WT&T Profiles Suppliers in Three States
Distributors Favor Landscape and Golf Over Consumer and Farm

Further Exploration of North American Natives Is Needed
Make sure your lawn care jobs don't come back to haunt you.

With labor and gasoline what they are today, the cost of a call-back is frightening. Add in the hidden costs of unhappy customers, and it's enough to scare you to death.

That's why you need DURSBAN* insecticide in at least two of your yearly applications. You see, in most parts of the country, insects are a problem in both the Spring and later on in the Summer. If they don't get you the first time, they just might get you the second.

And that can mean costly call-backs.

So think twice before you decide to skimp on DURSBAN. And think about how little it costs—as little as $3.50 for a 10,000 sq. ft. lawn. Which is a lot less than the cost of a call-back.

DURSBAN insecticide gives you results you can count on, too. It gets all your major problem bugs. And it controls them for up to eight weeks instead of the more common four to six.

DURSBAN. Makes sure all your returns are happy returns. Available in 2E and double-strength 4E formulations.

See your Dow distributor. Also ask him about our new "DURSBAN delivers the goods" incentive program. Be sure to read and follow all label directions and precautions. Agricultural Products Department, Midland, Michigan 48640.

DURSBAN
Call-backs haven't a ghost of a chance.

DOW Chemical U.S.A.

*Trademark of The Dow Chemical Company.

Circle No. 110 on Reader Inquiry Card
The multifaceted landscape management market consumes a wide variety of products in significant quantities. See page 37 for the 1983 Buyer's Guide.

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Landscape Management Profile: Dealers and Distributors
New research and four company profiles reveal creative measures taken by distributors to grow and prosper.

27
Beckman Salesmen Keep in Constant Touch With Their Customers
St. Louis turf and irrigation distributor serves its customers by frequent calls and professional advise. This persistence is paying off as Beckman grows.

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Modern Management Propels 7-Year-Old Irrigation Supplier
Hydroscape has experienced phenomenal growth in a short seven years due to a multi-talented management team and use of modern business tools.

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Garfield Williamson Doubles Turf Sales in Five Years
New Jersey seed and chemical distributor has tapped the New York Metropolitan area for amazing growth. Not bad for a company started 100 years ago.

89
Regional Distributor Becomes National Manufacturer
The fourth distributor profile is a prime example of the unlimited potential in the golf and landscape market. Lakeshore Equipment and Supply grew with the market from 1962 to present. Trucks are only part of Lakeshore's future.

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North American Natives Need Further Study
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DEPARTMENTS
Outlook

Green Industry News

Golf Update

Landscape Update

Government Update

Vegetation Management

Products

Events

Classifieds

Advertiser Information
There's nothing on earth like Eclipse Kentucky bluegrass seed available exclusively from:

GARFIELD WILLIAMSON, INC., 1072 West Side Ave., Jersey City, N.J.
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Eclipse Kentucky bluegrass is bred for out-of-this-world beauty and performance. It thrives in sun and light shade and is the ideal base for sod blends and turf seed mixtures for golf courses, parks, playing fields, and home lawns, coast to coast. In national trials, Eclipse was proven to have greater resistance to powdery mildew, leaf rust, Fusarium blight, and dollar spot disease. Eclipse stands up to harsh winter weather and easily tolerates poor fertility and high heat. For a dark green, low-growing turf with strength, density, and texture, you can't do better than Eclipse. There's nothing like it anywhere on earth.

Circle No. 115 on Reader Service Card
Who really wants or needs management information?

The popularity of management consultants to the landscape industry seems to say many of you want and need management information. The age of computers, volatile interest rates, and government regulations for small business make a basic level of understanding necessary.

Business magazines and general business courses are helpful, but when you have a question about a specific problem to the landscape business, where do you look for an answer? Associations, specialized consultants, your accountant or banker? Probably all of these. So you have four opinions for one problem.

Weeds Trees & Turf and the Associated Landscape Contractors of America have hopefully solved a problem with a book and an educational seminar. More than a dozen successful landscape contractors and consultants are now writing chapters for the book. They will describe their experiences in solving landscape business problems using actual cases and specifications.

ALCA has organized a management seminar for the Dallas area in November. The topics and roundtable discussions will be based upon problems ALCA membership has experienced.

As you can see, the purpose is to provide you with information which is directly applicable to your business. General information you have, specific information you need.

The landscape and golf industries have always had a thirst for technical information about turf and tree care. Our dilemma at WT&T has been how to add business information to technical information.

ALCA has recognized a special group of owners and managers who are looking for business assistance or standards. The current thought is this group needs helpful material written just for it, not bits and pieces mixed with technical material.

Weeds Trees & Turf will continue to provide technical and some business material for your use. The book will confront business topics specifically, with consideration of the technical limitations or requirements out in the field.

Not everyone wants or needs management information. But those who do are growing in number and it’s time to meet their needs. Drop me a note if you are looking for more business information. Perhaps you have a problem the book should cover. We’ve tried to include them all, but the idea is to meet as many of your needs as possible in one book.

My address is Weeds Trees & Turf, 757 Third Ave., New York, NY 10017. If you want more business information, we’ll get it for you.
We kept the RPM's low to help keep our new B8200 tractor quiet. But don't let that quiet exterior fool you. This is a very powerful Kubota. It offers the compact size and high maneuverability of our B Series. But with its heavy-duty hydraulics and a new extra-strength rear axle design, this new 19 hp tractor can handle tougher jobs. Like mowing, tilling, loading and scraping.

customers all like the B8200. Especially since Kubota's sturdy diesel engine never needs a tune-up. And everyone likes the way this tractor looks. The engine compartment is totally enclosed, keeping the lines clean and simple. Flat-topped fenders flare into large floorboards to help make a true operator platform. And the large control levers are conveniently located so that operation is also simple. Our nationwide sales and service network makes it easy to buy a Kubota tractor.

So stop by your local Kubota dealer and find out what he has to say about the new B8200. It's the only way you'll ever get to hear about its extra horsepower. For more information write Kubota Tractor Corporation, Communications Department, P.O. Box 7020, Compton, Calif. 90224.
Sod growers battle recession

Sod producers are having to improve their management practices to survive in the current market conditions. Representatives of the industry meeting at the American Sod Producers Annual Summer Convention agreed that sod sales are significantly down, due primarily to reductions in new home construction. According to Walt Pemrick of Warren Turf Nursery, producers are adjusting to the downturn by cutting back on overhead costs and making a more concerted sales effort.

According to Ralph White of Southern Turf Nurseries Tifton, GA and president of the ASPA, the smaller operators are under the most pressure. "A business which is as capital intensive as sod is very difficult to justify on 50 acres." White feels that sod producers are becoming more business minded, keeping closer inventories, using more effective means of cost accounting, using more efficient machinery and hiring a higher quality of employee. The tighter market has narrowed the profit margin on sod and made mistakes far more costly than they were a few years ago.

Al Gardner from Greenlawn Sod Co., Inc., of Broomfield CO, commented that the industry is trying to open up specialized markets by developing regional sod grasses from dry land grasses, salt tolerant species and low maintenance varieties. "In the future, water will dictate the types of grasses we produce" stated Gardner. Water shortages will require sod producers to offer sod that is suitable to local climatic conditions, according to many sod growers.

Producers also have the opportunity to open new markets in areas that traditionally use seed rather than sod. Because the price of sod has come down dramatically due to oversupply, efforts are being made to convince both professional and retail consumers to convert from seeding to the use of sod.

According to White, the ASPA is planning its activities with the short term difficulties of its members in mind. Symposiums on water usage and business management are being offered in conjunction with the association's winter convention in San Antonio TX. White feels that the management changes that are being made in the industry as a result of this recession will put sod growers in a very strong position when economic conditions improve.

The Vaughan-Jacklin Corp. has agreed to sell its business and assets to the Davis Rogers Investment Group. The Vaughan-Jacklin board of directors was unanimously in favor of the proposed purchase agreement and has agreed to sign a voting and proxy agreement for 53% of the outstanding shares of Vaughan-Jacklin.

Davis Rogers is offering $13.75 per share for Vaughan-Jacklin stock, less the expenses for the transaction. The purchase price is also conditional upon the net worth of Vaughan-Jacklin remaining the same as their preliminary estimate. After the transaction, Vaughan-Jacklin intends to make an offer to each shareholder giving him the option of redeeming his shares for cash.

Vaughan-Jacklin is a distributor, manufacturer and grower of professionally used horticultural products and home garden supply items. The Davis Rogers Investment Group which owns and operates substantial agricultural businesses and real estate. David Rogers presently owns and runs companies involved in growing and distributing sod, raising row crops and ranching.
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The Renovaire features independently-mounted tine wheels that hug the turf and deliver maximum penetration on irregular terrain like golf courses and parks.

Both aerators give you a wide 6' swath and a choice of interchangeable tines (coring, slicing and open spoon) to match your soil conditions. And either can be equipped with a heavy-duty dragmat for breaking up cores.

The Ryan Tracaire and Renovaire. One of them is perfectly suited to your grounds.

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USGA forms research committee

The United States Golf Association has formed the Turfgrass Research Committee. "In time, the research compiled by this committee could lead to major breakthroughs in turfgrass maintenance," said USGA Senior Executive Director Harry Easterly Jr.

The long-term program will be a multi-million dollar undertaking. The primary purpose of the program is to develop minimal maintenance turfgrasses that are water conserving, salt tolerant, disease and insect resistant and will provide excellent playing surfaces. One of the major efforts of the committee will be to form a computerized reference source for all turfgrass research literature. This will bring together every piece of literature dedicated to turfgrass research from throughout the world.

The committee will also fund overseas expeditions which will enable researchers to gather grasses from all over the world. An expedition for plant material search in Asia and South Africa has already been authorized.

Owners form independent group

A new golf industry trade association, the Golf Course Association (GCA), has been formed by the owners of privately-held public golf courses. Directors of the National Association of Public Golf Courses voted in April to become an independent group and adopt the new moniker, "Golf Course Association." NAPGC had been an affiliate of the National Golf Foundation for the past five years.

GCA's objective is to grow quickly as the voice for the owners of tax-paying public golf courses and earn a position as one of the major independent forces within the golf industry, according to Bailey Trull, owner of Trull Brook Golf Course, Tewksbury, MA. The association will represent public course owners on industry and governmental issues and is envisioned as an important business and management education resource for the daily-fee segment of the golf industry.

GCA is beginning with a membership of approximately 150 golf course owners. As of January 1, 1982, NGF reports that there are 5428 daily fee golf courses in the U.S. GCA predicts a membership growth rate in excess of 200% annually over the next several years. Michael Rippey of Smith, Bucklin and Associates has been named executive director of the association which is headquartered in Chicago and has offices in Washington, D.C. Regular membership dues are $175 for nine-hole courses and $250 for courses with 18 or more holes. Companies which provide products or services to GCA member courses may enroll as associate members for $200. Charter memberships are being offered until the Golf Course Association’s 1982 Annual Meeting, December 1-4, at Arnold Palmer’s Bay Hill Club and Lodge, Orlando, FL.

California announces national interior show

A California publisher has announced plans for a National Interior Landscape Exposition to be held at Disneyland Hotel Convention Center, Anaheim, for June 1983.

Florida has been the center of the interior foliage market since its creation, although interior landscapers are now in business throughout the U.S.

Hester Communications, publisher of Western Landscaping News, hopes to attract thousands of interior plant specifiers to Anaheim as well as hundreds of exhibitors. Hester currently coordinates the American Pavilion at the International Bicycle and Motorcycle Exhibit in Cologne, Germany.

A panel consisting of representatives from the Associated Landscape Contractors Association, the Interior Plantscapes Association, the American Society of Landscape Architects, and interior landscape firms is helping Hester with show planning.

NURSERY

Nurserymen hit the beach (in Hawaii)

"Oahu" means gathering place in Hawaiian and the nurserymen did just that as they flocked to Honolulu, HI, to attend the 107th Annual Convention of the American Association of Nurserymen.

NLA President Gerald Harrell

The convention ran five days and was chock full of information for the sundry affiliated associations of AAN. Tours and seminars were held for nurserymen and National Landscape Asso-

Continued on page 10
When you ask yourself how you can get long-lasting control of weeds in ornamental plants, trees and shrubs, what will your answer be? With Devrinol® herbicide, of course. Because you know Devrinol handles the tough weeds. You know it to be the one that lasts through the whole season. Why? It resists leaching — through heavy rains, even frequent irrigations.

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See your distributor now for Devrinol. Follow label directions. Stauffer Chemical Company, Agricultural Chemical Division, Westport, CT 06881.
LANDSCAPE UPDATE

Maintenance pegged at 19%

According to the National Landscape Association's latest Management Survey, landscapers reported that maintenance services provided 19% of their total business. Regionally, the Northeast reported the highest percentage — 26%, while the Great Plains region came in at 12%.

Of the 138 firms that participated in the survey, 97% performed pruning as part of their maintenance services. Other services include: mulching — 95%, fertilizing — 93%, insect and disease control — 80%, chemical weed control — 75%, lawn renovation — 70%, planting for seasonal color — 66%, mowing and edging — 57%, manual weed control — 51%, watering — 40%, litter and trash removal — 33%, snow removal — 25% (Northeast: 34% and Great Lakes: 34%), and sweeping parking lots — 19%.

In chemical weed control, 70% indicated they used selective herbicides, 52% indicated they use non-selective herbicides, and 11% use aquatic herbicides.

Late charge most popular collection practice

A recent management survey by the National Landscape Association concluded that 85% of the members responding assess late charges to encourage prompt payment of accounts. Regionally, the responses ranged from 62% in the Southwest to 93% in both the Great Lakes and Great Plains. The average monthly assessment was 1.7%.

Local attorneys were reported to have been used by 65% of the firms. Small claims courts have been used by 55% of the respondents. Mechanic’s liens and collection agencies were used at one time or another by 37% of the firms, often as a last resort.

ALCA launches management division, show, and book

The Associated Landscape Contractors of America Board voted in July to launch a Landscape Management Division at a meeting and educational seminar in the Dallas area in November. The Division will have its own set of officers and specialty staff at ALCA headquarters in McLean, VA.

Allen Smith, ALCA executive director, said both upper and middle managers of landscape companies will be invited to the meeting which will feature sessions on marketing, financial management, job costing, and roundtable discussions.

The new division is cooperating with Harcourt Brace Jovanovich Publications on a management book, Cost Effective Landscape Maintenance, to be published this winter. ALCA and HBJ are responding to requests for more information on business management of the landscape firm. The book will be written by successful landscape businessmen, university instructors, legal and business consultants, and HBJ editors. Maintenance standards will also be included.

NEWS from page 8

The interaction between Hawaiians and mainlanders was one of the most interesting aspects of the convention. Both groups took every opportunity to explore each other’s practices and techniques and were genuinely interested in finding out how nurseries and landscaping were handled back home. Six busloads of conventioneers turned out to tour native Hawaiian landscapes, which included the Royal Hawaiian Shopping Center, Honolulu International Airport, Spaulding Estate, and the East-West Center of the University of Hawaii.

The convention was very business-oriented, with the majority of the seminars devoted to advertising, marketing and business practices. A particularly interesting seminar was given by Glen Asakawa of Presidio Garden Center, San Diego, CA. He gave an overview of the interior landscaping market and then explained the reasons why his company was not expanding into that area. (He explained that the market is good but the timing was wrong for his firm.) Seminar attendees were well-rewarded for the hours they spent inside the convention hall (away from tempting Waikiki Beach).

On the business end, S. Kent Langlinais, owner and manager of Kent’s Nursery, Youngsville, LA, was elected AAN president and R. Jerry Rosso, secretary and treasurer of Julius Rosso Wholesale Nursery Co., Seattle, WA, was elected vice president. R. J. Hutton, Conrad-Pyle Co.; David Farley, Farley Bros. Nursery; and Richard Aldridge, Aldridge Nursery; were named to the AAN board of directors.

TURF

Lawn Institute names Roberts

The Lawn Institute confirmed Dr. Eliot Roberts as the new director at its annual meeting in Dallas, TX. He is leaving a position as professor of soil science at the University of Rhode Island, where he was supervising programs...
Contemporary favorite and exhibitionist's delight. Wide expanses show off well with artful contours of Fylking providing tasteful balance and form in mixtures. Find pleasing opportunities to flaunt your artistry with land sculptures of this Swedish heritage elite. Its full lush body would never betray how little care it requires and its lower cost. This and its resilience to heavy traffic and disease make Fylking truly art for the masses. Express yourself. Ask for Fylking Kentucky bluegrass at your local wholesale seed or sod distributor.
But that's only part of the story. Properly timed, that same application can also control major insects such as billbug, chinch bug, Hyperodes weevil and sod webworm.

For example, apply OFTANOL for the first infestation of surface feeding insects. You'll establish season-long white grub control at the same time.

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Or, treat for Hyperodes weevil in the spring. You'll also receive white grub control for the entire season.

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GOVERNMENT UPDATE
by William Hoffman

Five airports on beetle watch

The USDA is requiring five airports to inspect departing planes for hitchhiking Japanese beetles to prevent further spread of the pest. The airports are located in Delaware, New Jersey, Ohio and Maryland.

Beetle numbers in these areas are extremely high according to USDA. Gary Morehead, a USDA Animal and Plant Health inspector, said airlines must use mechanical or chemical means to keep the beetles off the aircraft.

The airports affected are Dover Air Force Base, Del.; McGuire Air Force Base, N.J.; Port Columbus Airport, OH; Rickenbacker Air Force Base, OH; and Baltimore-Washington Airport, MD.

Fire ant panel offers little help

The imported fire ant symposium sponsored by the U.S. Department of Agriculture and the Environmental Protection Agency offered little immediate help to EPA in resolving the control program for this insect.

The fire ant has now infested almost 1/4 of a billion acres in nine states from North Carolina to Texas. A panel on the social and economic factors relating to the fire ant recommended that an unsubsidized relief program would be the most feasible with property owners paying for the chemical treatment. Any program in which the federal or state government would participate would be so vulnerable to funding, legal, and management problems that it would never become operational.

The panel felt strongly that the fire ant problem should be considered a public health problem and not a threat to agriculture.

Several chemical companies reported on new products for the control of the fire ant. Most of the promising are of the biorational types like insect growth regulators and could be the most environmentally acceptable and safe. However, EPA representatives warned that even these compounds would have to be completely evaluated before being registered by the Agency. It would appear that the containment of the imported fire ant is years in the future.

Monsanto sues EPA for release of Roundup data

Claiming irreparable damage and contempt of a District Court order, Monsanto Company is suing EPA for releasing trade secret data on glyphosate, the primary component of Roundup, to a Washington, D.C., law firm.

Monsanto claims EPA did not follow regulations requiring 60-day notice before release of data, nor did it comply with a pretrial order from the U.S. District Court for Eastern Missouri.

The purpose of the law firm’s request for data is unknown. The information released consisted of material used to support the registration of Roundup.

NEWS from page 10

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EQUIPMENT

Sloan replaces West at Cushman/Ryan

Gary Sloan has joined OMC Lincoln’s advertising and marketing staff in Lincoln, NB. He succeeds Scott West who was promoted as a marketing manager for the company’s West Coast Operations.

