

Perhaps the greatest challenge for the future is increased communication among the various segments of the arborist industry.

Although the governmental regulatory agencies have established environmental and safety standards, these agencies cannot do their jobs without cooperation from the industry. Arborists must work with university and industry scientists to coordinate research with the needs of the field personnel. Companies should also encourage personnel to participate in the various training programs and symposiums to improve their knowledge and performance.

The time and monies expended in research and training and in complying with government regulations represent an investment in quality service to the public — the goal we should all be working toward.

Robert Felix



Bob Felix is the executive secretary of the National Arborists Association.

As a student at Adelphi University he helped develop Harder Tree Service. He eventually became executive vice president and controller of the company which owned and operated three tree service

companies in the New York/New Jersey area.

In 1972, Felix was elected president of the National Arborist Association and in 1974 he became the full-time executive secretary of the group based in Wantagh, NY. Felix is also a member of the International Society of Arboriculture, American Society of Consulting Arborists and the New York State and Long Island Arborist Associations.

He is married, has three children, and resides in Wantagh, NY.

Our industry is very healthy. Our market is bigger than it ever has been and is growing. Our sales are increasing in real dollars as well as inflated dollars. From the information available to me, it would seem that profits have increased proportionately.

In the private sector of tree care there is a tremendous increase in the degree of sophistication of management. This recent manifestation extends from marketing to business practices. Our professional arborists are offering full service tree care and making their clients aware of it.

Our utility tree trimming contractors are also experiencing real growth. Sure, the competition is tough but hasn't it always been? Every utility contractor I have spoken to speaks of putting on more crews.

Our industry is also in quite a transition. Thirty years ago, most commercial arborists, and certainly most NAA members were members of the Davey Alumni Association operating, for the most

part, small to medium size companies. They were purists, somewhat unsophisticated, but dedicated, determined individuals. Many of them have been quite successful both as arborists and businessmen. Their achievements are well known to many. They have been the backbone of this industry.

However, a younger generation is now making its mark in the management of our industry. They, too, are alumni but from a variety of companies. Some from colleges and universities. Our industry is also attracting people whose training has not been in arboriculture or horticulture. We have C.P.A.'s, attorneys, investment bankers, business administration majors, and the like, swelling the ranks of the management of tree care companies.

Our newer managers are not necessarily purists. They tend to be more opportunistic, venturing into other areas of the green industry or totally different fields. We find arborists in the lawn and landscape industry, of course, but we also have some in interiorscaping, environmental reclamation and horticultural products distribution and sales. We have one member who leases and sells recreational vehicles, another who owns a boat building company and one who owns a hotel.

This diversification has not diluted the level of professionalism one bit. The quality of the work being done today is as good as it ever was. In fact, the search for knowledge, the willingness to experiment and the desire to upgrade the quality of work done by employees increases every year.

Needless to say, we also have our problems. I have some specific concerns in this regard. I'm concerned about the small and medium sized companies endeavoring to get into utility trimming.

There seems to be a feeling that this is where the money is, no hassle with hundreds of individual customers and no need to train proficient climbers. Not true!

I'm concerned about the heavy investment by medium sized companies in new equipment because a utility asked for another crew. I'm very concerned about the fact that this "catch up" game that the utilities are playing might suddenly disappear. Then what will you do with that expensive piece of equipment?

I'm concerned about production personnel. Historically, when things in our industry have been good, there has never been enough men. That hasn't changed, but the segment of the labor market from which we can draw trainees is narrowing all of the time.

Our price structure has not been accelerated enough to keep pace with increased minimum wages, unemployment benefits and other government subsidized programs. We must be constantly aware of the need to anticipate not only rising labor costs but rising costs for benefits, insurance equipment, gas, oil and those indirect expenses that never seem to be able to be cut down.

I'm also concerned about research for our field. There is a great deal of research being conducted on tree problems but the results of this research don't get to the right people or enough people. How much research is being duplicated? How much do we never see? **WTT**

VEGETATION MANAGEMENT

By Roger Funk, Ph.D., Davey Tree Expert Co., Kent, Ohio

Q: I am receiving a large number of calls from customers about losses to trees by recent ice storms. Those who don't have insurance to cover the losses ask about a Federal income tax deduction. What are the facts on such occurrences?

A: The expense of removing, repairing, and replacing damaged trees, shrubs and evergreens is deductible if properly documented and not covered by insurance. It is important that the homeowner have a qualified horticulturist do the work and estimate damages. IRS may not honor the deduction without documentation from a tree expert in case of an audit. The expert can also determine for the homeowner whether or not a damaged tree is beyond repair because of storm damage.

As far as repair, reshaping, bracing, cabling, and fertilization must be properly recorded on invoices for the work.

The key words are "restored to the same approximate value as before the damage occurred." An appraisal may be important for cases of severe or wide-spread damage, since the value of the property lost may exceed the removal, repair, and replacement costs. IRS requires immediate appraisal by a recognized expert with photographs.

Who is a qualified expert? IRS recognizes members of the International Society of Arboriculture, the National Arborist Association, the American Association of Nurserymen, the American Society of Consulting Arborists, and the Associated Landscape Contractors of America.

Q: I am groundskeeper for a corporation which does chemical and pesticide toxicity studies and related research. I need an herbicide for weed control around the buildings which is non-volatile and cannot enter the labs through the air exchange units. I must be certain that any chemical I use cannot enter the labs or any part of the building and present itself as a variable in the research being conducted there. What can you recommend? This must be a broad spectrum weed control program for use in bluegrass-ryegrass turf areas.

