

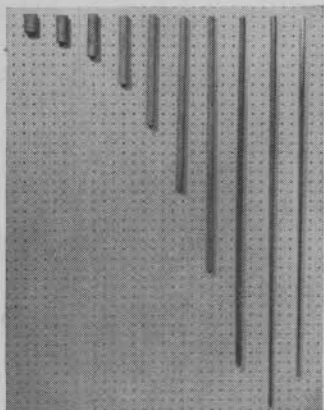


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True Temper Golf Shaft Division

"Leading manufacturers use True Temper shafts because..."

Different brands of golf shafts are made differently . . . and we must engineer shaft flexibility and weight requirements to the exacting specifications of each leading manufacturer . . . all of whom use True Temper step-down shafts in their finest clubs.

Experience in producing more than *fifty million* True Temper golf shafts . . . and exhaustive research with all kinds of materials . . . assure that, "When a better shaft is built, it will have a True Temper brand on it."



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No seams or joints mar True Temper shafts. Tubes are drawn through dies and over mandrels in seven separate stages to produce a diameter and metal "structure" essential to a perfect shaft.



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Gleaming chrome plate is applied uniformly by one of the most modern machines in the world. That's why the True Temper finish holds its gleaming beauty, season after season.

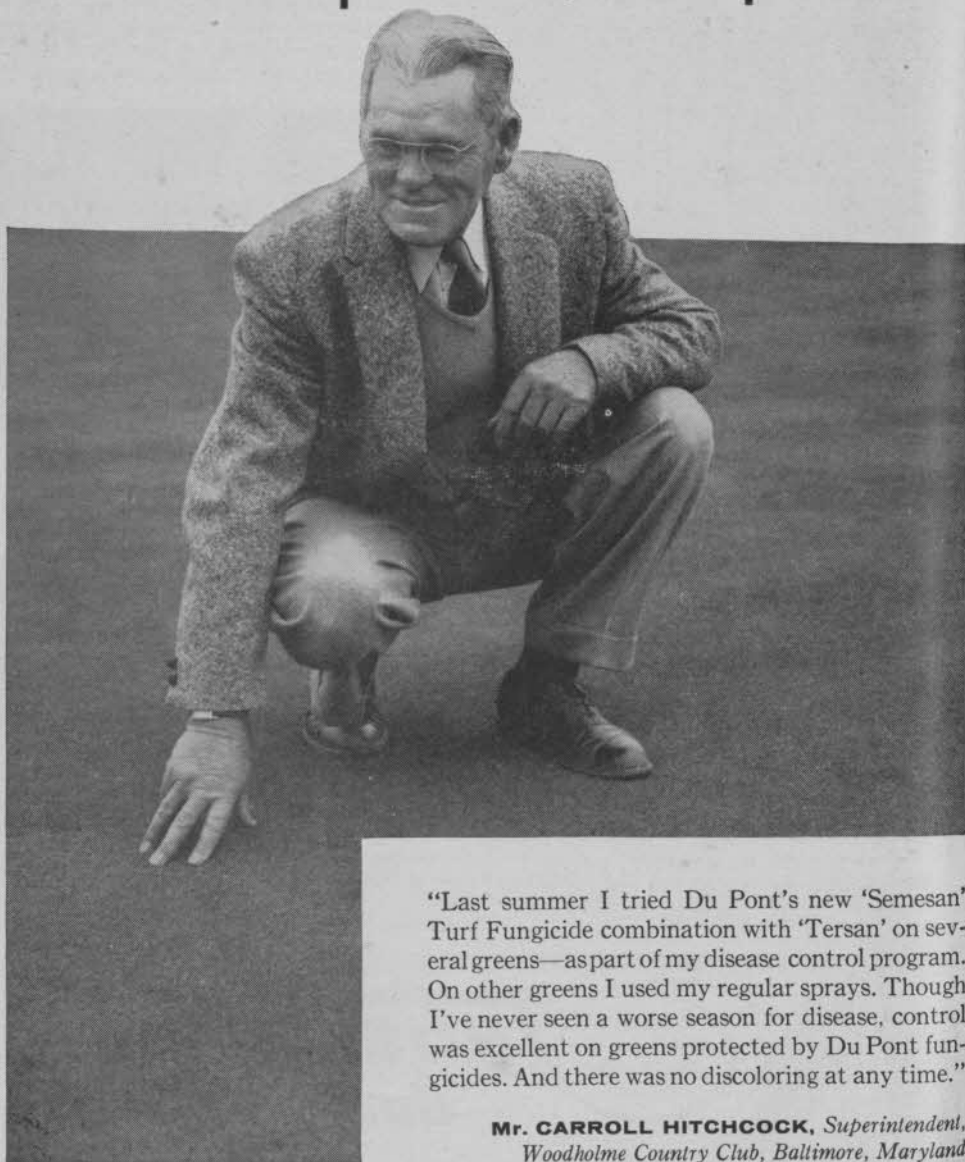


TRUE TEMPER GOLF SHAFTS

Even in Baltimore's

NEW

Semesan[®] Turf Fungicide to provide superior



"Last summer I tried Du Pont's new 'Semesan' Turf Fungicide combination with 'Tersan' on several greens—as part of my disease control program. On other greens I used my regular sprays. Though I've never seen a worse season for disease, control was excellent on greens protected by Du Pont fungicides. And there was no discoloring at any time."

Mr. CARROLL HITCHCOCK, *Superintendent,
Woodholme Country Club, Baltimore, Maryland*

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teams up with Tersan[®] disease protection

New double protection for fine turf!

New "Semesan" Turf Fungicide is an improved formulation—a mercurial fungicide offering broader, more effective disease control and greater safety to turf. Combine it with "Tersan" for exceptional control of large brown patch, dollar spot, snow mold and other fungus diseases. There's no more effective way to keep down maintenance costs and have finer greens.

