operating costs.

Leaf Spot and Melting Out, Dollar Spot (including benomyl-resistant), Brown Patch, Fusarium Blight, Fusarium Patch (Pink Snow Mold), and Gray Snow Mold. 26019. It ordered. Rhô Company

For healthier turf on greens, tees and fairways – plus a healthy cut in operating costs – control diseases with long-lasting Chipco 26019. It's just what the doctor ordered.

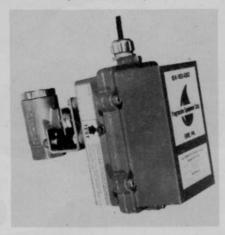
Rhône-Poulenc Chemical Company, Agrochemical Division, Rhône-Poulenc Inc., Monmouth Junction, NJ 08852. FUNGICIDE

CHIPCO 26019. It's strong medicine

Circle No. 148 on Reader Inquiry Card

NEW PRODUCTS from page 78

Progressive Equipment Corp.'s automatic motorized drain has an electric valve actuator that can deliver 150 lbs./ inch of torque, and can open and close



the drain valve on pre-set command. The standard one inch drain valve weighs eleven lbs. and occupies under one-half cubic feet of space. Circle No. 172 on Reader Inquiry Card

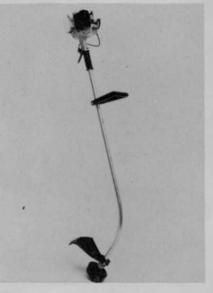
Joseph S. Finger & Assocs., Inc. have developed a portable device for measuring the compaction of seedbed mixtures on greens. According to Finger,



the vibration of equipment used on greens over a period of three to five years may be a greater cause of compaction than foot traffic. The "percolometer" can measure both compression and vibration, and can be used to check greens mixtures in less than two hours. Circle No. 173 on Reader Inquiry Card

Loveland Industries, Inc.'s Fighter F

silicone antifoam emulsion can be used with most aqueous and oil spray systems. The product was created to help reduce mixing time, eliminate material waste, and to provide more accurate metering of agricultural spraying. One to six ounces of Fighter F is used for every 100 gallons of spray mixture. Circle No. 174 on Reader Inquiry Card Hoffco Inc.'s lightweight trimmer is powered by a 13.8cc Kioritz engine with a 48-in. patented flexible drive shaft. The GT 14B features a Delta "D"



plastic loop handle and a one line three exit monfilament head. This small model is designed to give a professional performance at an economical price. Circle No. 175 on Reader Inquiry Card



CLICK."

America's becoming attached to multimot.

SOLO introduces an impressive array of outdoor equipment powered by a tough, compact 1½ hp SOLO-BUILT two cycle engine. It quickly attaches to a lawnmower, grass trimmer, brush cutter or chain saw. Also a hedge trimmer, tiller/cultivator, hand held air blower, centrifugal or high pressure liquid pumps and sprayers. And more to come — all SOLO engineered to attach in seconds without tools. <u>SOLO ensures return visits</u> from your customers <u>now and in the future</u> as our line grows. Start selling multimot from SOLO and develop some lasting attachments with your customers.



SOLO Inc., 5100 Chestnut Ave., P.O. Box 5030, Newport News, Va. 23605-0030 (804) 245-4228 Telex 823-864

NEW PRODUCTS

The Campbell Pacific Nuclear Corp. has announced the release of a instrument for measuring soil compaction and moisture. Called the Strataprobe, the device is designed to sort out tillage and trafficking effects on location in



the field without disturbing soil or living products. A new gauge has been designed to increase the accuracy of measurements from lightweight to maximum density.

Circle No. 176 on Reader Inquiry Card

Stanley Hydraulic Tools has introduced its model DL33 drill for use in moling and underground boring operations. Designed for low maintenance,



the tool features a compact gear-type hydraulic motor, a maximum torque of 95 lb-ft., a removable remote trigger, and instant reverse.

Circle No. 177 on Reader Inquiry Card

The General, Inc.'s LB-420, 53 hp, diesel-powered loader backhoe features four-wheel hydrostatic drive, a five-eighths cubic yard loader and a new low profile 11- or 13-foot backhoe.



The new design allows for trailering through low underpasses or work in low-clearance areas unaccessible to previous models.

Circle No. 178 on Reader Inquiry Card

Complete package includes hydraulic dump box trailer with 1000 lb. lift

capacity which uses same remote

control hydraulic motor as aerator.

Features double acting tailgate on

48" x 52" x 12" box with heavy duty

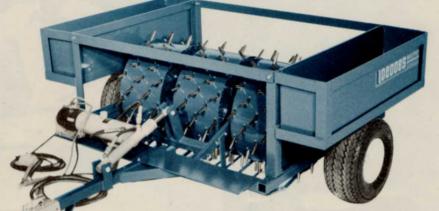
square steel tube frame.