Gary Sloan

Sloan was promotion manager for Rickel Mfg. Corp., Salina, KS, prior to joining OMC. He will manage marketing of the Cushman and Ryan lines of turf equipment.
**IRRIGATION**

**Cal Poly to offer Irrigation curriculum**

California Polytechnic University, Pomona, will offer an Irrigation Design curriculum beginning this September. Cal Poly Professor of Horticulture Kent Kurtz said the University worked closely with the American Society of Irrigation Consultants and many of the irrigation manufacturers in the area to develop the new coursework.

The four-year curriculum will be implemented by Kurtz, Dr. Joe Hung, and Professor James Degen. Students will study turfgrass management, landscape contracting, golf course management, plant materials, soil science, and drainage in addition to the irrigation courses.

For more information on the new program, contact the Ornamental Horticulture Dept., Irrigation Design Studies, California State Polytechnic University, 3801 W. Temple Ave., Pomona, CA 91768.

**EQUIPMENT**

**Jacobsen hosts student seminar**

The Jacobsen division of Textron sponsored the College Student Turf Seminar for 48 students of agronomy and turf at its headquarters in Racine, WI. The seminar presented information of grounds care techniques such as basic management, turf equipment maintenance and field experience.

According to the company, the turf seminar remains the first and only joint company-distributor sponsored program of its kind. "Our Turf Seminar, now in its 15th year, has always offered college students a premier chance to learn about the latest turf care advancements," said Ned Brinkman, general sales manager.

Divided into two identical sessions, the seminar included training on engines, mowers, turf tractors, hydraulics, hydrostatic transmissions, grinding and

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TELEPHONE ( ) AREA CODE

I WISH TO RECEIVE (CONTINUE RECEIVING) WEEDS, TREES & TURF EACH MONTH

SIGNATURE DATE
Only Hoffco cuts it all.

Some trimmer/cutter brands do brush, or brush and weeds. Then quit. Others do weeds and grass, or just grass. That's it. Only Hoffco handles all your groundskeeping work all the time.

Buy the one brand that does everything.

Choose from 13 different models, top to bottom. Our heavy-duty brush clearers take down a sapling quicker than you can say "Hoffco." Our medium-duty weed trimmer/cutters switch from blades for the tough stuff to monofilament for the easy going. Even our light-duty grass trimmers share heavy-duty Hoffco features like our patented drive shaft systems. All models with blade capability include Hoffco's Guardian Triangle, the three-point suspension system that promotes operator comfort, efficiency—and security.

We don't come apart when you need parts.

Hoffco boasts the best parts delivery in the business. We back our dealers with a parts and service program so complete and so effective, it's unlike any other in the industry. We don't let the grass grow under your feet when you need something. That's another reason to choose Hoffco trimmer/cutters.

TOUGH ON THE JOB. EASY ON YOU.
lapping of reels, preventative maintenance, budgeting and life cycle costing, safety systems and energy conservation. Students also gained hands-on experience operating a wide variety of grounds care equipment during a field day.

LANDSCAPE

Consultant organizes contracting data

Estate Landscape Consultants, the creation of Lon Monroe and Tim Johnson, is a new service that offers clients complete landscape information. The Santa Barbara, CA firm is becoming a clearinghouse on computer that contains information that can be used to administer site planning, construction schedules, materials selection pricing and availability and sources for specialized solutions to specialized landscape problems.

"We work with contractors and owners of the sites, often managing the job as well as providing the necessary information," stated Johnson. The company works on properties from 5 to 3000 acres in size.

Monroe and Johnson are also developing an extensive list of consultants who can advise on specialized projects. Associate consultants include horticulturist, Jerry Sortomme; pest adviser, Bruce Craig; and arborist Bruce Van Dyke. The data in the computers at this point is the most extensive is expanding to a national scale and have recently completed a several thousand acre project the Sycamore Valley Ranch and Walden Condominiums in Aurora, OH.

LANDSCAPE

Environmental Industries Names Rose EVP and CFO

Environmental Industries has placed David Rose in the newly created position of executive vice president and chief financial officer. Rose joined the company in 1972 and has served as the vice president and chief financial officer since 1974.

A Certified Public Accountant, he will be responsible for all accounting and financial policies as well as general managerial activities for the company and its four subsidiaries: Environmental Care Inc., Valley Crest Landscape, Valley Crest Tree Company and Western Landscape Construction, which are involved in landscape construction, landscape maintenance and tree growing. The company reported sales of $60 million in 1981.
No one grass seed combines every characteristic for every type of turf. That's why Northrup King research has developed a complete line of Medalist Turf Products to meet specialized professional needs.

<table>
<thead>
<tr>
<th>MEDALIST TURF PRODUCT</th>
<th>MAJOR AREAS OF USE</th>
<th>SPECIAL FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic Pro Mix</td>
<td>High maintenance athletic turf</td>
<td>Both are well suited for new seeding or overseeding. Fast establishing, excellent traffic tolerance, and rapid recovery. Provides good footing.</td>
</tr>
<tr>
<td>Athletic Pro II Mix</td>
<td>Low to moderate maintenance athletic turf</td>
<td></td>
</tr>
<tr>
<td>Boulevard Mix</td>
<td>Any area with high pH (roadsides, sidewalks, boulevards, beachfronts, etc.)</td>
<td>Contains both &quot;Fults&quot; Puccinellia distans and Dawson red fescue which thrive on high saline or alkaline soils. Performs at low to high fertility levels.</td>
</tr>
<tr>
<td>Landscape Pro Mix</td>
<td>School grounds, cemeteries, golf course roughs, lawns</td>
<td>Fast establishing. Adapts to broad range of conditions and management levels. Low to moderate fertility requirements.</td>
</tr>
<tr>
<td>Overseeder II Mix</td>
<td>Fairways, tees, athletic fields</td>
<td>Fast establishing, traffic tolerant, disease resistant, penetrates compacted soil.</td>
</tr>
<tr>
<td>Overseeder III Mix (Formerly Medalist North Mix)</td>
<td>Fairways, tees, cart paths, wear areas</td>
<td>Long term quality in high traffic areas. Clean mowing and disease tolerant.</td>
</tr>
<tr>
<td>Premium Sod Blend</td>
<td>Commercial sod producers</td>
<td>Fast establishing, exceptional dark green color, shade tolerant, superior disease resistance.</td>
</tr>
<tr>
<td>Special Park Mix</td>
<td>Parks, commercial developments, lawns</td>
<td>Low fertility tolerance, shade tolerant, adapts to wide range of soil types.</td>
</tr>
</tbody>
</table>

Ask your Northrup King distributor about the Medalist Turf Products for your needs. Or write Northrup King Medalist Turf Products, P.O. Box 959, Minneapolis, MN 55440.
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Flexibility • Utility • Economy

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Model 49 Truck

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OLATHE MANUFACTURING, INC.
P.O. BOX 17
INDUSTRIAL AIRPORT, KANSAS 66031
1-800-255-6438
LANDSCAPE MANAGEMENT

PROFILES 1982
Dealers and Distributors

WEEDS TREES & TURF
Finding the primary distributors of professional golf and landscape supplies in the United States is not easy. They are among a melting pot of retail garden centers, farm suppliers, general chemical distributors, outdoor equipment dealers, irrigation distributors, and arborist suppliers—totaling more than 40,000.

Finding the 1,500 businessmen who specialize in professional golf and landscape supplies may be so difficult as to discourage development of products by new manufacturers while protecting current manufacturers. The melting pot is a mixed blessing.

A random sample of **Weeds Trees & Turf**'s 1,400 distributor readers in June has provided some needed insight into their business. The profiles following this report show the variety of distributors serving you and the ingenuity they use to meet your needs.

By far the most prevalent type of product sold by professional distributors is chemicals. Offering chemicals is a practical investment and a service requested by equipment and plant customers. The one-stop approach to marketing professional products is popular, with the possible exclusion of large equipment, plant material, and irrigation supplies. These three items require either special investment or knowledge to sell.

Landscape and golf equipment is sold by half the distributors polled. Irrigation supplies are sold by 40 percent of the respondents and plant material by 32 percent. Large equipment selling requires a service department, replacement parts, and a significant inventory expense. Irrigation distributors require system designers, a specialized sales force, and a significant inventory. Wholesale nurserymen require yards, specialized equipment, and a maintenance staff. To become a distributor of these professional products a commitment beyond handling and sales is required.

More than half the distributors polled sell turf seed. The advent of improved turfgrass cultivars has "professionalized" the seed business and put it a notch above selling common varieties as was the case in the 50's and early 60's.

Twenty percent said they sold farm equipment. Very large equipment, such as tractors, large trenchers, and small dozers are still the domain of farm equipment and construction equipment dealers. Highly sophisticated mowers for golf courses and landscape maintenance are best sold by turf equipment dealers with their greater interest in our market.

The only way to recognize the key distributors of professional products for the golf and landscape markets is by their target customers. Therefore, we asked them a series of questions on primary and secondary types of customers.

What we found made sense according to the history of the market, but the results indicated a lag in reaction by distributors to serve newer, rapidly growing markets such as lawn care and contract landscape maintenance.

Golf course superintendents, park and school maintenance personnel, and the general public were listed as primary customers by nearly half the distributors. These were the first strong markets to lawn and garden product distributors in the 50's and 60's.

The postwar housing boom brought a tremendous interest by Americans in their own yards and the outdoors in general. Manufacturers such as Toro, Jacobsen, O.M. Scott, and Mallinckrodt first reacted to the attractiveness of the outdoor landscape market in the 20's and 30's. Golf boomed in the 20's as well. The Great Depression and World War II put a damper on the market, but not the research.

**TABLE 1.**

<table>
<thead>
<tr>
<th>Type</th>
<th>Primary</th>
<th>Secondary</th>
<th>Not Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golf Superintendent</td>
<td>49%</td>
<td>32%</td>
<td>18%</td>
</tr>
<tr>
<td>Parks/Schools</td>
<td>53%</td>
<td>38%</td>
<td>9%</td>
</tr>
<tr>
<td>General Public</td>
<td>46%</td>
<td>23%</td>
<td>30%</td>
</tr>
<tr>
<td>Landscape Contractor</td>
<td>26%</td>
<td>60%</td>
<td>13%</td>
</tr>
<tr>
<td>Contractor</td>
<td>35%</td>
<td>49%</td>
<td>15%</td>
</tr>
<tr>
<td>Landscape</td>
<td>30%</td>
<td>20%</td>
<td>49%</td>
</tr>
<tr>
<td>Condominiums</td>
<td>17%</td>
<td>62%</td>
<td>20%</td>
</tr>
<tr>
<td>Irrigation</td>
<td>15%</td>
<td>18%</td>
<td>66%</td>
</tr>
<tr>
<td>Contractors</td>
<td>15%</td>
<td>39%</td>
<td>45%</td>
</tr>
<tr>
<td>Airports</td>
<td>15%</td>
<td>34%</td>
<td>45%</td>
</tr>
<tr>
<td>Shopping Centers</td>
<td>13%</td>
<td>28%</td>
<td>60%</td>
</tr>
<tr>
<td>Arborists</td>
<td>11%</td>
<td>41%</td>
<td>49%</td>
</tr>
<tr>
<td>Sod Producers</td>
<td>9%</td>
<td>42%</td>
<td>50%</td>
</tr>
<tr>
<td>Estate Gardener</td>
<td>9%</td>
<td>52%</td>
<td>41%</td>
</tr>
<tr>
<td>Hotels/Resorts</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When the cloud lifted in the 50's the market took off again with many new products. The Baby boom put new pressure on government for parks and schools.

In the 60's the golf and landscape markets had arrived and many distributors recognized a need for local suppliers to serve them. The formula then, and still today, was golf/schools/parks/homeowner.

The 60's and 70's helped distributors with the growth of tree care, sod production, and landscape contracting. The gardener was slowly being replaced by commercial services who needed a local source for their supplies.

The installation of irrigation systems increased significantly in the period due primarily to golf and parks. The desire for summer turf color in cooler parts of the country made irrigation systems the state of the art. Beginning with simple, quick coupler systems, the market expanded into mechanical and then solid state control with many zones. Regional manufacturers of irrigation supplies grew into national corporations which needed local distributors. Expanding population in the Sun Belt and West expanded that already established market.

According to the survey, 35 percent of the distributors consider lawn care businessmen primary customers and 26 percent consider landscape contractors primary customers. Thirty percent consider farmers primary customers still.

We also asked the distributors about secondary customers and those who were not customers. The significance of lawn care and contract landscaping were bolstered by secondary ratings of 49 percent and 60 percent respectively. Distributors recognize their importance but still see the older, established markets as their bread and butter.

Off the charts, but still valued customers, are condominiums, airports, arborists, estate gardeners, and shopping centers. See Table 1 for more information.

Out of all the various submarkets in our industry, distributors saw landscape contractors, lawn care applicators, condominium staff, and the general public as the markets increasing in sales. Golf superintendents, estate gardeners, and hotels were seen as the groups just behind the leaders. The markets seen as having plateaued were sod producers, airports, and shopping centers. See Table 2.

Overall, distributors feel strongly (85 percent) that existing manufacturers adequately serve the market in terms of needs and quality. Just under two thirds feel manufacturers respond well to the needs of their customers.

Distributors anticipate their sales to fall in 1982 after a 13 percent increase in 1981. The average sales volume of our sample for 1981 was $2.7 million. The most common figure given was $1 million. The median was $1.2 million.

Only 15 percent reformulate chemicals for private labels. The reasons for establishing private labels were given as greater profit and better control. Fourteen percent of the distributors owned a landscape service company in addition to the distributor business. The most common type of service was lawn care with industrial weed control as a weak second.

Buyer cooperatives represent a temporary threat only according to the distributors. Only eight percent felt it would cause any permanent damage, even though 40 percent believe such coops are a threat to part of their sales.

Since many distributors also serve the general public and farmers, we asked them to pick which major market is growing the fastest. They selected the golf and landscape market as number one, followed by retail and farmers.

The only thing distributors might hope for is more help from manufacturers with promotion. Nearly 40 percent said they'd like more assistance in promotion. Currently, distributors rely on the following for promotion:

- Sales Force: 63%
- Local Shows: 57%
- Yellow Pages: 55%
- Direct Mail: 39%
- Regional Publications: 35%

Forty percent of the distributors said they had reduced inventories and increased reliance upon delivery from the manufacturer. Slightly less than half said their equipment service department is doing a greater business. The same number reported an increase in brand loyalty.

Distributors are adding educational seminars in more than two thirds of the cases reporting. Expanding regional show participation and increasing sales promotion are reported by more than 60 percent.

More distributors report a decrease in delinquent accounts than an increase. No one gave any indication of general dissatisfaction with the golf and landscape market. They appear glad to have specialized as they have.

<table>
<thead>
<tr>
<th>Type</th>
<th>Up</th>
<th>Down</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor</td>
<td>64%</td>
<td>9.5%</td>
<td>26%</td>
</tr>
<tr>
<td>Lawn Care</td>
<td>65%</td>
<td>8.0%</td>
<td>27%</td>
</tr>
<tr>
<td>Condominiums</td>
<td>62%</td>
<td>5.4%</td>
<td>32%</td>
</tr>
<tr>
<td>General Public</td>
<td>62%</td>
<td>12.0%</td>
<td>25%</td>
</tr>
<tr>
<td>Estate Gardener</td>
<td>54%</td>
<td>0.0%</td>
<td>45%</td>
</tr>
<tr>
<td>Golf</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent</td>
<td>50%</td>
<td>2.5%</td>
<td>47%</td>
</tr>
<tr>
<td>Parks/Schools</td>
<td>48%</td>
<td>12.0%</td>
<td>39%</td>
</tr>
<tr>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractors</td>
<td>50%</td>
<td>5.0%</td>
<td>45%</td>
</tr>
<tr>
<td>Farmers</td>
<td>45%</td>
<td>16.0%</td>
<td>38%</td>
</tr>
<tr>
<td>Arborists</td>
<td>42%</td>
<td>0.0%</td>
<td>57%</td>
</tr>
<tr>
<td>Hotels/Resorts</td>
<td>44%</td>
<td>4.0%</td>
<td>52%</td>
</tr>
<tr>
<td>Airports</td>
<td>33%</td>
<td>11.0%</td>
<td>55%</td>
</tr>
<tr>
<td>Shopping Centers</td>
<td>33%</td>
<td>4.8%</td>
<td>61%</td>
</tr>
<tr>
<td>Sod Producers</td>
<td>29.4%</td>
<td>17.6%</td>
<td>53%</td>
</tr>
</tbody>
</table>

TABLE 2
Increase and Decreases in Business by Customer.
A great ryegrass is handsome, tough, mows nicely and germinates in 5-7 days. 

DERBY

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

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

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

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

Derby is registered with the Plant Variety Protection Office. PVA No. 750009.
Despite the growing cost of sales calls, Bruce Beckmann, president of Beckmann Turf and Irrigation Supply of Chesterfield, Missouri, expects his sales staff to make seven to eight calls per day when they are not giving demonstrations. These aren't always sales calls, they are service calls too. "We make frequent calls on the customers," Beckmann says, "to develop a rapport and gain their confidence so that we can recommend products to fit their long-term growth."

To Beckmann, distribution is a one-on-one business. With direct mail advertising and a new catalog that goes out to 1800 landscape managers each year, it is the personal contact that is most productive. "It is probing by the salesman that determines what the customer's needs are," said Beckmann. "Once we have an exchange of ideas we can begin to help satisfy his needs by demonstrating equipment in order to determine its efficiency in comparison to what he already has."

On the day the Weeds Trees & Turf visited Beckmann Turf and Irrigation, one salesman had just returned from a demonstration of a Dedoes aerator for the superintendent of a 27-hole municipal golf course. During the course of the demonstration the salesman and superintendent figured out that the Dedoes would cut 75 man-hours from the traditional method of aeration. To Beckmann's sales staff each demonstration is an opportunity to sell.

Once a piece of equipment is sold, Beckmann then concerns itself with three other phases of the transaction: setting the equipment up, servicing it, and educating the customer to get maximum efficiency from it.

In effect, many sales calls are an offshoot of the deep commitment Beckmann feels towards its customers. "The service end of the business is as demanding as any part," said Beckmann. "Some customers don't have the expertise to continually update their specialty equipment to achieve the productivity demanded by their budgets." He added that while those calls are expensive to make, it is important to satisfy the needs of the customer in order to grow with his maintenance program.

Some recent trends have reinforced Beckmann's philosophy of customer commitment, particularly with irrigation and specialty equipment. Beckmann has watched the distribution of chemicals become the domain of specialists whose expertise lies in low pricing.

Many distributors are shrinking their lines and expanding their marketing region as shipping methods become more sophisticated. Beckmann suggested with products that require little service or follow-up, price is often the definitive factor. Beckmann carries a full line of chemicals and seed as a service to his customers, but there is clearly a concentration on irrigation and specialty equipment.

An important reason for this concentration is the industrial market's need for better-manicured turf. It can take 7 months to more than a year before a client can get final approval for a piece of equipment.

