STYMIED by HIGH irrigation COSTS?

The many advantages of J-M Transite Pressure Pipe assure long life and efficient operation of golf-course sprinkler systems...at low cost

HAVE you been hesitating about installing an irrigation system on your course because costs seem out of line? Then it will pay you to look at the many savings made possible by Transite Pipe. You’ll find it affords real economy during installation...that maintenance is practically eliminated...and that sprinkler coverage stays permanently high.

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Thorough aeration and cultivation of the sod makes an astonishing difference in the vigor of your greens. Practically eliminates all trouble from "brown patch" and fungus growth. Cuts the cost of maintenance. And here's a new-type spiker to do the work economically and well.

New RICHLAND GREENS SPIKER GIVES DEEP CULTIVATION

No other gives the same action. Spikes are so mounted that they slightly lift the sod and stir the soil beneath the surface.

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Special Turf Guard saves the grass, no matter how lightly rooted or loose the soil.

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Quality in every detail . . . fine materials, careful workmanship . . . and features that in ease of operation, effectiveness and durability set it apart from any spiker you've ever seen.

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When Costs Must be Lowered--Save on Maintenance with a ROYER COMPOST MIXER

This efficient little machine provides an adequate supply of uniform, thoroughly conditioned compost at a mere fraction of the cost of hand preparation . . . and will handle it wet or dry. There are no delays due to weather conditions.

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ROYER FOUNDRY & MACHINE CO.
158 PRINGLE ST.
KINGSTON, PA.
During July and August turf on our greens turns brown in spots, and then a green scum covers the area. Is this the result of faulty watering practice, or is some other cause responsible? We have been advised to water thoroughly at infrequent intervals.

**ANSWER:** Yes, failure to modify method of watering is responsible for your trouble. Soil in the areas first becomes dry, then grass begins to wilt and turn brown. As it thins out the soil surface becomes exposed and algae start to flourish. This forms the thin, skin-like scum. Algae are normal soil inhabitants which do not multiply as long as turf density is sufficient to exclude light.

With the approach of summer both root systems and soil moisture should be watched closely, because shallow roots or dry soil are the causes underlying the trouble.

When soil becomes dry in localized spots, the areas should be forked deeply and then drenched thoroughly with water to restore normal soil moisture. Several drenchings may be necessary. The holes formed by the ordinary spiker are too superficial to correct the condition.

Where shallow roots are the cause, it may be necessary to water greens one or more times every 24 hours to prevent serious wilting and consequent loss of grass. During hot or windy periods, greens should be inspected at mid-day even though the water was applied during the preceding night. Wilting grass takes on a characteristic bluish metallic color.

At the first sign of wilting, greens should receive just enough water to restore moisture in the shallow layer of soil to which roots are confined. Otherwise, serious loss of grass may take place.

The idea that daytime watering always burns grass is erroneous. Even in bright sunlight, no harm results, provided water does not collect in pools. Handwatering is the safest method, especially on heavily contoured greens. Water can be directed to the higher spots and surface run-off allowed to care for low areas.

If grass thins enough to permit growth of algae, a light application of hydrated lime usually checks their development. Because hydrated lime is caustic, it must be used carefully at not

Besides these temporary measures, steps should be taken in the fall to correct the underlying cause.

Among other things, localized dry spots may be due to an excessive surface mat of grass. If this is the case, the surplus should be removed by alternate raking, or brushing, followed by close cutting. Excessive soil acidity is another possibility. This may be corrected by the moderate use of lime.

Provided other factors are favorable, periodic thorough watering is stressed as a means of encouraging deeper root formation. So during the cooler portions of fall and spring, best practice is to water at irregular intervals. Because days are shorter and temperatures lower, serious wilting is less likely to occur at these seasons. During the interval between applications of water, the surface soil should become partially dry, but this does not imply that surface soil should be allowed to become thoroughly dry. As already pointed out, such soil refuses to absorb applied water. Sufficient water should be applied to re-establish contact with sub-surface moisture.

Tell us about your Turf Problem. The facilities and services of our Soil Testing Laboratory and Field Agronomists are at your disposal, within reasonable limitations.

