

Growth regulators may need more lawn testing

Growth regulators may need more field-testing before they can be fit into a standardized lawn care program, according to results from a Louisville, Kentucky-based lawn care business that sprayed 500 customer lawns earlier this year with a growth regulator.

Gary McCormick, agronomist for Green-Lawn, Inc., told the more than 200 persons at the recent Kentucky Turfgrass Conference of the problems his company had when they added a growth regulator in their May application.

"We got hit with a drought, and that, coupled with the use of the growth regulator, allowed the weeds to get a foothold in the lawns," he said. He said that the customers were initially informed of the growth regulator application and were enthusiastic. But after the application was completed, only about 10 percent of the customers were satisfied.

Another problem was that many of the lawns Green-Lawn handles in the Louisville area are a mix of bluegrass and fescue, and that the growth regulator did not retard growth

for both types of grasses at the same rate.

McCormick said that perhaps if the lawns had been watered regularly, the growth regulator might have had more success.

Also on the Kentucky program was Dr. John Matteson, of 3M Co., St. Paul, Minn., manufacturers of Embark 2S growth regulator. He said that the product might have better results were it applied earlier in the season, when lawn conditions are cool and moist.

Bud Shaber, Embark marketing manager, told LAWN CARE INDUSTRY that the product's primary uses now are on golf course roughs, cemeteries and rights-of-ways. He said further testing is necessary before the product is available on a large scale to the lawn care industry.

Rollins' Franklin to headline ALCA Symposium

Floyd Franklin, president of Atlanta-based Rollins Lawn Care, will be one of the main speakers at the annual Maintenance Symposium Nov. 29 to Dec. 1 in San Jose, Calif., sponsored by the Associated Landscape Contractors of America.

Rollins will headline the Thursday sessions of the event, devoted to "Chemicals in Landscaping." The morning sessions on that day will deal with chemical application for the lawn care industry, the afternoon program will feature a "hands on" program of demonstrations of proper equipment procedures. Franklin's dinner talk will carry

the theme further into practical corporate applications.

Registrations are still being taken, and further information is available from John Shaw, ALCA, 1750 Old Meadow Road, McLean, Va. 22102. Or call 703-893-5440. The three-day event

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EDUCATION

ChemLawn, OSU to hold turf disease symposium

Leading turfgrass disease specialists from the United States and Canada have agreed to participate in a special symposium on turfgrass disease to be held May 15-17 at the University Holiday Inn in Columbus, Ohio.

The symposium is sponsored by Ohio State University, the Ohio Agricultural Research and Development Center and Chem-Lawn Corp., Columbus.

The event is open to all lawn care businessmen and other turf managers from around the country.

For further information write: "A Symposium of Turfgrass Disease 1979," 2865 East Orange Road, Galena, Ohio 43021. Or call Dr. P.O. Larsen at 614-422-6987, or Dr. B.G. Joyner at 614-885-9588.

SUPPLIERS

Lakeshore opens sulfur-coated fertilizer plant

The first commercial plant in the world to produce slow-release, sulfur-coated fertilizers began operations under the direction of Ag Industries Mfg. Corp. (AIM) in Columbia, Ala. last month.

The AIM plant is sulfur-coating urea, a water-soluble nitrogen fertilizer compound, along with phosphorus and potash to produce a complete fertilizer.

The AIM corporation is wholly owned by Lakeshore Equipment & Supply Co., Elyria, Ohio, a supplier to the industry.

The company said the sulfur coating slows the dissolution of the fertilizer in the soil, making the fertilizer last longer, reducing the number of applications required and producing more even plant growth. Many lawn care businessmen across the country use some sulfur-coated urea fertilizers in their lawn care programs, and others are considering the fertilizers.

The AIM corporation is licensed by the Tennessee Valley Authority (TVA) to use methods developed by TVA at its

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EXPENDITURES

Average business spends \$8,500 yearly on lawn care fertilizers

The average lawn care businessman spends \$8,500 yearly on fertilizer purchases, a recent survey conducted by LAWN CARE INDUSTRY shows.

The same survey pegs average yearly expenditures for herbicides at \$2,330; for insecticides at \$3,406; for fungicides at \$2,680; and for seed at \$2,790.

Lawn care businessmen in the survey were also asked in which months they bought fertilizer, pesticides and equipment. They were asked to rank the first, second and third most important buying months.

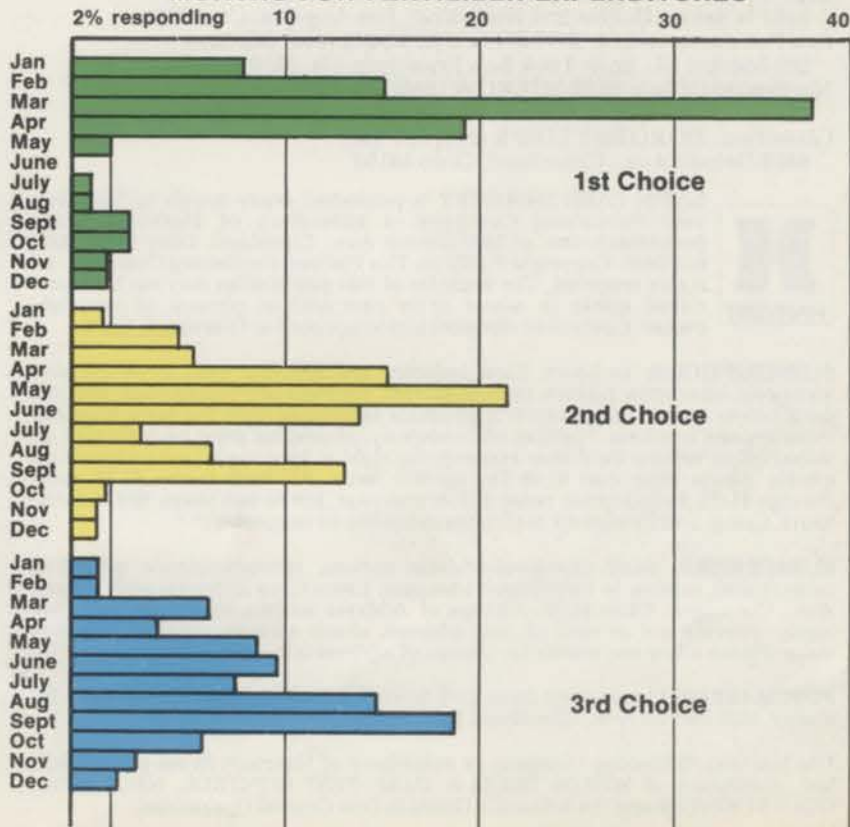
As the accompanying graph shows for fertilizer expendi-

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MONTHS FOR FERTILIZER EXPENDITURES



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re industry in Phila- part of a continuing where the lawn care of the city, potential operate there and how

LAKESHORE from page 1

National Fertilizer Development Center in Muscle Shoals, Ala. to produce the sulfur-coated fertilizers.

A similar facility in Willowdale, Ontario in Canada is owned by Canadian Industries, Ltd., and coats urea. It also supplies the lawn care industry and other turf managers in the United States.

Ronald A. Smith is the chief operating officer and project manager for AIM.

Lakeshore spokesmen said that agronomic testing by TVA and numerous universities across the nation has proven sulfur-coated urea to be an excellent fertilizer for lawns and other turfgrasses.

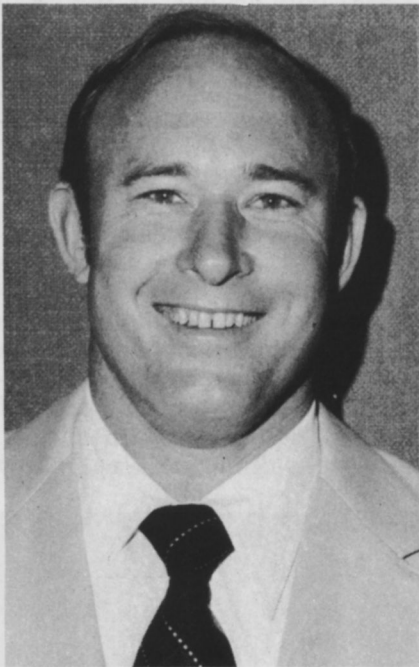
When compared with a single application of soluble fertilizer, sulfur-coated urea gave less growth immediately following fertilization, but better growth throughout the lawn care season, without excessive need for mowing and with minimal fertilizer burn. In three-year studies, it produced more uniform seasonal bermudagrass growth than a single or split application of soluble sources of nitrogen.

Lakeshore spokesmen also said that sulfur-coated urea has been shown to be an economically priced slow-release fertilizer compared with other products on the market. They note that some slow-release fertilizers currently available to the lawn care businessmen cost two to three times as much as conventional nitrogen fertilizer.

ALCA from page 1

will be held at the San Jose Hyatt House.

Session topics and speakers for the "Chemical Day" include: "The Right Chemicals for the Right Job," Dave Hanson of the University of California exten-



Franklin

sion department; "Problems To Avoid When Applying Horticultural Chemicals," Doug Hamilton, also of the University of California; "Cutting Labor Costs With Growth Retardants," Bruce Wilson, Green Valley Landscaping; and "Chemicals and Chemical Application," a series of short presentations by representatives of leading manu-

facture materials. Herman Carruth, AAA Lawn Industries, Atlanta, will chair the day's sessions.

The first day of the event will be devoted to first-hand explorations of specific maintenance projects. All of the projects to be outlined were recipients of the 1978 ALCA Environmental Improvement Award.

The final day of the program

will be a full day of business management sessions, tailored specifically for the landscape maintenance contractor. Topics include: "Trends in Market Segmentation and Service Proliferation," "Managing Time and Territory," "Getting Customer Communication," "Planning the Sales Call," "Closing the Sale," "Selling With Visuals," and "Providing Customer Service."

MEMOS

Franchising vs. government: "Franchising may well suffer its demise through government intervention," International Franchise Association representatives told a U.S. House of Representatives subcommittee at a hearing recently in Washington. Government interference is, according to testimony, "the single largest threat facing businesses which franchise. If franchising is to continue its recent growth rates, it can only do so in an atmosphere conducive to responsible franchising."

The spokesmen told the subcommittee that franchising is becoming subject to more and more governmental intervention on both the federal and state level. The Mikva Bill, state disclosure and registration laws, the proposed Federal Trade Commission Trade Regulation Rule on Franchising, and action of three federal agencies: The Internal Revenue Service, the Labor Department and the Equal Opportunity Commission were cited as most immediate threats.

The number of franchise lawn care companies is growing every day with new entries into the marketplace. Prominent names include Lawn Doctor, Matawan, N.J.; Lawn-A-Mat, Mineola, N.Y.; Lawn King, Fairfield, N.J.; Spray-A-Lawn, Cincinnati, Ohio; A-Perm-o-Green Lawns, Inc., Austin, Texas; Perf-A-Lawn Corp., New Carlisle, Ohio; and many others. At present, Lawn King president Joe Sandler is facing two concurrent six-month jail terms in New Jersey for alleged violations of anti-trust laws. The convictions are under appeal.

Seed quality determined by fluorescence: The movement toward the use of fine-leaved perennial ryegrass in turf has been dramatic in the past five years. The turf-type ryegrasses have proven to be more wear-tolerant in sports turf and have spread to home lawns as dark green color is bred into some of the new varieties.

According to spokesmen for Turf-Seed, Inc., Hubbard, Ore., quality control has been a problem for growers and marketers of turf-type ryegrasses. The only true test to determine whether ryegrass seed is annual or perennial is to germinate the seeds and place the seedlings under black light. The roots of the annual plant will fluoresce while the roots of the perennial plant will not. This unique test makes it possible to establish quality control in the production of both perennial and annual ryegrasses.

The Lawn Seed Commission of the American Seed Trade Association has appointed a committee to study the possibility of broadening standards so that companies would have to print the percentage of fluorescence on the purity tag for any purchaser to see. Only a few companies are doing this now.

Bulk mail: Size restrictions have been lifted for third-class bulk mail. It is no longer necessary to send identical pieces in order to qualify for beneficial third-class bulk mail rates, the American Association of Nurserymen reports.

Overtime objections: According to the *Wall Street Journal*, a limited survey of major companies indicated that many workers object when promotions to supervisory roles mean loss of overtime. A third of Burlington Northern Inc.'s supervisors return eventually to wage-earner status. A group of New York City engineering supervisors recently sought "demotions" to lower job titles because of this.

The main reason for these and similar developments elsewhere, officials say, is a desire to make more money through overtime.

The same problem can crop up for large lawn care companies when lawn technicians can pile up healthy overtime during the busy summer months, and sometimes take home more in their paycheck than their branch manager bosses. Irvin Dickson, regional manager for the Commercial Division of ChemLawn Corp., Atlanta, said earlier this year that most ChemLawn branch managers are willing to forego short-term wage losses because of long-range career goals with the company. He was speaking on a lawn care panel at the annual meeting of the Associated Landscape Contractors of America in Orlando, Fla.

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Million-dollar companies: ChemLawn, Lawn Doctor, Ever-Green head list

At least 22 chemical lawn care companies grossed more than \$1 million dollars last year, the majority of them chain operations.

At least another 16 chemical lawn care companies grossed just under \$1 million dollars, many of which may go over the million dollar mark when 1978 gross receipts are in.

The survey is based on questionnaires filled out by many of the companies, estimates by lawn care businessmen across the country, and estimates by the editors and marketing staff of LAWN CARE INDUSTRY. The list is not comprehensive, but does include most of the major chemical lawn

care companies in the United States.

ChemLawn Corp., Columbus, Ohio heads the list. It grossed \$48.9 million last year, has about 90 branches in 28 states and Canada and employs more than 1,500 persons.

Lawn Doctor, Matawan, N.J., has about 200 franchise outlets employing 1,200 persons. Gross sales were estimated by the company at more than \$12 million on service to 90,000 customers.

Lawn Medic, Inc., Rochester, N.Y. has 123 franchise outlets employing 291 persons. Gross sales were \$6.14 million on service to more than 40,000 customers.

