# HF-15 hydraulic technology presents The HF-5.

## If at first you succeed...

## The HF-15

A remarkably successful feat of pure engineering, the HF-15 keeps proving itself to be a versatile and reliable workhorse year after year. In both diesel and gas. With a fully hydraulic system for maximum control under most cutting conditions, the HF-15 remains un-111 surpassed by any other sevengang tractor in the field.

The New HF-5

A hydraulic chip off the old block, the com-pact, highly maneuverable HF-5 gives you three, four and five-gang Versatility plus the control and maintenance ease of a com-plete hydraulic system. The HF-5 is light on the turf and is hydrostatic variable speed transmission lets you handle most terrain or tur conditions thout shifting. The HF-5 will move up to 50 acres in eight hours, and the your budget downto the your budget down

Features -Cuts wet or dry grass easily. Reels can be tant backlapping. , efficiency and longer engine. Iffe. —84 — 1067—133° cutsing width for the gertips. dels can be reversed from Intuilie Lift Movers - 84"- 106"- 133" cuitaing width It the operator's ingertips tack Somened, Air-Cleaning System - Cleaner, and ser engine life.

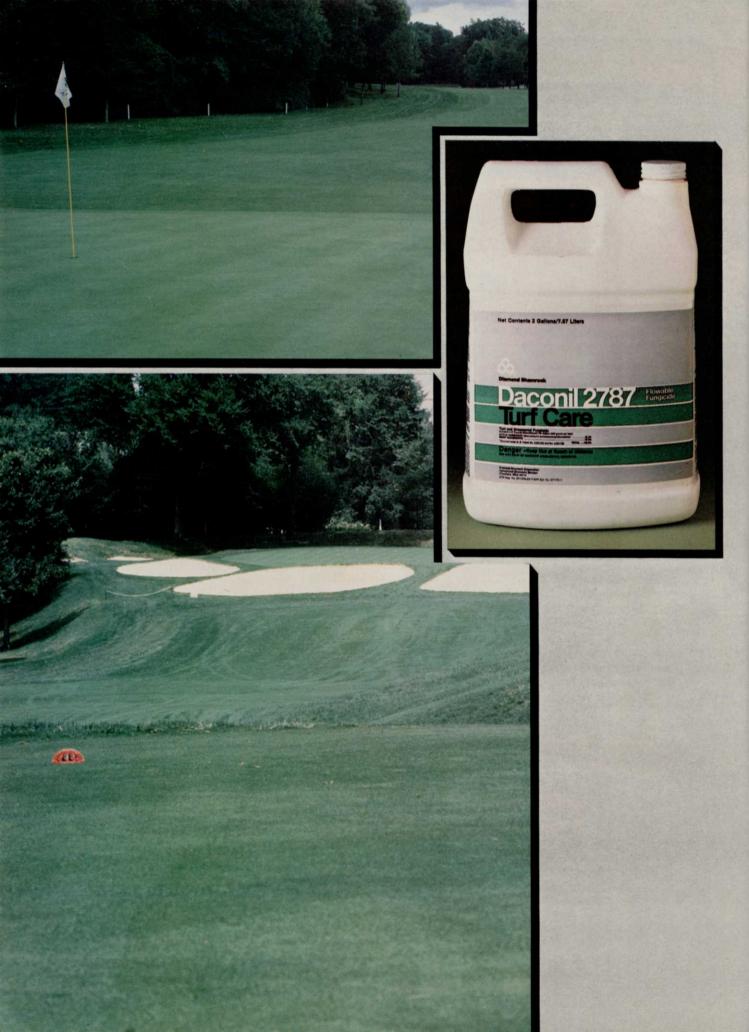
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Jacobsen Division of Textfon Inc

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# Proof that the best fungicide costs less.

There's no doubt why Daconil 2787<sup>®</sup> flowable fungicide is the preferred fungicide on America's tees and greens. It consistently delivers superior control of 9 major turf diseases.

But what you may not know is that Daconil 2787 is more economical to use than the other leading fungicides.

