"OUR IRRIGATION SYSTEM BEAT THE DROUGHT"

says Nicholas Penecale, Chairman of the Greens Committee of Sandy Run Country Club. "Our new sprinkler system kept greens and fairways in beautiful shape throughout a record-breaking dry spell. No freeze-up worries in winter, either."

Modern irrigation systems laid with Certain-teed "K&M" Asbestos-Cement Pipe can do wonders for your golf course, orchard, nursery or park. Check these advantages enjoyed at Sandy Run:

**FAST INSTALLATION**
600 to 1,000 ft. of Certain-teed pipe were installed each working day, without interrupting play on the course.

**FULL FLOW**
400 to 500 gallons per minute were provided, 70 gallons from each sprinkler head.

**EASY DRAINAGE**
The exclusive Certain-teed threaded brass insert couplings made drainage simple, without special fittings.

**PROTECTION**
Sprinklers, equipped with "swing joints", can bend 90° to avoid damage from vehicles and heavy objects.

Rust-free, trouble-free Certain-teed Pipe can solve your irrigation problems. Get full details now!


---

" CERTAIN-TEED FiberREINFORCED CONCRETE PIPE DIVISION • LEA BUILDING, AMBLER, PA. PLANTS AND OFFICES THROUGHOUT THE UNITED STATES"
Royated Soils are fluffy, thoroughly blended, trash-free soil mixtures that have been processed in Royer Soil Shredders. These soils are ideal for constructing and maintaining luxuriant, long-lasting turf and can truly be used all over your course. Whether you're constructing or extending greens and tees, maintaining or renovating existing turf, building a turf-grass nursery or even cleaning and fluffing trap sand, you can substantially reduce your costs with a Royer. And, you'll improve the quality of your soils, too, because the shredders do the job thoroughly.

Soil mixing, for example. (And mixing is not as easy as it sounds.) You can use a cement mixer—but it's slow. Or rototill—but this isn't thorough and can create stratification. You can 'doze and "pile-roll"—but you won't mix thoroughly. Or you can do the job right with a Royer and get the thorough mixing and blending of your materials that only these cleated belt shredders deliver. And, you'll get the economy of one-step soil preparation, too, from the combined action of shredding, mixing, blending and aerating that is built into every Royer. You'll get a ROYERATED SOIL—just right for use all over your course.

Now consider the various ways of removing sticks, oversize stones, clay balls and other trash from your soils. Power raking can contribute to compaction and hand raking is slow and costly. If your materials are damp and you use rotary screens or hammermills, they may plug up. But when you use a Royer you get automatic and continuous trash removal as your materials are shredded and mixed. And you can work with damp materials, too, because a Royer handles them easily.

Preparing top dressing. When you use a shredder and Royer's new POWER-screen, you can prepare top dressing at the lowest possible cost per yard. You get a top dressing that is easy to spread and materials that mat in, not off. And you screen out coarse materials that damage spreaders and dull mowers.

Shredders are available in ten sizes for hand shoveling or mechanical loading, with capacities from 5 up to 100 yds./hr. For complete information, send for Bulletin HS-12 (manually loaded models) or specify literature on "mechanically loaded models." For top dressing preparation, request Bulletin PS-30.
Your Du Pont Guide to healthy, vigorous turf

1. Eliminate crabgrass with new Du Pont Tupersan™ WEED KILLER

2. Prevent turf diseases with Tersan® OM and Tersan® 75 TURF FUNGICIDE THIRAM FUNGICIDE

3. Supply turf with long-feeding nitrogen from Uramite® UREAFORM FERTILIZER

These three fundamental principles of turfgrass management must be followed to produce and maintain healthy turf—free of weeds and diseases—and well-nourished. If any of these principles is overlooked, the condition and vigor of turf will be reduced.

On the following pages, you’ll find the Du Pont Turf Products that can help you to satisfy the three major requirements for successful turf management. Their use is a matter of sound economics, too. You can rely on these dependable chemicals to get the job done, and also to give you end-cost results of big savings in time, labor, and money.
Introducing Du Pont Tupersan™ Weed Killer

A unique crabgrass killer which permits seeding and treating the same day (COOL SEASON GRASSES)

Du Pont "Tupersan" is a new pre-emergence weed killer which gives highly effective control of crabgrass and certain other annual weed grasses in turf.

