

Meeting Dates

10 Week Winter Turfgrass Course, Cook College Campus, New Brunswick, New Jersey, Jan. 6-Mar. 13

Maryland Turfgrass Council, Landscape Maintenance Workshop, Interstate Inn, College Park, Md., Jan. 15.

California Weed Conference, 29th annual meeting, El Cortez Hotel, San Diego, Calif., Jan. 19-21.

Chemicals for Turfgrass Usage Seminar, Purdue University, West Lafayette, Indiana, Jan. 19-23.

Kentucky Chapter, International Society of Arboriculture, Stauffer's Inn, Louisville, Ky., Jan. 20.

Michigan State University Turfgrass Conference, Kellogg Center, East Lansing, Michigan, Jan. 21-22.

Ohio Chapter, International Society of Arboriculture and Ohio Nursery Association Short Course and Trade Show, Sheraton-Columbus Hotel, Columbus, Ohio, Jan. 25-29.

Southern Weed Science Society, 29th annual meeting, Statler Hilton, Dallas, Texas, Jan. 26-29.

One Week Winter Short Course, Turfgrass Management, West Tennessee Experiment Station, Jackson, Tenn., Jan. 26-30.

Associated Landscape Contractors of America, annual meeting and trade exhibit, Jan. 26-31.

Virginia Turfgrass Conference, Sheraton Motor Inn, Fredericksburg, Virginia, Jan. 28-29.

California Plant and Soil Conference, Quality Inn, Sacramento, Calif., Jan. 28-30.

Connecticut Tree Protective Association, annual meeting, New Haven Plaza Hotel, Jan. 29.

Turf and Landscape Conference, annual meeting, Tappan Zee Inn, Nyack, N.Y., Feb. 4.

American Sod Producers Association, mid-winter conference, Sheraton Sand Key, Clearwater, Fla., Feb. 5-6.

Golf Course Superintendent's Association of America, 47th international conference and show, Auditorium and Convention Hall, Minneapolis, Minn. Feb. 8-13.

Midwestern Chapter, International Society of Arboriculture, Sheraton-O'Hare Motor Hotel, Rosemont-Chicago, Ill., Feb. 10-12.

Illinois Landscape Contractors Assoc., annual seminar, Villa Olivia Country Club, Feb. 12-13.

American Society of Consulting Arborists, 10th annual meeting, Vacation Village, San Diego, California, Feb. 12-14.

Canada Chapter, International Society of Arboriculture, Chateau Frontenac Hotel, Quebec City, Quebec, Feb. 12-14.

National Arborist Assoc., annual meeting, Vacation Village, Mission Bay, San Diego, Calif., Feb. 15-19.

Wisconsin Arborist Association, annual convention, Midway Motor Lodge, LaCrosse, Wisconsin, Feb. 18-19.

International Pesticide Applicators Association, Successful Business Management Practices, Botanical Gardens, Denver, Colorado, Feb. 20-21.

Southern Chapter, International Society of Arboriculture, Myrtle Beach Hilton, Myrtle Beach, S. Carolina, Feb. 22-25.

Shade Tree Short Course, 19th annual, Scheman Continuing Education Center, Iowa State University, Ames, Iowa. Feb. 25-27.

Professional Turf and Plant Conference, eighth annual, Saisbury Club, Eisenhower Park, East Meadow, L.I., N.Y., Mar. 2.

Professional Turf and Landscape Conference, sixth annual, Ramada Inn, North Haven, Conn., Mar. 3.

Canadian Golf Superintendents Association, 27th Annual turfgrass show, Inn-on-the-Park, Toronto, Ontario, Mar. 8-10.

Northeastern Forest Pest Council, winter meeting, Copley Plaza Hotel, Boston, Mass., Mar. 10-11.

Pennsylvania Parks and Recreation Society, 29th annual meeting, Seven Springs Mountain Resort, Champion, Pa., Mar. 14-17.

Western Society of Weed Science, annual meeting, Sheraton-Portland Hotel, Portland, Oregon, Mar. 16-18.

American Society of Golf Course Architects, 30th annual meeting, Del Monte Lodge, Monterey, California, Mar. 21-26.

Arizona Turfgrass Council, 2nd annual Turfgrass Materials and Equipment Show, Veterans Memorial Coliseum, Phoenix, Arizona, April 14.

Southern California Turf and Landscape Institute, annual meeting, Royal Inn, Anaheim, California, Apr. 28-29.