Using a typical spray schedule, Daconil 2787 gives you greater savings on a per 1000 sq. ft. basis when it comes to controlling your most serious diseases — dollar spot (including benomyl-resistant dollar spot), Helminthosporium (leafspot and melting-out) and large brown patch.

Take a look at the chart. See for yourself how the cost of Daconil 2787 compares with the other leading fungicides on tees and greens.

Here are more reasons why it pays to use Daconil 2787. There's no need to add a costly spreader/ sticker. Daconil 2787 already has it built in to assure full and even coverage for maximum disease protection.

And Daconil 2787 resists wash-off, so it keeps on working during heavy rains or watering.

COST PER 1000 SQ. FT.*/ONE APPLICATION												
00.5	10	1.00 J	1.50	2.00	2.50	3.00						
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\*Costs based on manufacturer suggested retail unit price as of January, 1983.

What's more, in 15 years of continuous use, there has never been a documented case of resistance with Daconil 2787. Even on courses where it was applied at weekly intervals over many years.

The facts speak for themselves. You can't buy more effective, more consistent disease control on tees and greens than Daconil 2787.

Add to that the important cost savings you get spray after spray, and you'll see why Daconil 2787 gives you more for your fungicide dollar.

So this season go with Daconil 2787 from Diamond Shamrock. Because the best costs less.



## **Diamond Shamrock**

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

Always follow label directions carefully when using turf chemicals.

Circle No. 105 on Reader Inquiry Card

# LANDSCAPE MPDATTE

## 253 future contractors compete

It was a record-breaking event. More than 253 students from 18 colleges and universities across the nation and 86 professional landscape contractors attended the Associated Landscape Contractors of America's Student Field Day in Dallas in March.

Students competed in 18 events ranging from surveying to irri-



gation. Industry professionals acted as judges for the events or observers.

ALCA Student Field Day Chairman was Jean Felsted. Richland College Professor Frank Milsap and the Horticulture Club at Richland College also helped coordinate the event.

Next year's field day will be at the Agricultural Technical Institute in Wooster, OH.

# Middle management training available

Six seminars in six cities are planned for this fall to help middle managers and crewmembers with supervision potential. ALCA sponsors the seminars taught by Perrone and Ambrose, a management consultant firm in Chicago, IL. Three seminars were successfully presented this spring.

The fall seminars will be held in Phoenix (Sept. 8, 9), Dallas (Sept. 20, 21), Salt Lake City (Sept. 22, 23), Detroit (late Oct.), Boston (Nov. 20, Dec. 1), and Washington, D.C. (Dec. 2, 3).

ALCA Executive Director Gail Morgan told Weeds Trees & Turf, "Instead of being aimed at owners and upper management, these seminars are designed for mid-level managers and crewmembers with supervisory potential."

The first day the focus is on problem solving and team leadership. The second day is devoted to organizing work and time management. Interested persons should contact ALCA, 1750 Old Meadow Rd., McLean, VA 22102. (703) 821-8611.

## **NEWS** from page 10

president of the non-profit organization. "According to our 1982-83 GFA/ Gallup National Gardening Survey, there are 38 million gardening households out there who have a continuing need for new information, Radio provides a new avenue for Gardens for All to reach more gardeners with current news and tips.

Local radio stations and gardening centers can arrange to air the shows by contacting Gardens for All Radio, RFD Networks, Endwell, NY 13760.

## CHEMICALS

## Velsicol opens two Southern offices

Velsicol Chemical Corporation has opened district sales offices in Atlanta and Dallas. The offices will be staffed full-time to help provide greater sales support and communications.

"The Atlanta and Dallas sales offices have been added to provide a closer base for our growing sales force and growing product line," says Billy Adcock, agricultural products regional sales manager, South.

The Atlanta office is at 400 Wendell Court, Suite 426, Atlanta, GA 30336, (404) 696-8345. The Dallas office is at 8405 Sterling St., Suite 202, PO Box 169083, Irving, TX 75063, (214) 257-0511.