"Tupersan" is highly selective. This new crabgrass killer can be used on newly seeded areas as well as on established turf without causing injury to germinating seeds of cool season grasses, such as bentgrass, bluegrass and fescue.

"Tupersan" offers a high degree of safety to turf. Rates as high as three times the recommended rates have not injured established turf. Rates as high as twice the recommended rates haven't injured new seedings or reduced seed germination. And new "Tupersan" has been used at high rates under many trees and shrubs without injury to them.

Twenty-two days after seeding and treating with new "Tupersan", the five desirable grasses and the check plots in the strip of crabgrass are growing vigorously. Bare ground can be seen in the crabgrass strip where "Tupersan" was applied.

In this photograph taken thirty-nine days after seeding and treating, note how "Tupersan" has eliminated the crabgrass completely, and desirable grasses have started to grow into the bare spots. The treated and untreated plots of desirable grasses are equally healthy.
LARGE BROWN PATCH. Most active during hot, humid weather when it has a characteristic dark blue smoke ring at the outer edges. A regular preventive spray of 3 ozs. of “Tersan” 75 or 3 ozs. of “Tersan” OM per 1,000 sq. ft. every 7 to 10 days will usually prevent Large Brown Patch. Rates should be increased when conditions conducive to the disease are present.

Time-proven!

Du Pont Turf Fungicides control a wide range of diseases

An effective preventive disease program with time-tested Du Pont Turf Fungicides is another essential factor in successful turf management. For example, Du Pont Tersan® OM turf fungicide, a combination of Semesan®, a mercurial fungicide, and “Tersan” 75, an organic sulphur, gives fast knockout of major turf diseases, plus residual protection. “Tersan” OM has a large safety factor under all conditions.

DOLLAR SPOT. Usually most active during early spring and late fall, but can occur any time during the growing season. Disease causes a scar about the size of a silver dollar. A regular preventive spray program of 3 ozs. of “Tersan” OM per 1,000 sq. ft., or a tank mix of “Tersan” 75 plus “Semesan” will normally prevent disease.

SNOW MOLD. Develops in late winter or early spring. Damage appears in patches a few inches to over a foot in diameter. To prevent, apply 8 ozs. “Tersan” OM per 1,000 square feet as late in the fall as possible prior to snow-fall. Spray on a second application of 3 ozs. per 1,000 sq. ft. in early spring during freezing and thawing period.
For Turf and Ornamentals!

Long-feeding Uramite® gives sturdy, uniform growth

You can supply turf and ornamentals with enough nitrogen for an entire year with just two applications of Du Pont "Uramite"—one in spring and one in fall. Time-tested "Uramite" is 38% nitrogen—gradual-release nitrogen that feeds steadily without burning and resists leaching.

For ease of application on tight, low-cut turf, new "Uramite" Sprayable ureaform fertilizer can be applied through a high pressure sprayer.

Remember to observe the three fundamental principles of successful turf management—(1) weed control, (2) disease control, (3) adequate fertilization. For full information on dependable Du Pont Turf Products, consult your local dealer—your service agency.

On all chemicals, follow labeling instructions and warnings carefully.

Better Things for Better Living
...through Chemistry
for Golf Course Use

Ideal for Tournament Registration Booth . . . 19th Hole Refreshment Center . . . Snack Bar . . . Caddie House . . .

Expandable Storage Shelter for Golf Carts, Mowers, Tractors, Tools. Is a strongly built, durably finished, steel structure that can be quickly assembled. It can be closed and locked safely at night. If required, it can be easily moved on a special trailer. Dimensions are seven feet square and measures eighty inches under awning closures. Twenty-one feet of counter space keeps traffic moving. Several units can be combined to make a larger structure with choice of wall panels. The low price will surprise you. Write for literature. DISTRIBUTORS WANTED. GOOD TERRITORIES STILL AVAILABLE.

