said. "But the technical problems of landscape care are considerably more complex, however, and attempts to develop a simple, efficient process to service the lawns, ornamentals, trees and groundcovers that make up a landscape will be hampered by existing government regulation and the increasing risk of damaging a landscape by improper use of, or improper cleaning of, equipment and herbicides."

Cohen feels that successful operators in the West will have to offer a service completely opposite the spectrum of the "maintenance gardener" whose primary abilities are those of cutting, trimming and cleanup. The service of the spray industry will have to include feeding, conditioning, pest control and weed control of all types of landscape plants, instead of just lawns, as in the East.

"Operators will have to be skillful in recognizing different plant types, and their susceptibility to fertilizer burn, herbicide non-selectivity and pest control chemicals," he said.

"Moreover, with an average residential lawn of only 2,500 square feet, and the hilly terrain," he said, "the use of large tank trucks becomes difficult and the processing itself is a unique problem in logistics management." Eventually, he also sees the major structural pest control operators trying portions of the market in the West, offering lawn feeding as part of their regular service.

Franchises, mergers and retailers. Turf Gard's Weaver feels there will be fewer independent lawn care companies going into business in comparison with the increasing numbers of new franchises being sold with already well-established companies.

Joe Sandler, president of Lawn King, Inc., Fairfield, N.J., one of the largest franchisers in the industry, expects to see mergers between some of the smaller operators to help them compete with the larger ones.

"Many independents will affiliate or be absorbed by others around them so that they can operate more efficiently and economically," he told LAWN CARE INDUSTRY. "The less efficient or downright dishonest ones will fall by the wayside."

Large corporate retailers such as Sears and Montgomery Ward will become more of a factor in the industry, feel the principle of Techniturf, Inc., South Berlin, Mass. — president Dean Squier, logistics manager Alan Bebka and fulfillment manager Jim Fothergill.

Marty Erbaugh, former general manager of Davey Lawn Service, Kent, Ohio, and now president of lawn care consulting firm Erbaugh & Associates, Hudson, Ohio, agrees with this assessment.

"My guess is that more large retailers will be attracted to the lawn care industry as the retailers place greater emphasis on services in general," he said.

Longer residuals. Some of the improvements that Floyd Franklin, division operations manager for Rollins Lawn Care, Atlanta, Ga. hopes for and expects are:

Insecticides with more residual effect but still environmentally acceptable; more effective, selective herbicides against hard-to-kill weeds such as spurge, dallisgrass and nutsedge; growth retardants that really work without sacrificing the appearance of the turfgrass; and, the availability of more satisfactory slow-release nitrogen sources for use as liquids.

"Realistically," Franklin says, "I believe new pesticides for the lawn care industry will be slow in coming because of the tremendous development costs encountered by chemical companies as compared to the relatively small lawn care market for these chemicals."

Dave Napolitano, of Associate Industries, Inc., Montebello, Calif., says: "In the 80's, we will

see sprays for lawns that will retard growth, thereby cutting reduced to only four times a year. At the same time, the lawns will stay green all year."

He also agrees that new insecticides will be developed that will have a broader range of coverage and at the same time be effective for longer periods of time. He says that all-purpose herbicides will be developed capable of "weeding out" landscape areas more effectively and also have longer residuals.

Napolitano sees new groundcovers being propugated to insure longer life. In essence, he says, once groundcover beds are planted the life expectancy will be from five to 10 years. In the area of turf varieties, Franklin looks for a bluegrass that will grow successfully in the southern states, at least through the lower transition zone areas. He also hopes for a bermudagrass that will grow in the shade. Quality Lawns' Goodman said that a combination of recent-year droughts and conditions that allow for such troublesome diseases as *Fusarium* blight should stimulate development of "tougher" grass.

"We are already seeing this with the growth of use of such varieties as Victa and Nugget blends," he said.

Equipment designed for the industry. In the area of maintenance and spray equipment, Herman Carruth, president of AAA Lawn Industries, Inc., Tucker, Ga., says:

"Most of our suppliers have catered to the non-profit golf course industry whose unlimited budget enables it to purchase new equipment yearly. Being a profit-oriented business, we in the lawn care industry must have reliable equipment and more importantly, a readily available supply of replacement parts at an affordable price.

"If we are to continue to grow as we have in the past," he said, "we must bridge this gap. The development of better equipment and more qualified people to work in the field would be the greatest gift the lawn care industry could receive in the 80's to fulfill the needs of our customers."

On the same subject, American Lawn Services' Hughes adds:

"Most of the lawn care industry at this time still has to depend on commercializing common garden tractors ourselves. This situation should get better in the 1980's." He suggests that

satisfactory mowing machinery should have vacuum capacity, give a quality cut and have real durability.

Allen Dall, president of Lawnco, Inc., Brooklyn Heights, Ohio looks for better equipment for applying materials to lawns both liquid and dry. Also, more advanced tree and shrub feeding equipment. He also says that computers will be used more and more by medium to large companies for material and service control.

Dall says that, because of increased water and sewer costs, to page 18



Deering: "... as lawn service becomes more established in major metropolitan areas . . . small-town areas will soon follow . . ."



Carruth: "... we in the lawn care industry must have reliable equipment and . . . a readily available supply of replacement parts . . ."

Squier: "... the best the lawn care industry can look forward to . . . is pricing itself out of most of its market. The worst, outright ban of chemical lawn care . . ."

Napolitano: "We will see sprays for lawns that will retard growth . . . cutting reduced to only four times a year . . ."



PESTICIDES

EPA won't bring back DDT, despite study

In spite of a study by the National Cancer Institute (NCI) saying that DDT probably does not cause cancer, an Environmental Protection Agency (EPA) spokesman said the once frequently used insecticide will not be taken off the EPA's cancellation list.

Although the recent NCI study is not in agreement with earlier ones which said DDT caused cancer, there are other reasons for not bringing back DDT, the spokesman told LAWN CARE INDUSTRY.

"It was one of only several reasons for cancellation. Other reasons include: DDT's accumulation in the food chain, its persistence in the environment

and its effect on wildlife," the spokesman said.

He said groups could petition EPA to remove its cancellation on the basis of the NCI study. "I don't see us changing because of the study by itself," he said.

DDT is now only available for emergency reasons. It was used on home lawns largely for grub control.

RESEARCH

Preemergence herbicides studied in Nebraska

Continuing research to determine the effects of successive applications of preemergence herbicides on the heat tolerance and water use rate of Kentucky bluegrass turfs is underway at the University of Nebraska un-

der the direction of turfgrass specialist Dr. Robert C. Shearman.

The objectives of the research are (1) to determine the effects of successive pre-emergence herbicide applications on turfgrass quality and performance; (2) to evaluate the role of herbicides in successive applications on heat and drought tolerance; (3) to determine the effect of successive applications on the water use rate of the grasses; and (4) to observe the effects of the susceptibility of bluegrasses to disease and other environmental stresses.

Previous studies have indicated that the effects of repeated preemergence herbicide applications are subtle and occur mainly when the plants are exposed to environmental stress.

The research will study the effects of benefin, marketed by Elanco Products Co. under the

trade name Balan; EL-131, an experimental herbicide which Elanco hopes to market in the near future; bensulide, marketed by Stauffer Chemical Co., Westport, Conn., under the trade name Betasan; siduron, marketed by the Du Pont Co., Wilmington, Del. under the trade name Tupersan; and DCPA, marketed by Diamond Shamrock Corp., Cleveland, Ohio under the trade name Dacthal.