*Turf Service Bureau*

**THE SEWERAGE COMMISSION**

**MILWAUKEE, WISCONSIN**

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THE ORGANIC-NITROGEN TURF FERTILIZER
Pabst Blue Ribbon has meant unmatched quality in beer to five generations. That's why better hotels, restaurants, and clubs feature Pabst—a wholesome companion to good food.

PABST
GOOD TASTE FOR 94 YEARS
"YOUR COMMITTEE BEGS LEAVE TO REPORT:"

By J. PORTER HENRY
Green-Chmn., Algonquin GC, St. Louis

BY WAY of introduction let me volunteer the information that I occupy the hazardous position of Chairman of the Green-Committee of a golf club in central United States. I say central United States advisedly, because that's where the hazard comes in. That area imposes problems of turf maintenance little known to my more fortunate contemporaries in other territories.

Mr. Kettering of General Motors fame is authority for the statement that research chemists would give anything in the world if they could find out what makes the grass green. I would consider myself a horticultural genius if I could find out how to keep it green—or to keep it at all, for that matter.

When I fell for the lure of the links some 30 years ago, the paramount problem plaguing the members had more to do with perennial deficits and house management than the maintenance of fairways. At that time the house committee was the doormat on which the members wiped their feet. Which recalls the familiar story of the club guest rushing around the locker-room in search of a cuspidor—or shall I say spittoon, since this is more of a Western experience—rendered necessary by his cheek full of chewing tobacco. The alert chairman of the house committee observed his predicament and approached the guest, asking if he could be of assistance.

"I'm looking for a place to spit," said the guest, with his lower lip propped up to avoid the overflow; "where the hell is the—"

"Oh, never mind the spittoon," broke in the host, "I'm chairman of the house committee; just spit on me."

Of late years, and especially since the introduction of fairway watering, competition between club committees for tribulation honors is ended. The green-committee is well out in front.

After several years of heat and drought, which took their toll of turf, it is not surprising that golf players concluded that a watering system on the fairways was an absolute necessity. What if crab grass should appear; any kind of green covering was preferable to no covering; and what could be so drab a a bald headed fairway relieved only by touches of milk purslane, which, for the information of the reader, is a flat lacy weed which proclaims a drought and a hard soil.

The members talked about the watered fairways of Hokey Doke at Chicago, with bluegrass like a velvet carpet; the La Lalla course at Los Angeles, with a bigger and better turf; the Bermuda turf at Atlanta, which brought smiles to the face of
The Fort Worth (Tex.) Golf Assn. has the right idea about getting the folks to apply for district handicap cards. They put on a deadline and if applications aren't received by that time, it's too bad for the applicants. This year the association has 650 members, largest in its history. Numerous applications, received after May 3, the announced deadline, were turned down.

The brassie; the bent courses of New England; and on they rambled. So to the tune of many dollars a watering system was installed. After a year's experience with watering your committee hereby submits its report:

To the Board of Directors, Midcontinent Golf Club:

Your Committee begs leave to report that after an exhaustive study of grasses suitable for this area, watering considered, which included conferences and correspondence with the most expert advisers on the subject, your Committee selected a mixture of bluegrass and Rhode Island bent. A heavy fall planting with a good germination resulted in a beautiful spring turf, which brought cheers to the members and compliments to the Committee. But your Committee was a little embarrassed by what it feared might prove to be premature praise. The real test of mid-summer weather had not arrived.

It might be appropriate to interpolate here that the golf member is as appreciative of results as he is critical of mistakes. He may be silent when it comes to mentioning his high scores; or timid about counting his third putt, but when it comes to telling the green-committee what he wants, he cannot be accused of either silence or timidity.

Grass Height Is Debated

Your Committee had planned, as hot weather approached, to raise the mowers until the blades of grass were cut nearly two inches in height, to afford shade for the roots and to enable the plant to properly engage in what the experts describe as its photosynthesis process. But as this time approached and the mowers had been lifted for a cut somewhat in excess of an inch some slight difficulties arose with the membership. The Committee was politely but emphatically advised that after all we were operating a golf course, not a grass nursery. Did the green-committee remember that there was such a club as a brassie, which needed a clear lie? Or was the Committee going to furnish pins for brassie shots. One inquired without a smile whether the Committee was introducing niblick fairways.

Although your Committee felt it necessary to have inch and a half grass it found it much more peaceful to lower the mowers to an inch.