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NEWS (from page 40)

Toro Says Earnings Fell, But Market Share Boosted

Although Toro Co., earnings for the fourth quarter and fiscal 1975 fell short of fiscal 1974's records, the recession has helped the company boost its market share and it expects higher profit in fiscal 1976.

For all fiscal 1975, sales of the Minneapolis company were up about 15 percent from fiscal 1974's record \$125 million, David T. McLaughlin, president, said. He added, however, that the gain was entirely due to inflation. In fiscal 1974, Toro's earnings rose 15 percent to \$5.3 million, or \$2.15 a share, on an 18 percent sales gain.

Study Shows \$7,244 A Year Is Average Golf Hole Cost

It cost \$467 more last year to maintain a golf hole than it did the year before, according to a national study just completed by Harris, Kerr, Forster & Co. The company

surveyed maintenance costs at 100 clubs across the United States.

In a breakdown of the \$7,244 that each green cost, the survey showed payroll and related costs amounted to \$4,398 and all other expenses \$2,306. This amounts to an overall cost of \$130,392 for an 18-hole facility. For 1973, a similar study showed per hole costs of \$6,777.

International Turf Report Published With 70 Papers

The second research conference of the International Turfgrass Society held in 1973 featured more than 80 presentations concerned with turfgrass culture and use throughout the world.

The bulk of these presentations are now available in "Proceedings of the Second International Turfgrass Research Conference," published recently by the American Society of Agronomy and the Crop Science Society of America. The book is available for \$17 from the American Society of Agronomy, 677 S. Segoe Rd., Madison, Wis. 53711.

RENEWAL

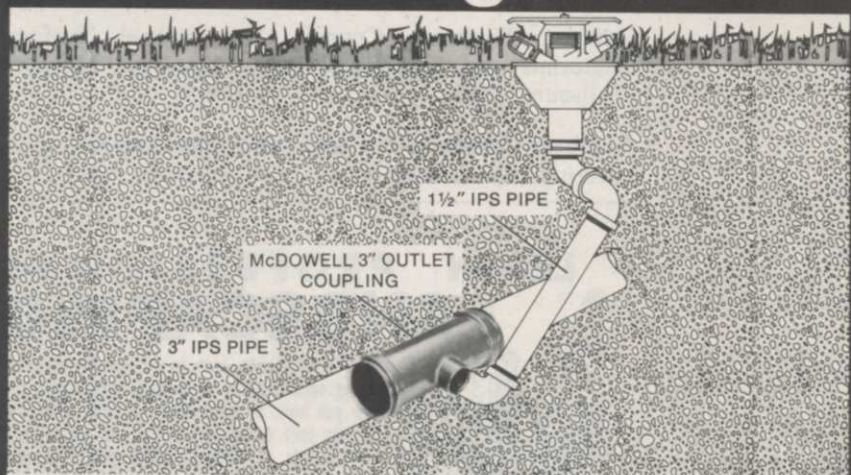
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Bent Greens, Battery-Power Mowers Early in Chicago

The first power mower on a golf course was used at Chicago Golf Club in 1899. It was powered by electric batteries. Dave Foulis recalled the start of power mowing in recollections he wrote in 1941 and reprinted recently in the newsletter of the Midwest Golf Course Superintendents Association.

Dave had come to Chicago in 1896 to assist his brother Jim as pro-greenkeeper. Jim had arrived in 1895. Jim played in the first U.S. Open at Newport Golf Club, Rhode Island in 1895. He tied for third at 176 with S. W. Smith, a Toronto amateur. Jim won the second Open in 1896 at Shinnecock Hills Golf Club with 152.

Dave also recalled that Charles Blair MacDonald, the first USGA national amateur champion and architect of the Chicago Golf Club course, the nation's first 18-hole course, had the fairways sown in 1897 with three tons of Kentucky bluegrass and one ton of redtop. That same year McDonald also imported bent seed from Holland for the greens.



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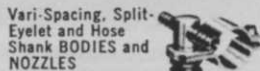


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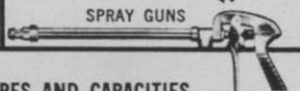
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People on the Move

Dr. Carl M. Berntsen, appointed director of Timber Management Research for the Forest Service, U. S. Department of Agriculture. Berntsen was formerly deputy director of the North Central Forest Experiment station, with headquarters at St. Paul, Minn. He succeeds **Dr. Warren T. Doolittle**, who was recently appointed Associate Deputy Chief for Research.

