

## Sprinkler Irrigation Conference Held In Denver

Opening with a special session on the energy situation and its implications to the sprinkler irrigation industry, the Sprinkler Irrigation Technical Conference was held in Denver, Colorado on February 24-26, 1974. Site was the new Regency Hotel.

Special sessions were devoted to financing of sprinkler irrigation systems and a panel on drip irrigation. Two general sessions of the conference presented a broad range of subject matter of interest to those in the field of turf and agricultural irrigation.

Registrants heard twenty speakers from all areas of the country—the most representative group to ever appear before the annual meeting which was sponsored by the Sprinkler Irrigation Association.

Other activities for the conference included the winter meetings of the SIA board of directors, the annual breakfast meeting of SIA committees and the association's annual banquet. A special meeting of the Association was held to vote on a series of amendments proposed to the organization's By-Laws.

## North/South Transition Zone Ready For Bermudagrass

Bermudagrass adapted to lawns in the "transition zone" between South and North could be only a few years away.

John Dunn, University of Missouri-Columbia turf researcher, said several Missouri and Kansas selections "look promising" and could be made available to homeowners in about 5 years. In fact, two winter-hardy varieties have been released by Kansas State University and are in limited use on lawns and golf courses.

Dunn, who calls the "transition zone" (like central Missouri or Kansas) "the toughest place in the country to grow a good lawn," said research to find winterhardy bermudagrass for this area might be a better idea than trying to develop summer tolerant bluegrass.

Improved bluegrasses have been developed, he said, but they need to be well irrigated in summer to stay green. "Besides," Dunn added, "serious disease problems may occur on bluegrasses in summer."

"Bermudagrass will tolerate our hot summers and stay green until the first heavy frost. We are look-

ing for more hardy varieties that can survive our harsh winters."

Dunn and others have been looking "inside" grasses in hopes of getting some cold-hardy "indicators."

They compared three bermudagrasses and Meyer zoysia. (Zoysias used in the Midwest are generally more cold-hardy than bermudagrass.)

They found that the carbohydrate content, mostly in the form of starch, was 2 to 3 times higher in zoysia than in bermuda during the cold-hardening period of early fall into winter.

Among the bermudagrasses, Dunn found little difference in carbohydrate levels even with differences in cold-hardiness.

He noted, however, that most carbohydrate storage of bermudagrass during fall and winter is in the stolons while storage in zoysias is equally divided between the stolons and rhizomes.

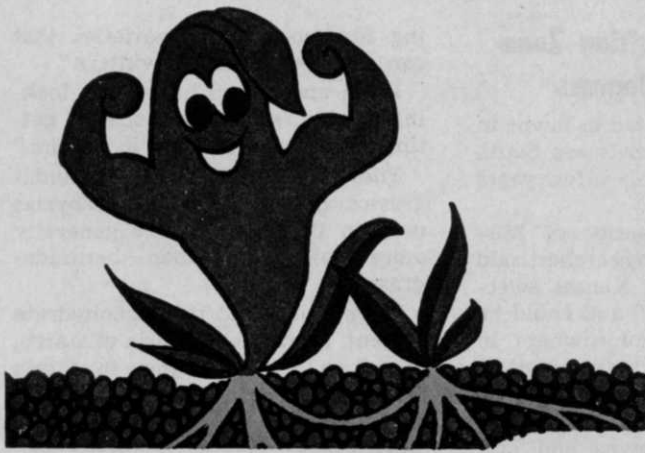
"One of the resistant bermudagrasses has more stolons and rhizomes which might give it an advantage over other bermudas of equal, inherent hardiness," said Dunn. "Since it has more of these, it has more possibilities of nodes surviving for regrowth."

## Announcing the new Asplundh "Whisper Chipper" Looks the same—sounds so different!

This new unit has all the dependable features of our famous chipper line. However, there is a remarkable difference — a great reduction in noise. Modification kits will be available for many existing models. **Asplundh Chipper Company**, a division of **Asplundh Tree Expert Co.**, 50 E. Hamilton Street, Chalfont, Pa. 18914

**ASPLUNDH**





## This Spring...Rebuild and Recondition Your Soil ...Apply **SOIL REBUILDER**

Created to let Mother Nature rebuild her soil naturally, Soil Rebuilder releases the pressure of compacted, tight soils so as to allow roots to grow deeper. Soil Rebuilder encourages grass to grow in thick and natural into bare and thin areas. **SOIL REBUILDER HELPS TO DEVELOP DEEP STRONG ROOTS.**

Composed of a natural combination of plant bi-products, decomposition bi-products, organic extracts, bacterial bi-products and many organic complexes found in highly productive organic soils, Soil Rebuilder recharges worn-out soil with life.