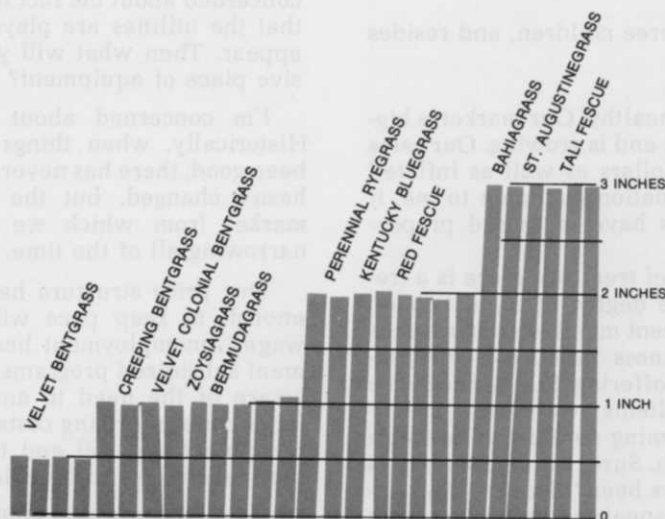
A: I cannot guarantee that any of the recommended herbicides will not enter the air ducts, but I can recommend materials and methods to minimize the potential.

If your laboratory is not utilized on weekends, I suggest that you close off the air exchange units, if possible, and apply the herbicides on a weekend.

If your main concern is plantain, dandelions, etc., an amine formulation of 2,4-D will suffice. If you also have vining weeds (ground ivy, veronica, etc.), you should include an amine formulation of Dicamba and/or Mecoprop. There are several brands on the market. Be sure to get amine formulations, which are relatively non-volatile.

Apply the chemicals low to the ground when the wind velocity is below 7 mph and the expected day temperature is below 85°F. Do not apply the material any nearer the air ducts than absolutely necessary. You may even consider hand-weeding in front of the ducts.

Maintaining a thick turf will minimize the need for future herbicide applications.



Recommended mowing heights for various grasses. A good rule of thumb is don't mow more than one third of the grass height in any one cutting. More frequent mowing may be required to avoid unusual stress on the grass plants and to achieve the most attractive results.

**GREEN
INDUSTRY
NEWS**

Continued from page 14



1978 officers for the Virginia Turfgrass Council are: (front row, left to right) Rex H. Harris, Eagle Haven Golf Course, assistant treasurer; Earl H. Odell, Todd Farm Equipment Co., secretary-treasurer; Gus C. Constantino, Wilson Feed & Seed Co., president; Charles Moss, Richmond Power Equipment Co., director; (back row) directors: George C. Baker, Dixon & Van; Stephen P. Skowronski, Meadowbrook Country Club; Archie Goode, Brookside Golf Club; Richard J. Fisher, Lake Monticello Country Club; and W. Ray Weekly, Prince William Turf Farms. Kenneth P. Giedd, Hermitage Country Club, vice president was not present.

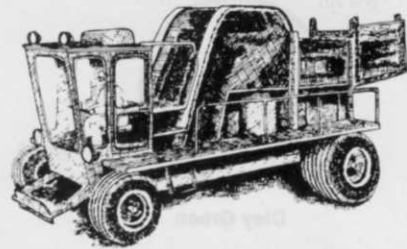
**Virginia turfgrass show
draws 280 delegates**

The 18th annual Virginia Turfgrass Conference drew 280 persons this year, in spite of the weather. The conference is sponsored each year by Virginia Tech's Extension Division and the Virginia Turfgrass Council. With "Emerging Trend for Better Turf" as the theme this year, the conference was attended by golf course superintendents from Washington D.C. and Williamsburg, National Park Service officials, and maintenance personnel for the marine base at Quantico, among others.

The Virginia Turfgrass Council presented its R. D. Cake Memorial Award to Lee Dieter, superintendent of the Washington Golf Course at Arlington, Va. Dieter is a past president of the council and the Mid-Atlantic Association of Golf Course Superintendents. He is a Pennsylvania native and 1959 graduate of Penn State.

The industry service award went to Richard E. Schmidt, associate professor of agronomy at Virginia Tech and director of the Turfgrass Research Center. A native of Michigan, Schmidt joined Virginia Tech in 1960 as an instructor after completing his bachelor's and master's degrees at Penn State. His doctorate came from Virginia Tech in 1965. He has directed research at the center since its founding in 1967. The award recognizes his nearly two decades of turf research.

**You'll be
A-a-a-all Alone!**
(even on pay day)



That's right! With Princeton's "Automatic" Sod Harvester you can harvest up to 27,000 sq. ft. of sod per hour...all by yourself. Eliminates the need for a large field crew. Save time, money, and man-hours.

Designed for large volume sod producers who want to increase production **and** profit. Cuts, aerates, crosstie stacks and palletizes sod...ready to ship, automatically. All you do is steer!

No matter how large your volume...**all you need** is a Princeton "Automatic" Sod Harvester... and **maybe** a radio for company.

There's a Princeton for Everyone.



Reduced costs and increased production means bigger profits. That's why the Princeton "Self-Propelled" Sod Harvester has become the standard for the sod industry. Compare output! Three men and one machine can harvest 22,500 sq. ft. of sod per hour, completely palletized.

For the medium to large volume sod producer who wants quality, high production, and low maintenance at a moderate price.

Models available for various soil and harvesting conditions.

Designed to meet the special needs of the smaller volume sod producer. Operates behind any adequately sized, low-speed tractor. Exclusive "2 minute hook-up" capability allows you complete flexibility in the use of your power supply. With a 3 man crew, you can harvest up to 13,500 sq. ft. of sod per hour, palletized and ready to ship. The "Tow-Boy" Sod Harvester...own a **real**

Princeton at one third the cost of our larger machines.