All of these herbicides are commonly used by lawn care businessmen across the country in their spring and other applications on home owner lawns. The research is funded in part by the Golf Course Superintendents Association of America, Lawrence, Kan.

REGULATION

Congress expedites pesticide program

A liberalized approach to uses of a pesticide that are not in lateral accord with the printed label on the product is one of the amendments to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) that a House-Senate Conference Committee has approved.

According to Steven D. Jellinek, assistant administrator for Toxic Substances, other amendments include: Conditional registration permitting the Environmental Protection Agency (EPA) to register products similar to old chemicals or providing new uses for them; a "generic standards" approach allowing EPA to make broad decisions for an entire group of products containing the same ingredient; and a diminished requirement for reviews on the efficacy of pesticides.

Jellinek said recently that it was "very frustrating" to have to turn down numerous applications because of a double standard that allows continued use of products already registered but requires a full complement of registration data before identical new products can be registered.

Jellinek added that EPA planned to issue regulations for conditional registration within the next few months, and begin issuing such registrations immediately thereafter.

The generic standards approach to re-registration of existing pesticides will make possible a more streamlined procedure rather than the present practice of regulatory decisions on a product-by-product basis.

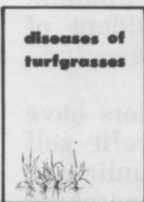
He also said the amendments provide a new definition of "use inconsistent with the label." It makes clear that certain practices, which may not be in strict or literal accord with the printed label, are nonetheless legally consistent with label directions.

"Specifically," he said, "pesticide applicators will be able to use less than the specified label dosage to treat for a pest not listed on the label, to mix pesticides and fertilizers on a broader basis, and to employ responsible methods of application not specified on the label.

Technical and Instructional Books



TREE SURGERY
Tree Surgery, A Complete Guide, gives an up-to-date account of modern tree surgery operations. The theory behind acquiring the skills and knowledge necessary to perform competent tree surgery is outlined clearly and precisely.
\$15.00



DISEASES OF TURFGRASSES
Couch's Diseases of Turfgrasses is one of the best references on that subject to date. No turf library is complete without it. It provides an in-depth analysis of turfgrass disease causal organisms and control of them. From diseases caused by pathogenic plants to viral turf diseases, Couch presents information necessary for any plantsman to achieve fine turf.
\$24.50



WOODY LANDSCAPE PLANTS
Manual of Woody Landscape Plants is a valuable reference for anyone interested in woody plants. The book provides concise, factual information on common and not-so-common woody ornamentals, ground covers and vines as well as the narrowleaf and broadleaf evergreens which are adapted to Midwestern and Eastern climates.
\$19.00



TREE MAINTENANCE
Tree Maintenance is an indispensable guide to anyone involved with the care and treatment of trees. All phases of tree care are described in non-technical language. The book includes a comprehensive list of effective and safe pesticides for trees.
\$25.00



GUIDE TO TREES
Simon & Schuster's Guide to Trees provides beginner and expert with a reference to 300 trees. Black and white line drawings and 350 color photographs accompany descriptive text on each tree, including etymology, habitat, description, propagation, and conditions for growth.
\$17.00



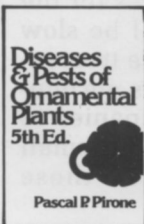
TREE FARM BUSINESS MANAGEMENT
Tree Farm Business Management covers all phases of a tree farming operation, from obtaining an accurate timber inventory to timing sales for profitable results. Budgeting, preparing scientific financial forecasts, special tax problems, and other financial matters are given thorough coverage.
\$16.00



DISEASES OF SHADE TREES
Diseases of Shade Trees is an excellent introduction to tree diseases, including infectious and noninfectious. Part III, Special Topics, covers nonpathogenic conditions, disease diagnosis and living hazard-trees. The book describes the theory and practice behind maintaining a healthy tree that serves a positive purpose.
\$22.00



SOIL MICROBIOLOGY
The second edition of Soil Microbiology integrates microbiology, soil science, and biochemistry to characterize soil microflora. The revised edition adds a closer scrutiny of environmental problems, information on soil toxicants formed by microorganisms, and a chapter on microbial metabolism of pesticides.
\$19.50



DISEASES & PESTS OF ORNAMENTAL PLANTS
Diseases & Pests of Ornamental Plants, fifth edition, includes new ornamental disease hosts, identifies new diseases, and describes the spread of known diseases to a wider range of host plants. The book keynotes environmental factors adverse to the health of 500 ornamentals.
\$19.00

Weeds Trees & Turf
Books Dept./Fran Franzak
9800 Detroit Ave.
Cleveland, OH 44102

Name _____
Company _____
Address _____
City _____ State _____ Zip _____

Quantity	Title	Unit Price	Total
_____	Guide to Trees	\$17.00	_____
_____	Soil Microbiology	\$19.50	_____
_____	Diseases & Pests of Ornamental Plants	\$19.00	_____
_____	Tree Surgery	\$15.00	_____
_____	Tree Farm Business Management	\$16.00	_____
_____	Tree Maintenance	\$25.00	_____
_____	Diseases of Shade Trees	\$22.00	_____
_____	Manual of Woody Landscape Plants	\$19.00	_____
_____	Diseases of Turfgrasses	\$24.50	_____

Shipping & Handling Chg. (1.00 per book) _____
Total Payment Enclosed _____

LAWN CARE INDUSTRY Marketplace

by Mike Casey
assistant editor

Indianapolis

Memorial Day weekend.

To most people, it is the unofficial start of summer; it is the first barbecue, the first sunburn, a parade of soldiers and, just as much a holiday tradition — the Indianapolis 500. On Memorial Day Sunday, 500,000 people rally in Indianapolis to watch 33 race cars zoom around the oval track at speeds of 200 mph.

For most people that Sunday is a day of rest and relaxation. For Charles Thompson, however, it is nothing but hustling. He maintains the city's most famous lawn, the Indianapolis Speedway's infield, and the rest of the grounds.

"I've been here for 18 years and never seen the complete race. We're always doing different jobs that day (the day of the race) like getting victory lane ready. The whole month of May is very busy for us," Thompson says.

Unfortunately, he does not get a chance to show off his lawn care abilities to the national television audience. The infield is covered with spectators and their vehicles.

After the race is over, his work really starts. Thompson estimates it takes two weeks to return the speedway to top shape after the race. Two full days are needed just to clear the litter from the infield, which is a $\frac{3}{4}$ mile-long and $\frac{3}{8}$ mile-wide chunk of bluegrass.

Thompson modestly says the lawn maintenance job is not that much out of the ordinary. "It's no real problem. We fertilize twice a year and mow it regularly. That's about all we have to do."

While Thompson maintains the city's most famous piece of turf, Indianapolis lawn care businessmen take care of lawns that are not as famous — but then they get to watch the Indianapolis 500 too.

Lawn care in Indianapolis mirrors the nationwide trend towards increased lawn care services; lawn care, in the capital of Indiana, has developed the same as in other metropolitan areas.

Prior to 1970, when **ChemLawn Corp.** entered the In-

dianapolis market, lawn care was essentially the responsibility of the home owner or a maintenance company.