* * *

Margaret Herbst, named executive secretary for the New York State Nurserymen's Association. Herbst is also executive secretary for the New York State Arborist Assoc., New York State Association of Cemeteries, and the Long Island Nurserymen's Assoc.

* * *

Ralph W. Spaulding, elected president of the Lawn & Garden Distributors Association for 1975-76. The association is composed of 175 distributors and manufacturers of seeds, chemicals, fertilizer, soil and accessories for the lawn and garden market nationwide.

* * *

Richard Gray, elected president of the Central Plains Turfgrass Foundation. Gray is superintendent of Crestview Country Club, Wichita, Kansas. **Herman Siler**, of Siler's Shade Acres Golf Course, Springfield, Mo., elected vice president, and **Ray A. Keen**, KSU professor of horticulture, reappointed secretary and treasurer. Newly elected foundation directors are **Ross B. May**, Wichita Parks; **Cary L. Tegtmeyer**, Kansas City, Mo., parks and recreation; **Blue Eastham**, El Dorado Country Club; and **Gary C. Panter**, Leawood South Golf Course.

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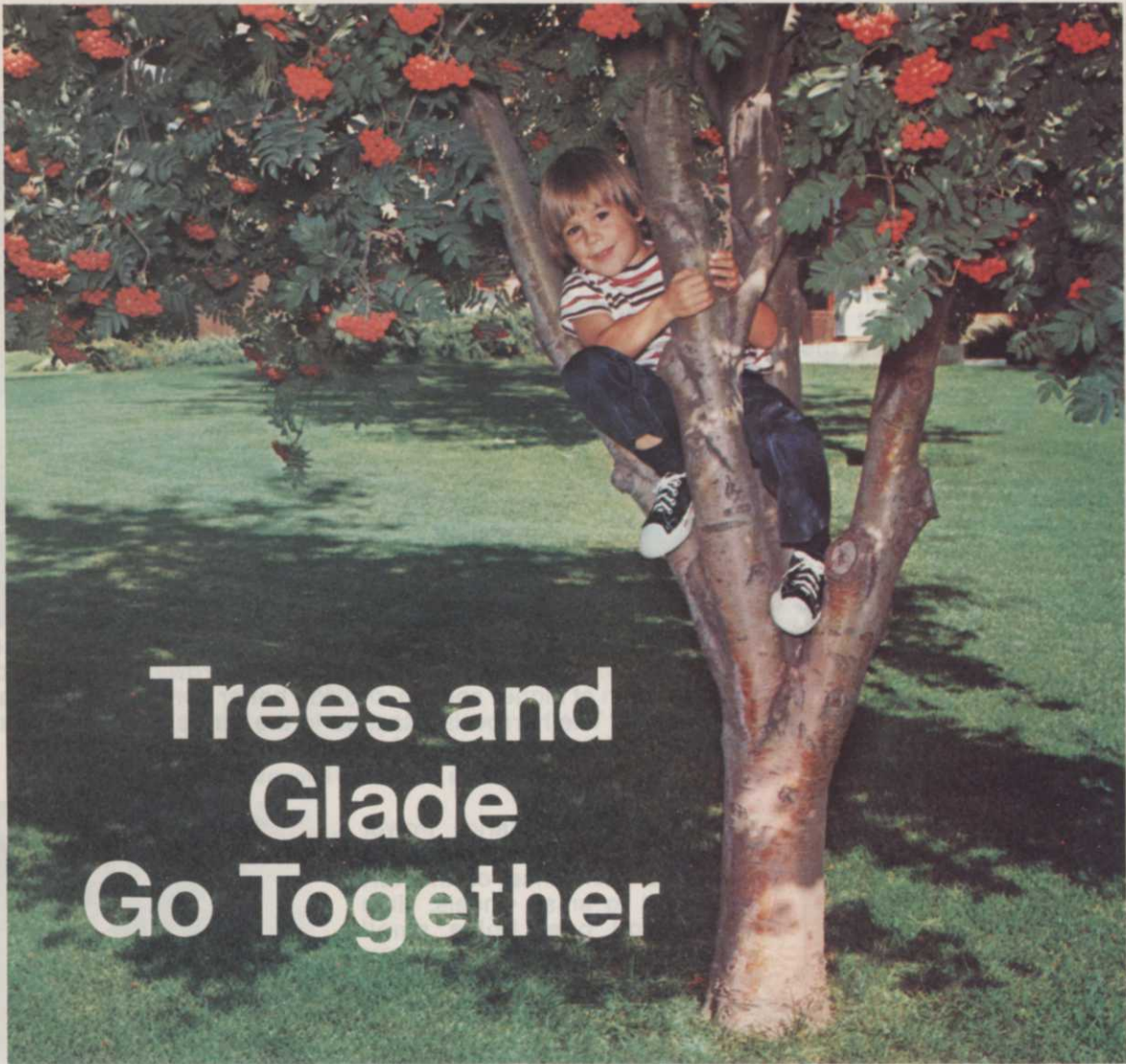
Edmond S. Bauer, elected an executive vice president and a member of the board of directors of Monsanto Company. Bauer will have responsibility for Monsanto Agricultural Products Company and Monsanto Commercial Products Company.