The Hinde Engineering Co. has introduced their Air-Aqua irrigation system designed to allow for the direct irrigation of roots without fear of clogging or deterioration. The semi-rigid valved tubing is placed below ground adjacent to either established or new plants. According to the manufacturer, the valves close automatically when pressure is turned off to block out dirt, roots and insects.

Circle No. 179 on Reader Inquiry Card

Continues on page 86

Trailer aerator/dump box package by Dedoes: easy, quick and effective.



You can be sure they'll work for you. Can be pulled by most tractors including International, Toro, Ford, Massey Ferguson, Yanmar, Kubota, John Deere, E-Z-Go, and Cushman, because Dedoes trailer aerator and dump box attach to your hitch.

Newly designed remote control hydraulics for easy hookup and stable saddlebag weight boxes for proper penetration, are two hard-working features that make your job easier. Not only is it easy to operate, you'll get years of time-saving aeration with low maintenance.

> The new trailer aerator is available in a variety of tine styles for tees, greens, fairways, lawns, right-of-ways, or institutional grounds.

> So if you're responsible for strong, healthy, attractive grass and concerned with saving time and money, it's worth your time to investigate Dedoes quality aerators. Call today for a demonstration.



1060 W. West Maple Rd., P.O. Box 575 OUT OF STATE Walled Lake, MI 48088 313-624-7710 800-521-7086

Circle No. 113 on Reader Inquiry Card

INTRODUCES TWO NEW REASONS WHY YOU CAN'T BEAT THE SYSTEM.





GREENSAVER The Greensaver actator gives precise aetation over fine furf areas



SPRAYER The Sprayer attachment sprays chemicals through an optional 15' rearboom or optional handgun



FLATBED BOX & SHORT BOX The Flatbed Box and Short Box attachments haul and dump 1500 pounds of sand or soil, with optional, live hydraulics.

Introducing the redesigned Cushman Turf-Trucksters.™

Both sport a sleeker, more sensible body that gives you two headlights, comfortable seating for two, and "clustered" controls conveniently located at the driver's side.

The new Turf-Trucksters have also been treated to such improvements as an optional "live" hydraulics package that speeds up work and prolongs clutch life, and a separate PTO system that has been simplified to reduce wear.

But there's a lot of the old Turf-Trucksters in these vehicles, too. You'll find the same air-cooled 18 hp OMC engine, auxiliary transmission and heavy-duty differential that hundreds of turf Circle No. 112 on Reader Inquiry Card pros have come to depend on over the years. Plus, standard features like a 1500 lb. payload, and engine/ ground speed governor for precise spreading or spraying. What really sets the Turf-Trucksters

What really sets the Turf-Trucksters apart though, is the variety of interchangeable Cushman attachments that go on in a snap with the unique pin-disconnect system.

So, you can start with just one Turf-Truckster and build a complete fleet of hard-working machines —that's economy. Plus, if you already own Turf-Truckster attachments, they'll work perfectly with these new models, too. Fill out and return this coupon today. What you'll get back is a new, full-line catalog of the time-saving, money-saving Cushman system.

rf care.	CUT 2-5
Lincoln, NE 68 your nearest d Please send the Cushma Please ask to contact n	CUSHMAN, P.O. Box 82405 1501 For the location of lealer, call 402-435-7208 d me the 1982 catalog of an turf-care system. my local Cushman Dealer me for a free demonstra- Working System.
NAME	1 - Richard Barris
FACILITY	Contraction of the second
ADDRESS	
CITY	STATE
ZIP	TELEPHONE

KING SYSTEM



QUICK AERATOR The Quick Aerator's 46" swath cover wide expanses of turf quickly. Choic of 3 time styles: coring, slicing, open spoon.



TOP DRESSER The Top Dresser holds about 1000 pounds of material and spreads a 31½" swath precisely and evenly.

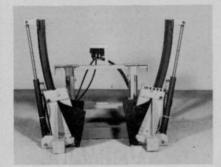


SPREADER/SEEDER The Spreader/Seeder provides uniform spreading across a wide 40° swath.

Quiboard Manne Corporation, 1981. All rights reserved

NEW PRODUCTS from page 83

Rokor, Inc., has expanded its digger line to include the Rokor 20, which produces an actual ball size of 22 inches in diameter, with a 24-in. model also available. It incorporates design fea-



tures used in Rokor's larger models, such as curved stems and narrow width, but it can be installed on smaller skid steer loaders, tractors, and frontend loaders.

Circle No. 180 on Reader Inquiry Card

Worksaver, Inc. has introduced a post hole digger with a four-position boom to allow for adaptation to most 3-point tractors. The screw-type auger center point and teeth are replaceable, and available in 6-in., 9-in. or 12-in. lengths.

