



With MAINTAIN[®] CF 125, you can get along without so much mowing, pruning, trimming and edging.

Because practically everything MAINTAIN touches grows slower.

Just how much slower depends on what the weather does to your greenery and what kind of greenery it is.

For example, 200 acres of grassed median in Pennsylvania were treated with MAINTAIN early last spring, just after the first mowing. The grass was cut once more before Labor Day, and that was it. MAINTAIN saved the State Department of Transportation approximately 5 mowings that year.

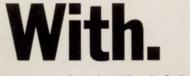
What's more, MAINTAIN works on trees, shrubs and vines as well as grasses.

While it slows down the growth of turf, it practically stops broadleaf weeds in their tracks. Which, naturally improves the quality of the turf, as well as the effectiveness of your maintenance program.

And MAINTAIN can be sprayed where machinery can't go. Up steep slopes. Around guard rails. Along fences.

At Washington National Airport in Washington, D.C., MAINTAIN was used on a dangerously steep bank between two levels of the airport. MAINTAIN saved the maintenance department 5 mowings, and the chance of injuries was reduced immeasurably because the equipment was not used as often.

Of course, the best way to find out what MAINTAIN can do for you is to try it. And the best way to do that is to get in touch with your U.S. Borax distributor or your nearest U.S. Borax office: 234 Eglinton Ave., East Toronto 315, Ontario, Canada 1290 Avenue of the Americas, N.Y., N.Y. 10019 1700 East Sherwin Avenue, Des Plaines, Illinois 60018 300 Interstate N. Parkway, Atlanta, Georgia 30339 3075 Wilshire Boulevard, Los Angeles, Calif. 90010



For More Details Circle (109) on Reply Card



Without.

Aerial applicators: want to take off with this kind of drift control?

You can. Just use Lo-Drift[™] spray additive the next time you fly on an Amchem herbicide.

What you see here ground-applied is what you'll get airborne a major reduction of fines that can cause drift problems. Instead, the spray is made up of large, heavy droplets that fall faster, stay intact, and land where you want them. And stick better, too. Because Lo-Drift not only increases droplet size, it helps them to adhere to foliage.

Lo-Drift mixes readily and requires no special nozzles or mixing/ spraying equipment. It won't corrode equipment, and clean-up is simple using just water.

Chemical cost? As little as a penny a gallon of mix. Is there a more economical way to help prevent drift problems from shooting you down? Ask your dealer for a Lo-Drift pamphlet. Or write: Marketing Manager, Industrial Products, Amchem Products, Inc., Ambler, Pennsylvania 19002.





A RORER AMCHEM COMPANY

AMCHEM PRODUCTS INC. AMBLER PA



James A. Sampl

Roger E. Youn Assistant Editor

Hugh Chroniste Presiden

Arthur V. Edward Publishe

Director of Circulation

ADVERTISING SERVICE

9800 Detroit Ave. Cleveland, Ohio 44103 Tel. 216+651-550

Headquarters Cleveland, Ohio 44102

Ext. 27

Advertising Production Manager

Volume 13, No. 3

Serving The Green Industry"	erving The Green Ind	ustry"	
-----------------------------	----------------------	--------	--

®	Contingency Use of DDT Granted 14
	A WTT special news feature. Russell E. Train, administrator of EPA, grants an emergency exemption for DDT in the states of Oregon,
March, 1974	Idaho and Washington.
	The Energy Crisis And The Turf Industry 16
mes A. Sample Editor	A new twist in the present energy situation. Dr. James R. Watson of Toro Looks at the beneficial effects of better maintenance and more utilization of turf facilities.
	Nematode Control Pays 18
Roger E. Yount ssistant Editor	A study of the effect of nematode control on bentgrass putting greens.
	Turfgrass: The People Pleaser
	The Navy's Role In Weed Control
lugh Chronister President	The military way to solve weed problems and unique biological problems present a challenge to D. R. Estes, special assistant for Applied Biology, Department of the Navy.
	Sprinkler Irrigation Association Report
hur V. Edwards Publisher	Rush Hour On The Golf Course 30
	The increase of golfing pressure puts a premium on turf manage- ment and the organization of maintenance work.
D. D. Langley of Circulation	Target: Railroad Weeds
	Trackside vegetation offers many opportunities for the custom applicator. Richard W. Fields explores a number of possibilities of getting onto the business.
	Midwest Regional Turf Conference 40
	Netting for Sod: Reality From Imagination
SING SERVICES	Sod crop turnaround time may be cut in half by using plastic netting to anchor the turf roots. Cal-Turf, California's largest commercial sod producer, researches the practical aspects of this industry inno- vation.
Darrell Gilbert	
ction Manager	Editorial 6 Meeting Dates 67 Government News/Business 10 New Products 68-69
O Detroit Ave.,	Book Report 10 To Trouble to To
d, Ohio 44102 216+651-5500	Letters to the Editor 13 Green Industry Newsmakers 32 Classifieds 75-76
	Sod Industry Section 54 Advertisers Index 76

The Cover

Spring is the time to initiate spraying programs. Weeds, trees, and turf require care. Our Cover shows tree insect control with a truck-mounted spray rig manufactured by Lockwood.

