The new Woods Models 650 and 750 utility backhoes can outperform others their size (and larger) digging footings, irrigation ditches, drainage ditches, wiring trenches, and for landscaping.

They offer control . . . and safety. Two lever control of all functions: reaching, digging, lifting, swinging and dumping. It couldn't be easier. And Woods' exclusive "Saf-T-Lok®" mount which eliminates sideto-side free-play movement of the 3-point hitch,

New Compact Backhoes...
the sure-footed way put ... and bucket, and tucks away for between jobs. The operators seat, puts him where he can their wide stance cantilevered stabilizers, and their self-contained independent hydraulics make sure they go where they're put . . . and stay put. Woods' 162° bucket curl gives maximum breakout

and full "bite", keeps material in the bucket, and tucks away for safe convenient transport between jobs. The operator platform, with adjustable seat, puts him where he can see his work, and perform safely and comfortably.

And they give a choice. Model 650 reaches 7'10" and will dig 6'6" deep from tractors rated 18-35 hp with standard category 1, 3-point hitch. Model 750 reaches out 9'4" and down 7'6" from 20-40 hp tractors.

Get the "full scoop" on these top performers today. Send for complete specifications.



**WOODS** 



**Division of Hesston Corporation** Oregon, Illinois 61061 for 35 years the name to remember for quality and performance Circle No. 163 on Reader Inquiry Card



# New Rubigan sends these

unwarranted. So the logical course of action is to evict these tenants before they call your turf their own.

Broad spectrum control.

Dollar spot (even fungicide resistant strains), large brown patch, fusarium blight, stripe smut and pink or gray snow mold—all these blots on the turfgrass can now be effectively controlled by Rubigan. And, if other undesirables are lurking in the neighborhood, Rubigan is compatible with most contact or systemic fungicides commonly used on turf.

Preventive and curative action. Rubigan provides you with the flexibility to manage a <u>disease prevention</u> program and at slightly higher rates, provides curative action on dollar spot and large brown patch. More to

the point, Rubigan acts as an enforcer that prevents turf diseases from making themselves feel at home on tees, greens and fairways.

Unlikely development of resistance. Rubigan has a mode of action involving three or more sites of inhibition. (A multi-site inhibitor.) Years of successful use outside of the U.S., as well as trial usage in the U.S., have shown that susceptible fungi commonly found in turf have not been able to develop resistance to Rubigan.

Longer-lasting control.
Rubigan is a very active, concentrated product. Long lasting control allows for longer intervals between

spraying. You can reduce the number of application trips and save on

fuel and labor costs. What's more, lower use rates mean less storage and lower handling costs.

Rapid leaf penetration.

Rubigan is a foliar-applied, locally systemic fungicide. It is absorbed almost immediately into leaf tissue and is not susceptible to washoff by rainfall or irrigation once the spray has dried. While the spray is drying, the active ingredient sets up shop inside the plant where it can't be washed out. Disease protection begins immediately after application.

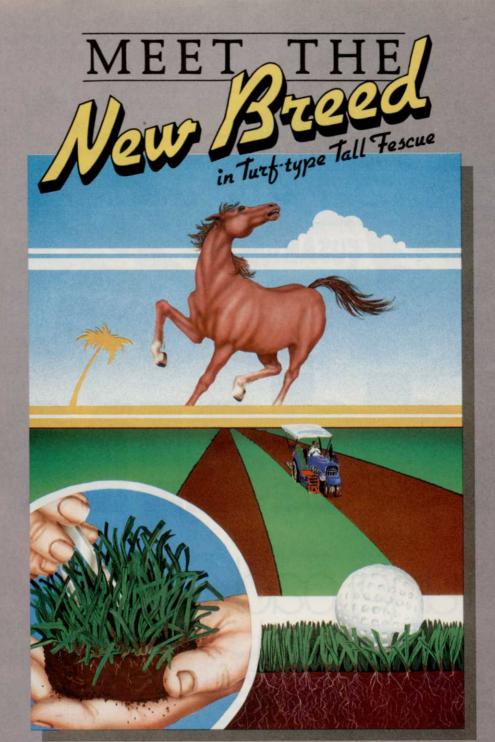
Excellent turfgrass safety.

