



***“It’s fall. How come  
the turf isn’t turning  
like the trees?”***

***“His turf never  
changes color.”***



As a professional golf course superintendent, green is the only color for your turf, no matter what the season.

And green is what you can get if you follow the DuPont TERSAN® 1-2-3 Disease Control Program. It’s effective, economical and complete—controls all major turf diseases on all turf grasses all season long. The third step of this program—the one to follow right now—is the application of DuPont TERSAN SP on tees, fairways and greens. TERSAN SP zeros in on Gray Snow Mold and Pythium—the diseases that can be a major problem most any time of the year but particularly during autumn and the early winter months. (depending on your area) TERSAN SP, applied as directed, stops these turf diseases before they have a chance to damage your playing surface. (Applications of DuPont TERSAN 1991 turf fungicide should be used in the late fall and early spring in areas where Pink Snow Mold is a problem.)

The TERSAN 1-2-3 Disease Control Program is a management tool you can depend on to do an outstanding job while keeping time, labor and costs at a minimum. So when members or officials of your club talk turf, they’ll be saying the kind of words you want to hear. For details on the TERSAN Program and a supply of TERSAN fungicides, see your golf course supplier.

*With any chemical, follow labeling instructions and warnings carefully.*



**TERSAN 1-2-3 DISEASE CONTROL PROGRAM**

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# Hal Vogler and his sowing machine.

Here's a man who wants to put the germination percentages on your side, for a change. He's with the W. F. Miller Co., the Jacobsen Distributor in Birmingham, Michigan.

And like the rest of us Jacobsen Distributors, he's got the machine that knows how to give you 70% germination on both overseeding, and in new seed beds. The Jacobsen Model 548-100 Seeder.

The reason it gives such good germination is because it plants the seed, not scatters it. (Broadcast-type seeders give you up to 40% germination. The rest of it often becomes bird seed.)

It removes thatch, it aerates and plants the seed, all in one operation. That's triple duty for your investment. (Not only that, if you take off the seeder attachment it will still renovate, thatch,

vertical mow, spike and aerate.)

For smaller seeding jobs we've also got the self-propelled Model 524-100. Same top germination results.

So if you're looking for rich and lush turf, try seeding with the sowing machine that can put more of your budget dollar where it does the most good.

Right where everybody can see it.

## Your Jacobsen Distributors

Before we sell it, we buy it.



For the name of the distributor near you write: Jacobsen Turf Directory, 1721 Packard Avenue, Racine, Wisconsin 53403



# WEEDS TREES and TURF®

October 1974, Vol. 13, No. 10

THE COVER—Two identical aerial photographs, one in normal color, the other infrared color, were combined to illustrate a unique property of infrared film. The pine trees in the lower right corner are infected with a fungus disease. The infrared reflection difference between the healthy trees and the diseased trees is registered on the infrared film. See page 34 for related pictures and story.

**FOAM OR SPRAY? Economics of Growth Regulator Application**—A technical paper on the economic utility of plant growth inhibitors. Plant specialist Henry Hield, examines the growth reduction characteristics of the chemical Alar on oleander shrubs..... **12**

**OLD FRIENDS, NEW IDEAS AND CHANGING TIMES**—A report on the 50th Golden Anniversary meeting of the International Shade Tree Conference, August 18-22, Atlanta, Ga. .... **14**

**ARBORIST IN THE WITNESS CHAIR**—A dead tree, an angry property owner, a lawsuit. An expert treeman is called into court to give testimony on the probable cause of the tree's death. An "expert" expert witness gives future witnesses a few pointers on court procedures. .... **16**

**INFRARED AERIAL PHOTOGRAPHY—Easier than you Think**—Heat sensitive infrared film has many practical applications for the golf course superintendent, forester or city park manager. William Wildman and J. K. Clark illustrate the basic techniques involved in infrared aerial photography. .... **34**

Editorial .....	6	Commercial Sod Industry .....	36
Government News, Business .....	8	Insect Report .....	39
Industry News and Newsmakers .....	24	New Products .....	46, 47
People on the Move .....	29	Classifieds/Advertisers .....	48
Meeting Dates .....	31	Trimnings .....	50

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This month's cover story on page 34 seems almost as far removed from us as a rocket to the moon. Yes, it is the brave new technology we've been hearing more and more about since 1950 . . . the technology which always seems so distant to our everyday lives. Lasers, heart transplants, nuclear reactors, solid fuel propellants, biological control, computers . . . and infrared photography.