WEEDS TREES and TURF is published monthly by The Harvest Publishing Company, subsidiary of Harcourt Brace Jovanovich, Inc. Executive, editorial headquarters: 9800 Detroit Ave., Cleveland, Ohio 44102.

Single Copy Price: \$1.00 for current and all back issues. Foreign \$1.50.

Subscription Rates: WEEDS TREES AND TURF is mailed free, within the U.S. and possessions and Can-ada, to qualified persons engaged in the vegetation care industry and related fields in controlled cir-culation categories. Non-qualified subscriptions in the U.S. and Canada are \$10.00 per year; other countries, \$12.00 per year. Controlled circulation postage paid at Fostoria, Ohio 44830.

Copyright © 1974 by the Harvest Publishing Company

WABP

Member American Business Press Business Publications Audit



New York, New York 10017 757 Third Ave./212+421-1350 Russell Bandy

ADVERTISING SALES OFFICES

9800 Detroit Ave./216+651-5500

For More Details On U.S. Borax Circle (109) On Reply Card For More Details On Preceding Page Circle (142) On Reply Card

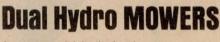
WEEDS TREES and TURF

Take the first step toward more efficient grounds maintenance. Send for your brochure now!



Not even the Red Baron could out-maneuver a HUSTLER!





for commercial, institutional and governmental groundskeeping

NEW—for Dikes, Cloverleaf or Slope Maintenance

HILLSIDE MODEL 360 has all the HUSTLER features plus an operator platform that is selfleveling. Even on a 30° slope both drive wheels have equal weight distribution for increased side-hill stability. A separate hydraulic mechanism keeps engine, canopy and rider level. Besides the flail mower, a six-foot rotary and other options are available.



You may already be aware of our HUSTLER mower-how it practically eliminates hand trimming because of its outstanding maneuvering ability. But you need more facts about this unique machine in order to judge its possibilities for the work you have to do.

In this brochure you can see the machine mowing around trees, under bushes and along walls. You can study a diagram showing how our dual hydro transmission gives independent control to each drive wheel. We tell you a HUSTLER can do the work of three mowers. We say it takes one-third the time you may now be spending with more pieces of equipment.

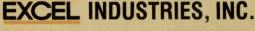
But all we hope is that this brochure will help you make the decision for a demonstration. You have to experience the sensation of operating a HUSTLER, and test its capabilities. See how its mowing deck works up close to obstacles. You can convince yourself it will outperform any other

equipment you may be considering.



So take the first step. Send now for this brochure, especially if you're faced with a bigger work load or a smaller work force. We'll send along the name of your nearest distributor who will be glad to arrange a demonstration. HUSTLER approved under Federal GSA contract (GS-OOS-05347).

For More Details Circle (115) on Reply Card Phone 316-327-4911



Box 385, Hesston, Kansas 67062

Editorial

Where are they now?

Where are the leaders whose energetic efforts resulted in the energy crisis. They are the environmentalists who clearly campaigned against the use of lead in gasoline because it produced harmful emissions. Their efforts brought about industry upheaval and knocking engines. They are the ones who monitored discharges from factory stacks and brought suit after suit against industry. They are the ones who forced these factories to convert from coal to less polluting fuel sources such as oil and gas.

Where are the leaders who so violently upheld the cause to clean up our rivers and lakes. They are the alarmists who reported increasing levels of mercury in our waters and brought on the mercury scare.

Where are the leaders who led the fight to ban all pesticides and their uses. They are the instant ecologists who entered the learning institutions and convinced unknowing students that all environmental protection chemicals were unsafe. They are the ones who put the doubt in teachers' minds about the quality of our American food supply. It was they who banned all uses of DDT because it alledgedly multiplied in the food chain. The net result has been devestation of forests by gypsy and tussock moth and the loss of thousands

Where Are They Now?

of acres of timber for lumber. They are the ones who magically transformed a gullible public into believing that organically grown crops (free of pesticides) were better for your health. They are the ones who failed to tell the consumer that a great many crop protection chemicals are organic based compounds. Their diligent efforts brought sweeping government controls on the registration, sale, application, use and disposal of crop and turf protection chemicals. These absentees cleverly instilled in the consumer that the farmer, applicator, weed control professional, arborist — yes, even our universities — deceived the public for wanton gain.

