Circle the Reader Service numbers of those items of interest to you.

GET More Facts

Now Toro's popular 570 Family gives you even greater flexibility

New 570-4P spray head clears taller grasses

With a full 41/4" pop-up to the nozzle, Toro's new 570-4P spray head effectively clears tall grass and low ground cover, making the 570 Family more versatile than ever. Now you have a full range of pop-up sprinklers: 2", 3", 41/4", 6" and 12", plus shrub risers. The new 570-4P has superior, positive retraction, with a stainless steel spring to make sure it pops down completely out of sight when not in use. And it's designed to handle all kinds of water sources, thanks to new, improved seal and minimal self-flushing action. An all-new body design includes Toro's exclusive "Conilip" seal and cap configuration. The screw-on cap makes it repairable from the top of the sprinkler. It accepts all 570 nozzles and filter screens, including Toro's full-range of nozzle angles: 0°, 10° and 35°. Now, more than ever, you'll find the answer is Toro!

The Toro Company, Irrigation Division Dept. WT-485, P.O. Box 489, Riverside, CA 92502

Circle No. 162 on Reader Inquiry Card



Toro's exclusive Conilip seal and cap flush dirt and debris – assure positive retraction.



EXCELLENCE IN IRRIGATION™

golf courses, Turfmat controls hillside erosion, can be used to patch dead grass areas, and grows in difficult environments such as dry or sandy soil.

It is available in convenient roll packaging, is easy to cut and shape, and is lightweight.

Circle No. 199 on Reader Inquiry Card

A big air broom from Atwater Strong

Atwater Strong introduces the Big Blast Model 16-BTW Low-Blo air broom two-way blower. It is designed to clean large areas of leaves and debris and it can be fitted to most work carts or two-wheeled, tow-behind trailers.

The Low-Blo's 16-hp cast-iron engine rotates an 18-inch, 8-bladed magnesium fan at 3600 rpm and developes 5000 cubic feet of air per minute at a blast velocity of 175 mph. It sweeps a 25-foot swath.

With a bed adjustment of 11 to 26 inches in height, the Low-Blo's exclusive two-way operation permits direction of the air blast.



Circle No. 200 on Reader Inquiry Card

Fertigation possible with new Chemigator

Performance Products, Inc., offers a simplified venturi injection unit that allows the application of fertilizers and chemicals directly through a lawn and garden or agricultural irrigation system. It is called the Chemigator. As water passes through the Chemigator a vacuum develops and pulls the fertilizer out of the container into the main stream. The built-in bypass valve allows for adjustment of the liquid additive. A sight gauge shows how the adjustment is affecting the additive rate. The unit has no moving parts, and no electric power is needed.

Circle No. 201 on Reader Inquiry Card

PumpTec imports portable sprayer

The Arimitsu portable power sprayer, used for many years in Japan, is being introduced to the U.S. by PumpTec. The Arimitsu is available as a gas or electric unit and is capable of up to 300 PSI at 1 GPM.

The compact sprayer weighs only 11 lbs. and comes complete with eight feet of suction hose, 33 feet of discharge hose, and spray gun. It can be used to apply chemicals to plants, coatings to poly, or it can serve as a pressure washer for smaller cleaning tasks such as lawn maintenance equipment.

Circle No. 202 on Reader Inquiry Card



New Bunton spreader cuts a wide swath

The new Bunton multi-purpose commercial spreader evenly distributes grass seed, fertilizer, or sand over a 16foot wide path. The spreader features a 130 lb. capacity, stainless steel hopper and blower/spreader, and heavy gauge steel handles.

The quiet 2.3 hp, 4-cycle Robin en-



gine moves the new Bunton spreader at speeds up to 2 mph, and finger-tip steering provides good manueverability.

