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# Dursban can make call-backs a thing of the past.

There's a phone call you shouldn't have to take ever again. The one that calls you back to redo a lawn or turf job. The one that costs you dearly in labor, time and gasoline. Not to mention the highest cost of all — the unhappy customer.

You can put all that behind you by using DURSBAN\* insecticides. Because once you use DURSBAN you can be sure you're getting up to eight weeks of tough, broad spectrum insect control.

You can count on DURSBAN 2E and double-strength 4E to knock out the toughest and most persistent outdoor insects. DURSBAN gets them all... sod webworms, armyworms, chiggers, chinch bugs, clover mites, crickets, ants, grasshoppers, mosquitoes, grubs, turfgrass weevils, billbugs and more — the first time around. It's hard

to find an insect that DURSBAN insecticide won't control.

Unlike slower acting insecticides, DURSBAN goes to work as soon as applied...spring, summer or fall. And for as little as \$3.50 per 10,000 square feet of lawn or turf, it's a lot cheaper than the cost of call-backs.

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Give your Dow distributor a call for DURSBAN insecticide. Also ask about the "DURSBAN delivers the goods" incentive program. Be sure to read and follow all label directions and precautions. Agricultural Products Department, Midland, Michigan 48640.

## **DURSBAN**

**Does it right the first time.**



Dow Chemical U.S.A.

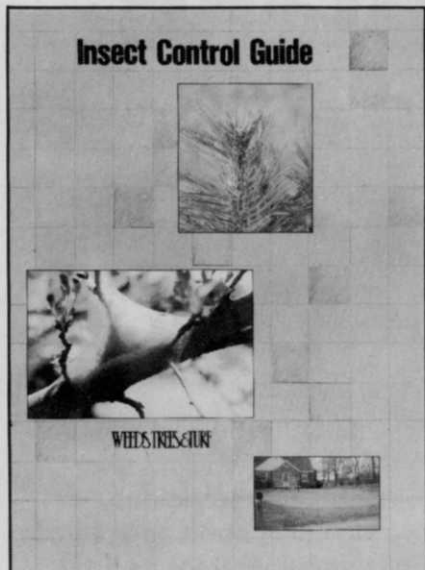
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3906



Cover: The idea of target golf is to lower maintenance costs, but some question if less fairway means less golfers. See story on page 20.

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Landscape and turf insect control, see page 27.



Duke University's landscape program, see page 64.



Detroit area school district controls costs, see page 70.

## 20 Target Golf American Style

Golf course architects see target golf as a partial return to old style standards practiced in the Links Land. Superintendents don't see a big difference in maintenance costs and some owners worry about making their courses too hard.

## 27 1983 Insect Control Guide

The first edition of an annual project to prepare landscape managers for insect attack. Emphasis is on control by season of each major insect pest. Quiz yourself on insect recognition. Keep this magazine for reference this season.

## 60 Schools Wrestle Eroding budgets

Falling enrollment and increased demand for recreational fields have school landscape managers searching for ways to stretch their budgets. An equipment solution is hoped for by survey respondents.

## 64 Duke's Love Asks Student Support

Duke University Operations Manager David Love takes his case for sharp landscaping to students for support and coordination. A computer helps Love keep track of 900 acres, including the campus, a medical center, and a golf course.

## 70 From Buses to Baselines

Detroit area school district places all property management in the hands of a grandmother. Faye Bird uses old school buses to carry landscape equipment.

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# Nitroform<sup>®</sup> paints a pretty picture



Nitroform<sup>®</sup> provides a consistent 38% nitrogen that's released by soil bacteria slowly and predictably — just when it is most needed to make turf and ornamentals green and healthy. And Nitroform continues this slow, steady release to sustain growth for over six months (even during periods of sparse rainfall).

You'll find Nitroform nonburning, nonstreaking, nonleaching. It's easy mixing and clean handling, too. This versatile nitrogen source is available in Blue Chip<sup>®</sup> for dry applications, Powder Blue<sup>™</sup> for liquid use, and it can be mixed and applied with insecticides and fungicides.

When you're buying a complete fertilizer be sure to check the label to see that it contains Nitroform, the most efficient source of Water Insoluble Nitrogen.

Nitroform can do beautiful things for your business.



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Circle No. 102 on Reader Inquiry Card

# **30-day control of dollar spot, fusarium blight, and anthracnose is no longer a small miracle.**



# With BAYLETON, it's par for the course.



When it comes to these common fungus diseases, <sup>®</sup>BAYLETON Fungicide is uncommonly effective.

Apply BAYLETON according to label directions and you get lasting control of dollar spot, fusarium blight, and anthracnose. Control that lasts a full 30 days, sometimes longer.

BAYLETON is more than a contact fungicide, more than a systemic fungicide with only foliar activity. With BAYLETON, you get contact action plus systemic action with both foliar and root uptake. The result is unequalled staying power and the broadest spectrum of control available in one product.

