

Insurance Department.

You're looking at a happy Jacobsen Distributor standing in his parts department. To Paul Porter (he's with Porter Brothers, Inc., headquartered in Shelby, N.C.), having a fully stocked parts department is like being backed by good insurance. He knows he can take care of what you buy from him.

For one, he has a roomful of genuine Jacobsen parts designed just for Jacobsen equipment. No will fit" stuff here. And chances are parts will be available right when you need them.

For another, he has Jacobsen factory-trained mechanics. Men who have been to the plant and

learned all about the equipment inside and out,

and can do everything from simply grinding reels to overhauling hydraulic systems.

Emergency field trips? You bet. When the need arises, he often goes to the equipment to fix or service it right on the spot.

Since all of us Jacobsen Distributors are independent businessmen, our livelihood depends on keeping you happy after the sale is made.

That's why we go out of our way to make sure our service is every bit as good as the Jacobsen equipment we sell in the first place.

We've found it's a very good policy.

Your Jacobsen Distributors. Before we sell it, we buy it.

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



Officers of the Ohio Sod Growers Assoc. are: (I-r) Woodrow Wilson, Eastside Nurseries, Inc., Canal Winchester, treasurer; Cecil Collings, Green Valley Turf Farm, Canfield, director; Paul Florence, Millcreek Sod Farm, Marysville, director; Jack Schiller, Haywood, Inc., Oak Harbor, director; Don Figurella, Best Turf Sod Farm, North Canton, vice president; Chet Augspurger, Cincinnati Turfgrass Nursery, Inc., president; and John R. Kramer, Kramer & Sons, Westlake, immediate past president. Dr. Robert Miller, remains as secretary.

OHIO TURFGRASS BONANZA (from page 28)

present many problems for the superintendent. The night man usually knew when to turn on or off the

water and this seldom interfered with the golfer.

"With the automatic irrigation system, the responsibility is placed on the superintendent," he said. The manager travels the entire course every day. He must think

of irrigation in terms of the needs of the turfgrass as well as the member. He must be careful of the use of water, when it is applied and how it is applied."

The Golf Association executive concluded his remarks by saying that no one can tell the superintendent how to apply water to the course. His advice was "Give the plant what it wants but not too much and give the member when he wants but not too much."

An annual highlight of the Conference was a reception by Lakeshore Equipment and Supply Co., Cleveland, followed by the Ohio Turfgrass Foundation banquet.

Many awards were presented during the banquet. The Ohio Turfgrass Foundation Professional Excellence Award went to Paul Mechling, Sylvania Country Club, Sylvania; Richard Craig, Camargo Club, Cincinnati; John Fitzgerald, Century Toro Distributors, Inc., Toledo and incinnati. Gale Love, a retired Army colonel was presented the OTF Student Leadership Award. Ohio State University scholarships were awarded to William Job, Nevin Vandergrift, John Zimmerman, Mark Yo-

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BECK'S BIG ROLL SOD HARVESTING AND LAYING SYSTEM . . . For Progressive Sod Growers



Harvest, load, and lay sod FAST, without manual lifting or handling. Let tractors do the hard work. Hand stacking and laying of sod is obsolete. Increases sales by cutting time and cost of installation. Stretches sod 3% to 5%, leaves lawns smoother, with fewer seams and joints. Disposable cardboard tubes are lighter and cheaper than pallets, permit easy loading, as many as 3 rolls at a time, with any fork lift, laying with any tractor.

No need to change over completely. Switch from Big Rolls to your present system in 5 minutes or less. This simple, rugged system can be had for as little as \$100/month.

For more information, write: BECK MANUFACTURING COMPANY P.O. Box 752 * Auburn, Alabama 36830 Tel. (205) 887-3730



Weather-matic turf irrigation components are higher quality and cost a little more.

Therefore, a Weather-matic System costs more than another system.

Right?

Not necessarily.

You see, in a commercial or industrial application, with Weather-matic's superior design capabilities, fewer components may be required for optimum performance. That means you get higher quality, a better functioning system — and a lower total cost.

So, you don't always get what you pay for. Sometimes you get more.

For additional information on Weather-matic irrigation systems, write or call:

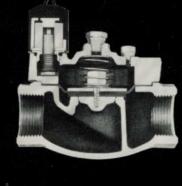




matic

LAWN AND TURF SPRINKLER SYSTEMS
P. O. Box 18205 / Dallas, Texas 75218 / (214) 278-6131







"I've played this course for a year and I haven't seen a bad patch of turf yet."