More and more landscape contractors are servicing the industrial market," said Beckmann. "Condominiums, apartment projects and industrial complexes are being maintained more like golf courses." While 10 years ago it was accepted that turfgrass had dormant periods, today turf is expected to be maintained 12 months a year.

Although Beckmann's territory lies smack in the middle of the transition zone with its four extreme seasons, the attitude is "it can be done." "With," Beckmann added, "modern irrigation and maintenance equipment, improved chemical products and the ability to apply those products with the new equipment."

Being in the transition zone causes the grass to have two heavy growth periods—March to June, and September to November. Beckmann sales would peak in spring and fall and drop in summer and winter in the past. The growth of the company's irrigation business however, has levelled out the summer trough and extended the fall peak into December or as late as installations are still feasible. Chemicals move well in the summer, largely because the weather has the cool season grasses under stress.

"Budgets at schools and government agencies come due in June and July," said Beckmann. "Most golf course budgets come due in the first quarter. Equipment is now selling on a nine to ten month basis, not just in the spring."

Beckmann's irrigation division has been a prime beneficiary of the trend towards better turf. By his estimate, 70% of keeping good turf is adequate water supply. "For the
first five years (of the irrigation division) we had to convince the commercial/industrial market that good turf was attainable," said Beckmann. "Now that it's established, they are opting for improved watering systems to maintain the turf." Manning the irrigation division is a sales manager, an architect/engineer and a designer/contractor.

In the off-season Beckmann sponsors training meetings for selected contractors. They involve marketing, design, advertising, promotion, service, and application of equipment. The residential and light industrial markets have grown significantly over the past six years, according to Beckmann. Improved irrigation systems are increasingly being specified for athletic field and golf course renovations, although new golf course construction has been off.

In line with most successful businessmen, Beckmann sees the tight economic conditions as an opportunity for his staff to exhibit their expertise and commitment to their customers. Beckmann stresses the "life cycle cost" of equipment, not simply the purchase price. "The cheapest piece of equipment is often short-lived and requires high maintenance," noted Beckmann. "Turfgrass managers can't afford down-time." With labor costs being such a large part (50-60%) of maintenance budgets, superintendents are opting for cost-efficient equipment.

"Toro equipment is the best engineered equipment I have ever seen in the industry," exclaimed Beckmann. "They have taken a leadership position. About 10 years ago they redesigned their equipment and came out with a life cycle and low cost that the industry needs." "Our specialty equipment is designed for broad applications in maintaining turfgrass," said Beckmann. "To justify the cost of the equipment, you can point to the number of jobs it can perform. We're selling 'greater versatility.' "

Beckmann started out in his family's lawn and garden supply company. It was the model of a two-step distribution system, i.e., receive it in a box and send it out in a box. Accordingly, it was a lot easier to service customers. "The transition from two-step to one-step distribution was difficult because of the increased demand for service after the sale," said Beckmann. "If a customer buys equipment and doesn't use it properly, all the investment in time and service goes down the drain."

Beckmann recently hired a field service technician to expedite his customer service. The field service technician makes periodic visits to offer help in structuring preventive maintenance programs and in effect, teach the customer what can be done to extend the life of his machine. As a jack-of-all-trades, the field service technician can fix equipment on site, make an educational service call, or haul damaged equipment back to the shop. Beckmann noted that his next personnel addition will be another field service technician.

Beckmann currently has a staff of 21: 6 in service, 4 in turf equipment and supplies sales, 3 in irrigation sales, 3 in parts, and 5 in administration. The warehouse facility includes a 12,000-sq. ft. warehouse, 7200-sq. ft. service facility, and an 8000-sq. ft. office/display area. The display area is reminiscent of a lawn and garden store, not an industrial distributor. "People like to look at what they are going to buy," said Beckmann. "Since we have the room, we set up the equipment and let them kick the tires. We're in a marketing business and we have to merchandise the equipment." Beckmann added that it can take seven months to 1-1/2 years before a client can get final approval for a piece of equipment. "So, everytime we can expose him to it helps."

The current trend in the bureaucracies is to let level upon level of management scrutinize big purchases (like specialty equipment). With the frequency of selling equipment somewhat limited by their longevity, Beckmann views each meeting with the customer and corporate structure as another chance to sell the advantages of his product. The sale, however, can be lost at any level, often after a considerable investment of time and salesmanship. Beckmann continually battles the corporate goblins that simply pick the least expensive piece of equipment.

Beckmann's mixture of customer commitment and service has proven successful, yet demanding. Particularly in a sales territory with a 300-mile radius. Expanding further, while still providing full service, proved to be a problem for the company. A solution came in the form of a return to a modified two-step distribution.

Recently Beckmann has begun setting up a commercial dealer operation in the outlying areas of his territory. This has benefitted the company by providing the Beckmann brand of service and education on a day-to-day basis by an affiliated dealer in the customer's locale. "The dealer network will give full service to outlying areas that were difficult to reach," said vice president Bob Tegetheroff. "It is also a way to reach customers that like to spend their money locally."

---

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HYDRO-SCAPE USES SALES SAVVY TO INCREASE IRRIGATION MARKET SHARE IN SOUTHERN CALIFORNIA

Operations Manager Don Larsen.

Sound, modern business practices are the reason Hydro-Scape Products, Inc., of Southern California keeps increasing its share of the irrigation and landscape products market during abundant rain and recession. Bob Tiglio provides the technical expertise with a background in golf course irrigation construction and Art Arns keeps management practices up to date with his manufacturing and sales background.

Operations Manager for the San Diego-based firm, Don Larsen told Weeds Trees & Turf Hydro-Scape made a major expansion into the Middle East in 1978 under the direction of Arch Humphreys. Today, Hydro-Scape has eight outlets with 3,000 accounts and it is only seven-years-old.

While many view Southern California as the land of opportunity and ever-increasing growth, Larsen noted that business is increasing but at a decreasing rate. "Business has been very good since the '74 recession, but last year was tough," said Larsen. He pointed out that the biggest problem during last year was the hard winter. In Southern California, while it never gets too cold to do contracting, the only thing that can hold up a job is rain and 1981 brought a lot of that. However, Hydro-Scape weathered the winter and in some ways came out ahead. Due to efficient management the company could afford to swallow some contracting down-time. Some of their competition wasn't as fortunate.

"While we see business in general increasing slower, we intend to increase our market share," said Larsen. Indeed, in the midst of last year's shakeout, Hydro-Scape bought up a Los Angeles-based competitor. "When the business climate got more severe during the past winter, the company concentrated on controlling purchases, reducing inventory and turning dollars more quickly. "We buy on a month-to-month basis," said Larsen. "One reason is that the cost of borrowing money is better on a month-to-month basis. Another reason is that we try to synchronize our buying periods with our sales periods." Due to Hydro-Scape's size, it has the ability to swap materials from one branch to the other when the need arises. Deliveries are made to the branches three times a week, although the company offers 24-hour delivery on pallet-size orders. "Service is very important," noted Larsen. "It is important to have orders ready when the customer needs it."

Service is one of the reasons that Hydro-Scape is more than an irrigation equipment distributor. Their customers demanded that they carry landscape supplies. "They liked the service they got with irrigation supplies, so they wanted us to carry other things," said Larsen.

The list of landscape products the company carries has grown to include: decorative bark, edging materials, erosion control materials, fertilizers, fungicides, herbicides, insecticides, lumber, nursery items, outdoor lighting, plant material, seed, sod, soil amendments, tools and equipment.

Expansion into Middle East provides cushion to U.S. sales

While other distributors were figuring out how to expand their territory into another county or state, Hydro-Scape Products expanded into another continent—the Middle East. The company now maintains full time sales representation in two Saudi Arabia offices.

While margins are slimmer, the volume of the projects is significantly larger. "They are building cities from scratch in the desert," said Operations Manager Don Larsen. "It is a status symbol to plan and generate ornamental irrigation in the desert because they've never had it before." The largest job Hydro-Scape has supplied is the 120-sq.mi. airport in Riyadh. Larsen hastens to add that the Mid-East is not quite a plum ready to be picked. "It can be very frustrating," he said. "Time is dragged out. It can take from two to five years to nail down a project and there is a lot of red tape." Larsen added that exporting was foreign (no pun intended) to Hydro-Scape, but they soon learned that if the paperwork wasn't perfect they could lose their shirts.

"There were two reasons for us to expand into the Middle East," said Larsen. "We thought it would be profitable and also help average out our domestic business cycles."
Toro creates the ultimate low pressure, large radius Pop-Up.

"Matched Precipitation" nozzles at 1.3, 2.5 or 5.0 gpm.

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Strong, stainless steel spring for positive, dependable retraction.

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TORO Irrigation Division
Circle No. 147 on Reader Inquiry Card
There's usually more than one reason why a company is the leader in its field. For ProTurf, there are 61.

Fifty-four ProTurf Tech Reps provide invaluable advice and support to golf course superintendents throughout North America.
Experienced personnel

Key to the leadership status of ProTurf are the dedicated experts who work with golf course superintendents to achieve vigorous, high quality turf...the 54 ProTurf Tech Reps. Each is thoroughly trained in agronomy, turf management, grass, weed, insect and disease identification and the features and benefits of Scott's professional products and services. Because of this background, the Tech Reps can help a superintendent develop a turf program that not only meets his course's needs, but also gives the most return for every maintenance dollar spent.

Full product line

More than 5,000 golf courses depend on ProTurf products specifically designed and research-tested for golf course usage: fertilizers, including specialty nutrient and regional products; fungicides; combinations of fertilizers and pesticides; seed, and application equipment.

Research expertise

Every ProTurf product is backed by more than 55 years of Scott's turfgrass experience. And, that knowledge is constantly being expanded by more than 120 full-time research specialists at the headquarters research center and five research stations across the country. They use more than 300 acres of test plots and 40 golf courses to study everything from plant pathology to equipment design and application. All, so you can have the most economical, convenient and effective turf products.

Seminars & tours

Each year, approximately 2,200 golf course superintendents take advantage of the 38 seminars conducted by the ProTurf Technical Institute. Attendees receive the latest information on a variety of subjects to aid the professional turf manager in solving problems fast. Special attention focuses on understanding fertilizers and new products, plus the identification, prevention and control of insects and disease. When seminars are conducted in Marysville, the groups also tour Scotts research labs and test plots.

Technical communications

Although the Tech Rep is the key communication channel, ProTurf keeps its clients up to date by other means, too. ProTurf publishes two free magazines to circulate information to the industry: "ProTurf," directed to improving golf course turf management; "Turf & Grounds Manager," directed to turf managers of companies, apartments, athletic fields, parks and lawn service firms. Additional data are included in technical bulletins, product guides and general materials.

Budget planning

As a golf course superintendent, you face the challenge of maintaining your course within a given budget. Your Tech Rep will be happy to discuss your course's needs and make sound recommendations based upon your soil and water analysis results. He'll also help you decide what to do about drainage problems, nutrient and pesticide requirements and other turf-related subjects. Then, together, you can set up a maintenance program that exactly meets both your turf and budget needs.

A reputation of quality

ProTurf is the professional division of the O.M. Scott & Sons Company, the turfgrass industry leader.
A second important reason for Hydro-Scape branching out into landscape products is the dual roles of the Southern Californian landscape contractor. Many of the company's customers do both landscape contracting and irrigation contracting. "Prior to us no other distributor carried both," said Larsen. In a typical transaction, a landscape contractor might first purchase his irrigation materials, then soil amendments, fertilizer, trees, edging and sod.

Even while Hydro-Scape strives to be a full-service distributor, it keeps an eye on business management at all times. A case in point was the decision not to carry turfgrass maintenance equipment, such as mowers and aerators. (Their landscape equipment line consists mostly of hand tools and spreaders.) "We don't have a service facility, so we carry very little maintenance equipment," said Larsen. "We have no inventory, but we will order items on special request. Basically, those items take up a lot of space and turn slowly."

With margins being squeezed slimmer and slimmer, Hydro-Scape turned to computers to fatten profits. They hit paydirt with their Nixdorf system. Their 3000 regular business accounts were programmed according to their method of buying, method of payment, volume and other categories. This simplified the pricing structure and enabled the customer to get the best discount possible. Inventory management was also made more cost-effective. "The system enabled us to buy faster and we found that the cost of our inventory dropped," said Larsen, "especially the price of plastics." Larsen stressed that they don't pick up the computer print-out and then order accordingly. "We still like the personal feel for inventory. We do a rough count on what we have, what we're ordering, and what we need."

Hydro-Scape opted for a Nixdorf system because they felt that the smaller computer firm was more responsive to their needs than the bigger companies they had contacted. The system they initially purchased was supposed to be sufficient for five years. After two years a bigger system was needed due to Hydro-Scape's speedy growth. "We're extremely satisfied," said Larsen. "With the help of some good programmers and a little patience, the performance has been terrific."

Though Hydro-Scape has diversified into landscape products, over 60% of its business is in irrigation. Their coverage of the market is impressive; in sprinkler equipment alone they carry no less than 16 lines, including Rain-Bird, Royal Coach/Buckner, Toro and Safe-T-Lawn. Some manufacturers were wary of having Hydro-Scape also carrying their competitor's products. (Rain-Bird only recently tapped them as a Southern California distributor.) Yet Hydro-Scape has a firm policy on which products they will recommend to a customer. "If the specs are set, we will not change them," said Larsen. "Otherwise we put together the best package for the job, even if that entails using components from different manufacturers."

With drought conditions becoming more prevalent in Southern California, irrigation sales might not be viewed as a growth industry. Yet in its typical fashion Hydro-Scape views the drought as another opportunity to do business. "The drought woke a lot of people up to improving their irrigation systems," said Larsen. "Customers are opting for drip irrigation systems and a more controlled spray. With today's solid state technology the spray at each valve can be monitored."

California's Proposition 13 caused some initial cutbacks in orders but business is back close to normal. Larsen told Weeds Trees & Turf that the government has found some alternative sources of revenue. "The tourist industry is very big here and there is a high priority on appearance," he said. "The government has a big investment in landscaping."

An interesting point made by Larsen is that sod sales are still strong in Southern California. Hydro-Scape is the largest distributor of Pacific Green/Nunes sod and there has been an increase in the sale of drought-tolerant sod. Selling sod and plant materials is one area where the company's ties with their landscape contractor customers has been an asset. "A lot of growers are wary of selling to contractors they are not familiar with," said Larsen. "With us as the intermediary, the growers is assured his money and the contractor gets his materials."

The company carries 16 different lines of irrigation equipment without favoritism.

Hydro-Scape maintains WATS phone lines in Los Angeles, San Diego and Orange county in order expedite transactions with the vast number of growers they do business. In that manner they can also avoid inventorying plant materials. The company views plant materials as a potential liability. With the Wats phone lines they can contact various growers and have them ship directly.
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Circle No. 137 on Reader Inquiry Card
The ability to respond promptly to the needs of the consumer is the most critical quality of a distributor for John Zajac, the vice president and general manager of Garfield Williamson, a distributor of seed and allied products in Jersey City, NJ. "Flexibility is what gives us our place in the market," he stated in a recent interview with Weeds, Trees & Turf.

The key to maintaining flexibility to Zajac is keeping the company a manageable size. The larger the company, the more layers of management a customer must wade through to have a request fulfilled. At Garfield Williamson, the customer doesn't have far to go for a definite answer. "As opposed to a large corporation, there is only one step in our organizational chart between the salesman and a definite yes or no," Zajac pointed out.

Garfield Williamson's seven salesmen, covering the New York, New Jersey, Pennsylvania, and Connecticut territories report directly to Zajac, who then contacts his staff members in the office.

The company has been service oriented since its inception one hundred years ago. The founder, Garfield Williamson, was among the first to tap the industrial market, approaching businesses and factories with the idea of beautifying their grounds.

The company was purchased in the 1930s by the Wagner family, who still control it today. The market remained more or less the same until the mid-forties. The business swung sharply toward retail after World War II as New York City dwellers spread out to the suburbs, creating the sprawling bedroom communities on Long Island, New Jersey and Connecticut. Acres of well kept lawn were being supplied by a new specialized retailer, the lawn and garden center, who was in turn being supplied by Garfield Williamson.

The retail market nearly had the full attention of the company until, with the increasing affluence of the region, golf courses began sprouting up and homeowners turned to professional landscapers.

Service has become even more essential as sales to professional users grow in comparison to the retail sales. "In the last five years professional accounts have grown from 20% of our business to at least 40%," estimated Zajac. "With an activity as weather dependent as seeding, servicing the professional sector is a demanding job. We are able to prepare and deliver 700-lb of a special mixture in two days."

As part of this service, customers are asking the distributor to take their burden of inventory off their shoulders. Because of uncertain cash flow, they are letting the distributor act as their warehouse. Business cycles have proved the distributor can warehouse more cheaply because it has better inventory control. This requires more work from the distributor. A customer's initial order used to be the biggest portion of his needs. Now he requires frequent deliveries of smaller orders.

Zajac feels that the high value that the customer has placed upon his time also benefits Garfield Williamson. The increasing prevalence of a "time is money" attitude has pushed professionals to invest in high grade proprietary grasses they sell. Zajac claims, Eclipse Kentucky bluegrass sells equally as well as conventional types of bluegrass although it costs almost three times as much. The contractor justifies the higher priced specialty grasses as insignificant monetarily when compared to the overall cost of the job.

Even the retail consumer has learned to appreciate special formulations and varieties of both seed and chemicals. A more informed public is now approached in much the same manner as the professional. Advertising and packaging, using the names of the specific seed varieties, is being used for the first time on the consumer level. Garfield Williamson now advertises its Wonderful brand of consumer products in local print, TV, and radio as well as providing retailers with point-of-purchase aids.

Despite Garfield Williamson's success in both professional and retail markets, it is now competing with a growing trend where professionals form groups to buy directly from the manufacturers. Zajac dismisses this as a fad, although the activity is growing in the New York and New Jersey areas. "These groups are big enough to buy from the manufacturers, but not big enough to demand the kind of service they may need in the height of the season. Distributors may be able to help, but we are bound to take care of our regular customers first. This will probably cause a ripple in the industry and then even outward."

Zajac is sure the position of the distributor is secure in the green industry as long as he doesn't overextend himself. "If your area gets too big, you can't effectively act as a distributor. We prefer to cultivate the 250-mile radius around New York city, our main market, more intensely than go further outward."
1983 Manager’s Guide to Equipment, Chemicals Supplies and Distributors

1. Equipment
From aerators to vibratory plows, manufacturers of the tools and materials for outdoor maintenance

2. Equipment Companies
Alphabetical listing by manufacturers’ names of who makes what, with address and phone number

3. Chemicals
From adjuvants to wetting agents, a comprehensive list of liquids, granulars, and organic compounds for turf and trees

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Alphabetical listing by manufacturers’ names with addresses and phone number

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A full line of growers and marketers
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In response to last year's attendees evaluations the program has been expanded to three days and will offer repeat workshops. Topics will include Motivation; Government Regulations; Management and Stress; Legal Issues; Client Relations and a special Panel Presentation on "Hot Issues."