Green-Lawn, Inc., Louisville, Ky. has 13 branches and employs 147 persons. Gross sales were more than \$6 million on service to 57,000 customers.

R.W. Collins, Inc., Indian Harbour Beach, Fla. has 16 branches and employs 120 persons. The company estimates gross sales were \$2.7 million on service to more than 20,000 customers.

Hydro Lawn, Gaithersburg, Md. has two branches and employs 34 persons. The company estimates gross sales were \$1.5 million on service to more than 20,000 customers.

Easy Lawn Co., Kettering, Ohio has six branches and employs 30 persons. The company estimates gross sales were \$1.1 million on service to more than 13,000 customers.

In the following listings, (C) represents a chain operation with offices in more than one

city, (F) represents a franchise operation, and (I) represents independent companies operating for all practical purposes in one metropolitan area. The companies are not listed in ranking order. The companies represented here will gross in excess of an estimated \$150 million this year.

Gross sales of \$1 million or more

- ChemLawn Corp.** (C)
Columbus, Ohio
- Lawn Doctor** (F)
Matawan, New Jersey
- Ever-Green Lawns Corp.** (C)
St. Louis, Missouri
- Lawn-A-Mat** (F)
Mineola, New York
- Lawn Medic, Inc.** (F)
Rochester, New York
- Green-Lawn, Inc.** (C)
Louisville, Kentucky
- Liqui Green Lawn Care Corp.** (C)
Peoria, Illinois
- Perf-A-Lawn Corp.** (C,F)
New Carlisle, Ohio
- Sears Lawn & Leaf** (C)
Wheeling, Illinois
- Davey Lawnscape Service** (C)
Kent, Ohio
- R.W. Collins, Inc.** (C)
Indian Harbour Beach, Florida
- Lawn King, Inc.** (F)
Fairfield, New Jersey
- Hydro Lawn** (C)
Gaithersburg, Maryland
- Easy Lawn Co.** (C)
Kettering, Ohio
- Rollins Lawn Care** (C)
Atlanta, Georgia
- Keystone Lawn Spray** (I)
Wayne, Pennsylvania
- Leisure Lawn, Inc.** (C)
Dayton, Ohio
- Tru-Green Corp.** (C)
East Lansing, Michigan
- Lawnrite Corp.** (I)
Bohemia, New York
- Chem-Trol, Inc.** (I)
Kansas City, Kansas
- Cunningham Oil Co.** (I)
Holly Hill, Florida
- Walker Industries, Inc.** (I)
Houston, Texas

Gross sales of \$500,000 to \$1 million

- Shur-Lawn Co.** (I)
Omaha, Nebraska
- A-1 Spray Service** (I)
Tacoma, Washington
- Techniturf, Inc.** (I)
South Berlin, Massachusetts
- Lawnco, Inc.** (I)
Brooklyn Heights, Ohio
- Superlawns, Inc.** (I)
Rockville, Maryland
- Abate-A-Weed** (I)
Bakersfield, California
- Wagenschutz Lawn Spraying** (I)
Plymouth, Michigan
- Excelawn Corp. of America** (C)
Louisville, Kentucky
- A-Perm-O-Green Lawns, Inc.** (F)
Austin, Texas
- Greenlon, Inc.** (I)
Cincinnati, Ohio
- Spring-Green Lawn Care Corp.** (F)
Naperville, Illinois
- Green Lawn Fertilizer Corp.** (I)
Kansas City, Missouri
- Keesen Enterprises, Inc.** (I)
Englewood, Colorado
- Atkins Grounds & Lawn Care** (I)
Columbia, Missouri
- Chemical Applicators** (I)
Pearland, Texas
- Tempo 21, Inc.** (I)
Wheeling, Illinois

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NEWSMAKERS

The fertilizer operation for **The Andersons**, Toledo, Ohio has been reorganized. The former Plant Food Division has been divided into two divisions — the Agricultural Fertilizer Division and the Lawn Fertilizer Division. Ronald A. Meier will manage the Lawn Fertilizer Division.

Dr. Roger Funk has been appointed director of research for Davey Tree Expert Co. and **Davey Lawnscape**, Kent, Ohio. He will be responsible for all activities at the Davey Horticultural Institute.

William Lowry, formerly New England district manager for **Gravely**, Clemmons, N.C., has been promoted to manager of distribution development and training, according to Rick Murray, national sales manager. Murray also announced the appointment of three new district managers. Dale Mloch will operate in the Michigan and northern Ohio areas. Jack Talin will handle the New England states. Gene Cowan will handle Kentucky, southern Ohio and West Virginia.



Thomas



Lowry

Gary Thomas has been appointed vice president and general manager of the **B. Hayman Co.**, according to a recent announcement by company president C. R. McMicken. According to McMicken, Thomas will serve as principal executive assistant in the management of the company, which is one of the oldest and largest distributors of turf maintenance equipment in the West.

Toro Co., Minneapolis, recently announced a number of appointments. James R. Bostic has been named vice president and general manager of the company's Outdoor Appliance Division. David L. Mona has been named vice president of communications. Receiving internal promotions to vice president are Richard J. Hargarten, the company's director of physical distribution and administration for the Outdoor Power Equipment Group, and J. David McIntosh, director of human resources. Also, Gary R. Holland has been given increased responsibilities as vice president and general manager of the International Division.

Aquatrols Corp. of America has appointed Loewy Stempel Zabin, Inc. to handle all advertising and sales promotion. An aggressive multi-media print campaign is planned, the company said.

Dr. William E. Knoop has been named area turfgrass specialist for the **Texas Agricultural Extension Service**, based in Dallas. He will be working with lawn care businessmen in that state. He formerly held a similar position at **Iowa State**

University, and also previously had been director of education of the **Golf Course Superintendents Association of America**.

Robert W. Reid, Jr. has become manager, **Lawn-Boy Product Group**, Galesburg, Ill. formalizing the product line marketing management reorganization of the Outboard Marine Corp., Waukegan, Ill.

Richard Hurley, research director at **Lofts Pedigreed Seed, Inc.**, has been awarded his certification as professional agronomist by the American Registry of Certified Professionals. This registry was organized by the **American Society of Agronomy** about a year ago. Certification requirements are strict and necessitate extensive educational and practical backgrounds for those hoping to become certified.

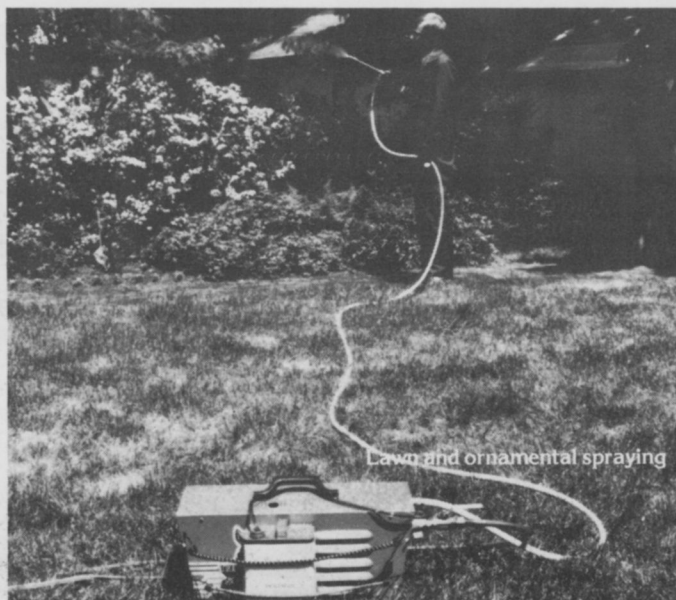


Jacobsen's Depew (left) and McPherson (right); B. Hayman's McMicken (center).

The **Jacobsen Div.** of **Textron, Inc.**, Racine, Wis. has presented its 1977 turf equipment volume award to **B. Hayman Co.** Jacobsen president Frank Depew and vice president and general manager of turf products

Howard McPherson presented the annual award to B. Hayman president Ray McMicken. The company has four locations in Santa Fe Springs, San Diego and Palm Springs, Calif., and Honolulu

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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, 301-652-6270.

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, Un-

iversity 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.

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 3R6, 416-767-2550.

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

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FERTILIZER: AN LCI REPORT

In this series of articles, Dr. David Martin of Ohio State University discusses the basics, Dr. Al Turgeon of the University of Illinois discusses the relationship between thatch and fertiliza-

tion, and Dr. John Hall of Virginia Polytechnic Institute discusses slow-release fertilizers and the concept of fall fertilization. Comments from fertilizer manufacturers begin on page 10.



Martin

Turgeon

Hall

OSU's Martin: N, P and K ratios most important in a good program

A fertilization program for any single lawn or lawns in a particular area with similar conditions is based, simply, on the proper ratio of the basic nutrients nitrogen, phosphorus and potassium.

Ohio State turf professor Dr. David P. Martin says that the fertilizer label must state the percentage by weight of nitrogen, phosphorus and potassium in that order. A 20-10-10 fertilizer has the mineral elements in the ratio of two parts nitrogen, one part of phosphorus and one part of potassium (2-1-1); so does a 10-5-5.

The difference is that weight for weight, the 10-5-5 contains one-half as much fertilizer value as the 20-10-10 and twice as much fertilizer value as the 20-10-10, and twice as much would have to be used for the same results in any lawn care fertilization program.

For example, Dr. Martin said that a 100-pound bag of 10-5-5 fertilizer contains 10 pounds of actual nitrogen (100 pounds x 10 percent nitrogen = 10 pounds), five pounds of actual phosphorus (100 pounds x five percent phosphorus = five pounds), and five pounds of actual potassium (100 pounds x five percent potassium = five pounds). The amount of nutrients in any other fertilizer can be determined in the same way.

Generally, a 3-1-2 or a 3-3-3 ratio is considered best for use on Ohio and other Midwest lawns, according to Dr. Martin. The ratio need not be exactly a 3-1-2 or 3-1-1. For example, a 20-8-8 analysis approaches a 3-1-1 ratio and a 10-3-7 grade is close to a 3-1-2 ratio. Substitutions of this kind can be made without concern.

Types of nitrogen. How do you choose between products with the same nutrient content? The big choice, according to Dr. Martin, is between fast and slow release of the nitrogen fraction.

The percentage of the total nitrogen that is water-insoluble and that which is water-soluble usually is listed on the fertilizer bag, or on the literature your supplier provides.

In water-soluble form the nitrogen is available quickly, and in the water-insoluble form it is available slowly.

He says that a good lawn fertilizer contains some of each kind of nitrogen. The slow-release portion provides nitrogen over a period of time, but it is not available to the plant during cool weather. The water-soluble fraction — or fast-release — will provide nitrogen almost immediately after application and during cool weather. He suggests something approaching

50 percent water-soluble and 50 percent water-insoluble.

Fertilizer programs. For improved bluegrass lawns, such as Merion and Windsor, and bentgrass lawns, he suggests application of two pounds of actual nitrogen per 1,000 square feet of area be applied during the first two weeks of September in Ohio and similar areas. He suggests a complete fertilizer of a 3-1-1 or 3-1-2 ratio or equivalent.

Examples of fertilizer to supply this amount are 20 pounds of 10-5-5, 10-3-7 or 10-6-4; 10 pounds of 20-10-10 or 20-8-8 and others. He suggests application of one pound of the same fertilizer in May, June and July.

For common Kentucky bluegrass customer lawns, he suggests the same program, with elimination of the June application. For red and tall fescue lawns, he suggests that one pound of actual nitrogen per 1,000 square feet in a complete fertilizer of a 3-1-1 or 3-1-2 ratio or equivalent be applied, with a repetition of this application in June.

Fertilizer burn. Any fertilizer

may burn the turf if improperly applied. Fast-release nitrogen is more likely to burn than slow-release forms, he said. To avoid burn:

- Do not apply more than two pounds of actual nitrogen per 1,000 square feet at any one time.
- Spread uniformly.
- Do not overlap or spill fertilizer.
- Apply fertilizer only when foliage is dry.
- Advise your customer to water after application is completed.

He also says that pulverized materials are more likely to burn than pelleted or granular materials.



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VPI's Hall: Know factors that influence nitrogen slow-release

To use slow-release fertilizers most efficiently, the lawn care businessman must be aware of the factors that influence the rate of nitrogen release from each source, according to Dr. John R. Hall, extension turfgrass specialist at Virginia Polytechnic Institute and State University, Blacksburg.

"The development of slow-release nitrogen fertilizers began in the late 1940's, and these materials are very popular today," he said.

According to Dr. Hall, the most popular materials currently being utilized are isobutylidendiurea (IBDU), urea-formaldehyde (UF) and sulfur-coated urea (SCU).

He said that the rate of release of IBDU nitrogen is depen-

dent primarily upon fertilizer particle size and soil moisture. Soil temperature and soil pH have a minor influence on the rate of nitrogen release from this material. However, the rate of nitrogen release from IBDU can be significantly decreased if the soil pH is above 7.0.

The primary factor influencing the rate of nitrogen release from UF is microbial activity. Temperature, moisture, and soil pH, through their influence upon microbial populations, have a secondary effect upon the rate of nitrogen release from UF materials, he said.

Therefore, Dr. Hall said, in comparing the release rates of IBDU and UF it is important to note that the UF release rate is more determined by microbial

activity than any other factor.

The rate of nitrogen release from SCU is primarily dependent upon the thickness of the sulfur particle coating. Soil moisture, temperature and microbial activity have a secondary influence upon the rate of nitrogen release from SCU.

Dr. Hall said that studies conducted in Maryland compared UF and IBDU. Treatments had equal nitrogen applications and indicated that IBDU had a faster initial rate of release than UF. However, as soil temperatures rose in the summer, the rate of nitrogen release from UF exceeded that of IBDU. Spring green-up occurred faster with IBDU than with UF, he said.