Circle No. 203 on Reader Inquiry Card

Toro Irrigation's new sprinkler heads

Toro's XP-300 family of sprinkler heads was designed as a companion to Toro's Stream Rotor and features a low precipitation rate which causes water to be applied slowly. A matched precipitation rate offers the flexibility of valving part circle and full circle sprinklers together.

The XP-300 sprinklers' stainless steel retraction assures positive pop down of the head, and a wiper seal keeps dirt out. Large screens protect the nozzles from clogging. Toro says these sprinklers are designed for both residential and commercial use. **Circle No. 204 on Reader Inquiry Card**

Coming Next Month Landscape Manager's

Guide IV

Insect Control

Slash labor costs with the **DUCKBILL**® Tree Anchoring System



Cross section of earth

One man can anchor a tree with 3 Duckbills in minutes

Robert L. Swain, vice president of the Dawson Corporation, landscape contractors in Windsor, NJ, said, "We used your Duckbill Earth Anchors to hold a large number of trees in place after planting. This cut the labor time by such a drastic margin that we saved a week's time with a four man crew!"

Landscape architects nationwide are specifying Duckbills on more and more projects because Duckbills are the easiest and fastest, the strongest and the safest because there are no rigid rods or hard steel loops left above ground to injure people or pets or damage motorized equipment. Only a small pliable loop remains above ground.

Duckbills are used to anchor trees, sheds, fences, park benches, tables, many other things that can be stolen or blown away. There are four sizes, from 250 to 5,000 lbs. holding capacity, to meet all anchoring needs.

Duckbills are driven into the ground using a drive rod and heavy hammer till only the cable loop remains above ground. An upward pull on the cable rotates the Duckbill into a load lock position, like a toggle bolt in undisturbed earth. When anchoring is no longer needed, simply cut cables at ground level, leaving no sign anchors were used.

For complete details call or write today. Foresight Industries Inc., P.O. Box 4067, 1603 Capital Avenue, Suite 307, Cheyenne, WY 82003. Phone (307) 635-4163.



Circle No. 115 on Reader Inquiry Card

PROBLEM SOLVERS

by Balakrishna Rao, Ph.D.

pH in Florida turf

Problem: What is your opinion on the importance of soil testing the pH value in turfgrass culture and management in Florida? (Florida)

Solution: Soil testing is an important management tool in turfgrass culture. The pH of soil solution determines the solubility and, thus, the availability of nutrients for root absorption. Under excessively alkaline or acidic conditions, turfgrass may not respond properly to a fertilization program. Corrective procedures would depend upon the pH, soil texture and turfgrass species.

Reports from the University of Florida indicates that turfgrasses differ in their adaptability to soil acidity. For example, centipede and bahia will grow in a more acidic environment (pH of 5.0 - 6.0) that St. Augustine or zoysia, which grow best at a near neutral (pH of 6.0 - 7.0) soil reaction.

The following table should be helpful in understanding turfgrass species adaption to pH in your area.

Desirable pH Ranges for Lawn Grasses in Florida

pH 5.0-5.4 Carpet, Centipede, Bahia

- **pH 5.5-5.9** Carpet, Centipede, Bahia, Italian Rye
- **pH 6.0-6.4** Bermuda, Fescue, Italian Rye, St. Augustine, Zoysia
- **pH 6.5-6.9** Bermuda, Fescue, St. Augustine, Zoysia

Alternative to dormant oil

Problem: Usually, because of the weather conditions, we are unable to provide a dormant oil application to a number of our clients' properties before bud break or while the trees are dormant. Is there something we can use for treatment after the foliage begins to flush? Any recommendations would be greatly appreciated. (New Jersey)

Solution: The general recommendation for dormant oil application is two to three gallons per 100 gallons of water. This should be applied prior to bud break to prevent injury to foliage.

Since you were unable to apply this before bud break, you can apply a summer oil-malathion mix (two quarts of oil, plus 1.5 pints malathion per 100 gallons of water), any time from bud break and throughout the season. This will aid in preventing a build-up of sucking insects such as aphids, mites and scales.