When sprayed, Soil Rebuilder loosens compact soil and allows air, water and nutrients to penetrate deeply into the root systems of grasses and ornamentals. Working its way downward with the natural nutrients, Soil Rebuilder coats soil particles with organic matter and helps develop soil aggregates. Plant roots grow deeper and stronger; plants thrive. More beautiful and more healthy because of Agro-Chem Soil Rebuilder . . . and a little help from Mother Nature.

### **A Naturally Popular Product Mover**

Guaranteed to be a pure, productive product, Soil Rebuilder produces dramatic, natural results.

Completely non-toxic and safe to use on all soils, Soil Rebuilder is harmless to humans, pets and wild-life. Soil Rebuilder rebuilds worn-out soils and improves good soils. Naturally improving the soil, the need for extensive watering, fertilizing and weed control is lessened. Maintenance costs reduced.

Try it on your ground this year. Notice the improved results within a few weeks—as water and nutrients penetrate and help fertilizer work better.

### **By Agro.Chem, Naturally**

No other product can produce such dramatic, natural results as no other product is produced in such a natural manner. Reducing labor time and expense, Soil Rebuilder is vital to all management programs. Agro.Chem Soil Rebuilder and all Agro.Chem products always produce positive results . . . with a little help from Mother Nature.

### **Distributorships Available**

**AGRO·CHEM, INC.**



Be certain to ask for Agro-Chem's Ground Care Catalog or circle number on reply card.

P.O. Box 59225, Chicago, Illinois 60659 • 312/673-7500



## meeting dates

**Northeast Ohio Commercial and Public Pesticide School,** Sheraton Motor Inn, Beachwood, Ohio, Feb. 21.

**International Erosion Control Association Conference,** Sacramento Inn, Sacramento, Calif., Feb. 21-23.

**Williamsburg Garden Symposium,** in association with the American Horticultural Society, Williamsburg, Va., Mar. 31-Apr. 5.

**Maryland Sod Conference,** 9th annual, Center of Adult Education, University of Maryland, College Park, Md., Mar. 7.

**Southern Turfgrass Conference and Equipment Show,** Holiday Inn Rivermont, Memphis, Tenn., Mar. 3-5.

**Cornell Turfgrass Conference,** 27th annual Statler Inn, Cornell University, Ithaca, N.Y., Feb. 27-28.

**Clemson University Turfgrass Field Day,** 1st annual, Turfgrass Research Area, Dalton Farm, Pendleton, S.C., Mar. 26.

**Southern Connecticut Grounds Keepers Ass'n.,** Grounds annual meeting, Downtown Holiday Inn, Tampa, Fla., Mar. 3-6.

**Professional Turf and Plant Conference,** 6th annual, Salisbury Club, East Meadow, L. I., New York, Mar. 5.

**Sixth Vertebrate Pest Conference,** Royal Inn, Anaheim, Calif., Mar. 5-7.

**Southern Connecticut Grounds Keepers Ass'n.,** Grounds Maintenance Conference, for nurserymen, landscapers, garden center operators, Waverly Inn, Cheshire, Conn., Mar. 6.

**Western Society of Weed Science,** annual meeting, Royal Lahaina Hotel, Kaanapali, Maui, Hawaii, Mar. 11-14.

**Canada Chapter, International Shade Tree Conference,** annual meeting, International Inn, Winnipeg, Manitoba, Canada, Apr. 3-5.

**Southern California Turfgrass and Landscape Horticulture Institute,** annual session, Royal Inn, Anaheim, Calif., April 23-24.

**Western Chapter, International Shade Tree Conference,** annual meeting, Del Monte Hyatt House, Monterey, Calif., May 19-22.

**Florida Nurserymen and Growers Association,** annual convention, Dutch Inn, Lake Buena Vista, Fla., May 23-25.

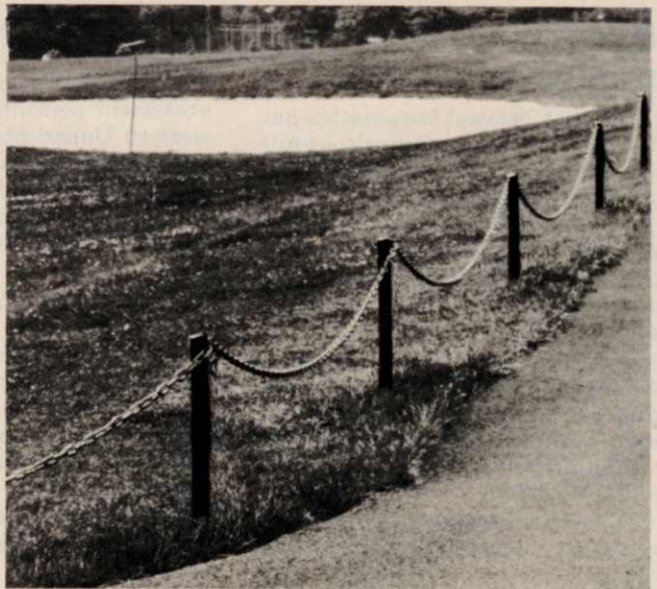
**American Association of Nurserymen,** annual convention, Four Seasons-Sheraton Hotel, Toronto, Ont., July 13-17.

