cally advanced to the presidency. He is supervisor of parks for Tenafly, New Jersey.

The new president-elect is Earl Wilson, vice president of Thornton-Wilson, Inc., Maineville, Ohio. Elected vice president was Fred Rigger, who is assistant manager in charge of grounds, Padonia Swim Club, Cockeysville, Maryland. Robert Fisher was reelected treasurer.

The society will present its first area management workshop, "Business Management Techniques for Professional Grounds Managers," at the Holiday Inn in Jessup, Maryland, on February 18 and 19, from 9:00 a.m. to 4:00 p.m. For information and registration brochure, contact Allan Shulder, Executive Director, Professional Grounds Management Society, 7 Church Lane, Pikesville, MD 21208; telephone 301-653-2742.

TURF DISEASE

Bitter cold, drought may alter incidence

Exceptional cold winter temperatures and lack of rainfall in the Northeast may alter turf disease incidence, according to Cornell University turf pathologist Dr. Richard Smiley.

Lack of heavy snow cover and frigid soil temperatures should reduce the incidence of snow molds, says Smiley. However, lack of rainfall and snowfall over the past two years in the Northeast combined with irrigation may increase the incidence of Fusarium Blight, red thread, and dollarspot. Droughty soil combined with surface humidity from irrigation may make summer diseases more prevalent in the region.

Smiley anticipates an increase in summer turf diseases into the mid-80's due to continued drought conditions in the Northeast.

CENSUS

Farmland value doubles, irrigation more common

Between 1974 and 1978, the average value of agricultural land and buildings per acre increased from \$336 to \$627, according to the latest data from the Commerce Department's Bureau of the Census. The dependence on irrigation for agriculture increased in the same period to five percent of U.S. farmland.

Although the number of farms continued to decrease, the drop was less

than in previous periods. The nation had one billion acres of productive farmland in 1978 in 2,480,000 farms, down 150,000 farms from 1974. There was an increase in the number of farms with less than 50 acres or more than 500 acres.

Farmers are turning to more efficient use of land and more control of available cropland. Acreage for pasture declined and irrigated acreage increased.

Orchard acreage increased ten percent and the number of orchards increase by a third. Possibly many of these new businesses were less than 50 acres.

Farmers chiseled away at wasteland by increased use of irrigation and decreased use of land for pasture. The net result was an increase in total cropland in 1978.

Continues on page 73





GOOSEGRASS SILVER CRABGRASS CROWSFOOT

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What you call it can't make it go away ...but Balan can.

Depending on where you are, Goosegrass gets called a lot of things. But no matter where you are, nobody calls Goosegrass an early riser. It doesn't get up and get growing with regular crabgrass in early spring. Goosegrass waits to make its appearance until six

to eight weeks after crabgrass germinates. And by the time you see it, there's not much you can do about it. But an application of Balan just before it begins to germinate is all it takes to put an end to your Goosegrass problems. Ask your Elanco distributor salesman to

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MARKETS

Fertilizer producers up output by 5 percent

U.S. fertilizer producers increased production five percent above the previous year's five-month period of July-November, and almost equalled domestic disapperance of an unprecedented record fall in 1979, according to a report of The Fertilizer Institute.

"Nitrogen products remained the strong leaders in domestic disapperance for the five-month period," said Edwin M. Wheller, president of The Fertilizer Institute. "This product group showed a gain of five percent over July-November 1979, whereas all other product groups decreased in market movement."

Wheeler said that continued strong foreign demand for U.S.-produced fertilizers resulted in an increase of 30 percent for exports in the July-November period over 1979. This increase in exports applies broadly to each of the nitrogen, phosphate, and potash product groups. Nitrogen solution exports were more than twice last year's levels. Urea exports increased 58 percent, diammonium phosphate, 38 percent, and potassium muriate, 22 percent over year-ago levels for the five-month period.

NEW COMPANY

Irrigation consultant starts California firm

Harold W. Wake, a pioneer in the design and manufacture of low volume irrigation systems, has formed a manufacturing and marketing firm, Misti Maid, Inc., with a new line of home and garden irrigation systems.

Wake says the Misti Maid systems contain unique, advanced features, such as easy installation, great water and energy saving ability, adaptability to all terrain and uses, and the capability to fog, drip, mist, or sprinkle.

Art McNab Agency, Mountain View, CA, will be the manufacturer's representative for the firm in the West.