## INDUSTRY

## PGMS conference set for Cincinnati

The Professional Grounds Management Society will have its 71st Annual Conference and Trade Show Oct. 15-18 at the Cincinnati-Marriott Hotel.

The conference will highlight educational sessions, along with the trade show and horticultural tours of interest in the Cincinnati area. The conference will conclude with the Awards Banquet on Tuesday night.

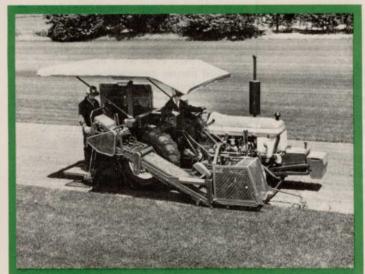
## CHEMICALS

## EPA approves Embark for Poa annua control

The Environmental Protection Agency issued its approval recently for the use of 3M's Embark plant growth regulator to suppress Poa annua seedhead development on golf course fairways. The approved rate is ½-pint per acre. *continued on page 16* 

# TIME TO CHANGE

## THE NEW BROUWER 1500 HARVESTER DOES IT ALL





#### AUTO STEER

- · Can save 2 3 pallets per acre
  - · No strips or even strips for regrowth
- · More uniform sod for landscapers
- · Simple can be turned on or off for auto or manual steering
- Produces a clean uniform cut in all conditions · Takes less topsoil from your farm · Operates off the uncut turf

Can roll, slab or fold

CUTS CLOSE

· To irrigation pipes, ditches & fences



#### **CROSS CONVEYOR**

- · New rubber conveyor makes stacking easier
- Other conveyors also available for slabbing · Sod harvester eliminates
- high labour cost Suitable for both large &
- small operations

## THE NEW BROUWER 2000 SOD HARVESTER HAS IT ALL



#### STANDARD PALLET CARRIER

- · Standard pallet carrier easy to load by forklift or manually · Folds up for compact and
- easy transport · Four wall piling cavity
- produces square and neatly stacked pallets



#### PALLET DISPENSER

- · Releasing a full pallet of slabbed sod squarely and neatly stacked due to four-wall piling cavity.
- · Single trip of a lever automatically releases empty pallet onto forks for easy stacking.



#### AUTO-STEER

· Automatic steering can be set to eliminate strips or leave a preset, con-sistent strip of sod for regrowth.



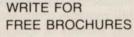
## DELIVER YOUR SOD WITH THE BROUWER HITCH-HIKER

TURF EQUIPMENT LIMITED

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 shaft for tight loading
- High transport clearance
- 19 HP Diesel Engine
- Mechanical Drive System
- Immediate Pallet Return





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# GOVERNMENT UPDATE

# EPA stops all registration in data dispute

The Environmental Protection Agency temporarily halted all registration in April until a ruling was clarified by the U.S. District Court for the Eastern District of Missouri. The Court found sections of the registration regulations "unconstitutional and unlawful" in a case brought against EPA by the Monsanto Chemical Co., St. Louis.

Monsanto brought the suit against EPA because its data alledgedly has been used to support registration of competitors products. EPA at first halted all registrations, then relaxed its position to register only those chemicals supported by data owned by the registrant and "me-too" chemicals supported by data used with permission of the owner.

While EPA and District Court lawyers attempted to explain the full impact of the court's ruling, EPA froze all registration applications. When lawyers suggested the ruling protected only Monsanto's data, a dozen other chemical companies filed a brief to the court seeking similar protection. The case may eventually reach the Supreme Court for further clarification.

EPA officials have felt it appropriate to consider all data on file when weighing the costs versus benefits of registration applications. Chemical companies dispute the use of their data for consideration of competitors products, claiming protection as a trade secret. The law and EPA have been vague for years on use of registration data. The controversy has finally reached court level and will be tested. Changes in sections of FIFRA are likely as a result.

# Bill earmarks \$1.1 billion in landscape work

The controversial Emergency Jobs Bill passed by Congress in March contains more than \$1 billion in grants and funding for landscape improvement. \$50 million of this is targeted for small business grants for tree planting and upgrading of recreational areas. Another \$40 million is available to urban parks on a matching fund basis.