"Tersan" and new "Semesan" Turf Fungicide are packaged for easy mixing and measuring. Both are compatible with most commonly used turf chemicals and pesticides. To save time and labor, fertilize when you spray for disease. Just mix in Du Pont Soluble Plant Food. It's packed in 50-lb. bags, especially for golf-course use.



On all chemicals follow label instructions and warnings carefully.

Order **Tersan[®]** and
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BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

Ford Goodrich Honored for 40-Years' Service

Ford Goodrich, whose name is closely linked with the vast improvement in course maintenance in the last four decades, and one of the organizers of what is now the GCSA, was recently honored at a banquet at the Flint (Mich.) GC where he is supt., in recognition of his 40 years' service with that club.

More than 50 members of the Michigan and Border Cities GCSA attended the affair which was arranged as a surprise for the veteran Flint superintendent. Receiving a gift of a lounge chair, which he expects to shun for at least a few more years, Ford learned that the Flint club will soon start construction of a new equipment building which will be named in his honor. Goodrich had been plugging for such an addition for several years.

Recounting his 40 years in greenkeeping, Ford told the banquet gathering he was introduced to the profession in 1914 when he was hired to haul sand for the traps of the original Flint CC, now known as Atlas Valley CC. Two years later, when construction of Flint GC was started, Goodrich was hired to prepare the land, build roads, sow the seed and then mow the grass under the direction of Willie Parks, the architect. Everyone was well satisfied with Ford's handling of these projects and he was officially installed as supt. in 1918.

One of the distinguishing things about Goodrich's career is that he has constantly attended state and national seminars and conventions, many of them at his own expense, in order to keep abreast of the newest developments in turf management and course maintenance. O. J. Noer, Milwaukee Sewerage Commission agronomist, and Ward Cornwall, GCSA pres., who attended the Flint banquet, both cited this as one of the reasons why Ford's work always has been outstanding.

About the only thing Goodrich has neglected in his long career is golf itself. He has never played a round.