BAYLETON not only gives

you 30-day control of dollar spot, fusarium blight, and anthracnose, but also combats brown patch, copper spot, powdery

mildew, red thread, rusts, smuts poa annua decline, pink snow mold, and grey snow mold.

With its excellent efficacy and lasting residual action, BAYLETON requires fewer applications and is more economical than ordinary fungicides. Your turf chemicals distributor has it.



BAYLETON is a Reg. TM of the Parent Company of Farbentfabriken Bayer GmbH, Leverkusen.



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# OUTLOOK

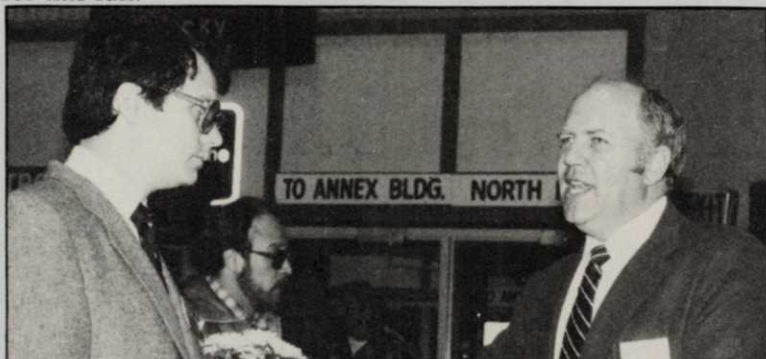
By Bruce F. Shank, Executive Editor

## Iron country restarts furnaces to capture commercial turf buyers

There is new life in the turf equipment business as I discovered on a recent trip to Iron Country. Distributors are restocking, manufacturers have new models in the testing stage, and turf managers are looking.

What is more, one manufacturer, not currently serving the commercial turf market, is about to announce a complete line of turf equipment this fall. I promised I wouldn't tell you who. And, two more companies would jump in if the distributor network wasn't so complicated.

Don't assume Jacobsen and Toro will get caught by surprise. Their engineers are busy with new models. More importantly, they are going a step beyond to provide new technology for the turf equipment market. Roger Thomas, vice president of Jacobsen, told me, "What we have coming is a unique type of mower technology, one which will be ours, not the same as every other manufacturer." Toro has sold distributors of new entries for this fall.



Ed Devinger, turf equipment sales manager for Reinders, updates the editor during Reinders Show in Waukesha.

Ransomes and its Bobcat line are aggressively attacking the golf and municipal markets. Sensation has new energy since Gilson took it over recently.

I can't tell you everything now. You'll have to read the whole story in June.

Finally, I'd like to thank Bob Reinders and Ed Devinger of Reinders Turf Equipment of Milwaukee for helping me find my way through part of Iron Country. Their enthusiasm matches that of the manufacturers. Something must be going right for them and as a result, for the turf industry as a whole.

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# Hydro-Wet<sup>®</sup> gives you wetter better water for cleaner greener turf.

Amazing Hydro-Wet Turf Wetting Agent actually increases the efficiency of water and gives it the down-deep penetrating power essential to lush, green turf.

By chemically modifying water's surface tension, safe, simple-to-use Hydro-Wet enhances and increases water's ability to penetrate hard soil or dense thatch. Less water gets more results because it works harder.

Hydro-Wet helps eliminate brown or bare spots, stops wilting, and promotes penetration on tricky terrain, even slopes. There are no more puddles or standing water, no wasteful moisture loss through evaporation. And by increasing the efficiency of water, Hydro-Wet increases turf vigor. It not only looks better, but is better able to resist damaging fungus.

Hydro-Wet is ideal for greens, fairways, roughs—anywhere you use water. Just mix with water according to label directions, spray

turf, then water. As little as a pint of Hydro-Wet will improve water penetration over an area of 1000 sq. ft. Usually, one or two applications a year does the job.

For cleaner greener turf, you need wetter better water. You need Hydro-Wet. Ask your turf chemicals supplier for genuine Hydro-Wet by name.



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# STOCKY NEW

## NEW 1000 SERIES DIESELS

### Tough new tractors with a combination of features you can't get anywhere else

Whatever the work you've got to do—around the home, on the farm or at the construction site—one of these new Ford 1000 Series diesels can handle it. Ford offers a wider choice of under-30 horsepower diesel tractors than any other American tractor company.

**New 3-cylinder diesels** power five of the six new models. Your choice of 11.5, 13.5, 16.5, 19.5, 23.5 and 28.5 PTO

horsepower.\* You get excellent fuel economy, and all the power you need, without paying for power you'll never use.

**Exclusive Synchronized Manual Shuttle Transmission** speeds work on many types of jobs. Available on 16.5 horsepower and larger models, this slick-shifting optional transmission lets you synchro-shift from forward to reverse with a simple straight-throw movement of the steering column-mounted range lever.

**Hydrostatic drive.** Here is the ideal transmission for compact mowing jobs. This optional drive for the 11.5 and 13.5 horsepower models lets you control speed and direction with simple foot pedal action. No need to clutch or shift gears.