**Central Plains Turfgrass Conference,** K-State Union, Kansas State University, Manhattan, Kan., Oct. 23-25.



**CENTER-MOUNTED ROTARY:** Gravely, Clemmons, North Carolina

Here's a 50 inch center mount rotary mower and a 16½ HP tractor that make a combination that's hard to beat. It's the same tractor that made the torture test, mowing from Washington, D. C. to New York City in 12 days. Transmission on this powerhouse allows a choice of eight ground speeds. Another advantage is constant attachment speed. It permits operator to match ground speed with the job at hand. For more details, circle (701) on the reply card.



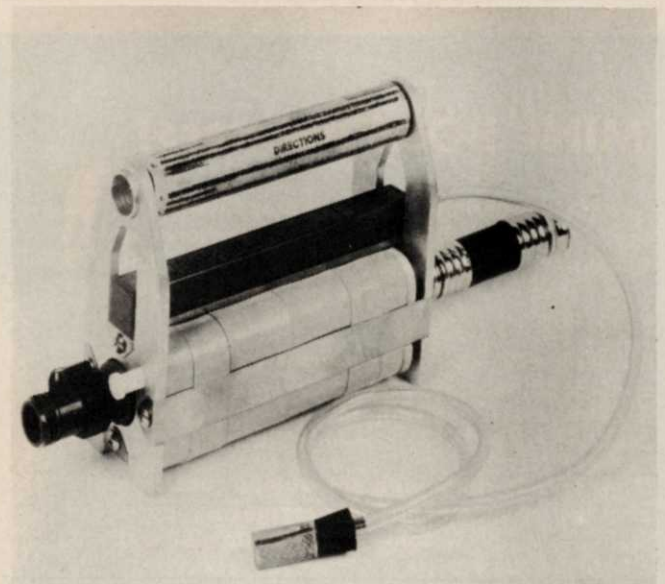
**POLY-X CHAIN:** Mercury Products Corporation, Providence, R.I.

Need a personnel barricade or barrier? A warning of a hazard? Use this colorful and decorative as well as durable polyethylene chain. It's available in several sizes and colors. Requires little or no maintenance and it is available in strengths up to 1200 lbs. of force. Also available are posts and cones on which chain is attached. Ideal for the golf superintendent or the parks and grounds manager. For more details, circle (702) on the reply card.



**HYDROGRASSER:** Reinco, Inc., Plainfield, N.J.

Model HG-25 is a low profile, 2500 gallon unit that can seed and fertilize five acres in one operation. Built for the large acreage user, this machine doesn't employ any belts, cables, pulleys or special drives. Fewer moving parts virtually eliminate down time. It can be chassis mounted and has a directional spray turret boom. The recirculating jet agitation insures continuous, uniform, no-clog solids dispersion. For more details, circle (703) on the reply card.



**HYDROCARE POWER SPRAYER:** Agro Chem, Inc., Chicago, Ill.

This small but powerful unit does the job of sprayers much larger in size. It attaches quickly to a standard water spigot. Here's how it works: Water flowing through the injection applicator activates four pistons which accurately inject liquid concentrate chemicals into the water stream at the ratio of one part concentrate to 24 parts water. Works positively on water pressures from 20 to 80 psi and flow rates from 1/10 to 7½ gpm. For more details, circle (704) on the reply card.



## AMVAC Chemical Corp. Plans Attack On Aquatic Weeds

AMVAC Chemical Corporation has announced plans to launch a full scale offensive against weeds, algae and other aquatic pests.

Of growing concern to everyone from EPA to sportsmen's groups is the condition of much of the water in the United States. Many bodies of water are choked with weeds and algae as a result of natural aging or other outside influences. While these aging processes are difficult to reverse, whether from natural causes or from other factors, symptomatic relief is available.

One of the reasons that persons owning or controlling water find it difficult to obtain information on this subject is that most of the materials available for this use have been offshoots of research in other areas, says the corporation. Another reason for the lack of readily available information has been the lack of trained personnel at the distributor level. Only a handful of such specialists exist, and a competent staff is difficult to assemble.

Justin Fuelleman, technical director for the organization, brings years of experience in weed abatement and

aquatic pest control to the firm. Jack Prieur, as sales manager, is well known to public health and mosquito abatement personnel throughout the western United States. With the recent addition of Richard Zuccarini as a full time aquatic specialist, the firm becomes one of the first organizations in the west to create such a department.