* * *

David G. Percy, appointed advertising manager of agricultural and outdoor power products for International Harvester. This new assignment combines all of the company's Agricultural Equipment Division's products in a single advertising group. Also, **Raul N. Gutierrez**, named media and traffic manager.

* * *

Harvey F. Polster, named manager of product planning for the Simplicity Manufacturing Co. Division, Allis-Chalmers Corp. **Paul A. Brow**, named manager of Lawn and Garden Equipment for the Agricultural Sales and Marketing Division. In related moves, **James Retert**, appointed the manager of merchandising Lawn and Garden Equipment. Also, **Jacques F. Trevillyan**, appointed president, Simplicity Manufacturing Company.



Trees and Glade Go Together

A new natural team, Glade Kentucky bluegrass and trees! Glade performs well in moderate shade, especially when mixed with fine fescues. A selection from Rutgers University (tested as P-29), Glade is an improved, low-growing, medium to dark green grass with fine leaf texture and thick, rapid-growing rhizome and root system. Glade has good resistance to important turfgrass diseases including powdery mildew.

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Get new Glade at local wholesale seed distributors.

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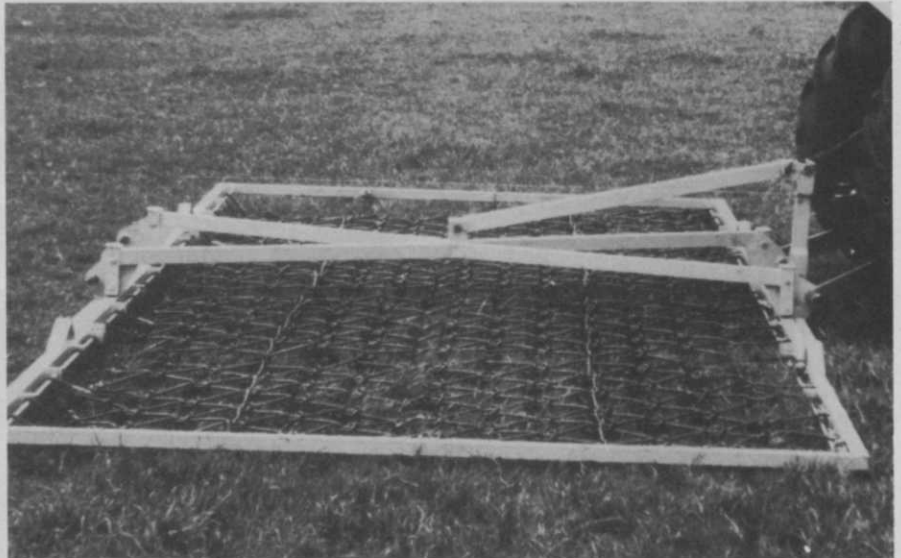
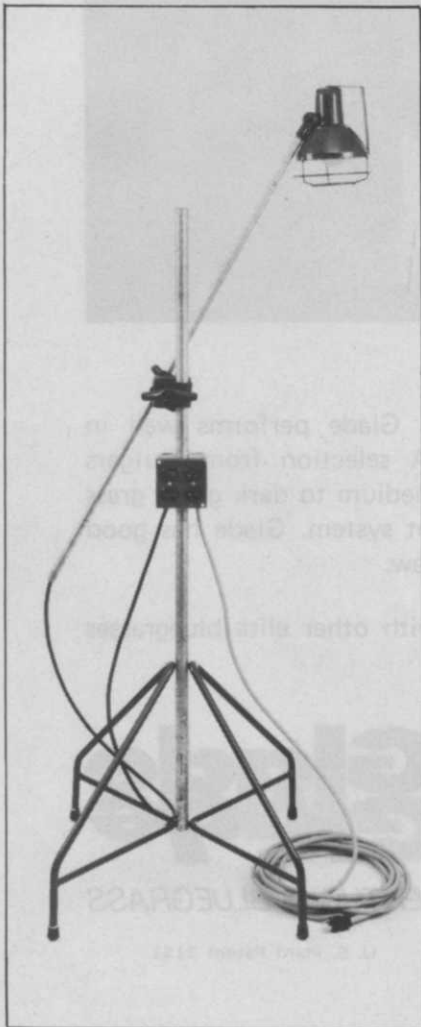
KENTUCKY BLUEGRASS