# FORDS!

**Full-time live hydraulics.** The new 1000 Series tractors give you easy fingertip control of mounted farming or grounds maintenance implements... and big flow capacity for loaders and other hydraulic equipment.

**Four-wheel traction.** Every 1000 Series tractor is available with an optional front-wheel drive system that cuts wheel slip, increases drawbar horsepower and reduces fuel consumption in tough working conditions.

**Implements to match.** There's a full complement of more than 50 attachments, implements and equipment to handle all kinds of jobs—anywhere there's work to be done.

**Ford parts and service backup.** Your local Ford Tractor dealer is a full-time tractor dealer. He maintains a large parts inventory and his mechanics have the experience, special tools, and training to service tractors quickly and correctly.

If you're looking for a tractor that's compact in size and big on work... check out the new 1000 Series tractors, at your Ford Tractor dealer.

*\*Manufacturer's estimate.*

*Model 1910, 28.5 hp, not available until Fall, 1983.*

FORD TRACTORS



Circle No. 120 on Reader Inquiry Card

## STATE LAW

### Washington fights sprayer discrimination

Two democratic state representatives from Seattle are causing Washington state certified public applicators to band together to fight against legislative discrimination.

John Behey, president of Eastside Spray Service in Seattle told *Weeds*

*Trees & Turf*, a change in the pesticide license law being considered by the state Committee on Environmental Affairs could require certified public applicators to notify residents of property adjacent to or within 100 feet of spraying in advance. "More than

25,000 applications per year would be effected by such a change in the law," Behey said. The change would exempt farmers, pest control operators, and government applicators, thus selecting out certified public applicators for restrictions. Private gardeners who spray less than 12 feet high and do not spend a major part of their time making pesticide applications are also exempt.

"We use proportion injectors for our lawn care trucks and may put down four chemicals at the same time," said Behey. "According to the law, we have to notify each adjacent property owner of the characteristics of all four pesticides since our applicators make the determination of what is needed during the call."

Behey is also 2nd vice president of the Washington chapter of the International Pesticide Applicators Association (IPAA). IPAA and applicators from across the state travelled to Seattle for the hearings. "We had 125 people at the first hearing wearing badges, but only two got to speak. The second hearing we had more and were allowed to speak for nearly two hours. The second hearing was a success. If we get it moved to the Agriculture Committee where it belongs we will have won. The Ag department feels the present law is sufficient and funding is the real problem since the state can only afford four enforcement officers currently."

The problem started when a yard next to a school was sprayed and children attracted to the area ran through the treated grass. Two representatives heard from concerned parents and the whole affair started to blow up. "By banding together, we have nearly put the issue back into perspective," says Behey. "It's a totally new experience for us and everyone should be prepared for such an uprising."

Behey says they will take the issue to court if it is passed by both houses. "It's unconstitutional to legislate just certified public applicators."

**Update—The controversial pre-notification bill in the Washington state Environmental Affairs Committee was killed after a massive effort by pesticide applicators and various other groups. It never got out of committee according to Bill Harland, president of IPAA.**



A worldwide seed production and marketing agreement was recently signed by the Jacklin family of Jacklin Seed Co. and representatives of Japan's Snow Brand Seed Co.

## MEETINGS

### Sod goes international at ASPA summer show

Sod producers from Australia, Israel, the UK and other countries are expected to attend the First International Meeting, the day before the American Sod Producers Association meeting in Atlantic City in July.

A panel of sod growers outside North America will speak, as well as A.J. Turgeon from Texas A&M,

Richard Hurley from Lofts Seed Company, and Henry Indyk from Cook College. Gerry Brouwer, president of Brouwer Turf Equipment Ltd., Keswick, Ontario, Canada, is chairman of the international committee.

"We are testing the waters," says Bob Garey, executive director of ASPA. "In previous years, foreign sod growers have attended our field days and returned to start up associations in their countries. Since they are not competitors, U.S. growers talk openly with the visitors. We may have an international meeting every other year or so."

## SEED

### Manhattan II ryegrass is now on the market

The concerted efforts of turf seed breeders and Turf Seed Inc. and Whitney Dickinson Seed Co. have resulted in the release of a new generation Manhattan perennial ryegrass called Manhattan II. Bill Rose of Turf Seed and Drew Kinder of Whitney Dickinson made the announcement at the International Turfgrass Conference in Atlanta in February.

The improvement of Manhattan to increase disease resistance was carried

out jointly by Bill Meyer of Pure Seed Testing in Hubbard, OR, and Dr. Reed Funk of Rutgers University in New Jersey.

Limited supplies of Manhattan II are now available from seed distributors and full availability will begin this fall.

Manhattan was not protected by the Plant Variety Protection Act since it was released prior to the act. Manhattan II is patented under this law assuring buyers of pure Manhattan II in their bag. Manhattan was found in Central Park in New York City. Manhattan II was selected from thousands of crosses from Manhattan and other select perennial ryegrasses in testing.