How to thaw winter cash flow problems

Ask a lawn care businessman what he does in the winter, and you may get answers ranging from skiing to digging graves.

The winter is the slack time for lawn care businessmen which means both pleasures and problems. The pleasures are from vacations and a wellearned rest.

The problems come from not having a steady income during the winter and, above all, not being able to keep employes because of the business' seasonal nature.

"You've invested a lot of money in training workers, and then you have to let them go. It really hurts," says Tommy Isbell, A-Perm-O-Green Lawn, Dallas.

Just as bad as the problem of letting workers go is the hassle of scrambling to hire new workers and train them. "It is the nature and problem of our business," says a Cleveland lawn care businessman.

To beat the problem, some lawn care businessmen have off-season work including snow-plowing, insulation installation, cutting and delivering firewood, grave digging and repairing lawn mowers. These winter jobs allow the company owners to maintain a cash flow and retain workers.

Snowplowing is particularly popular in Northern states. Ron Kujawa, K. E. I. Enterprises, Milwaukee, operates a big snowplowing operation with 17 vehicles from Jeeps to 2½-ton trucks.

Although he has 17 trucks, only about 10 are operating at one time. "We need some trucks for backup," he says. "Nobody wants to hear that you're broken down and can't plow."

The snowplowing operation allows K.E.I. year-round employment for 18 of its 85 to 100 employes.

K.E.I. specializes in industrial and commercial accounts. He charges a monthly minimum per account fee and once that is met, he charges hourly.

to page 2

Turf conference circuit begins next month: Mark your calendar now

A round of more than 25 major turf conferences — many with special lawn care sessions such as in New Jersey, Ohio, Texas, Illinois, Virginia and Indiana — begin next month around the country.

LAWN CARE INDUSTRY has prepared the following conference-by-conference roundup of major conferences and who to contact for more information.

Missouri. The 18th Annual Missouri Lawn and Turf Conference will be held Nov. 8-10 at the Hilton Inn in Columbia, Mo. Dr. John H. Dunn is the man to contact for further information. His address is 1-43 Agriculture Building, University of Missouri, Columbia 65211. His phone number is 314-882-7838.

South Carolina. The Clemson Turfgrass Conference will be held at the Clemson House Hotel, in Clemson Nov. 14-15. For further information, contact Dr. Landon Miller, Department of Horticulture, Clemson University, Clemson, SC 29631.

New York. The New York Turfgrass Conference and Trade Show will be held Nov. 14-16 at, appropriately, The Turf Inn in Albany. For further information, contact Janet Neumann, New York State Turfgrass Association, P.O. Box 36, Lockport, NY 14094. Her phone number is 716-434-5338.

The Professional Turf and Landscape Conference will be held at the Tappan Zee Inn Feb. 7 in Nyack, N.Y. For further information, contact Frank Claps, 136 Laurel Ave., Larchmont, NY 10538, or call him at 914-834-6846.

New Jersey. The New Jersey Turfgrass Expo '78 will be held Nov. 28-Dec. 1 at the Cherry Hill Hyats House. This show is traditionally one of the most successful in the Northeast and features a special session for lawn care businessmen. For further information, contact Dr. Henry W. Indyk, Cook College, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903. His phone number is 201-932-9453.

California. The Associated Landscape Contractors of America will hold its annual Maintenance Symposium Nov. 29-Dec. 1 at the San Jose Hyatt House. There will be a special "Chemical Day" on Nov. 30, where company personnel can get together with chemical manufacturers to discuss pesticide application and other topics. For further information, contact Joe Marsh, Environmental Indus-

to page 4



MAINTENANCE

Lawn care businessmen inventory equipment in recent LCI survey

The average lawn care businessman involved in mowing and maintenance owns more than eight walk-behind mowers and favors lawn tractors in the 10- to 20-horsepower range.

In a recent survey conducted of LAWN CARE INDUSTRY readers, 55 percent said they owned a walk-behind mower.

Answers ranged from one to 60, and the average was determined from these answers.

More than 48 percent said they owned an average of 2.6 lawn tractors in the 10- to 20horsepower range. Answers ranged up to nine.

More than 20 percent of the respondents said they owned an average of 1.69 lawn tractors in the range of less than 10 horsepower. More than 17 percent said they owned an average of 1.73 tractors in the 31 to 50-horsepower range. More than 14 per-

BUSINESS

Average volume \$339,000 landscape report shows

The typical landscape contracting company has an annual volume of \$339,000, according to a recent survey released by the Associated Landscape Contractors of America (ALCA).

The survey also reported that the average company purchased \$122,000 worth of equipment last year, and also purchased \$153,-000 worth of supplies and materials.

Non-ALCA members may purchase the report for \$5. Information is available from: ALCA, 1750 Old Meadow Rd., McLean, VA 22102. cent said they owned an average of 1.7 lawn tractors in the 21- to 30-horsepower range. And more than five percent said they owned an average of 1.75 tractors of more than 50 horsepower.

The survey was based on a 24.4 percent return of 1,000 questionnaires mailed to LAWN CARE INDUSTRY readers this summer.

How many mowers and tractors do Percent Reyou own? Average Equipment sponding Walk-behind 8.4 mowers Less than 10 hp tractors 10-20 hp 48.7 tractors 21-30 hp 14.2 1.70 tractors 31-50 hp 1.73 17.7 tractors More than 50 hp 5.2 1.75 tractors

Equipment shipments up, OPEI survey predicts page 2 Davey Lawnscape to be sold to employes page 2 Wisconsin Marine, Ransomes form ties page 3 Gravely acquires Hahn page 3 Mowers/tractors 1978/79: An LCI report page 8 Spray equipment and manufacturers page 22 MEMOS 2 COST CUTTINGS 4 MEETING DATES 6 NEWSMAKERS 7 TOOLS, TIPS & TECHNIQUES 12 MONEYWISE 20 MARKETING IDEA FILE 21

PRODUCTS 22

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Equipment shipments up, **OPEI** survey predicts

Participating companies in an industry outlook survey conducted by the Outdoor Power Equipment Institute (OPEI) forecast moderate increases in industry shipments for 1978 and 1979.

The figures were released by Frank Depew, president of Jacobsen Manufacturing Co., Racine, Wis., at the recent OPEI convention in Colorado Springs, Colo.

A 2.8 percent unit growth for 1978 over last year for the four categories surveyed was predicted. Although total units remained the same, the mix shifted as mowers and lawn tractors/riding mowers were forecast at an even higher rate while garden tractors and tillers are forecast at a lower rate.

Projected industry shipments were 5.4 million for walk-behind mowers in 1978 (5.5 million in 1979); 702,000 for lawn tractors/riding mowers in 1978 (710,-000 in 1979); 211,000 for garden tractors in 1978 (212,000 in 1979); and 600,000 for walk-behind tillers for both 1978 and 1979.

The industry forecasts a 3.8 percent increase in walk-behind power mower shipments for 1978 over 1977, and a 2.2 percent increase for 1979 over 1978; a 4.8 percent increase for lawn tractors and riding mowers in 1978 versus 1977 and a 1.1 percent increase for lawn tractors and riding mowers 1979 over 1978.

FINANCE

Davey Tree, Lawnscape to be sold to employes

Ownership of Davey Tree Expert Co., Kent, Ohio, and its Davey Lawnscape Service division will be turned over to employes, board chairman Alexander M. Smith announced last

"We like the company the way it is and would like to see it continue that way," said Smith, who has been on the board 32 years. "The major shareholders are getting along in years," he said. Most of the company stock is owned by relatives of the founder and they did not want to turn it over to outsiders.

The company plans to buy back outstanding common stock. An employe stock ownership plan and trust will be established and the repurchased stock will be sold to the trust or to the employes. It is felt that the sale to employes will insure that corporate offices remain in Kent.

Today the company is licensed for tree care in 45 states, has about 3,000 employes and expects to do \$50 million in business this year, according to Henry D. Schmid, marketing manager. Davey Lawnscape operates in eight midwestern cities. J. Martin Erbaugh is Lawnscape general manager.

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 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
Southwest Office: JOHN SANDFORD (213) 933-8408
5455 Wilshire Boulevard, Suite 1107, Los Angeles, Ca. 90036
San Francisco Office: ROBERT A. JOBSON (415) 982-0110

San Francisco Office: **ROBERT A. JOBSON** (415) 982-0110 582 Market St., Suite 1904, San Francisco, Ca. 94104 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



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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.

EXPANSION

Cincy's Spray-A-Lawn opens two franchises

Spray-A-Lawn, Cincinnati, Ohio has opened two new franchises in Michigan and Ohio, according to company president Larry Brandt.

The Michigan franchise began operation earlier this year servicing the Saginaw, Bay City and Midland areas. It is owned and operated by Ken Crane and Dave Bowersock.

The second franchise was

opened by the company's former operations manager, Randy Creque. It opened earlier this year in Toledo, Ohio.

Both operations utilize the Spray-A-Lawn approach, which is set up so that each customer's lawn is visited each month during the growing season. Spray-A-Lawn opened its doors in February 1975, and is planning two more openings before next lawn care season.

Replacing Creque as operations manager in the Cincinnati area are Jeff Robertson in the western region and Steve Flood for the eastern region.

MEMOS

Fuqua buys Massey garden tractor line: The announcement was made early last month that Georgia-based Fuqua Industries bought the lawn and garden tractor line of Massey-Ferguson, Inc., Des Moines. Fuqua also owns McDonough Power Equipment Co., McDonough, Ga.

Honda uses "personal approach": Honda Motor Co. has chosen what it called the "personal approach" to introduce its new HR-21 rotary lawn mower. The thrust of the Honda shirt-sleeve sessions completed around the country last month was that "seeing is believing." In a series of regional meetings in key states, lawn and garden dealers got a close-up look at the new unit from Honda. They also had plenty of time for questions and answers during informal cocktail hours and dinners at the end of each presentation.

Great challenges ahead, outgoing OPEI president says: An awareness of the greater challenges ahead facing the outdoor power equipment industry due to regulatory pressure from the federal government is one of the strong points of the industry, according to Harry L. Grumish, outgoing president of the Outdoor Power Equipment Institute (OPEI). The president of Roper Lawn Products, Kankakee, Ill. gave his address at the recent OPEI annual meeting in Colorado Springs, Colo.

Grumish referred to hearings on mandatory safety regulations with the Consumer Products Safety Commission and on noise emission standards with the Environmental Protection Agency. Proceedings on both issues continue.

Norman Sharp of the OPEI told LAWN CARE INDUSTRY that the organization has commissioned the Battelle Memorial Institute in Columbus, Ohio to determine the economic impact noise emission standards would have on the industry.

What Americans want most: According to the printing on the back of No. 10-size envelopes O. M. Scott & Sons mails its correspondence out in, a recent Harris-Life poll determined that the biggest vote of all was for "green grass and trees around me." The boosterism-type logo goes on to say: "A profound need and a wise choice. For now we know that green plants provide not only balm for the soul, but are our best environmental protection, preventing erosion, preserving water, purifying the air and supplying oxygen. Carl Sandburg understood all this when he said 'I am the grass, let me

Grass becomes art: Paintings of the 10 most popular grasses in America's lawns have been reproduced in a set of 12-by-16-inch color illustrations suitable for framing. The group of reproductions commissioned by O. M. Scott & Sons may be obtained for your office or den wall by sending \$2 to cover postage and packing to Scott's Paintings, Dept. A.O., Marysville, OH 43040

Fine fescue crop down: Rain at the wrong time and hot weather at the wrong time have combined to reduce the fine fescue crop in Oregon this summer, according to the Oregon Fine Fescue Commission. Fred Kaser, chairman of the Commission, said weather conditions in Canada have also diminished the crop of Canadian red fescue. He said the shortage in the two production areas could bring on higher prices for the 1978 crop and encouraged buyers to order now if they plan to have fine fescue for their mixes or for straight plantings. Oregon's production, which ordinarily runs at about 14 million pounds, is being estimated at about six to eight million pounds. Canadian production, which has reached as much as 20 million pounds in recent years, is being estimated at about six to eight million pounds also.

Automatic sprayer eliminates pouring

United States Department of Agriculture researchers are developing an experimental sprayer designed to avoid most handling risks for spray equipment operators.

The work is being done by Donald L. Reichard at the Ohio Agricultural Research and Development Center, Wooster.

"On our sprayer all liquid flows are controlled from the control panel by the operator," he said. "Metering pumps draw the chemicals from their containers and mix them with a water in a small mixing chamber on the way to the spray nozzles.

This system eliminates the dangerous pesticide-pouring operation as well as the disposal of left-over tank mixtures, he said. Also, the operator can flush the containers from the control

TRAINING

Cushman announces service school schedule

Cushman-Ryan has announced its national service school schedule for fall and winter to be held at company headquarters in Lincoln, Neb.

Ivan Vagts, national service manager, said that the 1978-79 curriculum includes four fiveday basic Cushman courses beginning Nov. 6, Dec. 4, Jan. 8 and Jan. 29. It also includes one Ryan training session Feb. 19-21, and four four-day advanced Cushman courses starting Nov. 13, Dec. 11, Jan. 15 and Feb. 5.