U. S. Plant Patent 3151

New Products

LIGHT: Here's a new portable industrial light "made by mechanics for mechanics" says Rimco Industries. According to the manufacturer, the unit features: infinite light position adjustment; three grounded 110-volt outlets on the stand to reduce the need for multiple extension cords; outlet box can be adjusted vertically on the stand and contains a switch controlling the light fixture. Constructed of heavy materials throughout, the unit uses UL approved components. These include a molded ground plug and a 25 ft. SJTW-A orange cord. A 150-watt heavy duty water resistant and protected incandescent fixture is standard, with fluorescent or other type lighting on request. Standard model specifications are: height: 60 in.; reach: 60 in.; weight: 27 lbs.; Cord: 25 ft.

Circle 702 on free information card.

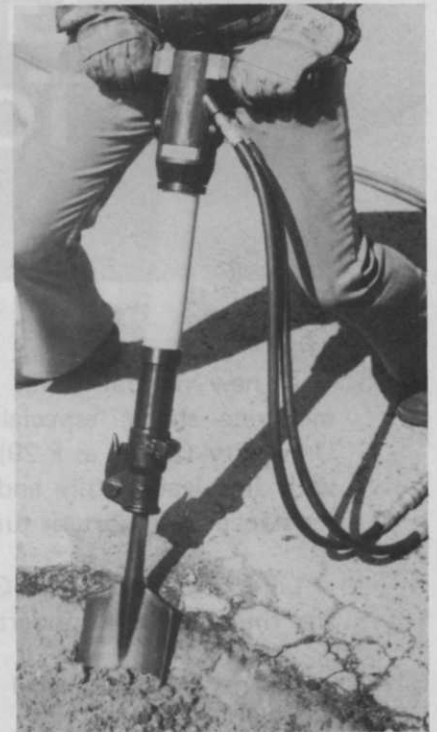


FLEXIBLE: Fuerst Brothers, Inc., says this new 3-point mounted frame fits either their Hercules or Peerless model harrows. It is also said to permit operation at higher speeds, provide better control and increase ease of transport. The harrow is attached to the frame so that full flexibility is retained and frame cannot ride on the ground.

Circle 701 on free information card.

HIGH WHEELS: Sarlo Power Mowers, Inc., new high wheelers lower the resistance of the turf compared to small wheels. High wheels roll over holes small wheels fall into, says the manufacturer. Also they permit larger engine sizes without reduction of maneuverability.

Circle 703 on free information card.



CLAY SPADE: This unit adapts to any tractor, portable hydraulic power source or other mobile equipment, claims Robinson Industries. Using optional tools, the unit becomes a light duty breaker, ground rod driver, a tamper and a chipper.

Circle 704 on free information card.

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TRACTOR: This is Gravelly's new Model 524, 8 HP, 4-speed, manual start tractor. The unit is powered by a Kohler K181, air cooled engine. The engine is designed to operate efficiently under all conditions and to deliver full-rated horsepower. All models feature Gravelly all-gear and steel shaft drive from the engine to the attachment.

Circle 710 on free information card.



TRENCHER: Vermeer Manufacturing Co. has a new heavy-duty, rubber-tired trencher. According to the company, the M-475 offers a choice of two engines — both liquid-cooled power in the 192 Ford gas or 254 Ford diesel engine. The unit retains all of the heavy-duty construction and handling features of the M-470, including 15,000 lb. capacity, full floating Rockwell axles, hydraulic four-wheel brakes, power articulated steering and a heavy-duty electrically welded frame, says the manufacturer.