Subsequently when Summer was in full swing and scattering blades of crab grass began thumbing their noses at your Committee, it recognized the signal to reduce watering to a minimum—just enough to keep the cultivated turf barely alive. But as the course began to assume a dryer appearance a fresh shower of suggestions descended on our ears. "My gawd, we've got a watering system, why don't we use it." "Are we saving the water for a rainy day?" "What, no quarters for the water meter?"

Notwithstanding the many objections, your Committee decided to stand firm this time and carry out its own ideas. At least that is what they determined to do, not what they actually did. After all, the Committee was not made up of experts, and when opinion multiplied that we were allowing the grass to dry up and die, when the members had spent their good dough to avert just this calamity, your Committee fell for the pressure again and resorted to more frequent watering.

Then Came Mid-August

We need not call attention to what happened to the course by the middle of August. You have heard all about the green-committee's luxuriant $25,000 crop of crab grass—a crop that yields no dividends except of the Irish variety. Ironically enough, your Committee knew what the trouble was. In the first place, the grass was cut too short, and in the second place far too much water was used.

There is another strange bit of information that has reached us. Because of loose bits of sod here and there on the course it was surmised that the workmen had evidently permitted the mower blades to...
get so dull that they pulled out small furrows of sod, especially where the water was spared and the turf tanned. But white grub worms had a better explanation for this condition. They had eaten all the roots of the turf in areas from four to six feet square, leaving nothing but a thin layer of sod that could be lifted as readily as a small rug from the floor, and the mowers had indeed torn up those furrows of sod. In some places the grubs numbered as many as 30 to a square foot.

This prolific visitation of grubs naturally invites the inquiry: why had they not appeared before? At least two reasons were suggested. Heretofore the ground in summer was too dry and hard for the animals to navigate and flourish with such freedom. The watering system had removed that impediment and made their burrowing easy, and our robins—which feed on worms—had all but abandoned our golf course. The spray of water from the revolving nozzles, shooting vast quantities of water in the radius of 90 feet into the trees, had frightened the birds from their roosts and caused them to seek quieter resting places in neighboring timber.

We learned that these white pests were to hibernate during the winter and, after their metamorphosis, sail forth in the spring as May bugs, lay their eggs again, hatch out as grubs and start again their vicious circle. What was to be done? An SOS was sent to various departments of Agriculture of the several States, and soon the awaited remedies came pouring in.

**A Mess of Poking!**

Here was one—Plow to a depth sufficient to uncover the grub and introduce a lot of hogs and chickens. What a remedy for a golf course! Nearly every mail brought this remedy—Get a small steel rod and poke it in their holes. Ye gods, 30 holes to the square foot and probably 10 acres of holes!

As mechanical remedies seemed impracticable, chemical poisoning appeared as the only hope. While we were trying to make up our minds as to the proper chemical treatment, an old gardener suggested that when the grub had turned to a beetle in the Spring, all we had to do was to set out a number of red lights in a bucket of oil; the flying bug, attracted by the light would bump his head, fall into the oil and drown.

As this suggestion came from many sources, we passed it on to the United States Department of Agriculture for its approval. Sure enough the scheme had been tried under scientific auspices—but found wanting. The light attracted only the male bug—(a red light would!)—and the few females that found the oil had already laid their eggs.

While the grub elimination efforts were under way, your Committee faced the problem of doing something about the $25,000 crop of crab grass—goose grass to be exact. Fall seeding was at hand. But when seeding was attempted the clumps of goose grass resisted the discs of the planting machine, and continued to resist even after the discs were sharpened to a carving knife edge.

Now what was to be done? The Committee was stumped. But not some members, who wondered why the dumb committee didn’t rake off the crab grass like they had just done at Blissful Hills in Kansas City. They knew that was the answer. They had seen it done.

How simple the suggestion, but how wide of the mark! The fact is that there wasn’t any goose grass on Blissful Hills. They had raised only the short-rooted, simple crab grass, readily removed by raking, whereas our goose grass was deep rooted and as tenacious as a bulldog. Only plowing would remove it, and your Committee feels certain that such a remedy would result in the removal of both the grass and your committee, which latter remedy your Committee is now about ready to invite.