Ford Goodrich

Women Golfers Give Business A Lift at Dubuque G & CC

Concentrating on getting more women to come out to the course, Howie Atten has made a real family game of golf at the Dubuque (Ia.) G & CC where he has been pro since 1950. Husbands are no longer trying to slip away from their wives in order to play against more accomplished male competitors because they now find they have plenty of competition in their own households.

Atten has seen to this by running a series of free weekly group lessons during May and June for the ladies during his tenure at the Dubuque club. Results have been gratifying not only from an artistic standpoint but because they have boomed business at Atten's pro shop. Group lessons are usually attended by upwards of 50 distaff swingers where only a handful of

women took advantage of them when they were started six years ago. Today there are at least 25 competent female golfers at the Dubuque club where a few years ago, according to Atten, there were no more than five or six.

Individual instruction has steadily increased as the result of the free group lessons and the sale of equipment and wearing apparel has been growing each year because the women invariably come into the pro shop following the group sessions to indulge in shopping sprees. Atten suspects that new found skill among the feminine contingent has resulted in more males taking lessons in order to defend their laurels, although this is not readily admitted by the men, and he thinks there is no doubt that it has given business in his pro shop an added boost since wives usually influence their husbands' buying.

(Continued on page 65)

I never dreamed.....
so many players would
want my golf clubs!



To meet the unexpected demand...

Our plant has been doubled in size...

Our working force tripled...

and it *looks* like we're going to get on a current delivery basis.

Every time we have produced *one* set of clubs, there must have been two customers in the pro shop waiting to buy. When that set reached a player, and he found out what they did for his game, he told all his friends.

Multiply that situation hundreds of times, and you can see the reason we have been running behind on deliveries.

We have refused to sacrifice quality just to fill orders. We feel you and your customers are willing to wait a little longer to get the "World's Finest".

The demand for my golf balls has also far exceeded my expectations, but I'm happy to report that we are now shipping on current orders.

Please accept my sincere thanks for your wonderful reception on our pro-only clubs and golf balls, and I sincerely believe you will be glad you waited.

Ben Hogan

*Ben
Hogan*

At PRO SHOPS ONLY

COMPANY

Fort Worth, Texas

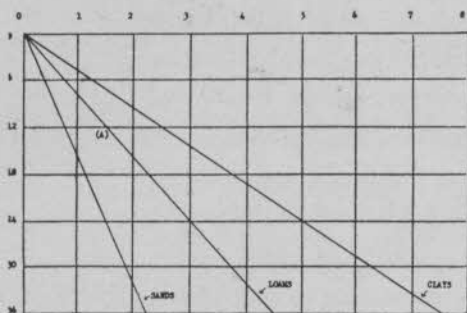
Water Management

Here is a summary of Irrigation Principles with which every Supt. should be familiar

By ROBERT M. HAGEN

(This is the second of two articles. The first appeared in June GOLFDOM.)

When you allow the soil to be dried out to a considerable depth, then you must plan on applying a deep irrigation if you are going to recharge completely the soil moisture reservoir. The following chart shows you how much water it takes to wet these soils to given depths.



(Fig. 12)

A loam soil, if you wet it to a depth of one foot after it has been dried out, requires one and a half inches; to two feet requires three inches, and so forth. If you have a clay soil, five inches would be required to wet it to a depth of two feet. One must recognize that if he is going to take advantage of deep roots and long irrigation intervals, it must be possible to apply and secure penetration of considerable depths of water where the irrigation season is short. You may be able to allow the subsoil moisture to be gradually depleted and depend upon fall rains to provide the deep irrigation. However, sometimes one sees very touchy situations created by allowing the subsoil moisture reserve to be depleted. In such cases the grass is dependent only on a limited supply. When this is exhausted, the grass may dry out

Hagen's paper was presented at GCSA convention in Long Beach, Calif.