Plans are to offer materials and recommendations for total aquatic habitat management as the situation dictates. "We feel that ill considered use of materials creates problems greater than those that already exist," says Justin R. Fuelleman. "No responsible Pest Control Advisor advocates unplanned and indiscriminate use of any agricultural chemical."

"We try to make recommendations which make maximum use of available natural controls and require a minimum of outside influence. This is not only the least expensive way," says Richard Zuccarini, "but it gives the longest lasting results.

"We cannot expect to have clear water all year around without expending considerable effort. As the season progresses, it is natural for most bodies of water to become choked with weeds, algae and other

matter. In the fall, with changing seasons, this dies back, decays, and as a result, fish and other aquatic creatures die. This is the natural system of checks and balances. Eventually all lakes grow old and die. The older they are physically, the greater the effort to keep them alive and safe for humans and animal life.

"In the end, it comes down to dollars and cents. We can devote a considerable amount of time and effort to a project, but we have to pay for materials. If we cannot find enough concerned people to raise the capital, neither we nor anyone else can begin."

## Stanley Hydraulics Is New Ackley Name

Ackley Manufacturing Co., Clackamas, Oregon, subsidiary of The Stanley Works, has recently undergone a name change. The new name will be Stanley Hydraulic Tools, Division of The Stanley Works.

No other changes in company management or policy will occur, said Robert J. Lytle, president, Stanley Hydraulic Tools.

## MINI BOSS delivers!

Because we designed this self-propelled sprinkler with smaller irrigation operations in mind, settings may be easily adjusted by one man. And, Mini Boss requires no man hours on the trip!

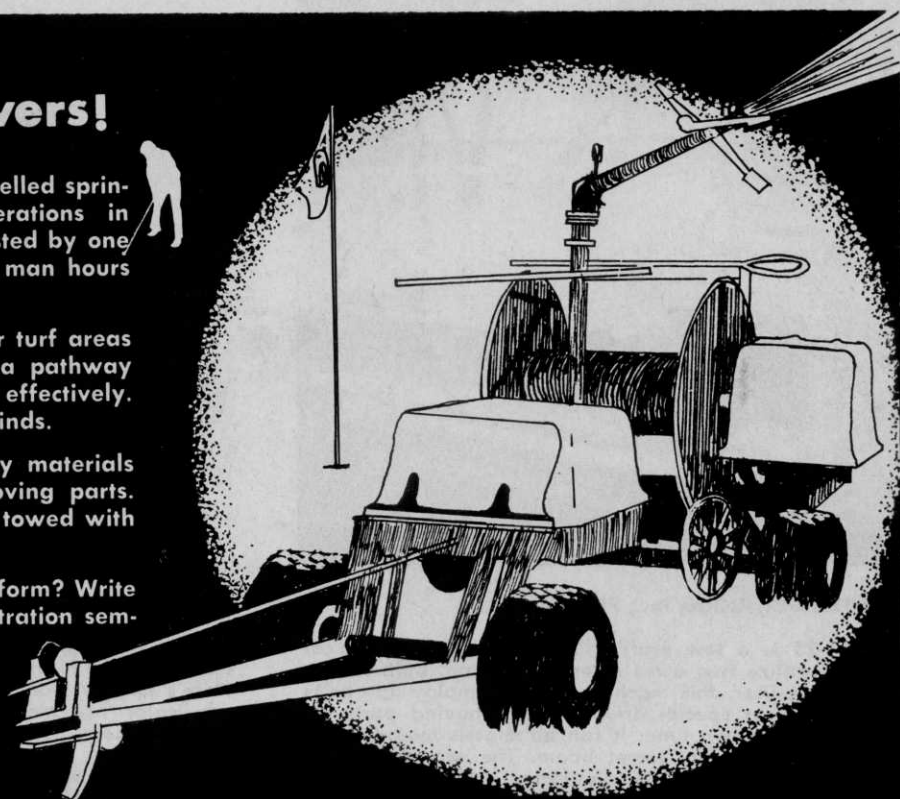
It's perfect for odd-shaped grass or turf areas and rough terrain, because only a pathway is needed for this unit to water effectively. Also, may be set for prevailing winds.

Mini Boss is built with top-quality materials and the minimum number of moving parts. Sturdy, yet lightweight, it may be towed with a light service vehicle.

Want to see this Mini machine perform? Write for details about our free demonstration seminar and specifications:

Boss Irrigation  
Consolidated Pipe & Tubing  
P.O. Box 191  
San Angelo, Texas 76901

or call collect: 915/655-5446



# TELL ME MORE

This page is provided for your convenience. To obtain additional information on new products, trade literature and advertised products in this issue, simply circle the corresponding number on the perforated card below, fill in your name, business address and mail the card. No postage is required.