While pondering the solution of this problem, not to mention others of equal difficulty, your Committee was reminded of the solemn conclusion reached by a group of greenkeepers in this territory, which reads as follows:

“*It is said that Father Adam knew something about grass—that cows would eat it. For some unexplained reasons he made no effort to increase his learning on the subject. We have concluded after years of experience that Father Adam was a wise guy.*”

Perhaps that is the answer; but your Committee is foolish enough to keep trying.
ON PAGES following are views of three pro-shops that are doing business . . . and a lot of it! The establishments are the new shops of Spencer Murphy at Glen Oaks G & CC (N. Y. metropolitan district), Jim Wilson at Park Ridge CC (Chicago district), and Wolf Rimann at Hillcrest CC, Kansas City, Mo. At Hillcrest the Kansas City Open ushered in the June tournament schedule with a large field of pros, many of whom could make a profit from their Hillcrest visit if they studied Rimann's shop, regardless of how they fared in the playing prize money.

Two views are shown of each shop so you can get the entire dope on the layouts.

Starting with the Wilson shop, let's observe some of the features of these pro business places.

Note that Jim has balls, raincoats and golf shirts displayed on a table, open for handling by the prospective customers. That requires more work in arranging the stock in the morning, keeping it orderly and dustless all day, and putting it away for safekeeping at night. It also requires vigilance by the shop men because members in a hurry are apt to pick up something and forget to sign the tickets. However, the extra work is thoroughly justified by the increased sales. Jim has made numerous experiments in merchandising display during his long and successful pro career and has come to the decision that it is feel that is the strongest factor in selling golf goods.

Make Goods Easy to Touch

Jim, who, as many of you know, is the handsome guy shown in these pictures, expresses the following opinion about golf shop merchandising:

"In golf selling, as well as in golf instruction, the pro has to arouse the customer's sense of feel for effective reception of the pro's efforts. Every pro knows what a tough job it is to get the pupil to feel the correct swing, but that after this feeling is obtained, the results are highly satisfactory. The same sense of feel induces a player to buy more and better golf balls. The touch of a good paint job, the markings, the solid feeling of the ball, its fresh, clean feel even when wrapped, all help to stir a buying desire much stronger than that which is aroused when the customer simply gets a look at a box of balls behind glass and thinks that he needs a new ball to go the round.

Help Them Buy; Don't Sell 'Em

"The same thing holds true with clubs and bags. Get them to touch and fool around with the merchandise and you have them well on their way to buying. When they get the merchandise in their hands they have expressed an interest that gives the pro a good opening for a diplomatic and educational sales talk. The pro then is in a position to help them buy instead of being compelled to sell them from a cold looking start.

"Apparel that must be carefully protected against dust, and which appeals on its looks rather than its feel, can be kept behind glass, but the merchandise that is to be used with the sense of feel predominant should be made available for the touch of the prospective customer."

You can argue all you want to about Jim's policy on letting them sample the feel of the merchandise but the idea works out very profitably for him and to the keen satisfaction of the Park Ridge members.

Note the rubber flooring where traffic comes through the door into Wilson's shop. Pro-shop floor covering always is a problem. It must be neat, non-slipping and sturdy resistant to wear. The rubber mat runner has to be rolled up and its location swept every night, but it keeps
the rest of the floor clean and protects customers in spiked shoes against slipping.

Rimann makes his Hillcrest shop an exceedingly attractive place on the pro-lounge order, where members are subtly invited to wait for their partners, read the sports magazines, or “visit.” The battleship linoleum on the floor, inset with the Hillcrest monogram, makes a fine stage dressing and wears well despite the spiked shoe pounding it gets.

Rimann keeps his bags under glass with the exception of numbers on which he features at sale prices. His idea is to give the appearance of a smart retailing establishment to his shop, thus subtly counter-
acting the down-town store competition. He's done that very effectively. His clubs are in the open for handling and he has a particularly neat and extensive display. His shop boy has instructions to see that the large ash container is cleaned out at frequent intervals because the collection of cigarette and cigar butts that piles up in pro-shop gaboons during a short time often is a marring and conspicuous little detail that lends a low-down poolroom note, and is extremely offensive to women members. Watching little things like that identify the smart pro merchant.

It's Wolf Rimann looking over the figures at the counter in one of the Hillcrest shop pictures. The figures look great for this season.