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Keynoting the convention this year will be Earl L. Butz, former U.S. Secretary of Agriculture, and Dean Emeritus of Agriculture, Purdue University, West Lafayette, Indiana. Dr. Butz will address the subject of the value of the small business entrepreneur in the American economic system under the title, "Populism, Politics, and Progress."

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THE E-Z-GO GX-800.
THE LASTING IMPRESSION
IT LEAVES WON'T
BE ON YOUR TURF.

E-Z-GO introduces a new concept in landscape maintenance. The light-turf vehicle that's perfect when you need a utility car, and a truck is too much.

It's as strong as an ox, but gentle as a lamb.

The E-Z-GO GX-800 is the perfect utility vehicle for landscaping. It’s light and gentle on your valuable grounds. Yet it’s strong enough to carry loads, climb hills, and ride in bad weather. The body is constructed of Galvannealed steel plating that’s treated with rust preventive zinc oxide. So they drive the fairway longer than any other utility vehicle. The chassis is welded high-yield tubular steel. It features a protective vinyl bumper strip, and a four-way diamond pattern treadplate design on the bed makes the GX-800 stronger all around. (Loadbed is not Galvannealed).

Put all your garden tools to bed.

The GX-800 has a 44” x 40” x 8” loadbed in the back that’s deep enough to carry all your turf tools. It carries up to 800 lbs., and heavy duty springs and shocks make the ride smooth and comfortable, no matter how tough the rough. The loadbed tilts for complete access to drive package. And the sides and tailgate are easily removed.

This beast is a beauty on your budget.

You can afford three GX-800 vehicles for the price of one heavy-duty pickup truck. It’s light enough so that it’s economical on fuel and requires only standard maintenance. And it’ll last years and years because it’s engineered by E-Z-GO.

The GX-800 is suited for anything.

From the electronic ignition, to the dual rear brake, to the hypoid ring and pinion differential, the E-Z-GO GX-800 light turf vehicle is strong enough for any landscaping job. Yet it is light enough so it won’t be a landscraper. It’s perfect for golf courses, cemeteries, public parks, office grounds-keeping, or large, private residential landscaping.

The GX-800 is especially a utility runabout. It’s a tremendous timesaver for the superintendent who has to get around the grounds to oversee his crew. It can take the shortest route to its destination. For more information, call your nearest E-Z-GO representative.

E-Z-GO
TEXTRON
P.O. Box 588, Marvin-Griffin Road
Augusta, Georgia 30915-2699.
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**Irrigation, Drip**
AMS Inc  
Aquatic Irrigation Systems Inc  
Chapin Watermatics Inc  
Dayni Controls Mfg Co  
Hendrix & Dail Inc  
Holly Filter  
Hydro Rain  
Irri-Trol Mfg Co  
Jaeco Pump Co  
Raindrip Inc  
Royal Coach/Buckner  
Submatic Irrigation Systems  
Westheffer Co

**Irrigation Systems & Supplies**
Ag-Rain Inc  
AMETEK/Plymouth Prods Div  
AMS Inc  
Champion Brass Mfg Co  
Champion Sprinkler Mfg Co  
Dayni Controls Mfg Co  
Dema Engineering Co  
Grass Pavers Ltd  
Hendrix & Dail Inc  
Hinds Int'l Inc  
Holly Filter  
Hydroflo Corp  
Hydro Rain  
Hydro Terra Corp  
Irri-Trol Mfg Co  
Irrometer Co  
Jaeco Pump Co  
King Brothers Industries  
Laval Corp, Claude  
Lumenite Electronic Co  
National Irrigation Specialists  
L R Nelson Corp  

**Irrigation, Mobile**
Ag-Rain Inc  
Finn Corp  
Lakeshore Equipment & Supply Lesco Prods  
Royal Coach/Buckner  
Travelrain Power Sprinkler  

**Landscape Design Kits**
American Stamp Co  
Miracle Recreation Equipment Co

**Lighting Systems**
Columbia Cascade Timber  
GTE Sylvania  
Intermatic Inc  
Lighting Prods Div McGraw-Edison Co  
Little Giant Pump Co Sub Tecumseh Prods Co  
Musco Sports-Lighting Inc  
Otterbine-Barebo Inc  
Spring City Electric Mfg Co  
Westinghouse Electric Corp Lamp Div

**Litter Receptacles**
BigToys  
Clean City Squares Inc

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**Vermeer Buyer's Guide**

**TS-84T.** Truck-mounted. Transplants trees with maximum trunk diameter of 8”. Six hydraulically activated, high tensile steel spades. Gravity-feed water tanks for spade lubrication.

**TS-50M.** Truck-mounted. Outstanding maneuverability. Extension and side-shift features let you hydraulically position the spade an additional 21” away from the frame and 151/2” left or right of center.

**TS-44.** Available in trailer-mounted, tractor-mounted or truck-mounted models. (Plus the option to extend or side shift for greater maneuverability as a truck-mounted unit.) Hydraulically transplants 4” diameter trees.

---

Call today! (800) 247-2347
Columbia Cascade Timber
Kay Park Rec Corp
Lakeshore Equipment & Supply Lesco Prods
Standard Golf Co

**Loaders**

American Trencher
Atwater Strong Div
Bush Hog Div Allied Prods Corp
J I Case
J I Case Drott Div
Caterpillar Tractor Co
Clark Equipment Co Melroe Div
Deere & Co
Dynamic Industries
Engineering Products Co
Ford Motor Co Tractor Operations
International Harvester Co
K-D Manitou Inc
Kubota Tractor Corp
Long Mfg NC Inc
Massey-Ferguson
Sperry New Holland
Steiner Corp
Tiger Corp
Yanmar Tractor (USA) Inc

**Log Splitters**

Buck Haven Industries Inc
Custom Products of Litchfield Inc

Deere & Co
Didier Mfg
Ford Motor Co Tractor Operations
Giant Vac Mfg Inc
Gilson Brothers Co
Hanson Equipment Co
Kubota Tractor Corp
La Font Corp
Lindig Mfg Corp
Morbark Industries Inc
MTD Products Inc
Poulan/Weed Eater
Shaver Mfg Co
UTEco Inc
Vermeer Mfg Co
W-W Grinder Inc
Yanmar Tractor (USA) Inc

**Markers, Field**

Agrotec Inc
B & G Equipment Co
Laurie Carlson & Assoc
Richway Industries
Smithco Inc
Turfgrass Products

**Measuring Wheels**

Agro Chem Inc
Agrotec Inc
Gandy Co
Professional Turf Specialties

**Mist Blowers**

Agrotec Inc
John Blue Co
Buffalo Turbine Agricultural Equip Co
Echo Inc
Encap Products Co
FMC Corp Agricultural Mach Div
Friend Mfg Corp
Hanson Equipment Co
HMC/Green Machine
H D Hudson Mfg Co Professional Prods Div
Professional Turf Specialties
Solo Inc
Stihl Inc
Vandermolen Corp
Westheffer Co

**Moisture Sensors**

Hydro Terra Corp

**Mowers, Flail**

Brillion Iron Works
Roscoe Brown Corp
Edwards Equipment Co

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**tree-moving equipment.**

**TS-30.** Trailer-mounted or tractor-mounted. Ideal for nurseries, tree farms, rental yards and tree service firms. Adjustable towers enable operators to transplant or package either cone shaped or flat-bottom trees or shrubs up to 3" in diameter.

**TS-84.** Compact. Economical. Tractor-mounted. Or slips onto the forks of most skid steer loaders equipped with an auxiliary hydraulic hookup (with a minimum lifting capacity of 1,200 lbs.). Transplants or packages small trees up to 2".

**TS-20.** Vermeer's mini-spade. Ideal for nurseries that package large quantities of stock for resale. Tractor-mounted. Hooks up to the standard Category I or Category II three-point hitch of your tractor.
## Equipment

*continued*

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<thead>
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<th>Company Name</th>
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## Mowers, Reel

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<tr>
<td>Westheffer Co</td>
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## Patio & Walkway Materials

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industries or Operations</th>
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<tbody>
<tr>
<td>Grass Pavers Ltd</td>
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<tr>
<td>Interlocking Paver Mfg Assoc</td>
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## Picnic Tables

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industries or Operations</th>
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<tr>
<td>American Playground Device Co</td>
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<tr>
<td>BigToys</td>
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</tr>
<tr>
<td>Kay Park Rec Corp</td>
<td></td>
</tr>
<tr>
<td>Miracle Recreation Equipment Co</td>
<td></td>
</tr>
<tr>
<td>Playworld Systems</td>
<td></td>
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<tr>
<td>Trojan Playground Equipment Mfg Co</td>
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## Pipe

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<thead>
<tr>
<th>Company Name</th>
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<tr>
<td>Advanced Drainage Systems Inc</td>
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<tr>
<td>Long Mfg NC Inc</td>
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<tr>
<td>McDowell Mfg Co</td>
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## Planters

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<tr>
<td>Clean City Squares Inc</td>
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<tr>
<td>Columbia Cascade Timber</td>
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</table>
**Ellis Mfg Co**  
International Harvester Co  
Landscape Forms Inc  
Miracle Recreation Equipment Co  
Parker Greenhouses Int'l  
Trans-Tree Corp

**Play Structures**  
American Playground Device Co  
BigToys  
Columbia Cascade Timber  
Delmer F Harris Co  
Kay Park Rec Corp  
Miracle Recreation Equipment Co  
Playworld Systems  
Trojan Playground Equipment Mfg Co

**Plows, Sand Trap**  
Dedoes Industries Inc  
Toro Co Commercial Prods

**Pools, Decorative**  
Fiberglass Unlimited Inc

**Post Drivers**  
Deere & Co  
Foresight Industries Inc

**Post Hole Diggers**  
Bush Hog Div Allied Prods Corp  
Clark Equipment Co Melroe Div  
Deere & Co  
Feldmann Engineering & Mfg Co  
Ford Motor Co Tractor Operations  
Foresight Industries Inc  
Ground Hog Inc  
HMC/Green Machine  
Hoffco Inc  
International Reforestation Suppliers Inc  
Kubota Tractor Corp  
Massey-Ferguson  
McMillen Div  
Rhino Sales Corp  
Don Savage Co  
Seymour Mfg Co  
Shaver Mfg Co  
Stihl Inc  
Union Fork & Hoe Co  
UTECO Inc  
Yanmar Tractor (USA) Inc

**Pressure Gauges**  
Irrometer Co

**Pressure Washers**  
Agrotec Inc  
John Blue Co  
Brovihill Co  
Citrus Systems Inc  
Deere & Co  
Ford Motor Co Tractor Operations  
Friend Mfg Corp  
Hanson Equipment Co  
Hotsy Corp  
Marco Sprayers  
Massey-Ferguson  
Master Sprayers Inc  
Minnesota Wanner Co  
Northeast Industries Inc  
Sioux Steam Cleaner Corp  
Strong Ent Inc  
Tri-Con Inc  
Tuflex Mfg Co  
Westheffer Co

**Pruners**  
American Standard Co  
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Deere & Co  
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Fairmont Hydraulics  
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Friend Mfg Corp  
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- Northeast Industries Inc

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- Halls Safety Equipment Inc
- Power Lawnmower Parts Inc
- Safety Test & Equipment Co
- Samson

**Safety Wear & Equipment**
- Bartlett Mfg Co
- Edmont Div Becton Dickinson & Co
- Fox Valley Marking Systems Inc
- Halls Safety Equipment Inc
- Norton Co Safety Products Div
- Power Lawnmower Parts Inc
- Safety Test & Equipment Co

**Saws**
- Bartlett Mfg Co
- Citrus Systems Inc
- Fairmont Hydraulics
- Friend Mfg Corp
- Halls Safety Equipment Inc
- Hinds Int'l Inc
- Limb-Lopper Div/Robinson Ind
- Milwaukee Electric Tool Corp
- Safety Test & Equipment Co
- Skill Corp
- Seymour Smith & Son Inc
- Stanley Hydraulic Tools
- Union Fork & Hoe Co

**Scrapers**
- Eversman Mfg Co
- International Harvester Co
- Little Giant Products Inc
- Union Fork & Hoe Co
- York Rakes Div York Modern Corp

**Screeners**
- Glenmac Inc
- Lindig Mfg Corp
- Royer Foundry & Machine Co

**Seeders, Hydraulic**
- Bowie Industries Inc
- Cushman Turf/OMC Lincoln
- Erocon Pacific Corp
- Finn Corp
- Friend Mfg Corp
- Reincoco Inc
- Solarcell Land & Bldg Inc

**Shears**
- American Standard Co
- Deere & Co
- Friend Mfg Corp
- Limb-Lopper Div/Robinson Ind
- Safety Test & Equipment Co
- Seymour Smith & Son Inc
- Stanley Hydraulic Tools
- Union Fork & Hoe Co
- D J Wilson Co
- Hermann A Wirth

**Shelters**
- Bally Case & Cooler Inc
- Koppers Co
- Miracle Recreation Equipment Co
- Poligon Div W H Porter Inc

**Snow Blowers**
- American Honda Motor
- Ariens Co
- Atlas Tool & Mfg Co
- Roscoe Brown Corp
- Bunton Co
- Cushman Turf/OMC Lincoln
- Deere & Co
- Excel Industries Inc
- Ford Motor Co Tractor Operations
- Gilson Brothers Co
- Goodall Div Bunton Co
- Gravely
- Haban Mfg Co
- Hanson Equipment Co
- International Harvester Co
- Kubota Tractor Corp
- Lawn-Boy Product Group
- Little Giant Products Inc
- MTD Products Inc
- Howard Price Turf Equip
- Professional Turf Specialties
- Ransomes Inc
- Steiner Corp
- Sweepster
- Toro Co Commercial Prods
- Yanco Tractor (USA) Inc
- Yazoo Mfg Co

**Rock Pickers**
- Glenmac Inc

**Rolls, Landscape**
- Bartlett Mfg Co
- Ford Motor Co Tractor Operations
- Fuerst Brothers Inc
- Glenmac Inc
- International Reforestation Supplies Inc
- Kenyon Mfg Inc
- Professional Turf Specialties
- Roseman Mower Corp
- Rugg Mfg Co
- Standard Golf Co
- Union Fork & Hoe Co
- Yanmar Tractor (USA) Inc
- York Rakes Div York Modern Corp

**Seeders**
- Bowie Industries Inc
- Brilllon Iron Works
- Central Quality Industry Inc
- Cyclone Seeder Co
- Erocon Pacific Corp
- Herd Seeder Co
- Jacobsen Div Textron Inc
- Lambert Corp
- Lawmawker Mfg Co
- Meredith Seed Miser
- Professional Turf Specialties
- O M Scott & Sons Proturf Div
- Vaughan's Seed Co
- Vicon Farm Machinery Inc

**Snow Plows**
- Ariens Co
- Roscoe Brown Corp
- Bunton Co
- Clark Equipment Co Melroe Div
- Deere & Co
- Goodall Div Bunton Co
- Gravely
- International Harvester Co
- Jacobsen Div Textron Inc
- Little Giant Products Inc
- Howard Price Turf Equip

### Pumps

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- Parco Div Blue Mountain Prod Inc
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- Power Spray Technology Inc
- Smithcgo Inc
- Stanley Hydraulic Tools
- Strong Ent Inc
- Trees Inc
- Tuflex Mfg Co
- Westheffer Co

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- Bartlett Mfg Co
- Ford Motor Co Tractor Operations
- Fuerst Brothers Inc
- Glenmac Inc
- International Reforestation Suppliers Inc
- Kenyon Mfg Inc
- Professional Turf Specialties
- Roseman Mower Corp
- Rugg Mfg Co
- Standard Golf Co
- Union Fork & Hoe Co
- Yanmar Tractor (USA) Inc
- York Rakes Div York Modern Corp

### Shears

- American Standard Co
- Deere & Co
- Friend Mfg Corp
- Limb-Lopper Div/Robinson Ind
- Safety Test & Equipment Co
- Seymour Smith & Son Inc
- Stanley Hydraulic Tools
- Union Fork & Hoe Co
- D J Wilson Co
- Hermann A Wirth

### Shelters

- Bally Case & Cooler Inc
- Koppers Co
- Miracle Recreation Equipment Co
- Poligon Div W H Porter Inc

### Screeners

- Glenmac Inc
- Lindig Mfg Corp
- Royer Foundry & Machine Co

### Seeders, Hydraulic

- Bowie Industries Inc
- Cushman Turf/OMC Lincoln
- Erocon Pacific Corp
- Finn Corp
- Friend Mfg Corp
- Reincoco Inc
- Solarcell Land & Bldg Inc

### Snow Blowers

- American Honda Motor
- Ariens Co
- Atlas Tool & Mfg Co
- Roscoe Brown Corp
- Bunton Co
- Cushman Turf/OMC Lincoln
- Deere & Co
- Excel Industries Inc
- Ford Motor Co Tractor Operations
- Gilson Brothers Co
- Goodall Div Bunton Co
- Gravely
- Haban Mfg Co
- Hanson Equipment Co
- International Harvester Co
- Kubota Tractor Corp
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Hanson Equipment Co
H D Hudson Mfg Co Professional Prods Div
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Maruyama Corp of America
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Master Sprayers Inc
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H D Hudson Mfg Co Professional Prods Div
Lakeshore Equipment & Supply Lesco Prods
Marco Sprayers
Master Mfg Co
Master Sprayers Inc
Minnesota Wanner Co
Parco Div Blue Mountain Prod Inc
Power Spray Technology Inc
Professional Turf Specialties
Smithco Inc
Strong Ent Inc
Torco Equipment Co
Tuflex Mfg Co
Westheffer Co

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Agro Chem Inc
Agrotec Inc
B & G Equipment Co
Broyhill Co
Citrus Systems Inc
Finn Corp
FMC Corp Agricultural Mach Div
Friend Mfg Corp
Hanson Equipment Co
Hill's Liqui-Systems
H D Hudson Mfg Co Professional Prods Div
Lakeshore Equipment & Supply Lesco Prods
Marco Sprayers
Master Mfg Co
Master Sprayers Inc
Minnesota Wanner Co
Parco Div Blue Mountain Prod Inc
Power Spray Technology Inc
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Smithco Inc
Strong Ent Inc
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- Strong Ent Inc
- Universal-Gerwin Div Leigh Products Inc
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- International Reforestation Suppliers Inc
- Nevr-Rust Tool-Tainer Inc
- Rotocast Plastic Products Inc

### Topdresser

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- Cushman Turf/OMC Lincoln
- E-Z-Go Golf Car
- Hahn Inc
- Olathe Mfg Inc
- Professional Turf Specialties
- Turco Mfg Inc
- Vicon Farm Machinery Inc