The specialized 21/2-day Ryan course will highlight aerification and sod cutter equipment. Cushman's programs range from basic engine repair to comprehensive classes on the electrical system.

The non-advanced courses are open to any Cushman-Ryan customer by contacting Vagts at 920 N. 21 St., Lincoln, Neb. 68501.

INSECTS

Grub control in lawns outlined in new report

Recognition of grub life cycles, detection of grub problems, diagnosis, prevention and control procedures are covered in a new situation report published by TUCO, Division of the Upjohn Co.

Consulting entomologists for the book point out that the knowledge of life cycles is extremely important in the control of these pests. The life cycle depicts times when the insect is most vulnerable to treatment.

Grub Control in Turf is the title of the situation report. It discusses the problems caused by soil-inhabiting insects such as the white grub, billbug, Japanese beetle, European chafer, May beetle and others, and the means to control them.

Copies of the report may be obtained by writing "Grub Control in Turf", TUCO Agricultural Chemicals, Division of the Upjohn Co., Department 9823-190-1, Kalamazoo, MI 49001.

MANUFACTURERS

Gravely acquires Hahn

Clarke-Gravely Corp., Clemmons, N.C., has purchased operating assets of Hahn, Inc. Outdoor Products Div., Evansville, Ind.

Hahn manufactures and markets rear engine riding mowers, walk-behind rotary mowers, snowblowers and rotary tillers. These assets will become a part of, and the Hahn product line will be manufactured by the Gravely division.

Lloyd Hahn, a familiar figure in the outdoor power equipment industry, will act as full-time consultant to Gravely.

The acquisition of Hahn assets allows Gravely to become a full-line producer of lawn and garden equipment. The present distributor organization for Hahn will continue to be a major factor in the distribution of the product, Gravely said.

COMPANIES

Wisconsin Marine in venture with Ransomes

Dane T. Scag, president of Wisconsin Marine, Inc., Lake Mills, Wis. announces that Ransomes Sims and Jefferies, Ltd., Ipswich, England has acquired

an equity interest in the com-

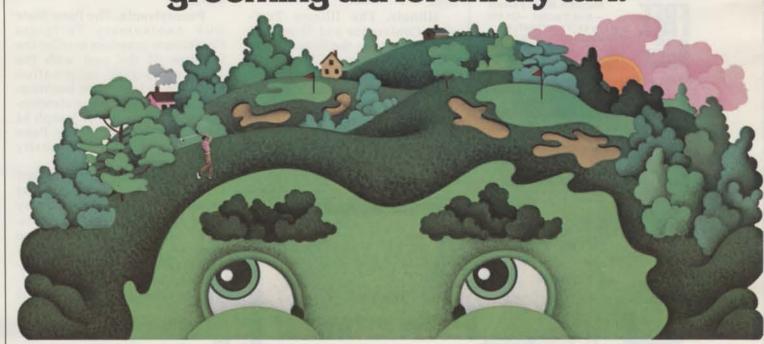
Ransomes is Europe's largest manufacturer of professional grass machinery. The company produces reel-type machines ranging in size from 20 inches to

Wisconsin Marine markets a line of commercial rotary mowers under the trademark "Bob-Cat." Ransomes has been marketing a range of rotary mowers in England manufactured by Wisconsin Marine. The addition of Ransomes products will provide a full line of turf equipment for Wisconsin Marine in North America.

Coming in December

The December issue of LAWN CARE INDUSTRY will feature a special report on "Lawn Care in the 80's," with comments from top lawn care businessmen.

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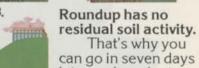
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tries, Inc., 825 Mabury Rd., San

The 15th Annual Northern California Turfgrass and Environmental Landscape Exposition will be held at the San Mateo Fairgrounds Jan. 24-25. For further information, contact Marilyn Heinrichs, NCTC, P.O. Box 268, Lafayette, CA 94549.





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HODS RESEARCH

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Ohio. The Ohio Turfgrass Conference and Show will be held Dec. 5-7 at the Veteran's Memorial Building in Columbus. This show has featured a special lawn care session for the past two years, drawing hundreds of lawn care businessmen from Ohio and neighboring states. Contact Dr. David P. Martin. 1827 Neil Ave., Columbus, OH 43210. Or call him at 614-422-

Texas. The Texas Turfgrass Conference will be held Dec. 11-13 at the Rudder Conference Center, Texas A & M University. The show will feature a special lawn care session for the first time this year. Contact Dr. James B. Beard, Department of Crop and Soil Sciences, Texas A & M University, College Station, TX 77843, or call him at 713-845-1551.

The Associated Landscape Contractors of America will hold its annual meeting Feb. 4-9 at the Galleria Plaza Hotel, Houston. This show featured a lawn care session last year for the first time. Contact John Shaw, ALCA, 1750 Old Meadow Rd., McLean, VA 22101, or call him at 703-893-

Illinois. The Illinois Turfgrass Conference and Show will be Dec. 12-14 at the Ramada Inn Convention Center, Champaign. This is the first year it will have equipment exhibits and a special lawn care session is featured. Contact Dr. John R. Street, 106D Horticulture Field Lab, University of Illinois, Champaign, IL 61801. Call him at 217-333-2123.

Nebraska. The Nebraska Turfgrass Conference will be Jan. 8-10 at the Nebraska Center at the University of Nebraska, Lincoln. Contact Dr. Robert C. Shearman, 105 Plant Industry Building, University of Nebraska, Lincoln, NE 68583.

Virginia. The Virginia Turfgrass Conference will be held Jan. 24-25 at the Colonial Williamsburg Conference Center. This show featured a successful lawn care session last year. Contact Dr. John F. Shoulders, 419 Smyth Hall, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Call him at 703-951-5797.

Georgia. The 50th International Turfgrass Conference and Show will be held Feb. 4-9 at the Georgia World Congress Center in Atlanta. Don't let the fact that it is sponsored by the Golf Course Superintendents Association of America scare you away. This is traditionally the biggest gathering of turf experts and turf manufacturers in the world. Contact Conrad L. Scheetz, GCSAA, 1617 St. Andrews Dr., Lawrence, KS 66044. Phone number is 913-

Pennsylvania. The Penn State 50th Anniversary Turfgrass Conference promises to offer the tradition of the past with the most up-to-date information available to lawn care businessmen and other turf professionals today. Contact Dr. Joseph M Duich, 21 Tyson Building, Penn State University, University Park, PA 16802.

Wisconsin. The Reinders Turf Conference is the largest turf show in Wisconsin, held every other year. This year it will feature turf seminars, irrigation seminars, an equipment show and service clinics. It is scheduled March 6-8 in the Milwaukee area, and is sponsored

by Reinders Brothers, Inc. Contact Ed Devinger, 13400 Watertown Plank Rd., Elm Grove, WI 53122, or call him at 414-786-3300.

Indiana. The Midwest Turf Conference, cancelled last year because of power shortages due to the nationwide coal strike, is scheduled March 12-14 at Purdue University in West Lafayette. It will feature a special lawn care session. Contact Dr. William H. Daniel, Department of Agronomy, 2-443 Lilly Hall, West Lafayette, IN 47907, or call him at 317-749-2891.

Canada. The 30th Annual Canadian Turf Show will be March 4-7 at the Chateau Halifax, Halifax, Nova Scotia. Contact the Canadian Golf Course Superintendents Association, 698 Weston Rd., Suite 32, Toronto, Ontario M6N 3R3, or call at 416-767-2550.

There are many more turf conferences and seminars scheduled, this is only a partial listing. Check "Meeting Dates" each month in LAWN CARE INDUS-TRY.

FINANCE

Toro is now listed on New York Exchange

Trading of Toro Co. stock began last month on the New York Stock Exchange big board with the company symbol -TTC. The company is based in Minneapolis.

Toro's chairman and chief executive officer, David T. McLaughlin, estimated sales for the fiscal year ended July 31 would be between \$225 and \$227 million, an increase of more than 40 percent over the preceding year's sales.



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COST CUTTINGS

Looking for some tax relief?

Any employer who hired more labor in 1978 than 1977 may qualify for a credit against taxes due, according to Richard D. Duvick, extension economist at Ohio State University. He said that the credit is based on wages paid any employe whether full-time or part-time.

The basic figure used to determine the credit is unemployment wages. Only the first \$4,200 of wages per employe are used to determine the credit earned. The credit can be sizeable, Duvick said, as much as \$2,100 or 50 percent of the \$4,200 wage base for each additional worker hired.

He gives this simple example: In 1977 you had one fulltime man and paid him \$10,000. In 1978 you have two men, each paid \$10,000. In this case, the jobs tax credit may be as much as \$2,100. This is a credit just like an investment credit, so it is a direct reduction of the federal income tax due, he said

If your additional hired labor is largely part-time workers, it may be easier for you to qualify the credit, since only the first \$4,200 of wages per employe qualifies anyway, he

The jobs tax credit is not necessarily based on total wages paid in 1978 versus 1977. However, in certain cases it may affect the total credit an employer can receive, Duvick said. This is one of several rules that may limit the credit for businesses with little or no increase in employes or wages, but these can be easily checked as you complete the tax form on jobs credit, he said.

For further information, contact the OSU Office of Information, 2120 Fyffe Road, Columbus, OH 43210.

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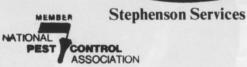
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MEETING DATES

Eighth National Institute on Park and Grounds Management, Regency Inn, Denver, Colo., Oct. 29-Nov. 2. Contact: National Institute, Box 1936, Appleton, Wis. 54911, 414-733-2301.

Atlantic Seedsmen's Association and meeting of the Lawn Seed Division of American Seed Trade Association, The Colonnade, Boston, Nov. 1-3. Contact: Margaret Herbst, 101 Park Ave., New York, N.Y. 10017, 212-685-5917.

Franchise Management Workshops, Holiday Inn, Chicago City Center, Nov. 1-2. Contact: International Franchise Association, Suite 600W, 7315 Wisconsin Ave., Washington, D.C. 20014, 301-652-

18th Annual Missouri Lawn and Turf Conference, Hilton Inn, Columbia, Mo., Nov. 8-10. Contact: Dr. John H. Dunn, 1-43 Agriculture Building, University of Missouri, Columbia, Mo. 65211, 314-882-7837.

Turfgrass Business Management Mini-Course VI, Virginia Polytechnic Institute and State University, Nov. 13-15. Blacksburg, Va., Nov. 13-15. Contact: Dr. John R. Hall, 421 Smyth Hall, VPI, Blacksburg, Va. 24061, 703-951-5797.

Clemson Turfgrass Conference, Clemson House Hotel, Clemson, S.C., Nov. 14-15. Contact: Dr. Landon Miller, Department of Horticulture, Clemson University, Clemson, S.C. 29631.

New York Turfgrass Conference and Trade Show, The Turf Inn, Albany, N.Y., Nov. 14-16. Contact: Janet Neumann, New York State Turfgrass Association, P.O. Box 636, Lockport, N.Y. 14094, 716-434-5338.

California Landscape Contractors Association Annual Convention, Hyatt Lake Tahoe Hotel, Lake Tahoe, Nev., Nov. 19-21. Contact: Mike Leeson, CLCA, 6252 E. Telegraph Rd., Los Angeles, Calif. 90040, 213-728-CLCA.

Turfgrass Ecology and Management Short Course, Virginia Polytechnic Institute and State University, Blacksburg, Va., Nov. 27-Dec. 1. Contact: Dr. John R. Hall, 421 Smyth Hall, VPI, Blacksburg, Va. 24061, 703-951-5797.

New Jersey Turfgrass Expo '78, Cherry Hill Hyatt House, Nov. 28-Dec. 1. Contact: Dr. Henry W. Indyk, Cook College, Rutgers University, P.O. Box 231, New Brunswick, N.J. 08903, 201-932-9453.

Associated Landscape Contractors of America Maintenance Symposium, San Jose Hyatt House, Nov. 29-Dec. 1, "Chemical Day," Nov. 30. Contact: Joe Marsh, Environmental Industries, Inc., 825 Mabury Rd., San Jose, Calif. 95156, 408-288-9770.

Turf Irrigation Short Course, San Francisco, Calif., Dec. 5-7. Contact: Irrigation Association, 13975 Connecticut Ave., Silver Spring, Md. 20906, 301-871-8188.

Ohio Turfgrass Conference and Show, Veterans Memorial Building, Columbus, Ohio, Dec. 5-7. Contact: Dr. David P. Martin, 1827 Neil Ave., Columbus, Ohio 43210, 614-422-2592.

Texas Turfgrass Conference, Rudder Conference Center, Texas A & M University, Dec. 11-13. Contact: Dr. James B. Beard, Department of Crop and Soil Sciences, Texas A & M University, College Station, Texas 77843, 713-845-1551

Illinois Turfgrass Conference and Show, Ramada Inn Convention Center, Champaign, Ill., Dec. 12-14. Contact: Dr. John R. Street, 106D Horticulture Field Lab, University of Illinois, Champaign, Ill. 61801, 217-333-2123.

Turfgrass Small Engine Repair and Maintenance Mini-Course VII, Virginia Polytechnic Institute and State University, Blacksburg, Va., Dec. 13-15. Contact: Dr. John R. Hall, 421 Smyth Hall, VPI, Blacksburg, Va. 24061, 703-951-5797.