Two decades ago, after-dinner speakers were delighting their audiences with forecasts of the world changing so fast we could barely keep up. It will be a button world, they would say, with major cities only minutes away by rocket. Weather will be under man's control and food will consist of multi-colored tablets (one for breakfast, one for lunch and one for dinner).

The predictions, of course, were often incorrect — due to many of our giddy feelings in the post-war boom. But, as all science forecasters through the years have found, the most common error was lack of imagination rather than too much imagination. It was easy to predict that man would someday visit the moon through rocket power. But how many forecasters

imagined that the first men on the moon would be seen and heard by everyone on earth through television?

The technological developments all along have been even more startling than predictions. But, often we are unable to recognize the significance of change because of its gradual movement.

It was almost unnoticed last month when a military jet covered the Atlantic in about two hours. A fantastic new technology, with all our expectations, has become a part of our lives without our notice. Kitchen ovens that clean themselves, adding machines you can carry in your pocket, and remote control toy powerboats that sell for \$7.

The point is — this technology is not as far from our life and work as we might imagine. The very words you're reading now were set by computer. A space age idea . . . at work today.

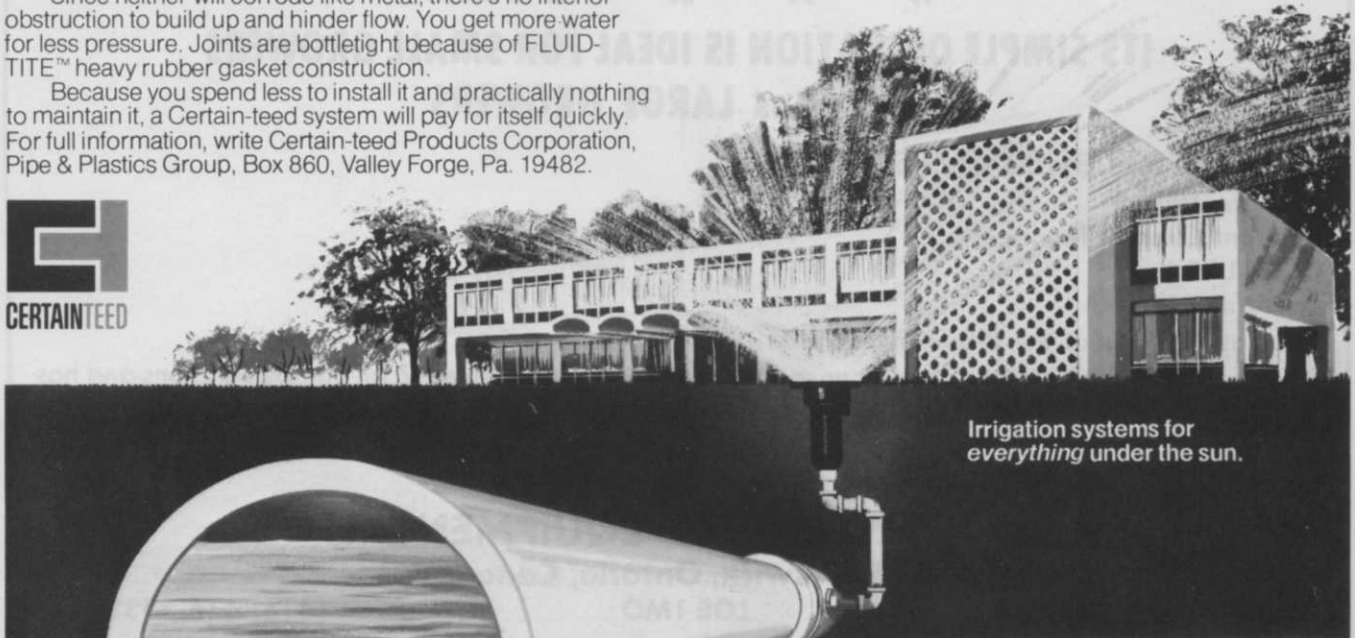
The infrared possibilities are like that. It is not an experimental technique. It is not simply a tool for science. Right now, infrared photography is and can be a tool for management in the green industry. If you will, this is space age technology for practical use.

# Start an underground movement to get the grass greener on your side of the fence.

A Certain-teed pipe irrigation system goes underground so quickly, your turf is back in good order in just a few days. That's because Certain-teed PVC or asbestos-cement pipes are so lightweight and easy to install.

Since neither will corrode like metal, there's no interior obstruction to build up and hinder flow. You get more water for less pressure. Joints are bottletight because of FLUID-TITE™ heavy rubber gasket construction.

