



LAWN
CARE

\$ 37
TOTAL
MONEY
03
GALLONS
1.2

DON'T BE TIED UP BY CALLBACK COSTS.

Use DURSBAN and TURFLON.

**Callbacks
also mean
unhappy
customers,
and worst
of all...
...cancellations!**

DURSBAN* insecticide and TURFLON* D herbicide can help put an end to callbacks that tie-up your people...your equipment...your money. DURSBAN gives up to eight weeks of effective broad-spectrum insect control. TURFLON D is the new herbicide that controls tough broadleaf weeds in cool season turf grasses.

You'll appreciate the low toxicity of all Dow turf products...to both humans and pets. Also, the wide variety of formulations. There's the familiar DURSBAN 2E and 4E liquids, 50W wettable powder and granular formulations to knock-out virtually all outdoor insects...sod webworms, chiggers, chinch bugs, mites, crickets, ants, weevils,

ticks, billbugs and many more, the first time around. TURFLON D knocks out hard-to-control broadleaves like veronica, spurge, ground ivy, oxalis, and wild vio-

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So now you have broad spectrum and cost-efficient control for both insects and broadleaf weeds. And that's the best control over callbacks you've ever had! Now more of your calls will be for new business.

The only callback we recommend is the one to your distributor. Talk to him about our new "DURSBAN Delivers The Goods" incentive program. Always read and follow all label directions. The Dow Chemical Company, 9001 Building, Midland, MI 48640.



Beautiful lawns and fewer problems with DURSBAN and TURFLON.



*Trademark of The Dow Chemical Company.

5001

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STOP LEAF SPOT FROM THE FIRST OFFENSE TO THE FINAL VERDICT.

Disease is a natural occurrence in nature, which proves that nature isn't as interested in beautiful, playable turf as you are. To overcome nature's little oversight, we present a proven product.

®DYRENE Turf fungicide is proven in control of leaf spot, melting-out, or going-out—popular names for diseases caused by *Helminthosporium (Drechslera)*.

DYRENE works on contact and should be part of any complete program of disease control.

It's compatible with other turf products, plus it provides control of dollar spot, brown patch, copper spot, snow molds, and rusts.

Leaf spot, one of nature's serious afflictions needs serious relief. DYRENE. Always read the label before use.



DYRENE.
**WHEN YOU'RE SERIOUS
ABOUT LEAF SPOT.**



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

DYRENE is a Reg. TM of Mobay Chemical Corporation.

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WEEDS TREES & TURF

The Magazine of Landscape and Golf Course Management Since 1962

28 The Agronomic vs. Budget Dilemma

Government landscape managers are feeling the squeeze of increasing problems vying for their time. Doing more with less tops the list.



30 Central Park—One of a Kind

A slice of the Adirondacks sits in the middle of Manhattan under the watchful and caring eye of Director of Horticulture Frank Serpe.



36 An Unrelenting Challenge

Hickam Air Force Base on Oahu, Hawaii, is blessed and cursed with almost perfect weather. The ideal growing conditions pose some special problems for entomologist Jonathan Kajiwara.



42 The Chemical Connection

The Indiana State Highway Department is proving chemicals can be a cost and time-saving alternative to mowing.

48 Borers: The Hidden Enemy

This often overlooked menace can do most of its damage before it's even detected. Some helpful suggestions on how to detect borers before it's too late.



62 TURF DISEASE CONTROL GUIDE

The third in WT&T's series of five landscape managers' guides. Tips on controlling disease in both warm and cool season turfgrasses. An excellent reference to save.



82 "Lavascaping" the Kona Surf

Coaxing a beautiful landscape from Hawaii's black lava rock is no problem for Ray Berg. The veteran landscaper finds the project a satisfying challenge.

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(HBJ) A HARCOURT BRACE JOVANOVIH PUBLICATION

by Bruce F. Shank, executive editor

NY extension asks for \$1 million

The future of extension funding may have become evident during the Nassau/Suffolk Landscape Gardeners Conference in Hauppauge, Long Island, in late February.