**FOR MORE INFORMATION FILL OUT AND MAIL TODAY!**

#### ADVERTISED PRODUCTS

101	102	103	104	105	106	107	108	109
110	111	112	113	114	115	116	117	118
119	120	121	122	123	124	125	126	127
128	129	130	131	132	133	134	135	136
137	138	139	140	141	142	143	144	145
146	147	148	149	150	151	152	153	154
155	156	157	158	159	160	161	162	163
164	165	166	167	168	169	170	171	172
173	174	175	176	177	178	179	180	181
182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199

#### NEW PRODUCTS

700	701	702	703	704	705	706	707	708
709	710	711	712	713	714	715	716	717
718	719	720	721	722	723	724	725	726
727	728	729	730	731	732	733	734	735
736	737	738	739	740	741	742	743	744

Please send more information on items circled

(Please type or print)

2/74

Name .....

Position .....

Company .....

Street .....


City .....

State ..... Zip Code .....

Signature .....

Please describe your type of business .....

Note Inquiries serviced until April 20, 1974



Use this convenient card if  
you wish to receive further  
information on products and  
services advertised or de-  
scribed in this issue.

**BUSINESS REPLY MAIL**

NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

FIRST CLASS  
PERMIT NO. 665  
DULUTH, MINNESOTA

postage will be paid by

**WEEDS  
TREES  
and TURF**

POST OFFICE BOX 6049  
DULUTH, MINNESOTA 55806



# Green Is For **GO**

*Editor's Note:* Louis L. Goldstein is the comptroller of the State of Maryland. In his work he regularly deals with reports on the state's economy. He was the guest speaker at the recent meeting of the Maryland Turfgrass Council. Although his remarks are directed to this group, we present them because they have meaning to all sod producers.

**T**HERE was a book written some years ago which revolved around the fictitious story that all of the grass in the world had died except for one remaining green patch in England. The story highlighted the importance of grass through the description of the savagery and selfishness of the few remaining persons fighting for their very lives over the possession of this last green acre.

Without grass, there would be no meat nor other food crops. Without grass, our supply of oxygen would be dangerously depleted. Every acre

of healthy grass produces much life supporting oxygen. Without grass, soil erosion would engulf us all. Land without grass would indeed be a "Never-Never Land". Turfgrass and its production, is, thank God, your basic interest and consideration.

A chart in one of your recent newsletters caught my attention. It showed a breakdown of the various uses of turfgrass in the state (Maryland). The \$4.1 million expenditure for maintaining the sod being produced is a drop in the bucket when compared to the total effect on the economy derived from harvesting, transporting, and installing this product to the ultimate consumer site. (Table 1, pg. 66)

The many uses of turfgrass right here in Maryland make up an impressive list. But the uses for your product — turfgrass — and for other varieties of grass that I am sure many of you will be producing in the future, will continue to grow. Grass will undoubtedly be widely

Louis L. Goldstein, the author of this article, is comptroller for the State of Maryland. He is shown here (1) along with Dr. John R. Hall, U of Md. turf specialist, and Emory Patton, vice president of the Maryland Turfgrass Council.



## The great dwarf Bluegrass that stands below the rest.

- DEVELOPED IN ALASKA
- LOW CUTTING HEIGHT
- SHADE TOLERANT
- DEEP GREEN COLOR
- HIGHEST ROOT STRENGTH (A HARVESTER MUST)
- HIGHLY WINTER HARDY
- RESISTANCE TO ALL MAJOR TURF DISEASES

**DEMAND CERTIFIED NUGGET**  
—DIRECT PROGENY OF  
ALASKAN SEED

**Nugget**

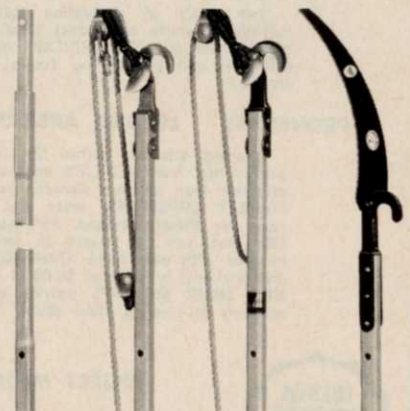
Kentucky Bluegrass  
Stock available.

Call collect for your nearest distributor.

**PICKSEED WEST, INC.**  
Box 888, Tangent, Ore. 97389  
Tel. 503/926-8886

For More Details Circle (164) on Reply Card

## BARTLETT Tree Trimmer with Fiberglass Handle



Features single-pulley (1 1/4" cap.) or double-pulley (1 1/2" cap.) tree trimmer head section, and square-end mount pole saw head section with 4 ft., 6 ft. or 8 ft. extension sections with built-in, ALL-FIBERGLASS CONNECTING SLEEVE, and polypropylene rope.