Studies conducted at Penn State University over a six-year period compared IBDU and UF at five pounds of nitrogen per 1,000 square feet per year rates. These studies showed that over a six-year period when 129 obser-

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U of I's Turgeon: Thatch can affect lawn fertilization

by Dr. Al Turgeon

Thatch has long been recognized as a potentially troublesome feature in turf. Yet, its influence on the response of turfgrass communities to fertilization has been largely ignored.

Recently completed research at the University of Illinois has shown that thatch can dramatically affect the availability of nitrogen to turfgrasses growing within a thatch medium. Visual examination of a thatchy turf reveals that much of the root and lateral shoot systems may be growing in the thatch rather than in the underlying soil (Figure 1).

Just as the physical and chemical properties of a soil have important effects on the growth of plants, these same properties of thatch can have similarly important effects where the thatch constitutes a significant portion of the growth medium.

Thatch characteristics. As growth media, some thatches are physically similar to sand in that they have an abundance of large pores which do not retain water¹. These pores occur between fibers of undecomposed roots, stem and leaf sheaths that comprise thatch.

Small pores located within the organic fibers retain moisture so tenaciously that much of it is not available to plants. Thus, percolation of water through the large pores of thatch may be so rapid that fertilizer nutrients and other water-soluble materials applied to the turf are quickly leached to the underlying soil.

The bulk density of relatively "clean" thatch from a Kentucky bluegrass turf is typically much lower than that of an uncompacted silt loam soil. When the cation exchange capacities of the two media were measured and corrected for bulk density differences, thatch was found to provide relatively poor cation exchange compared to the soil².

Therefore, based upon both physical and chemical measurements, nutrient retention by a thatch medium would be expected to be very low.

Contrary to popular belief, the pH of Kentucky bluegrass thatch was found to be only slightly acidic, and the same as or higher than that of the underlying soil.

Nitrogen mobility in thatch. Experiments to determine the mobility of nitrogen from urea, a water-soluble carrier, and IBDU, a slowly soluble carrier were initiated in 1976 (IBDU is manufactured by Swift Agricultural Chemical Co., Winter Haven, Fla. — Editor).

The fertilizers were applied to undisturbed cores extracted from thatchy (two inches of thatch) and thatch-free Kentucky bluegrass turfs. The turf cores were automatically irrigated for three seconds each hour.

Suction was applied to the bases of the cores to insure adequate percolation of water through each medium, and to

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BACK.



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Major fertilizer manufacturers realizing lawn care potential

The growing lawn care industry is beginning to turn the heads of the large fertilizer manufacturers.

The National Fertilizer Solutions Association has formed a Lawn and Garden Task Force to study increased possibilities of its members supplying this industry. Its first meeting is this month in Chicago. F.J. Ranstead, Hawkeye Chemical Co., Clinton, Iowa, is heading the Task Force.

Charles Dinsmore, of Agway, Inc., Syracuse, N.Y. and its Pro-Lawn division, a supplier to the lawn care industry, was recently elected committee vice chairman of The Fertilizer Institute's Turf and Garden Committee.

At that organization's recent Trade Fair in Cincinnati, TFI staff members discussed their

activities to combat a negative report to the Environmental Protection Agency regarding lawn fertilization on New York's Long Island and ground water nitrate levels.

Of the lawn care industry, TFI's Donald Collins recently told LAWN CARE INDUSTRY: "Emphasis on service to the public, efficacy of products used and quality care of lawns must continue as the hallmark of the legitimate lawn care industry businessman.

"As these businessmen have shown, building a good reputation involves more than causing a customer lawn to simply turn green for just one season. In this belief, the manufacturers of turf fertilizers wholly agree. Use of quality products, follow-up

service and customer satisfaction provides a sound basis for continued growth of the lawn care industry."

Taking note of the lawn care industry's growth, The Andersons, Maumee, Ohio, recently reorganized its fertilizer operations. The former Plant Food Division is now separated into the Agricultural Fertilizer Division and the Lawn Fertilizer Division. Ronald A. Meier, Lawn Fertilizer Division manager, told LAWN CARE INDUSTRY:

"Herman 'Salty' Sanders has been deeply involved as a salesman to the lawn care industry. He recognized the growth potential of lawn care applicators years ago and has been instrumental in developing products for this segment of the industry."

The company has annual sales of over \$650 million, and manufactures more than 300 finished products formulated for sale in 35 states.

Ashland Chemical Co., Columbus, Ohio, recently bought Slo-Release, Inc., of Kingston, Ohio. They will be supplying the lawn care industry soon, according to Robert M. Cook of the company.

Companies such as Hercules, Inc., Wilmington, Del., have known about the lawn care industry all along, and supply many of the major lawn care companies across the country.

It's Nitroform organic nitrogen has found an important place on the lawn care market, according to the company's Doris J. Watson.

"It's slow-release action keeps lawn greener longer and means more repeat customers," she said. "And since it is available in granular and powder forms, it can be used whether the equipment is designed for liquid or dry fertilizer application."

The company's Powder Blue 38-0-0 is used in liquid systems, she said. It is a powder form of Nitroform and with proper agitation, it suspends for even spray application. Blue Chip is the company's granular form. It can be applied blended or with other dry materials. Hercules has published *Lawns Stay Greener Longer with Nitroform Nitrogen*, which outlines rates for typical lawn care programs in different parts of the country. It is available by writing the company at Agricultural Chemicals, Hercules, Inc., Wilmington, Del. 19899.

Another major supplier to the industry is O.M. Scott & Sons, Marysville, Ohio. Ed Dotson is manager of commercial sales for the company's line of strictly professional products, professionally packaged in different formulations from its consumer lines.

Dotson said there are two ways to improve profitability of any lawn care fertilizer program.

• **Cut down on possibilities of callbacks or necessity for refunds.** He recommends using quality, safe fertilizers which give a safer performance, and also getting the best applicator and give him the best equipment that can be found for the money available.

• **Reduce labor costs and equipment wear and tear.** This can be done by combining as many applications into a single trip across the lawn as possible, either by tank mixing for liquid systems or mechanical mixing for dry systems. Or by using a combination-product approach where a fertilizer is mixed with pesticide in a single bag.

"We would like to encourage the lawn care businessman to also consider fertilizer costs not just by cost per ton, but also what it is going to cost him over a whole season," Dotson told LAWN CARE INDUSTRY. He stressed that the total cost is dependent upon efficient labor use and how much coverage is available per each bag of fertilizer. He said it is also necessary to determine how much poor results on a customer lawn are going to cost over the course of a year.

"What was quantitative can become qualitative," he said.

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How to select and use a good banker

In today's complicated business world, the lawn care businessman can no longer expect to be an expert in all phases of business management. He must rely on advisors for help in making legal, financial, insurance and general business decisions. All of which makes the lawn care businessman often only as good as his advisors.

And of particular importance as an advisor — whether your lawn care business is large or small — is your banker. But how do you judge and select a good banker? Then how do you make the best use of him?

Business consultant Leon A. Danco, Ph.D., president of University Services Institute, Cleveland, and conductor of seminars on using outside advisors, has some definite advice on working with bankers.

He says you should judge your banker objectively and carefully by using the following criteria:

- **Competence.** This is first and most important. Are you convinced he knows all aspects of banking? Does he really understand the financial needs of your type of business? You have to explain it to him correctly, of course, but he must have the tools to understand.

- **Commitment.** You need a friend at the bank — someone to prod other departments and be on your side in skeptical

"I used to think bankers were backward . . . how come they had all the money, they were so stupid and I was so bright?"

cal committees. Does your banker understand and share your dream? Does he see your growth as the key to his?

- **Contribution.** You are most likely not an expert in capital management, so you need more than just a source of finance. Does your banker suggest approaches, define possibilities and lay out options? Does he increase your skill in financial management?

- **Courage.** Business owners — particularly lawn care business owners — are proud, tough and not used to being questioned. A sound bank needs growing commercial accounts, and often your pride will tempt that bank to play down unpleasant advice to keep you happy. Is your banker

challenging? Is he absolutely frank? Does he analyze your judgments?

"When I was younger," Dr. Danco explains, "I used to think that bankers were backward because they wouldn't lend me money when I needed it. How come they had all the money, they were so stupid and I was so bright?"

"I've made it a rule that I won't buy my own ideas if I can't sell them to a banker. It is possible that any single banker might not accept my idea because I didn't explain it to him clearly. But if I can't explain myself to two or three bankers and have them accept my idea, then I will not buy it myself."

Once you have found that good banker, and somewhere down the line there comes a need for additional capital, what steps can you take to assure getting the loan approved? Lynn Jeffries, an officer of Cherry Creek National Bank of Denver, offers the following guidelines for getting loans approved:

- **Take along a balance sheet,** an income statement, and supporting data such as retained earnings, summaries of changes in your financial position, and a certificate of examination of all of these from a competent accounting firm.

- **Also have prepared** at least three years of summaries for short-term credit, and at least five years of summaries for long-term loans. The bankers will probably want to see quarterly or monthly operating statements for the past fiscal year, too, accompanied by your projected cash flow and disbursements.

- **On the expense side** of your operating statement, include what your operating expenses are, including administrative, buying and receiving, rent and occupancy and selling expense. Interest expense is another item bankers watch carefully, wanting to know not only how much you pay, but to whom you pay it, and why you borrowed money there in the first place.

- **On your balance sheet,** which presents a record of assets, liabilities and ownership at one instant in time, a banker will look carefully at your liabilities, examining notes payable (typically bank debts), current maturities of a long-term debt, your accounts payable and long leases in lieu of purchase of capital assets and equipment.

- **On the assets side of your balance sheet,** the banker also wants to see how good those assets are. Tell him what you really mean in "cash" on the balance sheet — how much is operating cash, how much in savings, certificates of deposit, marketable securities and the like. And he wants to know if any of that cash is pledged or restricted (as an amount that might be required on deposit with another bank where you have a loan).

CONFERENCES

Three lawn care sessions, 19 speakers highlight Ohio turf show

Three full sessions, featuring 19 speakers on lawn care topics, highlight the Ohio Turfgrass Conference Dec. 5-7 in

Columbus.

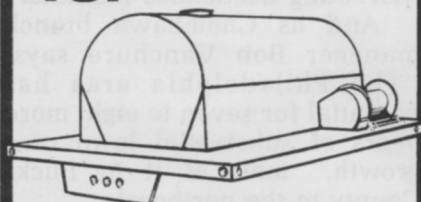
A panel on starting a new business in the lawn care industry will feature: Richard

White, Village Green Lawn Spraying, Glen Ellyn, Ill. speaking on selection of a program and scheduling; Ron Karoub, Cut-N-Care, Ann Arbor, Mich., on choosing proper equipment for services offered; George DiSanto, DiSanto Companies, Cleveland, on Advertising and

Promotion; and Ron Zweibel, Chem Care Lawn Service of Alabama, Birmingham, on hiring, training and motivating applicators.

For further information, contact: Dr. David Martin, OTF, 1827 Neil Ave., Columbus, Ohio 43210, or call him at (614) 422-2592.

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Perhaps it is because the restaurant serves exotic drinks with rum and fruit juices mixed together. The costumes that the waitresses wear could have something to do with their preference. Or maybe they like the fact that they get to choose the ingredients for their salad from a checklist of about 30 items that is given to them by the waitresses when the first drinks arrive at the table.

It gives them a chance to be just as choosy as the homeowners they face every day during the lawn care season.

"A growing percentage of the people are shopping around for lawn care more and more," Miranda told LAWN CARE INDUSTRY recently. Mike Mathews, American Lawnservice manager, adds: "There are five promotion pieces where there used to be just one a few years ago." And Curt Bell, sales manager, says: "We have to compete now, people are waiting to make their decisions until they get estimates from other companies."

Lawn care competition is picking up, largely because of

new company's like Davey Lawnscape Service, based in Kent, Ohio. The company just opened its doors this lawn care season, and district manager Kim Schaefer hasn't even had a chance to put up shelves to hold his stereo system speakers that ooze Linda Ronstadt tunes from a local FM radio station. Davey is operating two lawn spray trucks now, with expansion planned for next year.

There are now 14 Lawn Doctor franchisees working the Philadelphia metropolitan area, with an estimated 6,000 customers. Last year there were four franchisees.

The two major companies in Philadelphia are ChemLawn

Corp., with two branches, and Keystone Lawn Spray, based in suburban Wayne. Competitors say that ChemLawn has between 20 and 30 trucks on the road, and that Keystone is not far behind.

George Miranda was the first dealer for Lawn-A-Mat Chemical and Equipment Corp., opening the territory in 1967. There were seven Lawn-A-Mat franchises at one point in the early 70's, and Miranda says: "We went from a very small market to over a million dollars in just a few years." There are now three Lawn-A-Mat dealers in the Philadelphia area. Miranda's American Lawnservice was incorporated earlier this year when he decided to break from the Lawn-A-Mat fold.

Lawn Doctor dealers Norm Lynd and Rich Fishman have more than doubled their business in the last few years, in spite of shrinking their territories. This may be due in part to the Lawn Doctor cooperative television advertising, which places 42 one-minute spots a week on UHF channels at peak times of the season. They say that there is room in Philadelphia for almost 100 Lawn Doctor dealers.

They may be right. Philadelphia is the fourth largest metropolitan area in the country — right behind Chicago and right ahead of Detroit — with a population of 4,822,400 that is expected to grow 1.6 percent to 4,830,400 by 1982, according to figures released by the national Marketing Economics Institute.

And as ChemLawn branch manager Bob Vanchure says: "The Philadelphia area has potential for seven to eight more years of substantial lawn care growth," most of it in Bucks County to the northeast.

"Newspaper advertising is a shotgun — direct mail is a rifle shot," says George Miranda, 52, of American Lawnservice in North Hills outside of Philadelphia.

And when it comes to marketing lawn care in Philadelphia, he and the rest of the company staff have some definite ideas on percentage of lead responses they hope to get on their mailers, the closing ratio on a sale once they get a lead, the use of contracts, the difference between phone



Aerial view of the skyline of central Philadelphia, looking down the Benjamin Franklin Parkway. The U-shaped building in the center of the picture is the Philadelphia Museum of Art.

by Bob Earley
Editor

solicitation and direct mail and routing efficiency.