Dr. George Good, head of New York Extension, asked a gathering of turf leaders the morning after the show to donate \$1 million to turf programs. Good, saying the turf industry was a \$100 million business on Long Island alone, should be able to generate 1 percent of that for research and extension. The pitch for funding was bold and the amount shocked a number of people present, including Charles Pendlebury, Lebanon Chemical's marketing consultant on Long Island.

Despite the apparent boldness displayed by Good, isn't it much better to solicit funds this way rather than pressure teaching and research staff to solicit their own funding? If the method works, other states will apply it quickly. Any way you look at the situation, state organizations will be asked to do more than put on a show in the future; they will be asked to pay for a large portion of turf research as well.

Sports turf egg begins to hatch

The Sports Turf Managers Association is finding exceptionally strong support from manufacturers for its membership promotion. There is a definite consensus among manufacturers that the sports turf market is virtually untapped and represents an opportunity as promising as lawn care did 10 years ago.

The fledgling organization has doubled its membership in less than four months. Operated completely by volunteers at this time, STMA has produced its first six-page newsletter and will release a membership roster and specifications guide in late March.

Early research has shown the number of fields with respectable budgets for maintenance to exceed 20,000. Further research will help pinpoint these fields.

During the Golf Course Superintendents show, another organization designed to promote better fields to Parent Teachers Associations indicated a desire to work with STMA to accelerate market development.

The market badly needs nationally recognized field construction and maintenance standards. No such set of standards currently exists in the U.S. Library of Congress. STMA is supporting a book currently being written by Dr. Kent Kurtz of Cal Poly Pomona and Dr. William Daniel of Purdue University on sports field construction and maintenance. Cal Poly has granted Kurtz a sabbatical to work on the project and Daniel is devoting his efforts full time to the sports turf market when he retires this month.

If you are interested in joining the sports turf movement, contact Kent Kurtz, 1458 N. Euclid, Ontario, CA 91764, or Bruce Shank, Weeds Trees & Turf magazine, 7500 Old Oak Blvd., Cleveland, OH 44130.

The sports turf egg is about to hatch.

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OUR GANG.

INTRODUCING TORO'S FULL LINE OF REELMASTER™ GANG MOWERS.

Now there's a new breed of gang mower that's tough enough to take on any turf. From golf course to school yard. Park grounds to athletic field.

Our Reelmaster™ 5, 7 and 11 blade gang mowers deliver a superb quality cut and finished look. Whether you need a short, super-formal cut. Or a longer informal cut. Or something in-between.

Yet all three also deliver renowned Toro durability to keep you cutting.

We engineered all three with the bedknife optimally positioned in relation to the center line of the reel.



