

**How to
get better
turf.**

With Turf CareTM products from Diamond Shamrock.

As a golf superintendent, commercial or lawn care specialist, nurseryman or sod grower, you want the most healthy and most beautiful turf and ornamentals your expertise and experience can deliver. You believe in your cultural program for one reason only. It works.

And that's why Diamond Shamrock quality Turf Care products should be a basic part of your total program. Each is proven effective. Formulated for superior performance in the control of diseases and weeds on a variety of grasses and ornamentals.

So it's no wonder that more and more turf professionals are turning to the Diamond Shamrock line of Turf Care products. Only the best can give you better turf season after season.

Daconil 2787[®]. The product of choice among turf specialists.

A time-tested broad spectrum fungicide that provides unsurpassed control of 9 diseases in turf including dollar spot, brown patch and Helminthosporium, 7 diseases in conifers plus commonly occurring diseases on 29 ornamentals.

You can apply Daconil 2787 flowable fungicide at recommended rates on many grass species and varieties and be assured of excellent turf tolerance even during hot, humid weather. And in 15 years of continuous use, resistance has never been documented.

With proven residual effectiveness plus a built-in surfactant, Daconil 2787 is economical to use in a full season program.

And Daconil 2787 is easy to handle because it flows so smoothly and disperses so quickly.

For golf greens, tees, fairways and ornamental turf-grasses as well as certain ornamentals, you can't buy better disease control than Daconil 2787. (Also available in wettable powder formulation.)

Dacamine[®] 360D. A new formulation for greater killing action than ordinary 2,4-D. Dacamine 360D postemergence herbicide is a highly effective formulation of 2,4-D that provides broad spectrum control on more than 70 tough perennials, especially dandelions.

Dacamine 360D is an oil soluble formulation which penetrates weed leaves and translocates to the root system of the weed, killing the plant where it lives. Virtually eliminating the possibility of regrowth.

What's more, Dacamine 360D is non-volatile so it won't vaporize

even in hot weather. Once applied, there is no risk of injury to nearby ornamentals due to vapor action.

Plus, it's compatible with nitrogen solutions and that can save you time and money too.

So if you want superior killing action without volatility to stop over 70 broadleaf weeds once and for all, get Dacamine 360D.



MCPP + 2,4-D Amine (1 Plus 1). A new product for excellent weed kill that's economical and convenient.

Designed in a packaged mix, this new combination of MCPP and 2,4-D phenoxy acids is formulated for use on turf and golf course fairways.

MCPP + 2,4-D Amine (1 Plus 1) delivers effective control of hard-to-kill and common broadleaf weeds with better economy than the other leading postemergence herbicide.

It's ideal for early season weed control on established turf because it provides first rate killing power with gentleness to most tender grasses. And it can be applied around trees without risk of root injury.

MCPP + 2,4-D Amine (1 Plus 1). The broad spectrum herbicide that's tough on weeds, tender on grass and more economical.

MCPP-K-4. Early control of tough viney weeds.

A postemergence phenoxy herbicide that provides first rate, early control

of hard-to-kill viney weeds that 2,4-D formulations can miss.

MCPP-K-4 is especially effective against clover, chickweed and plantain which makes it an excellent herbicide for both lawns and golf courses.

What's more, MCPP-K-4 is gentle on tender grass.

For dependable results, make it MCPP-K-4.

Amine 4D. A selective postemergence herbicide.

This phenoxy formulation combines effectiveness and economy for control of broadleaf weeds in lawns, golf courses and other areas.

And because Amine 4D is low in volatility, it can be applied where susceptible plants are nearby.

Amine 4D is a useful weapon in your war against broadleaf weeds.

Daconate® 6 and Bueno® 6 postemergent herbicides.

