## Standard's new Duo-Rake...a real "smoothie" in any sand trap!

For the first time, a trap rake that extra-smoothes sand. Just the way your golfers want it!

Unique Standard Duo-Rake lets user rake out deep footprints, other indentations — then turn rake over and blade out — absolutely smooth — the grooves or ridges that can be a menace to good play.

Golfers find Duo-Rake a delight to use because it's so lightweight and easy to handle.

You'll love Standard's Duo-Rake, too. Because it's so maintenance-free.

Its high-impact molded plastic head is practically indestructible.

Add to this the no-rust, heavy-duty aluminum handle and chrome-plated 3-inch stand-up spike — and we ask — how can a rake be more maintenance free!

Choice of bright yellow or uncoated natural-aluminum-color handle.

Duo-Rake head is interchangeable with head on other Standard Trap Rakes.

The Standard Touch makes the difference.

## Why not bring your sand traps up to snuff now?

Contact your Standard Distributor. Or write or phone for new Standard Duo-Rake Bulletin DR-'78. Standard Golf Company, 220 East Fourth Street, Cedar Falls, Iowa 50613. 319/266-2638.





## WHY 9 OUT OF 10 LEADING LANN CARE FIRMS USE DURSBAN

When the top 9 of 10 lawn care firms in America all choose DURSBAN\* brand insecticides as their predominate insecticides for surface insect control...there has to be a good reason. Or two.

- Well there are two.
- 1. DURSBAN insecticides last longest of all leading insecticides.
- 2. DURSBAN insecticides cost less to use than other leading insecticides.

In fact one application of DURSBAN 4E, ¾ oz. per 1,000 sq. ft., costs only about 45% Yet with this small amount, you get six to eight weeks of unsurpassed residual control of dozens of turf pests. Compare this to two to four weeks with any of the other leading insecticides. And although DURSBAN insecticides are highly effective against insects, they are kind to turf, to people and to pets. You also use a lower dosage rate with DURSBAN than with other leading insecticides. That means you handle fewer drums to do the job. So ask your supplier for the turf insecticide that saves you time, trips, storage space and money. Ask for DURSBAN 2E Insecticide or double-strength DURSBAN 4E insecticide. Just be sure to read and follow all label directions and precautions. Agricultural Products Department, Midland, Michigan 48640.



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#### Turfgrass ranks high in Oklahoma's economy

Usually considered a land of cattle and wheat, Oklahoma's turfgrass production ranks right behind the two major crops in the state's agricultural economy.

Specialists Wayne Huffine and Roy Sturgeon at Oklahoma State University draw this claim from a recently published Oklahoma turfgrass survey which shows dollars from turf production, establishment, and management during the survey year, 1977, amounted to more than \$258 million. Below the turfgrass figure were hay at \$195 million and milk at \$113 million.

### Fertilizer producers show big increase

U.S. fertilizer producers registered a 14 percent increase in domestic dis-

appearance for the first six months of the 1979-80 year compared to July-December 1978, according to a report of The Fertilizer Institute. During the same period, U.S. fertilizer production averaged seven percent above the last six months of 1978.

"Much of the domestic disapperance from the producer likely occurred as shipments to retailer inventory, as dealers built stocks for early spring sales," explained Edwin M. Wheeler, president of The Fertilizer Institute. "In December 1979, fertilizer disappearance from producers was 24 percent above December 1978, with the increase applying broadly to nearly every nitrogen, phosphate, and potash product listed in the institute's fertilizer index," he added.

"Meanwhile, producer-held fertilizer inventories at the end of December dropped 24 percent below December 1978 to record low levels," Wheeler said. Several key products have stocks equivalent to only about three weeks of production, significantly below typical working levels of at least a month's production. "Among the basic fertilizer materials," said Wheeler, "only phosphoric acid had producer inventories equal to or above last year's levels."

#### Jacklin Seed plans large expansion

Jacklin Seed Co. of Post Falls, ID, is gearing up for its biggest production and marketing year with an expansion program that includes construction of a building believed to be the largest single unit in northern Idaho.

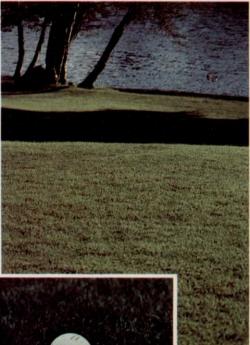
Doyle Jacklin, marketing manager for the company, said the expansion program would almost double the present warehouse and processing capacity.

### OREGON FINE FESCUES The Park and Golf Course Grass

The fine fescues, both Chewings type (doesn't creep) and the Red type (creeping) are favorites of golf course and park superintendents for several very good reasons. The fine fescues tolerate poor soils and have low water requirements compared with other type grasses. They take less fertilizer for maintenance and the fine fescues take the wear in parks and golf course fairways. Mix with other grasses or use it straight . . . the fine fescues make great turf for just about anywhere.

### CHEWINGS AND CREEPING RED FESCUE COMMISSION 1349 CAPITAL ST NE • SALEM OR 97303

QUALITY GRASS SEED FROM OREGON Circle 133 on free information card





84



**Slope Master** by Kut-Kwick cuts slopes up to 40 degrees due to its low center of gravity. Powered by a



23 h.p. gasoline engine, the unit has dual tractor wheels for added traction and stability. The mower cuts a 60-inch swath and up to three acres per hour.