"Funny, I was thinking the same thing!"



Compliments on the quality of your turf management are always nice to hear. They make all those long hours of challenging work seem even more rewarding.

Speaking of compliments, we have a way that can help you earn more of them: the Du Pont Tersan® 1-2-3 Disease Control Program.

Kudos from the greens committee.

With Tersan LSR applied in the spring, Tersan 1991 in the summer and Tersan SP in the fall, you control all major turf diseases on all common turf grasses all season long. Helps keep your turf lush, green and resilient from the day the course opens till the day it closes.



Applause from the finance committee.

Read the label on each bag of TERSAN and you'll be surprised at how little you have to use and how long the protection lasts. Take TERSAN 1991, for example: a systemic, curative (eradicant) and protective fungicide. Just 1 ounce per 1000 sq. ft. applied every 10 to 14 days controls dollar spot on tees.

The Tersan 1-2-3 Program is also designed to stop costly disease problems before they have a chance to cause trouble. So you get fewer tie-ups of men and equipment, more budget dollars saved.

Praise from your toughest critic.

As a turf professional, the standards you set for yourself are the most demanding of all. With the Tersan 1-2-3 Program, you can come closer to meeting these standards and win praise from your toughest critic—yourself.

For complete information on this program and a supply of Tersan turf fungicides, contact your golf course supplier.

With any chemical, follow labeling instructions and warnings carefully.



TERSAN 1-2-3 DISEASE CONTROL PROGRAM

Best Digger Value Anywhere!



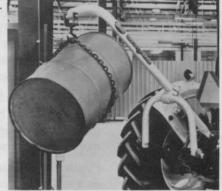
BUILT RIGHT...PRICED RIGHT! For agricultural and industrial applications. Two-in-one implement: Rugged post hole digger...or, handy utility crane. Choose from three different size augers: 6, 9, or 12 inch... each 48 inches long. Full swiveling hook (optional) converts unit into 1500 pound capacity utility crane.

THREE-YEAR GUARANTEE. Should gear box fail to give up to 3 years' service, it will be replaced without question, when used on complete

Gold Star Digger as recommended.

RUGGED CUTTING TEETH AND AUGER POINTS are easily replaced . . . bite into ground . . . even in shale or clay. Made of heattreated graphitic steel for longer life and better dependability.

MACHINED GEARS assure long wear and shock resistance. Boom fits all Category I standard three-point hitch tractors. Category II hitch pins also available.



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Please send product li	terature on the GOLD STAR DIGGER	
☐ Also send me the n	ame of my nearest authorized SERVIS Dealer.	
Name		
Address	All Dates	
City	State	Zip
Type of Tractor Owned	CONTRACTOR OF STREET	Student?

MAN AND NATURE WORKING TOGETHER

(from page 22)

the University of Pennsylvania nine years ago. They developed a workable system of sewage disposal which would help communities avoid having to build costly treatment systems and then still having to pollute rivers and streams with the effluent. The team decided to let Mother Nature help in their efforts by using the land disposal method of sewage treatment. With a few new twists, they finally settled on the method now being used so successfully by St. Charles. "This system can be built at one-fifth the cost of conventional sewage treatment plants," said IGC president James J. Wilson, "and it can be operated, along with the community water supply at St. Charles, by only four men.'

Many experts from other areas interested in the field of waste treatment and disposal have already been to St. Charles to see how the sewage lagoon system works. Now that legislation concerning sewage and pollution problems is pending, Congress is leaning more and more to the safer, less polluting methods of waste disposal, namely, the use of land as the prime means of disposal rather than rivers and streams.

Under guidelines set up by the Environmental Protection Agency, the U. S. Army Corps of Engineers has been made responsible for policing the nation's waterways. For that reason, and to learn more about the land disposal method of spray irrigation, their representatives have seen the St. Charles lagoons in operation.

In addition, interested representatives from such diverse groups as the Maryland State Water Resources Administration; the Montgomery county (Maryland) Council; several consulting engineers and even the American Public Works Association Research Foundation have singled out the St. Charles sewage lagoon system as being typical of the most effective land disposal method of sewage disposal.