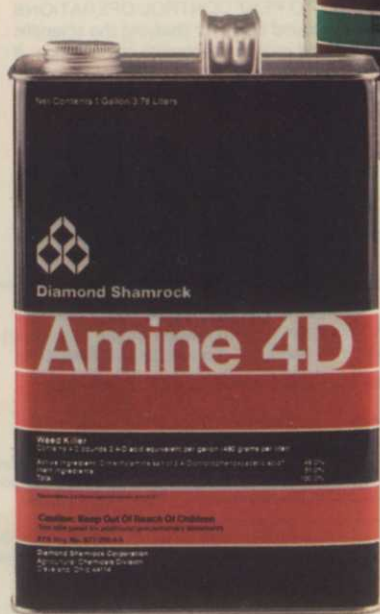
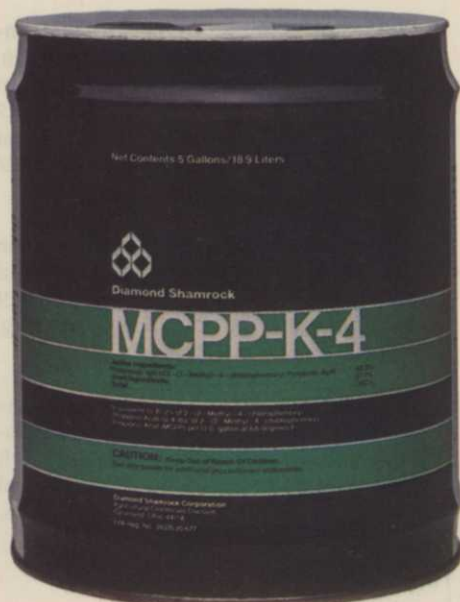
Proven performers against tough weeds such as nutsedge, chickweed, wood sorrel and a variety of grassy weeds.

Both are liquid, ready-to-use broad spectrum herbicides that are formulated with surfactants for uniform wetting. (Bueno 6 is sold only in western states for use on turf.)

Get the right tools for your cultural program.

For first rate disease and weed control, your Diamond Shamrock distributor has the proven products that get the job done.

Order now from our full line of Turf Care products. There's no better way to get healthier, more beautiful turf.



Diamond Shamrock
Agricultural Chemicals Division
Diamond Shamrock Corporation
1100 Superior Avenue
Cleveland, Ohio 44114

Always follow label directions carefully when using turf chemicals.

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.**

Landscape Design Short Course for Residential Properties, Cooperative Extension Service, Ohio State University, Wooster, OH, **Dec. 14-16.** Contact Fred K. Buscher, Area Extension Agent, Landscape Horticulture, OARDC, Administration Building, Wooster, OH 44691, 216/262-8176.

Twenty-Second Annual Illinois Turfgrass Conference and Tradeshow, Prairie Capital Convention Center, Springfield, IL, **Dec. 15-17.** Contact Dr. Thomas Fermanian, 1707 Orchard St., Urbana, IL 61801, 217/333-7847.

Turfgrass Disease Minicourse, Blacksburg, VA, **Dec. 15-17.** Contact

Cooperative Extension Service, Virginia Polytechnic Institute and State University, Patton Hall, Blacksburg, VA 24061, 703/961-6491.

North Carolina Nurserymen's Short Course and Trade Show, Pinehurst Hotel, Pinehurst, NC, **January 3-5,** Contact William Wilder, NCAN, RT. 2, Box 397, Knightdale, NC 27545.

Maryland Turfgrass '82, Baltimore Convention Center, **Jan. 4-6.** Contact Dr. Thomas Turner, Department of Agronomy, University of Maryland, College Park, MD 20742, 301/454-3716.

Winter Turfgrass Course, Cook College/Rutgers University, New Brunswick, NJ, **Jan. 4-Mar. 12.** Contact Edward Lipman, Cook College, P.O. Box 231, New Brunswick, NJ 08903, 201/934-9465.

Mississippi Nurserymen's Association, Annual Membership Meeting and Seminar, Metro-Ramada Inn,

Jackson, MS, **Jan. 10-12.** Contact Walter E. Davis, P.O. Box 242, Poplarville, MS, 601/795-4526.

53rd Annual Ohio Florist Short Course, Ohio Center-Hyatt Regency Hotel, Columbus, OH, **Jan. 10-13.** Contact Harry Tayama, Ohio Florists' Association, Columbus, OH 43210.

1982 North Carolina State University Agricultural Chemicals School, Jane S. McKimmon Center for Extension and Continuing Education, Raleigh, NC, **January 11-12.** Contact Harry Duncan, Plant Pathology, Box 5397, Zip 27650, 919/737-2711.

Landscape Design Short Course for Residential Properties, Cooperative Extension Service, Ohio State University, Wooster, OH, **Jan. 13-15.** Contact Fred K. Buscher, Area Extension Agent, Landscape Horticulture, OARDC, Administration Building, Wooster, OH 44691, 216/262-8176.