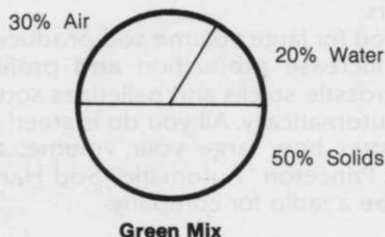
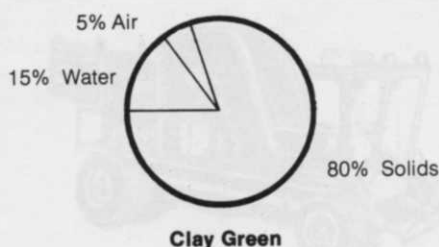
Rodger Osborne
Sales Manager
955 W. Walnut Street
Canal Winchester, Ohio 43110
614/837-9096

For additional information write or call collect:

PRINCETON
MANUFACTURING COMPANY

PROSCAPE

By Michael Hurdzan, Ph.D., golf course architect and consultant



Q: What would you suggest for sand topdressing to correct clay greens in a heavy rainfall climate?

A: If you really want to correct your clay greens, you should rebuild them. If you don't want to rebuild, you can try methods of improving clay greens which may reduce the severity of the clay/high rainfall problem.

Basically, the small size and shape of clay particles allow them to fit so closely together that the space between the particles is very small. Only marginal amounts of nongravitational water and air are held by the green to support plant growth.

In preparing green mixes, we try to achieve 30 percent air spaces, 20 percent water spaces, and 50 percent solids after the green has been compacted, soaked, and allowed to dry 24 hours. To achieve this mixture, silt and clay particles are excluded in most instances resulting in essentially soil-less greens composed of only sand and organic matter. Furthermore, excess water from rainfall or irrigation should be able to percolate downward to be carried off by drain tile placed in the green subgrade on 15-ft. centers.

To dilute the effects of clay requires massive amounts of sand. Your program should be geared to applying as much sand as possible without injuring the existing turf. Your greens will not need additional organic matter if you have any mat layer at all.

In the cool times of the year aerify with as large of tine as possible and to the greatest depth possible. Remove the plugs and topdress with pure washed, medium sand [particles 1 mm or smaller]. Apply roughly 1/8 in. of sand each time you topdress and aerify. Brush the sand into the holes and thatch layer. Do this as often as possible during the cool, actively growing periods. During hotter periods of slow turf growth, carefully topdress every three weeks or so with about 1/16 in. of plain sand.

Continue to aerify and topdress with sand until a six to eight-in. layer of sand has accumulated. This may take many years. Many superintendents have found a rotary, pull-behind fertilizer spreader equipped with a sand ring insert as a good way to apply the sand.

- Heed these points of caution:
- sand must be proper size,
 - sand should be neutral to slightly acid pH,
 - apply adequate micronutrients,
 - adjust watering practices as sand builds up,
 - only apply as much sand as can be worked into the mat layer,
 - topdress only when turf is actively growing.

The Tee-2-Green Corp., 1212 W. 8th St., Kansas City, Mo. 64101, has a free publication on sand topdressing available. Titled "Problems or Progress," it can be a great aid to any greens chairman considering a sand topdressing program. **WTT**

Flail Safety

Cut your grass and cut your risks with Mott flail safe mowers. Lightweight, free-swinging flail knives yield when striking objects, reducing the force of impact. Their vertical mode of operation, the guard action of the roller, and the deflecting features of the cutter housing all combine to make Mott mowers safer.

Cutting widths from 38 to 88 inches and gangs to 19 feet. Mott mowers have Long Life Durability and for you that means Best Value Purchase.



MOTT CORPORATION
514 Shawmut, La Grange, Illinois 60525. (312) 354-7220
The Original Flail Safe Mowing System



Circle 111 on free information card

TOUCHDOWN

Kentucky bluegrass

PLANT VARIETY
PROTECTION CERTIFICATE
No. 7400066

POA ANNUA... FINALLY MEETS ITS MASTER

... University of Illinois at Urbana-Champaign

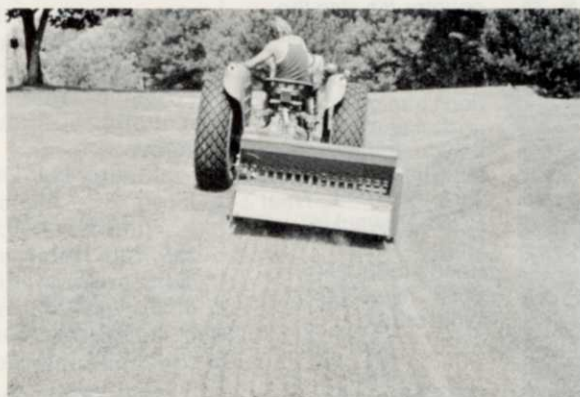
Dr. A. J. Turgeon and co-workers J. E. Haley and J. R. Street conducted intensive Kentucky bluegrass cultivar management studies.

Twenty-one cultivars were planted in September 74. Varying management regimes were imposed to measure their competitiveness against the infestation of *Poa annua*.

They concluded: "The most impressive differences among cultivars were observed under close mowing (0.75") and high fertilization (8 lb./N per 1000 sq. ft.). Several of the cultivars were virtually overrun by Annual bluegrass while others remained nearly weed free. Those cultivars which are apparently best adapted to this cultural intensity include A34, Brunswick and Touchdown".