The American Society of Landscape Architects is recommending its members contact local and state officials for potential work. The Bill stipulates much of the funding must be spent by October 1983, so haste is advised.

Much of the funding is intended for high population density areas with high unemployment. Much of the money will be spent in summer programs that employ large numbers of unemployed.

## State spray laws spread

A bill introduced in the New York State Senate in late March is similar to a bill recently defeated in the state of Washington. The bill requires commercial applicators to notify all adjacent property owners of spraying prior to application of pesticides. The New York bill, like the Washington bill, is the result of careless spraying practices being uncovered by local media.

## **NEWS** from page 14

Embark PGR, introduced by 3M in 1978, has been used extensively to reduce mowing costs on low-maintenance grasses and difficult-to-mow areas by golf course superintendents, highway maintenance crews and others. Turfgrass researchers at Michigan State and Pennsylvania State identified Embark PGR as a valuable tool for golf course superintendents when applied during the spring before seedheads have emerged. The product suppresses Poa annua seedhead development, which results in healthier root growth, enhanced summer color and increased drought-resistance, the researchers say.

## INDUSTRY

## Jacobsen names Kepner Chief Test Engineer

Kent G. Kepner has been appointed Chief Test Engineer for Jacobsen Division of Textron, Inc.

In his new position, Kepner will be responsible for establishing testing and evaluation programs for Jacobsen



prototypes and components at the company's Racine test lab and at field sites in Arizona, Texas and Florida.

Previously, he was test engineer supervisor. Kepner joined Jacobsen in 1970 and has held a variety of test engineering positions in Racine and at the company's providing grounds facility in Phoenix, AZ.

## INDUSTRY

## Teledyne opens new Memphis headquarters

The Teledyne Total Power Co., opened its new headquarters in Memphis, TN, in April. The company was formed late last year to handle all marketing, engineering and product support of Teledyne Wisconsin air-

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cooled gasoline and diesel engines.

The new facility includes administrative and engineering offices, warehouse accomodations for a large stock of engines and parts, engine dynamometer test cells and accomodations for making engine revisions and modifications.

President Lee A. Delaney explained the company's decision to locate in Memphis.

"Memphis is emerging as the transportation hub of the U.S. The availability of excellent shipping facilities, the city's central location and its business climate were all instrumental in our choice of Memphis for our headquarters," said Delaney.

From the facility, Teledyne Total Power is now distributing the full line of Wisconsin, Wisconsin-Robin and Wisconsin Diesel air-cooled engines.

TREES

## NAA establishes arborist foundation

At ceremonies in Wooster, OH, the National Arborist Association officially launched the Paul Tilford National Arborist Foundation, Inc., by installing Paul Tilford as the first charter fellow of the Foundation. Dr. Tilford was the first executive secretary of the National Arborist Association, serving from 1940 to 1965.

The purpose of the Foundation is to provide a source of funding for projects, studies and grants pertinent to the needs of good tree care. Equipment research and evaluation, tree care safety, and personnel studies are among the early projects to be funded.

## CHEMICALS

## Betasan frequency rates increased

New label registrations, recently approved by the EPA, increase application frequencies and application rates for Stauffer Chemical Company's Betasan herbicide.

Up to 25 pounds per acre of Betasan can now be used in two or more applications each year for control of crabgrass, goosegrass and poa annua in home lawns, turf and golf course greens and fairways.

"The new application frequencies

give people who need to control more than one grass an option to do so by split application of a single herbicide," says Herbert M. Day, sales manager of Stauffer's Specialty Sales Department.

Stuaffer recommends an application rate of 7<sup>1</sup>/<sub>2</sub> to 10 pounds in the early spring for the control of crabgrass, a second application of 7<sup>1</sup>/<sub>2</sub> to 10 pounds in late May for goosegrass control, and a fall application of 10 pounds in late summer for poa annua when these three weeds are problems in turf areas.

In regions where goosegrass or poa annual are the only or main problem, a full rate of 12<sup>1</sup>/<sub>2</sub> pounds should be used.