Mid-Atlantic Nurserymen's Trade Show, Baltimore Convention Center, Baltimore, MD, **Jan. 18-20.** Contact Mid-Atlantic Nurserymen's Trade Show, Perry Hall, MD 21128, 301/256-6474.

52nd Annual Michigan Turfgrass Conference, Longs Convention Center, Lansing, Michigan, **January 19-20, 1982.** Contact Paul Rieke, Dept. of Crop and Soil Sciences, Michigan State University, E. Lansing, MI, 48824, 517-355-0266.

Twentieth Nebraska Turfgrass Conference and Trade Show, Holiday Inn, Omaha, NE, **Jan. 19-21.** Contact Robert C. Shearman, Turfgrass Specialist, 377 Plant Science Complex, University of Nebraska, Lincoln, NE 68583, 402/472-2550.

Michigan Association of Nurseryman Convention and Trade Show, Grand Rapids, MI, **Jan. 20-21.** Contact Richard Ahti, P.O. Box 26008, Lansing, MI 48909, 517/394-0236.

Massachusetts Horticultural Congress, Dunfey's Hyannis Hotel, Hyannis, MA, **Jan. 20-22.** Contact Deborah Fanning, Massachusetts Horticultural Congress, 715 Boylston Street, Boston, MA 02116, 617/266-6800.

Scientific Guide To Pest Control Operations

by **Dr. L.C. Truman**
Dr. G.W. Bennett and
Dr. W.L. Butts



Domestic: \$23.00* (hardcover)
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The **SCIENTIFIC GUIDE TO PEST CONTROL OPERATIONS** is designed to provide a sound basis for studying the scientific aspects of pest control and promote technical competence. It places emphasis on urban and industrial pest problems. This volume also covers the laws and regulations concerning the pest control industry.

The **SCIENTIFIC GUIDE TO PEST CONTROL OPERATIONS** is written for owners, supervisors, servicemen, salesmen, students, persons preparing for state certification under the EPA/state programs for commercial pesticide applicators, and people interested in structural pest control.

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WTT 12

Associated Landscape Contractors of America Annual Meeting & Trade Exhibit, Hilton Riviera, Palm Springs, CA, **Jan. 24-29**. Contact ALCA, 1750 Old Meadow Road, McLean, VA 22102, 703/821-8611.

New York Turf & Landscape Association, Long Island Gardeners Association, Hudson Valley and Long Island Cooperative Extension Service, Annual Turf and Landscape Conference, Tappan Zee Inn, Nyack, NY, **Jan. 27**. Contact Frank Claps, 136 Laurel Avenue, Larchmont, NY 10538, 914/834-6846.

Winter National Hardware & Home Center Show, Las Vegas Convention Center, Las Vegas, NV, **Jan. 30-Feb. 1**. Contact Winter National Hardware and Home Center Show, Cahners Plaza, P.O. Box 3833—999 Summer St., Stamford, CT 06905, 203/964-0000.

Twenty-Seventh Annual Southwest Park and Recreation Training Institute, Lake Texoma Lodge, Kingston, OK, **Jan. 31-Feb. 3**. Contact James W. Kitchen, Institute Director, Department of Park Administration and Landscape Architecture, Texas Tech University, P.O. Box 4169, Lubbock, TX 79409, 806/742-2858.

Park and Recreation Maintenance-Management School, Wilson Lodge/Oglebay Park, Wheeling, WV, **Jan. 31-Feb. 4**. Contact Alice Strickland, North Carolina State University, Division of Continuing Education, P.O. Box 5125, Raleigh, NC 27650, 919/737-2261.

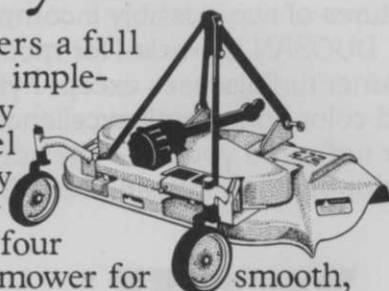
GCSAA International Turfgrass Conference and Show, New Orleans, LA, **Jan. 31-Feb. 5**. Contact Golf Course Superintendents Association of America, 1617 St. Andrews Drive, Lawrence, KS 66044, 913/841-2240.

Weed Science Society of America, Annual Convention, Boston Park Plaza Hotel, Boston, MA, **Feb. 7-11**. Contact WSSA 309 West Clark Street, Campaign, IL 61820.