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.

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.

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, 800-543-006.

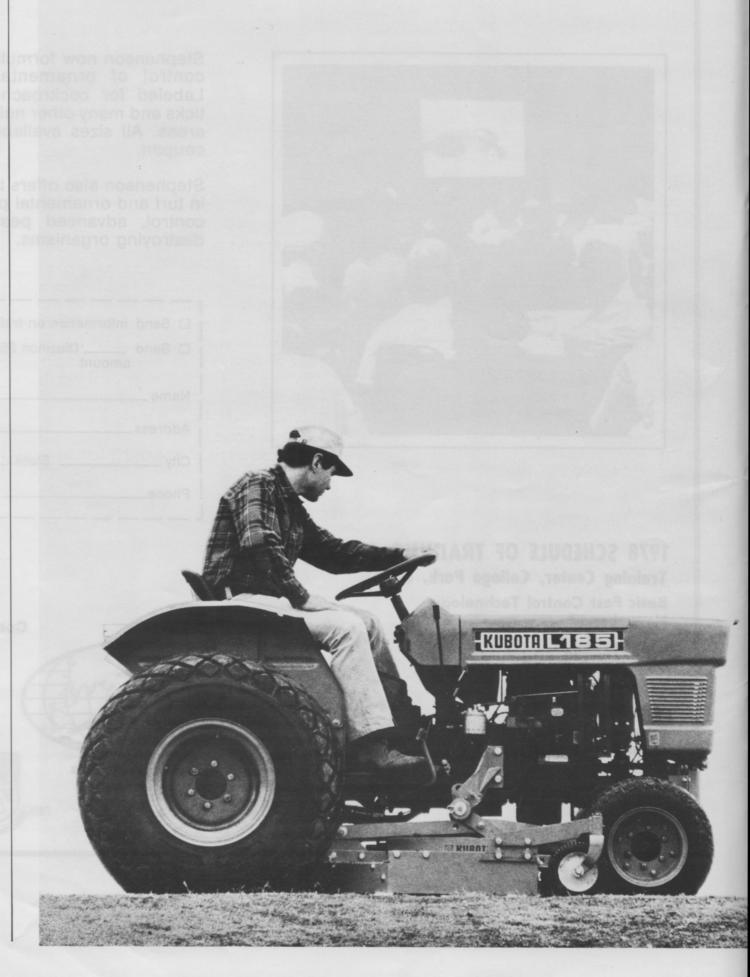
Professional Turf and Landscape Conference, Tappan Zee Inn, Nyack, N.Y., Feb. 7. Contact: Frank Claps, 136 Laurel Ave., Larchmont, N.Y. 10538, 914-834-6846.

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.

American Sod Producers Association Midwinter Conference, Contemporary Hotel, Disney World, Orlando, Fla., Feb. 24-26. Contact: Bob Garey, ASPA, Association Building, 9th and Minnesota, Hastings, Neb. 68901, 402-463-5691.

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 3Re, 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.



NEWSMAKERS

Jon Larsen, Leslie Schrankler and Leif Madson are all staff workers for McGuire Lawn Service, St. Paul, Minn., according to company president Paul McGuire.





Larsen

Madson

Ron Stretton is turf seed sales representative for Otto Pick & Sons, Ltd. He lives in Stroud, Ontario and will be servicing professional turf users such as lawn care businessmen, land-scape contractors, sod growers and golf course superintendents.

Douglas A. Bruce has been named marketing manager of the Ag-Turf Department of Johns-Manville Sales Corp., Fresno, Calif. He will continue as the company's manager of product development.

Gilson Brothers Co., Plymouth, Wis. has announced the appointment of The Powerhouse, Brewster, N.Y. as company distributor for southeast New York state, metropolitan New York, Long Island, northern New Jersey and Fairfield County in Connecticut. Richard Colhoun, Jr. is president of The Powerhouse, Jack Orvis is service manager; and Tom Bartlett is office manager.

The Yanmar Diesel Division of Mitsuir-USA has moved into new offices and warehouse in Bensenville, Illinois. Three new territorial managers will oversee distribution directly to dealers. Gary Bauer will be manager for Michigan, John Colvin for Texas and Oklahoma and H. Richard Lange for New York.

Neal K. Allen has been promoted to the new position of manager of international accounts for **The Toro Co.**, Minneapolis. His main responsibilities will be to develop marketing programs for new products, primarily through mass merchandisers.

David T. McLaughlin, chairman and chief executive officer of **The Toro Co.**, has been elected to the board of directors of the Chamber of Commerce of the United States.

The board of directors of the Wisconsin Landscape Federation has appointed Doris Ann Krupinski to serve as its executive secretary, according to Dick Garbe, president.

Arthur D. Wick has been ap-

pointed northeast regional sales manager for the LESCO Products Division of Lakeshore Equipment & Supply Co., Elyria, Ohio. In addition to his previous responsibilities, his duties will now include sales activities in northeast Ohio, Pennsylvania, New York, Connecticut, Massachusetts, New Jersey, Maine, New Hampshire, Rhode Island and Vermont.





Pyle

Sandi Pyle has been named communications coordinator for OMC-Lincoln, a division of Outboard Marine Corp., Lincoln, Neb. The company markets the corporation's Cushman vehicle line plus Cushman-Ryan professional turf maintenance equipment. Her new duties include Yellow Pages advertising, dealer field days, national trade shows and public relations.

Rodney McWhirter has been promoted to eastern turf sales manager for Rain Bird Eastern Sales Corp., Glendora, Calif. The promotion was recently announced by Ed Shoemaker, director of sales and marketing for turf products. McWhirter will be moving to the California headquarters from Orlando, Fla., where he was formerly turf district manager for northern Florida and Georgia.

Paul R. MacDonald has been appointed manager of marketing for the Ag-Turf Department of Johns-Manville Sales Corp., Fresno, Calif. He will be responsible for the marketing, product development and sales of Buckner irrigation system products and Febco backflow prevention devices. Prior to joining the company, he was vice president of sales and marketing for Dunlop Tire & Rubber Co., where he directed the sales growth of golf and tennis products. He was also president of the National Golf Foundation.

Dave Davis has been promoted to manager of the training department for **Rain Bird Sprinkler Mfg. Corp.**, Glendora, Calif.

Nancy E. Kelley has been named full-time horticulturalist for the Lawn-Pro Division of Sassaman Enterprises, Inc., Sarasota, Fla. She holds a horticulture degree from Cornell University and has been active in the Florida nursery, landscape and lawn care industry. Her prime objective, according to company vice president Hans Hauser, will be to administer a "preventive maintenance" program aimed to prevent lawn and ornamental problems rather than just to cure them after the damage is done.

Rain Bird Sprinkler Mfg. Corp. recently announced the creation of two new positions for its turf market. Ken Mills has been promoted to turf product development manager, and Carlyle "Cozz" Regele has been promoted to turf product technical manager.

How to buy the right tractor.

It's easy to buy a tractor. You go to a dealer. Pay him some money. He gives you a tractor.

Buying the right tractor is another matter. It's not hard to do. But there are a couple of important things to keep in mind.

YOU DON'T EAT SOUP WITH A FORK.

And you don't need a 100 horsepower tractor to raise vegetables, move some dirt on your farm, or landscape your yard. The prime consideration in buying your tractor is to get the right one for the job you have to do.

KUBOTA.THE MID-SIZE TRACTOR.

We are the world's leading manufacturer of mid-size tractors. In fact, that's all we make. We don't make giant tractors. Nor do we make garden toys. Kubotas are just right for your lesser jobs that still require the power and versatility of a real tractor. So even if you already own a 400 acre spread and a couple of heavy-weight tractors, you probably still have a place for a mid-size Kubota.

THE DYNAMIC DIESELS.

If you don't want to lavish a lot of attention on your tractor, Kubota's a good one for you. All Kubotas have water-cooled diesel engines. Diesel engines have no electric ignition system, and they never require a tune-up. This means service is reduced to a bare minimum. Which brings us to another of our strong suits. Economy.

HOW TO SAVE MONEY.

Running a Kubota diesel engine costs a lot less than what it would cost to run a comparable gasoline engine. And a 12 to 47.5 horsepower Kubota is going to burn up a lot less fuel than a larger machine.

Your Kubota dealer is the right man to tell you which Kubota suits your needs best. Which Kubota implements you should have. And whether you need 2- or 4-wheel drive.

Then there's only one thing left to do. Take our tractor and put it to work.

We're looking for work.

tractor, I'd like	Before I rush off and of to have a free copy of se send one quick.	
Kubota Tractor	tising Department r Corporation b Street, Compton, C	CA 90220
NAME		
NAME ADDRESS CITY	STATE	ZIP



Circle 101 on free information card

Mowers/tractors: 1978-79

More than 55 percent of LAWN CARE INDUSTRY readers include mowing as one of the services they offer their customers. And that means mowers and tractors. Here is a partial listing of some units available to the lawn care businessman. Through the winter months we will keep you abreast of what else is new in the maintenance market.

Mott: Flail mowers for 38 inches to 21 feet

Mott Corp. offers a series of data sheets on its line of flail mowers. The hammer knives cut forward and up on the grass, combing and clipping it evenly, the company said. The front inner deflector shield causes the cuttings to be carried up and over, to be discharged downward at the rear. Being pivotally mounted, the knives fold on impact with solid objects, minimiz-



ing the danger of throwing them. On the unit pictured, the mower engine operates independently of the towing source, delivering its full capability of power and speed to the cutter at all times. Gang towing frames as pictured are also available. Data sheets explain the mowers' compatibility with tractors manufactured by John Deere, Ford, Yanmar, Satoh, International Harvester, Simplicity, Allis Chalmers, Massey Ferguson (recently purchased by Fuqua Industries, Inc., Atlanta and Kubota. Tractor-mounted units range in cutting widths from 38 inches to 21 feet.

Circle 220 on free information card

Toro: Flexible-line replaces metal blade

The Toro Co. has ready for the market the first lawn mower with a cutting mechanism that utilizes monofilament lines in place of a metal blade. The machine trims grass with an efficiency comparable to steelbladed mowers but with the greater safety of flexible-line trimmers, according to Kendrick B. Melrose, Toro group vice president. It mows a 20-inch swath. Called the Toro 20-Inch Electric Lawn Mower/Trimmer, it will be introduced nationally starting in spring. The mowing mechanism of the new machine consists of two counter-rotating discs powered by separate heavy duty electric motors. Attached to each disc are two monofilament lines that can be advanced and trim-



med to proper length automatically as the lines wear down. The flexible lines extend 11/2 inches beyond the outside width of the mower wheels, permitting the machine to function as a trimmer as well as a mower. Melrose said that compared with gasoline-powered mowers, the electric mower/trimmer is much quieter and has fewer moving parts, which means less maintenance. Information is also available on the company's line of front-engine riders, selfpropelled rear-baggers and selfpropelled mulchers.

Circle 221 on free information card

Sarlo: High wheels for commercial mowing

The line of commercial mowers from Sarlo Power Mowers, Inc. features high wheels which roll easier over

holes that low wheels can drop into and make pushing tough. Large-diameter wheels lower the resistance of grass that small wheels push against. The Sarlo high wheels allow bigger engines while retaining excellent balance and easy handling, the company said. Bigger engines make low wheels tougher to maneuver. The heart of the selfpropelling drive train with semidifferential action (85 individual parts) is a gear box second to none in the industry, the company said. Castings, heattreated gears and shafts are all precision machined. Hardened spline crawlers assure positive traction with minimum tire wear. The clutch lever is handy and simple to operate. On certain models, a handy foot pedal disengages clutch for no drag, easy starting while brake simultaneously prevents blade from turning.
Circle 222 on free information card



Ford: Five new lawn maintenance products

Ford Motor Co.'s Tractor Operations has announced five new products to expand its line of tractors and specialized equipment for lawn maintenance, gardening and snow removal. New top-of-the-line offering is a 19.9-horsepower lawn and garden tractor for lawn maintenance and landscaping work, along with a 60-inch commercial mower. The Ford Model 195 tractor is powered by a twincylinder Kohler gasoline engine



shielded for quiet operation. Standard features include hydrostatic transmission, power steering, heavy-duty front axle, deeppadded high-back seat, individual wheel brakes, 12 volt, 42 amp battery, and rear power take-off - independent of front power take-off - which allows operation of two pieces of equipment simultaneously. Ford is also introducing three new walkbehind mowers for lawn maintenance and a re-designed 3.5 horsepower tiller for garden cultivation. The walk-behind rotary mowers will be available in a self-propelled rear bagger unit and push and self-propelled

Circle 223 on free information card

Roseman: Heavy-duty four-bladed reels

Roseman Mower Co.'s Hi-Cut gang mowers with large heavy-



duty four-blade reels are designed to withstand the rugged demands of tall grass mowing. The units operate safely at low revolutions-per-minute and do not throw debris with missile force. Roseman gang mowers offer maximum possible safety while mowing.