The maintenance companies offered complete services ranging from mowing to flowerbed work. With ChemLawn's entrance things changed.

More and more people began to take lawn care services, some which are essentially chemical applications. Today, there are more than a dozen chemical applicator companies in the city.

Older companies which offered total maintenance programs are entering the chemical application field to supplement their services. For example, Don Needham, 40, **Irvington Landscape Service Inc.**, Indianapolis, offered a chemical application program for the first time this year.

Needham started in the area in 1963 and offers landscaping, dethatching, sodding, aerating and now chemical applications. Success of other companies and requests from his existing companies influenced Needham to offer a four-part application service. He now has about 150 customers taking the application service.

Other more established company owners say ChemLawn and other chemical application services have not directly added to their business volume or changed their sales tactics. "ChemLawn has added a lot of professionalism to the industry but I don't see any direct benefit for my company," says one established company owner.

All eight lawn care businessmen interviewed for this article agreed that their businesses have done well this year. All mentioned increasing sales, new accounts and other signs indicating a vibrant, healthy financial picture of the industry.

They attributed the industry's growth to customer acceptance, increasing building, a healthy economy and customers' desire for increased leisure time.

Increased building is clearly demonstrated by figures from the Indianapolis Office of Metropolitan Development. Housing



Gene Rexroad of M & R Landscaping holding a tree he is planting in yard of a new home owner. Rexroad added a garden center to his business two years ago and "it has been offering a good return for dollar investment."



John Haas in a customer's backyard with a Bobcat and a scoopful of mulch. He is the owner of Creative Landscape.



Vince Flecker of Shur Spray Lawn Care just completed his first full year in business with 400 accounts.



Norm Mahin sprays with the familiar ChemLawn truck in the background.



Hoone



Rexroad



Flecker



Haas



Mahin



Engledow



Rolsky

permits for this year increased by 21 percent as compared to last year's total. As of this September permits were taken out for 2,959 units; last year permits were taken out for 2,450 units.

The building trend shows that the southern part of Marion County, where Indianapolis is located, is becoming the principal area for new construction. In the past the northeast and northwest sections of the county were the main areas for building.

While all the statistics point towards increased building, which means more homes and lawns, the area is not without its problems. One lawn care

mold was more of a problem this year than in the past because of the unusually heavy snowfalls and a late spring. Snow mold is usually found near driveways and sidewalks where snow is piled.

Most of the area's lawns are bluegrasses ranging from common Kentucky to the latest blends. A few fine fescues and even a couple of bentgrass lawns are in the city's older sections.

The average size residential lawn is about 12,000 square feet; the per application charge for a lawn that size ranges from \$31 to \$35.

To some lawn care businessmen, the key to success is the number of accounts. The more the better, obviously, because more means more money in sales, therefore more profit, etc.

However, a few Indianapolis lawn care businessmen have taken a different route to a prosperous business. They have zeroed in on one part of the market or featured a special service, which gives them a competitive edge.

For example, John L. Haas, 26, **Creative Landscape**, Indianapolis, has found his niche by servicing apartments. He provides a total maintenance service for 120 acres a week; Creative Landscape services seven different apartment complexes which account for all its business.

"Handling apartments, you lose some of the residential traffic but you cut road-time way down. It's road-time that can kill you. All of my accounts are within a mile of my front door. Also, I don't lose much time if equipment breaks down. It is not much of a problem to bring it into be fixed or fix it on the job," he says.

Haas finds the apartment managers to be very business-like paying their bills on time and expecting quality service. The apartment managers are willing to experiment with different products and techniques that a home owner might not be willing to try.

The secret to retaining his accounts, Haas says, is developing a good rapport with the customers and doing the work himself. Haas directs crews and works on the lawns. "That way I'm sure the job gets done right."

Haas entered the apartment market when he lived in one of the apartment buildings that he now services. One building lead to another and he became an apartment grounds maintenance specialist.

Besides the total maintenance program, comprised of mowing, chemical applications, edging and bed work, Haas offers year-round services by plowing snow and cutting firewood. These additional services guarantees him a steady cash flow during the slow season.

Another Indianapolis company which has firmly established itself in a particular field is **Engledow Inc.** Ed Engledow, 38, is now president of a company with a 40-year reputation. Engledow specializes in commercial accounts.

"There is a certain satisfaction of being with companies who want to make a statement with their landscaping. They are professional and creative. It is fun to be part of what they're doing," he says.

Engledow likes doing commercial work for business reasons also. He says it cuts travel time because of fewer accounts, as compared to residential companies and fewer accounts also mean less office work for the dollar volume.

His company offers a total landscaping maintenance program including fertilizing, weed control, mowing pruning, clean-up, landscaping and flowerbed work.

Before Engledow took over the business, it had established a reputation of catering to commercial accounts. "We've tended to concentrate and the result, at this time, is that the concentration has worked well."

However, there are potential dangers in concentrating on non-residential accounts. "You're very subject to swings in the economy. In the latest recession, we didn't really suffer that much, but it is clear that some business dropped off."

Some of Engledow's accounts dropped the company's services and employed their own workers to maintain the grounds. By using employees for grounds maintenance, the companies were able to keep key employees, who otherwise would be laid off and looked for other jobs.

Engledow employs 30 persons doing otherside landscape work during the peak part of the season.

While Engledow has concentrated on one aspect of the market, another lawn care businessman services mostly residential accounts but has found one special type of an account that helps his business.

Vince Flecker, 27, **Shur Spray Lawn Care**, Indianapolis, was a high school science teacher and a wrestling coach. Through coaching he made contacts with athletic directors at various schools.

These contacts paid off in a business sense because he now cares for some high school football fields. "I'll need to work a little harder now to get more fields."

Flecker says his science background helped by giving him experience with chemicals, soils and insects. He just completed



Ed Engledow, owner of Engledow, Inc. checks over American States Insurance mini-park in downtown Indianapolis. The insurance company's new mini-park is one of Engledow's accounts.

businessman dubbed Indianapolis "the white grub capital of the world."

All lawn care businessmen agreed that white grubs were the most widespread service problem this year and in past years. They estimate that seven to 10 percent of their accounts were attacked by the pests. All businessmen use Diazinon marketed by Ciba-Geigy Corp., Greensburg, N.C., wet or dry to combat the problem. They give the insecticide good marks for insect control in their area.

Occasional pest problems are from the sod webworm and chinch bug; with varying degree of emphasis lawn care businessmen list the principal disease problems as *Fusarium* blight, leaf spot, snow mold and brown patch.

Several mentioned that snow



Mort Rolsky, owner of Pro Care Landscapers, also does landscape design, and is pictured at his board.

MONEYWISE

The ins and outs of routing

Mort Rolsky's battle plan for routing is displayed on his office wall. The different colored pins on the map of Greater Indianapolis indicate his customers and the different types of services they receive.

A map like this is not unlike the maps that adorn many of the walls of lawn care businessmen across the country.

Rolsky, **Pro Care Landscapers**, uses the color-keyed map to route his service men into sections of the city. Pro Care service zones, like those of most other companies, are broken down into geographical areas.

The maps with pins can save time, and more importantly — money.

For example, if a customer on Elmwood Street needs a special fungicide application and another one two blocks away needs the same application, the route manager can easily see it is more efficient to do both jobs at once.

Coordinating special service items with the regular services reduces callbacks which eat up valuable time and increase expenses, Rolsky says.