No adverse effects or discoloration occurs when Rubigan is used at



## Rubigan. It's spreading. A Division of Eli Lilly and Company Indianapolis, IN 46285

ELANCO



Meet Mustang-the new turf-type tall fescue whose extraordinary turf quality, heat/drought tolerance and dark green color make it a breed apart from the others.

Turf data from major universities rank Mustang superior in seedling vigor, turf performance, and disease resistance. You demand excellence in your turf management, so why settle for anything less in your

choice of a tall fescue ... demand Mustang!

Pickseed also produces



Produced by:



P.O. Box 888 • Tangent, Oregon 97389 (503) 926-8886

Circle No. 143 on Reader Inquiry Card

### **PRODUCTS**

### Jacobsen Turfcat gets flail mower

A flail mower designed to put a smooth finish on rough turf has been introduced by Jacobsen Division of Textron Inc.

The new flail unit attaches to Jacobsen's recently introduced Turfcat II DW 220 riding mower.

Described as a "vertical rotary mower," the 60-inch flail cuts by revolving a double spiral of tabs fixed to a cylindrical rotor.

Rotation is clockwise with uniform discharge to the rear from the 11gauge steel housing which is offset to the left for trimming. Using brake assist, the Turfcat II with flail mower can achieve a zero uncut circle. Height of cut can be adjusted for 3/4-inch to 3-1/4 inch increments, without the use of tools.

To follow surface irregularities, the flail mower's mounting is fully articulated, side-to-side and fore-andaft, as it is for all Turfcat II implement attachments.

The diesel-powered Turfcat II DW 220 offers hydraulic cutting and can be equipped with 60-inch rear or side discharge rotary decks, a 72-inch rear or side deck, a 60-inch rotary broom, a 51-inch snowthrower or a 54-inch dozer blade. A pin mounting simplifies attachment of any implement. allowing the machine to go from one task to another. Jacobsen reports that the new flail mower's capacity is 2.8 acres of rough turf per hour.

Circle No. 185 on Reader Inquiry Card

### Water-permeable fabric reduces maintenance

The Du Pont Company has introduced a new permeable landscape fabric that promotes healthier plants and reduces routine maintenance.

Unlike plastic film, Du Pont Landscape Fabric lets water pass through to plant roots while controlling weed growth. Because water passes through rather than flowing off, the Du Pont fabric minimizes wash away of gravel or mulch. The mulch layer remains intact to slow evaporation and moisture loss.

The material is chemically inert. The barrier does not have to be removed to treat plants with liquid herbicides, fertilizers and insecticides. They flow easily through to the soil without damaging the sheeting. Du Pont Landscape Fabric also resists mildew, rotting and decay for



Circle No. 146 on Reader Inquiry Card

Compare the total installed cost of HYDRO MULCH fibers to ordinary straw for turf establishment.

	Hydraulic Mulching (2 people) (\$12 per hour)	Straw Mulching (6 people) (\$12 per hour)
HIDDEN OVERHEAD  1. Start-up  ● Pick up ● Prep & load equipment  ■ Travel time ● Set up	\$30	\$156
2. Shut-down  ■ Break time ■ Clean-up ■ Loading  ■ Travel time	\$60	\$216
TOTAL OVERHEAD	\$90	\$372
VARIABLE COSTS		
1. Materials (per acre)  1.500 lbs HYDRO MULCH fibers vs. 100 straw bails	\$200	\$125
2. Application (per acre)  • Hydro seed, fertilize, apply HYDRO MULCH fibers vs. hydro seed, fertilize, apply straw, crimp	\$31	\$39
3. Equipment (per acre)  • Fuel, maintenance, depreciation	\$30	\$50
TOTAL VARIABLE (per acre)	\$261	\$214
TOTAL INSTALLED COST	\$351	\$586

In many of today's projects, hydraulic mulching with HYDRO MULCH fibers can be less costly than straw mulching. That's because there's usually <u>less hidden overhead</u>. So while savings vary from project to project, you owe it to yourself to find out more. After all, the results are in black and white.