Where are they now? We followed their findings. Many of their points were good and we supported them. Government agencies, pollution boards and more to record, monitor, meter and regulate were created. The task of environment preservation was challenging and to be against it was like being against motherhood. Who could argue with it? Yet this implosion of environmental awareness, once it began, has been conducted from the rear. Our current situation forces us to seek for leadership to drive this gigantic machine out of the present energy rut. Leaders are needed to chart the course of the future. The job is only partially completed. Where are they now?



For More Details Circle (126) on Reply Card

The very latest in go carts.

Just what you need for carting, for hauling, for getting personnel from one work area to another.

Ray McMicken (with B. Hayman Company in Santa Fe Springs, California) is one of us 74 Jacobsen Distributors who can tell you all about these new hauling vehicles.

Take the big, one-ton capacity UV4 shown up front. It lets you haul dirt, sand, fertilizers or chemicals to anywhere you want to put it. And that means anywhere because it's an articulated 4-wheel drive vehicle.

Also, it features a hydraulic dump, a rugged torque converter transmission with two forward and one reverse speed including 20 MPH transport, and powerful hydraulic brakes. It even has an hour meter, along with other things you should know about, like top and bottom tailgate hinges.

For smaller loads like tools, equipment and personnel, the Cruiser 2 has a payload of 1/2 ton. It seats two and goes between work areas as fast as 12.5 MPH.

It also has a torque converter transmission with two forward and one reverse speed, hydraulic brakes, plus a ground-hugging design for safety. Ask your Jacobsen Distributor for a

Ask your Jacobsen Distributor for a demonstration at your place. He'll show you vehicles that have real get-up-and-go. If you're not convinced, he'll get up

and go. Your Jacobsen Distributors.

Before we sell it, we buy it.

For the name of the distributor near you, write: Jacobsen Turf Distributor Directory, 1721 Packard Avenue, Racine, Wisconsin 53403.



The Environmental Protection Agency issued notice in early March for public comment on the application of 2,4-D to control water hyacinths on portions of the St. John's River in Fla. Applicator of the herbicide is the U. S. Army Corps of Engineers. The Corps has applied for a specific exemption of the Federal pesticides law to use the herbicide. Presently, 2,4-D is not registered by EPA for use in moving waters. The exemption applied for by the Corps appears under Section 18 of FIFRA as amended, which permits state and Federal agencies to employ unregistered uses of pesticides under emergency conditions.

<u>Ciba-Geigy Corporation</u> has tendered an offer to purchase at \$17 cash per share net all available shares of common stock of Funk Seeds International, Inc., provided at least a majority of outstanding shares are tendered. Funk Seeds, a major producer and marketer of seed corn and other seed, has announced the tender offer would be mailed to the stockholders. No recommendations by the board of directors of Funks is being made to the stockholders.

Dateline, March 12, 1974: Attorney Bill Harding, counsel for the American Sod Producers Association, has discovered a small coup at work in the Federal Energy Office. Energy Czar Simon's men are quietly revising the definition of "agricultural production." <u>Tentative revisions do not include sod production or horticulture</u>! The result will be that sod producers and those in a horticultural related business would not be entitled to "fuel for 100% of current needs." ASPA executive secretary Bob Garey recommends calling or writing your U. S. senator or representative about the "proposed" change in definition.

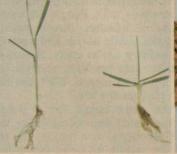
EPA has just published proposed standards describing the types of knowledge that pesticide applicators will be expected to have in order to qualify as certified applicators. Originally scheduled to be published about six months ago, the standards have been the subject of much controversy and discussion. Basically, the standards apply to private and commercial applicators. Neither will be required to have completed any particular level of formal education. EPA has proposed, however, the commercial applicators be required to pass written exams. Private applicators would have to show that they can read and understand pesticide labels. This may be no small feat, considering the level of understanding to many labels is well above that of a high school student.