Touchdown fights *Poa annua* two ways: First — its superior disease resistance means it won't thin out from Crown rot (Leaf spot) Leaf rust, Stripe smut or today's *Fusarium* so *Poa* can't get a foothold . . . and secondly it's so aggressive and dense in growth habit it just keeps on fighting *Poa*.

Touchdown is ideal for overseeding . . . it germinates fast and quickly develops a healthy, mature turf.



Let's look again at what Touchdown has for you:

- early spring greenup
- rapid establishment
- drought and heat tolerant
- dwarf growth habit
- superior disease resistance
- bright green color

QUALITY CERTIFIED SEED AVAILABLE — Summer '78

Produced and distributed by

PICKSEED
PICKSEED WEST, Inc.

Box 888, Tangent, OR. 97389 (503) 926-8886

Available from:

Lofts
PedigreedSeed, Inc.,
Bound Brook, N.J. 08805
(201) 356-8700

Lofts/
New England,
Arlington, Mass. 02174
(617) 648-7550

Lofts
Kellogg Seed Co.,
Millwaukee, Wis. 53201
(414) 276-0373

Lofts/
New York,
Albany, N.Y. 12205
(518) 456-0042

...in Canada: Otto Pick & Sons Seeds Ltd.,

Box 126, Richmond Hill, Ont. L4C 4X9
(416) 884-1147
Telex: 06 986612

Box 4, Grp. 200,
R.R. 2, Winnipeg, Man.
R3C 2E6
(204) 633-0088

Box 151,
St. Hyacinthe, Que.
J2S 5J9
(514) 799-4586

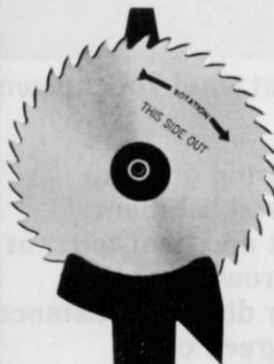
PRODUCTS



**DON'T
CUT OUT
QUALITY.**

DO IT RIGHT,
WITH
STANLEY.

Quality, by our standard, is something which goes a lot further than making tools. To Stanley, it means: a full line of tree trimmers for every job; the best warranty in the business; complete parts backup; and distributors to help you anywhere in the country. It's also the efficiency, safety and dependability of hydraulic power. We don't trim on anything so that you're able to do your trimming faster. Stanley Hydraulic Tools: 3810 S.E. Naef Road, Milwaukie, Oregon 97222. Phone (503) 659-5660. Telex 360771. Write or call.



STANLEY

®

Circle 155 on free information card



MODEL HA ROTAVATOR is in full-scale production by the Howard Rotavator Co. The new 70-inch variable offset model, designed for tractors in the 25-50-hp range, is expected to become popular for applications where a tool is needed that will work close to trees, without damaging lowhanging branches. It can be switched from offset to a central mounting position by turning a hand-screw.

Model HA7OG/VO comes with Howard's "Selectatilt" gearbox, providing a choice of 165, 190, 210, or 235 rpm rotor speeds. Other versions are available in tillage widths of 40, 50, 60, 70, and 80-inches. Depth is accurately controlled to protect tree and vine roots.

Circle 701 on free information card



RYAN EQUIPMENT COMPANY is introducing a new self-propelled turf aerator, weighing 150-lbs. The 3-hp unit is reported to be 60 percent lighter than previous coring aerators built by Ryan.

The aerator features a drainable 6.6-gallon capacity barrel to increase aerating weight by 55 pounds when filled with water. The barrel,

treated to inhibit rust, is located slightly ahead of the tines to provide coring penetration up to 2½-inches deep. The machine can aerate up to 150 ft. per minute in 19-inch swaths under normal conditions, according to Ryan.

Circle 702 on free information card



FERRARI INTERNATIONAL has announced the heavy duty Model 85 four-wheel-drive, low profile tractor. Forty inches high at the hood, the 45 hp tractor was three years in development. It features four wheel hydraulic brakes, with dual safety system, power articulated steering, two locking differentials, two P.T.O. shafts, one high and one low for easy hookup to all standard three-point hitch implements, seven forward gears and three reverse, and a convenience cluster of all levers for the driver.

Standard tires are 15.50 x 15 high flotation. A bonus feature allows the tractor to be equipped with 9.50 x 15 tires, giving it a width of 40 inches, for narrow row work.

Circle 703 in free information card

THE BROYHILL COMPANY is now marketing a G.P.M. meter accurate within one percent. The meter can instantly provide gallons per minute from which can be determined gallons per acre for sprayer and liquid fertilizer application. Meters can also be purchased with gallon accumulators for total gallons used. Other applications are monitoring plugged and worn nozzles, loss of pump prime, pressure, or empty tank. Calibration becomes simpler. Total cab control is available with the RC-1 remote boom solenoid control unit.

Circle 704 in free information card

CLASSIFIEDS

When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, Dorothy Lowe, Box 6951, Cleveland, Ohio 44101.

Rates: All classifications 65¢ per word. Box number, \$1. All classified ads must be received by Publisher the 5th of the month preceding publication date and be accompanied by cash or money order covering full payment. Mail ad copy to: Dorothy Lowe, Weeds, Trees & Turf, P.O. Box 6951, Cleveland, Ohio 44101.