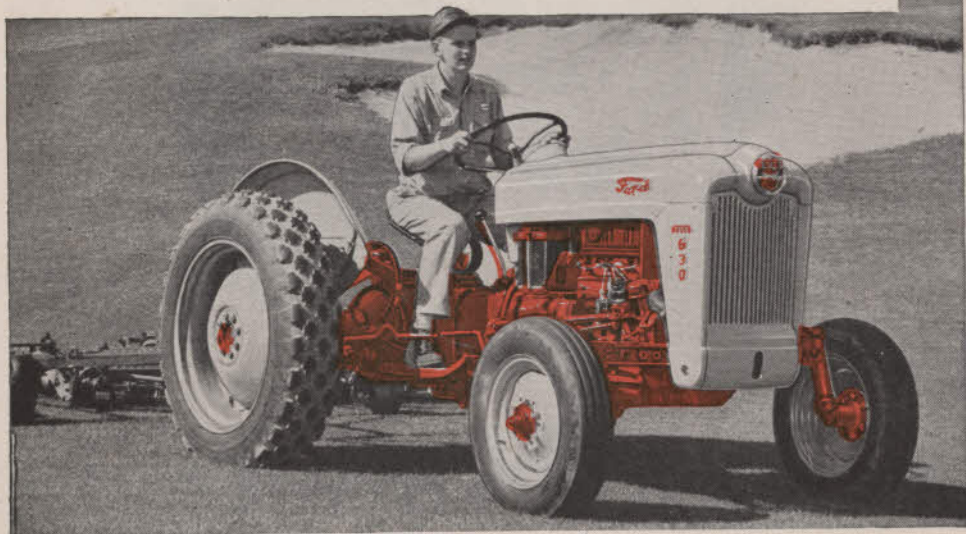
suddenly and probably be lost.

The simple calculation for predicting irrigation frequency which I gave previously can be used as a useful check on your irrigation operations. It can help you to find out what is the effective depth of our irrigations or the effective depth of the roots of our grass, whichever is the shallower. The effective depth of either the grass roots or the irrigation is equal to the irrigation interval times the use rate divided by the water-holding characteristics of the soil.

Let's take an illustration. On a golf course in a hot-dry area where the water use rate is .3 inches per day and the soil is a loam holding $1\frac{1}{2}$ inches of available water per foot, assume irrigation is required every 2 days to avoid wilting. Then the effective depth of rooting or irrigation is equal to the irrigation interval (2) times the use rate (.3) divided by the water-holding characteristic of the soil ($1\frac{1}{2}$), or $(2)(.3)/1.5 = 2/5$ foot. In other words, if irrigation is needed every two days under these conditions, it means either that the roots of our grass are restricted to less than a 6-inch depth or the water being applied is penetrating to a depth of only about six inches. When you encounter this situation, it is quite likely that the irrigation water is not penetrating below this depth. A soil tube or some other sampling device will help check on this. You had better take the time to find out what is going on down there.

Let's take another illustration of a golf course where the fairways were very dry yet they were irrigated every second night using one-hour sets on the sprinklers. The water use rate in the area is about .25 inches per day. Why are these fairways so dry? Check on what is happening by a simple calculation. Many sprinkler systems will put on about one-third of an inch of water per hour. Assuming this application rate, these fairways were receiving

3 Big Advantages For Golf Course Work



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2 YEAR-ROUND VERSATILITY for more jobs. In season, you can use a Ford Tractor for mowing, aerifying, seeding, fertilizing and rolling. You can handle these jobs quickly without interrupting play. The same Ford Tractor will help you save time and labor on off-season jobs like building and repairing tees, traps and bunkers; loading sand and plowing snow.

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new turf fungicide



- A new antibiotic fungicide for the control of significant turf diseases.
- **Proved effectiveness** — Extensive field testing by golf course superintendents has shown Acti-dione RZ to possess highly protective and curative effectiveness against:

- A. Large Brown Patch** (*Rhizoctonia Solani*)
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- C. Fading Out** (*Curvularia sp.*)
- D. Melting Out** (*Helminthosporium sp.*)
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- Selection of geographic locations for testing against brown patch were based on expected severity in disease development.

During the period of serious disease conditions in the summer of 1955, reported effectiveness was 94% against brown patch.