Saves Time, Labor and Fuel.



The unit's gear box features roller bearings with double lip spring-loaded seals designed for smooth operation. Circle No. 181 on Reader Inquiry Card

Glenmac Inc.'s Harley Stone Removal equipment is designed for optimum results when fine cleaning trash and rocks for seed bed preparation on new golf courses. According to the manufacturer, the equipment will sanitize down to ¹/₂-in. and can clear from 5-15 acres per day. Glenmac offers the rock picker for sale or will contract for site preparation.

Circle No. 182 on Reader Inquiry Card

A new high rpm brush blade from Hoffco, Inc. is available as an accessory item for their JP340 and JP215 model grass trimmers. The Sandvik Brush Blade, of heavy spring steel, measures 9-in. in diameter with a 20 mm bore.



The blade has 22 cutting teeth, each equipped with a forward depth gauge designed to keep kickback at a minimum.

Circle No. 183 on Reader Inquiry Card Continues on page 93

- Maneuverability with "feather touch" control puts you in full command.
- Dual hydrostatic power provides "one pass" mowing eliminating finish trim time.
- Out front mower deck for full view mowing.
- PTO drive to mower deck eliminates belts, simplifies change of accessories.
- Three h.p. sizes 12-16-18 to match your mowing needs, engineered for three mowing widths 44"-52"-61".
- Attachments to provide year round versatility.
- Vacuum Grasscatcher (available in two styles).
- Dozer Blade
 Sweeper
 Snowthrower

Circle No. 119 on Reader Inquiry Card

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Body Fashions/Intimate Apparel	8,984	LP/Gas	13,664
Dental Laboratory Review	17,265	Lawn Care Industry	12,178
Dental Management	101,645	Neurology	12,600
Drug & Cosmetic Industry	7,426	Paper Sales	12,06
Electronic Technician/Dealer	43,041	Pest Control	14,624
Fast Service	50,378	Professional Remodeling	36,076
Flooring	13,032	Quick Frozen Foods	20,721
Food Management	49,723	Rent All	11,136
Hearing Instruments	17,002	Roofing/Siding/Insulation	18,459
Home & Auto	22,424	Snack Food	9,196
Hotel & Motel Management	36,360	Toys Hobbies & Crafts	14,19
Housewares	12,678	Weeds Trees & Turf	42,37
Industrial Education	45,096	and the second state of th	NO. OF TAXABLE PARTY.

Don't forget that classified advertising works just as effectively in locating employees as it does if you are looking for a position, have a line, machinery or a business to sell, are seeking representatives or wish to buy a specific item. Let it go to work for you!

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WT&T EVENTS

The current issue of WEEDS TREES & TURF carries meeting dates beginning with the following month. To insure that your event is included, please forward it, 90 days in advance, to: WEEDS TREES & TURF Events, 757 Third Ave., New York, NY 10017.

lowa Turfgrass Conference and Trade Show, Marriott Hotel, Des Moines, IA, March 1-3. Contact Ed Cott, 105 Horticulture Building, Iowa State University, Ames, IA 50011, 515/294-1870.

Pennsylvania Turfgrass Conference and Trade Show, Hershey Lodge and Convention Center, Hershey, PA, March 1-4. Contact Christine King, Pennsylvania Turfgrass Council, 412 Blanchard Street, Bellefonte, PA 16823.

Midwest Regional Turf Conference, Purdue University, West Lafayette, IN, March 1-3. Contact W.H. Daniel, Purdue University, Dept. of Agronomy, West Lafayette, IN 47907, 317/494-4785. 51st Massachusetts Turfgrass Conference and Sixth Industrial Show, Civic Center, Springfield, MA, March 2-4. Contact Dr. Joseph Troll, Stockbridge Hall Room 12, University of Massachusetts, Amherst, MA 01003-0099, 413/545-2353.

American Sod Producers Association Midwinter Conference, Royal Lahaina, Maui, HI, March 3-5. Contact Bob Garey, Association Building, Ninth and Minnesota, Hastings, NE 68901, 402/463-4683.

Canadian Turfgrass Conference and Show, Constellation Hotel, Toronto, Ontario Canada, March 7-10. Contact Mary Gurney, 698 Weston Road, Toronto, Ontario M6N 3R3, 416/767-0387.

"Interiorscape Design—A Total Approach," Airport Hilton, Salt Lake City, UT, March 12. Contact Scott Wolford, Utah Chapter/ASLA, 57 W. So. Temple #300, Salt Lake City, UT 84101, 801/364-1718. International Society of Arboriculture 33rd Annual Convention, Valhalla Inn, Toronto, Ontario Canada, March 16-19. Contact ISA/Canada, P.O. Box 995, Station B, Willowdale, Ontario Canada M2K 2T6.