CAUTION: Read the label and follow the directions! Reports indicate that plants like sugar maple, Japanese maple, beech, black walnut, hickory, nut trees (in general), red bud, and Colorado blue spruce are sensitive to oil. Dormant oil will remove the bluish waxy bloom from Colorado blue spruce needles when applied during the dormancy period. They will normally produce a new wax coat in four to six weeks. The 'Canart' juniper is sensitive to malathion in the summer oil treatment.

Injury is more likely to occur if the plants are under environmental stress such as drought. Therefore, be careful if you are considering a blanket treatment to all plants on a property.

Although summer oil can take care of a number of pests, foliar application of other insecticides may be necessary, as needed, during the insect activity period to manage the pest problem.

Bird dropping control

Problem: Would you please recommend some chemical or other means of how we can keep the birds from feeding on our blueberries and cherries? Their feeding doesn't bother us, but their excrement creates a mess. We would appreciate your comments in this regard. (New York)

Solution: Blueberries or even the small cherry plants can be protected from bird feeding by covering the plants with nylon nettings. This would be practical if you have only a few plants.

Mesurol 75% Wettable Powder insecticide is a bird repellant manufactured by Mobay Chemical Company and is registered for use on blueberries and cherries.

Read the label and follow the directions for the dosage guidelines. Apply Mesurol using conventional sprayers as a full coverage spray as cherries begin to ripen. Do not apply more than a total of three times per season to repel birds. Do not apply within seven days of harvest and do not graze animals in treated areas.



Balakrishna Rao is Director of Lawn Care Technical Resources for Davey Tree Expert Co., Kent, OH.

Questions should be mailed to Problem Solver, Weeds Trees & Turf, 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Please allow 2-3 months for an answer to appear in the magazine.



GXT-7





62.GO



Whatever the task – hauling or turf-related – E-Z-GO has a complete line of utility vehicles with options to suit your special needs. Find out more about how we can help you cover a lot of ground.





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Circle No. 114 on Reader Inquiry Card

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To give you the best full line of gasoline powered portable outdoor equipment.

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trimmer/cutters equipped with everything from brush and/or weed blades to monofilament heads.

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Dependable engines, long wearing clutches, sturdy transmissions and patented flexible drive shafts.

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Brush, weeds or grass to clear-up or clean-up whatever the job application ... it's HOFFCO. So stand up, be counted ... for more sales, more profits, more customer traffic.

358 N.W. "F" St., Richmond, IN 47374 Telex 20212

May Arizona Turf, Landscape, and Irriga-

tion Conference, May 2-4. Ramada Airport Resort, Phoenix, AZ. Contact Billie Reynolds, Arizona Landscape Contractors Association, P.O. Box 27312, Phoenix, AZ 85282. 602-968-8179.

Landscape Technology Certificate Program, May 8-9. Cal Poly, Pomona, CA. Drip irrigation, land design, and fertilization courses. Contact Wayne Smith, program director, Cal Poly, Office of Continuing Education, 3801 W. Temple Ave., Pomona, CA 91768. 714-598-4391.

Seminar and Procurement Trade Show, May 13-17. Venice, FL. Seminar for governmental purchasing personnel May 13-17. trade show May 14-15. Contact Jeanne B. Minnock, director of purchasing, The City of Venice, 401 W. Venice Ave., Venice, FL 33595. 813-485-3311.

Menninger Flowering Tree Conference, May 16-17. Cypress Gardens Quality Inn, Winter Haven, Fl. Contact Ellen M. Landry, Florida Nurserymen and Growers Association, 5401 Kirkman Road, Suite 650, Orlando, FL 32819. 305-345-8137.

JUNE

Univ. of Massachusetts Turf Field Day, June 26. Massachusetts Turfgrass Research Station, South Deerfield, MA. Contact Dr. Joseph Troll, Plant & Soil Sciences, Stockbridge Hall, Room 10, U. of Mass., Amherst, MA 01003. 413-545-2353.