Not only does a color-keyed map make routing easier, it gives the boss the big picture: where most of his accounts are, what types of services are selling best and what areas need special attention.

Routing is more than just sending people here and there. Accompanying routing are three major management decisions: how far should a service area be expanded to take in new customers; should servicemen bill customers, and can routing be used as an employee motivator?

Two big expense items, travel time and labor costs, have to be weighed when considering expanding into a new territory. Indianapolis lawn care businessmen were unable to provide any absolute guidelines for expanding a service territory.

They agreed that when a company is starting off it is wiser to take accounts that are available, even if the driving distances are long. They reasoned that it is more important to get accounts in the beginning and then try to build other accounts in the area by providing a good service to the first customer. Hopefully, word-of-mouth advertising will have done its job and the lawn care businessman will have enough accounts to make the area a profitable item.

As to the second point, all lawn care businessmen in Indianapolis with large routes say they bill customers just after application services are finished. However, they reported varying degrees of success with on-the-spot billing. Their responses ranged from poor to excellent.

Those lawn care businessmen who had poor results from on-the-spot billing say at least it saves them the postage of a first mailing. Also, it gives them a chance to talk with customers and find out if they have problems.

Two Indianapolis companies have found out how routing can help motivate employees.

Joe Hoone, **Excelawn**, says, "Our men set up their own routes. This gives him control of his own territory. We find that this is a better motivator, it is like having your own small company. It is a lot better than coming in and having a route thrown at you and being told, 'take it or leave it.'"

Another company that uses this philosophy is **ChemLawn**. Branch manager Norman G. Mahin says, "The employee feels that full responsibility and does not feel like a machine." Besides improving the employee's attitude towards his job, routing this way improves service to the customer. The employees are fully aware of the area, their customers and the customer's problems.

What should be on a route card?

Indianapolis lawn care businessmen, like most others, use route cards to direct and arrange their routing. Here is the information that should be on a route card:

- customer's name, address, location of house and phone number.
- lawn size, price and type of service.
- type of grass, type of soil, description of lawn, including past pest or fungi problems, shaded areas and weed problems.
- application dates.

A card with this information will help the regular serviceman refresh his memory about the lawn or give background to a new employee.



Joe Hoone, branch manager of Indianapolis' second-largest lawn care company — **Excelawn**.

his first full-time year of lawn care work, after working five years part time.

"I found out I couldn't do the two jobs at once so I went full time into lawn care. It has been a very good year. I started off with 55 then 150 and now 400 accounts," Flecker says.

He is planning to purchase another spray rig and hire a person for next year to help him service lawns.

A specialized added service is another method of carving a part of the market. Gene R. Rexroad, 37, **M & R Landscaping Inc.**, Indianapolis, added a garden center to his business two years ago. "It has been looking very promising and offering a good return for dollar investment," he says.

His garden center sells lawn equipment, plants and shrubbery. "It is a one-stop center," he says. He estimates that the garden center accounts for 50 per cent of his profits while the other two services total the other 50 per cent.

By blending the landscaping service, lawn care and garden center together, Rexroad had increased his sales. "When you get the three together it makes selling a lot easier," Rexroad says. Customers who take one service are lured to another one, and this increases dollar volume without increasing new customers.

Rexroad, who has been in business for eight years, services mostly residential accounts on lots of ¼ to four acre lots. M & R employs 10 men during the peak season and two in the slow season.

One Indianapolis lawn care businessman is proud of a part of his business that does not even make a profit. Mort Rolsky, 58, **Pro Care Landscapers**, is one of the participants in the Central Garden Flower and Patio Show, which 10 local landscapers participate in; they show off landscape creations to the public.

One Pro Care creation was a 3,000-square-foot garden with a 12-foot waterfall and 4,000 annuals. "The guys really like to work on the project, and it gives us a lot of self-satisfaction," he says.

Besides this gratis work, Pro Care offers a complete maintenance service and specializes in maintaining apartments, con-

dominiums and businesses. The company also landscapes and then maintains residences.

Rolsky's long career in public parks maintenance has trained him very well to operate his business. He has 27 years of park experience including architecture, maintenance and landscaping. He was a park superintendent in Missouri and Indianapolis.

"I left because I had to satisfy someone else's goals rather than mine," Rolsky, who opened his business five years ago, says.

His company has about 200 accounts and employs 25 persons at the peak of the season. His sons, Lowell, 22 and Mitch, 20, are in the business also. Mort is president of Indiana Chapter of Professional Grounds Management Society.

While some lawn care businessmen have chosen to specialize, add particular services or concentrate on one section of the market, other companies have been successful by offering maintenance services targeted at the mass residential market.

ChemLawn, the largest company account-wise in the area, has three branches in the metropolitan area. While ChemLawn workers declined to say how many accounts they have, competitors estimate that each branch has 10,000 accounts.

Norman G. Mahin, 29, manages ChemLawn's north branch; he joined the company in 1972. He grew up on a farm near Indianapolis. "There is too much country in me, I thought, for me to work in Indianapolis."

However, his father sold the family farm, and Mahin took a job with ChemLawn which in some ways is similar to his background. "I worked with fertilizers and soils on the farm."

He still lives on a farm and likes his job because he is working outdoors and making things grow.

Probably the second largest company in the area account-wise is **Excelawn**, Indianapolis. This company headquarters are in Louisville, Ky., and has a branch in Chicago also.

Joe Hoone, 34, is the company's Indianapolis branch manager; he worked with ChemLawn for four years before he joined Excelawn.

Liming a good investment on your customer lawns

The upward adjustment of pH on acid soils is an important management practice the lawn care businessman should include in his program or at least recommend for his customer lawns, according to Dr. C. Richard Skogley, professor of turfgrass management at the University of Rhode Island.

He says that although the lawn care businessman or home owner can seldom see a visual response to liming, it has been demonstrated repeatedly that it is a good investment.

"It has been known for many years that efficiency of growth of most turfgrasses can be increased by applying ground limestone to acid soils," he told LAWN CARE INDUSTRY recently.

"This increased growth efficiency might be the positive result of one, or several, effects that limestone can have within the soil." To fully understand this, it is necessary to know something about the nature of limestone, he said.

Limestone is calcium and magnesium carbonate. Limestone with less than 10 percent magnesium oxide is called high calcium; lime with more than 10 percent magnesium oxide in it is called high magnesium or dolomitic lime. Limestone is very slowly soluble, so if it is to be of value, it must be ground very fine. A general standard is that it should all pass a 20-mesh screen, 80 percent should pass a 60-mesh screen, and 20 percent should pass a 100-mesh screen.

Calcium and magnesium are both nutrients required for plant growth, he said. In acid soils these nutrients are often in short supply — the first reason for liming. High magnesium (dolomitic) limestone is preferred if it is available.

In addition to supplying nutrients, limestone also reduces soil acidity. It has been repeatedly demonstrated that most grasses make their best growth at a pH of about 6.5 (very slightly acid). In many parts of the country, primarily in the high rainfall areas, the native soil pH may range from 4 to 5. By raising the pH (making the soil less acid), a number of things may happen:

- Availability of other plant nutrients in the soil is increased, also improving efficiency of applied fertilizer.

- Reduces toxicity of aluminum.

- Improves conditions for growth of favorable soil bacteria (including improved conditions for organic matter decomposition).