Sewage from the homes in St. Charles and its two schools flows through traditional sewer lines into a system of lagoons covering twenty acres near the eastern boundaries of St. Charles' 8,000 acres. The first two lagoons into which raw sewage flows are equipped with four large aeration devices which continually churn the sewage water, adding oxygen. The aeration provides the oxy-

(continued on page 57)

Get rid of unwanted green growth before it cuts into your profits.

The weed onslaught is just about universal.

An expensive headache. For utilities, railroads, highway departments, the petroleum industry and industry in general.

But there is a way to con-

trol that costly green tide—with Tandex® herbicide.

It's a urea-carbamate compound that gives outstanding extended control over a range of weeds and grasses.

But it's more than weed control.

It's brush control, too. If you've got to get rid of really tough brush and woody vines, Tandex gets the job done.

You can spray Tandex or apply it in dry granular form.

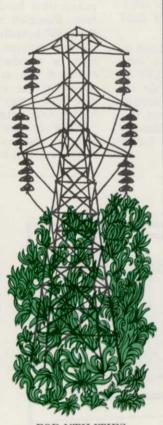
Either way you use it, you'll control that costly green tide.



FOR INDUSTRY



FOR RAILROADS



FOR UTILITIES



FOR ROADS





PROBE BENEATH THE SURFACE

(from page 20)

of the soil reservior and the upper and lower limits we set on this reservoir. This is usually expressed as percent of field capacity.

The turf superintendent should determine the watering holding capacity of his various soil types by use or a tensiometer, irrometer or similar moisture sensing device. Install the tensiometer in a representative area at the bottom of root depth. After calibrating the tensiometer, let the soil in that area dry to the 50-60% field capacity point. Add a predetermined amount of water with a sprinkler, about one-third inch, and determine what the increase is in percent of field capacity.

Water applied can be measured in a pan set adjacent to the tensiometer. Compute the amount of water required to manage your irrigation between field capacity limits. A second tensiometer at the 12-inch or 18-inch depth is valuable to prevent overloading the lower soil profile with water.

If the tensiometer reading at these lower levels shows an increase in moisture, percolating is occurring past the root zone. This is water going to waste and is filling up your water reservoir leaving little capacity for the coming rains.

If the increase in soil moisture at lower levels is due to rainfall, then care must be exerted not to over irrigate and add more water to an already filling reservoir.

Another method of controlling irrigation is the water balance method. Here a balance sheet of credits and debits of water is kept. Rainfall and irrigation are the credits. The debits depend on the evapotranspiration of the turf plant. This is difficult to measure on the golf course but a lot of good approximation can be made by checking the evaporation from a free water surface. Research on grass type will show its' evapotranspiration rate to be some percent of the evaporation from a standard pan. Making a standard pan is not difficult and recording the evaporation can be done once a day or just before timing the next irrigation.

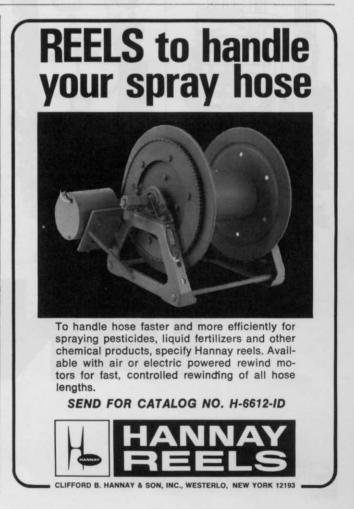
Many of the national weather service stations measure evaporation and will be glad to show you their equipment. With this method water lost from the soil reservior by evapotranspiration can be determined. And rainfall can be measured. The difference is made up by irrigation - hence the balance method. A note of caution - the rainfall in excess of that necessary to bring the soil to 100% field capacity usually percolates to a lower profile and is lost and not available to the plant. Even in the water balance method, it's well to have a few tensiometers installed around the course so you can monitor your soilwater relationship.

In addition to the tensiometer method of measuring soil moisture, you can use electrical conductivity of the soil as an indication of available water. This is usually done by measuring with metal probes. The varying level of salts in the soil may require recalibrating at various intervals.