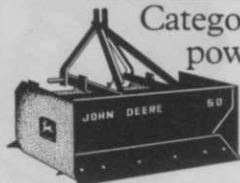
National Arborist Association 1982 Annual Meeting, Maui Surf Hotel, Maui, Hawaii, **Feb. 14-18**. Contact National Arborist Association, Inc., 3537 Stratford Road, Wantagh, NY 11793, 516/221-3082.

Even if you don't own a John Deere tractor, you can still have John Deere behind you.

John Deere offers a full line of quality-built implements to fit nearly any make of small diesel tractor with a Category 1 3-point hitch. For example, there are four mowers: a grooming mower for smooth, even cuts; a rotary cutter for rough terrain; a flail mower for trashy conditions; and a sickle-bar mower for roadsides and hayfields.



For landscaping, John Deere has hitch-mounted implements including a rotary tiller, a box scraper, a rear blade and a post-hole digger. Of course, we also have a full line of hitch-mounted farm implements. So even if your tractor isn't green, you can make it do more when you put John Deere behind it.



For more information about John Deere Category 1 3-point hitch implements power-matched to small diesel tractors, see your John Deere dealer or send for a free leaflet.

To find out how John Deere implements can increase the versatility of your small diesel tractor with a Category 1 3-point hitch, send for a free descriptive folder. Mail this coupon to John Deere, Dept. B147, Moline, IL 61265.

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Address _____

City _____

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WT

Nothing Runs Like a Deere®



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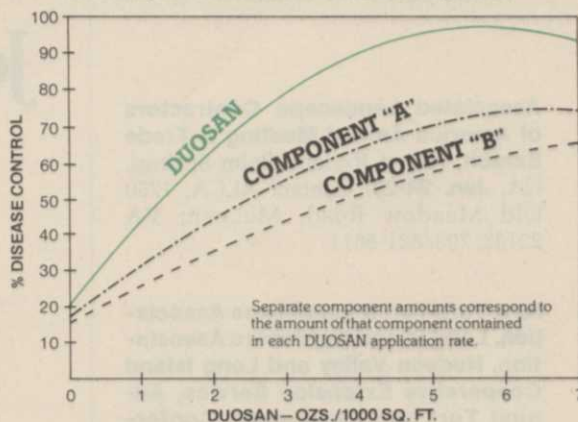
It's DUOSAN® — a scientifically formulated combination of a systemic and a contact fungicide. The combination creates a synergistic effect achieving better results than if the two were used independently. And it takes less to do the job.

Now you can overcome the problems of fungicide-resistant disease strains or the emergence of pathogens not affected by a single control...without separate applications of systemic and contact fungicides...without resorting to "homemade" mixtures of two possibly incompatible controls.

DUOSAN is labeled for most major spring and summer turf diseases except Pythium and results in good color and overall excellence of turf. Why not give your turf—and yourself—the advantages of this unique development. Get mean about Green with DUOSAN.

SYNERGISTIC EFFECT OF DUOSAN ON DISEASES ON BENTGRASSES AND BERMUDAGRASSES

SUMMARY OF DATA FROM 6 EXPERIMENTS INVOLVING COMBINATIONS OF 4 ORGANISMS — Dollarspot, Brown Patch and Leafspots (Curvularia and Helminthosporium)