One further possible benefit of liming is an improved physical condition of the soil. This is particularly so if the soils are high in silt and clay.

Dr. Skogley said that simple soil tests for acidity level (pH) can determine the limestone requirement for a particular soil. Considerably less limestone is required to adjust the pH on light, sandy soils than on soils high in silt and clay.

"The ideal time to correct the pH level is when preparing the soil for seeding or sodding," he said. "During soil preparation, limestone can be thoroughly mixed with the upper few inches of soil. This is desirable since limestone is slowly soluble, and when surface-applied, downward

movement is very slow."

Several years may be required to change the acidity a few inches below the surface.

Once the correct soil pH is established, it normally requires about 25 pounds of limestone per 1,000 square feet annually to maintain the level. Since pH changes slowly, it might be suggested that a 50-pounds-per-thousand-square-feet application be made every second year.

Limestone may be safely applied during any season. To avoid inconvenience to lawn care customers, it is often suggested that application be made when the turf is not in use, such as in the fall, because of the dustiness. Also, if possible, it is best not to apply limestone shortly before, or after, fertilizing. This is because it can slightly tie up certain fertilizer elements.

"For many years," Dr. Skogley said, "the only form of limestone available was the dusty, ground agricultural limestone. It is still by far the most widely used form. It can be difficult to spread with many mechanical spreaders, and it is virtually impossible to spread with broadcast spreaders."

Drop-type spreaders, with large openings and heavy agitators, are required to properly spread ground limestone, he said.

"In recent years, pelletized limestone has come onto the market," he said. "Because of added processing, the price is considerably above that of the dusty product. The convenience of greatly improved spreadability, and dust-free handling, might well offset the price differential."

One or more liquid lime products are also on the market.

"The claim that a single

gallon of one of these products is equivalent to 500 pounds of calcium carbonate in adjusting soil pH, or improving plant growth, has not been substantiated in research trials," he said. "In fact, it appears that liquid lime must be used at nearly equivalent weights to dry forms to provide equal neutralizing power."

RESEARCH

Texas' Beard studies oil spills on turf

Detergent proved most effective in enhancing bermudagrass recovery from motor oil, hydraulic fluid and brake fluid damage in a recent study of oil spills on turf conducted by Texas Agricultural Experiment Station turf researcher Dr. James Beard.

Petroleum spill damage was on bermudagrass was studied to determine injury symptoms and subsequent recovery rates.

Five petroleum products commonly used in lawn maintenance equipment were applied and injury symptoms noted for gasoline, motor oil, hydraulic fluid, brake fluid and grease spills. Calcined fine clays (kitty litter), activated charcoal and detergent were applied within 20 minutes of each spill and evaluated as corrective agents.

Detergent improved recovery time about half as much as the eight to 10 weeks recovery time noted without corrective measures. None of the corrective treatments were effective on either the gasoline or grease-damaged turf. If petroleum spill is of high volume, turf and soil may need to be replaced.

Lawn care in the 80's

from page 13

that irrigation installation will come into its own in the East.

In the West, where lawn irrigation is the norm rather than the exception, Napolitano says that new strides are taking place in irrigation equipment not only to save on water, but reduce electrical output as well. Also, valves are being modified to be maintenance-free while new heads will be designed to eliminate damage caused by maintenance equipment, vehicles, vandalism and time.

Government regulation is coming. ChemLawn's Wright says that government regulation is coming, and there are many in the industry who agree with him.

"Our biggest challenge of the 80's will be the Environmental Protection Agency and the Occupational Health and Safety Administration," says Norm Hays, vice president of Lawn Pride, Lexington, Ky. "Because of this, I believe that we will be actively offering a total program of lawn care while successfully practicing Integrated Pest Management."

Although Hydro Lawn's Faulring does not see a significant amount of new government regulation in the short term, he does see the "industry emerging as a selective applicator of pesticides based more on need. We will be forced to do this not by

regulation, but because it is right and because it is one of the significant ways to increase profits without raising prices."

John Hogg, president of 26-year-old John's Spray Service, Inc., Daytona Beach Fla. agrees that there will be greater restriction on uses of certain lawn spray chemicals — particularly insecticides — and also says that it will become more difficult to qualify as a pest control operator in the future.

Lawnco's Dall says that these stricter pesticide regulations will also affect the home owner and cause more people to have to go to lawn service companies "to get results."

A code of ethics, sobering thoughts and the future. ChemLawn's Wright and many others in the industry say that some sort of "code of ethics" or standards will be necessary in the future for the stable growth of the lawn care industry. Faulring and others have advocated the same measures, and perhaps also the formation of a national lawn care association to foster these goals and allow the industry to share its ideas and thoughts.

There will be some problems in the growth of the industry though, code of ethics or not, says Techniturf's Squier.

"The most important fact of

life in America today is the failure of both the leaders and the people to come to terms with exhaustion of our petroleum reserves," he told LAWN CARE INDUSTRY. "The present rate of inflation will accelerate, and it will be entirely due to the enormous importation of oil, and no economic measures which do not curtail this importation will halt this inflation."

"It does not matter whether the country wakes up and does something to reduce oil imports or waits until the economic forces now at work do the job, the results will be the same," he said.

"We believe the best the lawn care industry can look forward to on the 80's is pricing itself out of most of its market. The worst, outright ban of chemical lawn care as one of the many measures taken to reduce oil imports," he said. "A dramatic breakthrough in energy technology, such as a practical solar cell would turn the dark picture bright again."

Sobering thoughts indeed. However, the outlook of most lawn care businessmen is optimistic.

"The industry will continue to grow through the 1980's, though at a slower rate than the 1970's," says consultant Erbaugh. "Because the market is continu-

ing to expand, the industry will not be severely impacted by recessionary factors," although he admits that the impact of an economic slowdown will hit the industry harder than in 1973-74.

Continuing, Erbaugh says: "Barring any major technological breakthrough, it will become difficult for prices to keep up with inflationary pressures. The effect will thus be a 'thinning' on profit margins. This is characteristic of any industry becoming increasingly competitive in an inflationary environment. Observing this, many companies will begin diversification into different turf and ornamental related services."

"Despite the fact that the industry, from a nationwide perspective, will continue to grow in the 80's, many market areas will approach saturation. In those areas, the issue will become how to maintain and increase market share in the context of limited market expansion. This will cause increased emphasis on marketing strategies and product quality."

Lawn King's Sandler speaks for most when he says:

"The demand is there, the services we perform are necessary and needed and the public will be served. The outlook for the industry as a whole is bright for the 80's and into the 90's."

(1) prevent operation of the lawnmower blade unless a control is engaged by the operator, (2) require that the operator be in continuous contact with the control in order for the blade to be driven, and (3) cause the blade to stop within a specified time upon release of the control by the operator, most likely three seconds.

Mower manufacturers have charged that the rules may entail unwarranted extra costs and perhaps preclude development of even better designs. Current tactics of mower manufacturers are aimed at getting the CPSC to revise the rules so that they specify lawnmower performance, not design (see "Innovative Safety Standards Sought by Mower Manufacturers, LAWN CARE INDUSTRY, May 1978, page 1).

Most manufacturers are also worried about the reliability of the clutch brakes needed to meet the new standards.