Circle 224 on free information card

Deere: Lawn tractors, self-propelled mowers

eightand horsepower lawn tractors with a rear-bagger option lead the parade of units being intro-

The biggest breakthrough in the greening of America began in 1970. That's when turfgrass specialists at Pennsylvania State University completed development of a remarkable fine-leafed perennial ryegrass with all the advantages of ryegrass. And none of the drawbacks. They called it Pennfine.

Now, just six years later, the success of their undertaking is evident. On golf courses and athletic fields. In parks and cemeteries. And on public grounds

across the country.

Proven in tests. Among the nine perennial ryegrasses tested over a five-year period at University Park, Pennsylvania, Pennfine ranked finest in texture. Most resistant to disease. First in density and decumbency (low growth). The University Park test results

were only the beginning. Over 5,000 test kits with seed samples were distributed over the entire country in answer to requests from turf professionals wanting to test Pennfine. The results confirmed the University Park findings.

Most importantly, Pennfine established a new standard of mowability. Some other perennial ryegrasses, cut with the same mower, left ragged, fibrous tops that quickly turned brown. Pennfine's softer fibers cut smooth

Proven from coast to coast, from North to South. Pennfine's durable beauty has been demonstrated at prestigious sites all over America. From the lawns at an historic national landmark to the greens at a nationally-renowned golf course.

Besides possessing the ability to stand up under heavy traffic, Pennfine germinates rapidly. That makes it ideal for winter overseeding in the South. And, its non-competitiveness allows a smooth spring transition to bermudagrass.

Proven quality control under the Plant Variety Protection Act. You can be sure that all Pennfine Perennial Ryegrass meets the same high standards, because Pennfine is covered by the Plant Variety Protection Act.

That means every pound of Pennfine is certified. You are assured, by law, that it's produced exactly as intended by the original variety breeder.

Prove it to yourself. To learn more about how Pennfine is changing the face of America - and how it can work for you-write: Pennfine, P.O. Box 923, Minneapolis, MN 55440.



The best thing growing.

The 108 tractor is powered by an eight-horsepower engine and mows a 30-inch path. the 111 tractor is powered by an 11horsepower engine and mows a 38-inch path. Both engines are synchro-balanced to reduce vibration. These are onecylinder, four-cycle, air-cooled engines with 12-volt electrical

duced by Deere and Co. for 1979.



systems. A five-speed transmission provides five forward speeds from 1.4 to 4.9 miles per hour, and reverse speed of 1.6 miles per hour. The in-line shift control is mounted on the fender deck to the right of the seat. The transaxle is completely enclosed, with the differential and transmission housed in one gearcase. The transmission has constantmesh gears and key-type shift to provide convenient on-the-go shifting. In third gear the 108 can mow about three-fourths of an acre in one hour. The 111 can mow about an acre an hour.

Deere also enters at the selfpropelled walk-behind mower market with a 21-inch rotary mower that is powered by a fourhorsepower Briggs and Stratton engine. A bevel-gear, rear-wheel drive system propels the mower so the operator need only guide it. Rear-wheel drive provides good traction.

Circle 225 on free information card

Bolens: Rear-baggers, mulchers, lawn tractors

FMC Corp. offers detailed literature on its Bolens line of mulching mowers, rear-baggers and lawn tractors. The patented cutting chamber of the mulching mower and multi-pitch blade cuts and then recuts the blades of grass into tiny particles, which are blown down into the turf where they decompose after a few days, providing nourishment for the root system of the lawn. In the fall leaves are often



overlooked as a source of nutrients for the lawn. The Bolens mulcher chops a dry leaf cover into tiny mulched particles and feeds them to the lawn. There are six models, including manual and electric start, hand and self-propelled. Also, the 1979 line of Bolens lawn tractors has been expanded to include a new 11-horsepower model and two eight-horsepower models. These compact and durable lawn tractors feature rugged transmissions with three speeds forward and one reverse, and offer cutting widths of 32 to 42 inches, the company said.

Circle 226 on free information card

The seed that's changing the face of America.

Pennfine Perennial Ryegrass

Jacobsen: Turfcat designed for lawn care

The new Turfcat, manufactured by Jacobsen Mfg. Co., was specifically designed for the special needs of lawn and landscape contractors, according to Anthony Grygera, product manager for riding rotary and reel mowers. (Pictured on one of his own units here) The unit's 50inch or 60-inch cutter deck is mounted out front so the operator can keep an eye on his trimming maneuvers. The deck is also articulated to give a smooth finish over uneven terrain just as on a flat surface. The deck is supported by two large caster wheels to make climbing over obstacles like curbs easy. Steering is by rear wheel so the Turfcat turns easily. The unit's 18horsepower engine is an overhead value design, which great-



ly simplifies maintenance compared to the valve-in-block arrangement. The engine drives through a two-speed hydrostatic transmission, giving a transport speed of eight miles per hour and a mowing speed of four miles per hour. The transmission is operated by a foot pedal as is the control for hydraulically raising the cutter deck. These controls mean the driver never has to take his eyes from his work.

Built to take the rigors of steady commercial use, the Commercial 20 walk-behind mower (pictured below) by Jacobsen features the company's own two-cycle engine. It provides positive lubrication when mowing slopes and has 30 percent fewer moving parts than a similar four-cycle unit. Push handle, deck, rotor and other components are designed for heavy-duty application, and big wheels make pushing easier.



Circle 227 on free information card

McDonough: Snapper adds new mower to line

New to the Snapper line of lawn equipment is a 33-inch model with extra vacuum power for lawn care. It has the versatility and power to smoothly mow grass and broadcast cuttings evenly, McDonough Power Equipment said. It will also



accommodate a six-bushel rearmounted catcher or the trailing Bag-N-Wagon with a 30-bushel capacity. The high vacuum power enables the lawn care businessman to mow and vacuum cuttings, leaves and debris even in high moisture conditions. The company also recently purchased the assets of the Garden Tractor Division of Massev-Ferguson, Inc. Five new models will be offered with cutting widths of up to 54 inches.

Circle 228 on free information card

Garden Pro: Five speeds, 38-inch cut

Features on the Garden Pro. Inc. line of tractors include a 38inch cut, with full floating twin blade deck with trailer wheels, exclusive one-piece, 13-gauge steel frame. The line features a contour-molded seat: a single lever that adjusts to five different cutting heights; heavy duty



mower deck axle; disc brake on rear axle; automotive-type, heavy duty differential; fuel gauge on dash; exclusive Posi-Trac steering, 4:1 ratio, no gears to rattle or wear; blade clutch; trailer hitch; rear storage compartment; flip-up hood and rear deck for easy maintenance; and cigarette lighter on dash. Models are offered from eight horsepower to 11 horsepower.

Circle 229 on free information card

Gravely: Forward or reverse, instantly

Gravely offers a detailed, 22page, four-color brochure on its line of lawn maintenance tractors. On the units, all-gear direct drive from the engine through the transmission to attachments transmits engine power efficiently, the company said. And because it is all-gear, there are no belts that can slip, wear out or break.

Circle 230 on free information card



Appraising Our Past — Discovering Our Future

about the latest developments in the turfgrass industry. Seven preconference seminars

- · Four days of education sessions
- The only turfgrass show of international scope

other turfgrass management professionals in Atlanta Feb.

4-9. This is a once-a-year opportunity for you to learn

- Annual meeting and election
- Golf course tour
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Join with thousands of golf course superintendents and GCSAA members will receive further information and registration materials in October. If you would like a non-GCSAA member to receive this information, please complete the coupon and send to: GCSAA Headquarters, 1617 St. Andrews Drive, Lawrence, Kan. 66044.

name		
address		
city	state	zig

Honda introduces a new line of rotary lawn mowers to the lawn care industry. The Honda HR-21 rotary mower is available in four 21-inch models. The units feature an exclusive safety system called the Honda Roto-Stop. Whenever the special lever on the handle is disengaged, the rotor blade stops within a few seconds while the engine continues running. The heart of the HR-21 is the four-stroke GV-150, 3½-horsepower vertical-shaft engine. The engine features a cast-iron cylinder sleeve, a



chromed-top piston ring, a trochoid oil pump to provide lubrication while cutting on hillsides up to a 20-degree angle, a ball-bearing supported crankshaft on the flywheel side and replaceable valve guides for longer engine life. A one-piece, cast-aluminum deck and carbon steel blade increases suction, the chrome handle is reinforced for longer wear, and replaceable rubber tires with wide tread design and rear-wheel drive provide better traction and handling ease. The new mower can be used as a rear bagger, a sidedischarge or a mulcher.

Circle 231 on free information card

Howard: Front-cut with rear steering

The Turf Blazer line from Howard Price Turf Equipment, Inc. has several features that make it compatible to the lawn maintenance industry, according to company president Howard Price. First, it has a front cut with rear steering that enables the



machine to have a high degree of maneuverability. With the hydrostatic drive, the operator can pick his own speed to the cutting condition required. The company also offers a new unit, the Hydro-Power 180. Price says that this machine is designed for larger sites that a lawn care businessman may have a contract to maintain, such as an industrial complex. This mower is designed for businessmen that previously used gang reel mowers. With a rotary mower, maintenance is lower and the mower is capable of cutting higher grass and buck-

Circle 232 on free information card

Simplicity: Full line of mowers, tractors

New literature is available from Simplicity Manufacturing Co. on its new four-in-one mower, the economy walk-



behind mower line and mulcher. Additional literature and specification sheets are also available on its other mowers and tractors, including 19 and 21-inch walkbehinds, mulchers, and lawn tractors from five to 19.5 horse-

Circle 233 on free information card

Satoh: 15-hp diesel

Satoh features a new multipurpose 15-horsepower diesel tractor in its line of mowing equipment — the Beaver. A choice of two- or four-wheel



drive is offered. Features include a two-cylinder, watercooled engine; six forward speeds and two reverse; a threestep power take-off; category O, three-point hitch. Turf tires offered include 18 x 7.00-8 for the front and 9.5-16 for the rear.

Circle 234 on free information card

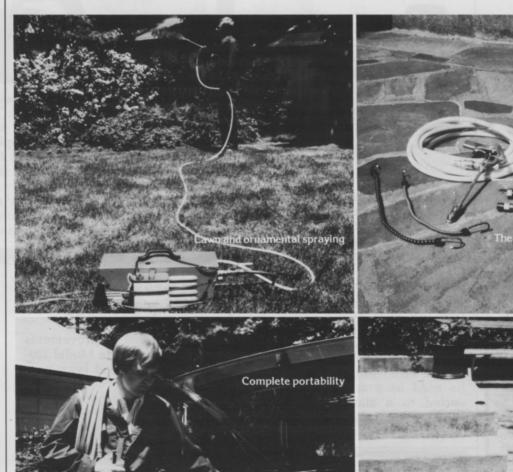
Heckendorn: 36 to 88, zero turning radius

Riding mowers from Heckendorn Manufacturing Co., Inc. are offered with cutting widths of 36, 50, 62, 72 and 88 inches. The line's tricycle design and hinged outboard cutting units work together to provide a minus zeroinch turning radius on the outboard unit side, with no damage to turf under either wheel. Hinged outboard units follow ground contours. Driven through high-speed universal joints, outboard units are built as ruggedly as the main cutting deck, the company said. Foot-operated deck lift allows instant lift to maximum deck height to clear obstructions or ground iregularities. Units are offered from 10 to 20 horsepower.

Circle 235 on free information card

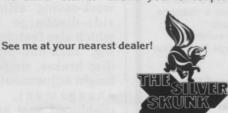
Termite control

ANKS FOR THE MEMO



For the first time in pesticide history, "The Silver Skunk" directly to a garden hose for a water source. "The Silver 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

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.



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

Lawn-Boy: Mulches or catches clippings

Robert W. Reid, Lawn-Boy director of marketing, describes the Lawn-Boy Mulch-R-Catch as the mower which offers the flexibility to either mulch grass clippings or catch them. "This



added flexibility to catch clippings is a particularly important convenience when grass is lush and growing rapidly as in early spring or when the growth exceeds several inches and cannot be effectively mulched with one

> Get the right pressure at the nozzle...

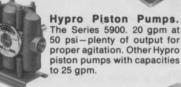
Go Hypro all the way!



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mowing," he said. The mower features a patented orbital chamber deck design which utilizes natural flow patterns for mulching the clippings. This design eliminates the need for either artificial deck obstructions or an additional blade to realize a mulching effect of the grass clippings. The 21-inch, four-square deck configuration will allow close-up trimming with either side of the mower.

Circle 240 on free information card

Yard-Man: Mulchers, rotaries, lawn tractors

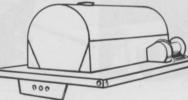
Yard-Man Co. announces introduction of its Model 13885 Lawn Tractor, which features an 11-horsepower engine and heavy-duty transaxle drive taht provides three forward and one reverse speeds. Features include 36-inch full-floating twin-blade cutting deck, belt-driven, and an accessory system that makes it useful throughout the year. Important features of this lawn



tractor are its cast pivoting front axle for easy maneuverability; standard key electric starting and twin front headlamps on a 12-volt battery with alternator; disc brakes that insure straightline stops. The company's Model 12304 self-propelled, rear-drive, rear discharge rotary mower is powered by a four-horsepower gasoline engine and delivers a full 20-inch cut. The company's Model 1170 "Mulch/Mow" may be used as a mulcher, or converted to a standard side-discharge rotary mower.