HELP WANTED

INSTRUCTOR/ASSISTANT PROFESSOR Plant Science: Teach such horticultural courses as Nursery Culture & Operation, Arboriculture, Landscape Design, Landscape Construction & Maintenance, and Woody Plants. Willingness to teach evenings, possible summer teaching. Assist in arranging summer work experience for students. Qualifications: Master Degree in Plant Science with strong leaning toward practical applications; 3 years of commercial or other field experience in plant science. Application deadline June 16, 1978; position begins September 1, 1978. Contact Dr. Lewis Roberts, Jr., Thompson School of Applied Science, Barton Hall, University of New Hampshire, Durham, N.H. 03824. The University is an Affirmative Action/Equal Opportunity Employer.

CITY FORESTER — Beautiful town of 21,000 in residential New Jersey requires graduate municipal forester with supervisory experience. Responsibility for Shade Tree Department, park, recreational and school grounds maintenance. Send resume in detail to Box 196, Weeds, Trees and Turf, Box 6951, Cleveland, Ohio 44101.

PARK MAINTENANCE SUPERVISOR — Pasadena, California (population 113,000). Salary — middle \$20,000 annually. Requires B.A. in park management/administration or related field, four years of progressively responsible experience in park or landscape management, two years of which must have been in a supervisory capacity and possession of California driver license. (Two years additional related experience may substitute for up to two years of education with an A.A. in park management/administration). Landscape management experience must include knowledge of proper use and control of pesticides and herbicides, maintenance of turf, trees, and shrubs, and of irrigation systems. Apply immediately to Personnel Department, City of Pasadena, 100 N. Garfield Avenue, Pasadena, California 91109. Phone 213 577-4366.

SUPERINTENDENT: A quality midwest cemetery organization requires the services of an outside man with leadership experience of at least 5 years to supervise land development, maintenance of turf, nursery materials, buildings and fleet equipment and handling of interment services by personnel. 100 acres, half developed; populatio of community 400,000. The individual will do his own hiring and earn \$15,000 to \$20,000 per year depending on qualification, plus full employee benefits. Please send resume in detail to Box 190, Weeds, Trees and Turf, Box 6951, Cleveland, Ohio 44101.

ASSISTANT SUPERINTENDENT or grounds foreman: Attractive memorial gardens located in north midwest has an excellent opportunity for an experienced assistant superintendent or a grounds foreman. Applicant should have a minimum of five years cemetery experience and at least two years in a supervisory position. All inquiries strictly confidential. Please send resume to Box 191, Weeds, Trees and Turf, Box 6951, Cleveland, Ohio 44101.

Continues on page 68

BUNTON

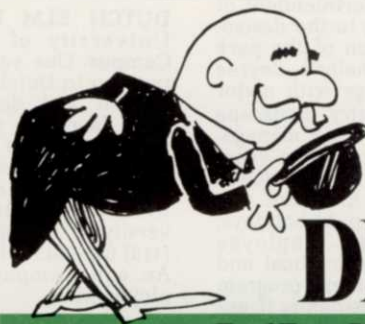
The Bunton Breed



Introducing the 36 inch cut Bunton Rear Discharge mower. A new design deck allows close trimming on both sides, helps prevent windrows and gives you a clean manicured cut (not that just-cut look). The new variable speed drive gives a wider range of ground speeds. The 3 gallon fuel tank and Hi-Way front caster wheels are standard equipment. This new mower is designed for fine lawns and rough areas. The finger tip control gives the same easy handling and hill-side stability and maneuverability as the other Bunton Self-Propelled models. Also available is a new 52 inch rear discharge mower.

Bunton Co. • 4303 Poplar Level Rd. • Louisville, Kentucky 40213 U.S.A.
Phone 502/459-3810 Telex 204-340

Circle 126 on free information card



DERBY

Turf-Type Perennial Ryegrass

*U.S. Plant Protection
Certificate No. 75000009

Setting a New Standard of Excellence

Derby is the dark green beauty which joined Manhattan and Pennfine on the "highly preferred list of ryegrasses." That was last year. Now Derby is setting a new standard of excellence. In the eyes of many Golf Superintendents it reigns supreme among the turf-type ryegrasses today. Why? Because it performs! And performance counts.

- Durable, dark green, excellent mowing qualities
- Germinates in a week under ideal conditions
- An excellent record as a Southern winter grass
- Performs better than other leading varieties
- Vigorous upright and lateral growth



INTERNATIONAL SEEDS, INC.

Dept. D • P.O. Box 168 • Halsey, Oregon 97348
Telephone (503) 369-2251 • TWX 510/590-0765

Circle 104 on free information card

FORESTER: Responsible position assisting the City Forester in the care, supervision and maintenance of trees on city streets, boulevards, and public areas. Requires a bachelor's degree from an accredited college with major course work in horticulture, forestry or a related field. Training in urban forestry is desirable. Excellent employee benefits including paid holidays, sick leave, and vacation, employee hospitalization plan, major medical and life insurance, City retirement program and Credit Union. Non-residents, if appointed, must agree to establish residency within the city limits of Kansas City, Missouri. Salary range \$1008.00 to \$1285.00 per month. Equal Opportunity Employer. Apply by June 2, 1978 to: Earl Unell, Personnel Department, 12th floor, City Hall, Kansas City, Missouri 64106. (816) 274-1228.

OPERATIONS MANAGER — must have experience in planning, scheduling, and supervision of field crews, preferably in non-agricultural herbicide application. Other responsibilities: personnel function and overall equipment maintenance. Considerable travel within 4-state territory required. Unlimited opportunity with growing herbicide application firm, doing business primarily with state and county highways and utilities. Contact: Lex Dalton, Dalton Gang, Box 246, Warsaw, Indiana 46580.