Maine Turf Conference, Merry Manor Inn, South Portland, ME, March 17-18. Contact Vaughn Holyoke, Deering Hall, University of Maine, Orono, ME 04469, 207/581-2111.

Tree Care—Urban Forestry Foreman Training, Davey Environmental Services, Kent, OH, March 22-April 2. Contact Richard Abbott, Davey Environmental Services, 117 South Water Street, Kent, OH 44240, 1-800/321-7572.

Soil Erosion and Sedementation Control Short Course, Vance Tyee Motor Inn, Olympia, WA, March 23-24. Contact Roy Goss, Western Washington Research and Extension Center, Puyallup, WA 98371, 206/593-8513.

EMBARK[®] Plant Growth Regulator (PGR)



A solution to suppress turf growth for up to 8 weeks.



EMBARK PGR can significantly reduce or even eliminate mowing requirements for 5 weeks on bermudagrass, and up to 8 weeks on grasses such as Kentucky and annual bluegrass, fescues, perennial ryegrass, quackgrass and many others. Unsightly seedheads will also be suppressed or eliminated.

WHERE

A work-saver on low-maintenance grasses, hard-to-mow and trim areas.



Put EMBARK PGR to work along highways, around industrial parks, at cemeteries and wherever else you want a uniform appearance of grass with less mowing.

Also reduce mowing hazard and time on slopes, around headstones and other hard-to-mow areas. Grass remains viable and green.

NEWS from page 19

USDA's Insect Identification and Beneficial Insect Introduction Institute in Beltsville, where nearly one-third of a million insects and mites are identified each year for biological control projects and other research.

Knutson said that despite successes already achieved, progress in putting IPM to work has seemed slow at times. "Much of the foundation work, the research on natural enemies, has not yet reached the farm. Each biological control agent requires considerable study because of the complex behavior and ecology of living entities. We first must determine the vulnerabilities of a pest. Then, each new biocontrol agent requires a unique set of in-the-field procedures." Knutson added that using IPM on the farm, often takes a lot of time, special knowledge and a high initial risk financially.

HORTICULTURE

Record number contribute to HRI

The Horticultural Research Institute (HRI) has increased its industry support by 101 firms in the past ten years, *Continues on page 90*



Instructor Fred Buscher (right) critiques a drawing during a three-day short course on residential landscape design. Jerry Magistrella (left) and Rose Spena were two of the 56 members of the nursery and landscape industry at the course who received instruction on landscape plan drawing and design. Buscher, area extension agent in landscape horticulture, established the series of five three-day Short Courses in 1976 in cooperation with the Ohio State University Department of Landscape Architecture.

Keeps turf as trim as the budget ... easily.

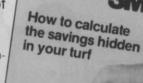


One mowing instead of eight saves time, labor and budget

With EMBARK PGR, mow once instead of 8 times. You could start saving after you eliminate the second mowing. Also frees up the crew to get more jobs done with the same people in the same time.

If you'd like to calculate your specific mowing costs and potential savings...

Ask for your free guide





Applies easily with standard spray equipment

Apply anytime turf is actively growing. Use a range of spray equipment from truck mounted booms to a backpack unit.

Product Application Handbook is available from your distributor. Anyone on the job can also call toll-free for answers on equipment calibration.

For your free Mowing Costs Guide and toll-free call card contact your dealer or Agricultural Products/3M, 223-6SE, St. Paul, MN 55144.

EMBARK is a reg. TM of 3M.





3M Hears You.



A Cushman Frontline mower is donated to Dr. Bob Shearman, University of Nebraska, (seated) by Herb Jesperson, OMC Lincoln. This unit is part of the ongoing support by the Lincoln-based manufacturer for the school's various turf projects. Dr. Shearman will use the self-propelled mower on turf research plots located near Mead, NB.

according to Administrator Duane Jelinek.

At the American Association of Nurserymen board of governors meeting in 1981, HRI Past President Bob Siebenthaler recalled the progress the Institute has made in the past ten years. ... in 1971, 143 business firms contributed their support to HRI," said Siebenthaler. "Today it's 244. Likewise, state, regional and national nurservmen's association support has also increased. In 1971, 28 associations contributed to HRI. In 1980, 35 associations contributed." Siebenthaler added that while HRI still has not received the support from the industry it truly deserves, it is making good progress.

ORNAMENTALS

Penncap-M granted SLN in Ohio

Ohio has granted the AgChem division of Pennwalt Corp., Philadelphia, PA, a Special Local Needs (SLN) registration for use of Penncap-M insecticide to control leafminers on chrysanthemums grown in commercial greenhouses.

The SLN registration allows Penn-



Circle No. 122 on Reader Inquiry Card WEEDS TREES & TURF/MARCH 1982