COURTS

Retailers unpaid for 2,4,5-T/Silvex products

Many retailers have not been paid for 2,4,5-T/Silvex products they returned

to suppliers after the Environmental Protection Agnecy's cancellation order in March. 1980.

Dow Chemical is still appealing the cancellation, but most formulators have agreed in the meantime to take back all supplies subject to EPA reimbursement. Retailers are entitled to cost plus a 15 percent handling charge.

While the EPA has admitted the validity and amounts of major claims, it has refused to pay for lack of funds. Lebanon Chemical sued the government in U.S. Court of Claims last June, and others are following. Favorable court judgments are expected within the next few months, and payment will then follow from court appropriations.



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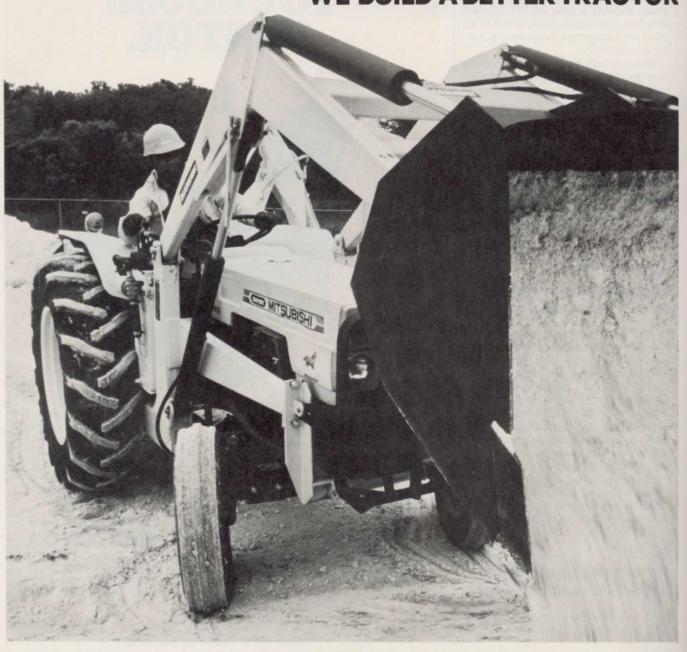
A DIAMOND IN THE ROUGH.

You're a pro and it shows. Everything has to be just right—especially the equipment you use. That's why you'll want the Mitsubishi diamond on those rough jobs, where a tractor has to deliver.

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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

2nd Annual Agri-Turf Irrigation Exposition and Technical Conference, Salt Palace, Salt Lake City, UT, Feb. 15-18. Contact The Irrigation Association, 13975 Connecticut Ave., Silver Spring, MD 20906, 301/871-1200.

National Arborist Association Annual Meeting, Sarasota Hyatt House, Sarasota, FL, Feb. 15-19. Contact Robert Felix, Executive Vice President, 3537 Stratford Road, Wantagh, NY 11793, 516/221-3082.

Capital Area Turf & Ornamental School, Lancaster Area, Feb. 18-19. Contact Harold E. Stewart, Dauphin County Cooperative Extension Service, 75 South Houcks Street, Suite 101, Harrisburg, PA 17109, 717/652-8460.

Maryland Nurserymen's Day, Maryland Flower Growers' Day, and Landscape Contractors Day, Center of Adult Education, University of Maryland, College Park, Feb. 17, 18, and 19. Contact Conrad B. Link, Professor, Dept. of Horticulture, University of Maryland, College of Agriculture, College Park, MD 20742, 301/454-3606.

WSSA annual meeting, Dunes Hotel and Country Club, Las Vegas, NV, Feb. 17-19. Contact Weed Science Society of America, 309 West Clark St., Champaign, IL 61820.

Southern ISA chapter meeting, Sheraton Hotel, Charlotte, NC, Feb. 22-25. Contact Ervin C. Bundy, Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/328-2032.

American Sod Producers Association Midwinter Conference, Harrah's, Lake Tahoe, NV, Feb. 23-25. Contact Bob Garey, ASPA Executive Director, 9th and Minnesota, Hastings, NE 68901, 402/463-4683.

Connecticut Groundskeepers Assoc. Conference, Hartford Civic Center, Hartford, CT, Feb. 25. Contact Connecticut Groundskeepers Assoc., P.O. Box 3916 Amity Station, New Haven, CT 06525.