"I suppose the technology for a clutch brake is within the realm of possibility," Richard G. Peterson, vice president for technical affairs at Jacobsen Mfg. Co., Racine, Wis. has said. "But most manufacturers haven't really gotten enough time on them to be sure we have a fail-safe design."

The next standard the industry will face seeks to curb the noise of walk-behind mowers. The federal Environmental Protection Agency (EPA) noise standard, originally planned for September, now is not expected until mid-1979.

But the industry expects that today's mower noise, which ranges up to 87 decibels (db), will be limited to 82 db by 1981, and then to 73 db by 1987. The EPA says that one method of meeting these standards should only add \$12 to manufacturing costs of a mower.

For further information, contact: William Kitzes, Office of Program Management, CPSC, Washington, D.C. 20207.

670,000 units in 1977. Shipment value was \$383 million, a 22.2 percent increase over 1977's \$313.5 million.

Estimated shipments of walk-behind mowers totaled 5.4 million units in 1978, for an increase of eight percent over 1977's five million units. Shipment value increased 16.6 percent from \$469.5 million to \$547.6 million.

DAVEY EXECS from page 1

most experienced district managers most recently in the company's successful Pittsburgh office, will assume marketing responsibilities for the company. Davey operates branches in eight midwestern cities, and is a multi-million dollar lawn care company (see "Million Dollar Lawn Care Companies," LAWN CARE INDUSTRY, November, 1978, page 4.)

Erbaugh said that his company's specific services include sales promotion, planning given objectives of a firm, financial planning and cash management, new market expansion planning and personnel development planning, and start-up alternatives.

In other Davey news, the parent Davey Tree Expert Co. recently added a new division — Davey Environmental Services — according to an announcement made by the company's president, Jack W. Joy.

The service will offer to clients horticultural appraisals, computerized street tree inventories, master street tree plans, environmental impact studies, vegetation management information, rights-of-way maintenance evaluations and recommendations, soil sample analysis, pesticide residue analysis, educational programs and contract research.

To head this new service, Davey has named Richard E. Abbott, vice president, as its manager.

PRODUCTS

Unit allows technician to measure wind velocity

One of the biggest problems facing lawn care businessmen and the lawn care industry as a whole is the possibility of damage to a home owner's landscape plants if a pesticide is sprayed on a day when the weather is too windy. Hand-held



anemometers available from R. A. Simerl can help the lawn technician in the field measure wind velocity at any given time prior to spraying a lawn. The unit is electrical, self-powered and features a folding cup type rotor. To use, the cups are unfolded, the instrument is held in the wind, and the velocity is read directly from the meter scale. No batteries are required. Detailed information is available.

Circle 207 on free information card

Fiberglass tanks for the lawn care tank farm

For the lawn care company seeking to establish its own storage and mixing tank farm for fertilizers and pesticides, Raven Industries, Inc. offers an addition of 4,000 to 12,000 gallon fiberglass tanks to its line. Measuring 10 feet, four inches in diameter, the new Raven tank

series complements the company's existing size range of 55 to 6,000 gallons in tank diameters from 23 through 90 inches. These tanks are used by many of the larger lawn care businesses in the country.

Circle 208 on free information card

Non-selective herbicide works within 6-8 hours

Research Products Co. and Aero Mist, Inc. join together in introducing REPCO-KILL, a new non-selective, diesel-oil-based herbicide and ground sterilant, which has uses in lawn renovation work. The herbicide contains 2,4-D, bromacil, phenols and penetrants, and usually knocks weeds down within six to eight hours on a warm, sunny day.

Circle 209 on free information card

New brochure details Jacobsen turf line

Even though snow may be flying in many parts of the country, now is the time to begin planning any purchases of new mowing equipment for those extra lawn care customers you are going to add next season. Jacobsen's complete line of turf care equipment is described in a new, four-color, 16-page brochure just released. Of particular interest to the lawn care businessman are the company's line of four rotary mowers: The Commercial 20, the Commercial 21, the Out Front 72, and the new Turfcut 50/60, which features an articulated deck design that follows undulating turf for superior cutting performance. Also described in the free brochure are the company's gang and tractor reel mowers, covering the latest pneumatic designs; walk-behind reel mowers; sweepers; seeders and aerators; turf tractors; and the company's new UV-4, four-wheel drive vehicle for on- and off-the-road work.

Circle 210 on free information card

GREEN LAWNS
11th ANNUAL
LAWN SPRAYING
SEMINARS

Will be held January 17th and February 14th, 1979, at the Hilton Airport Inn, St. Louis, Missouri (across from the Airport).

My seminar will give you all the information you need to start a lawn spraying business:

- 1) ALL FORMULAS FOR 2, 3, 4 and 5 SPRAY PROGRAMS.
- 2) EQUIPMENT REQUIREMENTS AND SPECIFICATIONS.
- 3) APPLICATION TECHNIQUES.
- 4) ADVERTISING COPY AND LAYOUT READY FOR MEDIA.
- 5) SOLUTIONS TO PROBLEMS BEFORE THEY BECOME PROBLEMS.

Cost of the seminar is \$550. (Your profit, after labor and material, on your first 7 orders.)

Write or call
JIM McCURDY
Green Lawns, Inc.
633 West Monroe Street
Belleville, Illinois 62221
Phone 618-234-2141
or circle 114 on reply card

Circle 114 on free information card



NOW PROVIDING OUTSTANDING EQUIPMENT FOR THE LAWN CARE INDUSTRY.

- LAWN CARE UNITS
- SPRAYERS
- PUMPS
- TANKS

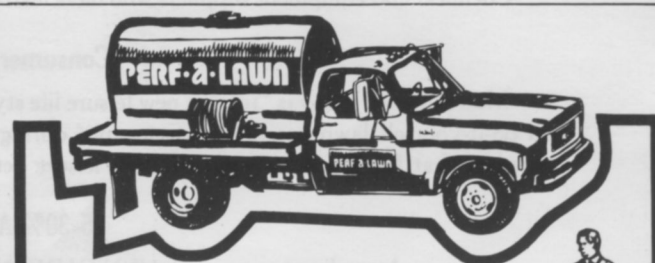
WESTHEFFER
TURF DIVISION

Box 363

LAWRENCE, KS. 66044

Tele 913-843-1633

Circle 118 on free information card



ACT NOW!

EXCELLENT INCOME
PROTECTED TERRITORY
PROVEN TRACK RECORD
YOUR OWN BUSINESS

Secure your future with one of the nation's fastest growing industries.

Perf-A-Lawn Corporation is now offering Franchises in your area.