George Miranda was the first Philadelphia dealer for **Lawn-A-Mat Chemical and Equipment Corp.**, Mineola, N.Y. and the area distributor. He signed up seven dealers for the area at Lawn-A-Mat's peak in Philadelphia, but decided to start his own firm when the company went into Chapter 11 (although Lawn-A-Mat is still in bankrupt status, the company has a great number of successful dealerships across the country, strong dealer organizations and a fully staffed home office which is in direct contact with dealers daily).

American Lawnservice was incorporated in January with Bill Miranda, 24, as president. Mike Mathews, 24, a former Chem-Lawn employee, is manager, and Curt Bell, also 24, is sales manager. At present, the company has about 1,500 accounts, almost 800 of which they have put on this season. With 10 employees, the company will gross between \$350,000 and \$400,000 this lawn care season.

But back to marketing and promotion. The company distributed more than 250,000 promotion pieces this year.

"As an individual company, we can't really blanket the whole area, so we have to be selective," George Miranda said. "We are happy if we can get leads from one-half of one percent of the pieces we put out through distribution and in the mail."

When the leads come in, Bell



George Miranda



Bell

takes over. First he calls the potential customer, to find out exactly what they are interested in, and then he sets up an appointment. He says that half of the time he talks to men, but that "more and more women are making \$350 decisions with us."

Bell said that he closes sales-on-the-spot about one-third of the time and on good days 50 percent of the time. He says his closing percentage is 70 percent of all leads, and adds: "Now we are competing with other companies more and more, and we often have to wait for people to get estimates from other lawn care companies. A growing percentage of people are shopping around."

The company offers both liquid and dry applications and also lawn rebuilding programs, and Mathews says that "we compete, we tell the people to deal with us on the exact program that they want because we can do either. And we will split lawns too, perhaps a full program on their front lawn and a simple maintenance program on the back."

The company believes strongly in contracts, Mathews

said. "We feel it is important to let the people know on paper what they are getting, and we explain it on the spot," he said. "We don't think it can be done with a leave-behind estimate. Many companies are averaging 20 calls a day, while we are spending 20 minutes on the average in the home, not including travel time."

Bell adds: "Our leads are frightfully expensive if we don't convert them into a sale." Which is why the company does not use phone solicitations.

"We don't believe in using a boiler room operation," George Miranda said. "We feel that your prospect can come to resent a company intruding on their privacy by calling them at home. And a phone lead is not anywhere near a sure sale, it is an inquiry that you have to go out and really sell."

The company feels that a direct inquiry a person sends in after seeing one of its promotion pieces is a much more sure sale. George Miranda pegs the ratio of closes at about three or four to one, direct inquiries over phone leads.

But when it comes to that subject, George Miranda says: "I will cover every lead. We are still in the position of picking up 'hangers' unfortunately," and anybody who has ever shot a game of billiards knows the difference between running a series of closely bunched balls and going out on a limb to pick up the "hangers." The key, according to Miranda, is getting the routes big enough in one area to break-even and then make a profit.

When they decided to start American Lawnservice, they were not sure which direction would be best — liquid or granular application of fertilizer and pesticides. So they decided "to hew a line down the middle," as George Miranda says. "We have the best of both worlds," Mathews said, "lawns are divided into two categories, good and bad, and this gives us the capability to go the rebuilding route or the maintenance route."

American Lawnservice has two programs. The first is called the "spray maintenance program" and the more extensive is called the "lawn rebuilding program."

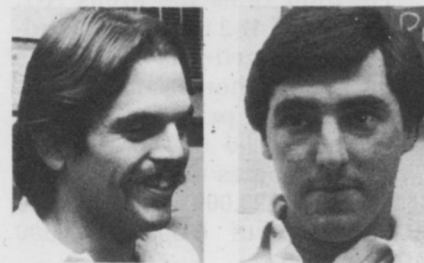
The spray program has a minimum charge of \$19.95 for 3,000 square feet, and costs go up from there. Spring applications in March, April and May include fertilization, weed control and preemergent crabgrass control. Late spring applications in May, June and July include fertilization, weed and insect control. Summer applications include fertilization, weed control, "surface" insect control and grub-proofing. Fall applications in September, October and November include fertilization, weed control, a soil test and liming.

The rebuilding program has a minimum charge of \$45 for 4,000 square feet and costs go up from there. Spring trips include power aeration, rolling, seeding with

one pound per 1,000 square feet with a premium bluegrass blend, preemergent crabgrass control, weed control and fertilization. Late spring trips include fertilization, weed and disease control, chinch bug and sod webworm control, nutsedge "inhibitor," and post-emergent crabgrass control.

Summer trips include fertilization, weed and disease control, post-emergent crabgrass control, sod webworm control, grub-proofing, chinch bug control and nutsedge "inhibitor." Fall applications trips include the same as the spring trips minus preemergent crabgrass control and adding a soil test.

Bill Miranda says that about half of the customers on the com-



Bill Miranda



Mathews

pany books are on the spray program and about half are on the lawn rebuilding program. The company's average lawn is in the vicinity of 7,500 to 8,000 square feet and the average charge per customer is between \$250 and \$260 a year. Lawn rebuilding customers average payments of about \$350 a year and spray customers average between \$120 and \$130 a year. He says this is the "highest contract average in the city."

Norm Lynd, owner of **Lawn Doctor** of North East Montgomery, figures that for him to write \$100,000 worth of new business in a year, it takes \$25,000 worth of marketing, advertising and new labor and equipment costs.

For the lawn care businessman just starting out, he ups the figure to 40 percent — or about \$40,000 — of the \$100,000 dollar amount of gross business example. In other words, the "profit is not there the first year."

He began in the Philadelphia market in the spring of 1972, six years ago. He put on 200 customers the first year. He has had a steady growth since then, doubling the number of accounts on his books the last two years when Lawn Doctor went to a more streamlined program. He is closing in on 2,000 customers this year.

"Three years ago, I was a holdout on the new program," he said. "But then I realized that there were so many lawns out there that did not need to be aerated and seeded every trip. Lawns we were not seeding were doing as well as lawns we were seeding."

His program now includes five trips a year. In fall, the program calls for a heavy rate of fertilization, along with broadleaf weed control. Late fall includes a double rate of balanced fertilizer. The spring trip includes fast-release fertilization to complement the residual fertilizer available from the late fall trip.

Late spring includes both quick- and slow-release fertilization along with broadleaf weed control. Summer includes slow-release fertilization, broadleaf weed control, insecticide application for control of chinch bug, sod webworm and armyworm, and crabgrass preventer.

Available options that his program offers include seeding, liming, milky spore applications, soil additive applications, tree and shrub spraying, disease control, a specific shade lawn program, a new lawn program and grub treatments. The typical Lawn Doctor program offered many of these treatments as part of their main program until about two years ago.

The basic costs for Lynd's program are \$100 for the first 5,000 square feet of lawn, and then about \$13 per 1,000 square feet after that. The minimum charge is \$80 a year for 4,000 square feet. He said that the average lawn he services is between 8,000 and 9,000 square feet, although his average income from each customer is about \$157, because of extra charges for seeding and other services that many of his customers desire on an add-on basis.

Lynd says that 60 percent of the lawns he services have disease problems on a fairly regular basis. He charges between three and four dollars per 1,000 square feet for fungicide treatments with Tersan 1991, marketed by Du Pont Co., Wilmington, Del., or Daconil, marketed by Diamond Shamrock Corp., Cleveland.

He employs seven persons full-time during the lawn care season on an hourly basis but he admits, "this is not the way to keep good labor." Next year he hopes to have three or four persons working full-time year-round.

He will be hiring people earlier — probably in early February rather than March 1. This will give him more time to train his workers.

"My men now know what they are putting down and why it works, but if there are any special problems, they are not yet prepared to handle them, and I have to go out on all calls," he said. "The more customers we get, the less I am available to handle all the calls. That is why I have to take more time with training."

His first-year employees receive an average of three dollars an hour, and he will be raising salaries to four dollars an hour on a year-round basis, if everything goes according to plan. He has also just hired a full-time foreman.

Although Lynd's basic philosophy is to try to keep his customers as concentrated as possible in a certain area, he is not afraid to break in a new area that he feels has potential.

"We will take on customers that are between a half-hour and 40-minute drive away," he said. "Then we put on a push and strive to build up business in that area. Once we get a few customers, we advertise heavily to get

more as soon as possible."

He estimates that he spends about \$15,000 a year on advertising and promotion, much of it going for 70,000 mailings in his area. He does two mailings a year to the same prospects in spring and fall, then does a third mailing of about 10,000 to areas he feels will produce customers. Other parts of his promotion budget include his share of co-operative television advertising with other Philadelphia Lawn Doctor dealers and ads in newspaper "pennysavers" or shoppers.

His sales are handled by a full-time salesman that has been with him four years and also a part-time salesman. Their commissions range from five to 10 percent, based on volume of the sale. The commission is paid up front.

Although Lynd does not sell directly any more, he still remembers his largest sale to date, which was also one of his first — \$3,140 annual charge, or \$785 a trip for the four services they were doing at the time. "It paid a lot of bills in our first few years in business," he says.

As a district manager for one of **Davey Lawnscape's** newest branch operations based in Conshohocken, to the west of Philadelphia, Kim Schaefer, 26, has to deal in hard numbers.

He expects a 2½ percent response rate from direct mail pieces the company mails out. With these leads, he expects a 75 percent sales close ratio. And after he has the customer on the books, he expects a 90 percent retention rate.

Schaefer started with the Kent, Ohio-based company four years ago in its Akron branch, and moved into Pittsburgh. He came to Philadelphia a year ago to open the doors of the Philadelphia branch and get things rolling for the first lawn care season.

He also deals in other numbers. The average lawn Davey handles at present is between 15,000 and 20,000 square feet, with some almost an acre. The company offers a four-application program. Schaefer's staff includes a sales and service representative, a secretary, and two lawn technicians at present driving spray trucks, one with an 800-gallon tank, and one with a 1,200-gallon tank, both manufactured by Tuflex Mfg. Co., Fort Lauderdale, Fla. The Davey units also utilize Myers pumps, and hose manufactured by Samuel Moore Co., Piqua, Ohio.

When Davey came to Philadelphia, Schaefer said the most important thing he had to do was to get name recognition in the market. He said the fact that Philadelphia is a large tree district for the parent Davey Tree Expert Co. helps, because "people know there is a big company behind you. It is definitely a selling point."

He also says that the fact that the billing is done through the company's main offices in Kent "adds an extra touch of class."

But the main thing, Schaefer stresses, is to establish a name through quality service, "if a company is going to be success-

ful, this is the only way to do it."

Davey's lawn technicians do not handle sales and service, they are strictly in charge of spray production. And Schaefer feels that use of the sales and service representative exclusively for those tasks is the best way to go because it gives better service to the customer, and also frees up the lawn technicians to devote their full efforts to spraying lawns. He said that all technicians are groomed to become sales and service representatives.

One of the first things Schaefer began to do when he came to Philadelphia was set up street lists and lists of commercial prospects. He says the best way to develop street lists in any area is to simply "ride the streets" with a criss-cross directory and a local map book on the front seat.

He then rates the areas A-1, A-2, A-3, B-1, B-2 and B-3 according to basic criteria. A-1 areas might include homes in the \$85,000 to \$100,000 price range, with lawns of 10,000 square feet or more. A-2 homes might be in the \$60,000 to \$80,000 price range with lawns of 6,000 to 8,000 square feet.

Davey is more aggressive in its commercial selling than it is for residential selling. "We will cold-call companies, but never with a hard-sell approach," he said. Most of the commercial



Schaefer

selling is done during the winter months, dealing with purchasing agents and maintenance foremen and vice presidents. A lot more time is involved, he said, "because you sometimes have to go through different layers of people." But he says the best sales technique for developing commercial business is through doing a good job for one company, and having it to show to another prospective commercial client.

Davey's marketing program to residential home owners includes both mailers and newspaper ads, with newspaper ads as "back-up" to the mailers, he said. They begin their program about the last week of February or the first week of March, but sometimes it has to be flexible, because "people are not that interested in lawn care when there is three feet of snow on the ground."

The basic Davey program is spray applications. Spring: Heavy, but balanced, fertilization. Crabgrass pre-emergence control. Dandelion and broadleaf weed control. Late spring: Slow-release fertilizers with potassium to develop a stronger root system. Surface insect control for chinch bugs, sod webworms, etc. Plus broadleaf weed control, as required by local climatic conditions.

Summer: Slow-release fertilization with potassium to

hold the green color through hot weather. Plus guaranteed surface insect control. Fall: Quick-release, balanced fertilizer for color and growth and to prepare the lawn for the dormant winter. Plus broadleaf weed control. Also, in late spring, summer and fall, minor elements of iron, sulfur, phosphorus, etc. are applied as local climatic conditions indicate. Fungicides are added on a service-call basis.

Schaefer says that the lawn care business can be tough on an employee and his family because "you have to fit a year's worth of work into about eight months." On a busy day, a lawn technician might be putting out \$600 to \$700 worth of spray production, so he feels that hiring top people and giving them extensive training is important.

"I look for a person with a business background that we can teach the technical information to," Schaefer said. New employees begin training February 1 in the branch office and then are turned over to Dr. Roger Funk, director of the well-known Davey Horticultural Institute in Kent for the basics of lawn care.

The technical training is taught at different levels each year for every employee. When a technician moves up to the sales/service representative job, he goes through a different type of training. Each branch district manager goes through this training every year also. Part of the training includes what Schaefer calls specific questions to a sales/service representative.

"But the technician is the key," he said. "You have to instill the idea of running a quality business at the technician level, because they are the Davey showpiece, the ones the customer sees most often. They don't just run up, spray a lawn and leave. When they are done spraying they hand the customer 'tips' booklet on mowing, watering, insect control, mechanical maintenance or seeding. And if a home owner has any questions, the technician does what he can to answer it on the spot, or get the answer later."