To see if Conwed can save you money on your next project, call (612) 221-1196. Or write us: Conwed Corporation, Fibers Division, P.O. Box 43237, St. Paul, MN 55164.

\*HYDRO MULCH is a federally registered trademark of Conwed Corporation Any use of HYDRO MULCH beyond reference to Conwed's wood fiber mulch may constitute infringement under the Trademark Laws of the United States.



innovative products for better environments Circle No. 107 on Reader Inquiry Card

long service life. It is applied by rolling out over new plantings and an "X" is cut into the fabric. Plants are gently pulled through the hole. Excess fabric is folded under itself and covered with mulch. The product is available at local retail and wholesale nurseries.

Circle No. 186 on Reader Inquiry Card

### New transplant system from Trans-Tree

A one-man system for digging, transporting and transplanting four mature trees has been introduced by Trans-Tree of Minneapolis. The Trans-Tree TTC-60 system combines a truckmounted hydraulic tree spade and



special dual axle trailer with four metal cones to provide all work operations for mature trees with maximum 6-inch diameters. The curved blade tree spade fits the tiltable cones to ease placing and removing trees, root systems and soils from the cones. The spade unit is designed for mounting on a close-coupled dual axle 2-1/2 ton truck equipped with a 350-400 CID engine with PTO service.

Circle No. 187 on Reader Inquiry Card

### New deposition aid improves spraying results

Sta-Put Deposition Aid, developed and manufactured by Nalco Chemical Company, will increase the amount of chemicals reaching the target within the spray swath.

Sta-Put increases the placement of farm chemicals, thereby increasing the consistency of performance by up to 30 percent. By increasing spraying effectiveness, a deposition aid minimizes potential complaints and callback situations and reduces the chances of having to redo an area.

Sta-Put stabilizes spray droplet size, thereby creating a more efficient spray pattern. Furthermore, uniform droplet size helps minimize "fines" and their resultant premature evaporation. It does this by insuring that more spray solution actually reaches the target area.

# We promise to tell the truth the whole truth and nothing but the truth. So help us BPA.

As a member of BPA (Business Publications Audit of Circulation, Inc.) this magazine subscribes to the principle that it takes more than good faith to earn the business of advertisers. It takes good figures.

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We make sure you get what you pay for.



than doubles your mowing capacity at about half the price of competitive units.

The incredible HUSTLER Range Wing maintains big acreage effort-lessly. With three hydraulically lowered and raised decks spreading over 12-foot wide, you can cut a whopping 62 acres of turf a day. And, because each deck floats independently to follow ground contour, scalping is virtually eliminated. The result is a smooth, uniform cut that will make both the turf and you look very good.

Combined with the HUSTLER tractor's drive-wheel steering and dual hydrostatics, you'll find that the Range Wing performs with exceptional mowing maneuverability compared to large, tractor-pulled gang mowers.

Although the Range Wing was specially designed for the fuel-efficient diesel HUSTLER 305 D, there's also a 9-foot single wing version for the HUSTLER 295.

You must agree, the benefits are clear. With the HUSTLER Range Wing, you'll save time, money and op-

EXL-1-184

erator fatigue while enjoying increased productivity. That's why HUSTLER is... worth the difference.



An automatic clutch on each wing disengages blades when wing is raised. When cutting grass around lakes or ponds, the tractor's drive-wheels remain 4-foot up from the bank's edge for traction and control.

There are six HUSTLER models ranging from 18 to 32 hp with a host of attachments to meet year-round needs.

Sta-Put is easy for custom applicators to use. A measured amount of Sta-Put is measured into the spray tank while it is agitating. Sta-Put does not settle or lose activity when diluted. Circle No. 188 on Reader Inquiry Card

### New broad-spectrum from Cynamid

Arsenal herbicide, a broad-spectrum. postemergent systemic will be on the shelves starting next year after four years of testing in the U.S., Europe and the Far East. Applicable as a contact herbicide any time the vegetation is actively growing, Arsenal penetrates through both foliage and roots to the growing center of the plant. Growth ceases shortly after application, but complete kill can take up to two weeks. There is no fire hazard from undesirable quick-burn or brown-out. In perennials, the herbicide kills underground storage organs to prevent regrowth.