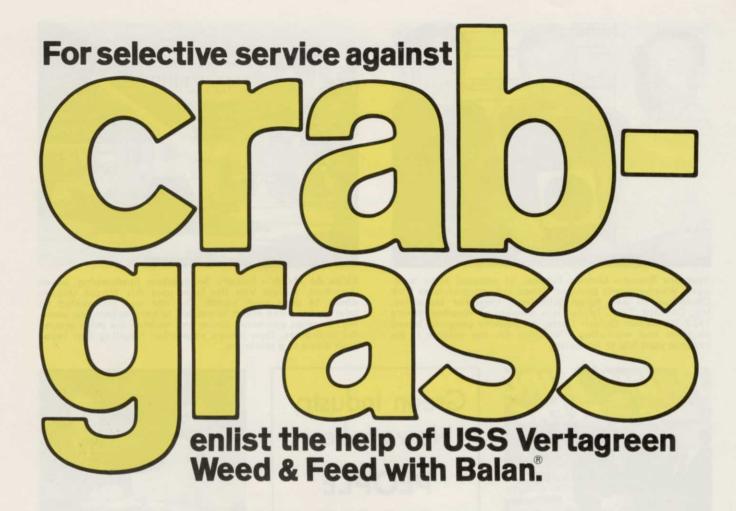
There is a limited variety of equipment on the market. Development of accurate, permanently installed equipment is one of the great needs of our industry.

As a professional turf man you need to "look" under the surface and plan better management of the water in your soil reservoir.





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Two things that every professional turf manager in the country agree on is that Crabgrass can be a problem in the Spring, and Poa Annua can be a problem in the Fall.

Getting rid of these pesky weeds and feeding the turf used to be two separate operations... until VERTAGREEN Weed & Feed for Professional Turf solved the problem.

Weed & Feed contains famous BALAN®, the highly selective pre-emergence herbicide that kills Crabgrass and Poa Annua seeds as they germinate. You never see them. And, because BALAN® breaks down gradually,

it leaves no harmful residue. Doesn't damage your established turf.

And, as BALAN® controls these weeds, VERTAGREEN's superior grass-growing nutrients (12-4-8) are hard at work providing quick and steady growth for healthy, professional turf.

Now's the time to stop Crabgrass before it starts. Call the VERTAGREEN Representative from USS Agri-Chemicals today. His Professional Turf Program includes a full line of dependable turf products and services. To make your turf a lot nicer and your job a little easier.



USS) Vertagreen
Professional
Turf Program

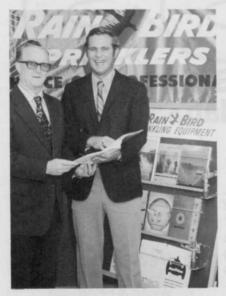
BALAN® is the registered trademark for Benefin, Elanco Products Company, a Division of Eli Lilly and Company.



Acapulco Bound — Charles Putnam (c) national sales manager, Weather-matic Division, Telsco Ind. congratulates Dick Conradson (l) and Edron Schneider, Irrigation Industries, Inc., Concord, Calif. Triple-I is a member of Weather-matic's 1972 Distributor Golden Circle, a company program based on sales and marketing. The prize for top volume is an expense paid trip to Acapulco.



Chips As Mulch — Miami's Seaquarium landscaping superintendent, Willem Van der Laan uses this Wayne chipper about 16 days each month. The site was constructed on infertile land and mulch is needed to keep vegetation growing. He chips unwanted plants and mulches the chips around the desirables. Now there's vegetation recycling that keeps costs down to a minimum.



New Distributor — Roy Garrett, district manager for Rain Bird Eastern Sales, Dallas congratulates Dale Ousley (r) president of Hydrotex Irrigation Supply, Inc. as a new Rain Bird turf distributor.

Green Industry Newsmakers

PEOPLE PLACES EVENTS



What's It All About — That's what Bill Westerhold asked when he was recently appointed advertising supervisor for Shell. Dennis G. Meyer (I) newly promoted Atlanta district supervisor, fills in the details of the job.



Ernest A. Tosovsky, Jr., vice-president of Home Nursery Greenhouses, Inc., Edwardsville, Ill. becomes new board member of the American Association of Nurserymen.



On-The-Job-Training — Indianapolis Summer Intern Program students report the program a success. Standing (I-r) are: Vern Hartenburg Intern Coordinator; Michael LaFave, Michigan State University; Mark Ackelson, Iowa State University; Tom Vaughn, Texas Tech University; Ron Journay, Purdue University; Rick Lendrum, California State Polytech. College — Pomona; Lee Roberts, Texas A&M University; Jack Duncan, Indianapolis assistant superintendent of parks, Seated (I-r) are: Richard Helman, North Carolina State University; William Martin, West Virginia State University; John Gall, Purdue University; Gary Bellamy, Texas Tech University.