INTERNATIONAL EQUIPMENT DIVISION
Morrison International Corp., 2487 Walden Avenue
Buffalo, N.Y. 14225 A subsidiary of Conax Corp.

courses at North Park and the 9-hole layout at South Park, had a total of 182,709 rounds played during 1964, with total revenue of $216,881.35.

Renovation and remodeling are underway to provide more space, including new locker facilities for women, at the Oswego Lake CC in La Grande, Ore. . . . A second-floor club room addition is planned for the pro shop at the King City (Calif.) CC . . . . Bogalusa (La.) CC planning new clubhouse . . . . Belleville (Kan.) CC members have voted to move their links to a 64 acre, L-shaped strip located in the southeast part of the city . . . . An FHA loan has been approved for the Dix River CC, Lancaster, Ky., to build a course, pool and clubhouse . . . . Midsummer is the expected opening date for the Hardeman County (Tenn.) G & CC with its 9-hole course.

June 1 is the date that the new Beaver Hills CC (Cedar Falls, Ia.) should be in full operation . . . . Club is successor to old Washington Park CC . . . . Denton (Tex.) CC has Jim Dieb, who has also been a part-time teacher, as its new manager. . . . He joins former teacher, Buster Creagh, who is pro at Denton . . . . Lon Mills, long time city horticulturist and lately operator of the only municipal course in Knoxville, Tenn., died recently . . . . He was an active golfer and the designer and builder of over 25 courses in eastern Tenn. and Ky.

Aaron Barker has replaced Gary Gruenemeier as manager of the Oakland (Neb.) GC . . . . A new frame building is being constructed near the site of the burned-out Elwood (Ind.) CC to serve as temporary offices for the club until construction of a new clubhouse is completed . . . . A $400,000 facelifting operation on the Ogden (Utah) G & CC is completed . . . . A new building has literally been wrapped around the old clubhouse adding 10,000 to 20,000 square feet of space including doubling the men’s and tripling the women’s locker space . . . . There is also a new pro shop and a storage and repair area for carts and up to 500 sets of clubs . . . . The front nine playing route has been changed to facili-
WHY BE SATISFIED WITH LESS THAN THE BEST?

THE ORIGINAL
SELF PROPELLED SPIKER

Fewer working parts therefore, less maintenance cost.
Hundreds now in use all over the country.

POWER SPIKE MANUFACTURING CO.

113 E. Colorado • WALTERS, OKLAHOMA • Area code 405 MI 7-2307

tate golfers by using a tunnel to avoid traffic along Ogden's busy Washington Blvd.

Preston Hollow CC, now Forest Hills CC, in Dallas, Tex. is reported to be on the way out due to financial difficulties. It will probably be turned into a housing development. Work is continuing on the Munuscong course, Pickford, Mich. Although work will be completed by fall, spring of 1966 is set for the opening.

Another son coming into Robert Trent Jones' golf architectural firm . . . Rees Jones, now at U of California studying landscaping after having studied at Harvard School of Design, will join his father and brother, Robert Trent, Jr. next year . . . Walter Nagorski, pro at Ft. Shafter course, Honolulu, working to extend the Hawaii PGA's annual "Ice Cream and Soda Pop" junior tournament so it will bring kids and their parents from the mainland . . . Golf boom has hit Hawaii with some very good pros nursing it along . . . Hawaiian pros relieved at settlement of PGA National course controversy . . . Nothing could have made less business sense than Hawaiian pros being assessed for deficit of a PGA operation in Florida.

Chick Evans' idea of a Golden Seniors tournament for the merry old souls of 65 or more went over so well at De Soto Lakes GC and Lodge at Bradenton, Fla., that some of the substantially solvent veterans got talking about buying the place . . . Supt. Jack Bernard played that one real smart in making a thrifty budgeted course a showpiece.

Charles F. Hough, Chicago corporation lawyer, was elected president of the Golden Seniors Golf Assn. . . . Jack Vilas, Glenview (Ill.) Club was elected Golden Seniors sec.-treas. . . . Vilas, a Florida golfer in winter, was a pioneer aviator . . . He was first man to fly across Lake Michigan . . . Chicago Children's Memorial Hospital pro-am going into its fifth year with a record of raising $70,000 in the previous four years.