### Tractors & Attachments

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- Ariens Co
- Atwater Strong Div
- Roscoe Brown Corp
- Bunton Co
- J I Case
- Custom Products of Litchfield Inc
- Deere & Co
- Engineering Products Co
- FMC Solens Corp
- Ford Motor Co Tractor Operations
- Gilson Brothers Co
- Goodall Div Bunton Co
- Gravely
- Guest Industries Inc
- Haban Mfg Co
- Hefly Tractor Co
- International Harvester Co
- Jacobsen Div Textron Inc
- Kubota Tractor Corp
- Little Giant Products Inc
- Long Mfg NC Inc
- McMillen Div
- Mitsubishi AG Machinery Co Ltd
- Morbark Industries Inc
- MTD Products Inc
- Ransomes Inc
- Steiner Corp
- Tiger Corp
- Toro Co Commercial Prods
- UTECO Inc
- Wheel Horse Products Inc
- Yamaha Motor Corp
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- Black & Decker Mfg Co
- Bunton Co
- Deere & Co
- Echo Inc
- Goodall Div Bunton Co

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- Caretree Systems Inc
- Mechanical Transplanter Co
- Rokor Inc
- Trans-Tree Corp
- Vermeer Mfg Co

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- Deep Root Corp

### Tree Wrap

- General Bandages Inc

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- American Trencher
- Roscoe Brown Corp
- J I Case
- J I Case Drott Div
- Clark Equipment Co Melroe Div
- Ditch Witch Div Charles Machine Works
- Ford Motor Co Tractor Operations
- Ground Hog Inc
- Seaman Co
- Vermeer Mfg Co

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- Black & Decker Mfg Co
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- Clark Equipment Co Melroe Div
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- Schutt's Equipment Co
- Trans-Tree Corp

### Traps, Animal

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- Woodstream Corp

### Vacuum

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- Billy Goat Industries Inc
- Central Engineering Co
- Echo Inc
- E-Z Rake Inc
- Giant Vac Mfg Inc
- Lambert Corp
- MTD Products Inc
- Nunes Mfg
- Parker Sweeper Co
- Turf Vac Corp
- Woods Div Hesston Corp
- Yard Vac Prods Inc

### Vehicles, Turf

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- Bajaj America Inc
- Cushman Turf/OMC Lincoln
- Eagle Vehicles Inc
- E-Z-Go Golf Car
- Hahn Inc
- F E Myers Co
- Olathe Mfg Inc
- Professional Turf Specialties
- Rivex Industries Inc
- Smithco Inc
- Toro Co Commercial Prods
- Yamaha Motor Corp

### Vibratory Plows

- J I Case
- J I Case Drott Div
- Ditch Witch Div Charles Machine Works
- Seaman Co
- Turco Mfg Inc
- Vermeer Mfg Co
## 2. Equipment Companies

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Address</th>
<th>Phone</th>
</tr>
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<tbody>
<tr>
<td>Advanced Drainage Systems Inc</td>
<td>3300 Riverside Dr, Columbus, OH 43221</td>
<td>614-457-3051</td>
</tr>
<tr>
<td>Ag-Rain Inc</td>
<td>600 S Schrader, Havana, IL 62644</td>
<td>309-543-4425</td>
</tr>
<tr>
<td>Agro Chem Inc</td>
<td>11150 Addison, Franklin Park, IL 60131</td>
<td>312-455-6900</td>
</tr>
<tr>
<td>Agrotec Inc</td>
<td>Spearin Rd, Salisbury, MD 21801-0215</td>
<td>301-749-8496</td>
</tr>
<tr>
<td>Algoma Net Co-Div Gleason Corp</td>
<td>1525 Mueller St, Algoma, WI 54201</td>
<td>414-487-5577</td>
</tr>
<tr>
<td>Alpina North America</td>
<td>PO Box 112, Northport, WA 99157</td>
<td>604-367-9202</td>
</tr>
<tr>
<td>AT's Machine Shop</td>
<td>See AMS Inc</td>
<td></td>
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<tr>
<td>American Enka Co</td>
<td>See Enkamat Div, American Enka Co</td>
<td></td>
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<tr>
<td>American Honda Motor Co</td>
<td>100 W Alondra Blvd, Gardena, CA 90247</td>
<td>213-327-8289</td>
</tr>
<tr>
<td>American Playground Device Co</td>
<td>100-31 S Jackson St, PO Drawer, IN 46011</td>
<td>317-642-0288</td>
</tr>
<tr>
<td>American Stamp Co</td>
<td>PO Box 741, Reseda, CA 91335</td>
<td>213-881-2808</td>
</tr>
<tr>
<td>American Standard Co</td>
<td>One West St, Plantsville, CT 06479</td>
<td>203-628-9643</td>
</tr>
<tr>
<td>American Trencher</td>
<td>503 Gay St</td>
<td></td>
</tr>
<tr>
<td>AMETEK/Plymouth Prods Div</td>
<td>502 Indiana Ave, Sheboygan, WI 53081</td>
<td>414-457-9435</td>
</tr>
<tr>
<td>AMS Inc</td>
<td>1515 Fayette, El Cajon, CA 92020</td>
<td>714-449-8570</td>
</tr>
<tr>
<td>Anchor/Swan Corp</td>
<td>PO Box 509, Worthington, OH 43085</td>
<td>614-548-6511</td>
</tr>
<tr>
<td>Aquamarine Corp</td>
<td>PO Box 616, Waukeisha, WI 53186</td>
<td>414-547-0211</td>
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<tr>
<td>Aquatic Irrigation Systems Inc</td>
<td>619 E Gutierrez, Santa Barbara, CA 93103</td>
<td>805-965-5125</td>
</tr>
<tr>
<td>Aquatrols Corp of America</td>
<td>1432 Union Ave, Pennsauken, NJ 08110</td>
<td>609-665-1130; 800-257-7797</td>
</tr>
<tr>
<td>Aquaturf</td>
<td>11363 San Jose Blvd, Jacksonville, FL 32217</td>
<td>904-268-6707</td>
</tr>
<tr>
<td>Arctic Mizer Manufacturers</td>
<td>2120 E Norwich St, St Francis, WI 53207</td>
<td>414-744-4160</td>
</tr>
<tr>
<td>Ariens Co</td>
<td>655 W Ryan St, Brillion, WI 54110</td>
<td>414-756-2141</td>
</tr>
<tr>
<td>Asplundh Mfg Div</td>
<td>50 E Hamilton St, Chalfont, PA 18914</td>
<td>215-822-0542</td>
</tr>
<tr>
<td>Atlas Tool &amp; Mfg Co</td>
<td>7100 S Grand Ave, St Louis, MO 63111</td>
<td>314-353-7800</td>
</tr>
<tr>
<td>Atwater Strong Div</td>
<td>6284 Waterloo Rd, Atwater, OH 44201</td>
<td>216-947-2344</td>
</tr>
<tr>
<td>Auburn Consolidated Industries Inc</td>
<td>Box 250, Auburn, NE 68305</td>
<td>402-274-4911</td>
</tr>
<tr>
<td>Auto Crane Co</td>
<td>9260 Broken Arrow Expressway, Tulsa, OK 74145</td>
<td>918-627-9475</td>
</tr>
<tr>
<td>Bajaj America Inc</td>
<td>1237 Gadsdon St, Columbia, SC 29201</td>
<td>803-779-5361</td>
</tr>
<tr>
<td>Bally Case &amp; Cooler Inc</td>
<td>PO Box 98, Bally, PA 19503-0098</td>
<td>215-845-2311</td>
</tr>
<tr>
<td>Barnant Co</td>
<td>28W92 Commercial Ave, Barrington, IL 60010</td>
<td>312-381-7050</td>
</tr>
<tr>
<td>Bartlett Mfg Co</td>
<td>3003 E Grand Blvd, Detroit, MI 48202</td>
<td>313-873-7300</td>
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<tr>
<td>Beard-Poulam/Weed Eater</td>
<td>See Poulam/Weed Eater</td>
<td></td>
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<tr>
<td>Beck Mfg Co</td>
<td>1510 Pumphty Ave, PO Box 2014, Auburn, AL 36830</td>
<td>205-82-4600</td>
</tr>
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<td>B &amp; G Equipment Co</td>
<td>Applebutter Rd, Plumsteadville, PA 18949</td>
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<td>Billy Goat Industries Inc</td>
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<td>57540 SR 19 S, PO Box 1027, Elkhart, IN 46515</td>
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<td>PO Box 356 Oregon IL 61061 815-732-3239</td>
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<td>Gandy Co</td>
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<td>8300 Lehigh Ave</td>
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48", 60", 74", 88"
fine or coarse cut for higher h.p. tractors.

Interstater®
Gangable to 21'
fine or coarse cut

MOTT CORPORATION
589 Shawmut Avenue • P.O. Box 518 • LaGrange, Illinois 60525
(312) 354-7220

Circle No. 132 on Reader Inquiry Card

SEPTEMBER 1982/WEEDS TREES & TURF 69
<table>
<thead>
<tr>
<th>Equipment Companies</th>
<th>continued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raverty's Sod Blades</td>
<td>PO Box 7606</td>
</tr>
<tr>
<td>St Paul MN 55119</td>
<td>612-774-2155</td>
</tr>
<tr>
<td>Reach-All Mfg</td>
<td>436 Calvary Rd</td>
</tr>
<tr>
<td>Duluth MN 55803</td>
<td>218-728-5138</td>
</tr>
<tr>
<td>Reading Body Works Inc</td>
<td>Hancock Blvd &amp; Gerry St</td>
</tr>
<tr>
<td>PO Box 14</td>
<td>Reading PA 19603</td>
</tr>
<tr>
<td>215-775-3301</td>
<td></td>
</tr>
<tr>
<td>Reinco Inc</td>
<td>520 North Ave</td>
</tr>
<tr>
<td>Plainfield NJ 07061</td>
<td>800-526-7687; In NJ 201-755-0921</td>
</tr>
<tr>
<td>Rhino Prods Inc</td>
<td>1000 Singleton</td>
</tr>
<tr>
<td>PO Box 22117</td>
<td>Dallas TX 75222</td>
</tr>
<tr>
<td>214-651-0733</td>
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<tr>
<td>Rhino Sales Corp</td>
<td>620 Andrews Ave</td>
</tr>
<tr>
<td>Kewanee IL 61443</td>
<td>309-882-4461</td>
</tr>
<tr>
<td>Richdel Inc</td>
<td>PO Drawer A</td>
</tr>
<tr>
<td>Carson City NV 89701</td>
<td>702-862-6766</td>
</tr>
<tr>
<td>Richway Industries</td>
<td>525 Main St</td>
</tr>
<tr>
<td>Janesville IA 50647</td>
<td>319-987-2976</td>
</tr>
<tr>
<td>Rivlex Industries Inc</td>
<td>301 E Stevens Ave</td>
</tr>
<tr>
<td>Santa Ana CA 92707</td>
<td>714-540-8814</td>
</tr>
<tr>
<td>Robark Inc</td>
<td>7309 Lake Dr</td>
</tr>
<tr>
<td>Lino Lakes MN 55014</td>
<td>612-784-0657</td>
</tr>
<tr>
<td>Roko Inc</td>
<td>310 Herring Ave</td>
</tr>
<tr>
<td>Wilson NC 27893</td>
<td>919-237-2108</td>
</tr>
<tr>
<td>Rolatape Corp</td>
<td>4221 Redwood Ave</td>
</tr>
<tr>
<td>Los Angeles CA 90066</td>
<td>213-822-2057</td>
</tr>
<tr>
<td>Root-Lowell Corp</td>
<td>100 Foreman Rd</td>
</tr>
<tr>
<td>Lowell MA 50317</td>
<td>361-897-9212</td>
</tr>
<tr>
<td>Roseman Mower Corp</td>
<td>2300 Chestnut Ave</td>
</tr>
<tr>
<td>Glenview IL 60025</td>
<td>312-729-2300</td>
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<tr>
<td>Rotocast Plastic Products Inc</td>
<td>3645 NW 67 St</td>
</tr>
<tr>
<td>Miami FL 33147</td>
<td>305-693-4680</td>
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<tr>
<td>Royal Coach/Buckner</td>
<td>4381 N Brawley Ave</td>
</tr>
<tr>
<td>Fresno CA 93711</td>
<td>209-275-0500</td>
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<tr>
<td>Royer Foundry &amp; Machine Co</td>
<td>PO Box 1232</td>
</tr>
<tr>
<td>Kingston PA 18704</td>
<td>717-287-9264</td>
</tr>
<tr>
<td>Rugg Mfg Co</td>
<td>105 Newton St</td>
</tr>
<tr>
<td>Greenfield MA 01301</td>
<td>413-773-5471</td>
</tr>
<tr>
<td>Ryan /OMC Lincoln</td>
<td>PO Box 9209</td>
</tr>
<tr>
<td>Lincoln NE 68501</td>
<td>402-435-7208</td>
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<tr>
<td>Safe-T-Lawn Inc</td>
<td>5350 NW 165 St</td>
</tr>
<tr>
<td>Hialeah FL 33014</td>
<td>305-625-7000</td>
</tr>
<tr>
<td>Safety Test &amp; Equipment Co</td>
<td>PO Box 400</td>
</tr>
<tr>
<td>Shelby NC 28150</td>
<td>704-482-7346</td>
</tr>
<tr>
<td>Samson</td>
<td>99 High St</td>
</tr>
<tr>
<td>Boston MA 02110</td>
<td>617-426-6550</td>
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<tr>
<td>Sario Power Mowers Inc</td>
<td>PO Box 1169</td>
</tr>
<tr>
<td>Ft Myers FL 33902</td>
<td>813-332-1955</td>
</tr>
<tr>
<td>Don Savage Co</td>
<td>39 E Main St</td>
</tr>
<tr>
<td>PO Box 375</td>
<td>716-219-5121</td>
</tr>
<tr>
<td>Schutt's Equipment Co</td>
<td>450 Larchlea</td>
</tr>
<tr>
<td>Birmingham MI 48012</td>
<td>313-642-6555</td>
</tr>
<tr>
<td>O M Scott &amp; Sons Co Proturf Div</td>
<td>Marysville OH 43040</td>
</tr>
<tr>
<td>513-644-0011</td>
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<tr>
<td>Seaman Co</td>
<td>13500 W Carmen Ave</td>
</tr>
<tr>
<td>Menomonee Falls WI 53051</td>
<td>414-781-8900</td>
</tr>
<tr>
<td>Sea Ranch</td>
<td>Rte 2 Box 604</td>
</tr>
<tr>
<td>Sheridan AR 72150</td>
<td>501-942-2515</td>
</tr>
<tr>
<td>Sensation Corp</td>
<td>3601 N 16th</td>
</tr>
<tr>
<td>Omaha NE 68110</td>
<td>402-345-3884</td>
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<tr>
<td>Seymour Mfg Co</td>
<td>500 N Broadway</td>
</tr>
<tr>
<td>Seymour IN 47274</td>
<td>812-522-2900</td>
</tr>
<tr>
<td>Shaver Mfg Co</td>
<td>PO Box 3087</td>
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<tr>
<td>Des Moines IA 50317</td>
<td>515-266-7550</td>
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<tr>
<td>Sidewinder Int'l Inc</td>
<td>PO Box 671</td>
</tr>
<tr>
<td>Bay City MI 48707</td>
<td>517-894-4570</td>
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<tr>
<td>Sioux Steam Cleaner Corp</td>
<td>Sioux Plaza</td>
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<tr>
<td>Beresford SD 57044</td>
<td>605-763-2776</td>
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<tr>
<td>P E Skaling Soilmoisture Equipment Corp</td>
<td>801 S Kellogg Ave</td>
</tr>
<tr>
<td>Goleta CA 93117</td>
<td>805-964-3525</td>
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<tr>
<td>Skill Corp</td>
<td>4801 W Peterson Ave</td>
</tr>
<tr>
<td>Chicago IL 60646</td>
<td>312-286-7330</td>
</tr>
<tr>
<td>Smithco Inc</td>
<td>11 West Ave</td>
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<tr>
<td>Wayne PA 19087</td>
<td>215-888-4009</td>
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<tr>
<td>Smith Precision Products</td>
<td>1299 Lawrence Dr</td>
</tr>
<tr>
<td>Newbury Park CA 91320</td>
<td>805-495-6616</td>
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<tr>
<td>Seymour Smith &amp; Son Inc</td>
<td>900 Main St</td>
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<tr>
<td>Oakville CT 06779</td>
<td>203-274-2558</td>
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<tr>
<td>Snapper Power Equipment</td>
<td>535 Macon Rd</td>
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<tr>
<td>McDonough GA 30253</td>
<td>404-957-9141</td>
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<tr>
<td>Snowco</td>
<td>4350 McKinley St</td>
</tr>
<tr>
<td>PO Box 12067</td>
<td>Omaha NE 68112</td>
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<td>402-453-2200</td>
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<td>Soilmoisture Equipment Corp</td>
<td>See P E Skaling Soilmoisture Equipment Corp</td>
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<tr>
<td>Solarcell Land &amp; Bldg Inc</td>
<td>412 113th St</td>
</tr>
<tr>
<td>Arlington TX 76011</td>
<td>817-640-1488</td>
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<tr>
<td>Solo Inc</td>
<td>5100 Chestnut Ave</td>
</tr>
<tr>
<td>PO Box 5030</td>
<td>Newport News VA 23605</td>
</tr>
<tr>
<td>804-245-4228</td>
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<tr>
<td>Sorensen Sprayers Inc</td>
<td>Airport Rd</td>
</tr>
<tr>
<td>Box 344</td>
<td>Worthington MN 56187</td>
</tr>
<tr>
<td>597-376-6230</td>
<td></td>
</tr>
<tr>
<td>Sperry New Holland</td>
<td>500 Diller Ave</td>
</tr>
</tbody>
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CHOICE CUTS

Choosing the right riding mower... We've cut the task in half.

Because now the maker of the finest rotary mower joins
the maker of the finest reel mower. So whether you choose
the light-weight maneuverability of the Ransomes Bob Cat
or the money-saving durability of the Ransomes Motor 180
Diesel, you get choice cuts every time out. See your Ransomes
Bob Cat distributor or call Ransomes, Inc., One Bob Cat Lane,
Johnson Creek, WI 53038, (414) 699-2000.