Residential Landscape Design Short Course III, Fisher Auditorium, Ohio Agricultural Research and Development Center, Wooster, OH, **Feb. 25-27** Contact Fred Buscher, Area Extension Agent-Landscape Horticulture, Administration Building, OARDC, Wooster, OH 44691, 216/262-8176.

Penn-Del ISA chapter meeting, Holiday Inn, King-of-Prussia, PA, Feb. 26-27. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/320-2032.

Southern ISA chapter meeting, Sheraton (not finalized), Charlotte, NC, Mar. 1-4. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801.

Pennsylvania Turfgrass Conference & Trade Show, Hershey Lodge & Convention Center, Hershey, PA, Mar. 2-5. Contact Christine E. King, Executive Secretary-Treasurer, Pennsylvania Turfgrass Council, 412 Blanchard Street, Bellefonte, PA 16823, 814/355-8010.

The Irrigation Association Short Course, Pasco, WA, Mar. 3-4-5. Contact The Irrigation Association, 13975 Connecticut Ave., Silver Spring, MD 20906, 301/871-1200.

American Society of Agricultural Engineers symposium on "Engineering Systems for Forest Regeneration," North Carolina State University, Raleigh, NC, Mar. 3-6. Contact ASAE Headquarters, Dept. SESFOR, Box 410, St. Joseph, MI 49805, 616/429-0300.

Southeast Region Parks and Recreation Maintenance Operations workshop, Unicoi State Park, Mar. 8-13. Contact Charles Gregory, Recreation Advisor, Recreation Services Section, Georgia Dept. of Natural Resources, 270 Washington Street, S.W., Room 704, Atlanta, GA 30334.

The Irrigation Association Short Course, Lansing, MI, Mar. 10-11. Contact The Irrigation Association, 13975 Continues on page 76

Does the condition of your turf make you see red?

Switching to Pennfine Perennial Ryegrass could color your outlook. It's long been the standard of quality against which other varieties are compared. Why not simplify your life? Go with the most widely used fine-leafed perennial ryegrass in the nation. By the way, if you have trouble finding Pennfine, just ask the turf pro with the best-looking turf around. Chances are he's already using it. Pennfine Perennial Ryegrass, P.O. Box 923, Minneapolis, MN 55440



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Events from page 75

Connecticut Ave., Silver Spring, MD 20906, 301/871-1200.

Northeastern Pennsylvania Turf & Grounds Maintenance School, Master Host Motel, Wilkes-Barre, PA, Mar. 10-11. Contact E.V. Chadwick, Luzerne County Cooperative Extension Service, Court House Annex, 5 Water Street, Wilkes-Barre, PA 18702, 717/822-1109.

Residential Landscape Design Short Course IV, Fisher Auditorium, Ohio Agricultural Research and Development Center, Wooster, OH, Mar. 16-17. Contact Fred Buscher, Area Extension Agent-Landscape Horticulture, Administration Building, OARDC, Wooster, OH 44691, 216/262-8176.

Hazardous Waste Management Conference, Stouffer's National Center, Arlington, VA, Mar. 16-17. Contact Robert W. Nash, executive director, The Energy Bureau Inc., 41 East 42nd Street, New York, NY 10017, 212/687-3178.

Continues on page 79



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One bluegrass does it best.

Warren's A-34 BenSun bluegrass out-performed 43 bluegrasses during a 5 year independent study at 8 universities.

Whether it be density, texture, disease resistance, color, uniformity, wear and shade tolerance, hot-cool-dry or wet conditions, A-34 BenSun was superior in quality to all others.

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FERTILIZE WITH ENVIRONMENTALLY RESPONSIBLE NITROFORM. UREAFORM NITROGEN

Overapplications of water soluble nitrogen may constitute a major source of nitrates in ground-water. This is called to your attention because golf courses and other ornamental turf are the single largest "crop" in many states.

AVOID NITRATE RUN-OFF.

Use fertilizer formulations with slow-release Nitroform 38%N to help reduce the problem of nitrate contamination. Use it not only on your greens and tees, but your fairways too. You can apply Nitroform less often, which saves labor and fuel. It also reduces costs.

NITROFORM IS ECOLOGICALLY TRUSTWORTHY.

Nitrogen in Nitroform
is held in reserve until turf
can use it. Then it is released
by bacterial action that
increases as soil moisture
and temperature increase.
This is when turf needs
and can use it. Nitroform
should be an important
element in every well-planned
turf fertility program because
it assures sustained, highnitrogen feeding when used
consistently.

