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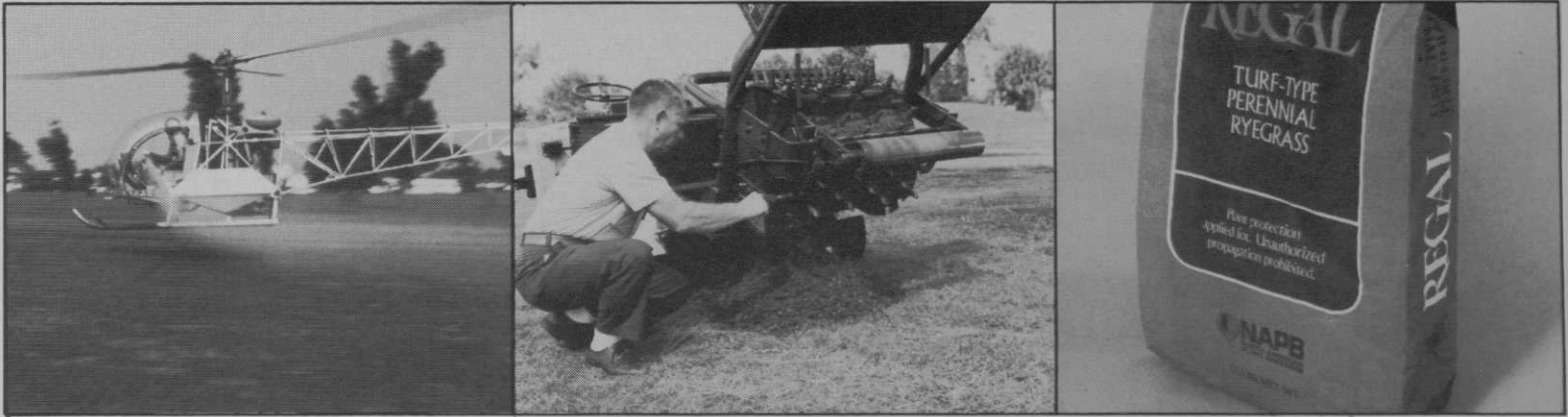


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FRONT COVER:

There is an endless stream of plants and pots and field tests before a turf variety is released to the industry.

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Clippings

Brief bits of news from in and around the golf business. . .

A red 300-gallon gasoline storage tank will lose about 10 gallons of gas per month sitting in the sun, according to Fred Oomens, University of Wisconsin, in "Crops and Soils magazine". A white tank sitting in the same location will lose about six gallons. Put the white tank in the shade and losses cut to 2½ gallons. If it is impossible to put the tank underground or in the shade, build a shed around it with the open front facing away from the sun.

Oomens also says that a pressure-vacuum relief filler cap can cut losses by as much as 50 percent. The cap works by controlling the release of vapor and intake of moisture laden air as pressures, both inside and outside the tank change due to temperature.

The USGA has a new film which explains the role of the golfer in the practical care and maintenance of the golf course. The film shows the golfer why and how to repair ball marks on greens, smooth sand in bunkers, remove and replace flagsticks, operate carts, and other practices which help in overall maintenance of the course. Shot at the Baltusroi Golf Club, the film explains the services of the USGA and illustrates USGA Green Section specifications for putting green construction. Arnold Palmer, Tom Watson, Gary Player, Jerry Pate and Nancy Lopez make appearances in the film. Rental fee is \$10 from The United States Golf Association, Golf House, Far Hills, NJ 07931.

New officers for the central Florida GCSA are: President, **Gary Morgan**, Sherwood CC; Vice President, **Joe Sagan**, CC of Orlando; Secretary-Treasurer, **Dwight Singo**, Big Cypress GC; and Directors **Louis Edwards**, Fairgreen CC, **Daniel Alywin**, New Smyrna Beach G&CC, **Edward Harvey**, Deer Run CC, and **Bill Galliant**, Winter Park GC. Past president is **Aris Catsam**, Rolling Hills CC. **Bill Cahil**, Port Malabar CC, is Vice president for Outside Affairs.

Bob Sanderson, Superintendent at Port Charlotte Golf Course in Florida, received the

Florida Turfgrass Association's "Wreath of Grass" award at their annual meeting. Bob is a CGCS and was a co-founder of the Everglades Golf Course Superintendents' Association and is currently president of that association.

Chipco 26019 fungicide has now received EPA registration for the control of fusarium blight on all common turf grasses. Application rate is 4 oz./1000 sq. ft. and should begin when conditions first become favorable for disease development. Two additional applications should be made at 14 to 21 day intervals. Chipco 26019 is manufactured by

Rhone-Poulenc in Monmouth Junction, N.J.

Golf Digest's Hole-in-One Clearing House registered a record **29,416 holes-in-one** for 1979.

The American Society of Golf Course Architects will hold its annual meeting in Scotland, May 16-25. The ASGCA members will visit some of the outstanding Scottish courses, including St. Andrews, Carnoustie, Gleneagles, Muirfield, North Berwick, Royal Dornoch, Troon and Prestwick. Jack Kidwell, President, announced that the Donald Ross Award Dinner will be held at Royal Dornoch, which was Ross' home course before he became a great American golf course architect.