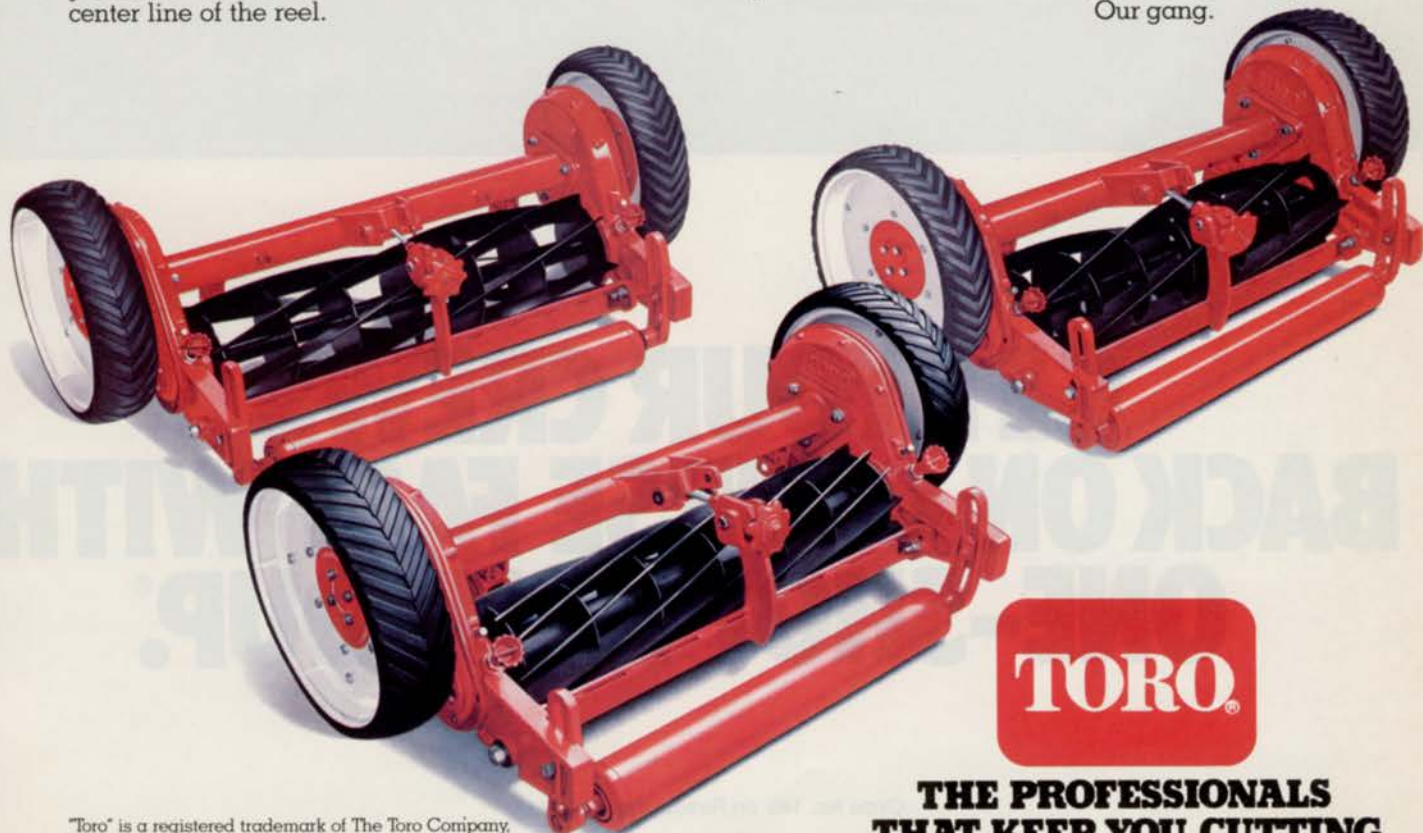
This cuts down on stragglers that can detract from the finished look of your turf.

All three were designed to discharge clippings in a high vertical arc, so they disperse and settle evenly. And all three reduce clippings accumulation and clumping, for the cleanest possible finish, even in wet grass.

In addition, we incorporated other great Toro features. Like our exclusive single knob bedknife-to-reel adjustment to maintain the quality of the cut. And seven spiders for increased durability. As well as Toro's proven gear drive for less downtime and fewer repairs.

Want to know more? Call your Toro distributor today. Ask him to tell you about the toughest gang on any turf:

Our gang.



TORO

**THE PROFESSIONALS
THAT KEEP YOU CUTTING.**

Toro is a registered trademark of The Toro Company, 8111 Lyndale Ave. So., Minneapolis, Minnesota 55420.

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APRIL 1985/WEEDS TREES & TURF 5



GET YOUR CREWS BACK ON COURSE FAST WITH ONE-SHOT ROUNDUP.[®]

Circle No. 140 on Reader Inquiry Card



With Roundup® herbicide, your crews will spend less time controlling weeds and more time keeping greens, fairways and other high-visibility areas up to par.

One-shot, versatile Roundup controls over 100 species of weeds, roots and all, so they won't grow back. That includes nuisance weeds like poison ivy, poison oak and kudzu. With one gallon of 2% spray solution, one man can treat 1,000 feet of fence line for less than \$2.00*. Or the areas around 30 trees for about a nickel apiece. You can get as much weed control with one treatment of Roundup as you would with up to 6 string trimmings over the course of a season.

Let the versatility of Roundup free your crews from time-consuming mechanical or hand weeding jobs.

AROUND THE COURSE	AROUND THE CLUBHOUSE	HIGH-VISIBILITY AREAS
bunkers rough fairways cart paths	tennis courts swimming pools pathways patios	parking lots entrances steps shrub beds

With Roundup along the edges of the rough areas, you'll improve the looks of your course, plus improve and maintain "speed of play." Players will spend less time hunting for balls lost in dense undergrowth.