Get set for another round on fuel...this time from the folks who make additives. EPA has proposed regulations (Federal) to require registration of fuels and fuel additives. Purpose says EPA is to establish procedures to obtain basic information about fuels and fuel additives. This info is needed to determine the effects which they, or their combustion products, may have on emission control devices (particularly catalytic converters) or on the public health or welfare. The muscle behind the regulations, if approved, would prohibit the sale, or introduction into commerce, of fuels or fuel additives designated by EPA. Public comment on the proposed regulation is invited. Write to: Office of Fuel and Fuel Additive Registration, EPA, Research Triangle Park, N. C. 27711. Oh yes, submit comments in triplicate.

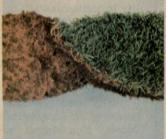
Fylking-outstanding as its name!

mixer in any lawn seed mixture, exceptional in producing a thick turf. The dense rhizomatous textured Fylking has greater disease resistance greener in summer, stays green longer into fall. Can be cut low as ¾ inch (even ½ inch) and Check tests shown below





1. Comparison of Fylking (right) with another elite bluegrass plant.



2. Cross section shows thick, luxuriant turf, fine leaf texture and brilliant green.



3. 11-day seedling comparison Fylking and another elite Kentucky bluegrass. Another fine product of Jacklin Seed Company



- For More Details Circle (110) on Reply Card
- other elite bluegrass.

Our happiest M-437 Trencher customers are those who weren't Vermeer M-437 customers before!

Sure, it sounds strange . . . but anyone who has ever bought multi-purpose trenchers before, knows where the profit and loss is made: in the shop. And that's why "The Diggin' Dutchman's" dependable M-437 looks so much better on the rebound. Where's the difference? Machine weight and stability have a lot to do with it; but also compare chain strength, positive chain drive and center-pivot articulation . . . plus a whole list of protection-

engineered features that many never considered or took time to design. Vermeer craftsmanship? After 25 years of trenching and underground experience on the job, we'd like to think so. Next time compare . . . you'll be surprised. You may even be shocked!

Our 25th Year

THE DIGGIN'

DUTCHMAN

VERMEER TRENCHER-PLOW DIVISION

PELLA, IOWA 50219

Green Industry Book Report

The DDT Myth: Triumph of the Amateurs, by Rita Gray Beatty. Published by John Day Company, New York, New York.

Dichlorodiphenyltrichloroethane. Or DDT. You know what it is. You've heard about it. But chances are your information is based on claims by uninformed or misinformed overnight specialists.

Finally, a book has been written presenting documented evidence, pro and con, on the real story behind the ban on DDT. Rita Gray Beatty traces the history of DDT from Paul Muller, recipient of the 1948 Nobel Prize for his discovery of the lifesaving effect of DDT, to the June, 1972 ban by William Ruckleshaus and his Environmental Protection Agency. With a wealth of quotes and references, the 200-page, \$3.95 paperback book points out the strengths and weaknesses in modern pest control practices.

Beatty claims the chlorinated hydracarbon we call DDT, the chemical that has caused a wave of passions and borne such grave implications for the future of mankind, has saved more lives than penicillin. Her claim is based on the control of the anopheles mosquito, carrier of malaria parasites, by the World Health Organization. Malaria is still the number one killer of mankind.

Insects, with their amazing adaptability, have contested our mastery of nature from day one. According to Dr. S.A. Forbes, entomologist, "Insects had, . . . all the advantages of a possession of the field when the contest began, and they have disputed every step of our invasion of their original domain so persistently and so successfully that we can scarcely flatter ourselves that we have gained any very important advantage over them . . . "

Beatty presents a sound case for the control of the gypsy and tussock moth with DDT. She documents case after case of uncontrollable insect damage to forests and our lack of economical chemical control. "The farmer like the forester, has many chemical pesticides available to hum. He may use them if they will control the damaging insects on that crop and if they are economical enough to leave him a reasonable profit. . . A safe, inexpensive, long lasting pesticide can spell the difference between a marketable crop sold at a profit or a loss."

One question reoccurs throughout the book: How can we ban the use of DDT when there is no equivalent substitute? For over ten years, false prophets, overnight ecologists and environmental alarmists have blamed DDT for crimes ranging from endangering wildlife to contamination of mother's milk. People are dying world-wide from insect-borne diseases, insects ravage our forests and crops and the public health and agricultural wealth of our own country are at stake. Scientists have developed no effective, safe pesticide to rival the success of DDT and yet until last month, DDT use has been forbidden in every state in the US.

Beatty also rebukes the news media for a strong tendency to accentuate the "bad" and to minimize the "good." She blames the emotional assertations in the press for misinforming the public and causing unfair pressure to ban DDT. She urges reasonable rather than emotional legislation regarding agricultural chemicals. She wrote a book that represents a plea for sanity, prudence and proper perspective on the part of all of us.

For More Details Circle (124) on Reply Card