The Kentucky Turfgrass Council will host its annual turfgrass conference and field

day in Richmond Ken., October 7-9. There is to be a pre-conference golf tournament on the 7th with an evening discussion of turfgrass research the same day. Interested persons can contact Kenneth Rue, President, KTC, Crescent Hill GC, 3110 Brownsboro Rd., Louisville, KY 40206, 501/893-7317 or Dr. Dwight Barkley, Executive Secretary, KTC, College of Agriculture, Eastern Kentucky University, Richmond, KY 4075, 606/622-2031.

The Texas A&M University Turfgrass Research Field Day will be held May 21, at the TAMU Turfgrass Field Lab, Agronomy Rd., TAMU Campus, College Station, Tex. Interested persons should contact Dr. Richard Duble or James Beard, Dept. of Soil & Crop Sciences, Texas A&M University, College Station, TX 77843

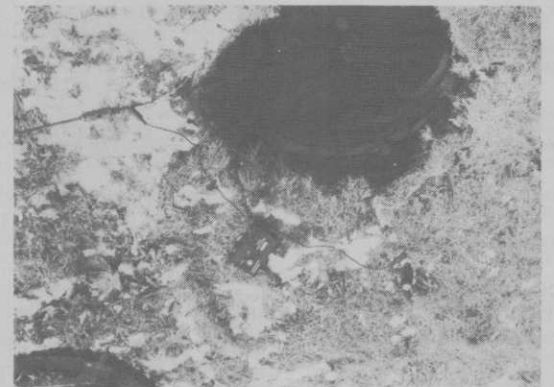
Idea file

Locating underground drainage pipes

Donald Hearn, Superintendent
The Weston Golf Club
Weston, Massachusetts

Many, if not all, golf courses have some type of underground drainage pipes. Exactly where these pipes are located under the surface is quite frequently a guessing game. Being at a course where many of the drainage pipes were installed in the early 1900's, I have had to locate pipes for which no plans exist. The easiest and quickest method I have found to do this is by using an underground cable locator in conjunction with sewer clean-out rods or an electrician's snake.

When an obstruction is encountered in a drain line, the distance to the obstruction is easily measured, but the direction from the starting point is frequently unknown. To eliminate the "hit or miss" digging to find the pipe, the cable locator and sewer clean-out rods can be used to pin-point the exact area to excavate. If pipe is installed in a



straight line between two catch basins or man holes, locating the obstruction is simply a matter of measuring the distance from the starting point. The direction is obviously in a straight line between the catch basins or man holes. The cable locator and sewer rods are used where pipe has been installed in a random pattern, an arc or other situation where pipe is not in a straight line. Determining the exact point of blockage under these type conditions can save a lot of time and money; particularly when under roads, parking lots or other hard surfaced areas.

To locate the direction of the pipe, the sewer rod is placed in the pipe and pushed to the point of blockage. At this point, one clip of the transmitter is attached to the exposed portion of the rod and the other clip of the transmitter to an earth ground such as a screwdriver pushed into the soil. After this is done, it is simply a matter of tracing the route of the pipe with the hand-held receiver. To date, I have used this technique to locate pipe up to five feet deep, and over three hundred feet in length. Where small diameter drop inlets or catch basins are used to direct water from pocketed areas into the drain system, a more flexible rod such as an electrician's snake can be used in place of the stiffer sewer rods.

In addition to drain lines, I have traced the location of irrigation control wire, metal pipe, electric cable and telephone cable with this equipment.



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add any of the Turf-Truckster's accessory pieces, thanks to Cushman's pin-disconnect system. No bolting, no hitching. Just snap two or three pull pins in place and you're ready to hit the turf.

If a good transportation/hauling vehicle is all you need, though, look at the Cushman Runabouts. There's an 18-hp two-seater, and a fuel-stingy 12-hp one-seater model. Both Runabouts are economical to own. And like any Cushman vehicle, they're built tough.

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News

Alcohol fuel association provides information to producers

The National Alcohol Fuel Producers Association (NAFPA), a non-profit educational and resource exchange center located in Lincoln, Nebraska, has launched a search to find people who are producing or will soon be producing 140-200 proof fuel-grade alcohol. NAFPA feels certain that this search will allow it to become a leading resource headquarters for this information, and the association will be able to provide its members with this service.

For \$75.00 per year NAFPA provides its members with technical bulletins on the latest

advancements in alcohol production and related topics, a monthly newsletter about people and events on the alcohol fuel front, hot line bulletins on fastbreaking news, and a copy of their new book: *Learning Guide for Alcohol Production*. The 348 page manual was written and tested in a series of workshops held in Colby, Kansas last year. The association is in the process of developing a catalog of suppliers and manufacturers of alcohol equipment and technical consultants.

Write NAFPA at 1700 South 24th Street, Lincoln, NE 68502 or call 402/474-1977.