CIRCLE NO. 139 ON READER INQUIRY CARD
Equipment Companies

continued

New Holland PA 17557
717-354-1121

*Spraying Systems Co
North Ave at Schmale Rd
Wheaton IL 60187
312-665-5000

Spring City Electric Mfg Co
Hall & Main Sts
PO Drawer A
Spring City PA 19475
216-948-4000

Spyder Sales Inc
12838 Westheimer
Houston TX 77077
800-435-6108

Sta-Green Plant Food Co
PO Box 540
Sylacauga AL 35150
205-245-5282

Standard Golf Co
220 E Fourth St
Cedar Falls IA 50613
319-266-2638

Stanley Hydraulic Tools
3810 SE Naef Rd
Milwaukie OR 97222
503-659-5660

Steiner Corp
12657 Church Rd
Orville OH 44667
216-683-0055

Stihl Inc
536 Viking Dr
Virginia Beach VA 23452
804-486-8444

Strong Ent Inc
4240 SW 72 Ave
Miami FL 33155
305-264-5525

Strong Mfg Co
PO Box 8068
Pine Bluff AR 71611
501-335-4753

Submatic Irrigation Systems
PO Box 246
Lubbock TX 79408
806-747-9000

Sudbury Laboratory Inc
572 Dutton Rd
Sudbury MA 01776
617-443-8844

Sumitomo Corp of America
See Mitsubishi Ag Machinery Co Ltd c/o
Sumitomo Corp of America

Swan Hose Div Amerace Corp
See Anchor/Swan Corp

Sweepster
2810 SW Baker Rd
Dexter MI 48130
313-426-3961

Swenson Spreader Co
127 Walnut St
Lindenwood IL 61049
815-353-4455

Taylor-Dunn Mfg Co
2114 W Ball Rd
Anaheim CA 92804
714-956-4040

Tecumseh Products Co Engine Div
900 North St
Grafton WI 53024
414-377-2700

Teledyne Wisconsin Motor
1910 S 53 St
Milwaukee WI 53219
414-384-5800

Tennant Co
701 N Lilac Dr
Minneapolis MN 55440
612-540-1200

Terrain King Corp
PO Drawer 549
Sequin TX 78155

Thompson Mfg Co
4832 Chino Ave
Chino CA 91710
714-591-4851

Tiger Corp
4315 N Cliff Ave
Sioux Falls SD 57104
605-336-7900

Torco Equipment Co
207 Eiler Ave
Louisville KY 40214
502-366-1415

*Toro Co Commercial Prods
8111 Lyndale Ave S
Minneapolis MN 55420

*Toro Co Irrigation Div
5925 Jasmine St
Riverside CA 92502
714-688-9221

Trac N Combo
PO Box 7
Metuchen NJ 08840

Tradewinds Inc
PO Box 1191
Tacoma WA 98401
206-272-4887

Trans-Tree Corp
5100 Eden Ave
Edina MN 55436
612-927-4450

Travelrain Power Sprinkler Co
239 N Robertson Blvd
Beverly Hills CA 90211
213-276-3213

Trees Inc
RT 5 Box 251
Carthage MO 64836
417-358-8174

Tri-Con Inc
27331 Tunstern Rd
Cleveland OH 44132
216-261-3400

Trojan Battery Co
9440 Ann St
Santa Fe Springs CA 90670

Trojan Playground Equipment Mfg Co
11-2nd Ave NE
St Cloud MN 56301
612-251-3080

*Tuflex Mfg Co
800 Eller Dr
Ft Lauderdale FL 33316
305-525-8815

Turfcasa Corp
3456 Washington Ave N
Minneapolis MN 55412
612-586-0741

Turf Grass Products Corp
2210 NE 124 St
North Miami FL 33181
305-893-6449

Turfibre Products
2210 NE 124 St
North Miami FL 33181
305-893-6449

Turf Vac Corp
PO Box 4339
Long Beach CA 90804
213-426-9376

Turner International (Eng) Ltd
6487 Chupp Rd Unit B1
Conyers GA 30098
404-482-7661

Union Fork & Hoe Co
500 Dublin Ave
Columbus OH 43216
614-226-1791

Universal-Gerwin Div Lehigh Products Inc
460 Main St
Saranac MI 48881
616-642-9413

Universal Tractor-Equipment Corp
See UTECO Inc

UTECO Inc
923 N Meadow St
Richmond VA 23220
804-353-7806

Vandermolen Corp
119 Dorsa Ave
Livingston NJ 07039
201-992-8506

Vemco Corp of America
5300 Katrine Ave
Downers Grove IL 60515
312-969-6300

Vemco Corp of America
1331 23rd St
WE GIVE GREENS THE KINDEST CUT OF ALL.

WITH REELS THAT FLOAT.

Toro pulls out the stops to give you the kind of greens-mower you want most. One that keeps you cutting. With a quality of cut second to none.

That's why our Greensmaster 3® is the choice of the majority of America's top hundred golf courses.

This fast, agile professional gives each green a uniform cutting height, appearance and playing characteristic.

Because it's the only greensmower in the world with cutting heads isolated from the traction unit and grass baskets. Our secret is a carrier frame, with low pullpoints, that pulls rather than pushes. Resulting in balanced, fully floating cutting heads that allow the reels to float freely as they cut, unaffected by dips or bumps encountered by other parts of the machine. Or by the weight of clippings in the baskets.

You get the kindest cut of all. Smooth. Even. Consistently superb.

Plus, other features that make the Greensmaster 3 a versatile as well as durable performer. Like quick disconnect cutting heads for easy conversion to thatching or spiking units.

Call your Toro distributor. He'll give you more good reasons to choose our Greensmaster 3. The greensmower that proves Toro quality doesn't cost, but pays.

"Toro" is a registered trademark of The Toro Company
8111 Lyndale Ave. So., Minneapolis, Minnesota 55420.
GET SNOW MOLD OFF YOUR BACK.

MALLINCKRODT OFFERS THREE WAYS TO GET MEAN ABOUT GREEN.

Winter wet can turn greens splotchy.
Get mean about it with Mallinckrodt's well-proven controls.
Take your choice of CALOCLOR for spray application, CALO-GRAN for dry spreader application, or CADMIMATE, also effective against brown patch, copper spot and dollar spot.
All give you positive snow mold control that can last the whole winter season.

FROM THE GREEN GROUP AT

Mallinckrodt
MALLINCKRODT, INC.
ST. LOUIS
JERSEY CITY
LOS ANGELES

Circle No. 127 on Reader Inquiry Card
3. Chemicals

This section is broken down by chemical product with companies providing that chemical listed below. Companies' common and brand names are listed on the line following the company name.

Adjuvant/Carrier

- Aquasolve Corp
- BASF Wyandotte Corp
- Citowett Plus
- Bonide Chemical Co
- Chevron Chemical Co
- Drexel Chemical Co
- Surf-Ac 820
- Grass Growers Inc
- Herbex
- Hopkins Agricultural Chemical Co
- Kalo Agricultural Chemicals
- B10-88
- Nalco Chemical Co
- PBI-Gordon Corp
- Adjumec
- Rohm & Haas Co
- Triton
- Stull Chemical Co
- Bivert
- T H Agricultural & Nutrition Co
- Super Savol Concentrate

Algaecide

- Applied Biochemists Inc
- Citrene-Plus
- Aquashade Inc
- Aquashade
- Clean-Flo Laboratories Inc
- Buffer Alum, Clean-Flo Lake Cleanser
- Faesy & Besthoff Inc
- Copper Sulphate
- Great Lakes Biochemical Co
- Algimycin
- Lakeshore Equipment Lesco Products Div
- Copper Sulphate, Lesocide-Plus
- Rohm & Haas Co
- Hyamine

Antitranspirant

- Agro Chem Inc
- Bonide Chemical Co
- W A Cleary Chemical Corp
- Clear Spray
- C B Dolge
- Encap Products Co
- Wilt-Pruf
CHEMICALS
continued

PBI-Gordon Corp
  Exhaust 4-10
  Witt-Frut Products Inc
  Witt-Frut

Colorant
  Agro Chem Inc
  W A Cleary Chemical Corp
  Turf Colorant, Greenzit
  Lakeshore Equipment Lesco Products Div
  Turf Colorant, Lesco Green
  Mallinckrodt Inc
  Turf Colorant, Auragreen, Vitalon

Compatibility Agent
  Hopkins Agricultural Chemical Co
    Unite
  Kalo Agricultural Chemicals
    Compex
  Miller Chemical & Fertilizer Corp
    Sandoz Inc
  Stull Chemical Co
    Bivert

Defoamer
  Agro Chem Inc
  Ashland Chemical Co
  W A Cleary Chemical Corp
  Cleary Defoamer
  Drexel Chemical Co
  Wetz
  Faesy & Besthoff Inc
    Defoamer & Unfoamer
  Hopkins Agricultural Chemical Co
  Kalo Agricultural Chemicals
  Lakeshore Equipment Lesco Products Div
    Lesco Defoamer
  Miller Chemical & Fertilizer Corp
  Montco Products Corp
    Zap!
  Rigo Co
    Rigo D-Fome
  Stull Chemical Co
    Bivert

Drift Retardant
  Agro Chem Inc
  W A Cleary Chemical Corp
  Drift Proof
  Stull Chemical Co
    Bivert

Fertilizer, Tree
  Adco Works
    Easy Grow
  Agro Chem Inc
  BFC Chemicals Inc
    Nitroform, Powder Blue
  C-I-L Inc
    Sulfur Coated Urea
  Creative Sales Inc
    MediCap 2N, MediCap FE, MediCap MN, MediCap MO
  Davey Tree Expert Co
    Davey Arbor-Green
  Estech Inc (IL)
    Gro-Tone
  Faesy & Besthoff Inc
  Great Salt Lake Minerals & Chemicals Corp
    GSL Sulfate of Potash
  International Spike
  Lakeshore Equipment Lesco Products Div
    Lesco Tree & Shrub
  Lebanon Chemical Corp
  Lebanon Tree Food
  Leffingwell Chemical Co
    Nutra Phos, Sorba Spray, Vitatone
  J J Maugut Co
  Milwaukee Metropolitan Sewage District
    Milorganite
  Plant Marvel Laboratories Inc
    Plant Marvel
  Rigo Corp
    Nutri-Pak
  Sierra Chemical Co
    USS Agri-Chemicals Div US Steel
    USS Vertagreen

Fertilizer, Turf
  Agro Chem Inc
  Allied Chemical
  The Andersons
    Tee Time
  BFC Chemicals Inc
    Blue Chip, Nitroform
  Bonide Chemical Co
  Chemovon Chemical Co
  C-I-L Inc
    Sulfur Coated Urea
  W A Cleary Chemical Corp
    Fluf, 10-1-4 Liquid
  Estech Inc (FL)
    Par Ex
  Estech Inc (IL)
    Gro-Tone
  Faesy & Besthoff Inc
  Grass Growers Inc
    Terra Plus
  Great Salt Lake Minerals & Chemicals Corp
    GSL Sulfate of Potash
  Jonathan Green & Sons Inc
    Landscaper 600
  Lakeshore Equipment Lesco Products Div
    Lesco Turf Fertilizer
  Lebanon Chemical Corp
  Lebanon Country Club
  Leffingwell Chemical Co
    Nutra Phos, Sorba Spray, Vitatone
    Liqui *Lawn Corp
    Liqui *Lawn Spray On Lawn Food
  Lofk-Kollsp Seed Inc
  Miller Chemical & Fertilizer Corp
  Milwaukee Metropolitan Sewarage District
    Milorganite
  Pennwalt Corp
  Plant Marvel Laboratories Inc
    Plant Marvel
  Rigo Corp
    Plant Food w/Systemic Insecticide
  O M Scott & Sons Co Proturf
  Sierra Chemical Co
    Sta-Green Plant Food Co
    Sta-Green
  Stanford Seed Co
    Old English
  Sudbury Laboratory Inc
    USS Agri-Chemicals Div US Steel
    USS Vertagreen
  Vaughan's Seed Co

Fungicide, Tree
  Agro Chem Inc
  Bonide Chemical Co
  Chevron Chemical Co
  Orthocide 50 Wettable
  Diamond Shamrock Corp
  Daconil 2787 Flowable, Daconil 2787 W-75
  Drexel Chemical Co
    Maneb 80
  E I du Pont de Nemours & Co
  Estech Inc (IL)
    Vigoro
  Faesy & Besthoff Inc
  Lakeshore Equipment Lesco Products Div
    Lesco 4
  Mallinckrodt Inc
    Zyban
  J J Maugut Co
  Mobay Chemical Corp Agri Chem Div
    MSD/AGVET Div Merck & Co
    Arbotect 20 S
  PBI-Gordon Corp
  Rohm & Haas Co
    Dikar
  T H Agriculture & Nutrition Co
    Du-Ter, Nutra-Spray Copper
    Vineland Chemical Co

Fungicide, Turf
  Agro Chem Inc
  The Andersons
    Tee Time
  Bonide Chemical Co
  Ciba-Geigy Corp
    Subdue
  W A Cleary Chemical Corp
    Dacron
  Diamond Shamrock Corp
    Bromosan
  Diamond Shamrock Corp
    Daconil 2787 Flowable, Daconil 2787 W-75
  C B Dolge
  E I du Pont de Nemours & Co
    Tersan
  Estech Inc (IL)
    Vigoro
  Faesy & Besthoff Inc
  Lakeshore Equipment Lesco Products Div
    Lesco Thiram
  Lebanon Chemical Corp
    Lebanon Turf Fungicide
  Mallinckrodt Inc
    Calo-Clor, Calo Gran, Duosan, Fungo
    50, Koban 30, Koban 1.3G, Kromad, Thiram, Cadimate
  Mobay Chemical Corp Agri Chem Div
    Bayleton
  MSD/AGVET Div Merck & Co
    Mertect 340 F
  Olin Corp
    Terracolor, Terrazole 35W
  PBI-Gordon Corp
    Carbamer, Dymec, Formec
    Phone-Poulenc Chemical Co Agro Chem Div
    Chipco 26019
  Rigo Co
    Benomyl Systemic Fungicide
  Rohm & Haas Co
    Fore
  O M Scott & Sons Proturf
  Tuco Ag Chemicals
    Acti Dione, Banol
Growth Regulator
Drexel Chemical Co
Vigor
Maag Agrochemicals Hoffmann-LaRoche
3M/Agricultural Products
Embark
MSD/AGVET Div Merck & Co
Gibrel
Nalco Chemical Co
Pennwalt Corp
US Borax, Maintain
Herbicides, Aquatic
Agro Chem Inc
Applied Biochemists Inc
Aquashade Inc
Aquashade
Chevron Chemical Co
Ortho Diquat Water Weed Killer
Ciba-Geigy Corp
Glyphosate, Roundup
Occidental Chemical Co
Monobor Chlorate, Ureabor
Rigo Co
Amitrol-T Liquid
Shell Chemical Co
Atrazine, Shell Atrazine 80W
Stauffer Chemical Co
Vapam
TH Agriculture & Nutrition Co
Dichlobenil, Casoron G-4 & W-50
2,4-DB, Klean-Up
NP-A-Dinitro, Klean-Krop
Ciba-Geigy Corp
Prometon, Pramitol
Crystal Chemical Co
Drexel Chemical Co
Methyl Bromide & Chloropicrin, Plant
Bed Gas, Simazine, Atrazine, Diuron
E I du Pont de Nemours & Co
Estech Products Co
Spike
Estech Inc (IL)
Vigoro, Weed & Grass Killer,
Faesy & Besthoff Inc
Eptam
Hopkins Agricultural Chemical Co
Revenge, Rout & Dozer, Urox
Lakeshore Equipment Lesco Products Div
Lesco Bor
Monsanto Co
Spike
Ortho Diquat Water Weed Killer
Ciba-Geigy Corp
Ethofumesate, Prograss
W A Cleary Chemical Corp
MCPP, MCPP + 2, Methor 30, 4D
Diamond Shamrock Corp
MSMA, Bueno 6, Daconate 6,
LoVol/2,4-D + 2,4-0P, D Plus DP,
MCPP, MCPP-D-4, MCPP-K-4, MCPP + 2,4-D Amine, 2 Plus 2, 2,4-D Amine,
Amine 4D, Dakamine 360D
Dow Chemical USA
2, 4-D, DMA-4, Esteron 9 Concentrate,
Formula 40, Phenoxy
Drexel Chemical Co
DSMA, DMA-4, Esteron 99 Concentrate,
Liver Pool, Liver Pool
Estech Inc (IL)
Vigoro
Kalo Agricultural Chemicals
Demise
Lakeshore Equipment Lesco Products Div
Lesco 8-1
Lebanon Chemical Corp
Liqui' Lawn Corp
Weed Control, Spray'On Broadleaf
Mallinckrodt Inc
Dicamba, Trexsan
Mobay Chemical Corp Agri Chem Div
Sencor

Herbicides, Nonselective
Chevron Chemical Co
Paraquat, Chevron

Herbicides, Postmergence
Selective
BASF Wyandotte Corp
Beritazon, Basagran
BFC Chemicals Inc
Ethofumesate, Prograss
W A Cleary Chemical Corp
MCPP, MCPP + 2, Methor 30, 4D
Diamond Shamrock Corp
MSMA, Bueno 6, Daconate 6,
LoVol/2,4-D + 2,4-0P, D Plus DP,
MCPP, MCPP-D-4, MCPP-K-4, MCPP + 2,4-D Amine, 2 Plus 2, 2,4-D Amine,
Amine 4D, Dakamine 360D
Dow Chemical USA
2, 4-D, DMA-4, Esteron 9 Concentrate,
Formula 40, Phenoxy
Drexel Chemical Co
DSMA, DMA-4, Esteron 99 Concentrate,
Liver Pool, Liver Pool
Estech Inc (IL)
Vigoro
Kalo Agricultural Chemicals
Demise
Lakeshore Equipment Lesco Products Div
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Rigo Co
Super D Weedone, Triple Action Weed Killer
Rohm & Haas Co
Blazer, Stam, Stapede
O M Scott & Sons Proturf
Sta-Green Plant Food Co
Sta-Green
Stanford Seed Co
Old English

T H Agriculture & Nutrition Co
2, 4-D, Dibrom-Sulv-Amine, NPA-Dinitro, Dinitro-3 & 5, Naphtlam, NPA-3, Dinitro Clean-Up
USS Agri-Chemicals Div US Steel
USAS

Veliscol Chemical Corp
Dicamba, Banor 4S, Banor +24D

Herbicides, Preemergence
The Andersons
Tee Time (fertilizer plus herbicide)
BFC Chemicals Inc
Ethofumesate, Prograss
Diamond Shamrock Corp
DCPA, Daetcha G-5, Dacthal W-75
E I du Pont de Nemours & Co
Dinolucon, Klen-Krop, Naphthiam, NPA-3, Dinuron, Clean-Up

Elanco Products Co
Balan
Estech Inc (IL)
Crabgrass Preventer, Vigoro
Faesy & Besthoff Inc
Bensulide, Betasan
Lakeshore Equipment Lesco Products Div
Bensulide, Lescosan
Mallinckrodt Inc
Bensulide, Presan
O M Scott & Sons Proturf
PBI Gordon Corp
Betamate
Stauffer Chemical Co
Bensulide, Betasan, Devrinol
T H Agriculture & Nutrition Co
Dinitro, Dinitro 3 & 5, Naphtlam, NPA-3

Insecticides, Tree
American Cyanamid Co
Malathion
BFC Chemicals Inc
Bendiocarb, Turcram
Bonide Chemical Co
Carbaryl, Dursban
Chevron Chemical Co, Orthene Tree & Ornamental Spray
Carbaryl, Dursban
Ciba-Geigy Corp
Diazinon, D-Z-N
Conrel
C B Dolge
Dow Chemical USA
Chlorpyrifos, Dursban
Drexel Chemical Co
Carbaryl, Carbaryl
E I du Pont de Nemours & Co
Estech Inc (IL)
Insect Control & Lawn Fertilizer, Vigoro
Faesy & Besthoff Inc
Dursban
Hooker Chemical
Hopkins Agricultural Chemical Co
Diazinon, Malathion
Lakeside Equipment Lesco Products Div
Diazinon, Lesco Diazinon 5G
Lebanon Chemical Corp, Lebanon Insect Control
Mallinckrodt Inc
Diazinon & Methoxychlor, Dymet
Mobay Chemical Corp Agri Chem Div
Baygan, Dusan, Dylux, Dylux, O村子, Odyrol
PBI Gordon Corp
Liquid Sevin, Carbamate
Prentiss Drug & Chemical Co
Rhoine-Poulenc Chemical Co Agro Chem Div
Rohm & Haas Co
Karathane, Keathane
Shell Chemical Co
Fenbutatin-oxide, Vendex 50WP, 50WSP. Fenvalerate, Pydrin 2.4EC, Methomyl, Nudrin 1.8S, 90WSP, Monuron, Azodrin 5WM
Stauffer Chemical Co
Phosmet, Imidan
T H Agriculture & Nutrition Co
Bacillus Thuringiensis, Bactur-L
T H Agriculture & Nutrition Co
Diazinon, Diazinon AG-4 Diffubenzuron, Dimilin W-25 Dimethoate, De-Fend E267, W-25, Malathion, Malathion E-5, E-8
Union Carbide Ag Prod Co
Sevin
Zoecon Corp Ag Chem Div