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TOOLS, TIPS & TECHNIQUES

A modified granular spreader

Al Dall, 45, owner of Cleveland's 17-year-old Lawnco, modifies his granular spreaders with a simple adjustment so none of the fertilizer or pesticides his workers apply is put out onto sidewalks or driveways.

The first thing he does when he gets a shipment of spreaders in from O.M. Scott & Sons, Marysville, Ohio, is add a



special plate he has designed with two wing-nut bolts and an adjustable track/slot.

The spreader is operated with full fertilizer/pesticide throw for most of the lawn application. But when one of his workers comes to the edge of the lawn, the worker simply slips down the plate to deflect the throw down onto the edge of the lawn.

Dall swears by the Scott spreaders because of their longevity, and says the only other modification he makes is adding new tires when the original tires wear down.

MTD: Grass mowed, picked up and bagged

Major design improvements in the new Lawnflite Model 139-796, eight horsepower lawn tractor from MTD Products, Inc. allow grass to be mowed, picked up and bagged in one operation. A transparent polypropylene chute conducts grass clippings from the 30-inch center-mounted mowing deck into an ordinary disposable trash bag in the rearhung container. Called the "Bag-It" grass catcher system, it adds another dimension in time- and



work-saving efficiency to this side-discharge lawn tractor, which also features electric starting, rack-and-pinion steering, disc brakes, single lever cutting height adjustment and blade disengagement, adjustable cushioned seat and 12-volt battery with plug-in charger.

Circle 242 on free information card

IH: Ground-hugging design for hillsides

Two new mowing tractors -International 240 and 250 - providing more efficient and less costly lawn maintenance, are now available from International Harvester. Both tractors



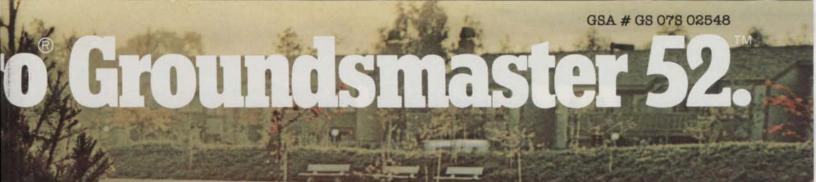
are compact and highly maneuverable, with a groundhugging design that clings to hillsides and terraces. The tractor's special hydrostatic drive and independent power take-off help less-experienced mower operators maintain full engine revolutions-per-minute while precisely matching ground speed to mowing conditions. The handoperated hydrostatic control also cuts down on legwork and clears the deck of the tractor's walkthrough compartment. Equipped with a four-cycle diesel engine and a choice of either a 46-horsepower gear drive or a 50-horsepower hydrostatic, the tractors give the best opportunity to tailor a tractor to fit specific yearround requirements.

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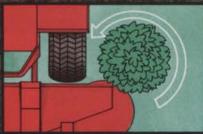
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National: Performance on banks and hillsides

Detailed literature is available on the line of reel mowers available from National Mower Co. The units feature Timken bearings, automotive-type transmissions and heavy-duty, tubular steel frames. Reels adjust down to fixed bed bars providing for more rigid and longer lasting mowing units, the company said. Bed knives have turned up lips for extra wear.

Circle 245 on free information card

Engineering Products: all-gear drive, more hp



The Power King tractor from Engineering Products Co. features an all-gear drive, which wastes little horsepower in its drive train, therefore providing more horsepower for the mower, more work on a gallon of gasoline, says the company's W. F. Reeder. High clearance under the tractor provides room for higher mower lift over obstructions. Units are available in 12, 14 and 18 horsepower, with 48inch and 60-inch rotary mower attachments.

Circle 246 on free information card

F. D. Kees: 21-inch mower with steel deck

A heavy-duty, 12-gauge steel deck and frame is one of the features of the Powermow, manufactured by F. D. Kees Mfg. Co. The unit offers a choice of fourcycle, 3.5 or five horsepower Briggs & Stratton engines with high inertia flywheel. The heavy gauge steel handle folds down without tools for easy transport and storage. The unit features a special one-piece, suction-lift blade with tempered cutting edges. Height of cut is adjustable from one to 31/2 inches.

Circle 247 on free information card

Kubota: Tractors from 12 to 47.5 hp

Kubota Tractor Corp. Manufactures a line of mid-size tractors that range in size from 12 to 47.5 horsepower. Power take-offs are available front and rear and four-wheel drive. The units also offer a three-point hitch and a number of attachments, including rear- or mid-mount mowers, backhoes, cultivators, dozer blades and more. Further information is available in data sheets and brochures.

Circle 248 on free information card

TURF MANAGEMENT

Turf professor suggests heavy fall fertilization

Fall fertilization of a lawn vields a number of benefits without leading to any serious problems, according to Dr. D. Thomas Duff, associate professor of plant and soil science at the University of Rhode Island.

He has put together some alternative nitrogen fertilization programs using the fall application concept that he says lawn care businessmen may want to consider.

Using fertilization dates that would suit a southern Rhode Island climate, Dr. Duff has suggested programs for low, moderate and high nitrogen fertility

He characterizes a high nitrogen program as five pounds of nitrogen per 1,000 square feet applied as such: Two pounds Nov. 15, and one pound each June 1, July 15 and Sept. 1.

His moderate nitrogen program would total 31/2 pounds of nitrogen applied as such: Two pounds Nov. 15, and one-half pound each June 1, July 15 and Sept. 1.

His low nitrogen program totals two pounds of nitrogen in the course of a year, applied as such: One pound Nov. 15, onehalf pound June 1 and one-half pound Sept. 1.

Dr. Duff says that research has shown that lawns fertilized in mid-November attain an attractive green color as much as four weeks earlier than turf fertilized the previous summer. And although the lawn becomes green earlier, the lawn requires mowing only about a week earlier than lawns fertilized in sum-

Other studies have shown that fall application of nitrogen fertilizer increases root growth during the fall to spring period.

Thus green color is attained earlier, topgrowth is more uniform and root growth is greater. The increased tillering and good root growth helps provide a denser lawn in spring, which helps reduce annual weeds.

Studies on the effect of fall fertilization on cold resistance of Kentucky bluegrass have found that any fertilizer program that maintains turf color longer into the fall reduces the inherent cold resistance of grass crown tissue.

"Generally, the fall application should be made before a winter freeze-up," Dr. Duff said. "This means that results should be satisfactory if nitrogen is applied soon after the last mowing of the season."

During this period, he says, labor for applying the fertilizer is usually more available than in the spring when winter clean-up and other tasks tie up the work force. The soils, too, are in better condition for holding equipment in the fall.

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BUSINESS MANAGEMENT



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LAWN CARE INDUSTRY Marketplace

Psst. The secret about lawn care in Baltimore is out.

"I'm not sure you want to publish this in your magazine" a Baltimore lawn care businessman says hesitantly, "but the truth is that Baltimore is a wide-open market."

Although some lawn care businessmen here would like to keep it a secret, they have a hard time not bragging about their city.

"There is plenty of room here for everyone to grow. And we are all growing," says Hollis Albert, Jr., president of **Maryland's**

Lawnkeeper, Baltimore.

Another lawn care businessman says, "The market here is unlimited. A person can put on as many customers as he wants if he'll push hard. People here are tremendously aware of our service, and it is just a question of seeking them out."

One lawn care businessman who can compare Baltimore with another market, is Tom Brunner, **Personal Lawn Care**, Rocky River, Ohio, a Cleveland suburb. Brunner's first business, also called Personal Lawn Care, is in Baltimore; he returned to Ohio, his native state, to start another business, while someone else operates the Balitmore business.

"Cleveland has more people in the business and more competition. However, Baltimore has a lot of area and is a good opportunity area for a lawn care business to grow," Brunner says.

Another aspect that makes Baltimore's lawn care industry different from other areas is the city's lack of cut-throat competition, common in some areas. "There isn't much price cutting, no price wars and few underestimations of a lawn's square footage," says one lawn care businessmen agreed that the area is fairly free from unprofessional pricing practices.

Baltimore is an easy place to

grow grass as compared to Denver, where it is as easy to raise lawns as it is to cultivate the moon.

The city by the Chesapeake Bay has a good climate for growing a variety of grasses. As one lawn care businessman says, "Lord knows we've got it from fescues to bluegrasses to crabgrass to bermudagrass."

Bluegrass and fescues are the most common. Since the city rests on the grass transitional zone, bermudagrass, a southern grass, sometimes mixes with bluegrasses. When this occurs, lawn care businessmen treat the bermudagrass like a weed and try to remove it.

Matching the variety of lawns are numerous insect pests, including the Japanese beetle and chinch bug, which are the most troublesome. Lawn care businessmen use Dursban, Diazinon and Dylox to combat the insect pests.

To deal with disease problems, such as Fusarium blight, Helminthosporium, and dollar spot, the three most common, lawn care businessmen have opted for Tersan or in extreme cases reseeding.

Despite the insects and the diseases, lawn care businessmen say the area is a good place to raise grass, and they are optimistic about their businesses' futures.

They have good reasons to be optimistic. In fact, they have 31,-850 good reasons because that is the number of single-family homes projected to be constructed in the five-county metropolitan area in 1978, 1979 and 1980.

Although housing construction is expected to increase, it will fall far short of the record 26,360 units built in 1972. Housing projections are made by the Regional Planning Council, which serves the metropolitan area including Baltimore city

and Baltimore, Anne Arundel, Carroll, Harford and Howard counties.

Baltimore County is expected to lead the area in new housing building with one-third of the total. In rank order, the other areas for new construction are: Anne Arundel, Howard, Harford, and Carroll counties and Baltimore City.

What all this means for lawn care businessmen is a new crop of potential cusotmers, waiting to be harvested. Usually, though new construction does not immediately produce new

Carroll County

Baltimore County

Howard County

Anne Arundel

Home owners generally are do-it-yourselfers for the first three or four years after buying a new house and then decide to hire a lawn care company, observes one lawn care businessman.

When customers are ready to buy lawn services, they are generally in the \$15,000-a-year-and-up income category.

Lawn care businessmen are most likely to find customers in the higher income brackets in Howard County, where the median income is \$16,809, according to the Maryland Comptroller of the Treasury's 1976 statistics.

the Treasury's 1976 statistics.

The median income for other areas is \$14,386 Anne Arundel; \$14,222 Harford; \$13,892 Baltimore County; \$13,437 Carroll and \$10,059 Baltimore City.

What makes Baltimore an economically thriving and sound area is its diverse economy including steel manufacturing, government services, electronics and shipping. Baltimore harbor is one of the largest in the United States.

The harbor area, one of the oldest sections of the city, is an area of the city's renaissance. The area has been cleared of dilapidated warehouses and now is the site of a park, where many of the city's ethnic festivals are held.

The festivals are reminders of the city's ethnic past. Immigrants poured into Balitmore at the end of the 19th century, when the city started heavy industrialization.

The waves of immigrants have left their mark on the city to this day; Baltimore still has its Little Italy, Little Poland, Little Lithuania and other ethnic neighborhoods.

Even though the city maintains its ethnic character, its population is dwindling and surrounding suburbs are expanding. Since suburbs are the bread-and-butter of lawn care businessmen, the trend indicates an ever increasing market, as the Regional Planning Council statistics state.

Some lawn care businessmen indicated they are preparing to capture part of the expanding market with additional offices and employes.

ChemLawn Corp. this year split their metropolitan operation into two branches and is contemplating opening a third branch next year.

Harry Huber, H. F. Huber &

Harry Huber, H. F. Huber & Son, Inc., Baltimore, has been in the business for almost 25 years. His services have covered the full range of lawn maintenance, and now he's thinking of adding a spray truck.

Huber observes, "The market is expanding, and it is competitive. Basically, the additional companies have been in spraying



BALTIMORE

liquids. Out of these there are a lot that come and go."

The ones that remain in business credit their success to good services, and just as important, customer's acceptance of lawn care as a legitimate service.

Many lawn care businessmen credit the customer's acceptance to ChemLawn's promotion of the industry through mass media and professional image.

Just four years ago Chem-Lawn came to the area and is now the dominate company. Russ Holliday is branch manager of the company's western office.

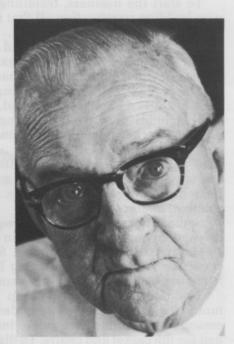


Bill Stanfill

The other branch, headed by Bill Stanfill, serves eastern Baltimore and Anne Arundel County. Both managers have prior experience in other company branches. Holliday worked in Cincinnati and the Washington, D.C. office, and Stanfill was in the Indianapolis, Ind. branch. Competitors estimate that ChemLawn has between 5,000 and 7,000 customers in the Baltimore area.

One of the oldest companies in the area is Maryland's Lawnkeeper, which started 15 years ago. The company had an unusual reason for getting into the field.

"We did it primarily to keep on drivers of our fuel oil trucks," says Hollis Albert, Jr., president



Hollis Albert, Sr.

of the company. Albert and his father, Hollis, Sr., were in the fuel oil business before they started Lawnkeeper. They still have a fuel oil business. They got the idea for forming the company from an agricultural chemical salesman who told them about liquid lawn spray applications.