Catalog free on request.

**BARTLETT MANUFACTURING CO.**  
3009 E. Grand Blvd.  
Detroit, Mich. 48202  
Phone (Area 313) 873-7300

For More Details Circle (168) on Reply Card

**Table 1. Estimated Expenditure in 1971 for maintaining turfgrass in the State of Maryland.**

Area	Acres	Annual Maintenance Production Costs
Sod	13,000	\$ 4,100,000
Golf Courses	13,240	8,570,000
Lawns - Maintenance	140,000	42,200,000
Lawns - Established	5,089	12,724,000
Federal Installations	21,900	2,250,000
Schools & Colleges	16,700	1,714,000
Recreation Areas	16,800	1,645,000
Churches	2,600	266,200
Airports	1,200	123,200
Highways (State Roads)	20,000	1,500,000
Cemeteries	N/A	4,800,000
<b>Total</b>	<b>249,729</b>	<b>\$79,892,400</b>

used purely as what I call an environmental crop. A Crop whose basic use is for the maintenance and improvement of our vital environmental well-being.

The average cost paid in 1971 to cut, load, deliver and install an acre of sod in Maryland was \$3,279. Couple this figure with the estimated 13,000 acres of sod grown in Maryland and it is quite possible that the gross product of the State of Maryland could be increased by some 42 million dollars just by virtue of the installation of the sod crop.

Already we are moving in that di-

rection. Building developers are turning more and more to the establishment and preservation of green havens within their community planning . . . highway builders are realizing the physical and environmental necessity for providing green medium strips.

Cities are including a grassy green oasis within their urban development programs. Everywhere you look, the word is green . . . The color symbol for go — for life itself.

The word grass comes up in our conversation a thousand times a day — once again underscoring the importance of your product, "a great

crop." We say "That the grass is greener on the other side of the fence," when we dream of improving our lot in life. We speak of "the grass roots" of our American way of life, and we even sing of "The Green, Green Grass of Home."

But the time for sentiment alone is over. Like so many other things within the scope of our American way of life, that have been habitually taken for granted, the greening of America can no longer be left to chance. Wild grass is fast becoming extinct. Nowadays, the key word is cultivation and you of the council membership are doing an excellent job of keeping up with the technical problems of producing the best strains of healthy grass for a multitude of turf uses.

The production of tailor-made grass for a specific use is one of the great wonders of this age of technology. As you well know, golf courses require a different, tougher type of grass than say, a median strip of highway. Climatic conditions, usage, and many other considerations go into the development of your products.

Now is the time to take a down to  
(continued on page 72)



## for fast-effective treatment of iron chlorosis

### ★ TESTED BY LEADING UNIVERSITIES

Two years of evaluating MEDICAPS by leading university researchers have shown the effectiveness of IRON MEDICAPS in correcting chlorosis, and the lasting control that they provide.

### ★ PROVEN BY LEADING ARBORISTS

Leading arborists across the country have proven that Iron MEDICAPS are not only more effective than previous chlorosis remedies—BUT EQUALLY IMPORTANT, labor and application costs are sharply reduced. For example, a 5" DBH tree can be treated in less than ten minutes with only three STANDARD MEDICAPS (material cost is less than \$3.00 at retail value). NEW SUPER MEDICAPS provide even greater economy in treating trees above 12" DBH.



### INJECT MEDICAPS NOW!

Even if you're in an area where trees are dormant, you can utilize "off season labor" to inject MEDICAPS now. The encapsulated MEDICAP "implants" will be ready to go to work when the tree sap moves upward.

**Creative Sales, Inc.**  
200 So. Main Fremont, Nebr. 68025

STH74-8 A



## Kellogg bags it!

### NITROFORM\*

organic nitrogen

The slow-release nitrogen that helps turf keep its good looks without repeated fertilizing. Use it to save labor.

Turf and Horticultural Products, Synthetics Dept.  
Wilmington, Delaware 19899

\*Registered trademark of Hercules Incorporated.

For More Details Circle (155) on Reply Card



STH74-9 A



## Lakeshore bags it!

### NITROFORM\*

organic nitrogen

The odorless nitrogen. Has guaranteed performance, too.

Turf and Horticultural Products, Synthetics Dept.  
Wilmington, Delaware 19899

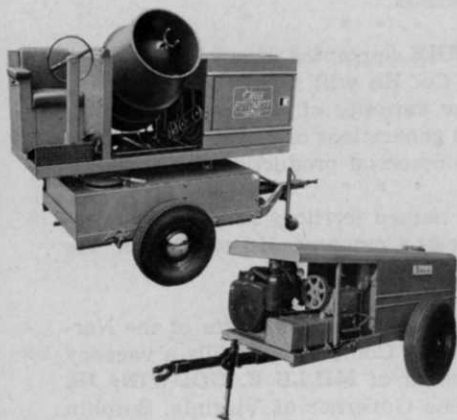
\*Registered trademark of Hercules Incorporated.