Rich Fishman, 35, co-owner of **Lawn Doctor of Northampton** in Bucks County with his wife Gail, 34, was the first Lawn Doctor dealer in the Philadelphia area of Pennsylvania.

In 1971, his first year, he wrote \$16,000 worth of business while still handling it on a part-time basis. The second year, he wrote \$65,000 worth of business, about \$40,000 of that from a series of ads in one "shopper" weekly newspaper.

His third year in business, he split his territory with another Lawn Doctor dealer, and still wrote \$65,000 worth of business. He grew steadily to a gross of \$130,000 in 1976, and last year grossed \$144,000. He now has 531 customers on the books and hopes to have 1,000 next year.

In addition to more traditional newspaper advertising and door-hanger distribution, he has built his business through phone solicitation and billboard advertising.

He had a standard-size billboard on a major route going through his sales territory at a

cost of about \$85 a month until three years ago, when a change in his territory dictated that he not advertise through billboards anymore. He said the monthly cost for the billboard would cost about \$200 now.

"The billboard was great because it was located in a 15 m.p.h. zone," Fishman told **LAWN CARE INDUSTRY** recently. "I think it works almost as subliminal advertising. The person sees it every day on the way to work, and of course does not call us up as soon as he or she sees it. But when they are ready to purchase a lawn care service, we are the first company to pop



Fishman



Fishman

into their minds."

For his phone solicitation operation, he employs a number of women in their 20's, and pays them by the hour and by the lead. He pays minimum wage hourly, and then pays 25 cents per lead (not per sale). He says his people average about 8-10 leads per night, sometimes as high as 12.

His doorknob hangers, offer a free lawn evaluation" and a free 2½ pound bag of grass seed with no obligation. He distributes about 500 door-hangers a week during peak times of his season. About one-third of his total advertising and promotion budget goes for his share of Lawn Doctor advertising on UHF stations in the Philadelphia area. "Television ads give us credibility," he feels.

His program includes five applications a year, and he calls his late fall application "just dynamite. Research has shown this is much better than shocking the grass plant with a heavy fertilizer application in March or May."

His program includes about 1½ pounds of nitrogen four times a year, and about two pounds of nitrogen in late fall. This totals out to between six and eight pounds of nitrogen per lawn care season. His first application in the spring is a slow-release fertilizer.

"Our service is our main selling point against the large spray application companies," he said. "We offer 24-hour service, if we get a call we are on the lawn within 24 hours. The larger companies are only able to say that 'we will be over in your territory within the next three weeks.'"

Gail Fishman usually does quite a bit of work handling the phones in the office, and says: "We can satisfy most problems over the phone. What I think our customers appreciate most is that we care about what happens to their lawns."

Just about the time these words are being read, Dave Dempsey and Bob Vanchure, Philadelphia branch managers for **ChemLawn Corp.**, and their employees will be involved in go-

ing from a four- to five-application lawn care program in the areas they serve. The reason is simple, as Vanchure, 29, explains.

"We want to get a head start on a good growing season for the lawn next year by providing fertilization for a deep root system development now," he told LAWN CARE INDUSTRY recently. "Applications in late fall will give our lawns a jump when they come out of dormancy next spring — and that means a greener lawn earlier. The deeper root system will make lawns much easier to manage and maintain next summer and when heat and drought stress hits."

Dempsey, 28, said that tests with both four and five applications in the Philadelphia area and at ChemLawn home offices in Columbus, Ohio have proven that a fifth application is needed in the Philadelphia area. "The price is the same," Dempsey said, "we have just added another application for our customers."

The ChemLawn program provides a customer lawn with five specially formulated and timely



Dempsey

Vanchure

applications — early spring, late spring, summer, fall and late fall. In the complete annual cycle, the lawn receives:

- Preemergent crabgrass control and foxtail control in the spring.
- Slow-release nitrogen when the lawn most needs it.
- Four applications of a completely balanced fertilizer at the proper intervals.
- Insecticides as the weather conditions encourage insects to feed upon Philadelphia-area lawns.
- Broadleaf weed control when the weather permits the weeds to be killed without damage to turfgrass.

The ChemLawn program does not include disease control. The company will recommend fungicides to the home owner, or will apply them for an extra charge. Fungicides are not guaranteed.

For the average 10,000-square-foot lawn in the Philadelphia area, the cost per application is \$32, or \$160 annually. Minimum charge is \$75 for a 3,000-square-foot lawn, and about \$2.50 per thousand square feet per application after that.

Dempsey manages the ChemLawn branch in Warminster, and Vanchure manages the newer Malvern branch. They both joined the company about six years ago and have handled assignments in various cities around the country. ChemLawn is in its fourth lawn care season in Philadelphia, and Dempsey was one of the first company employees to open the market.

"We came in here in the spring of 1975 with seven guys who were looking for a chal-

lenge," Dempsey said. One of the seven, was former branch manager Jim Kelly, now manager of one of ChemLawn's major competitors, **Keystone Lawn Spray**, based in Wayne to the west of Philadelphia.

"It has been very rewarding to have the number of customers we have now compared with what we started with," Dempsey continued. "People here were not aware of what a lawn spray program was when we started, and now with the customer satisfaction we have, the lawns sell for themselves."

Vanchure adds to this: "We are challenge-oriented people working for a challenge-oriented company. We believe in what we are doing, and there is a feeling around here that there is nothing we can't do to get the customer a better lawn. The research back-up that recommended we go to a five-application program is an example of this."

Dempsey said that the overall image he received from the first week on the job six years ago — which might be described as the "ChemLawn attitude" — is something that he feels he has to portray to his new employees now.

"We are a nation-wide company, but we are still one big team," Vanchure said. Dempsey and Vanchure are now hiring in fall for the employee force that they need next spring. "Spring is the wrong time to start at ChemLawn because of the hectic pace that picks up then," Vanchure said. "This gives us the correct amount of time to train our people."

ChemLawn lawn specialists are in charge of sales and service for a six- or seven-square-mile area in Philadelphia. Bills are left behind by the specialist after the application is completed. Dempsey said that most of the customers pay within a week, and perhaps 20 percent pay before the next application.

Spring and fall are the big sign-up times for customers. Dempsey said that almost all of the phone inquiries come from newspaper advertising, and that mail inquiries come from direct mail promotions the company carries out. Vanchure said that 75 percent of all inquiries come from people who have neighbors receiving ChemLawn services. The direct mail promotion or newspaper ad serves as a catalyst for the inquiry.

Once ChemLawn signs up a customer, "Education is a major part of our business," Dempsey said. The first trip out emphasizes explanation of the types of grass in the customer's lawn, explanation of proper mowing, watering, fertilization and pesticide application processes, and explanation of what a lawn care program can and cannot do. The company also points out specific weeds, insect, compaction, thatch and drainage problems a particular lawn might also have.

This explanation is done on-the-spot by the lawn specialist or perhaps by phone. Sometimes a second trip back to visit with a husband on the weekend is necessary.

During the lawn care season,

COST CUTTINGS

Is radio advertising cost-efficient?



Lynd

Is radio advertising a good medium for lawn care advertising? Does a lawn care businessman get his money's worth for a 30-second or minute spot on the radio?

Norm Lynd, owner of Lawn Doctor of South East Montgomery outside of Philadelphia says no. He has much company, but there are also many lawn care businessmen that swear by it.

"Whether you go on one of the larger metropolitan radio stations or buy time for less on a smaller station, costs don't mean a thing, because you are just throwing your money away," he told LAWN CARE INDUSTRY recently. "The visual is just not there with radio advertising. People have to see something to remember it."

Joe Sandler, president of Lawn King, Fairfield, N.J. agrees with Lynd.

"We used radio advertising years ago when we first started," he said, "we were on 110 times a week. But we have decided never to use it again."

Sandler tells the story of a time he bought radio time for a big sports event that was running Saturday afternoon in the metropolitan New York area. He was standing by at the phones to go out and make calls because he was sure the advertising would net him a substantial amount of leads. He went out on the first call to make an on-the-spot estimate, went into the prospective customer's living room, and heard the ballgame on the radio.

"I asked him if all of the ads during commercial breaks was the reason he called us out," Sandler recalls, "and he acted surprised, said he was not even aware of the advertising. The reason he called us out was that he had seen one of our trucks parked near his home with our men out working on one of his neighbor's lawns. Lawn care is a very visual thing, and that is why radio advertising is just not worth the money."

Tom Gunn, owner of Lawn Doctor of Fort Worth, says that it is hard to measure returns on radio advertising, and it is hard to really hit the audience you are looking for as a lawn care businessman. "It is just too hit-and-miss, and we have decided not to do any radio advertising anymore, although we used it a few years ago," he said.

Other lawn care businessmen feel that radio advertising can be very cost-efficient if the lawn care businessman takes the time to be selective.

Joe Matulis and Nick Licursi of L & M Lawncare, Cleveland, use an extensive radio advertising campaign. "The main thing is picking the stations that have the listeners that you want to reach," he said. They stay away from some of the larger stations, with high costs and diverse listeners, utilizing smaller stations.

Others feel that radio advertising is a way to establish a lawn care company's image, and still beat the high costs of television advertising.

Dick Deering, president of Perf-A-Lawn Corp., New Carlisle, Ohio went to New York to get a catchy jingle produced and plans on using it in the 10 cities his company has branches in. The company also has gone into franchising, and will provide the radio spots to franchisees.

Leo D'Arcy, station manager of WELW radio outside of Cleveland, says that costs on smaller suburban stations average about \$10 a minute, with the highest rate about \$12 a minute. For major market stations, he says the average is about \$30 a minute, ranging from a low of \$22 to a high of \$50 for some of the larger FM stations. For half-minute spots, the cost is about 50 percent of the minute cost for the suburban stations, and about 80 percent of the minute costs for metro stations.

the company sends out three or four brochures on insect problems, disease problems and what to do during drought or heat stress. This is to keep the customer advised on what might happen to their lawn at certain times of the lawn care season, and how they can care for their lawn until the next application.

Part of the ChemLawn education program that is new this year is availability of ChemLawn grass seed for customer lawns. The selling point of the brochure is that "now we can offer you grass seed that ChemLawn research recommends for the Philadelphia area."

The ChemLawn brochure that lawn specialists distribute to customers says that the grass seed is formulated for the Philadelphia area as recommended by the company's regional agronomists. There are also two mixtures, one for sun and one for shade lawns. Also, the seed is made up of several improved grass varieties in a special mixture that is normally not available in retail outlets, and the price is cheaper than what it would cost if it was available retail. The customer fills out a coupon and sends it away if he is interested, and the seed is mailed directly to him.

FERTILIZER from page 10

Scott's manufactures six fertilizers they feel are applicable for the lawn care industry. A straight Fairway Fertilizer, with a 31-3-10 analysis, a maintenance fertilizer which is safe to apply any time, even in summer; Fertilizer Plus Weedgrass Preventer, a 26-0-12 analysis fertilizer including the preemergent herbicide bensulide; Fertilizer Plus Dicot Weed Control, which has a 30-5-3 analysis and includes post-emergent weed control from 2,4-D and MCPP; FF II, which is a 14-3-3 analysis plus PCNB for disease control; Fertilizer Plus DSB Fungicide, which is a 28-0-7 analysis fertilizer with benomyl for disease control; and Fertilizer Plus Insecticide III.

O.M. Scott & Sons will deliver fertilizers all at once to a lawn care businessman, or will work out a scheduled delivery program for lawn care businesses without extensive warehouse facilities.

Sierra Chemical Co., Milpitas, Calif. manufactures a number of fertilizers for the lawn care industry, including Agri-form CRF (21-8-8) controlled release fertilizer, for three- to five-month feeding of turfgrass. This is a special high-nitrogen formulation of large granules of resin-coated and uncoated soluble fertilizers, for efficient, long-term feeding, according to director of marketing Peter K. Horner.

The key to a successful turf program is the correct use of vital primary, secondary and micronutrients, according to **USS Agrichemicals**, Atlanta, Ga. Its granular fertilizers come in a number of formulations and include nitrogen, phosphorus and potassium and also magnesium, sulfur and iron. Magnesium is a secondary nutrient that forms chlorophyll and sugar, carries phosphorus and corrects acidity. Sulfur maintains a plant's dark green color, encourages growth and corrects soil alkalinity. Iron

is one of the most important micronutrients and it promotes chlorophyll production and is provided in two forms: fritted, glass-like materials giving slow but continuous release; and chelated, chemically activated to prevent the iron from bonding with phosphate. Fritted iron is ideal for acid soil conditions, while chelated iron is more suitable for alkaline soils.

Other fertilizer suppliers to the lawn care industry include **Occidental Chemical Co.**, Houston; **Lebanon Chemical Co.**, Lebanon, Pa.; **Swift Agricultural Chemical Corp.**, Winter Haven, Fla., manufacturers of IBDU and Par Ex fertilizers; **Canadian Industries, Ltd.**, Willowdale, Ontario, Canada, manufacturers of sulfur-coated fertilizers; **Lake-shore Equipment & Supply Co.**, Elyria, Ohio, also suppliers of sulfur-coated fertilizers; and **Amereq Industries**, Roslyn, N.Y., manufacturers of Heritage House fertilizers.

TURGEON from page 9

prevent denitrification (conversion of ammonia to N_2 gas under waterlogged conditions) within the media. Leachates were collected daily for 15 days for analysis. Then, the cores were divided into upper and lower halves and analyzed for total nitrogen.

The entire apparatus was constructed within a controlled environment chamber. Results showed that where urea nitrogen was applied, the nitrogen leached more readily from the thatch than from the soil¹. However, where the slowly soluble carrier was applied, almost no leaching of nitrogen occurred (Figure 2).

Analysis of the cores showed that most of the slowly soluble nitrogen was still within the upper half of the thatch cores while the urea nitrogen has been essentially depleted after 15 days. Much of the urea nitrogen could still be found in the soil cores due to slower leaching and the higher cation exchange capacity of the soil.

Volatilization of nitrogen from the two nitrogen carriers applied to thatch and soil was also studied. The fertilized cores were placed in glass chambers positioned within a controlled-environment chamber. Air entered each glass chamber through small holes near the base and exited through tubes attached to the top.