More groundskeepers are finding that Roundup is helping to keep their courses looking their best and playing their best—because their crews are giving their best.

FOR A FREE ROUNDUP USAGE GUIDE,
CALL TOLL-FREE 800-621-5800.
IN ILLINOIS, 800-972-5858.

*Based on cost of Roundup alone to treat low-growing vegetation using flat fan nozzles.



Monsanto

GCSAA breaks attendance records in D.C.

The numbers tell the story for the Golf Course Superintendents Association of America's 56th International Golf Course Conference and Show in February in Washington D.C.

"I guess you could describe it as a smashing success. Or, how about a resounding success?" GCSAA publicist Clay Lloyd says.

Either way it was big. Real big.

Preliminary results show about 9,000 registrants (almost 1,000 more than the '84 conference in Las Vegas) and a significant jump in the number of exhibitors, again over the previous high set the year before in Las Vegas. Included in the 290 exhibitors in the most recent GCSAA trade show were 66 first timers.

One of those first-time exhibitors, Guy Atkisson of Dietrich's Tree Well, said traffic was steady and good even though his booth was located in an annex next to the main hall.

"The quality of the traffic through here was what impressed me," he said.

Bob Knocke of Griswold Controls, also in the annex, had a major problem—his equipment didn't arrive, but he still said traffic and interest was good.



Thongs await to tour the trade show floor.

Bob Speaker, western regional manager for Yamaha, had a front row seat as far as booth space. Located right at the main door, he said booth traffic was much better in D.C. than in

Las Vegas last year.

"We had a lot of interest in our new electric golf car," he said.

Charles Putnam of Weathermatic,
continued on page 12

INDUSTRY

NOR-AM buys Upjohn's plant health business

NOR-AM Chemical Company, marketers of Ureaform Powder Blue, Turcam, and Ficam, recently purchased the plant health business of The Upjohn Company, Kalamazoo, MI.

The major products included in the purchase are the Acti-dione line of fungicides for turfgrass, lawns, and ornamentals; Banol turf fungicide; Proxol insecticide; Enide pre-emergence herbicide; Botran fungicide; Collogo postemergent herbicide; SOK-BT biological insecticide; and Botec peanut seed protectant.

A joint announcement by Leo Ekins, president of NOR-AM, Wilmington, DE, and David Phillipson, vice president of the Agricultural Division of The Upjohn Company, Kalamazoo, MI, indicates the former Upjohn products will be marketed and distributed "in accordance with NOR-AM sales and marketing policies."

NOR-AM, a subsidiary of Schering

AG, a company headquartered in West Germany, manufactures and sells a wide variety of agrochemical, specialty chemical, industrial chemical, and animal health products.

The purchase price of the transaction was not disclosed by either NOR-AM or Upjohn.

INDUSTRY

GCSAA show brings luck to three

Some superintendents went home from the Golf Course Superintendents Association of America show a little richer after winning WEEDS TREES & TURF annual sweepstakes drawing held at the show in February.

George W. Cavanaugh of Bear Lanes Country Club in West Palm Beach, FL, pocketed \$1,000 after he submitted his name at the Rainbird booth. Joe Leopold of Tualatin Development, Portland, OR, won the \$500 second prize with an entry submitted at the Barebo booth and Harry Nichol of Burning Tree Country Club, Green-

wich, CT, took home \$250. His entry was submitted at the Irri-trol booth.

Our congratulations to all the winners and participating exhibitors at the GCSAA show.

INDUSTRY

Sale of Stauffer Chemical in works

Chesebrough-Pond, Inc., in an all-cash transaction that could amount to \$1.25 billion, is seeking to acquire Stauffer Chemical Company. Boards of both companies recently approved a plan for Chesebrough to purchase Stauffer common stock at \$28 per share.

Stauffer, headquartered in Westport, CT, makes and markets chemicals and chemical-related products including such Green Industry products as Betasan, a preemergence herbicide, Imidan, an insecticide for trees, Aspon, an insecticide for turf, and the nematocide Vapam.

"First of all, this is just a proposal at
continued on page 12

THREE TOOLS THAT WILL OPEN YOUR EYES

In operations such as seeding, fertilizing, or the application of liquid chemicals, accurate measurement is essential to minimizing waste and achieving quality results. Yet, most operators have been forced to run "blind" because of a lack of affordable, reliable instrumentation. Micro-Trak is changing that with a line of low cost monitors that provide a clear picture of the work performed.