LANDSCAPE ARCHITECT II Responsible professional landscape architecture position assisting the Superintendent of Forestry and Landscaping in the design, development and operation of the park system. Requires a bachelor's degree from an accredited college with major course work in urban forestry, landscape architecture, horticulture, park management or a related field and three years responsible experience in the practice of one of the above fields. Excellent employee benefits including paid holidays, sick leave and vacation, employee hospitalization plan, major medical and life insurance, City retirement program and Credit Union. Non-residents, if appointed, must agree to establish residency within the city limits of Kansas City, Missouri. Salary range: \$1204.00 to \$1711.00 per month. Equal Opportunity Employer. Apply by June 2, 1978 to: Earl Unell, Personnel Department, 12th floor, City Hall, Kansas City, Missouri 64106. (816) 274-1228

SUPERVISOR OF FLORICULTURE Responsible position supervising the floriculture programs which include the greenhouse and garden center operations and care of plants and flowers throughout the municipal park system. Requires a bachelor's degree from an accredited college with major course work in horticulture, botany, soils, or floriculture and five years experience in greenhouse plant propagation, production, research, and ornamental display and related floriculture work. Excellent employee benefits including paid holidays, sick leave and vacation, employee hospitalization plan, major medical and life insurance, City retirement program and Credit Union. Non-residents, if appointed, must agree to establish residency within the city limits of Kansas City, Missouri. Salary range: \$1110.00 to

\$1487.00 month. Equal Opportunity Employer. Apply by June 2, 1978 to: Earl Unell, Personnel Department, 12th floor, City Hall, Kansas City, Missouri 64106. (816) 274-1228.

BRANCH MANAGERS: Chemical Lawn Care Currently 17 Florida locations, year around operations. Branches range in size from 1 to 15 trucks. Agronomic background helpful but not necessary. Paid training programs, Pension and Profit Sharing Plan. Send resume in confidence to Florida's largest chemical lawn care company. R. W. Collins, Inc. Attention: R. W. Collins, President, P.O. Box 2477, Satellite Beach, Florida 32937.

BRANCH MANAGER — National automated lawn service presently in franchise market seeks experienced individual to start and head up company areas. Tremendous growth potential for one presently with liquid spray management experience. Send confidential resume to Lawn Doctor, Inc., P.O. Box 186, Conover Road, Wickatunk, N.J. 07765.

LANDSCAPE GARDENER — Growing landscape company requires gardener who is familiar with general maintenance procedures to maintain landscaping on established routes. Call 213 787-0338.

LANDSCAPE FOREMAN — Wanted landscape foreman for commercial landscape company. Must have previous experience. Call 213 787-0338.

DUTCH ELM DISEASE SPECIALIST. University of California Berkeley Campus. One year (possibly renewable) position in Dutch elm disease control extension and demonstration. Minimum M.S. degree in plant pathology or entomology and one year of appropriate experience required. Refer to #7810. Contact Personnel Administrator, Cooperative Extension 331 University Hall, University of California, Berkeley, CA 94720. (415) 642-0343. Closing date: May 26, 1978. An equal employment opportunity employer M/F.

FOR SALE

HYDRO TRAVELER hydraulic-engine irrigator covers 20 acres a day with only 2 hours labor. Dozens of features, yet at the price of a water-drive! Write or call for illustrated brochure. Hydro Engineering, Inc., Dept. WT-5, Box 98, Young American, Minnesota 55397. Phone 612 467-3100.

1966 FITCHBURG CHIPPER, dismantled, best offer; 1964 John Bean sprayer, 60 gpm, 600 gallon tank, Hannay hose reel included, Willy's engine, \$2,000; Lehman Tree Experts, 516 484-4490.

MAKE BIG MONEY with biggest efficient tank truck sprayer, 1800 gallon, livetime, double stainless oval tank with insulation, 60 G.P.M. high pressure F.M.C. pump, Wisconsin engine and more. Doubles as water or chemical tanker or other uses. Save now. Paul Bunyan Mfg. 603 Union Road, R2, Lebanon, Ohio 45036. 513 424-2052.

FOR SALE — Complete tree service company 23 years in business New England area. Equipment modern and good condition. Excellent clientele. Box 192, Weeds, Trees and Turf, Box 6951, Cleveland, Ohio 44101.

FOR SALE: Landscape contract business. Snow removal in winter. Can be bought on contract for deed. Write to: Morris Landscape Contractors, Stonehedge, Winona, MN 55987.

USED EQUIPMENT

2 — 50' AERIAL BASKETS, brush chipper, stump cutter, 2 sprayers, small crane. Parkway Tree Service, 12026 West Cherry St., Wauwatosa, Wisconsin 53226. 414 257-1555.

FOR SALE — 1975 Vermeer TS-22" tree spade. Mounts on Bobcat or 3 pt. hitch. Excellent condition. \$1800.00. 1976 Care tree 30" tree spade. Mounts on Bobcat or 3 pt. hitch. Mint condition. \$2995.00. 1976 Care tree 36" tree spade. Mounts on 990 Bobcat, tractor, loader, or dozer. Mint condition. \$4495.00. 1972 Vermeer TS-44T tree spade on 1974 GMC 1 ton. New spades. Good condition. \$7800.00. Will send photographs upon request. Call or write: Spartan™ Tree Transplanting Equipment Company, 16084 S. Chandler Rd., East Lansing, Michigan 48823. Phone 517 351-1370. (We buy, sell, and repair high quality tree transplanting equipment).

FOR SALE: Two Ryan 18" sod cutters, automatic cut off, \$600.00 each. Two 18" sod rollers, good working condition, \$250.00 each. One Rainmaster 6x6 irrigation pump with Ford V-8 391 industrial engine, \$2,500.00. Mueller Farms, Inc., Huntley, Illinois, 815 923-4368 days. 312 669-5794 nights.