International Turfgrass Society Conference, June 30-July 4. Avignon, France. Contact ITS, Agronomy Department, Virginia Polytechnic Institute, Blacksburg, VA 24061.

JULY

Association of Physical Plant Administrators of Universities and Colleges annual meeting, July 10-13. San Diego, CA. Contact Wayne Leroy, APPA, 1446 Duke St., Alexandria, VA, 22314. 703-684-1446.

To insure that your event is included, please forward it, 90 days in advance, to: WEEDS TREES & TURF Events, 7500 Old Oak Boulevard, Cleveland, OH 44130.

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Circle No. 121 on Reader Inquiry Card



STOP GRUBS FROM THE FIRST BITE TO THE LAST GASP.

Grubs are a hardy breed. They're tough to prevent and even tougher to get rid of once they start chowing down on the roots of your turf.

One thing that puts them off their feed is *OFTANOL 5% Granular insecticide.

Another is new OFTANOL 2 Insecticide. It's a liquid formulation of OFTANOL, containing two pounds of active ingredient per gallon.

The nifty thing about OFTANOL, liquid or granular, is that it stops grub damage fast, even before it kills. After an application of OFTANOL, grubs stop feeding and the damage stops. Use it as a preventive, in the spring, or as a curative anytime grubs are a problem.

Grubs, one serious problem with two serious solutions. OFTANOL. Always read the label before use.



OFTANOL. WHEN YOU'RE SERIOUS ABOUT GRUBS.



Mobay Chemical Corporation Specialty Products Group Box 4913, Kansas City, Mo. 64120

Se. OFTANOL is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen. Circle No. 135 on Reader Inquiry Card

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RATES: \$1.00 per word (minimum charge, \$25). Bold face words or words in all capital letters charged at \$1.25 per word. Boxed or display ads: \$85 per column inch-1x (one inch minimum); \$80-3x; \$75-6x; \$70-12x. Agency commissions will be given only when camera-ready art is provided by agency. For ads using blind box number, add \$5 to total cost of ad. Send ad copy with payment to Dawn Anderson, WEEDS TREES & TURF, 1 East First Street, Duluth, MN 55802.

BOX NUMBER REPLIES: Mment, 120 W. 2nd St., Duluth, MN 55802. Please include box number in address.

BUSINESS OPPORTUNITIES

WANT TO BUY OR SELL a golf course? Exclusively golf course transactions and appraisals. Ask for our catalog. McKay Golf and Country Club Properties, 15485 N. East Street, Lansing, Michigan 48906. Phone (517) 484-7726. TF

SOD FARM FOR SALE serving the booming Las Vegas area. Owner ready to retire. For futher details write Nevada Turf Growers, Inc., 4295 S. Arville, Las Vegas 89103 4/85

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An opportunity of a life-time for the right person with a background in the Industry, to own a well established Landscape Construction, Lawn Maintenance and Nursery Business, located in a rapidly growing commercial/industrial Northwest Chicago Suburban area, consisting of the following: 6 acres of land, including 4 acres of 1,000 prime specimen trees, calipered at 2" - 5" min., modern large office, 5 bay fully equipped garage and service shop, storage buildings, and a leased income building. All large, and small equipment necessary to operate this type of business, also truck mounted snow removal equipment, a 1/4 acre pond and paved road and lot, 2000 gal. diesel and gas tanks. A long list of prestigious clients with income of \$800,000.00 to \$1,500,000.00 annually. Over 25 years as an established business in the Industry. Huge growth potential. Terms available at low interest rates. Owner to stay on to help the right person establish themselves. This opportunity only comes along once in a life-time, take advantage of this offer. For more details, please direct all inquiries to: W.H.N., 23612 N. Hwy. 21, Mundelein, IL 60060. 5/85