INCREASE LATERAL GROWTH.

In recent tests on athletic fields, slow-release nitrogen increased lateral growth of turf rather than vertical growth. This increased turf density and resulted in fewer athletic injuries.

NO SALT BUILD-UP.

Water soluble nitrogens build up the salt level in your soil, which can eventually make it sterile. Nitroform will not build up the salt level.

LITTLE OR NO LEACHING.

University tests suggest that although water- soluble nitrogens may be cheaper on a pound-for- pound basis, it may be more economical to use slow release nitrogen

products on turf because of leaching or volatiliza

of leaching or volatilization of the water-solubles.

BE ENVIRONMENTALLY RESPONSIBLE. SPECIFY NITROFORM IN YOUR TURF FORMULA... OR APPLY DIRECT.

Use Blue Chip® for dry applications; Powder Blue™ for liquid. Good for shrubs and trees, too. Call your turf supplier or write for more information.





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Events from page 76

5th Turf Conference of Reinders Brothers, Inc., Waukesha Expo Center, Waukesha, WI, Mar. 18-19. Contact Ed Devinger, Reinders Brothers, Inc., 13400 Watertown Plank Road, Elm Grove, WI 53122, 414/786-3300.

Irrigation Association's Institute for Agricultural Irrigation, University of California-Riverside, Mar. 23-Apr. 3. Contact the IA, 13975 Connecticut Ave., Silver Spring, MD 20906.

The California Landscape Contractors Associations' second annual Landscape Industry Show, Convention Center, Long Beach, CA, Mar. 26-27. Contact Michael Leeson, CLCA, 1419 21st St., Sacramento, CA 95814, 916/448-2522.

Canada ISA chapter meeting, Holiday Inn City Centre, London, Ontario, Apr. 1-3. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/ 328-2032.

International Symposium on Phytophthora, University of California—Riverside, Apr. 1-4. Contact Forrest D. Cress, University of California—Riverside, Div. of Agricultural Sciences, Riverside, CA 92521, 714/787-3332.

Annual Meeting of the American Boxwood Society, Blandy Experimental Farm, Boyce, VA, May 14. Contact The American Boxwood Society, Box 85, Boyce, VA 22620.

Second Annual Menninger Flowering Tree Conference, Quality Inn, Cypress Gardens, Winter Haven, FL, May 14-15. Contact Mrs. Taylor Burris, P.O. Box 16796, Temple Terrace, FL 33687, 813/985-8511.

Western ISA chapter meeting, Sacramento Inn, Sacramento, CA, May 17-20. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/328-2832.

Quebec ISA chapter meeting, Hotel Auberge des Gouverneurs, Sherbrook, Quebec, May 21-23. Contact Ervin C. Bundy, 5 Lincoln Square, Executive Director, P.O. Box 71, Urbana, IL 61801, 217/328-2032.

California Nurserymen's refresher course, Cal Poly, San Luis Obispo, Continues on page 82 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 I 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

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Deere has hitch-mounted implements including a rotary tiller, a box scraper, a rear

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

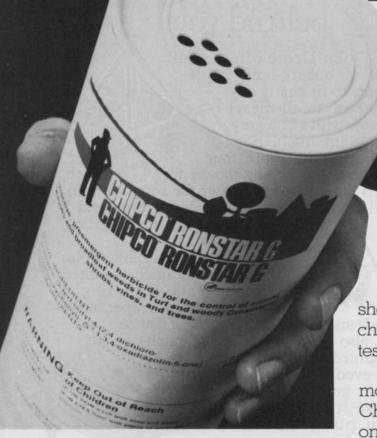
To find out how John Deere implements can increase the versatility of your small diesel tractor with a Category I 3-point hitch, send for a free descriptive folder. Mail this coupon to John Deere, Dept. B147, Moline, IL 61265.

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One in turf. One in ornamental plantings. And one in ground cover.

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Then, as time goes by, note that wherever you put the Chipco Ronstar G, you're getting great control of crabgrass, goosegrass, and a broad spectrum of

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And then, if you like the idea of getting excellent, long-lasting crabgrass control with a herbicide that's so versatile it's foolproof, you won't mind paying for your next batch of Chipco Ronstar G. Fair enough? Rhône Poulenc Chemical Co., Agrochemical Div., Rhône Poulenc Inc., Monmouth Junction, NJ 08852.

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