TALK TO THE GREEN GROUP AT

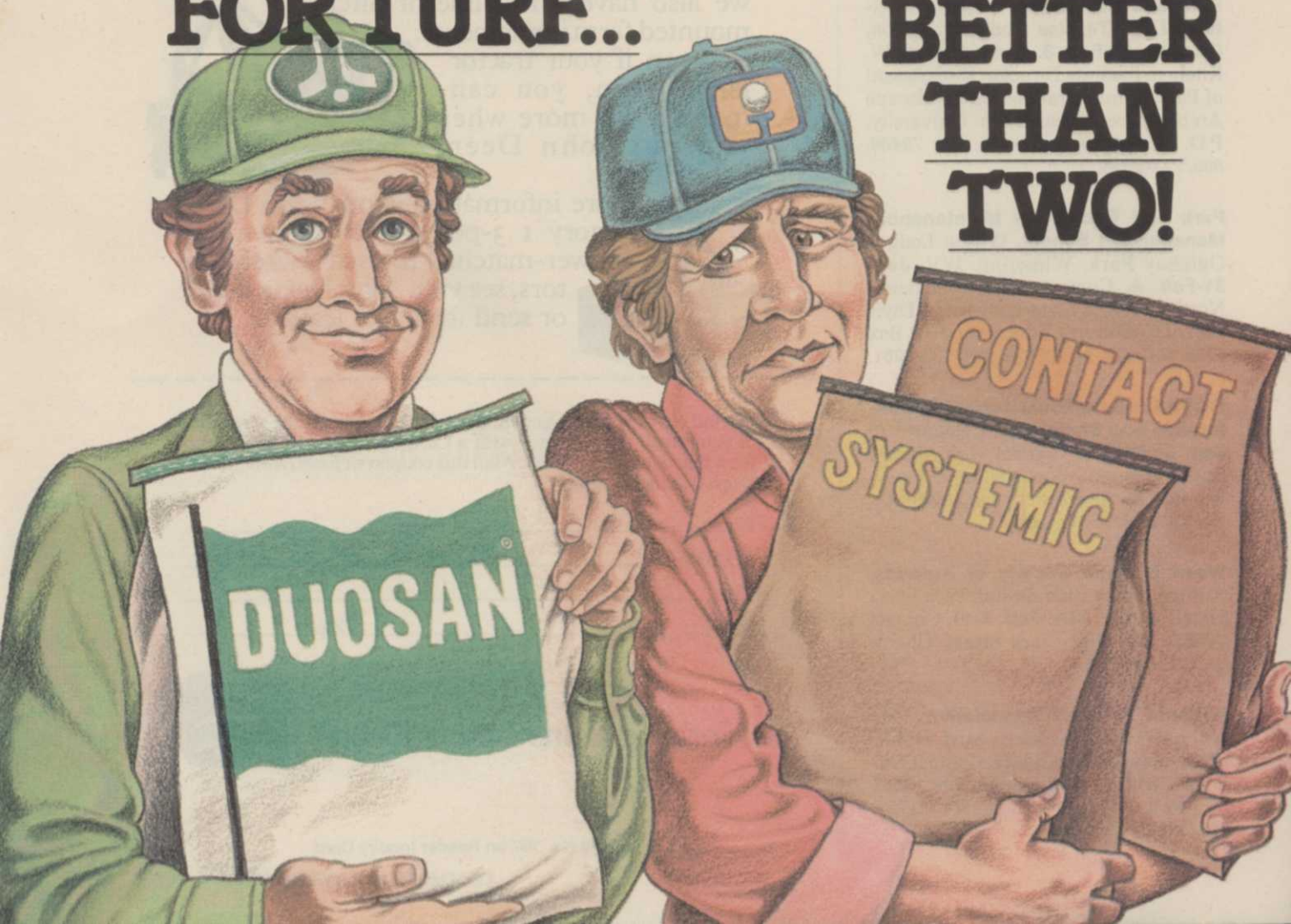


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**NOW
THERE'S ONE
FUNGICIDE
FOR TURF...**

**THAT'S
BETTER
THAN
TWO!**



NURSERY

NMC fund drive way ahead of schedule

In the first month of fiscal 1982, the Nursery Marketing Council (NMC) has received 45% of the total amount contributed all of the past year. According to NMC Steering Committee Chairman Gordon Bailey, Bailey Nurseries, St. Paul, NM, income for fiscal 1981 (ended June 30) was \$227,379, while income for July, 1981 was close to \$125,000.

"We expect an expanded international radio advertising program for NMC this coming year," said Bailey. "We intend to add more weekends and more weekdays to our advertising schedule—as support funds permit. We are looking at additions to the program, too, in the form of specifically-targeted advertising to narrowly defined markets—such as home-builders."

Bailey noted that major wholesale growers and suppliers are adding a voluntary NMC contribution to their invoices amounting to one-fourth of one percent. When their retailing customers include that amount in their payment, the grower or supplier matches the contribution and sends the total to NMC.

EQUIPMENT

OPEI Working On Shredder Standard

The Outdoor Power Equipment Institute has initiated a voluntary standards development program for shredder grinders. This program is virtually completed. The final proposed standard will be submitted shortly to the American National Standards Institute's Board of Standards Review. Final approval is expected soon.

An OPEI safety seal program for shredders will be initiated next year after the ANSI approval has been obtained.

Bannigan Named E-Z Go Vice President

Ed Bannigan has been named vice president of sales of E-Z Go, Augusta, GA. Bannigan had previously been western regional manager of the company. He began his career with E-Z Go in May of 1978 as Branch manager.