FOR SALE

LAWN SEED. Wholesale. Full line of top quality grasses. Improved bluegrass varieties, fine fescues and fine bladed ryegrasses. We specialize in custom mixing. Oliger Seed Company, 2705 Wingate Avenue, Akron, OH 44314. Call collect (216) 753-2259. TF

TREE FERTILIZATION GUN, tested on over a million square feet of trees and shrubs all over the U.S. Good to 500 psi, repairable, non-corrosive. Buy direct from manufacturer, \$95.50. Arbor-Nomics, Inc., 5634-A Buford Highway, Atlanta, Georgia 30071. (404) 447-6037. TF

Used equipment for sale: 2 Jacobsen F-10 mowers (\$5,000 & \$7,000). 1 Roseman 7-gang mower, tow type, hydraulic powered with new motors (\$5,000). 1 Jacobsen 5-gang ram lift ranger with fairway units (\$2,000). 1 Roseman 5-gang (\$1,000). 2 six-foot Lawn Genies (\$1,000 each). 2 seven-foot Beck sweepers (\$2,500 each). 1 fivefoot Rogers sweeper (\$500). 2 Jacobsen fairway mowing units (\$400 each) plus spare parts. If interested call: (205) 821-0969. Beck's Turf-Nursery, P.O. Box 752, Auburn, AL 36830. 4/85

BALL BARRIER NETTING: Made of olefin fibers. 6 1/2 feet and 25 feet high. Strong and tough. Will not rust. Easy to handle. For Driving Ranges and Golf Courses. Keep golf balls from straying off-course. J.A. Cissel Mfg., Co., P.O. Box 339, Farmingdale, N.J. 07727. (800) 631-2234. 5/85 BUCKET TRUCKS, straight stick, corner mount and knuckle boom cranes. Sprayers, chippers, dumps, stakes, log loaders, crew cab chip box dumps, railroad trucks. 50 in stock. Sold as is or reconditioned. Opdyke's, Hatfield (Philadelphia area). 215-721-4444.

HYDRO-MULCHERS AND STRAW BLOWERS New and used. JAMES LINCOLN CORPORA-TION, 3220 S. Jupiter Rd., Garland, TX 75041. (214) 840-2440(TX), (800) 527-2304 (except TX) TF

1973 F-10 JACOBSEN FAIRWAY MOWER—6 Blade Reels, Ready to Mow, \$11,500.00. C.O.D. Bowling Green Country Club, P.O. Box 958, Beech Bend Rd., Bowling Green, KY 42101. 4/85

Jacobsen HF-5—Hydraulic 5 gang with 6 blade reels front and rear rollers, wheel wts. and ROPS with canopy. 285 hrs. like new. Call (616) 887-7301, 7:00 AM to 5:00 PM—John Read. 4/85

EXCELLENT Ford 3600 tractor with Armstrong 18.4-16A rear and Fireston 9:00-10 front turf tires, \$6350. Turf tires only \$850. Deere 6 ft. 272 grooming mower like new \$975. Lippincott, Fulton, Mo. 314-642-8646. 4/85

The perfect retreat!! 20+ acres with 650 feet of lake frontage, large home, barn, and beautiful view. All for a quick sale at \$65,000. Lakes & Land Realty, Box 25, Siren, WI 54872, 715-349-5353.

6/85

1974 Jacobsen F-10 mowing tractor 7-gang hydraulic powered, low operating hours, good working condition. \$7,000, or best offer. Call Mr. McCarthy (201) 754-2200 ext. 208 or 265 4/85

1975 to 1980, 1300 gallon tank trucks reconditioned ready for service. Pick up units or skids 300 gallon tank, pump, reel etc. New spray equipment 170 gallon to 5,000 gallon. 303-422-7608, Bob Smith. 6/85

Well established tree service located in the St. Petersburg, Florida area. Customers with sales in excess of \$270,000.00 per year including equipment (optional). Call (813) 541-3888. 4/85