Circle 711 on free information card.

MASK: This respirator mask from Mine Safety Appliances Co., features a Comfo II facepiece with a soft returned lip construction for an efficient face seal, the company claims. Twin disposable combination chemical cartridges and particulate filters located on each side of the facepiece purify air breathed by the user. The pesticide mask is listed by the U.S. Department of Agriculture for protection against pesticides.

Circle 712 on free information card.



POWER PLANT: Allis-Chalmers has four new revolving field alternators, producing power in a stationary element which is conducted to outlets through solid connections. These units are used to provide electricity at the job-site.

Circle 713 on free information card.



Classifieds

When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

Rates: All classifications 50¢ per word. Box number, \$1. All classified ads must be received by Publisher the 10th of the month preceding publication date and be accompanied by cash or money order covering full payment.

EQUIPMENT FOR SALE

FOR SALE 1 used 1970 Hi-Ranger mounted on International truck. Equipment: Chip box hydraulic pruners and saw. Write or call Bill Sowers, Tree Service and Nursery, 409 N. Main St., Sycamore, Ohio 44882. Phone 419 927-9562.

USED EQUIPMENT

FOR SALE: 2 used aerial baskets — 50 ft. working height, 2 Asplundh brush chippers. Bean sprayer, 35 G.P.M. Vermeer stump cutter 1560. Parkway Tree Service, Milwaukee, Wisconsin. Phone 414 257-1555.

VERMEER TS-66T tree spade mounted on a Michigan 125 III A rubber tire loader, converts back to conventional 4 yard loader in minutes. On large scale tree moving projects or balling and burlaping trees, this unit will outwork the truck mounted model 421, four to one, \$48,500. Phone 419 424-0896.

FOR SALE: several 1970, 1971, 1972 fifty foot Skyworkers with fiberglass upper booms and insulators, utility body and hydraulic tool system. For further information call or write to: Aerial Lift Repair, Inc., 571 Plains Rd., Milford, Conn. 06460. Phone 878-5239.

57' UNIC HYDRAULIC CRANE model U-500E mounted on 1972 Ford C700 with 14' steel contractors bed and tool box, 11,000 miles. \$12,500, very good condition. Gustin Gardens Tree Service, Inc., 19425 Gaithersburg-Laytonsville Rd., Gaithersburg, Md. 20760.

1963 CHEVROLET with Asplundh bucket, 47' working height, fiberglass upper boom, and insert, Worthington air compressor, Braden 20,000 lb. winch. \$7,000.00. 1961 Chevrolet, Powers sky-master, 50' working height, air compressor. \$5000.00 Livonia, N.Y. 1-716-346-3981 (evenings).

TREE SPADE 1972 Vermeer TS44-T, on 1972 Ford 1 ton, 360 engine, 4 speed. Both very good condition. Phone 303 597-6314, Don Ames, 4975 Templeton Gap Rd., Colorado Springs, Colo. 80918.

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Trimnings

Chemical studies conducted at Wye College, London University, are leading researchers to discover many of nature's own defensive chemicals. The tests were conducted by scientists who felt that many plant disease micro-organisms are developing resistance to commercial fungicides. Resistance, scientists say, can be caused by genetic change in the fungal cell which originate as mutations. At the Agricultural Research Council's unit at Wye, researchers are working on the premise that although growing plants are always exposed to a wide range of fungi, they are completely resistant to most of them. Many times resistance can be related to morphological characteristics. There is, however, evidence that natural disease resistance may be associated with protective chemicals within the plant cells.

One development came from scientists asking a simple question: 'Why should roots growing in the soil always remain healthy?' After all, a living root is surrounded by millions of bacteria and fungi that inhabit the soil yet it is not attacked by them. If, however, the root were killed by dipping it into boiling water and then put back into the soil, the micro-organisms would soon destroy it. This led to a simple experiment in which pea and bean seedlings were grown with their roots in water. When the roots were extracted and examined, the antibiotics with antifungal properties were isolated and identified, indicating that the living root is able to survive in the hostile environment of the soil because it produces antibiotics to protect itself.

Philadelphia Association of Golf Course Superintendents celebrated their 50th anniversary recently. The event took place at the site of the original meeting; Whitmarsh Country Club. Honored guest for the evening was the only surviving member of the five founding fathers, Herbert F. Jewson and his wife Mary. The Greenskeepers Association of the Philadelphia Section held their first meeting on September 14, 1925.