James R. Brooks, National Sales Manager for GOLF BUSINESS, presents a check for \$1000 to Charles Tadge, President of GCSAA. Brooks made the donation in behalf of the magazine and Harvest Publishing Company for research and education.

Beware of promoters selling alcohol stills

Roy Taylor at the University of Idaho suggests that get-rich-quick promoters may be working on schemes involving alcohol fuel distilleries. "Almost everyone who wants to earn a buck seems to be interested in building somebody else a fuel alcohol distillery," says Taylor, an extension agricultural engineer. He warns that the enthusiastic promoter with an impressive set of blueprints may lack any actual experience in constructing stills. "Most of the companies that are trying to sell large units have never built one themselves." He offers these guidelines:

—Make certain you have a performance bond in the contract so you can be sure of getting all the potential alcohol from your material before the supplier gets paid in full for his equipment.

—Insist that the supplier train you thoroughly in every phase of the alcohol plant's operation and maintenance.

—Check carefully so you know your distillery will be operating in compliance with laws regarding health and safety, alcohol tax exemption and protection of the environment.

Information on the basic processes of distilling alcohol is available from the University of

Idaho Cooperative Extension Service in Moscow, Idaho 83843.

2,4-D under fire by Canadian citizens

An editorial in a recent issue of the *Toronto Globe and Mail* talks of a group of parents who have organized as "Parents Against Senseless Spraying (PASS)" and are angry because their local board of education is allowing lawn care companies to spray 2,4-D on the school grounds. A pamphlet issued by PASS says: "We have good reason to suspect 2,4-D can cause cancer, birth defects, and deformities. We know it can cause headaches, fever, nausea, skin rashes, etc. We also know it does not break down as rapidly as we are led to believe and can remain in both the food chain as well as the body. When cancer has increased by 240 percent since 1910 and is the number one disease killer of children, can we afford to allow the continued use and overuse of this chemical?"

While this action does not directly affect golf courses in the United States, the *Toronto Globe and Mail* editorial portends a warning as it explains that 2,4,5-T and 2,4,5-TP were banned because of "great public concern over the use of these two products".



New officers of the Golf Course Superintendents Association of New Jersey are, from left to right: Vice president Dennis Wagner, Superintendent at Trenton CC; President Jack Martin, Superintendent at Shackamaxon CC; Treasurer Edward Nickelsen, Superintendent at Montclair GC; and Secretary Games Gilligan, Superintendent at The Bedens Brook Club.

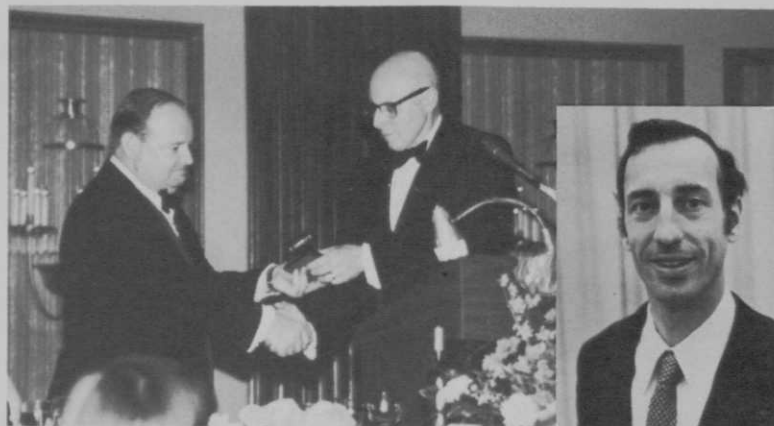
Melvin Lucas becomes GCSAA president

The Golf Course Superintendents Association of America elected Melvin B. Lucas, Jr., CGCS, superintendent of Piping Rock Club in Locust Valley, Long Island, New York, as their new president. Michael R. Bavier, CGCS, superintendent of Inverness Golf Club in Palatine, Illinois, and a member of the association's board of directors, was elected vice president.

Two new members were elected to the board of directors to serve three year terms. They are Robert W. Osterman, CGCS, superintendent of The Golf Club of

Aspetuck, Easton, Connecticut and James W. Timmerman, CGCS, superintendent of Orchard Lake Country Club in Orchard Lake, Michigan. Lucas appointed Paul Boizelle, CGCS, superintendent of the Fiddlers Elbow Country Club in Far Hills, New Jersey to fill the remaining two years of Baviers term as director.

Lucas also appointed James A. Wyllie, CGCS, to serve as secretary-treasurer. Wyllie is superintendent of the Bayview Country Club in Toronto, Ontario, Canada.



GCSAA President Melvin Lucas Jr. (left) accepts the gavel from Immediate Past President Charles Tadge. Vice president Michael Bavier is shown in the inset.

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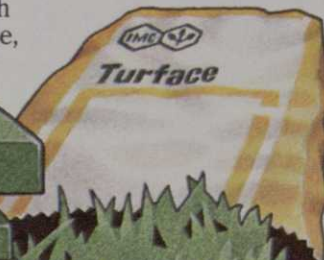
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Grounds Superintendent
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