Circle No. 189 on Reader Inquiry Card

### Accurate delivery with HB-Aqua

Del Rio of California, Fresno, is marketing a drip irrigation emitter that operates with constant and accurate delivery the full length of the line. The HB-Aqua emitter distributes approximately 3/4 gallon of water per hour at 14 PSI and above the full length of the line up to 1,000 feet. Drip irrigation on slopes will be delivered evenly while compensating for any pressure loss with this device.

Circle No. 190 on Reader Inquiry Card

### Soil Seal for erosion control

The Soil Seal Corp. has a new soil stabilization product for erosion control, dust abatement and mulch tackifying. Soil Seal Concentrate forms a crust between 1/8 to 1-1/2 inches thick, depending on dilution and soil characteristics, to stabilize areas being prepared for seeding. The solution can be sprayed on existing vegetation without harmful effects, although delicate plants should be avoided.

Circle No. 191 on Reader Inquiry Card

### Sand-Aid makes market debut

Following a successful year in selective test markets, Emerald Isle, Ltd. will introduce Sand-Aid nationally for the 1984 season.



Call Toll-Free,

1-800-835-3260

or write for free literature: EXCEL INDUSTRIES, INC., P.O. Box 7000, Hesston, KS 67062

Circle No. 116 on Reader Inquiry Card

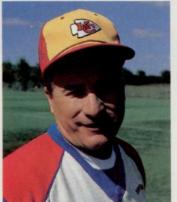


## For Superb Turf at the Super Bowl, Turf Wizard George Toma Specifies Ph.D.

George Toma's regular job is turf manager for the Kansas City Chiefs and Kansas City Royals, but he is also turf consultant to the National Football League.

That's why he is responsible for preparing the turf for Super Bowl games. Because it's vital that the turf be right for the players, the fans and the television cameras, George Toma uses Ph.D.® overseeding blend.

"Ph.D.® is ideal for the Super Bowl because it germinates rapidly, quickly develops a strong root system, has excellent color and



stands up to the punishment given it by the pros," Toma says.

Ph.D.® is a blend of three modern turf-type perennial ryegrasses including Derby and Regal, two of the most highly regarded grasses available to the turf manager today.

Turf managers count on Ph.D.® to thrive in a wide variety of soils ranging from sandy to heavy

clay. Germination is normal in 7-10 days.

Ph.D.® is used for permanent turf in Northern regions and for overseeding of dormant winter turf in the South.



P.O. Box 168, Halsey, Oregon 97348 USA Tel. (503) 369-2251 TWX 510/590-0765

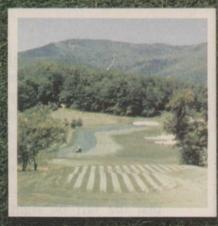
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# TOSTAYON THE RIGHT COURSE, COLOR YOUR WAY FROM TEE TO GREEN.

Blacon

BLUE SPRAY PATTERN INDICATOR

When you mix Blazon™ Spray Pattern Indicator with herbicides, fungicides, insecticides and liquid fertilizers, you can see exactly where you've sprayed, helping to prevent costly overlap and/or missed areas. **Q** The color pattern is temporary and dissipates with rain, heavy dew, normal sprinkling, or even with sunlight alone. ¶ You'll be able to apply a uniform spray everywhere your tank sprayer or tractor goes, including areas around bunkers and across contours and hills. ¶ And while Blazon itself is environmentally safe and does not permanently stain hands, clothing, or equipment, it lets you know exactly where potentially harmful chemicals are. C Best of all, you're turning an educated guess into an applied science, making for a better golf course and a better looking bottom line. For further information, contact Milliken Chemical, P.O. Box 817, Inman. South Carolina 29349, 800-845-8502.



CHEMICALS

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