Because you spend less to install it and practically nothing to maintain it, a Certain-teed system will pay for itself quickly. For full information, write Certain-teed Products Corporation, Pipe & Plastics Group, Box 860, Valley Forge, Pa. 19482.



Irrigation systems for everything under the sun.





## Make the fifth season your catch-up season.

The fifth season is "Davey Season." It starts when valuable trees lose their leaves and go dormant. It runs into the first budding of spring.

Right now, during the fifth season, is a good time to call Davey about your tree needs. We can make surveys and cost estimates — without obligation. We can help you plan your tree maintenance budget through the early months of 1975. Or we can set up programs to give immediate attention to your current needs.

With civic and recreation areas less crowded, Davey Season is a low-cost time to catch up on tree work that didn't get done during busy summer months.

Our trained crews are fully equipped with specialized equipment to quickly and efficiently plant new

trees, remove dangerous old trees, prune deadwood from pedestrian paths, grind stumps below ground level, clear around streetlights, or remove brush and growth encroaching on paths and fairways.

Use the Davey Season to get back on schedule or to get a head start on next year's tree work. Call your local Davey representative for help in organizing and budgeting for your tree service needs. He's in the Yellow Pages under Tree Service.

# DAVEY TREE

KENT, OHIO 44240  
Coast to Coast and Canada



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# Government News / Business

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State governments fearful that job safety and health enforcement will not be returned to their control were assured by OSHA head, John H. Stender, that their "fears are unfounded." Stender conceded that "many are fearful that such a return (of enforcement activity) to the states will mean a return to the same casual treatment of job safety and health that was the rule in most states in pre-OSHA days." He said management of state plans at the federal level including programs of monitoring and evaluation, will prevent any return to the "slipshod enforcement of the old days." Stender addressed his remarks to a labor-management audience in Honolulu.

States with federally-approved job safety and health plans must adopt record-keeping and reporting regulations which are substantially identical to federal standards. OSHA boss, John Stender, said, however, that states at their option may extend the federal requirements to employers with seven or fewer employees. OSHA exempted these employers from the requirements in 1973 to ease the paperwork burden for small businesses.

Sierra Chemical Company is opening a new and expanded international headquarters office and production facility. Their former location at Newark, California has been closed. The new facility is located at 1001 Yosemite Drive, Milpitas, California 95035.

Department of Transportation's Office of Hazardous Materials has received enough industry feedback to schedule a two-day conference on the transportation of hazardous materials. The meeting, slated for October 2-3, will include information on general regulatory compliance, international issues and transport of radioactive materials. Further information is available from the Office of Hazardous Materials, Department of Transportation, Washington, D. C. 202-426-0656.

Dr. John V. Osmun, EPA's director of pesticide programs, has returned to Purdue University. He began sabbatical leave July 1, 1972 and served as a consultant with the Cooperative State Research Service of USDA. Osmun then moved over to head EPA's pesticide programs. He will return to Purdue and resume duties in the entomology department where he has been a staff member for 24 years.

Collier Carbon and Chemical Corp., is constructing a new fertilizer plant in Kenai, Alaska. The \$165 million project will produce 1,500 tons of anhydrous ammonia per day and 1,200 tons of urea. Collier, a subsidiary of Union Oil Co., plans to ship the fertilizer to west coast markets.



Have you noticed lately that most everytime you go somewhere, you see another Ditch Witch — being pulled along a road or highway to a job or at work in a variety of job situations?

There's a good reason why this is so. For a lot of people, the words "Ditch Witch" have become synonymous with the words "trenching machine." It's a Ditch Witch, not a trencher. There's a good reason for that, too. Ditch Witch designed and built the world's first service-line trencher, more than 25 years ago. Lots of us started business with one of the Ditch Witch models and have stayed with Ditch Witch through the years.

For today's trenching needs, Ditch Witch offers two compact handlebar models, the C and the M; and two four-wheel drive trenchers, the J20 and V30. If your job calls for digging trench, each of these models can do the job for you more efficiently and economically than anything in their respective classes.

That's why Ditch Witch outsells everything in its class.\*

Of course, Ditch Witch doesn't limit its line just to trenchers.

There is a full range of vibratory plows (from 25 to 195 horsepower). And the Ditch Witch Modularmatic Series, utilizing a basic vehicle with interchangeable socket-mount working modules, permitting one machine to perform a wide range of underground jobs (including trenching).

Next time you go some place, be on the lookout. You'll probably say . . .

## THERE GOES ANOTHER DITCH WITCH



\*Based on U.S. Department of Commerce figures

*Ditch Witch . . . equipment from 7 - to 195-HP.*

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