Not only does the company use its fuel oil drivers as lawn technicians, they also convert the fuel oil trucks for chemical applications.

"It only takes about a half a day to convert the trucks for lawns and a half a day to convert them back to fuel oil," Albert says. The big advantages of having the two businesses is that "they scratch each other's backs," Lawnkeeper's president

"We've added customers to our fuel oil routes by doing their lawns and the other way around. By keeping drivers all year round, we've cut down on breaking new employes in. Because we don't have to hire seasonal help, we get better workers, and they treat the equipment better. Sure we have to pay them more in benefits, but it saves on wear and tear on the equipment. The drivers know the area, and they don't get lost. Having them yearround saves money because they won't spend half a day looking for two stops," he says.

Of his 25 workers, Albert employs six in the lawn care business. Lawnkeeper has eight trucks, six which are converted fuel oil trucks and two hydroseeders. About 95 percent of his 1,200 to 1,300 accounts are residential and most are in the north Baltimore area.

A former Maryland Lawnkeeper employe, Frank Stevens,



Frank Stevens

57, now has his own business, **Pro-Lawn-Plus**, **Inc.**, Baltimore. Stevens, who managed Lawn-keeper's operation for eight years, left the company because he wanted to start his own business.

"When you're my age, you look at starting your own

business very carefully. But I decided to open my own business because I was sure of its future," he says.

Stevens' experience prepared him for opening his own business. Besides his eight years with Lawnkeeper, Stevens was an agricultural chemical salesman. "That's how I first heard about lawn care. As a salesman, I wanted to find out everything possible about lawn care."

Just as important as his sales and managing background is Stevens' love for making things grow. The only sunlight window in his office is loaded with plants. Stevens started the business the first of this year and says with pride, "We've just crossed the \$100,000 mark in gross sales." He attributes part of his company's success to its varied services besides lawn care. Pro-Plus also offers tree and shrub spraying. "It is a big help to spray insecticides and disease control chemicals on trees and shrubs. We can do a more complete service.'

Pro-Plus has 270 customers and two trucks; 40 of its customers are nonresidential. The company employs nine persons, four are year-round workers.

While Stevens' sales and management background seems as a natural lead towards his owning his lawn care business, two Baltimore lawn men have backgrounds very different from lawn care. Nevertheless, they are in the business and happy with it.

Barry Levy, 28, owner of Lawn King of Lutherville, found that it is not all that far from Shakespeare to crabgrass control. A college graduate from the University of Maryland with an English degree, Levy decided to leave his English books on the shelf and push a green seeder.

After graduation, three years ago, he capitalized on a business



Baltimore is a city with a proud past and a bright future. The U.S. Constellation (left) is anchored in the harbor and is the oldest floating U.S. Navy ship. Hopkins Plaza (center) is a sign of the city's renaissance. It is part of the city's urban renewal project. From Mt. Vernon Square, the Baltimore's skyline shows a mixture of old churches and new buildings.

MONEYWISE

How to thaw winter cash flow problems from page 1

By charging a monthly rate, he guarantees a steady cash flow which is needed to meet overhead expenses. "Snowplowing isn't a gamble, it is a business. You shouldn't base your hours on whether it snows or not and how much it snows."

When Kujawa asks a customer about doing snow work, he offers a specific rate for doing various work. "We have specific rates for plowing, removal and salting. We don't have problems with the customer not understanding exactly what they should be getting."

A problem with doing snow work is lack of communication with workers. "To overcome this we use beepers, a device that beeps and is a way the person knows to call the office. Radios are not needed if the workers are going to be in one place."

Kujawa cautions against getting into the business, "It is extremely difficult to tell whether you made money because of the wear-and-tear on vehicles. We find it necessary because we can retain key employes."

Although some lawn care businessmen find snowplowing profitable, Tom Brune, Atwood Lawnspray Service, Sterling Heights, Mich., is one person who has had enough of it.

"I'll stand on street corners in Detroit and sell apples before I run a snowplow again," he says.

Brune got out of snow plowing after 25 years because he could not stand the constant complaining of customers. "You have plenty of griping in lawn spraying but not like the grip-

ing in snow plowing."

His migraines came from complaints by residents of the condominiums he served. "There was good money in it. However, at condominiums you have 200 or 300 customers, who all want this or that done a special way. It is like having

300 bosses."

Besides the complaining of customers, Brune says snow plowing takes a heavy toll on vehicles. Other lawn care men who snowplow agree with Brune saying the damage to truck transmissions, brakes, body, mirrors and clutches makes the part-time business a full-time problem.

Brune's final complaint about snowplowing is its bad effect on a family man's time at home. Because snowplowing means working odd night hours, it can cause troubles at home, he says.

To keep some key employes working this coming winter, Brune is offering the workers the snowplowing contracts that he handled. However, Brune will not supervise or plow snow.

What makes snowplowing attractive is that it is a relatively low investment business. Lawn care businessmen already have the vehicle and all that is needed is a plow.

However, the cost of a plow, mounting and hydraulic equipment may cost from \$1,000 to \$4,000 depending on the plow's size and weight.

Another business requiring a low investment to start off is . the insulation installing business.

Bill Carey, Jr., Lawn Masters, Inc., got into the insulation installing business a year-and-a-half-ago. "I got into the business to keep employes."

To start the business, installing only rolled insulation in new building construction all that is needed is a \$300 to \$400 investment in tools and insulation.

To get into a more technical end of the insulation business, blowing cellulose into walls of existing construction, about \$1,500 is needed to purchase the machine.

The biggest roadblock to starting an insulation business is the specialized knowledge needed, says Carey. His preparation includes four years of engineering at college and previous work in heater and air conditioner installation.

"You don't need all that education," he says with a laugh. "But you really need to work with someone who installs it and learn from them. It would be good to be hired as a helper for someone who does it full-time. Also, get to know you (insulation) dealers."

Some off-season businesses require a substantial capital investment but can be profitable in keeping workers.

Harry Huber, H. F. Huber & Son, Inc., Baltimore, Md., cares for 19 cemeteries offering lawn maintenance, shrub trimming, chemical applications and even grave digging.

The later service opened up another business opportunity for Huber. Huber provides complete graveside accessories for a funeral service, including canopy, lowering pad for the casket and chairs. To dig the graves, workers use a backhoe.

Huber admits it is a lot to purchase but the cemetery work helps maintain five of a 10-man summer workers.

Before getting into the cemetery service business, Huber advises that special insurance is needed.

Aside from the many business possibilities, the winter time is a good time for training employes. ChemLawn and Davey Lawnscape use the time to instruct employes in new lawn care techniques. Workers in the large companies also repair and maintain trucks and other equipment.

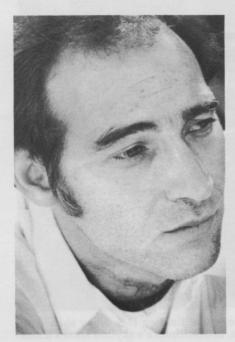
Many other smaller companies spend a portion of the winter getting mowers, sprayers, spreaders and aerators ready for the next season.

However, all business and no play can make the winters very dull. Many lawn care businessmen entered the business so they could take long vacations. Vacation places range from the mountains of Colorado to the warm waters in Florida.

Dick Keilt, Lawn Doctor of Lakewood, skis down the slopes of the Rockies, near Denver, where he operates his business. "That is a reason I left New Jersey to come here. I love winter vacations and skiing."

While Keilt prefers the cold winters in the Rockies, Barry Levy, Lawn King of Lutherville, Md., likes to pack up his family and spend a few warm weeks in Florida. —Mike Casey

opportunity that gave him his own business. "I saw an ad for buying an existing Lawn King franchise and decided to buy it." Levy's customer area is the northeast section of Baltimore and its suburbs.



Barry Levy

"I got into business because I like working outdoors. I had parttime summer jobs cutting grass and trimming shrubs. Also, I like the month-long vacations in the winter. It gives you time to be with your family and go places," he says. Lawn King services 350 residential accounts with one truck. It employs two seasonal workers.

Another lawn care businessman whose background is not related to lawn care, is Hassel Paige, Lawn Doctor of Howard County.

Prior to opening his lawn care operation this year, Paige handled the administrative paperwork for Air Force One, the president's jet. He earned 25 years of service with the Air Force before retiring.

"I grew up on a farm, and I've always been interested in making things grow. I like providing a service, which I can see results for my efforts," he says. Paige priced a few lawn care companies and decided to buy the Lawn Doctor franchise, which serves the rural area around his

present residence in Columbia. He has one truck and two part-



Hassel Paige

time workers for 75 customers, all but one customer is residential.

Harry Huber's experience in lawn care is impressive — 25 years. But what is even more impressive is that he is just 35 years

"When my father started the company, I was only 10 years old but helped him part-time. Now he has retired, and I run the business," Huber says. The company is H. F. Huber & Son, Inc., Baltimore. With a 10-man crew, the company services 110 accounts and 19 cemeteries. Huber provides a complete service including grass cutting, shrub trimming, landscaping, dry applications, liquid weed control and gardening.

Of the 10-man crew, five are full-time year-round workers. "What makes it possible for us to keep all year workers is our cemetery business and snow removal," Huber says. Huber provides service for cemeteries ranging in size from two to 10 acres. The cemeteries do not have full-time crews and hire him to maintain the grounds and

dig graves.

Another family lawn care business in Baltimore is the Lawn-A-Mat of Northeast Baltimore franchise. William Royer

started the business in 1965 and now his two grandsons, John and Bruce Kammer are in the businness also. Royer handles the office management, while Bruce takes care of sales and John does the lawn maintenance.

Bruce, 24, says, "We've been very fortunate in building our business. Our customers are very investment conscious. They realize that a good lawn helps improve the price of their homes." The company employs four persons and has 300 accounts.

Other persons in the lawn care business in the Baltimore area include: N & N Lawn Service, Baltimore; A to Z Lawn Service, Baltimore; A 1 Mowing Service, Baltimore; Briarwood Landscaping, Baltimore; Roberts Landscaping; Ellicott City; Professional Garden, Pikesville; Loudon Nurseries, Reisterstown, and Pro Lawn, Inc., Baltimore.

Area lawn care businessmen usually provide a four- or fiveapplication program, including fertilizers, weed control, insecticides, fungicides, seeding and lime. Lime is applied to help grass in soil with a pH of 5 to 6. The per application charge for the average lawn of 9,000 square feet is from \$29 to \$47 with most companies falling in the \$30 to \$35 range.

The photographs of Baltimore lawn care businessmen were taken by Jed Kirschbaum, a photographer in Baltimore.



Frank Stevens takes a phone call.



Hassel Paige pushes a spreader.



Hollis Albert, Sr., stands in front of a lawn spray truck which is also used



Barry Levy shows off his direct mailer, which urges customers to take fall service to rebuild lawns.



ChemLawn's Bill Stanfill stands in front of a company truck while it is

MARKETING IDEA FILE

Promoting your lawn care business

For one lawn care businessman it is a television commercial. For another it is a 30-second radio spot, aired during drive time. And for another it is a brochure hung on a potential customer's door knob.

They are all different ways Baltimore lawn care business-

men use to attract new customers.

"The most important thing to do is to define your market," says Barry Levy, Lawn King of Lutherville. "What you want to do is concentrate your efforts so it will give you the most results.

Levy has a franchise for a narrow part of the Baltimore area so he found that television advertising was not the best form. About 20 Lawn King franchises pooled their money to buy television time. The advertisements were supplied by the home office.

"The television ads were okay, but they hit too general of an audience — the Washington and Baltimore area. It is better to concentrate on a specific section," he says.

Besides the television spot, Levy has used direct mailings with a good deal of success because the mailings are targeted for an area in his franchise.

"For the money, the Yellow Pages probably pays off the best," Levy says. He advises that it is well worth it to have a good ad to draw attention.

The March 1978 issue of LAWN CARE advised businessmen to hire a professional graphics designer to get a good logo, which can be used in ads, stationery, etc. A professional looking logo draws attention.

Picking the correct medium for reaching customers may be a question of selecting the right newspaper, says Frank Stevens, Pro-Lawn-Plus, Inc., Baltimore.

'I found that many of my customers are Jewish, and I get good results by advertising in the Jewish Times, which circulates in the Baltimore area," he says.

Stevens uses the Baltimore Evening Sun with success. However, the Evening Sun would not do as much good for Hassel Paige, Lawn Doctor of Howard County, Columbia because his franchise is in a suburban area removed from Baltimore.

Although the Baltimore paper reaches a large audience,

the local weekly in Howard County is more likely to hit his prospective customers, Paige says.

Paige is starting his business this year and uses telephone solicitation combined with leafleting to drum up possible

Other lawn care businessmen say the telephoning is only a good practice when starting a business. After the first year, it is better to build customers around areas, where there are already customers.

By building a steady number of customers in one area driving time and traveling expenses are cut.

One way to build customers in a neighborhood already receiving service is to distribute literature in the area. This can be done in a leafletting campaign or by drivers who are working in the area.

After a driver has finished a lawn, Stevens' requests his service technicians to drop literature in homes nearby.