FOR SALE: 1968 945 Wayne 4 wheel sweeper. Perkins diesel power, good condition. Phone 303 934-8320.

ROYER TOPSOIL SHREDDER, brand new, used three weeks, extra gas can, two hitches. Call after 9:00 p.m. 216 237-3668.

FOR SALE: Brouwer 16" harvester with Massey tractor, very good condition, asking \$10,000; Del Zotto 28" front mounted tree transplanter, new, \$3,000. Tom Selstad, Selstad Soil Service, R1 West, Box 43, Great Falls, Montana 59401. 406 452-5158.

MODEL 329 EVERSMAN land leveler, excellent condition. Large turf vac with hi-lift dumping. Crystal Springs Sod Farm, R1, Worthington, Pa. 16262. 412 445-3338.

USED CHIPPERS, SKYWORKERS and hydro-ax's. Please call P. C. Gould Sales Company, Box 178, Essex, Connecticut 06426. 203 767-1636 Phil or Jeff Gould.

FOR SALE: 4 Elliott Hi-reach — No. 21, 45 ft. aerial tower mounted on 1973 1 1/2 Chevy. truck, \$3,500.00. No. 22, 50 ft. aerial tower mounted on 1973 C-60 Chevy. truck, rotating bucket, \$23,660.00. No. 32, 50 ft. aerial tower mounted on 1969 Ford

truck F-600, \$16,500.00. No. 41, 50 ft. aerial tower mounted on 1973 Chevy. truck C-60, rotating bucket, \$21,700.00. Vermeer stump cutter, model 2460, 1969, 60 horsepower engine, \$4,550.00. Swingle, Inc., 620 South Dahlia Street, Denver, Colo. 80222. 303 399-2301.

VERMEER MODEL 2460 stump grinder. \$5,200.00. Wye Tree Experts, Inc., Wye Mills, Md. 21679. Phone: 301 822-3220.

USED VERMEER tree spade TS44 mounted on 4 wheel drive. GMC 2 ton, \$7,700.00, very good. 618-682-3363; 618 682-3370.

TREE SERVICE EQUIPMENT — 4 chip-pers, 4 aerial bucket trucks, 2 crew trucks. John Mayer, 300 Muir Mill Road, Willits, Calif. 95490. Phone 707 459-2013.

FOR SALE — Worthington turf mowing tractor with five gang Blitzer. Kansas City area. Call 816 421-6632.

STUMP ROUTER — Wayne Stump King, good condition with water cooled engine. \$2,400.00. Call 215 539-6090.

1974 JOHN BEAN SPRAYER model B-6-50MT, 600 gallon stainless steel tank, 50 gpm. at 800 psi, 200' 3/4" hose. 802 658-2433 or 4 Seasons Garden Center, Williston, Vermont 05495.

VERMEER STUMP CUTTER, model 6524, \$5,000.00. Asplundh 16" chipper, \$4,-500.00. Both A-1 shape. Joe Little Tree Service, 3746 S. Jamestown, Tulsa Oklahoma. 918 743-8434.

SEEDS

SOD QUALITY Seeds: Adelphi, Glade, Cheri, Nugget, Merion, Fylking, Majestic, Baron & Touchdown bluegrasses, also fine fescues. Manhattan ryegrass. Custom mixing available. Michigan State Seed, Grand Ledge, Michigan 48837. Phone 517 627-2164.

MISCELLANEOUS

WE DIG TREES. Will move large trees (5" to 10") with 78" tree spade. Will travel. Call or write Floral City Tree Service, 891 N. Dixie Hwy., Monroe, Michigan 48161. 313 241-7510.

BUSINESS OPPORTUNITIES

WANT TO BUY OR SELL a golf course? Exclusively golf course transactions and appraisals. McKay Golf & Country Club Properties, 15553 N. East St., Lansing, Michigan 48906. Phone 517 484-7726.

LEARN LANDSCAPING and the Growing of Plants at home. Start a satisfying business or hobby. Free booklet. Lifetime Career Schools, Dept. A-399, 2251 Barry Avenue, Los Angeles, Ca. 90064.

WANTED TO BUY

LINDIG OR ROYER SHREADERS. Any size age or condition. Art Lewis 813 299-2106, 355 5th Street. S.W., Winter Haven, Florida 33880.

AAA TREE SERVICE, INC. is interested in buying all types of used tree equipment. 1292 South Eastlake, Longwood, Florida 32750. Phone 305 339-5242.

NEXT MONTH!

LAND RECLAMATION

AQUATIC WEED CONTROL

Most good golf courses, parks and home lawns have something in common — FINE LEAFED FESCUE

Oregon Fine Fescue - thrives in shady areas, does well in dry spells, germinates fast and blends well. Its straight-growing habit holds the grass up for even mowing, and Oregon grown Red Fescue even creeps to cover the spots left when other grasses fail.

Oregon Fine Fescue the grass seed on which
the best mixes are built.

For a brochure and sample, write: Oregon Fine Fescue 1349 Capitol N.E. Salem, Oregon 97303

EVENTS

American Association of Botanical Gardens and Arboreta Annual Meeting, Royal Botanical Gardens, McMaster University, Hamilton, Ontario, Canada. May 28-June 1. Leslie Laking, Royal Botanical Gardens, Box 399, Hamilton, Ontario, Canada L8N 3H8.

Canadian Land Reclamation Association Third Annual General Meeting, Sudbury, Ontario, Canada, May 29-June 1, Canadian Land Reclamation Association, Box 682, Guelph, Ontario, Canada N1H 6L3.