Pros have been shocked to read pub-
Will golfers need a 5-iron to putt on your wet greens?

You need TURFACE®, Wyandotte’s inorganic soil amendment that keeps greens puttable in practically any weather. TURFACE particles aerate and loosen soil. So excess moisture drains quickly even after a downpour. But there’s much more. TURFACE particles absorb and hold this moisture down at root level. This raises the field capacity of soil . . . promotes healthy root growth all season long. Although TURFACE particles absorb their own weight in water, they won’t break down. TURFACE keeps on working indefinitely. There’s nothing on the market quite like it. And now’s the time to treat your greens with TURFACE. See your supplier.

Wyandotte Chemicals

J. B. FORD DIVISION, WYANDOTTE, MICHIGAN
IN CANADA: WYANDOTTE CHEMICALS OF CANADA LTD., 41 METROPOLITAN ROAD, SCARBOROUGH, ONT.

March, 1965
NEW BAG RACKS

INCREASE EARNINGS AND SAVE SPACE
Service is in sight with vertical bag racks

Your club members will appreciate the extra convenience and service that only Stafford Vertical Bag Racks can offer. And, like pro shops across the nation, you can profit from the 40% additional space (compared to other storage systems) this rack makes available. Additional benefits are:

- Wear and tear of golf bags is completely eliminated
- Damp bags dry faster—no mildew
- Faster, easier storage
- Provides a neat appearance
- Easy to install

PLAN TODAY TO CONTACT
THE A. G. STAFFORD CO.
2006 Allen Ave S E • P. O. Box 287 • Canton, Ohio
Phone 453-8431

liciety in which a golf magazine publisher criticised the nation’s Junior golf program as “weak” when facts show that golf promotion is the most vigorous field of all Junior sports promotions. There are nearly 150 golf courses at colleges and a few Par-3 courses at high schools.

California golf association’s Spy-Glass Hill course in Monterey area, giving association players a great place for their tournaments several weeks of the year, and an excellent private membership club the rest of the time, has other associations watching its progress. Amateur and professional men's, women's and juniors' regional tournament schedules are heavy in many areas and difficult to accommodate with courses already crowded.

There has been talk for years about getting an Indiana, Illinois, Michigan associations’ joint course in picturesque dunes country at the south end of Lake Michigan. Superhighway development has made the area convenient.

A top grade team of club pros is reunited with Ray B. Garrett, pro at Wichita Falls (Tex.) CC getting J. H. (Dotta) Watson as co-pro. Watson and Garrett were at Wichita Falls CC seven years before Watson went to Ardsley CC. Ardsley-on-Hudson, N.Y., where he’s been pro for past five years. Said Bill Wotherspoon at the PGA meeting: “Joe Dey has upgraded golf every year since he’s been with the USGA.” National Golf Day this year gets another boost with Oldsmobile sponsoring a telecast of the round between the 1965 National Open and PGA champions.

The second compilation of Masters scoring records by Bill Inglish of Oklahoma City is a comprehensive and amazing job. If anything is missing, we couldn’t figure out what it is. Charles Bartlett of the Chicago Tribune came up with an interesting series in early February in detailing ten days in the life of John Frillman, assistant pro at Knollwood in Lake Forest, Ill., who was trying to make a name on the winter tour.
New sprinkler system
pays for itself in 10 years...
automatically!

Based on actual operating
costs, stepping up from hand
sprinkling to an automatic
Toro underground sprinkler
system can:

... save up to $20,000 on
labor costs over 10 years if
you sprinkle just three
months a year;

... save up to $120,000 on
labor costs over 10 years if
you sprinkle nine months a
year.

And if you now have an
underground system with
quick couplers and impact
sprinklers, you can convert
to Toro's automatic system
and recover your investment
in as little as five years.

Efficient automatic opera-
tion is only one of the reasons
for a fast payoff with Toro.

Exclusive valve-in-head sprinklers
cost less to install and maintain.
(See illustration above.) Save
up to 40% per head, initially.
Cost less to maintain because
both valve and head are easily
reached for quick service.