'Sure it takes time. But it is time well-spent," he says. It capitalizes on a number of advertising points.

First, the person receives the literature. They may have seen the lawn care company doing the work, and this will reinforce the message of the brochure. Finally, they may ask the neighbor, receiving the service, and get the best advertisement of all - the recommendation from a satisfied customer.

Other means of catching the buyer's attention include direct mailings and radio advertising.

Stevens inserts an advertisement in an envelop of coupons mailed to 10,000 persons in a target zone. He says it costs about \$335 and gets good results.

Another direct mail approach is using a list of past customers. Hollis Albert, Maryland's Lawnkeeper, says they mail to customers of one and two years ago. "People are funny, they'll skip a year and then come back.'

He also uses 30-second radio spots aired on a station with a \$15,000-plus income audience. Persons with that income are more likely to take the lawn care service than those below \$15,000.

The radio spots are on during the drive-time hours, 7 to 9 a.m. and 4 to 6 p.m., when it is most likely to catch the biggest audience.

Important with all advertising is the correct timing. Lawn care businessmen usually advertise in the late winter to attract prospective customers, and then again in the fall to get reseeding customers. Mike Casey

PRODUCTS

The latest in spray equipment: Tanks, pumps, hoses, guns, nozzles

Catalog offered on nozzles and accessories

Spraying Systems Co. offers a free, 34-page catalog outlining availability of its spray nozzles and accessories. Three of the



units are pictured here. Top: The 144-1 Directovalve — designed for remote "on-off" control of spray from operator's location; large internal flow chambers with no pilot hole reduce the chances of clogging, thus making it suitable for wettable powder applications.



Middle: The LP Teelet Flat Spray Tips — the tips assure uniform ground coverage by means of multiple nozzle boom spraying. Each tip produces a tapered edge spray pattern for uniform coverage where patterns overlap.

Bottom: The Type 112 SQ Double Hose Connection Vari-Spacing Nozzle — a complete unit consists of clamp, lock nut, TeeJet Vari-Spacing body, TeeJet cap, internal strainer and spray tip of your choice.



The complete catalog offers information on spray nozzle assemblies, spray tips, valves, spray guns, strainers and specialties.

Circle 217 on free information card

Lawn spray unit

The LawnFeeder, manufactured by Finn Equipment Co., sprays granular and liquid lawn care products. Slow-release,



water-insoluble and granular fertilizers can be incorporated into your program with our multiple applications to the lawn. The company will provide the spray unit, the spray unit and bed, or the spray unit and bed mounted on a truck.

Circle 218 on free information card

Three tanks in one unit

Ecor Spray Systems Division offers (top) a complete lawn spray truck equipped with a 25 gpm, 800 psi piston pump driven by a Kohler 16 hp electric-start



gas engine. This unit features a 1,000-gallon fiberglass tank with built-in enginepump canopy, molded one-piece fiberglass deck and skirting, 100-gallon fertilizer storage tank with five-gallon dispenser, and a separate 200-gallon mixing tank.



Also illustrated is the 1,200 gallon fiberglass tank with builtin equipment compartment and 100-gallon fertilizer storage tank. Tanks are available up to 1,430gallon capacities with the option of an enclosed equipment compartment fitted with locking doors. All tanks are equipped with large fiberglass hinged lids for good tank access and easier chemical pouring, full height and width baffles for safer driving conditions, and stainless steel stud plates for mounting (no need for straps, the company said). Tank construction is all hand lay-up lamination incorporating woven roving in alternate layers. A seven year warranty is included.

Circle 219 on free information card

Keep this information—you might need it in February

Maybe your first advertising of the year will bring in more customers than you expected. Maybe you will retain more of your customers than you did last year. Maybe you will get those two or three big industrial accounts that you have been working on. Maybe there will be a delay on getting the spray equipment you ordered from the manufac-

Or maybe all of these circumstances will hit late this winter or early spring. If they do, here is a partial listing of the manufacturers of spray equipment to write or call:

Torco Equipment Co. 207 Eiler St. Louisville, KY 40214 502-366-1415

FMC Corp. Agricultural Machinery Division 5601 E. Highland Dr. Jonesboro, AR 72401 501-935-1970

Master Sprayers, Inc. P.O. Box 1700 Ontario, CA 91762 714-627-7466

John Blue Co. 2800 Wallace Ave. Huntsville, AL 35805 205-536-5581 Ecor Spray Systems Div.

2820 Electronic Dr. Melbourne, FL 32935 305-254-0923

Delavan Corp P.O. Box 100 West Des Moines, IA 50265 515-274-1561

Hill's Liqui-System P.O. Box 1043 Victoria, TX 77901 512-575-3351

Power Spray Technology, Inc. Suite 8. Suite 8, Township Square Building Hook and Calcon Hook Roads Sharon Hill, PA 19079 215-461-6331

The Broyhill Co. North Market Square Dakota City, NE 68731 402-987-3412 Strong Enterprises, Inc.

Finn Equipment Co. P.O. Box 8068 Cincinnati, OH 45208 513-871-2529

Micron West, Inc. 8582 Katy Freeway Houston, TX 77024 713-932-1405

Hypro Division

Spraying Systems Co. North Avenue at Schn Wheaton, IL 60187 312-665-5000

Dountz Equipment Co. 1437 E. Fifth Ave. Columbus, OH 43219 614-253-7479

Consolidated Services 401 S. College St. Piqua, OH 45356 513-773-3109

Westheffer Co., Inc. P.O. Box 363 Lawrence, KS 66044 913-843-1633

Tuflex Mfg. Co. P.O. Box 13143 Port Everglades Station Fort Lauderdale, FL 33316 305-525-8815

Burgess Vibrocrafters, Inc. Route 83 Grayslake, II IL 60030 312-223-4821

H. D. Hudson Mfg. Co. 500 N. Michigan Ave. Chicago, IJ. 60611 312-644-2830

Raven Industries, Inc. P.O. Box 1007 Sioux Falls, SD 57101 605-336-2750

Essco Mfg. Co. P.O. Box 124 Amityville, NY 11701 516-799-7805

Hanson Equipment Co.

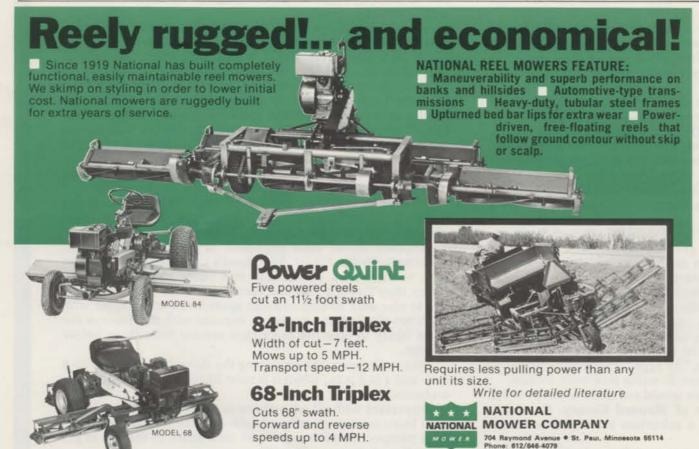
American Hose & Reel Co. P.O. Box 639 Marland, OK 74644

F. E. Myers Co.

Root-Lowell Mfg Corp. 1000 Foreman Rd. Lowell, MI 49331

Lakeshore Eqpt. & Supply Co.

Clifford B. Hannay & Son, Inc. Westerlo, NY 12193 Lawn Pride, Inc. 223 Big Run Rd. Lexington, KY 40503 606-277-1112



Broyhill offers catalog on spray equipment

The Broyhill Co. is offering a detailed booklet on its line of spraying and liquid application equipment, such as the Gunjet Spray Gun with rotating handle control pictured here. This unit



has a rotating handle which controls the flow from straight stream to varying cone spray to shut off in on full turn. Most guns are available in brass or aluminum construction and all are rated to 800 operating psi. The catalog features information on Broyhill's trailer sprayers, pickup sprayers, commercial sprayers, turf sprayers, lawn sprayers and parts and accessories.

Circle 210 on free information card

Large-volume units from 500 to 2000 gallons

Enterprises, Strong custom builds lawn care units to the customer's needs. They also



specialize building to the customer's own design. The company is also available for consultation if a company has a particular problem or special application needs. The units offer fiberglass tanks, stainless steel mechanical agitation, built-in storage boxes and many options.

Circle 211 on free information card

2,000 gallons a day

Hill's Liqui-System is a specialized unit for feeding, spraying and treating plants, trees and lawns. Protected





Inside of Hill's unit

storage provides varied supplies for a 2,000-gallon day's work. This unit sprays at 800 psi, fertilizes with standard corrosive fertilizers and pumps interchangeably from its 10 formula tanks. The patented two-pump injector and control system reduces by five the tank sizes and multiplies by five the speed of refilling.

Circle 212 on free information card



Lawn care units

Westheffer Turf Division now offers lawn spray units in various sizes for all kinds of lawn and ornamental spraying. They



will custom-build units such as the truck-mounted unit shown here, or the pickup truck unit for smaller work or for the lawn care businessman just starting out.

Circle 213 on free information card

Power sprayers catalog

Root-Lowell Corp. published an eight-page catalog outlining its power sprayers available to the lawn care industry. It offers power sprayers, booms and accessories, hose reels, spray guns and portable spray units.

Circle 214 on free information card

Truck-mounted lawn spray units

Lawn spray units manufactured by Dountz Equipment Co. are custom-designed to your



specifications, the company said. They feature steel or stainless steel tanks, various tank sizes to choose from, tanks mounted on truck frame for lower center of gravity, direct-mounted pumps for lower cost, pumps to meet your needs for soluble or nonsoluble chemicals, mechanical or pressure agitator systems, and power rewind reels.

Circle 215 on free information card

Small-job sprayer catalog available

H.D. Hudson Mfg. Co. offers a 24-page data catalog on its line of compression sprayers from one to four gallon capacities. Also featured trombone and hydragun sprayers, power sprayers up to 100 gallons capacity and backpack sprayers.

Circle 216 on free information card

HERE'S YOUR CHANCE TO CASH \$\$\$ PROFITS

by extending your season and expanding your services

OFFER YOUR CUSTOMER FALL DEEP-ROOT FEEDING OF TREES, EVERGREENS, SHRUBS AND PERENNIAL ORNAMENTALS.



INTRODUCTORY OFFER

AGRO CHEM'S POLY-JET ROOT FEEDER For use with watering hose. Automatically mixes & dilutes concentrated TES Root Feeding materials with water and properly iniects them into the root zones.

NEW FOR THE PROFESSIONAL: AGRO CHEM'S power sprayer injection root feeder.

FREE — Either root feeder with initial minimum order.

Free offer good through November 30, 1978, or as long as supplies last.

Note: Training seminars available in Oct., Nov., Dec., 1978; Jan., Feb., 1979.

For more information call Mr. C. Gregory collect (312-455-6900) or write.

Provide a truly professional service.

Help prevent some of the following:

- -Premature leaf drop
- Leaf discoloration, yellowing or chlorosis
- —Many broken branches after windy days
- -Leaves growing dwarflike & in clusters (Witches Broom-like)
- -Stunting or unnatural dwarfing
- —Lack of terminal growth
- —Die back, dying of branches
- —Inability to ward off and/or heal from insect, disease and/or adverse weather conditions.

Inadequate nutrition is frequently the basic cause for most of these problems.

Most perennial ornamentals are planted in undesirable soils and are forced to grow under unnatural conditions. This places a great deal of added stress upon these plants.

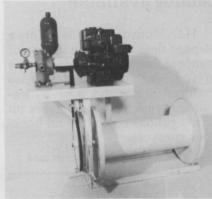
Now you can help your perennial plants overcome many of these problems and encourage them to become beautiful and healthy by: DEEP-ROOT FEEDING them this fall with AGRO CHEM'S TES, a complete TREE, EVER-GREEN, SHRUB & PERENNIAL ORNAMENTAL PLANT FOOD & SOIL REBUILDER. TES contains the primary nutrients (NPK), secondary nutrients and micro nutrients (sulfur, iron, copper, zinc & manganese) in the low salt and natural organic polyflavanoid forms that will provide a balanced diet of nutrients while rebuilding and reconditioning the soil. This unique formulation is a liquid slurry mixture containing both soluble and slowly available forms of nutrients. Available in 5-gallon pails.



PRODUCTS

Portable spray unit, truck-mounted units

Consolidated Services recently expanded its product line to include a new portable spray unit designed for the lawn care industry. The Model C-200 Self-Contained Portable Spray Unit (pictured) is designed so it can be mounted inside a step van, pickup truck or similar vehicle for easy transportation. The unit



hooks up to the customer's own tanks for a variety of custom spray applications. The hose reel has capacity for 400 feet of ½-inch inside-diamater hose. The reel features power rewind with solid steel shaft and belt drive. The C-200 was designed for dry fertilizer lawn care companies that spray liquid herbicides, fungicides or insecticides. It is adaptable for liquid fertilizer applications.

The company also offers two standard truck-mounted chemical spray body units. The Model CS-650 offers a 650-gallon tank, and the CS-1200 offers a 1,200-gallon tank. Both units can be built separately and mounted later on an appropriate customer vehicle, or the customer may order a complete new truck and body combination.