Continues on page 57



Flail Mowers can cut your TURF CARE COSTS

Mott Flail Mowers reflect extra value through greater versatility, added production with longer trouble-free life, and safer operation. No other mowing system is as versatile as the flail. With only one mower investment, you can trim fine lawns, shred tough weeds, mulch, renovate, dethatch and scalp. You can work any area that is smooth or rough, clean or trashy, level or steeply banked, dry or "liquid wet". And you can operate with much greater safety than with rotary mowers. Mott Flail Mowers are built to last and can be used with most tractors. Models are available in widths from 38 to 88 inches. In combination, they will handle up to 19 foot swaths. Contact us today and discover how the extra value of Mott Flails can pay off by cutting your turf care costs.

MOW LAWNS ■ RENOVATE ■ MULCH LEAVES ■ SHRED WEEDS




Mott Interstater Cuts 19' Swath.

MOTT CORPORATION 514 Shawmut Avenue
P.O. Box 518, LaGrange, IL 60525 (312) 354-7220

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PICKS UP LEAVES AND DEBRIS



lawn genie®

Pick-Up Mower



Why own three machines when one does the job?

Spring: Thatches, renovates and picks-up in one pass!
Summer: Mow and pick-up clippings.
Fall: Clean-up leaves, twigs and trash.

Simple— anyone can operate it. Built to take it all day, everyday.
 Hopper empties from tractor seat.
 Change mowing or thatching blades in seconds with M-C's patented spring-loaded hangers.



48" Pull-Type



72" P.T.O.



The only flail pick-up mower that thatches, mows and picks-up in one pass! Available in 36", 48", 60" and 72" cutting widths.

Mathews Company / Box 70, Crystal Lake, IL 60014 / 815-459-2210

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PRODUCTS

Advanced Drainage Systems is offering its corrugated plastic drainage tubing in a choice of two synthetic wrap



materials for protecting subsurface drains against the most challenging siltation problems. ADS Drain Guard, a 100% nylon envelope is an ultraporous filter that restrains and stabilizes problems solids such as fine sand and silts.

Circle No. 178 on Reader Inquiry Card



Finn Corp.'s T80 tank features a low profile tank design for ground level loading and a hydraulic powered, variable speed paddle agitator. The hydraulic seeder can be trailed to a site with ease and stability. It is a viable option to higher priced chasis-mounted units.

Circle No. 179 on Reader Inquiry Card

Wyo-Ben's Envirogel is manufactured from bentonite clay and is processed for use in reducing the seepage of fluids through porous soils. According to Wyo-Ben, bentonite can absorb five times its weight of water and expand to 12-16 times its dry volume.

Circle No. 180 on Reader Inquiry Card

The model 10 Turf-Truk is the latest addition to the line of Hester Ag-Truk three-wheeled ranch machines. The model 10, manufactured by Horizon



Services Company, features a two-passenger bench seat, electric start G300 Honda industrial engine, 3 ft. by 4 ft. cargo box and a load carrying capacity of 1200 lbs.

Circle No. 181 on Reader Inquiry Card

Custom Products' all-weather, steel Cozy Cabs are now available for the brand new John Deere compact utility



tractor. The Custom 300 cabs are ROPS-tested to meet OSHA requirements and feature all-steel construction, tinted safety glass, sliding rear window and vinyl padded interior.

Circle No. 182 on Reader Inquiry Card

Continues on page 53



New Trailblazer™ sweeps turf/hard surfaces

At last! A rugged all-terrain sweeper that can clean both your turf and hard-surfaced areas. Provides productivity undreamed of before.

TENNANT® Trailblazer™ sweeps up to 3 acres of turf or 7 acres of hard surfaces per hour. Has more power than any turf machine.

Lease/time purchase/rental plans available. Write: Tennant Company, 701 N. Lilac Dr., Minneapolis, MN 55440.



Climbs curbs, articulates to sweep hard-to-reach places.

TENNANT® MAINTENANCE SYSTEMS
sweepers • scrubbers • scarifiers • floor coatings

Call Toll Free: 800-328-5727 Ext. 768S

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3 GOOD WAYS TO IMPROVE YOUR QUALITY, PRODUCTION, SERVICE AND PROFIT WITH BROUWER!