Betasan also is registered for control of redroot pigweed, barnyardgrass, lambsquarters, shepherds purse and deadnettle.

## GOLF

## Columbia fire delays production until August

Columbia Car Corporation of Deerfield, WI, expects to be back up to full production by August after a fire in April destroyed one of its seven bays in



the warehouse and shipping area. Damage estimates were in excess of \$1 million.

Executive Vice President D.V. Conway told WEEDS TREES & TURF some cars that were on line during the fire are being completed, but full production would not resume until August.

Columbia Car President Joseph Noll credited the area's fire department with keeping the blaze from spreading. The company was able to resume shipping golf cars three days after the fire.

No injuries were reported.

Columbia Car is one of the nation's major manufacturers of golf cars.

## **TURFGRASS**

## **Rothenberg re-elected** president of PTC

Michael Rothenberg, golf course superintendent of the West Shore Country Club, Camp Hill, PA, was reelected president of the Pennsylvania Turfgrass Council. He has served on the board of directors since 1979. Rothenberg, a graduate of Penn State University, has been in turfgrass management since 1971.

Other officers elected at the Pennsylvania Turfgrass Conference were Steven Campbell, Aronimink Golf Club, Newtown Square, PA, first vice president; R. William Marberger, sales manager-turf, Mid-Atlantic Equipment Corporation, Collegeville, PA, was elected second vice president; and Christine King, Bellefonte, PA, was re-elected executive secretarytreasurer.

Twelve directors were also elected to the board.

## TREES

## **Davey acquires** Memphis tree service

The Davey Tree Expert Company of Kent, OH, has purchased Suburban Services of Memphis, a tree care service company that has been in the Memphis area since 1975.

The company will continue to operate under the name of Suburban Services and as a division of Davey Tree. The previous owner, Thomas G. Dedrick, will remain as district manager.

Davey Senior Vice President How-

ard L. Eckel, Jr., said that the acquisition will provide an established base for tree care operations for the company in the Memphis area and enable Suburban Services to utilize Davey's advanced sales and personnel training and modern research and technical service facilities.

Davey Tree is the original and largest tree service company in the country.

#### TREES

## Lesh named 1983 president of NAA

Lee Lesh is the 1983 president of the National Arborist Association. He was elected at the Annual Meeting in New Orleans, recently.

Lesh has served as an NAA officer and director since 1977. Originally from northern New York where he received his early training as an arborist with Monroe Tree and Landscape, Inc., Lesh settled in California in 1964. He founded Lee's Tree Surgeons in Saratoga, CA in 1969. His firm is engaged primarily in residential, institutional and commercial tree care.

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#### Change spray tips clean strainers **Clean Up Lakes**, **Ponds, River Fronts** in seconds. Mud Cat's Aquatic Weed Harvester restores without tools! ecological balance through fast, efficient removal of both floating and submerged weeds. Independently controlled paddle wheels permit easy maneuvering, New resist clogging in heaviest weed beds. Unit operates in inches of water to cut close to shore. Easily Luicklei moved from job to job on trailers rated for highway speeds. Available in cutting swaths to 8 feet. operating depths to 5 feet, svstem capacities to 660 cubic feet. Optional shore off-loading CLICK' conveyor unit permits faster turnaround. NATIONAL CAR RENTAL Th PO. BOX 16247, ST. LOUIS PARK, MINN. 55416 U.S.A. PHONE TOLL-FREE 800-328-7333 FROM MINN. OR OVERSEAS CALL 612-893-6400 TELEX 29-0767 Model QJ%TT QJ100 Series QJ200 Series New QuickJet System minimizes your service time and helps assure accurate delivery. The self-aligning quick "on/off" cap can be used with all interchangeable spray tips. The caps are available in 8 colors for color-coding different tip sizes. QUICKJETS SAVE TIME AND MONEY. Send for QuickJet bulletin and data sheets. A Division of National Car Rental System, In Wheaton, IL 60188 Telephone 312/665-5000 Circle No. 128 on Reader Inquiry Card Circle No. 132 on Reader Inquiry Card