The tank agitators feature heavy-duty paddles and solid steel shaft with three non-corrosive, nylon bearings. The standard tanks are constructed of 10-gauge steel but several other

material options are available. All tanks are one-piece welded construction. Cam-lock fittings are available front and back providing for multiple use of the various optional pumps in dispensing, filling, or as an auxiliary agitation system. Mechanical agitation is standard with a sparge line option available on standard and custom units.

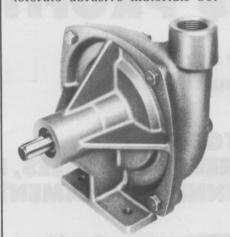
A labor-saving option available for all units is a nodrag hose reel. The reel features power rewind but with an easyout clutch that lets the hose unreel freely without pulling against the motor.

Circle 207 on free information card

Pump buyer's guide

Hypro, Division of Lear Siegler Corp., offers a free 48page pump buyer's guide outlining its complete line of pumps and spray equipment. Some units featured in the guide include the following:

Top: Series 9200 centrifugal pump — the units handle slurries and suspensions well and tolerate abrasive materials bet-



Hypro centrifugal pump

ter than other pump types. They have no valves to adjust and no rubbing surfaces to wear, except the shaft seals. Are most efficient at high speeds.

Series 5200 piston pumps — they have the volume and high pressure needed for efficient spraying operations; are built to



Hypro piston pump



Hypro roller pump



Hypro nylon line strainers



Hypro jet agitators

handle a wide range of suspensions and solutions, including wettable powder slurries, insecticides, oil and water; two available sizes are six and 10 gallons-per-minute.

Series 4001/4101 roller pumps

— these units are vane-type
pumps in which resilient rollers
replace flat sliding vanes; most

develop pressures up to 150 psi (pounds per square inch) and some models are capable of 300 psi. Also pictures are the company's nylon line strainers and jet agitators.

Circle 208 on free information card

High-pressure sprayers

A completely new line of hydraulic sprayers has been developed by FMC Corp., Agricultural Machinery Division. The series of sprayers



features a new pump and tank. The pump comes in 25- and 35gallons-per-minute models and features many innovations that have been incorporated into the new three-cylinder pump, the company said. Some of the features are a one-piece valve chamber for easy maintenance, stainless steel valves and nonwearing cylinders. The sight gauge, pressure gauge and large suction strainer are all mounted on the front panel, allowing the operator to check all functions with one glance. The sprayers feature 300-gallon hexagonally shaped fiberglass tanks that rest on channels welded into the boxtype frame. The sprayer is available in engine or PTO (power-take-off) models and is available with a trailer package. Optional equipment offered by FMC includes rollers attached to the frame of the sprayer for easy mounting or de-mounting in a pickup truck. Other accessories offered are hose, hose reels, guns and air blast attachments. The company also offers 10- and 20gallons-per-minute pumps in this new sprayer.

Circle 209 on free information card

REVEILLE





Now, big limestone & gypsum profits in a virtually dust-free pellet form.

Opens up a whole new market segment for your lawn care business . . . without the mess of dusty, uncontrolled spreader applications.
Economical, yet highly profitable.
Works with any type spreader, including broadcast.
Lets you increase customer service plus decrease your fertilizer costs.
Idea of slack periods because REVEILLE can be applied practically year 'round. Available in bag or bulk, both REVEILLE Limestone and Gypsum fit perfectly into liquid or dry lawn care operations.



Circle 102 on free information card

Fiberglass tanks

Tuflex Mfg. Co. offers fiberglass lawn spray tanks in sizes from 100 to 200 gallons to 1,200 gallons shown here. The smaller sizes are ideal for pickup truck mounting, the larger sizes for truck-mounting. The company specializes in seamless tanks. The units carry a five-year



100-gallon tank

warranty. The spray tanks feature Hypro, bean or Myers

Circle 201 on free information card

Delavan offers parts to lawn care industry

Delavan Mfg. Co. supplies component parts to the lawn care industry such as the three units pictured here: The Turbo 90 pump used for tank agitation, the Delavan Raindrop Nozzle which offers a drift reduction cone spray in stainless steel and nylon; and the Delavan hydraulic-driven centrifugal pump suitable for lawn care operations.

Top left: Turbo 90 pump. Top right: Centrifugal pump. Bottom: Raindrop nozzle.

Circle 204 on free information card

Spinning-disc sprayers require little water

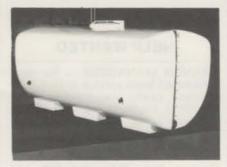
Earlier this year, Micron West introduced its Herbi spinning disc sprayer. It is lightweight, hand-held and batteryoperated. The unit incorporates the principle of applying herbicides, insecticides and fungicides at ultra-low volume, using the technique of controlled droplet application. The unit insures even droplets, in an even disbursement of over 60 droplets per square inch for maximum spraying efficiency. It eliminates the necessity for burdensome amounts of water and allows a small amount of spray mixture to thoroughly treat a large area.

42-gpm spray pump

After seven years in development and extensive testing, John Blue Co. has announced a new spray pump. The S-660 Super Blue Hy-Line Spray Pump is a three-cylinder, double-acting pump that delivers 42 gallonsper-minute at up to 500 psi (pounds per square inch) at 750 rpm (revolutions per minute). It can be driven in either direction from either side and requires only 16 horsepower at full pressure and output. The unit is the lightest pump for its performance available, the company said, weighing only 142 pounds.



200-gallon tank



1,200-gallon tank

Knapsack sprayer

Burgess Vibrocrafters, Inc. offers a 4-1/3 gallon knapsack sprayer for professional spraying on small jobs. It features an adjustable spray pattern, fine-mesh, easy-clean filler strainer, adjustable padded shoulder straps, low center of gravity and concave curvature for wearer comfort.

Circle 202 on free information card

Switch from one pesticide to another

The "Silver Skunk," manufactured by Power Spray Technology, Inc. is a portable, high-pressure pesticide sprayer featuring the exclusive Micro-Injection System. It can be used with a garden hose or tank. It measures the gallonage used, injects precise amounts of concentrate directly into the high pressure flow. It can be easily



calibrated when switching from one concentrate to another. The concentrate does not touch the piston pump. It operates on 110 volts a.c. at 125 psi. It complies with all Environmental Protection Agency regulations. Comes complete with 100 feet of highpressure hose, spray wands, nozzles, adapters and a 90-day warranty.

Circle 203 on free information card

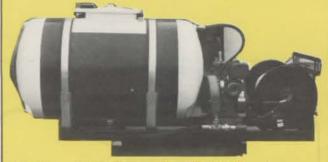




1250 Gal. capacity with 20-20 Bean turf pump TS-1250

TORCO features:

- · Designed & built to outlast second chassis.
- Low profile stainless steel tanks. Mechanical agitation — 7 paddles. 4 bearings.
- Jet sweep eliminates tank settlings.
- Easy access for pump and filter service. PTO driven only two belts involved.
- Calibrated sight gauge 18" leak-proof hatch.
- Unique heavy-duty, electric driven reel
- Light weight hose free wheeling pull-out.
 - Metered gun with unique TORCO nozzle.



TF-300 300 Gal. capacity with 10-10 Bean turf pump Skid mounted for 3/4 ton pick-up. Same TORCO features as TS-1250. (Selfcontained engine.)

Build your profit for next year order now for early delivery. Price protection on all orders received before Dec. 15.

TORCO's quality design and service record leads the lawn care industry. Longer, maintenance-free equipment life means less down time, MORE PROFIT for you.

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

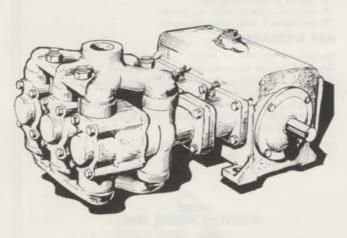
EQUIPMENT 207 Eiler Ave. COMPANY Louisville, Ky. 40214

Distributors of Asplundh aerial baskets and chippers. RO digger-derricks, utility bodies, and fabricators of special allied equipment





Circle 205 on free information card



Circle 206 on free information card

BEHIND THIS ISSUE



Last month, we printed the results of a survey we did this summer where consumers rated reputation and recommendation most important and advertising least important of the factors they considered when hiring a lawn care company.

Well, our Midwest marketing/sales manager Joe Guarise took

issue with the survey, and he has some good points. He says . . . but why not let him tell you

He wrote: "First, how does a lawn care company earn a reputation, or more simply, get the first customers and enough customers to build a reputation and earn a recommendation? The new lawn care businessman must use advertising to let potential customers know he is open for business.

"Second, the lawn care industry is very young, and at this point creating a consumer need for its service. How can a homeowner possibly consider price or appearance of the workers if he does not believe he needs the service in the first place?

"Third, I feel your survey was shaded by the fact that the word 'advertising' implies subjective, impulsive choices to the homeowner, who feels he is capable of making an objective buying decision on his own without advertising. How else did you expect them

"I hope the smart lawn care businessman is not overinfluenced by this survey and stops his advertising. It is his most efficient way of telling his potential lawn care customer what services he has to offer.'

Thanks, Joe.

Rob Garley

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,

HELP WANTED

BRANCH MANAGERS - National automated lawn service in franchise market seeks experienced individual to start and head up ocmpany areas. Tremendous growth potential for one presently with liquid spray management experience. send confidential resume to Lawn Doctor, Inc., P.O. Box 525, 142 Highway 34, Matawan, New Jersey

MANAGER OF NEW LAWN CARE **DIVISION** — Established Houston, Texas commercial grounds maintenance firm seeks experienced individual to start and operate a home lawn care division in this rapidly expanding market. The right person will receive excellent starting salary and company benefits with profit sharing potential. Send resume to Environmental, 7544 Harwin Drive, Houston, Texas 77036. 713 784-1750.

QUALITY TREE and Pest Control, Inc., is looking for one expert lawn technican. Pay is negotiable if you are an expert, you will work your way up our ladder quickly. Send letter of qualification and experience to: Quality Tree and Pest Control, Inc., 3002 Manzano N.E., Albuquerque, New Mexico 87110.

MANUFACTURERS REPRESENTA-

TIVE for Southeast turf grass sales. National Turf seed company seeking sales persons to sell quality turf seed to professional turf markets, golf courses, etc. Territories available. Please send resume and complete details to: Box Lawn Care Industry, Box 6951, Cleveland, Ohio 44101.

FOR SALE

FOR SALE: 1978 Finn lawnfeeder mounted on 1978 GMC 17,500 GVW truck, 2800 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 SPRAY TANKERS. 2 — 1977, excellent condition, 1500 gallon Loadstar International completely equipped with hose reels and 300 ft. of delivery hose. 313 362-4301.

DEALERS WANTED

MOW LARGE LAWNS FAST. New flexible hitch connects second mower to tractor mower. Free information. Carson's Inc., Faxon, Oklahoma 73540.

FLOWER BULBS

FLOWER BULB SPECIAL. King Alfred famous golden yellow daffodils, naturalizing fixture, all colors and varieties, per bushel, \$28.00; 4 or and varieties, per bushel, \$28.00; 4 or more \$25.00 per bushel; 100, \$7.00; 1000, \$60.00. Tulips no. 1 size (11-12 cm) imported, red, yellow, pink, blue or mixed, 100, \$11.00; 1000, \$85.00. Hyacinth, white, blue pink (15-16 cm), 100, \$17.00; 1000, \$160.00. Grocus (8-cm up) mixture, all colors Crocus (8-cm up) mixture, all colors, 250, \$10.00. Grape hyacinth, blue, 250, \$10.00. Above two items per 1000, \$35.00. All bulbs blooming size. U.S.D.A. inspected stock. Ship by truckline or U.P.S. Add 15% for packing and prepaid delivery. Send check with order. The Terra Ceia Farms, Wholesale Growers, R2, Box 167, Pantego, North Carolina 27860. 919 943-2865.

USED EQUIPMENT

LAWN SPRAY TRUCKS: 1978 I.H. 24,000 GVW, 15,000 miles, \$10,500. 1977 Ford F-750 24,000 GVW, 14,000 miles, \$11,500. Both fully equipped with 1500 gallon epoxy lined steel tanks, stainless steel mechanical agitation, PTO driven Bean pump, hose, reel and gun. Please call 312

LAWN SPRAY TANKERS. 2— 1977 excellent condition 1500 gallon Lodestar International, completely equipped with 2 hose reels and 300 ft. of delivery hose. Phone 313 362-

EQUIPMENT FOR SALE

LIQUID LAWN CARE EQUIP-MENT. 3-1300 gallon tank trucks complete. 1974, 75, 76 GMC new pumps. Ready to make \$. Will sacrifice, trades considered. Cleveland, Ohio. 216 255-3131.

ADVEDTICEDS

ABVEILLE	
Agro-Chem	22, 26
American Pelletizing Corp.	
Consolidated Services	
Dountz Equipment Co	
Essco Mfg. Co	26
GCSAA	
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NEXT MONTH

The November issue of LAWN CARE IN-DUSTRY will feature a report on the "Lawn Care Top 50," and fertilizers available to the lawn care businessman.

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