Air flow then proceeded through a trapping solution (to pick up NH_3 gas) and finally to a suction pump. Thus, any volatilized nitrogen from the cores would be measurable in the trapping solutions. The cores were irrigated following fertilization then allowed to dry throughout the eight-day experiment. Results showed that urea is considerably more volatile than IBDU, and that more volatilization loss of nitrogen occurred from thatch than from soil (Figure 3).

Conclusions. A turfgrass community is unique among plant communities in that it is perennial and continually changing, its shoot density may be so high that plants appear to be contiguous, and it can generate sufficient biomass to provide its own growth medium above the soil surface.

This final feature — surface biomass — is commonly referred to as thatch. Where the thatch layer is stable and deep enough to include most of the turfgrass root system, it can dramatically influence the response of a turf to nitrogen fertilization.

Unless the thatch is removed, or modified through the addition of soil, it would be advisable to use predominantly slowly soluble carriers for supplying turfgrass nitrogen requirements. Otherwise, the combination of leaching and volatilization may substantially reduce the efficiency with which a nitrogen fertilizer is used by a turfgrass community.

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3. Turgeon, A. J., K. A. Hurto, and L. A. Spomer. 1977. Thatch as a turfgrass growing medium. *Illinois Research* 19(3): 3-4.



Ohio Turfgrass Foundation president John Fitzgerald (r) recently presented the 1978 research donation of \$16,500 to Ohio State University associate dean Ken Reisch (c) while Dr. Dave Martin, O.S.U. extension agronomist in turf and OTF executive secretary, looks on. The \$16,500 donation will be used for turfgrass research in agronomy, entomology, and plant pathology and brings OTF research donations to more than \$170,000 since 1968.

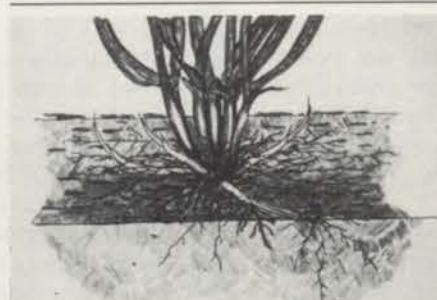


Fig. 1. Root and lateral shoots may be growing in the thatch.

NITROGEN MOBILITY IN THATCH

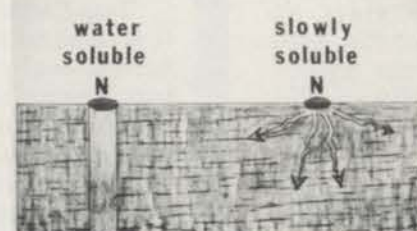


Fig. 2. Leaching characteristics of water-soluble nitrogen and slowly-soluble nitrogen.

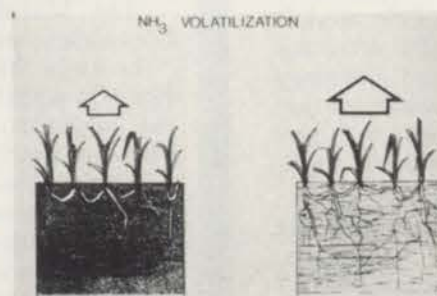


Fig. 3. More volatilization loss of nitrogen occurs from thatch (right) than from soil.

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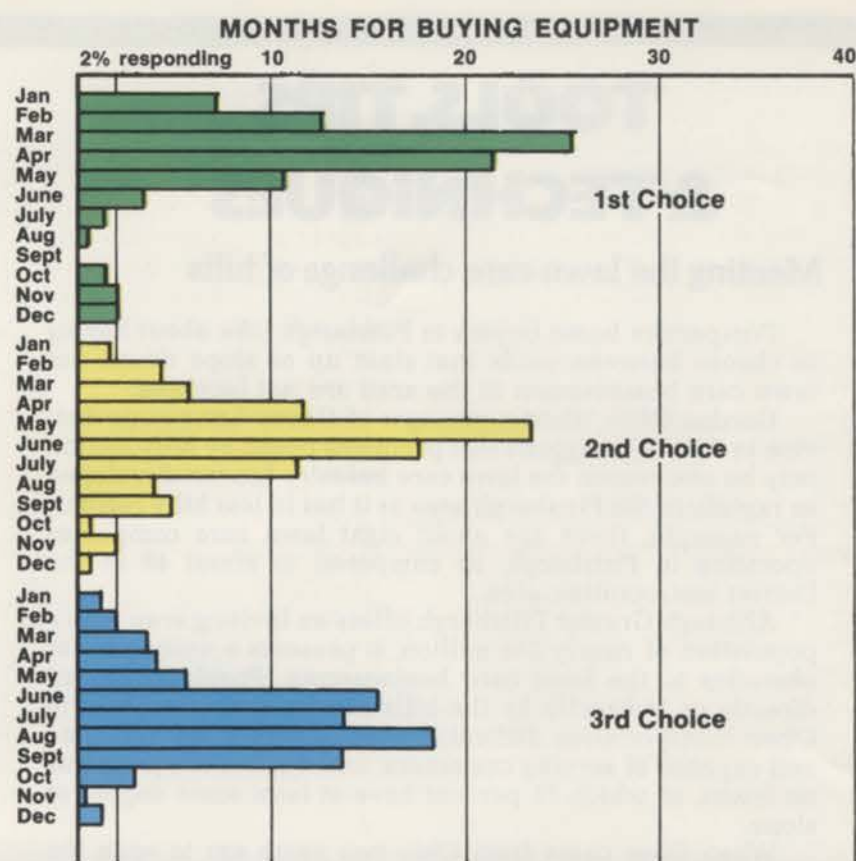
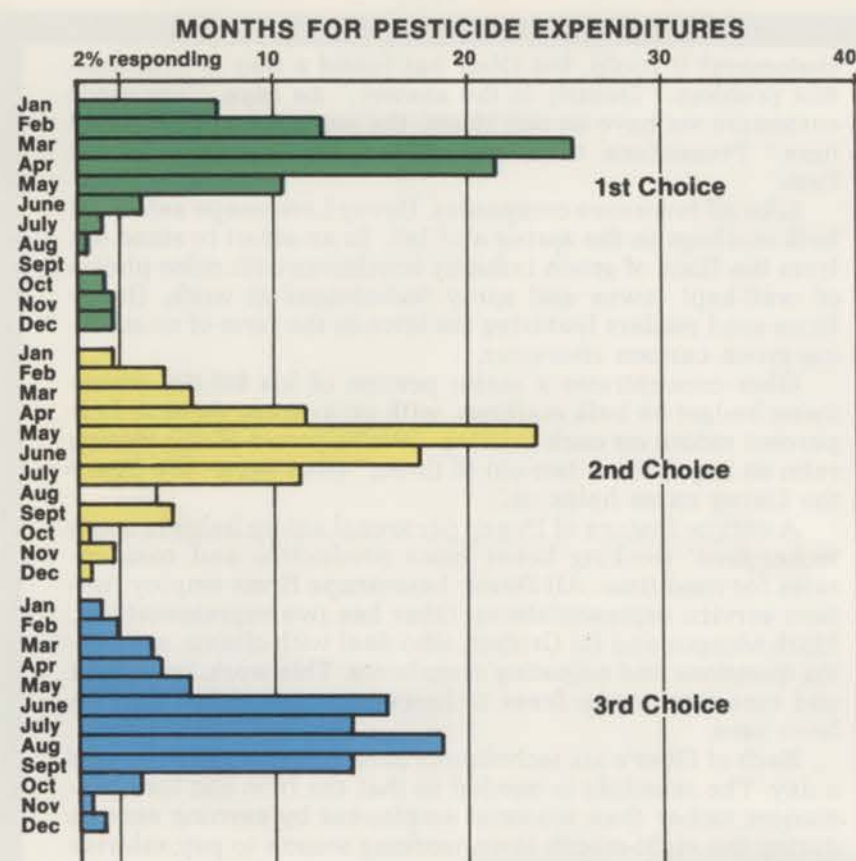


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\$8,500 YEARLY from page 1

tures, the largest percentage of businessmen (between 35 and 40 percent) listed March as their main buying month, with May and September as second and third choices, respectively.

For pesticide expenditures, lawn care businessmen also listed March as their main buying month, with May and August second and third, respectively.

For lawn care equipment, the respondents in the survey listed January and February as their first two choices, and March as their third choice. The accompanying graphs show the spread of answers.

When asked their main source of fertilizer purchases, 42 percent of the respondents listed manufacturers, and 58 percent listed local dealers or distributors.

When asked their main source of pesticide purchases, 22 percent listed manufacturers and 78 percent listed local dealers or distributors.

A total of 952 questionnaires were mailed on July 24 to readers of LAWN CARE INDUSTRY. On August 9, returns were closed with 232 usable responses. This number represents 24.4 percent of the mailing. Tabulations for the survey were made by computer.

MARKETING

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The first public relations handbook written especially for franchisors — *The Franchisor's Guide to Public Relations* — has been published by the International Franchise Association (IFA).

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Copies of the guide are available from the IFA office at 7315 Wisconsin Ave., Suite 600W, Washington, D.C. 20014.

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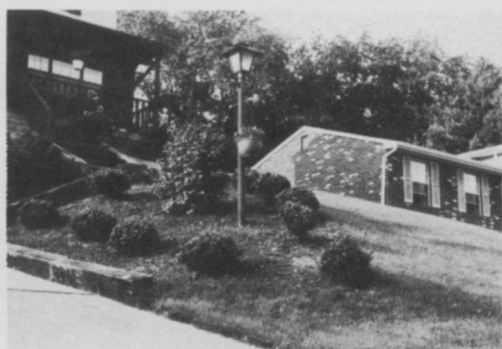
Meeting the lawn care challenge of hills

Prospective home buyers in Pittsburgh joke about having to choose between yards that slant up or slope down, but lawn care businessmen in the area are not laughing.

Gordon Ober, district manager of Davey Lawnscape Service in that city, suggests that problems posed by hilly terrain may be one reason the lawn care industry has not developed as rapidly in the Pittsburgh area as it has in less hilly regions. For example, there are about eight lawn care companies operating in Pittsburgh, as compared to about 40 in the Detroit metropolitan area.

Although Greater Pittsburgh offers an inviting area with a population of nearly 2½ million, it presents a unique set of obstacles to the lawn care businessman. Problems caused directly or indirectly by the hills are twofold, according to Ober: transportation difficulties, which add to the road time and expense of serving customers; and application problems on lawns, of which 75 percent have at least some degree of slope.

When Ober came from Ohio two years ago to open the Pittsburgh operation of the Davey Lawnscape, he had been forewarned about the situation. The oldest division of the parent firm, the Davey Tree Expert Company, had been



Pittsburgh district manager for Davey Lawnscape Gordon Ober and the type of lawn he and his technicians face every day. An estimated 75 percent of Pittsburgh lawns have some degree of slope.



operating in the area for 20 years, pruning, feeding and spraying trees.

Acting on the experience and advice of men from the older firm, Ober ordered trucks with special features not required on Davey Lawnscape trucks used in other cities. His Pittsburgh trucks have larger engines, stronger brakes, and two-speed transmissions with a high and low range of gear ratios. In addition, the trucks need tougher tires.

If the added expense of special-order trucks seems an excessive precaution, consider the roads these trucks must travel. Since the city "just grew" from early colonial times, it lacks an orderly grid plan. Many streets in the city proper are narrow, congested and steep. There are no beltways and only one principal freeway through the city — the East-West Parkway — with little relief from stop and go traffic and rush-hour tieups.

Known as the "city of bridges" (there are 358), and compounding the problem with an array of tunnels, the area has a number of limited access arteries, resulting in detours for truck drivers.

Narrow streets and heavy traffic cause a higher rate of fender-bender accidents. Ober says his trucks sustain more damage of a minor nature than do Davey trucks in other cities.

However, outfitting his trucks to suit the terrain does little, Ober says, to relieve his biggest hassle: excessive road time. From the Davey plant in Coraopolis, a short distance from the Greater Pittsburgh Airport, it takes an hour's drive to reach clients in any direction within the entire area. "There is no way our men can zip through the traffic in a hurry, and no way to avoid congested arteries for at least a major portion of the route," Ober says. This is a problem many lawn care businessmen face.

When choosing his site two years ago, he tried to find a central location, but, as in most cities, large commercial properties are not available in convenient locations. He needed a facility of 5,000 to 6,000 square feet for offices and warehouse, plus ample parking space.

The location he settled for is just off Parkway West, giving access to the West End, East End and South Hills. The site is four or five miles from I-79, the North-South interstate artery, with access to northern and southern suburban areas. Not a bad choice; still, the round trip to reach clients' lawns in any direction drains two hours from each technician's workday.

Does excessive road-time mean the firm can serve fewer

customers? It could, but Ober has found a way to overcome this problem. "Density is the answer," he says. "The more customers we have on one street, the more we can cut travel time." Promotions, then, are particularly important for his firm.

Like all lawn care companies, Davey Lawnscape sends out bulk mailings in the spring and fall. In an effort to stand out from the flood of green industry brochures with color photos of well-kept lawns and spray technicians at work, Davey firms send mailers featuring the lawn in the form of an amusing green cartoon character.

Ober concentrates a major portion of his \$25,000 advertising budget on bulk mailings, with an average three to four percent return on each mailing. "We're proud of our closing ratio on inquiries — two out of three," Ober says. "We figure the Davey name helps us."

A unique feature of Davey personnel set-up helps to make technicians' working hours more productive and compensates for road time. All Davey Lawnscape firms employ full-time service representatives. Ober has two representatives, Mark Morgan and Ed Gruber, who deal with clients, answering questions and adjusting complaints. This work, important and time-consuming, frees technicians to spend full time on lawn care.

Each of Ober's six technicians must complete 15 to 20 jobs a day. The schedule is needed so that the firm can hire permanent rather than seasonal employees by earning enough during the eight-month lawn working season to pay salaries and expenses for 12 months.