WE OFFER: Computerized routing — Volume buying (no mark-up) — Continual technology back-up — Paid training

For complete information, call: **RON WILSON**

Perf-A-Lawn Corporation
127 Quick Road, New Carlisle, Ohio 45344
Phone: 513-845-3558

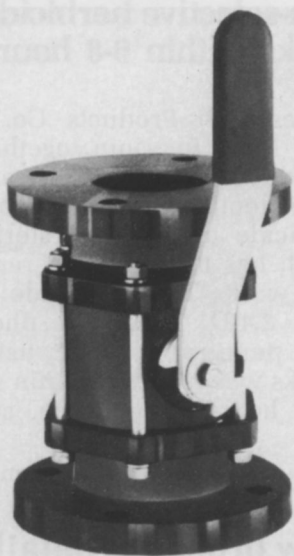
PERF-A-LAWN®

Circle 109 on free information card

PRODUCTS

Ball valves for liquid spray system

For the lawn care businessman putting together a liquid fertilizer/pesticide spray system



for next lawn care season, the OPW Division of Dover Corp. offers fiberglass-reinforced polypropylene ball valves. The valves are corrosion-resistant to a wide range of chemicals, including all known fertilizer solutions and almost all turf pesticides. Complete details are given in the company's free eight-page catalog BV. The valves feature self-aligning balls which float freely to provide a tight seal against Teflon seats. All styles are designed with easy access to internal parts for servicing without removing the end connections from the line. Circle 201 on free information card

300,000 square feet with one tank load

Finn Equipment Co. will offer a 1,200-gallon version of its LawnFeeder to lawn care businessmen for this season. The unit is capable of spraying 300,000 square feet with one load, at

a rate of four gallons per minute. It features mechanical agitation and all-hydraulic drive. It is designed to fit on a truck with a capacity of 22,000 pounds gross vehicle weight, or about a 2½-ton truck. Size is 102 inches cab to axle length.

Circle 202 on free information card

Lawn plugger-aerator is easily transported

A new lawn plugger-aerator from Yard Marvel Mfg. Co., Inc. is compact enough for lawn care businessmen to transport it from job-to-job with ease. Its dimensions are 17 inches wide by 30½ inches long by 23 inches high. It has applications to the lawn care businessman for troublesome compacted lawns on a spot basis, or for extra add-on business from existing customers. Advantages of aerating with a plugger-type unit are that it revitalizes the lawn by opening up the root structure of the grass. It also

breaks up the surface so water can penetrate, thus water goes deeper and does not evaporate as fast. This also applies to fertilizer application after plugging. The unit is designed to take out plus from 1½- to 1½-inch deep, approximately ½-inch in diameter.

Circle 203 on free information card

Suspending clay for suspension fertilizers

Floridin Co. offers a data sheet on its MIN-U-GEL 200 suspending clay for suspension fertilizers. The product permits use of insoluble plant nutrients in liquid fertilizers, holding these salts in stabilized suspension. It maintains suspension and permits the addition of important insoluble pesticides are suspended in uniform manner throughout the suspension.

Circle 204 on free information card

The Residential Lawn Care and Maintenance Service Industry Isn't Coming.

It's Here.



Chemical and equipment suppliers who have learned that lesson are growing faster than ones who haven't!

Consumer Wants/Needs:

Mass America today is "into" a new leisure life style, and home owners who were oriented to home, family and do-it-yourself lawn care and maintenance during the late 1950's and 1960's are now into action sports and services that free up extra time for their leisure activities — lawn care/maintenance services fill their need.

25-30% Annual Growth:

According to a recent LAWN CARE INDUSTRY market study there are 7.5 million customers using lawn care and maintenance services this year, (primarily single family home owners) and 1.9 million new customers will be added to this rapidly expanding service industry next year.

It's Here:

In 1979 the lawn care industry will be 9.4 million customers (4 million acres of turf) producing service receipts of 2.2 billion + dollars . . . which says clearly that the lawn care and maintenance service industry has arrived. It's the new volume marketplace . . . the new mass market for lawn and garden products. Shouldn't you be getting your product story to this growing marketplace?

Match your message to the market.



A Harvest business publication.

Lawn Care . . . The Growingest Market.

New herbicide kills 33 common lawn weeds

Spectrum 33 Plus Lawn Weed Killer, manufactured by Ciba-Geigy Corp., will kill 33 troublesome common lawn weeds, in-



cluding poison ivy and poison oak, chickweed, dandelion, plantains, ragweed and many other similar broadleaf weeds. It is available for use on lawns consisting of bluegrass, fescue, zoysia, bermudagrass, bentgrass, St. Augustinegrass and centipedegrass.

Circle 206 on free information card

SPLIT PERSONALITY.

Another fine,
quality-con-
trolled product
of Jacklin Seed
Company.

Glade Glade

KENTUCKY BLUEGRASS U.S. Plant Patent 3151

Bright sunshine or moderate shade makes little difference to Glade Kentucky bluegrass. With its split personality, Glade grows well under both conditions.

A Rutgers University selection, low-growing, deep green Glade has improved resistance to most races of leaf rust, stripe smut and to powdery mildew in up to 60% shade. Because of its better than average resistance to most races of Fusarium blight, Glade Kentucky bluegrass is being used as a fortifying ingredient in many professional turf grass mixes. It blends beautifully with the new, fine-leaved rye grasses, fescues and other elite bluegrasses.

Specify Glade for your next turf grass mix. You'll appreciate the split personality that thrives in both sun and shade.



BEHIND THIS ISSUE



We don't really want to spill the beans, but just can't resist printing in this space a letter we received recently from Mrs. Kathleen Weiss of Snyder, N.Y. She wrote:

"The subscription of LAWN CARE INDUSTRY I am purchasing from you is to be a Christmas gift for my husband. Could you please send me a gift certificate to put in his stocking before we receive our first issue in January? Thank you very much, your cooperation is appreciated."

We'd like to take this opportunity to wish Joseph Weiss, co-owner of Grass-Green, a Merry Christmas, and we also hope you enjoy your future issues of LAWN CARE INDUSTRY. And to all of our other readers — both old and new — we would also like to wish you a happy and prosperous new year.

Bob Early

Professional SPRAY EQUIPMENT

AT AN ECONOMICAL COST!!!

YOUR LAWN CO.



**DEPENDABLE
ACCURATE • ECONOMICAL**



1. Two stage pump provides high volume and low maintenance.



3. Tachometer pressure gauge and remote throttle assure accuracy.



2. Inductor allows you to mix chemicals one yard at a time.



4. Electric hose reel provides quick rewinding and proven service.

Your spray company is different than others so you need a sprayer tailored to your needs. That's why the Professional Turf Specialties system is used by lawn spray companies from Chicago to Texas. No other system can suspend large particles such as IBDU and nitroform and offer a separate tank that allows you to mix one product, one lawn at a time, through an inductor as well as these features:

- 1) A pumping system that can load or unload itself and other trucks.
- 2) Remote throttle tachometer and pressure gauge for finite accuracy.
- 3) Ability to suspend slow release nitrogen such as IBDU® or nitroform.
- 4) Can be mounted on your present equipment or on any new truck.
- 5) Optional compartmentalized tank, allowing you to fill one section from the other and custom mix chemicals on the job through an inductor.

Professional Turf Specialties
CALL COLLECT (309) 454-2467

SUPPLIERS OF EQUIPMENT AND CHEMICALS FOR TURF MAINTENANCE
1801 INDUSTRIAL PARK RD. • NORMAL, ILLINOIS 61761

Circle 121 on free information card

COMING ISSUES

Upcoming features in LAWN CARE INDUSTRY include: January — Miami MARKETPLACE. February — Houston MARKETPLACE, weed identification and control, herbicides available to the lawn care businessman, lawn care advertising; March — Atlanta MARKETPLACE, insect identification and control, insecticides available to the lawn care businessman. April — San Francisco MARKETPLACE, disease identification and control, fungicides available to the lawn care businessman. May — Boston MARKETPLACE. June — Pittsburgh MARKETPLACE. July — Washington, D.C. MARKETPLACE. August — Seattle MARKETPLACE.