Va. Society of Landscape Designers/Va. Nurserymen's Association Joint Summer Meeting, Cavalier Hotel, Virginia Beach, Va., June 3-5, John Richardson, VSLD, 9540 W. Broad St., Richmond, Va. 23229.

1978 Rutgers Turfgrass Research Day, Ryders Lane Turf Station, North Brunswick, N.J., June 7, 201/932-9427.

Annual Management Seminar for Commercial Arborists, Baltimore, Md., June 13-14, 516/221-3082.

103rd American Association of Nurserymen Convention, Fairmont Hotel, New Orleans, La. July 15-19. American Association of Nurserymen, Inc., 230 Southern Bldg., 15th and H Streets, NW, Washington, D.C. 20005. 202/737-4060.

American Sod Producers Association Summer Convention & Field Days, Sheraton-Spokane, Spokane, Wash., July 19-21, 402/463-5691.

Annual Management Seminar for Commercial Arborists, Denver, Colo., June 20-21, 516/221-3082.

Lofts Field Day, Lofts Research Plots, Martinsville, N.J., June 21, Karna Sapp, 201/359-1100.

Missouri Turf Field Day, University of Missouri South Farms, Columbia, Mo., July 25, 314/882-7838.

1978 Penn Allied Nursery Trade Show, Hershey Motor Lodge and Convention Center, Hershey, Pa., July 25-27, 717/243-1786.

The South Carolina Plant Food Educational Society Annual Summer Meeting, Holiday Inn, Hilton Head, S.C., July 30-Aug. 1, A. B. Everett, Sec.-Treas., TSCPFES, 615 Saluda Ave., Columbia, S.C. 29205.

ALCA Reclamation/Erosion Control Symposium, Marriott Hotel, Denver, Colo., Aug. 3-4, 703/893-5440.

American Association of Nurserymen 1978 Management Seminar, Colorado State University, Fort Collins, Colo., Aug. 13-18, 202/737-4060.

Tenth Biennial National Christmas Tree Convention, Amherst, Mass. August 16-18. National Christmas Tree Assoc., 611 E. Wells St., Milwaukee, Wisc. 53202.

Turf and Landscape Day, Ohio Agricultural Development and Research Center, Wooster, Ohio, Sept. 12, 216/264-1021.

International Pesticide Applicators Association Annual Convention, Sea-Tac

Motor Inn, 18740 Pacific Highway South, Seattle, Wash., Sept. 13-15, Ed Walters, 206/362-9100.

Pacific Horticultural Trade Show, Anaheim Convention Center, Anaheim, Ca., Sept. 20-22, 916/443-7373.

1978 Northwest Turfgrass Conference,

Holiday Inn, Richland, Wash., Sept. 25-28, Dr. Roy Goss, Western Washington Research and Extension Center, Puyallup, Wash. 98371.

18th Annual Turfgrass Equipment & Materials Educational Exposition, Orange County Fairgrounds, Costa Mesa, Cal., Oct. 18-19, 213/798-1715.

WT&T

ADVERTISERS

Ben Meadows	23	Mitts & Merrill	29
Brouwer Turf Equipment Ltd.	17	Monsanto Chemical Co.	31
Bunton Co., Div. Goodall	67	Mott Mower Corp.	64
Chevron Chemical Corp.	cover 3	Nursery Specialty Products	46
Conwed	40	Oregon Fine Fescue	69
Cottage Gardens Inc.	26	Pickseed, Inc.	65
Dedoes Industries Inc.	55	Princeton Mfg. Co.	63
Delevan Mfg. Co.	24	Rain Bird	51, 57
Dow Chemical Co.	47	Rhodia Inc., Div. Rhone-Poulenc	21
Elanco Products Co., Div. Eli Lilly	53	O. M. Scott & Sons	48
Excel Industries	13	Snow Co.	44
FMC Corp.	41	Spartan Tree Equipment	46
PBI Gordon Corp.	35-37	Stanley Hydraulic Tool	66
Gravelly, Div. Clarke Gravelly Corp.	45	Sto-Cote	40
Hypro Pumps	43	3-M Corp.	4
International Seed Co.	67	True Friends	39
Jacobsen Mfg. Co.	7	Turf Seed	8
Kershaw Equipment Co.	32	Turf Vac.	9
Kubota Tractor	10, 11	Union Carbide Corp.	cover 2, 3
Lofts Pedigreed Seed	cover 4	Velsicol Chemical Corp.	6
Merck & Co., Inc.	33	Vermeer	58, 59
		Weathermatic, Div. Telsco	20
		Weed Eater	15

Advertising Sales Offices

HEADQUARTERS

9800 Detroit Ave.,
Cleveland, OH 44102.
216+651-5500.
Richard J. W. Foster,
General Manager.

NEW YORK

757 Third Ave.,
New York, NY 10017.
212+421-1350.
Steven Stone,
Eastern Manager.

CHICAGO

333 N. Michigan Ave.
Chicago, IL 60611.
312+236-9425.
Joe Guarise, Jeff Dreazen

ATLANTA

3186 Frontenack Court, NE,
Atlanta, GA 30319.
404+252-4311.
Richard Gore, Sales Manager.

SAN FRANCISCO

582 Market St., Suite 1904,
San Francisco, CA 94104.
415+982-0110.
Robert A. Mierow,
Western Manager.

LOS ANGELES

5455 Wilshire Blvd., Suite 1107,
Los Angeles, CA 90036.
213+933-8408.
John Sanford, Western Manager.