Exclusive 2-speed head elimi-
nates double coverage. Toro’s
new 660 rotary pop-up head
automatically goes twice as
fast in overlapping areas,
automatically slows to regu-
lar speed in areas covered by
just one head. Saves water
by eliminating puddling, run-
off and waste. With 185’
diameter coverage*, fewer
sprinklers are needed to cover
the same area.

Exclusive sprinkler nozzle design
results in the industry's most
effective precipitation rates
... can actually reduce your
water costs up to 25%.

Let us show you how fast an
automatic Toro system can pay
off on your turf. We manufac-
ture a full selection of auto-
matic sprinkler system com-
ponents and can engineer the
right system for any job or
budget. Call or write your
nearest Toro distributor. Or
write direct to Toro, P.O.
Box 489, Riverside, Calif., for
a free analysis.

*Wind velocity 3 m.p.h. or less

TORO

...famous for lawn mowers for over 50 years

March, 1965
A championship green cannot be established with seed. This fact has been recognized by leading golf course superintendents for over 50 years.

The variability in seed results eventually in "patchwork quilt" greens of different textures and different colors. Recent experimental plantings of Penncross seed resulted in over 100 different types of Bent from 1 ounce of seed. This extreme variability can be seen at our research center in Palos Park, Illinois.

A leading turf expert stated recently, "Now that the quality of turf developed from Penncross seed seems to be deteriorating (production fields appear to be left down) men are looking to the old standard commercial stolons."
Already the flood of sports television programs has advertisers using fall golf tournaments seeking to escape competition with football telecasts . . . They want to switch final rounds of golf tournaments from Sundays to Saturdays . . . They are paying for the show and they'll run it . . . Winner of the PGA Seniors to be invited by the R&A to the British Open . . . This year at Fort Lauderdale (Fla.) CC, Canadian and Mexican Senior pros competed against U.S. veterans.

PGA Merchandise Show at PGA National club conducted smoothly with about 150 booths sold . . . John Vasco, Lehigh CC, Allentown, Pa., and his committee did a thorough job of organizing the exhibit . . . Business was fairly good with accent on buying of soft goods . . . Club and bag orders of leading pro accounts are placed in autumn to work into manufacturing schedules . . . Exhibitors would have preferred show to be held during Senior PGA week when crowds are bigger, but they were satisfied with 1965 affair . . . E-Z-Go match play tourney during the Show week was won by Chuck Malchaski, Brookwood CC (Chicago dist.) from the previous year's winner, Bob Fainey, Thorny Lea CC, Brockton, Mass. . . . First place money of the $10,000 purse was $1,500.

Sam Harvey, unattached St. Petersburg pro, won the PGA stroke-play championship on the fourth extra hole after he had tied at 291 with Steve Bull, Tripoli CC, Milwaukee . . . Lorin Shook and Bob Cajda, Michigan team, took the Golf Pride PGA Senior-Junior first prize of $500 with their 67-62—129 over the West and East courses of the PGA National club . . . Lot of talk during PGA Merchandise Show on what a fine shop Lou Strong set up at PGA National . . . Arrangement and color of displays showed the influence of the observant Mrs. Strong.

Ed Dembnicki now supt. at Indian Spring (Md.) CC . . . Western Golf Assn. made its "outstanding service" awards to supts. at courses where Western's three championships were held in 1964: Art Mueller at Tam o' Shanter (Western Open); Harold Stodola, Tucson CC (Amateur) and George Kirkpatrick, Eisen-

(Continued on page 158)
Wherever golf is played...

With Par Aide's greens equipment—cups can be easily moved to any position on the green. Hole cutter used in conjunction with Hole cutter Guide assures a clean accurate hole. Greens cup can be easily removed with the Par Aide cup puller and reset to the right depth with the par aide cup setter. Die cast aluminum greens cup—machined, anodized and dichromated—Interior painted with high gloss white air dry enamel.

PAR AIDE
FOR COMPLETE LINE OF PAR AIDE GREENS AND TEES EQUIPMENT—WRITE FOR CATALOG

PAR AIDE PRODUCTS COMPANY
296 NORTH PASCAL STREET • ST. PAUL, MINNESOTA 55104