Write 701 on free information card

**Tip N Measure** by Container Manufacturing Inc. eliminates the need for a second measuring device by its integrally molded and calibrated head. The container is closed for initial

measurements, volume recheck, and addition or subtraction of material thus providing safety and minimizing accidental spillage. The con-

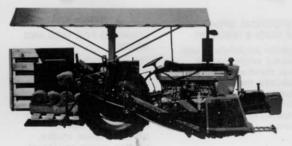


tainers are available in one and two quart and one gallon sizes. Write 702 on free information card **Chieftan Mower** by Clinton has the power to cut any height of grass with its 5.5h.p. two-stroke engine. Features such as ball bearing wheels, heavy-duty blade clutch, below deck muffler discharge, and



snorkle air cleaner kit for dust protection give professionals what they want. Available in 20- and 22-inch

# Cut, Roll, Slab or Fold, 24 hours a day, wet or dry weather, all sod conditions.









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#### Products from page 85

models with a three or five quart fuel tank.

Write 703 on free information card

**Controlled release packet** by Unique Fertilizer Inc. provides nutrients for up to eight years when placed near the roots of a plant or tree. The sealed polyethylene bag, containing



a water soluble fertilizer of at least 16-8-16 analysis, slowly releases nutrients through micropore holes. Originally developed by soil scien-

tists at the University of Wisconsin, the packets release only the amount of fertilizer needed during the season.

Write 704 on free information card

**New engine option** for Reinco's Power Mulcher. A four-cylinder water cooled gasoline engine from Ford provides landscape contractors with a more efficient engine under



extreme environmental conditions. The unit has a cyclopac air cleaner, full cowl enclosure with instrumentation and an hour meter for monitoring usage. It is capable of placing four tons of hay or straw per hour at distances of up to 60 ft. utilizing two men.

Write 707 on free information card

**Tree stump treatment** and cutsurface treatment with Dow's Tordon herbicide is possible with a ready-to-



use formulation packaged in a convenient squeeze trigger applicator bottle. Tordon RTU is the only product in the line of Tordon herbicides that is not a restricted use pesticide and can be used by persons without special licensing. One gallon will



treat from 300 to 800 stumps, depending on their size.

Write 708 on free information card

Compact riding trencher from Ditch Witch Division of Charles Machine Works offers the compactness of a handlebar trencher and the convenience of a riding trencher. The 1810 is built on a rigid one-piece frame



and has a 20,000 lb. test digging chain. It provides hydrostatic ground drive to all four wheels and will dig to depths of five ft. and to widths of 12-in.

Write 709 on free information card

Fertilizer injector for hose or underground sprinkling systems by Chemilizer Products Inc. connects to the water supply with standard hose fittings and injects a calibrated amount of fertilizer into the sprin-



kler system. It uses a liquid fertilizer available in two and four-gal. sizes. Made of lightweight molded plastic, the Chemilizer can be easily moved to different locations. In underground systems chemicals are injected after the pump system to prevent corrosion. The unit can be bypassed for flushing lines following use or for straight irrigation.

Write 711 on free information card

Webbed windbreak from V & V Noorrdland Inc. can be used as a windbreak around greenhouses, orchards, nurseries and landscapes or as a shading material. The webbing is made from two-in. wide straps of coated yarn. It can be erected quickly and easily relocated. Benefits include protection from storm damage, rapid temperature variation and evaporative losses by plants, and prevention of energy loss from greenhouses.

Write 710 on free information card

Wild flower mix from Lofts and Jacklin seed Cos. reseeds itself annually and requires almost no maintenance. A blend of annuals and perennials, Pinto Wild Flower Mix can be planted alone or with grass

## **Finally, An Aid For Teaching Turfgrass**

Superintendents, Contractors, Lawn Care Managers, New, On-the-Job Reference. The Turf Managers' Handbook is a compre hensive, 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 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

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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 nanagement, cemeteries, athletic fields, nd low maintenance areas. If it concerns turf, it's in the Turf Managers' Handbook.

Ordering Information	Signature		
Please send copies of the hardback (\$18.95 ea.) copies of the paperback (\$14.95 ea.) A shipping charge of \$1.25 per book must be added.	Name (Print)Address		
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#### Products from page 87

seed to enhance any landscape setting. Available in one-acre bags or one-ounce packages (700 sq. ft.) Perfect for a low maintenance landscape where color is desired.

#### Write 712 on free information card

**Soil probe** by Oakfield Apparatus is an easy-to-use soil sampler probe which can extract a 12-in. core for soil testing. Made from chrome-



plated steel, the device is a onepiece unit with interchangeable tips for different soil types and conditions. A foot step eliminates stooping to insert the probe. Sample is removed by turning unit upside down.

#### Write 713 on free information card

**Mobile irrigation system** from Long Manufacturing offers sod producers and nurserymen an alternative to



underground irrigation systems. The Nu-Way irrigation units carry up to 835 ft. of hose and are available with water turbine or gasoline engine power.

Write 715 on free information card



# The height of confidence for consistent yellow nutsedge control.

It takes consistent performance to earn the confidence of turf professionals. And no herbicide ever provided more consistent yellow nutsedge control than Basagran<sup>®</sup> herbicide, leaving established turf green and healthy.

BASF Wyandotte Corporation Agricultural Chemicals Devision 100 Cherry Hell Road Parsippany, New Jersey 07054

#### For consistent yellow nutsedge control. Basagran every time.

For more information, write or call our nearest Regional Office: 5720 W. 85th Street, Suite 16, Indianapolis, Indiana 46278, (317) 299-4122 6263 Poplar Avenue, Suite 850, Memphis, Tennessee 38138, (901) 761-2001 6405 Metcalf, Suite 317, Shawnee Mission, Kansas 66202, (913) 677-2424

## Diazinon is labeled for How many will you

Diazinon<sup>®</sup> not only controls, but is labeled for more turf insects than any other turf insecticide. Just take a look, it's the biggest label in the business. You'll count 24 turf insects in all. Including white grubs, sod webworms, cutworms, chinch bugs,