FLOWTRAK™

SPRAYER MONITOR

Provides a direct readout of ground speed with tenth of a mile per hour accuracy, distance in feet, acres worked, gallons applied per acre and total gallons used. Includes stainless steel flowmeter.

\$595

CALC-AN-ACRE™

SPEED, AREA, AND DISTANCE MONITOR

A basic, very easy to use system that provides measurement of acres, MPH and feet.

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FLO-PRO™

MULTIPLE INPUT GALLON COUNTER

Monitors the flow of chemicals from up to three separate tanks at the same time. Features set keys and built-in relay for notifying the operator when a desired application volume is reached.

All systems feature easy push-button operation, an illuminated display and electronic memory for storing daily totals.



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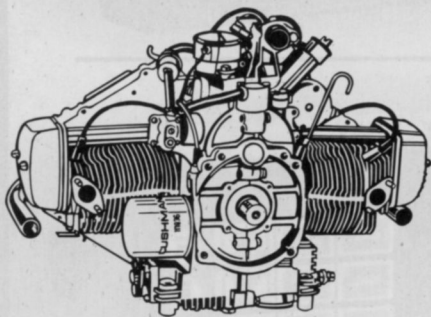
WHAT MAKES THE CUSHMAN TURF-CARE SYSTEM WORTH THE INVESTMENT:

Aerating, hauling, dumping, spraying, seeding, spreading and top dressing — one vehicle does the work of a fleet of machines.



The exclusive Cushman pin disconnect system lets you attach and remove accessories in minutes.

A NEW 22-HP ENGINE.



The Cushman Turf-Truckster™ is now equipped with a new 22-hp gas engine.

It gives you the power to haul a full load uphill, without straining. It maintains a sure, steady speed while you're spraying or spreading.

And it's built tough. The crankshaft is forged alloy steel. The cylinder heads are reinforced for extra strength under stress. And the hydraulic pump is mounted to the engine for better service life and smooth operation.

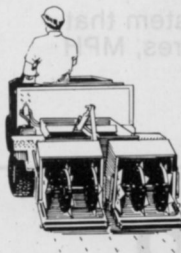
Team up the new 22-hp Turf-Truckster with any of the following accessories for a complete Turf-Care System.

THE AERATORS.

Because you have two types of turf to aerate, Cushman makes two aerator attachments for your Turf-Truckster.

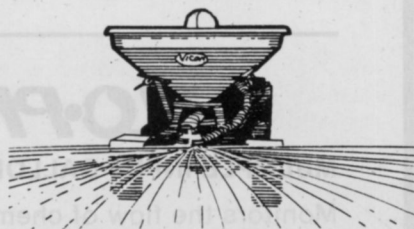
The Greensaver® is ideal for greens and other delicate areas . . . while the Quick Aerator makes short work of big jobs (it covers a 46" swath).

Both can be equipped with interchangeable coring or deep-slicing tines.

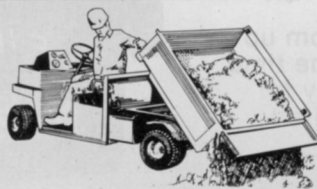


THE SPREADERS.

Two choices here, too. The 700-lb. capacity Viccon Spreader with a 45' swath. Or the Spreader/Seeder with a 300-lb. capacity. Both give you smooth, uniform spreading because application rates are controlled by the Turf-Truckster's ground speed governor.



THE DUMP BOXES.



Again, you have a choice! Our Short Box is a high quality dump box . . . and our Flatbed/Box converts from flatbed carrier to dump box just by adding the bolt-on sides and tailgate. Both can be hydraulically dumped right from the driver's seat.

THE SPRAYERS.

Choose the capacity you need . . . our big 150-gallon sprayer or 100-gallon model. Both give you uniform spraying controlled by the Turf-Truckster's ground speed governor.

THE TOP DRESSER.

Everything from rock salt to powdered fertilizer can be uniformly spread across a 31½" swath at a rate of up to 220' per minute.



A FREE DEMONSTRATION

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