## Seasonal leaf drop is one thing...



...but loss of leaves through bark and leaf infestation is quite another. To protect your shade trees, a well-planned spray program is well worth the time it requires — and BEAN spraying equipment is the best way to go. FMC's Rotomist controlled-air sprayers for example, are engineered to give you maximum penetration and assure you the best possible coverage and protection. FMC's Royal high pressure sprayers also afford you the versatility and performance you need...are available skid-

mounted or in trailer models, with hose and gun for effective shade tree applications. You won't find any better tree protection than with BEAN sprayers. Contact your nearest FMC representative for a demonstration today, or write:

FMC Corporation  
Agricultural Machinery Division  
Jonesboro, Arkansas 72401

**FMC** Environmental  
Equipment

For More Details Circle (165) on Reply Card



# Quality

in looks, ability and  
performance in the field.

And, Jacklin Seed Company built its reputation for quality with top performance in the field year after year. Jacklin is your reliable answer to seed performance. When you order seed, specify JACKLIN SEED.

#### JACKLIN PRODUCES:

Merion, 0217<sup>®</sup> Fylking, Glade, Cheri, Nugget, S-21, Newport, Delta, Geary, Park, Six, and Troy Kentucky bluegrass; Rathdrum and Reubens Canada bluegrass; Norlea Perennial ryegrass, Public and private varieties of Creeping Red, Nova rubra, Chewings, and Hard fescues.

And has produced on a contract basis: Pennfine, N.K. 100, N.K. 200 and Pelo Perennial ryegrass. For these quality Jacklin seeds see your local wholesale seed distributor. Jacklin is also a prime\* contract producer of: Warren's A-34, O.M. Scott's Windsor and Adelphi Kentucky bluegrass. Jacklin has built a reputation of fine quality and service for over 30 years. You can count on purity of content, high quality and sure germination.

\*Available only through breeder and owner outlets.

## Jacklin<sup>®</sup> Seed Company

Division of the Vaughan-Jacklin Corporation

industry people  
on the move



**EDWIN M. TAYLOR** appointed chief designer for Friend Manufacturing Corp.

\* \* \*

**BEN KELKER** appointed sales representative in northern Wisconsin for Lely Corporation.

\* \* \*

**DICK ZUCCARINI** joins Amvac Chemical Corp. to help organize their new aquatic nuisance control dept. He was formerly western regional manager for Applied Biochemists.

\* \* \*

**ROBERT V. MITCHELL** appointed superintendent of golf and grounds for The Greenbrier. He previously was golf superintendent of the Portage Country Club, Akron, Ohio.

\* \* \*

**DR. S. ROBERT COLBY** joins the agricultural chemicals division of ICI America Inc. He will direct programs involving plant growth regulators and herbicides at the company's Goldsboro, N.C. research center.

\* \* \*

**RAYMOND P. STORTI**, named marketing manager of the turf products division, Hahn, Inc. He was formerly general manager with Toro Pacific Distributing Company.

\* \* \*

**DR. DONALD W. GATES, GARRY D. MASSEY, DAVID J. PROCHASKA** join 3M Company as agricultural research scientists responsible for development of agricultural chemicals.

\* \* \*

**J. DAVID DeKRAKER** is now director of marketing planning for the agricultural division of Ciba-Geigy Corp. In other company moves **JOHN A. MULLINS, JR.** named assistant director of sales for the division; **DR. EVERETT COWETT** appointed director of technical sales services; **FRANK L. CLUNAN** to manager of distribution services in logistics; **GENE GENTRY** to director of product quality assurance; **PETER L. PLATZ** to manager of contract manufacturing; **DR. C. GLENN BRADLEY** to manager of chemical studies; **DR. BILL G. TWEEDY** to manager of residue investigations.

\* \* \*

**AMBROSE D. DEGIDIO** has taken over management of all Toro-owned distribution points. He replaces **ROY W. SIMPSON** who resigned to become an independent Toro distributor in Phoenix.

\* \* \*

**DR. JOHN H. THORNE**, appointed director of research for the Jacklin Seed Co. He will supervise the testing and evaluating of new varieties of turfgrasses, monitor breeder fields and test generations of mother plants from initial discovery to commercial production.

\* \* \*

**JAMES A. BERGS**, named territory sales-service representative for Mathews Company. He will cover the eastern half of Minnesota.

\* \* \*

**SAMUEL R. SUTPHIN**, elected a director of the Norfolk and Western Railway Company. He fills a vacancy caused by the resignation of **MILLS E. GODWIN, JR.** who resigned to become Governor of Virginia. Sutphin is from Zionville, Indiana.