Insecticides, Turf
American Cyanamid Co
Diazinon, Lesco Diazinon
Mallinckrodt Inc
Bendiocarb, Dycarb, Diazinon & Methoxychlor, Dymet
J J Mauget Co
Mobay Chemical Corp Agri Chem Div
Baygan, Dansit, Di-Syston, Dylux, Guthion, Metasystox-R, Systox
PBI-Gordon
Prentiss Drug & Chemical Co
Rhoine-Poulenc Chemical Co Agro Chem Div
Rohm & Haas Co
Karathane, Keathane
Shell Chemical Co
Fenbutatin-oxide, Vendex 50WP, 50WSP. Fenvalerate, Pydrin 2.4EC, Methomyl, Nudrin 1.8S, 90WSP, Monuron, Azodrin 5WM
Stauffer Chemical Co
Phosmet, Imidan
T H Agriculture & Nutrition Co
Bacillus Thuringiensis, Bactur-L
T H Agriculture & Nutrition Co
Diazinon, Diazinon AG-4 Diffubenzuron, Dimilin W-25 Dimethoate, De-Fend E267, W-25, Malathion, Malathion E-5, E-8
Union Carbide Ag Prod Co
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Zoecon Corp Ag Chem Div

Nematocides
Drexel Chemical Co
Methyl Bromide & Chloropicrin, Plant Bed Gas
Mobay Chemical Corp Agri Chem Div
Nemacur
Stauffer Chemical Co
Metham, Vapam

Repellents, Animal
Hopkins Agricultural Chemical Co
Thiram, Thiram 42-6
International Reforestation Suppliers Inc
Deer-Away BGR, Deer-Away
Leffingwell Chemical Co
Hinder
T H Agricultural & Nutrition Co
Ammonia Soaps, Hinder

Repellents, Bird
National Bird Control
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Perlite, Vigoro
Faesy & Besthoff Inc
Grass Growers Inc
Terra X Tract
ICI
International Reforestation Suppliers Inc
Super Moisturizer
Terra Sorb
Michigan Peat Co
Baccio, Garden Magic
Oil-Dri Corp of America
Terra Green
United States Gypsum Co
Gypsum, Sof’N-Soil
US Agri-Chemicals Div US Steel
US

Soil Fumigants
Bonide Chemical Co
Estech Inc (IL)
Vapam, Vigoro
Faesy & Besthoff Inc
Vapam
Hendrix & Dail Inc
Chloropicrin, HD PIC, Methyl Bromide/Chloropicrin, MBC, MBC
Concentrate, MBC-33
Hopkins Agricultural Chemical Co
Mylyone 50D
Shell Chemical Co
D-D
Stauffer Chemical Co
Metham, Vapam

Sticker Extender
BASF Wyandotte Corp
Citowett Plus
Bonide Chemical Co
EnCap Products Co
Spray-Stay
Hopkins Agricultural Chemical Co
Pvacy
Kalo Agricultural Chemicals
Bio-Film
PBI-Gordon Corp
Rigo Co
Spray-Ad 56
Rohm & Haas Co
Tri-ton
Stull Chemical Co
Bivent
Superior Fiber Products Co
Wilt-Pruf Products Inc
Spray-Stay

Tree Dressings
Bartlett Mfg Co
Bonide Chemical Co
Samuel Cabot Inc
Healing Paint, Cabot’s Tree
Coopers Creek Chemical Corp
C-4

Wetting Agents
Agro Chem Inc
Ashland Chemical Co
Surfactants
Aquatrols Corp of America
Aqua-Gro ‘L’, Aqua-Gro ‘S’
BASF Wyandotte Corp
Citowett Plus
Bonide Chemical Co
W A Cleary Chemical Corp
All Wet
Hopkins Agricultural Chemical Co
Neptune
Kalo Agricultural Chemicals
Hydro-Wet
Lakeshore Equipment Lesco Products Div
Lesco Wet
Montco Products Corp
Surf-Side
Mallinckrodt Inc
Agquor
PBI-Gordon Corp
Rohm & Haas Co
Triton
T H Agriculture & Nutrition Co
Dimethylpolysiloxane, Activate 3

4. Chemical Companies

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See Adco Works

Adco Works
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212-739-0701

Agro Chem Inc
11150 Addison
Franklin Park IL 60131
312-455-6900

Agricultural Service Corp
PO Box 101
Harrisburg OR 97446
503-995-6754

Allied Chemical
Box 2120
Houston TX 77001
713-960-7924

American Cyanamid Co
Berdan Ave
Wayne NJ 07470
201-831-2000

American Excelsior Co
850 Ave H East
PO Box 5067
Arlington TX 76011
817-640-1555

American Pelletizing Corp
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Des Moines IA 50322
515-278-5900

The Andersons
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Maumee OH 43537
419-893-5050

Applied Biochemists Inc
5300 W County Line Rd
Mequon WI 53092
800-555-5106

Aquashade Inc
PO Box 198
Eldred NY 12732
914-557-8077

Aquatrols Corp of America
1432 Union Ave
Pennsauken NJ 08110
609-665-1130; 800-257-7977

Ashland Chemical Co
PO Box 2219
Columbus OH 43216
614-889-3333

Bartlett Mfg Co
3003 E Grand Blvd
Detroit MI 48202
313-873-7300

BASF Wyandotte Corp
100 Cherry Hill Rd
Parsippany NJ 07054
201-263-0200

BFC Chemicals Inc
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PO Box 2867
Wilmington DE 19805
302-575-7850

Bonide Chemical Co
Two Wurz Ave
Yorkville NY 13495
315-736-8231

Samuel Cabot Inc
One Union St
Boston MA 02108
617-723-7740

Cal-Fiber Co
625 S Anderson St
Los Angeles CA 90023
213-268-0191

Cellin Mfg Inc
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Lorton VA 22079
703-690-1195; 800-336-3074

Chevron Chemical Co
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800-328-6656; 612-935-2137
W A Cleary Chemical Corp
1049 Somerset St
Somerset NJ 08873
201-247-8000
Conrel
110 A Street
Needham Heights MA 02194
617-449-3970
Conwed Corp
PO Box 43237
St Paul MN 55164
612-221-1100
Coopers Creek Chemical Corp
River Road
West Conshohocken PA 19428
215-828-0375
Creative Sales Inc
222 N Park Ave
Box 501
Fremont NE 68025
402-727-4800
Crystal Chemical Co
1525 N Post Oak Rd
Houston TX 77055
713-682-1221
Davey Tree Experts Co
117 S Water St
Kent OH 44240
216-673-2027
Diamond Shamrock Ag Chem Div
1100 Superior Ave
Cleveland OH 44114
216-694-5041
C B Dolge
11 Ferry Lane
Westport CT 06880
203-227-9591
* Dow Chemical USA
9001 Bldg
Midland MI 48640
517-636-0936
Drexel Chemical Co
2487 Pennsylvania
PO Box 9306
Memphis TN 38109
901-774-4370
E I du Pont de Nemours & Co
Wilmington DE 19898
302-774-2132
Elanco Prods Co
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Indianapolis IN 46285
317-261-3638
Encap Prods Co
PO Box 278
Mt Prospect IL 60056
312-593-6464
Estech Inc
PO Box 1996
Winter Haven FL 33880
813-294-7793
Estech Inc
30 N La Salle St
Chicago IL 60602
Faeys & Besthoff Inc
143 River Road
Edgewater NJ 07020
201-945-6200
FBC Chemicals Inc
See BFC Chemicals Inc
Fuerst Brothers Inc
PO Box 271
Rhinebeck NY 12572
914-876-3575
Grass Fiber Inc
520 E Second St
Junction City OR 97448
503-998-6812
Grass Growers Inc
424 Cottage Pl
Plainfield NJ 07060
201-755-0923
Great Lakes Biochemical Co
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Milwaukee WI 53218
414-464-1200
Great Salt Lake Mineral & Chemicals Corp
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Ogden UT 84402
801-731-3100
Jonathan Green & Sons Inc Seedsman
Quankum-Yellowbrook Rd
Farmingdale NJ 07727
201-938-7007
Gulf States Paper Corp
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Tuscaloosa AL 35404
205-552-6200
Hendrix & Dall Inc
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PO Box 648
Greenville NC 27834
919-758-4263
Hooker Chemical
PO Box 344
Niagara Falls NY 14302
Hopkins Agricultural Chemical Co
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Madison WI 53707
608-222-0624
ICI
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Wilmingon DE 19897
International Reforestation Suppliers Inc
2100 W Broadway
PO Box 5547
Eugene OR 97405
503-345-0597
International Spike
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Lexington KY 40593
800-354-9360
Kalo Agricultural Chemicals
4550 W 109 St
Overland Park KS 66211
913-649-5525
Kalo Inc
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Kansas City MO 64114
800-821-3172
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217-446-0983
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11 S Berry
Brea CA 92621
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Warrensville Hts OH 44128
216-831-3610
Loft-Kellogg Seed Inc
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414-276-0373
Maag Agrochemicals Hoffman-LaRoche
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201-235-3633
* Mallinckrodt Inc
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Houston TX 77266
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  Specialty Prods Group
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  Kansas City MO 64120
  816-242-2000

* Monsanto Co
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  St Louis MO 63167

Montco Products Corp
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Ambler PA 19002
215-628-3144

MSD/AGVET Div Merck & Co
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Rahway NJ 07065
201-574-6463

Nalco Chemical Co
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National Bark Sales
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208-375-0656

National Bird Control
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Skokie IL 60076
312-675-2368

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209-858-2511

Oil-Dri Corp of America
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Chicago IL 60611
800-621-7191; In IL 312-321-1515

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Little Rock AR 72203
501-378-3772

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330 S Third St
Kansas City KS 66118
816-421-4070

Pennwall Corp
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Philadelphia PA 19102
215-587-7000

Plant Marvel Laboratories Inc
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Chicago Hts IL 60411
312-757-7500

* Prentiss Drug & Chemical Co
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  New York NY 10001
  212-736-6766

Reclamare Co
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Seattle WA 98148
206-824-2385

Rhone-Poulenc Chemical Co Agrochem Div
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Black Horse Lane
Monmouth Junction NJ 08852
201-297-0100

RIGO Co
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502-222-1456

Rohm & Haas Co
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San Diego CA 92108

O M Scott & Sons Co Proturf Div
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Houston TX 77002
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408-283-8080

Southern Hydro Mulch Supply Inc
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* Stauffer Chemical Co
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  203-222-3000

Stull Chemical Co
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617-443-8844

Superior Fiber Products Co
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Dexter MI 48130
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T H Agriculture & Nutrition Co
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Kansas City KS 66106
913-281-4100

TUCO Ag Chemicals Div Upjohn Co
9823-190-1
Kalamazoo MI 49001
616-323-4000

Union Carbide Ag Prod Co
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United States Gypsum Co
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Chicago IL 60606
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US Agri-Chemicals Div US Steel
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Atlanta GA 30328
404-572-4000

Vaughan's Seed Co
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201-356-4200

Velsicol Chemical Corp
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Chicago IL 60611
312-670-4665

Vineland Chemical Co
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Jonathan Green & Sons Inc Seedsman
Squankum-Yellowbrook Rd
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606-371-8423
Certified Turfgrass Seed Names: Regal Perennial Ryegrass, Eclipse Kentucky Bluegrass, Rebel Finofoot Leaf Fescue

International Seeds Inc
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Jacklin Seed Co
W 5300 Jacklin Ave
Post Falls ID 83854
208-773-7581
Certified Turfgrass Seed Names: Flying Kentucky Bluegrass, Glade Kentucky Bluegrass, Ram I Kentucky Bluegrass, Cheri Kentucky Bluegrass, Wabash Kentucky Bluegrass, Elka Perennial Ryegrass, Reubens Canada Bluegrass

Jenks White Seed Co Div Jacklin Seed
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Tangent OR 97389

Kellogg Inc: Seeds & Supplies
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Milwaukee WI 53204
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216-323-7544
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Lofts Pedigreed Seed Co
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Bound Brook NJ 08805
201-356-8700

Mangelsdorf Seed Co
5400 Swan Ave
St Louis MO 63110
314-535-6700

Certified Turfgrass Seed Names: Arboreteum Kty Bluegrass, Adelphi Kty Bluegrass, Baron Kty Bluegrass, Fylink Kty Bluegrass, Glade Kty Bluegrass, Warren's A-34 Kty Bluegrass, Manhattan Perennial Ryegrass, Pennfine Perennial Ryegrass, Regal Perennial Ryegrass

Manhattan Ryegrass Growers Assoc
1349 Capitol St NE
Salem OR 97303
503-363-1022

Midwestern States Fescue Assn
149 Park Central
Springfield MO 65806

Northrup King Co
1500 NE Jackson St
Minneapolis MN 55413
612-781-8011

Oregon Fine Fescue Commission
1349 Capitol St NE
Salem OR 97303
503-363-1022

Oregon Ryegrass
4093 12th St
Salem OR 97302

Oseco BC Ltd Oregon Ryegrass
PO Box 3366
Salem OR 97302

Oseco Inc
PO Box 219
Brampton ON L6V 2L2
Canada
416-846-5080

Certified Turfgrass Seed Names: Baron Kentucky Bluegrass, Birka Kentucky Bluegrass, Sydsport Kentucky Bluegrass, Yorktown II Perennial Ryegrass, Omega Perennial Ryegrass, Emerald Creeping Bentgrass

Patten Seed & Turfgrass Co
119 Murrell Ave
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Certified Turfgrass Seed Names: Centi-Seed, Tifgreen, Tifdwarf, Tifway, Tifway II, Emerald, Meyer Z-52, Raleigh, Floratam

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St Hyacinthe PQ J2S 7B4
Canada
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Certified Turfgrass Seed Names: Banff Kentucky Bluegrass, Cheri Kentucky Bluegrass, Dormie Kentucky Bluegrass, Fyking Kentucky Bluegrass, Nugget Kentucky Bluegrass, Ram I Kentucky Bluegrass, Touchdown Kentucky Bluegrass, Barone Kentucky Bluegrass, Adelphi Kentucky Bluegrass, Merion Kentucky Bluegrass, American Turf-Type Perennial Red Fescue, Pennfine Perennial Ryegrass, Manhattan Perennial Ryegrass, Regal Perennial Ryegrass

Certified Turfgrass Seed Names: Rugby Kentucky Bluegrass

Certified Turfgrass Seed Names: Citation Perennial Ryegrass, Omega Perennial Ryegrass, Pennfine Perennial Ryegrass, Pennstar Perennial Ryegrass, Pennfine Turf-Type Perennial Ryegrass, Citation Turf-Type Perennial Ryegrass

Certified Turfgrass Seed Names: Adelphi Kentucky Bluegrass, Cheri Kentucky Bluegrass, Merit Kentucky Bluegrass, Touchdown Kentucky Bluegrass, Pennfine Perennial Ryegrass, Pennstar Perennial Ryegrass, Pennfine Turf-Type Perennial Ryegrass, Citation Perennial Ryegrass

Certified Turfgrass Seed Names: A-34 BenSun Kentucky Bluegrass

Certified Turfgrass Seed Names: Pennfine Perennial Ryegrass, Manhattan Perennial Ryegrass, Pennfine Perennial Ryegrass, Manhattan Perennial Ryegrass
Inquiries serviced for 90 days from date of issue. For those countries outside the U.S., please apply appropriate postage before mailing.

**READER SERVICE INFORMATION CARD 9-82**

For more information on products or services mentioned in this issue, circle the corresponding numbers below, fill in appropriate information and mail today.

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MY PRIMARY BUSINESS AT THIS LOCATION IS:
(PLEASE CHECK ONE ONLY IN EITHER A, B OR C)

A. LANDSCAPING/GROUND CARE AT ONE OF THE FOLLOWING TYPES OF FACILITIES:

- **0005** Golf courses
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- **0015** Parks
- **0020** Rights-of-way maintenance for highways, railroads & utilities
- **0022** Schools, colleges & universities
- **0025** Industrial & office parks/plants
- **0045** Condominiums/apartments/housing developments/hotels/resorts
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- **0205** Sod growers
- **0210** Dealers, Distributors
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Approximately how many acres of vegetation do you maintain or manage?

What is your title? (please specify)

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BUSINESS ADDRESS ________________________________________________________________

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LAKESHORE: OHIO TURF DEALER GROWS INTO NATIONAL MANUFACTURER

In 1961, there were three ways for a golf course superintendent to buy products he needed: from an agricultural supplier, a garden center dealer or, in a few cities, from a local "turf distributor" such as Bob Burkhardt in Rocky River, Ohio. Regional distributors of turf and landscape supplies hadn't developed in most areas of the United States by then.

Today, Bob Burkhardt looks back with partner Jim FitzGibbon and smiles, almost in disbelief, at the state of Lakeshore Equipment & Supply Co., one of the first "regional turf suppliers," now a national distributor of turf supplies. The $75,000 gross of 1962 has grown and is now approaching $40 million including chemical and equipment manufacturing divisions.

FitzGibbon, a lumber broker and hardware merchant, joined up with Bob Burkhardt in the early 1960s. Since 1962, Lakeshore has had four homes in the Cleveland area, but next year the company returns its offices to where it started out, Rocky River. Lakeshore is in the process of renovating the old hardware store to make it the new headquarters for LESCO.

The company's current headquarters in Elyria, OH, doesn't have the Musac atmosphere of some companies. It is more like the floor of the stock exchange with orders being announced over the intercom and all kinds of activity in the hallways and offices. The only time the principals really have time to discuss business is over lunch.

As the name implies, Lakeshore started as an equipment and supply dealer located on the south shore of Lake Erie, supplying local golf courses, cemeteries, greenhouses and nurseries. More than 80% of its business in 1963 was equipment. Lakeshore represented National, West Point Products, Sod Master, Goodall, H.D. Hudson and Smithco, among others. Its first salesman, Herb Cole, came from H.D. Hudson in 1963. Sales people Gene Probasco, Ed Williams, Barb Craycraft and Ron Giffen joined the company shortly thereafter.