The wrong chart was inadvertently published on page 17 of the November issue of LAWN CARE INDUSTRY depicting months when lawn care businessmen buy equipment. As was stated in the accompanying story, January is the first choice for buying equipment, and February and March the second and third choices.

ADVERTISERS INDEX

Agro-Chem	7
Deere & Co.	4
Green Lawns	19
Hahn, Inc.	8
Jacklin Seed Co.	3, 21
Lakeshore Eqpt. & Supply Co.	5, Cover III
Lofts Pedigreed Seed, Inc.	Cover IV
Perf-A-Lawn Corp.	19
Power Spray Technology	9
Professional Turf Specialties	22
Torco Engineering	11
Westheffer Co.	19

CLASSIFIED

When answering ads where box number only is given, please address as follows: Box number, c/o LAWN CARE INDUSTRY, Dorothy Lowe, Box 6951 Cleveland, Ohio 44101.

Rates: 35¢ a word for line ads, 65¢ a word for display ads. Box numbers add \$1 for mailing. All classified ads must be received by the publisher before the 10th of the month preceding publication and be accompanied by cash or money order covering full payment.

Mail ad copy to Dorothy Lowe, LAWN CARE INDUSTRY, Box 6951, Cleveland, Ohio 44101.

HELP WANTED

AGRICULTURALIST, HORTICULTURALIST/AGRONOMIST.

Excellent opportunity to assume broad scope responsibilities for a major chemical lawn care company. Primary responsibility will involve research, training, and providing technical support to Branch Management Personnel. Successful candidate should have a PhD. in agriculture with specialization in agronomy and horticulture. Some experience in turf management or related fields. Salary commensurate with experience and job responsibilities. For confidential consideration, send resume and salary history to: Box 215, Lawn Care Industry, Box 6951, Cleveland, Ohio 44101.

COLORADO OPPORTUNITY. Established lawn chemical service offers position with ownership participation to individual with liquid application and formulation experience. Replies will be held in strict confidence. We are not looking for an investor but an experienced, honest, hard worker. Reply Box 26527, Lakewood, Colorado 80226.

CHEMICAL LAWN CARE and tree company needs service manager for 3,000 customers. Start January. Salary open. Send resume to Lawn Doctor, Box 30121, Dallas, Texas 75230. 214 690-1900.

FOR SALE

FOR SALE: 1978 Finn lawnmower mounted on 1978 GMC 17,500 GVW truck, 4000 miles, automatic transmission, 800 gallon sprays granular and liquid lawn care products. Hydraulically powered drive, two hose reels with 300 ft. of hose on each reel. Will sell with or without truck. Call 317 873-5231 and ask for George.

LAWN SPRAYER — New generation automatic sprayer. Cuts spraying time by 75%. Sprays insecticides, herbicides, fungicides. Under \$250.00. Free information. Yard Mate, P.O. Box 971, Arvada, Co. 80001.

MISCELLANEOUS

KNOW pH INSTANTLY. Electronic tester, portable, handheld. For soil, liquids, etc. Low cost (under \$25). Details free. A & H Marketing, Dept. L1, 8325 Dru Ave., SE, Albuquerque, NM 87108.

USED EQUIPMENT

UPDATING FLEET AND EQUIPMENT: 3—1975 Chevy's and 14—1976 Chevy 1-ton spray trucks. All have 750 gal. steel tanks, pumps, hose and reels. Ready to spray. Good condition. Also, 3—1976 Chevy ¾ ton pickups, 12—750 gal. tanks, 2—1,200 gal. tanks. Several Beam and R&M pumps, hose reels and other misc. spray equipment. Call: 1 513 845-0517 or 0717. Ask for Charlie Pratt.

1978 GMC ¾ ton spray truck with 220 gallon tank, hydraulic driven pump and mechanical agitation, hose, hose reel, spray wand, and floatation tires. This truck in excellent condition and ready to spray would make a good starter system. For details call 217 529-5692.

LAWN SPRAY TANKER. 1—1977 excellent condition 1500 gallon Loadstar International, completely equipped with hose reels and 300 ft. of delivery hose. Phone 313 549-1912.



WE RECOMMEND LESCOSAN

In two seasons, we reduced the crabgrass population from 90%-plus to less than 10%. And this is on big lawns of almost an acre. Lescosan is the mainstay of our crabgrass control program.

—JOHN R. LINKHART
Perf-A-Lawn Vice-President (Sales)

As John R. Linkhart knows, Lescosan is the answer to pre-emergence crabgrass control. The undeniable proof exists in every application.

"Nashville is the premier area for crabgrass. And Lescosan is the main-stay of our crabgrass control program. It works better on crabgrass and foxtail than any other product."

The Perf-A-Lawn professional chemical lawn maintenance company specializes in liquid spray applications and they're building more than turf. They're building a reputation.

"Since we are constantly expanding our franchise

market, we must be sure a product works. So we recommend Lescosan to our franchisees."

Lescosan (Betasan*), available in 4E emulsion or 12.5 granules, provides full-season effectiveness on all grasses, as well as on a number of ornamentals and ground covers. When Perf-A-Lawn buys Lescosan from Lakeshore, they buy from the formulator. And for Perf-A-Lawn, that means quality and savings!

If quality, savings and performance are selling Lescosan to you, take advantage of our toll-free information service and call Barb

today. Those east of the Mississippi can reach her by dialing 1-800-321-5951. (In Ohio, dial 1-800-362-7413.) If you're west of the Mississippi, call Barb collect at 216-323-7544.

She'll have our representative contact you so you'll know why Perf-A-Lawn recommends Lescosan and how our other fine LESCO Products (including LESCO 36 Sulfur Coated Urea) are selling themselves every day!

Our LESCO Quality Products and Friendly Service are always as close as your phone.

*(Betasan—Registered TM of Stauffer Chemical Company.)

LESCO PRODUCTS

Division of Lakeshore Equipment & Supply Co.
300 S. ABBE ROAD, ELYRIA, OHIO 44035

A FAMILY OF FINE PRODUCTS—Lescosan 12.5G—Lescorene—Lesco 4—Lescobor—Lescopar—Lescopex—Lesco Non-Selective Herbicide
Lesco MSMA—Lesco Thiram 75W—Lescozyme—Lakeshore Chinch Bug & Sod Webworm Control

POUNDS
Sold Worldwide

baron
KENTUCKY BLUEGRASS

Baron Outsells Merion by more than 10 to 1!

No Wonder:
Quicker Germination
Less Fertilization Required
Greater Disease Resistance
More Widely Adaptable
Less Expensive



Merion
KENTUCKY BLUEGRASS

1973 1975 1976 1977 1978



**Lofts
Pedigreed Seed, Inc.**
Bound Brook, N.J. 08805/(201) 356-8700

Lofts/New England
Arlington, Mass. 02174
617-648-7550
Great Western Seed Co.
Albany, Ore. 97321
503-926-2636

Lofts Kellogg Seed Co.
Milwaukee, Wis. 53201
414-276-0373
Lofts/New York
Cambridge, N.Y. 12816
518-677-8808

Lofts/Maryland
Landover, Md. 20785
301-322-8111
Oseco Ltd.
Ontario, Canada
416-457-5080

Merion production figures taken from "Seed Crops" published by U.S. Dept. of Agriculture, Crop Reporting Board, Washington, D.C.
Baron production figures supplied by Baronbrug Holland and Lofts Pedigreed Seed, Inc.