A Davey lawnscape technician must take a 40-hour course on the principles of lawn care, and must repeat the course until he gets a perfect score. Every member of the lawn care staff starts as a technician, so that he understands the problems of actually working on lawns. Ober, who has an M.B.A. from Kent State University, started on the trucks and worked his way up through the ranks.

This background of training and experience is helpful in dealing with hilly lawns. Three-quarters of Pittsburgh's suburban lawns fit that category, having some degree of slope ranging from gentle to drop-offs so steep they must be planted with a rock garden or ground cover. Ober says that in dealing with steep banks spray companies have the advantage over firms that use granular applications. "A granular operation may have to turn down a client who has a bank too steep to service with a tractor or spreader," he says. "Spray firms don't have that problem."

Davey Lawnscape firms, unlike other spray application operators, use an extended nozzle. The advantage of this nozzle, they feel, is that it gives the technician better control and prevents herbicide spray from harming valuable ornamental plantings. With this type of nozzle, control of spray drift is possible even on a hillside.

All lawn care firms, whether spray or granular, must deal with the biggest difficulty a hilly lawn presents: its responsive nature. A lawn in excellent condition will respond well in spite of the slope. But if the soil is baked tight or if there is a dense layer of thatch, the water rolls off without being absorbed. The Pittsburgh area, Ober observes, lacks gentle soaking rains in the summer season. Rather, there is a strong tendency toward the heavy downpour of late afternoon or evening thundershowers. Runoff causes localized drought spots on steep banks even when there is ample rainfall.

Proper fertilization will help the condition, but will not solve the problem. Here is where the client's cooperation is vitally important. Ober says his service reps analyze the soil, and advise homeowners in methods of dethatching, deep-soaking, reseeding, proper mowing, and removal of clippings and autumn leaves. It takes time and patient effort, along with a precisely formulated program of spray applications at proper intervals, but it is possible to achieve an attractive healthy lawn coverage even on what appears an "impossible" bank.

In addition to their slope problems, Pittsburgh lawns tend to be small, with an average size of 5,000 square feet in suburban areas. Suburbs offer the best market, with a mean income of \$15,000, as compared to a mean income of \$10,000 in the city. Even among prosperous outlying communities, there are few plans where lawns average 20,000 square feet.

Commercial properties also have small lawns. One of Ober's largest commercial clients is sizable Monroeville Mall. "Most commercial clients don't have enough area to have a big lawn," Ober says, pointing out that, whereas a Pittsburgh apartment complex might have a lawn of 5,000 to 10,000 square feet, a comparable apartment in Detroit might have 30 to 40 acres. Commercial properties account for only 10 percent of Ober's business.

With all its problems, Pittsburgh is not holding the Davey Lawnscape Service down. During two years' operation, Ober and his staff have met the city's challenges successfully, with an operation of a little under \$200,000 the first year, a 100 percent increase the second year, and a projected 50 percent increase for the third year to a low or mid-\$600,000 figure. Ober plans to increase his fleet of six trucks by three more next year, and the firm is already outgrowing its present facility.

vations of color were made, IBDU had unacceptable color ratings 29 times and UF had unacceptable color ratings 36 times.

"It is interesting to note, however, that during the first two years of the six-year study when 46 color ratings were made," Dr. Hall said, "IBDU had 14 unacceptable ratings and UF had 30. During the last four years of the study when 83 color ratings were made, UF had only six unacceptable color ratings while IBDU had 15."

He said that this data substantiates the field observation that continued use of constant rates of UF over extended periods of time can lead to annual release of higher rates of nitrogen. He said this build-up does not appear to be as great with IBDU.

Chelated iron. More recent work with chelated iron in Virginia by Dr. Richard E. Schmidt has shown that there can be several favorable affects associated with the application of iron to turfgrass.

Iron deficiency can be initiated by several factors such as over-irrigation, poor aeration, high phosphorus levels, high concentrations of heavy metal in the soil, extremely low or high temperatures, high light intensity and high nitrogen concentrations in the soil, Dr. Hall said.

"With all of these conditions possibly creating iron deficiency," he said, "it seems quite likely that iron applications might provide benefits to turfgrass."

Benefits of iron fertilization which have been noted through research and practical observation are improved green color, increased top growth, increased root growth, increased carbohydrate levels, decreased respiration and decreased winter dessication.

"The work at VPI has expanded our understanding of the different effects provided by iron chelate and iron sulfate," he said. "It is now known that iron chelate has more plant mobility, does provide better results dur-

ing stress periods and can cause growth inhibition in early spring."

He said the iron sulfate form of iron is cheaper and is absorbed more rapidly into the plant. The iron sulfate has consistently performed better than iron chelate when applied with spring nitrogen programs, he said.

Fall fertilization. One of the most important discoveries in recent years has been the finding that late fall fertilization provides several benefits to cool-season turfgrasses in many areas of the country.

Advantages noted in research and practical observation from late fall fertilization are increased shoot density, increased root growth, decreased need for spring mowing, improved fall to spring color, decreased weed problems, increased drought tolerance and decreased summer disease.

"The theory of late fall fertilization is primarily dependent upon differences which exist in the metabolic processes of photosynthesis and respiration," he said. The process of photosynthesis utilizes carbon dioxide in the presence of sunlight, chlorophyll and water to produce carbohydrate. This carbohydrate serves as an energy or food storage reservoir.

The process of photosynthesis is relatively temperature-insensitive. It occurs almost as rapidly at 40°F. as it does at 70°F.

The process of respiration, which involves the utilization of photosynthetically produced food, is very temperature-sensitive. The warmer the temperature, the higher the rate of food reserve use. This means that in most areas where summer air temperatures exceed 80°F., Kentucky bluegrasses are in a state of deficit spending" with regard to food in reserves.

In other words, they are burning up more carbohydrates in respiratory processes when temperatures are warm than they are making in their photosynthetic processes. Therefore, during these periods it is not wise to be forcing bluegrass into more rapid respiratory rates with fertilization. Summer fertilization of Kentucky bluegrass in warmer regions of the country results in excessive loss of stored food reserves.

In many regions of the country, fertilization of Kentucky bluegrass during periods when photosynthesis is maximum and respiration rates are minimum (late fall) can lead to maximum storage of food reserves, he said. These food reserves are then utilized during the winter growing season for the production of roots. These same food reserves can be utilized to provide recuperative potential in July and August.



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

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Can you handle disease problems on your customer's lawns? If not, you're probably missing opportunities to sell special treatments, and you may even be losing customers.

"Once a homeowner discovers he has a problem and you can't solve it, he'll find someone who can," says Steve Derrick of Lawn Groomer, Bloomington, Ill.

"The challenge," adds partner John Latting, "is to solve the problem on the spot, with no additional service cost."

Many lawn care companies will let a customer go before they try to solve his problem, or recommend that the customer do it himself. This is because most companies operate on a volume basis where every lawn gets the same treatment. Few companies are set up to handle special problems, and few feel they can afford the expense of additional service calls.

Lawn Groomer was no exception to this, until Derrick and Latting recognized they were missing business opportunities when disease problems started showing up regularly in their customer's lawns.

"All lawns have disease in some degrees," says Latting. "We just didn't realize the magnitude of the problem when we got started," adds Derrick, "and we didn't realize that home owners will readily pay for special services beyond the basic program."

"We recognized that what we needed was a vehicle that allowed us to cater to special needs, but without sacrificing



Derrick Latting



Lawn Groomer can offer prescription lawn care thanks to a new spray system which allows the applicator to custom-blend insecticides in small quantities to handle special lawn problems.

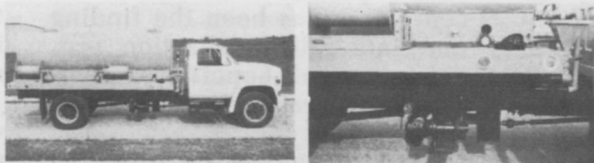
volume," Latting said. Fortunately, the two of them were no strangers to spray equipment. In addition to their lawn care service they also teamed up several years ago to begin Professional Turf Specialties, which builds spray systems and custom trucks for lawn care companies as far away as Texas.

After tinkering with several new designs, they recently developed a compartmentalized tank which looks something like a small tank inside a larger tank with some fancy piping. The system is designed to allow the applicator to custom-blend materials in the small tank as needed.

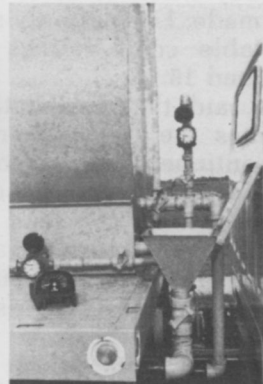
Fortunately, Derrick and Latting were no strangers to fungicides either. They knew it wasn't necessary to haul around a lot of materials around on the off-chance a Lawn Groomer crew would run across a disease problem. The

backbone of their disease control work is Tersan 1991, a systemic fungicide which controls a variety of diseases including dollar spot, large brown patch, *Fusarium* patch and blight and striped smut.

Tersan LSR is a contact fungicide that controls leaf spot, rust and *Rhizoctonia*, and the combination of 1991 and LSR controls most early-season lawn problems. For late-season disease problems, the combination of 1991 and Tersan SP will also control *Pythium* and snow mold. One or the other of these combinations can usually take care of most lawn problems, Derrick and Latting feel.



The system has two tanks and a hose for each one (left). The two-stage centrifugal pump is easily serviceable and the only moving part on the truck aside from the hose reels. This system can transfer materials between tanks in addition to pumping out (middle). For easy mixing the materials can be added through the venturi without opening the top hatches while the tachometer assures accurate metering (right).



Tersan is marketed by Du Pont Co., Wilmington, Del. Other fungicide manufacturers with products available to the lawn care businessman include: TUCO, Div. of Upjohn Co., Kalamazoo, Mich.; Diamond Shamrock Corp., Cleveland; Mallinckrodt, Inc., St. Louis; W. A. Cleary Corp., Somerset, N.J.; Rhodia, Inc., Monmouth Junction, N.J.; Rohm & Haas Co., Philadelphia; Chemagro Agricultural Div., Kansas City, Mo.; Stauffer Chemical Co., Westport, Conn.

Latting says that the new spray system allows the applicator to meter the correct amount of material from the larger bulk tank into the smaller tank to treat a lawn with a "standard" application, but it only takes an extra five minutes to custom-mix a fungicide or insecticide into the tank to handle special problems.

"That means we can sell a special treatment at no added service cost," Derrick said.

"And that means we can offer prescription lawn care," Latting adds. "The system is flexible, but doesn't sacrifice volume business."

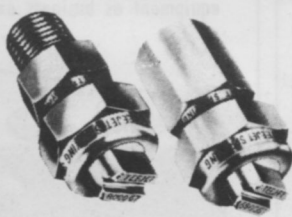
Lawn Groomer services an area within a 50-mile radius of Bloomington and has found that the increased business from fungicide applications generates enough profit to offset all of their fixed operating costs for the entire service.

Latting says that as competition for customers gets tougher between lawn service companies, he expects the emphasis to shift from getting new business to maintaining the customers he already has, and that means catering to their special needs.

"Until now," he says, "the lawn care industry has been operating under the concept that we can go out and treat every lawn the same. But all lawns aren't the same. What we have done is design equipment that allows us to provide a special service that people are willing to pay for, and make a better profit at the same time."

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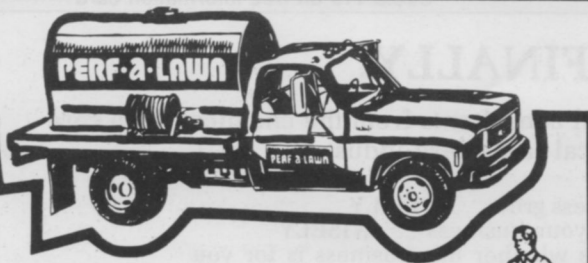
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Circle 109 on free information card

Measuring Wheel

Heavy Duty Measuring Wheel

Welded Construction

Wide Wheel - 1 1/4"

Cushioned Handle Grip

Metal Housed Veeder-Root Counter

Easy Reset

Counter Guard

Used by one of the Largest Lawn Care Companies in the U.S.A.

Great for Measuring Roads, Parking Lots, and Driveways...

Custom Colors Available on Request (Lots of 25 or more Only)

Shipping F.O.B. Columbus

Quantity Discounts Available

For More Information Call or Write:

Imler Industries, Inc.
1117 Broadview Ave.
Columbus, Ohio 43212
614/486-9068

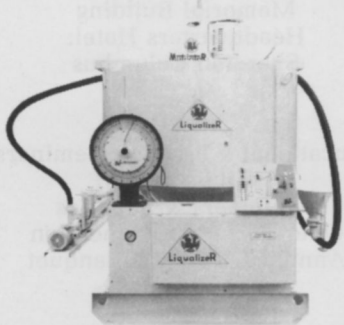


Circle 114 on free information card

PRODUCTS

Custom fertilizer mixes possible with system

Lawn fertilizer mixes, customized to meet local market soil and climatic conditions, are possible with the LiquezR, a cold-mix, liquid-blend system, manufactured by Barbard & Leas Mfg. Co., Inc. The B & L Liq-



ualizeR combines a liquid fertilizer base solution with water, nitrogen solutions and dry solids to produce a complete analysis liquid fertilizer for the local market. The unit features the patented B & L MutilatoR, and agitator-mixing system that insures complete and thorough blending and an automatic control system that prevents formula errors. Installation is easy too, requiring only the obvious supply and discharge connections, plus final power source hook-up.

Circle 202 on free information card

59 pounds, 24 aerator holes per square foot

The Derby Morgan professional lawn aerator was designed by the Derby Tiller Co. to give the lawn care businessman an efficient, low-cost means of aerating and thatching. Professional lawn care businessmen were involved in the design of the product. It can also be used as an edger and as a tiller for reseeding browned-out areas of lawn. The unit weighs just 59 pounds. It can be loaded, unloaded and operated by just one person. The unit works 24 inches

wide and will do the average residential lawn as fast or faster than large, trailer-drawn machines which take 15 minutes to load and unload, the company said. Free, detailed literature is available on the unit.