## Davey comes equipped to give you a head start in 1974.



Get the jump on busy spring and summer seasons. We've got everything it takes to put you ahead of schedule: custom-built trucks, hydraulic cranes, power saws, brush chippers, and other high production tools.

Our crews are carefully trained and supervised by experienced men who know how to use this specialized equipment efficiently and safely.

They'll help you get a lot of work done before parks, golf courses, and other civic and recreational areas get crowded.

They know how to prune deadwood and open up vistas, remove dangerous trees, plant new trees, grind stumps below ground level, remove unwanted growth from paths and fairways.

Right now is a thrifty time of year to put Davey to work on your grounds. Programs can be set up to meet your budget requirements. And we can give prompt attention to your tree-care needs.

Call for estimates without obligation. We're in the Yellow Pages under Tree Service.



# DAVEY TREE

KENT, OHIO 44240  
Coast to Coast and Canada



For More Details Circle (130) on Reply Card

## \$20 THOUSAND IN SAVINGS

(from page 26)

mowing and watering, is not noticeable.

At times what you don't do is as important as what you do. Until about 15 years ago, for example, I spiked the fairways, but have since discontinued the practice. I believe fairway spiking: encourages *Poa annua* growth, causes unnecessary damage, more work, is unsightly and angers players who are unhappy with the playing conditions. However, aeration can have a place in turf management when used properly. A thatch machine such as Ryan's Mataway will assure better and tighter turf so fairways can be cut at a one-half-inch championship height.

No matter what a superintendent does or doesn't do, no matter how good a businessman he is or what precautions he takes, Nature can defeat him overnight. We can't be cocky in this business because our jobs are 99 percent luck and one percent common sense. But I love my work and enjoy competing with Nature. If I had to live my life again, I wouldn't change a thing. □

## Bermudagrass Care Requires Many Inputs

Standard management practices of irrigation, vertical mowing, and fertilization must be carefully programmed with chemical weed control to maintain weed-free, high quality bermudagrass, as shown by results of research done at the University of California, Riverside.

"If the interrelationships and timing of these practices are not considered," says W. W. Wright, research associate, "the results may be undesirable with respect to weed control and turf appearance."

Wright reported on the effects of cultural and chemical renovation of weed-infested bermudagrass turf during the American Society of Agronomy.

He conducted the research in cooperation with Dr. V. B. Youngner, professor of agronomy, UCR, and Dr. V. A. Gibeault, agricultural extension environmental horticulturist at the Riverside campus. The study was partially supported by a grant-in-aid from the U.S. Golf Association-Greens Section.

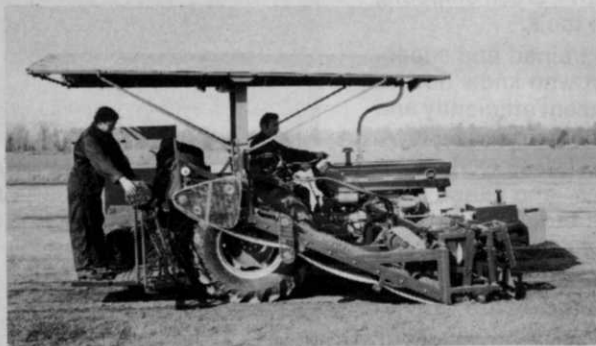
"In a randomized split, split plot

experiment," Wright said, "irrigation, vertical mowing, nitrogen fertilization, and chemical weed control were evaluated for the renovation of a weed-infested common bermudagrass turf. These factors were considered from the viewpoint of long-term effects and maintenance of an improved condition once it was attained."

The researcher reported that the following results were observed after two and one-half years of regular treatment: over all the cultural practices, the highest quality turf was obtained with the use of the herbicide Kerb, although certain broad-leaf weeds were not controlled. Both fall and spring vertical mowing increased weed populations despite herbicide applications. For this reason vertical mowing, unless done for reseeding or thatch removal purposes, is a questionable practice. Fall vertical-mown plots contained considerably more weeds than spring vertical-mown plots. Soluble and slow-release fertilizers gave comparable turf quality. The frequency of irrigation influences the performance of chemicals and the effects of other cultural practices.

# THE BROUWER HARVESTER

HAS OUTSOLD  
ALL OTHER SOD HARVESTERS



## WHY?

BECAUSE WORLDWIDE CUSTOMER  
ACCEPTANCE SHOWS THAT IT IS:

- The Simplest
- The Lowest Cost
- The Most Maneuverable
- The Most Dependable
- The Most Productive  
and
- It Requires Less Maintenance Than  
Other Makes

**BROUWER TURF EQUIPMENT, LTD.**

(416) 476-2442

RR #1  
Keswick, Ontario, Canada

(416) 476-3333