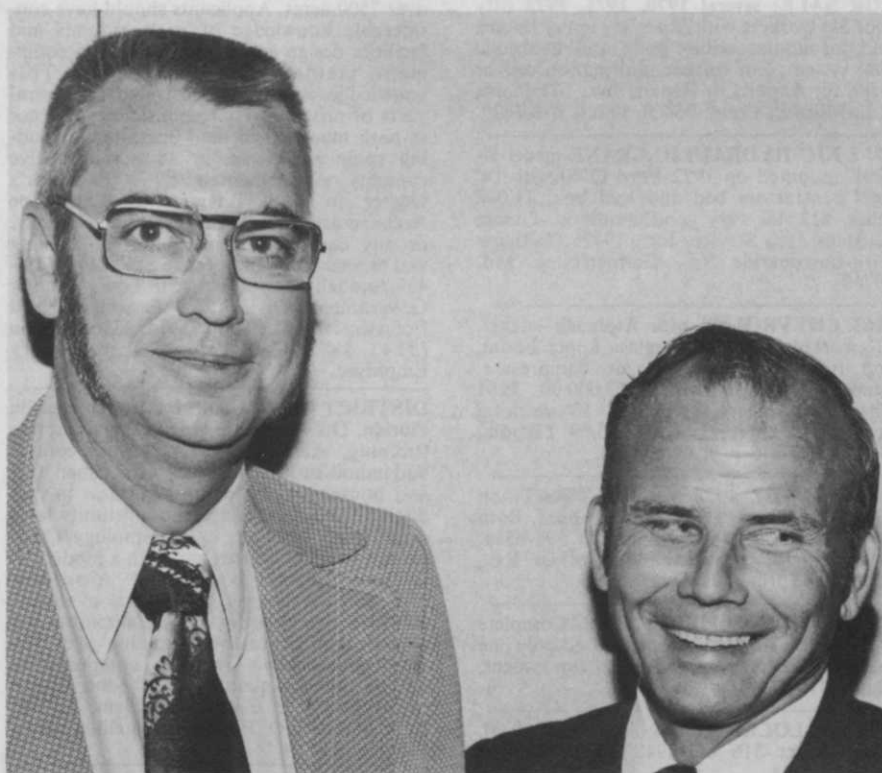
University of Delaware's Dr. William H. Mitchell, turf specialist, has one of the largest test plots we heard of — a nine hole three par playback course. The campus course looks like any conventional course, but beneath the neatly-trimmed turf, the ground is a maze of wires, pipes, tubes, drains, and soil types. Each green consists of eight separate soil mixtures, varying from sand and peat moss to the light sandy soils of lower Delaware and black soils high in organic matter.

Some of Mitchell's objectives are to test out materials which could lower the cost of golf course construction, study subsurface irrigation methods which require less water and are less disruptive to play, identify superior kinds of grasses which tolerate divot removal and resist compaction, and develop ways to reduce maintenance costs. His underground system of drains on this course makes it possible to find out which chemical materials are leach-

ing and which soil types hold the herbicides and fungicides the best.

What will the golf course of the future look like? The American Society of Golf Course Architects predict generally shorter courses designed for versatile maintenance equipment and created for the average golfer. The long, monster courses which have been so prevalent will give way to shorter courses measuring anywhere from 5,000 to 6,600 yards. With less length to challenge brute strength, golfers will need to devote more concentration to accuracy and strategy.

Land availability is an obvious factor in the anticipated reduction of course acreage. Yet, in an architects survey, the most frequently cited reason for shorter courses was the average golfers' ability. The soaring costs of building and maintaining a golf course further contribute to the shorter course outlook. Maintenance economy was cited by numerous architects.



Hubert E. Buckley, (left), Irrigation Consultant from Gainesville, Florida and Doyle C. Jones, Landscape Construction Supervisor, Walt Disney World, Orlando, were elected president and vice president respectively of the Florida Turfgrass Association. Lou F. Oxnevad, Riviera Country Club, not pictured, was elected secretary-treasurer. Also elected to the Board of Directors were: H. Anthony Kimball, The Deerwood Club; Lewis C. Dolan, Cypress Creek Golf Club; Clifford L. Woodliff, Lehigh Acres Development; Robert H. Enoch, International Minerals and Chemical Corp.; and Stanley F. Cruse, Pursley Grass Co.