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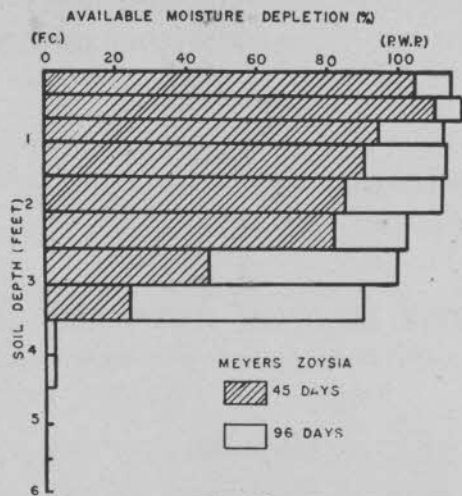
Upjohn

*TRADEMARK, REG. U.S. PAT. OFF.—THE UPJOHN BRAND OF CYCLOHEXIMIDE

.33/2 or about .17 inches of water per day — about one-half the irrigation requirement. Thus it is no wonder the fairways were dry despite irrigation every second night. This trouble did not show up until after midsummer. During the first part of the summer, the grass got by without wilting by drawing some moisture from the subsoil to make up for the deficient irrigations. However, as the summer wore on, the grass used up the deep soil moisture reserve and became dependent upon the one-third inch handout it got every two days. If the weather turned hotter and drier, there was real danger of losing the grass since there was no reserve left to draw on. It had been depleted by borrowing on it all summer.

If you are in a situation — and unfortunately we are finding more and more of these cases — where you have to get by with less water because the water is rationed or there just isn't any water available for irrigating turf, whether it be on the golf course or on the home lawn, one way of stretching your water supply is to let your grass dry as much as possible before irrigating. This can be done safely, particularly with the grasses like the bermudas and the zoysias or even with bluegrass, provided the soil conditions and irrigation practices have been such as to permit these grasses to have deep roots. These give them a reserve supply of moisture. As a result, the grasses dry out slowly over a longer period of time. It does not run completely out of water suddenly and die.

The next figure shows the decreased use of water by Meyer's zoysia at Davis as it became dry.



(Fig. 13)

The water extracted during the first forty-five days is indicated by the cross-hatched bars. The zoysia then looked somewhat dry although it was still green. No water was applied. During the next fifty days, the grass extracted water indicated by the longer bars. The grass now appeared brown although it was still green next to the soil surface. Comparison of the area of cross-hatched bars to that of the longer bars shows that during the last 50 days as the grass was becoming progressively drier it used far less water than it did during the first 45 when it was green and growing. By postponing irrigation for the additional 50 days, less than half the water was required to maintain the zoysia although, of course, it did look dry near the end of the test period. When irrigated, it came back to a green color rapidly and looked fine. The same thing can be done with bermuda on deep soils. (A color slide was shown of a thick U-3 bermuda root projecting out of a soil plug taken at a depth of five feet.)

Formula Suggested

Despite the deep rooting potential of a grass like bermuda you sometimes see it soaked every few days. (A color slide was shown of a football stadium in summer where frequent irrigation had made the soil soggy and the bermuda was doing poorly). In most cases, less frequent irrigation would reduce costs, save water and often produce a better bermuda turf.

You will find the following formula useful in checking on the amount of water you are applying. I suggest you write it down and try it out when you get back home.

$$\text{Precipitation} = \frac{36.7 \text{ gallons water}}{1,000,000 \times \text{acres irrigated}} \quad (\text{Fig. 14})$$

This allows you to convert the figure you find on some of your water bills (gallons) into average precipitation in inches per day.

If you will carry out this calculation for your course, you may well come up with some surprising and informative results. Here is an illustration. A superintendent told me that according to his records he was applying an average of 900,000 gallons of water per day to an 18-hole golf course with an irrigated area of about 60 acres. Well, is this good irrigation? Is this anywhere near what he needs to buy and apply? Plugging these figures into the above formula shows he is applying an