FitzGibbon and Burkhardt weren't satisfied with the territorial limitations placed on equipment distributors by manufacturers. They had a concept for a regional business and restrictive territories were counterproductive. Even so, Lakeshore grew to become the largest distributor of many equipment lines. "There are two thoughts on marketing equipment," says FitzGibbon. "One is to sell by territory. The second is to allow competition to take its course." Though the second choice was not popular in the turf industry, Lakeshore was ready to let competition take its course. The course led straight to growth.

In the early days, Lakeshore also sold a line of fertilizers manufactured by Agrico. Today, its subsidiary Ag Industries Mfg., Columbia, Alabama, produces sulfur-coated urea and sulfur-coated fertilizers. Facilities in Wellington, OH, produce fertilizer, formulate chemicals and serve as a warehouse. Manufacturing, formulating and warehouse facilities are also located in Sebring, FL, and a new warehouse is located in Landover, MD.

Lakeshore added chemicals to its line in 1970 when Morton Chemical was selling out its line of turf herbicides. Lakeshore bought the products and originated its first private label chemicals, Lescopex—MCPP—and Lesopar—a combination of MCPP and 2,4-D. Today, Lakeshore formulates a line of 20 proprietary chemicals including Lesocasan, A,4-D (2,4-D), Dursban® and Diazinon® granular and fertilizer combinations. Plans for 1983 include more formulating facilities and more facilities for the manufacture of after-market replacement parts for turf equipment and golf course accessories.

If Lakeshore has symbol to tout, it is its LESCO Truck showroom system. With 21 trucks and growing, Lakeshore brings a showroom on wheels to its golf course customers once a month, or more often if needed. Chemicals, equipment and accessories are displayed and supplied from the trucks. In between salesmen's visits, customers can order directly from Elyria. Ads encourage phone orders suggesting customers "Call Barb" for fast service.

Lakeshore's first LESCO Truck was placed in Florida and proved to be a disappointment. A second chance in Florida proved to be successful, however, and Lakeshore has expanded its truck routes ever since. Prior to instituting truck sales, Lakeshore served the states of Ohio, Indiana, Michigan, Kentucky, Pennsylvania and Illinois. Today, the company serves 25 states with its sales force and the entire country with its mail order business.

The trucks have enabled Lakeshore to grow more into Southern markets which have year-round growth. Growth has also encouraged Lakeshore to enter the overseeding market. A relationship with Turf Seed, Inc. in Hubbard, OR, has prospered with CBS overseeding mixture. Future seed varieties are being tested by Turf Seed's Dr. Bill Meyer.

The lawn service business has given Lakeshore another area for growth. FitzGibbon sees continued growth there as well as in the golf course and nursery areas. A new line of spreaders, including an electric model, might be the beginning of a national equipment manufacturing division. "We already make many replacement parts for golf equipment, we just don't assemble the units yet," says FitzGibbon.
Q: I would like to know as much as possible about gummosis. It is common here on Russian olive and honey locust, and I have been told that it is a sure sign of stress. What kind of stress? Water, nutrient, light, insects? What is it? How does it form? Where does it come from? And would it be toxic to trees that are close or are planted as replacements in the same spot? (Colorado)

A: Gummosis is defined as the exudation of sap which breaks out to the surface. Discharges may be due to the attack of a parasite, often in another part of the plant. The peach borer, working in the crown, may cause gummosis of trunk and branches. Gummosis caused by the fungus, Botryosphaeria dothidea, has been reported recently on peach as well as currant, apple, almond and blueberry. It is highly possible that a biological stress or combination of stresses weakened the trees and predisposed them to borers or a fungal infection which, in turn, caused gummosis. Biological stress can be any environmental factor capable of inducing a potentially injurious physical or chemical change in a living organism. These factors include drought, defoliation, high and low temperatures, transplanting, wounding and chemical (i.e. herbicides, air pollution) stresses. Both water stress and defoliation have reportedly predisposed several tree species to Botryosphaeria dothidea, the fungal organism mentioned earlier as causing gummosis.

Contact your local Cooperative Extension Service for information concerning the nearest diagnostic laboratory to which you can submit samples. Perhaps Dr. James R. Feucht, Professor, Landscape Plants, Department of Horticulture, Colorado State University, could be of assistance. You may also want to contact Dr. Schoeneweiss at the Illinois Natural History Survey in Urbana, Illinois, for further information on environmental stress and predisposition.

Q: Can you recommend a publication on diagnosing tree problems that can be used to help train fieldmen? (Ohio)

A: Identifying Shade Tree Problems (A3073) by Dr. Gayle Worf, Professor of Plant Pathology at the University of Wisconsin, is an excellent aid for field personnel. It contains color prints, is reasonably priced and is available to out-of-state purchasers from Agricultural Bulletin Building, 1535 Observatory Drive, Madison, Wisconsin 53706.

Q: I read recently that lime reduces the number of grubs in turf. Is this true can lime be used as an effective control for beetle grubs? (New York)

A: Lime does appear to provide some kind of physical or chemical barrier which prevents the female beetle from entering the soil and laying eggs. However, the barrier is temporary, probably lasting only a few days. Further testing is necessary to determine the effectiveness of lime in reducing white grub populations, but current indications are that lime alone will not provide adequate control.

Q: What causes the leaves of black locust to turn brown every summer? Is it a disease and can it be controlled? (West Virginia)

A: The larvae of the locust leafminer cause the leaflets to turn brown by mining between the leaf surfaces. Several insecticides are effective including Diazinon or carbaryl sprayed on foliage in late May and again in early July to control adult beetles.

Q: Could the weight from unused mortar dumped on one side of a large slash pine cause injury to the root system? The mortar was removed after about a month but two large limbs have since died on that side. (Florida)

A: Compaction and changes in water and oxygen availability can quickly cause injury to roots. Older trees and those in weakened condition are more seriously injured. Slash pines also are reportedly sensitive to pH changes in the soil. Lime from the mortar could have raised the pH to an unsuitable level.

Send your questions or comments to: Vegetation Management c/o WEEDS TREES & TURF, 757 Third Avenue, New York, NY 10017. Leave at least two months for Roger Funk's response in this column.
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Red Maple has adapted to regional growing conditions from Florida to northern Michigan.

FURTHER EXPLORATION IS NEEDED TO GET MORE OUT OF NATIVE PLANTS

By DOUGLAS CHAPMAN

Plant exploration is one way to add diversity to the landscape. When one mentions plant exploration, Japan, China, Russia, and Poland first come to mind, but plant exploration in our country, stressing the factors of provenance and site adaption, is another way for American horticulture to develop its own distinct mark. We recommend selecting native plants from geographic regions, to be planted in those regions, e.g. Great Lakes, Northeast, Southeast, etc. By selecting outstanding natives, we are taking advantage of provenance, or regional adaption, and unique site adaption, e.g. a hickory that grows in the flood plain as well as upland fertile soils. What precedent is there for this type of development?

Dr. Fred Meyer, of the National Arboretum, recently stressed the outstanding development of Japan-

Continued on page 94

Douglas Chapman is horticulturist for Dow Gardens, Midland, Michigan.
Columbia Kentucky Bluegrass is at the roots of a good sod business...

Columbia Kentucky Bluegrass is the ideal "blue" for sod and home lawn use. Above ground level, Columbia produces a medium dark green turf that is resistant to Fusarium Blight, Leaf Spot, Stripe Rust and Stripe Smut. Columbia adapts well to all geographical areas and has good winterability in colder climates.

Underground, Columbia produces a quick spreading rhizome system that allows sod to be harvested earlier. A good root system is important to turf health in hot, dry summer periods. Columbia's Fusarium Blight resistance makes it a perennial winning turf-type "blue".

The Rewards of Research...

These test plots at Camarillo, California, proved Columbia Kentucky Bluegrass was best suited to this area. Fusarium and rust damaged Baron, Victa, Glade, Park and Touchdown while Columbia rated second only to the experimental CHB-11A. As a result, Columbia was chosen as a vital part of the mixtures used in southern California sod.

Rankings from turf trials throughout the United States:

<table>
<thead>
<tr>
<th>Kentucky Bluegrass</th>
<th>Rutgers University</th>
<th>Ohio State University</th>
<th>University of Illinois</th>
<th>Kansas State University</th>
<th>Camarillo California</th>
<th>University of Idaho</th>
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<tbody>
<tr>
<td>Columbia</td>
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<td>3</td>
<td>2</td>
<td>2</td>
<td>6</td>
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<td>Midnight</td>
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<td>Baron</td>
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<td>39</td>
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<tr>
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<td>36</td>
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<td>16</td>
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<td>Victa</td>
<td>20</td>
<td>38</td>
<td>*</td>
<td>15</td>
<td>*</td>
<td>9</td>
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<tr>
<td>Touchdown</td>
<td>3</td>
<td>18</td>
<td>18</td>
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<td>14</td>
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<td>Mennon</td>
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Developed and produced by Turf-Seed, Inc.
P.O. Box 250
Hubbard, OR 97032
Phone 503-981-9571
TWX 510-590-0957

The Rewards of Research... These test plots at Camarillo, California, proved Columbia Kentucky Bluegrass was best suited to this area. Fusarium and rust damaged Baron, Victa, Glade, Park and Touchdown while Columbia rated second only to the experimental CHB-11A. As a result, Columbia was chosen as a vital part of the mixtures used in southern California sod.
nese horticulture. The one thing highlighting Japanese horticulture is the fact it developed internally from native plants for 1,000 years. They select, breed, and landscape their gardens with plants native to Japan. They rarely explored outside of the Japanese islands, while developing the best, by yet improving on what they had.

Certainly as we look across this country, we see the marks of English and, now the mark of, Japanese horticulture. It is possible that the main legacy that Japanese horticulture should give to American horticulture is to develop our native plants to the fullest.

Regional adaption of trees is certainly one of the main considerations in selecting and developing native trees, or regional cultivars. Rehder and Wyman suggest, the native range of *Acer rubrum* (Red Maple) is from northern Michigan to Florida, but a northern Florida Red Maple would not survive in Michigan. Conversely, a northern Michigan Red Maple would not thrive in Florida.

**Provenance** manifests itself not only in adaption but some unique physiological responses, e.g. photoperiodic effects on growth. However at Michigan State University has shown clearly that plants native to northern climates are more photoperiodic responsive than those native to southern areas.

One of the most useful characteristics of this adaption would be juvenile northern Red Maple grown under continuous light will remain continuously vegetative, reaching 5 feet from 6 inch cuttings in one season. The same phenomenon is not as pronounced in southern Red Maple.

Further, provenance affects winter hardiness in northern areas and heat tolerance for southern natives. When selecting and developing cultivars for the Great Lakes Region, a line can be drawn from Columbus, Ohio (east and west), north of that line, the plants would be hardy throughout much of the Great Lakes, and natives south of that line would show adaption to the south-central and southeastern areas.

**Site adaption**, or, if you will, adaption to micro-climate, is a further reason for plant selection. Horticulturists have noted that Sugar Maples thriving in fertile, well-drained soils and an ecoype that thrives growing at edges of swampy areas or flood plains. This adaption to soil conditions is a real opportunity for nurserymen and horticulturists, alike, to select plants that will tolerate urban conditions. Certainly many of us have observed Red Maples growing in flood plains, also upland soils.

One must be continually alert to this condition or other variations from the norm. In the mid-Michigan area alone, we have observed *Carya ovata* (Shagbark Hickory) growing in traditional soils and in swamps or flood plains where, in fact, their root system is in water 4 to 6 months of the year. Also observed are Red Maple growing on sand hills and swamps and Sugar Maple, or its sub species, growing in heavy soils, as well as the traditional well-drained fertile sites.

It is paramount to select trees for site adaption while looking for trees that have outstanding aesthetic characteristics, such as scarlet or yellow fall color, columnar habit of growth.

Further, tolerance to insects; Crab Apple - aphid; Hackberry - nipple gall; and disease resistance, e.g. Crab Apple - fire blight and apple scab; Hackberry - witches broom; Sycamore - anthracnose. This resistance or tolerance may give us an opportunity to satisfy low maintenance needs while adding diversity to the landscape.

These are only food for thought, but by utilizing native trees that prove to be "spartans" or grown under urban conditions while showing resistance to pest problems, it gives us one way to cut maintenance costs. Further, by developing regional cultivars of native trees and shrubs, we strengthen local nurserymen while adding diversity to the plants available for the landscape.

---

**Several characteristics for cultivars of native trees worth observing include:**

- **White Ash** (*Fraxinus americana*) drought tolerance
- **Northern Red Oak** (*Quercus rubra*) some salt tolerance oak wilt resistance
- **Red Maple** (*Acer rubrum*) droughty soil tolerance
- **Bur Oak** (*Quercus macrocarpa*) droughty soil tolerance
- **Russian Olive** (*Elaeagnus angustifolia*) Fusicoicum elaeagni canker resistance
- **Hackberry** (*Celtis occidentalis*) nipple gall resistance
- **Yew** (*Taxus*) resistance to scales or black vine weevil
- **Rhododendron** (*Rhododendron*) resistance to Phytophthora
- **White Birch** (*Betula papyrifera*) resistance to birch leaf miner and or borer.
INTERIOR

Indoor plant population increasing

Households that keep indoor plants have increased the average number of plants in each home 120% since 1975, according to a Phillipps Products Survey. The average number of houseplants in a home is now 21, up from 10 in 1975, although the percentage of households that actually keep plants has gone down from 81% to 76%.

Interior gardeners are not only caring for more plants, but over half of those polled expected to increase the number of plants in their homes in the future. The other 46% planned to keep the same number.

The most popular type of planter, according to the survey, is not plastic. Plastic, which was preferred in the 1975 poll, dropped to 33%, versus 36% for clay. The remainder was divided between among ceramic, wood, wicker, glass and metal.

NURSERY

PNA names Saia acting director

The Pennsylvania Nursermen’s Association has appointed Charles V. Saia as the acting executive director. He was previously the PNA field administrator and director of member services.

A native of Johnstown, he now lives in a suburb of Harrisburg. Prior to joining the PNA staff, Saia was a general manager and comptroller of a Harrisburg country club.

NEW—

QuickM" Nozzle Assemblies
A unique new system of quickly interchangeable self-aligning spray nozzles and spray tips. To provide choice of spray droplet size, in full cone, hollow cone and flat spray patterns. \( 3/4" \) NPT (M) inlet conn. Write for Bulletin 195.

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Superintendents, Contractors, Lawn Care Managers, New, On-the-Job Reference. The Turf Managers' Handbook is a comprehensive, organized approach to turfgrass science and care. It has been designed and written by leading turf specialists from Purdue, Dr. William Daniel and Dr. Ray Freeborg, for on-the-job reference and as a text for students.

The book contains 150 illustrations and 96 color photographs. Data includes 240 tables and forms. Included are specifications for rootzones, employment, calculations for chemical applications, and extensive metric-imperial conversion. Business and technical aspects of turfgrass management are covered in this 424-page book. Planning, purchasing, hiring, construction, and plant selection are put together for easy on-the-job reference.

Markets covered include lawn care, sod production, golf course management, cemeteries, athletic fields, and low maintenance areas. If it concerns turf, it's in the Turf Managers' Handbook.

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*Please add $3.00 per order plus $1.00 per additional copy for postage and handling.

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A check or money order for is enclosed.

I understand that delivery may take six to eight weeks. Quantity and bookstore rates available upon request.
be serviced by usual trenching and plowing. The push/pull process pushes steel rods under an obstruction to a target trench where the service is to be installed and then retrieves the rods. The Hole-Mole works with any hydraulic system capable of delivering 5 to 20 gpm and 1500 to 2500 psi.

Circle No. 155 on Reader Inquiry Card

Myers pump offers high psi flexibility

The new BX6-12 high-pressure pump can be used for a wide range of applications. Weighing only 50 lbs., the unit can pump up to 8 gallons-per-minute at up to 1,200 psi. The cast iron body features a Lexan window to check the lubricating oil and the crankshaft.

Circle No. 156 on Reader Inquiry Card

Royal Coach controls now have dual starts

Royal Coach/Buckner is producing all of its commercial and industrial solid state/electro-mechanical 12 station controllers with dual day and dual time starts. The model 34112 has two complete schedules that can be programmed for 14 different days each and different start times each day. Once programmed the schedules can be operated independently or together and completely revised in only a few minutes. The 34112 features solid state station timing from 0-60 minutes and a check switch. Easily installed, the pedestal is complete with all instructions and hardware for mounting.

Circle No. 157 on Reader Inquiry Card

Olympic is dark, low tall fescue

Turf-Seed Inc. is marketing a leafy, moderately low-growing tall fescue

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HEAVY DUTY BLOWER-SWEeper helps a small crew gather more leaves, trash, clippings in less time. For details on today's 5 to 45 horsepower models, call Area 216-947-2344.

Circle No. 104 on Reader Inquiry Card

SEPTEMBER 1982/WEEDS TREES & TURF 97
called Olympic. Co-developed by Pure-Seed Testing, Inc., and Rutgers University, Olympic has "a moderately dark green color." The new tall fescue displays improved resistance to leaf spot, brown patch, and crown rust. Emergence takes place in 6-10 days when seeded in late spring or early fall. It can be sown with Kentucky bluegrass to improve drought, heat and wear tolerance.

Circle No. 158 on Reader Inquiry Card

Stumps cut deeper, wider by new Rayco

Rayco has a new stump cutter, the RG 1837, designed for greater production and field life. The unit has a heavy duty power unit to produce a deeper and wider cut into the stump, a 48-in. telescopying cylinder to expand the working area without repositioning the towing vehicle, and cutting depth capacity increase to 18-in. below grade and super grip notch v-belts to minimize possible slippage of the drive train.

Circle No. 161 on Reader Inquiry Card

Rear vacuum added to Excel Hustler

Excel Industries now has available a vacuum attachment for its Model 261 outfront rotary mower. Designed for grass clippings and leaves, the Bac-Vac uses a 5-h.p. Briggs & Stratton engine for picking up 16 bushels of material at a time. To empty, the operator releases the contents by a lever as he drives forward.

Circle No. 162 on Reader Inquiry Card

Finn redesigns B250 straw blower

Finn Corporation has totally redesigned its B250 blower to increase the capacity to blow low grade, tough hay or other vegetative mulch. The unit has a capacity of 25-ton-per-hour capacity with variable speed control. It is powered by a choice of six-cylinder diesel or gasoline engines.

Circle No. 163 on Reader Inquiry Card

E-Z-Go turf vehicle carries its weight

The 800-lbs. E-Z-Go GX-800 is a multi-use light turf vehicle. Available this month at distributors the unit has a tilting bed with a capacity of almost ten cubic feet, a zinc-oxide plating on the body to reduce rusting and chipping, and a 244 cc oil-injected engine with electronic ignition.

Circle No. 160 on Reader Inquiry Card
There's a lot of grass to mow in the Windy City, and Chicago's Park District uses rugged Woods mowers to help them cover a lot of ground.

But Woods mowers aren't designed just for large areas. In fact, we make mowers that cut swaths from 3 1/2 feet all the way up to 20 feet. Plus, we offer more rearmount and undermount models than any other manufacturer of tractor-powered mowers. New tractors or old, domestic or imported, Woods has a mower to fit the tractor and the job.

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