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"TROUBLE SHOOTING IRRIGATION CONTROL SYSTEMS" Learn quick diagnosis and repair. Train yourself, train employees. Save valuable time with this very "un-technical" manual written in every day language. Lots of examples and diagrams for beginners or veterans. Tells ONLY what you must know about valves, simple electricity, meters. Send \$15.00 prepaid to: "Repair Book", c/o Bill Derryberry, 4849 E. Pinchot, Phoenix, AZ 85018. 4/85

BULK LANDSCAPE MATERIALS HIGHEST QUALITY "LOWEST PRICES" DELIVERED WITHIN 48 HRS. THROUGHOUT CALIF. CALL FLORI BUNDA (209) 962-7040 OR WEST COAST MATERIALS, INC. (209) 847-3053 9/85

FOR SALE—VALAC HYDRAULIC DUMP TRAILER 14,000 POUND CAPACITY WITH CYL-INDERS, HOSES AND JACK INCLUDED. BEACON HILL COUNTRY CLUB, ATLANTIC HIGHLANDS, N.J. 201-291-0953. 4/85 TREE SPRAYER—FMC/BEAN, VERY LITTLE USE, 1000 GALLONS, 50 GPM, 800 PSI, ELEC-TRIC HOSE REEL, SPRAY GUN, ROOT FEEDER, REFILLER. \$10500.00, (203) 651-3450. 4/85

Wade Rain solid set irrigation for 40 acres; alum. pipe: (30) 3" x 40', (630) 2" x 40', 1300 ft. PVC mainline; 40 Buckner agricultural valves; 4 Buckner controllers; 380 Rainbird heads; 80 Endplugs; 22,500 ft. control wire. American Tree & Turf, Denver, (303) 986-6067. 4/85

SALE--SALE--SALE--Hannay 12 Volt Reel Motors, \$100.00 (new) regular \$160.00. FMC JOHN BEAN parts, sprayers, spray guns and pumps at discounted prices. HYPRO parts, pumps and accessories at 25% discount. HANNAY reel swivel joints, reel switches, and solenoids at discounted prices. TUFLEX FI-BERGLASS TANKS and replacement parts at discounted prices. GREEN-GARDE JD-9 spray guns and spray hose at discounted prices. Call: Strong Ent., Inc. Collect (305) 264-5525.

HELP WANTED

SOD FARM MANAGER: 500 acre Chicago-area operation seeks qualified manager. Involves production, irrigation, and harvesting. Excellent salary and benefits. Send resume to WTT Box 354.

4/85

Wanted: Qualified Turf Management Specialist, 5years verifiable experience, two year education minimum. Job responsibilities to head turf management division including: Quality control, scheduling, estimating, buying, selling, budget preparation. We are an established lawn and landscape company with 70-80 employees specializing in institutional-commercial work-experiencing tremendous growth and need technically qualified personnel. Salary 15-20K. Contact Sarajane Ritz, Landcare Industries, 5805 S. MacDill, Tampa, FL. 33611, Phone (813)-831-5530. 4/85

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North Houston area horticultural company is now accepting applications for qualified personnel to perform residential and commercial grounds maintenance. 3 to 5 years experience is required. Good benefits. Please send resume to Wakefield Horticultural Services Corporation, P.O. Box 2117, Conroe, TX 77305. 5/85

Tree and shrub specialist Chemlawn Services Corporation. Are you an ambitious person who is willing to take risks in a company growing at a 25% yearly rate, a company who has promoted 150 managers last year, a company which is the recognized leader in its industry? If so, you may qualify for an opportunity to join the Schaumburg, Illinois branch. Responsibilities will include sales and servicing our customers. This outstanding ground floor opportunity offers a salary, fringe benefits, continual job training and unlimited challenge. To find out more about this career opportunity, please write or call Chemlawn Services Corporation, 1103 W. Morse Ave., Schaumburg, IL 60193, 312-529-4200. 4/85