1. NEW BROUWER HITCH-HIKER

Another Brouwer innovation in material handling

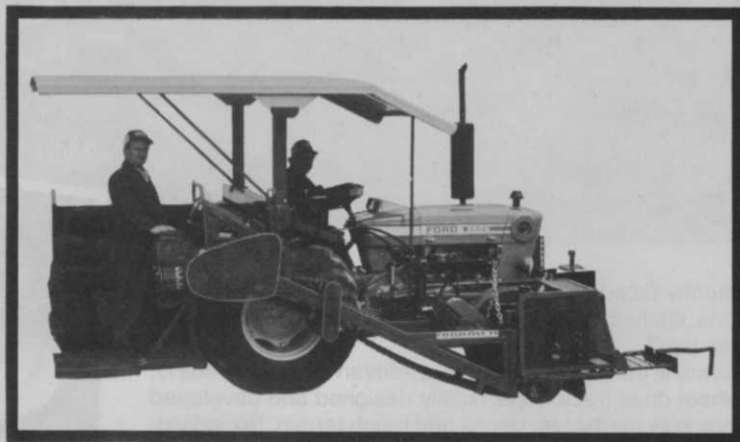
- Simple, safe operation
- Very lightweight design
- Excellent performance on all terrain
- Quick hook-up and release to any truck
- 8" side shift for tight loading
- High transport clearance
- 19 HP Diesel Engine
- Mechanical Drive System
- Immediate Pallet Return



2. BROUWER ECONOMY HARVESTER

- Operate off uncut turf
 - A more uniform cut
 - Less down time
 - Less top soil removal
- Available in 15, 16, 18 and 24 inch widths and choice of pallet sizes
- Cut, Roll, Slab or Fold 24 hours a day, wet or dry weather, all sod, all conditions.

Top Turf men around the world use Brouwer Harvesters to assure top profit.



ROLL



SLAB

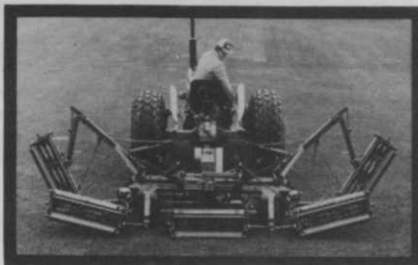


FOLD

3. BROUWER PTO MOWERS

FEATURING HYDRAULIC LIFT

WRITE FOR FREE BROCHURES.



Brouwer PTO Mowers for economy, reliability and cutting the toughest grass.

- Easy to transport
- Smooth cut at a low cost
- Lightweight, high-stress steel frame
- Simple "no-wheel and gear" PTO Drive
- No wheel tracks
- Track remover available
- Yours in 3, 5 and 7 gang combinations

BROUWER

The Turf Equipment People

Brouwer Turf Equipment Limited, Woodbine Ave., Keswick, Ontario, Canada L4P 3E9

Tel: (416) 476-4311

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EXCEL HUSTLER 602 D

Introducing the new six-wheel drive, self-leveling mower for rough, rugged, hilly terrain!



Consistently faced with the really tough slope mowing jobs? Are culverts, ditches, roadside berms and hilly terrain where your work takes you?

The answer is the new 27.5 hp, diesel-driven HUSTLER 602 D, the six-wheel drive tractor specifically designed and developed for bunkers, hilly roadsides, berms and rough terrain. Six individually-powered drive wheels deliver unmatched traction capabilities in all conditions. The 602 D's exclusive self-leveling feature automatically levels operator station and engine platform on slopes. Cab/engine platform leveling may also be manually controlled up to 27° right or left.

Another HUSTLER exclusive feature is the dual-hydrostatic drive system powering both sets of drive wheels independently. Twin steering levers control direction speed, turning and braking, giving you infinite maneuverability with simple, one-hand control.

Equip this rugged machine with HUSTLER attachments and you have four-season versatility. A 72" heavy-duty rotary deck, 60" flail mower, 60" two-stage snow thrower, 72" dozer blade, 72" rotary broom, cab enclosure kit and more are available with the 602 D.

Call toll free 1-800-835-3260, or write for the name of your HUSTLER distributor and free literature.



The four front wheels on the 602 D are mounted on a walking-beam suspension to allow the tractor to virtually walk over uneven, rutted terrain without loss of traction. Rear wheel hydraulic wheel lift allows smooth, easy turns.

The choice of the Pros.



HUSTLER
Turf & Grounds Equipment

GPW-8-381

EXCEL INDUSTRIES, INC. • BOX 727 • HESSTON, KANSAS 67062 • (316) 327-4911 • (800) 835-3260

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