Circle 208 on free information card

Lawn edging resistant to frost-heave, settling

The "Black Diamond" bed divider/lawn edging manufactured by Valley View Specialties Co. is constructed of pure virgin polyethylene with weather inhibitors added. It is resistant to frost-heave and ground settling, the company said. The edging will not rot, rust, deteriorate, or lose its shape when properly installed, the company said.

Circle 204 on free information card

Addressing package for up to 800 names

Speedaddress, Inc. announces the introduction of the new Speedaddress Data File, a complete addressing package for mailing lists of up to 800 names.

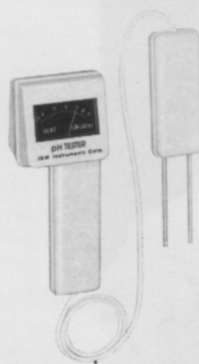


The data file is ideal for direct mail, sales leads, follow-ups and statements. Each address card includes ample record recording area in addition to being a clean, ink-free address master. The file assures complete organization of mailing lists, with four dividers, colored signals for coding, plus ample supply storage space. It comes complete with addressing cards, addresser roller and duplicating fluid in a compact covered file box.

Circle 207 on free information card

Easy-to-read pH tester

A new pH tester is available from J & M Instruments Corp.



The model PH3 is a complete, self-contained, easy-to-read unit that features a high-impact, molded case and is only four ounces in weight. No batteries are required.

Circle 206 on free information card

New pop-up sprinkler for residential work

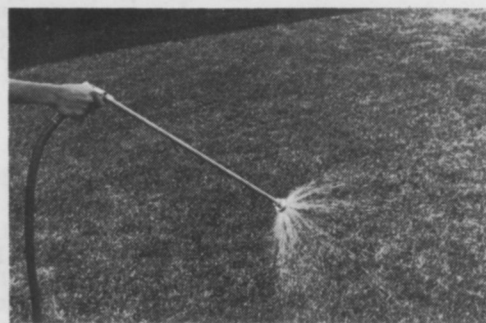
Rain Bird Sprinkler Mfg. Co., Inc. recently introduced a new pop-up sprinkler for residential



installation that features an exclusive "PJ" arm to eliminate annoying side splash. The model 15105C "Pop-A-Way" sprinkler also offers an effective arm hood to prevent debris from entering the arm bearing and new trip mechanism splines to prevent foreign material from interfering with effective operation. The sprinklers are capable of full- or part-circle operation and

The LAWN PRIDE 500

... regulate flow with finger tip control



- sprays low and wide for drift control
- cover wide turf areas AND go low under shrubs
- Viton-O-Rings — lasting performance
- corrosion resistant — easy maintenance
- course spray pattern for low volatility
- manufactured of corrosion resistant materials for longer life

PRICE: \$47.95
includes gun, extension & exclusive nozzle

For further information contact:
Lawn Pride
223 Big Run Road
Lexington, Kentucky 40503
Phone (606) 277-1112

Circle 124 on free information card

are field-adjustable for coverage of from 20 to 340 degrees.

Circle 203 on free information card

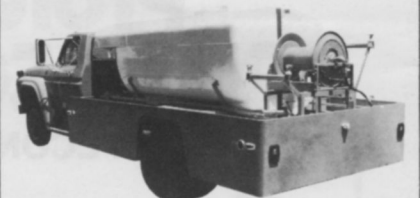
Testing equipment for small gas engines

Sometimes engines on small tractors, lawn mowers, chain saws and other equipment are hard to start, and the cause of starting difficulties is not always easy to find. Flywheel magneto testers, compression gauges and condenser and coil testers, available from Perry Davis Equipment, will tell you at once where to look for the problem. They will instantly test ignition, revealing defective coils and condensers and bad points. Further information is available.

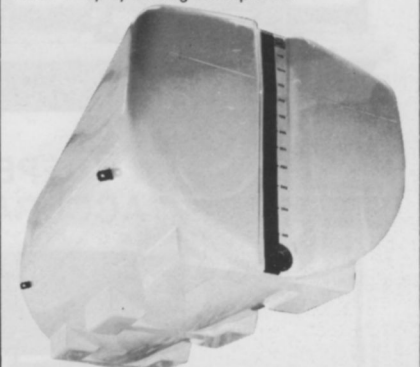
Circle 210 on free information card



WHEN
THERE'S NO
SUBSTITUTE
FOR THE BEST!



Model #PC 1200 fiberglass tank equipped with fiberglass pump cover, Model #D 200 gallon mixing tank shown mounted on a custom truck body by Strong Enterprises.



Bottom view of the Model #PC 1200 tank showing to best advantage the integral molded mounting base and steel hold-down lugs designed for ease in mounting on your truck and eliminating costly installation.

THE Tuflex Manufacturing process allows a five year warranty on all tanks.

Tuflex is the only manufacturer to specialize in *seamless* fiberglass spray tanks specifically for the pest control and lawn care industry. Remember when craftsmanship was an art... at Tuflex it still is! The exclusive Tuflex process carries a full five year warranty on all handcrafted seamless fiberglass tanks.

For economy prices and more information on our complete line of tanks, write or call now:

Tuflex Manufacturing Company
Post Office Box 13143
Port Everglades, Florida 33316
(305) 525-8815

Circle 105 on free information card

Put the **GREEN** back
in your Customers lawn
and the **GREENBACK**
in your pocket!
And keep it there
with:

The Andersons

DRY LAWN CARE PRODUCTS
MAUMEE, OHIO

Nothing Fancy
Just Good Service & Fair Prices

Call Salty or Roger
Lawn Fertilizer Div.

Toll Free:
In Ohio 800-472-3220/Outside 800-537-3370

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BEHIND THIS ISSUE



It got started out as the "Lawn Care Top 10" then a few weeks later we decided to make it the "Lawn Care Top 50." We sent out questionnaires, huddled in meetings with our editors and marketing staff, and contacted major lawn care suppliers across the country.

Our results — 38 chemical lawn care companies grossing just under or more than a million (many well over a million) dollars a year — are on page 4.

The idea is not to publish private financial data, but rather to get a handle on the amount of business being done in our industry. Obviously, the large manufacturers are beginning to take note, if the fertilizer manufacturers quoted in the story beginning on page 10 are any gauge.

Anyway, it is a start on defining this industry in which we all spend 100 percent of our working day.

Bob Early

Professional SPRAY EQUIPMENT

AT AN ECONOMICAL COST!!!



DEPENDABLE
ACCURATE • ECONOMICAL



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



3. Tachometer pressure gauge and remote throttle assure accuracy.



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



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

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

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

Professional Turf Specialties
CALL COLLECT (309) 454-2467

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

Circle 121 on free information card

System eliminates catch-up bookkeeping

A new accounts receivable system from NBS Systems, Inc. eliminates catch-up bookkeeping and helps find information fast. A unique audit trail feature eliminates time-consuming steps in finding needed information. It features categorized distribution with ample columns to provide desired analysis. The company said it is an exceptional cash flow control tool to provide monthly analysis through a subsystem designed for effective collection follow-up.

Circle 201 on free information card

4,000- to 21,000-gallon chemical storage tanks

A new, four-page brochure from Raven Industries describes its line of 4,000 to 21,000-gallon chemical storage tanks. Fiberglass-constructed for maximum protection against chemical and corrosion attack, Raven's new maintenance-free storage tanks are available in 10-foot and 12-foot diameters. The tanks are offered with either standard or optional accessories.

Circle 209 on free information card

Lawn irrigation controls with 40-station capacity

Literature is available from Lumenite Electronic Co. on its line of five- and 11-station sprinkler controllers and also on its 40-station capacity controllers. There are no relays, coils, capacitors, diodes or any other unneeded parts, which eventually fail, leading to call-backs, the company said. Manual indexing is accomplished by merely rotating the index knob to the desired station.

Circle 205 on free information card

CLASSIFIED

When answering ads where box number only is given, please address as follows: Box number, c/o LAWN CARE INDUSTRY, Dorothy Lowe, Box 6951, Cleveland, Ohio 44101. Rates: 35¢ a word for line ads, 65¢ a word for display ads. Box numbers add \$1 for mailing. All classified ads must be received by the publisher before the 10th of the month preceding publication and be accompanied by cash or money order covering full payment. Mail ad copy to Dorothy Lowe, LAWN CARE INDUSTRY, Box 6951, Cleveland, Ohio 44101.

HELP WANTED

AGRICULTURALIST, HORTICULTURALIST, AGRONOMIST. Excellent opportunity to assume broad scope responsibilities for a major chemical lawn care company. Primary responsibility will involve research, training, and providing technical support to branch management personnel. Successful candidate should have a Ph.D. in agriculture with specialization in agronomy and horticulture. Some experience in turf management or related fields. Salary commensurate with experience and job responsibilities. For confidential consideration, send resume and salary history to: Box 10, Lawn Care Industry, Box 6951, Cleveland, Ohio 44101.

COLORADO OPPORTUNITY. Established lawn chemical service offers position with ownership participation to individual with liquid application and formulation experi-

**Attention: Midwestern
Lawn Care Businessmen!**

OHIO TURFGRASS CONFERENCE & SHOW

December 5-7 in Columbus
Exhibit Hall — Veterans
Memorial Building
Headquarters Hotel:
Sheraton Columbus

Educational & Practical Seminars
Exhibits of Turf
Equipment & Supplies
Ohio Turfgrass Foundation
Annual Meeting & Banquet

Contact: David P. Martin, OTF
1827 Neil Ave., Columbus,
Ohio 43210
phone 614/422-2591

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The Andersons	16
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Erbaugh & Associates	19
E-Z Rake	21
Imler Industries	20
International Seed	7
Lakeshore Equipment & Supply Co.	23
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Mid-America Trade Show	17
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Perf-A-Lawn Corp.	20
Power Spray Technology, Inc.	5
Professional Turf Specialties, Inc.	22
Spraying Systems Co.	20
Tuflex Mfg. Co.	21
Union Carbide Corp.	8-9
Velsicol Chemical Corp.	3
Warren's Turf Nursery	11
Westheffer Co.	19

ence. Replies will be held in strict confidence. We are not looking for an investor but an experienced, honest, hard worker. Reply Box 26527, Lakewood, Colorado 80226.

FOR SALE

3 LAWN SPRAY TANKERS, 1300 gallon fiberglass, automatic, power reels, agitation, complete. GMC 1974, \$9500, 1975 \$10,500, 1976 \$11,500. 216 255-3131.

DEALERS WANTED

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

USED EQUIPMENT

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

WANTED TO BUY

SOIL SHREDDERS WANTED. Large tractor loader fed type Lindig and Royer Soil Shredders wanted. Turn your surplus shredders into cash. Contact by telephone or write with full details about your shredder. R. N. Duke, 1184 Plains Road East, Burlington, Ontario L7S 1W6. 413 637-5216.



WE RECOMMEND LESCOSAN

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

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

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

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

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

"Since we are constantly expanding our franchise

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

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

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

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

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

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

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

LESCO PRODUCTS

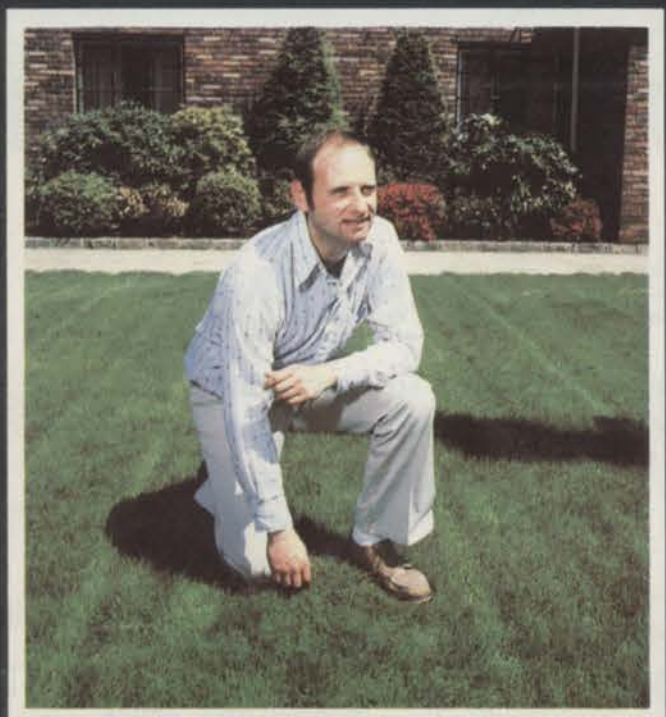
Division of Lakeshore Equipment & Supply Co.
300 S. ABBE ROAD, ELYRIA, OHIO 44035

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

"baron

KENTUCKY BLUEGRASS

is the most 'customer-proof' grass seed I can buy"



Alan Maged

Alan Maged,
Lawn-A-Mat dealer, Garden City Park, Long Island, New York. . .
one of the largest independent lawn care dealers, servicing over 2000 lawns.

"I make sure Baron is in every pound of grass seed we use. Last year it amounted to 80,000 pounds of Lofts special lawn seed mixtures. If all goes well, I'll order even more this year.

"Why do I insist on Baron? Because my customers expect me to compensate for everything, from the weather to their own mistakes. Some homeowners may let their lawn grow to six or eight inches, then cut it to three-quarters of an inch! Or they'll forget to water their grass during a drought, or

use their lawn for a baseball field. With all that abuse, they still expect a good lawn.

"I need a 'customer-proof' grass seed mixture. So I specify Baron, Yorktown and other top quality Lofts grasses in my special mixture. I get a lush, green color, an excellent root system and the best resistance to leaf spot I've ever seen. Guess that's why I get better than 85% renewals every year.

"One last thing, I really depend on my suppliers for delivery and service. I've dealt with the Lofts people for 15 years and they haven't failed me yet. That's very important to me."



**Lofts
Pedigreed
Seed, Inc.**

Bound Brook, N.J. 08805/(201) 356-8700

Circle 103 on free information card