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TURF DISINFECTANT



What Years Have Taught Me About Practical Maintenance

By JOE WILLIAMSON
Greenkeeper, Scioto Country Club

A GREENKEEPER today to succeed must be a general to lead his men and a master of arts to show them how, a mechanic of first class machinery of all kinds, a civil engineer to survey and construct, a landscape architect to create and beautify, a doctor to diagnose, and a chemist to mix the dope. In a word, the greenkeeper of today must be a genius, and whether he is or not, that is what he is expected to be, "A Miracle Man."

So let us look his place over. First, comes the question of equipment—tractors, machinery, tools, and so forth, to conduct the work efficiently at low cost.

Does he have up-to-date and labor-saving appliances? For if he has not, and his equipment is in poor shape and dilapidated condition, he cannot expect to do good clean work such as is looked for today. A few dollars saved in cheap tools or in trying to get by for a while longer will eventually cost much more. The slovenly manner in which the course must then be kept and the disrepute piled upon him are often at the cost of his job.

On the other hand, if the greenkeeper is capable and experienced, many of these problems can be solved if he is somewhat of a diplomat and can show his chairman the folly of trying to get by all the time with a poor working outfit which will double the cost of labor. Half of this money would pay for the necessary tools and put the place in much better shape and stop a deal of criticism.

Working and Storage Space Vital

Now what does the greenkeeper have for a starting-out place? Does he have a place fit to call a workshop for repairing tools and machinery? What does he have for a tool house where the tools, hand mowers, wheelbarrows and other equipment can be housed without being thrown in a heap like a pile of junk, among sacks of fertilizers and other things which have to be cared for and kept out of the weather, or where the men can go and

get what they need without the trouble of throwing everything aside to find what is wanted?

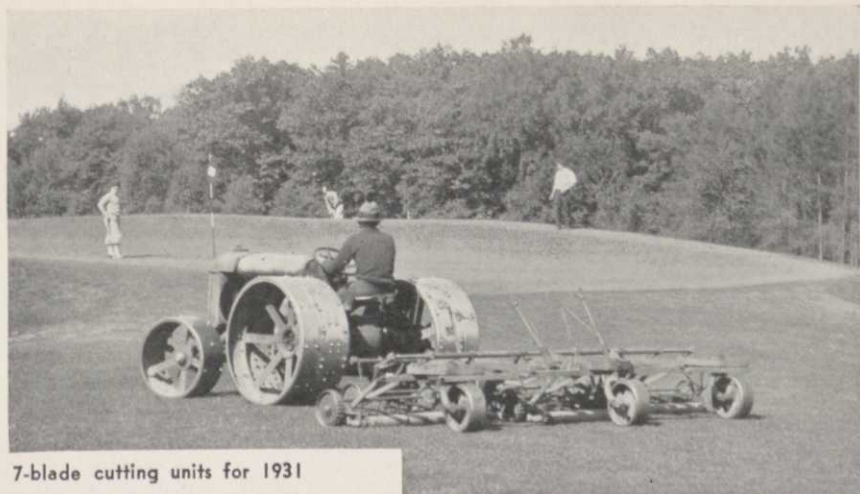
This condition I have seen many times on so-called first-class courses, and is a reflection on a good greenkeeper. Far too often are good tools and machines carelessly thrown aside for the need of a rivet or set screw to put them in good shape.

The first essential and most important thing for the greenkeeper to start out with is a good clean workshop and an orderly and well-kept tool house, with a place for everything, and everything in its place when not in use. Then and only then is he ready to start off on the daily grind.

Another thing of great importance is the compost pile and the shed in which to prepare the topdressing and to house it from the weather, where the men can work on rainy days instead of being laid off. There also is needed a cover for the tractors, trucks and large machines; a golf course without such accommodations is losing big money from waste and rapid deterioration of equipment. With these accommodations which are most essential to efficiency and good workmanship, the greenkeeper feels a backing of security to meet the daily routine and speed up the work which otherwise would only be hindered by lack of such necessary accommodations.

Concerning the compost pile, I think little need be said, for every well-versed greenkeeper who knows his humus, knows only too well how to prepare and keep a big pile constantly coming along to nurse his greens when feeding time comes, which naturally it does at frequent intervals and more often than not is very much neglected.

And now the question: How often should we topdress? Well, of course that depends upon the nature and condition of the soil. Some greens which I have seen have been so carelessly built that they had no soil or humus content whatever, hav-



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Orchard Lake, Wis.

Dec. 20, 1930

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Gentlemen:

Referring to Mr. Petley's call of December 19th, 1930, I will arrange to be at your shop on December 22nd, 1930, for a few various repair parts for our IDEAL Putting Green and Fairway mowers.

I am keenly interested in the performance of your three-gang Rough Mower during the past season and appreciate your co-operation in this connection. After having used this Rough Mower for the season we find the results have been very satisfactory.

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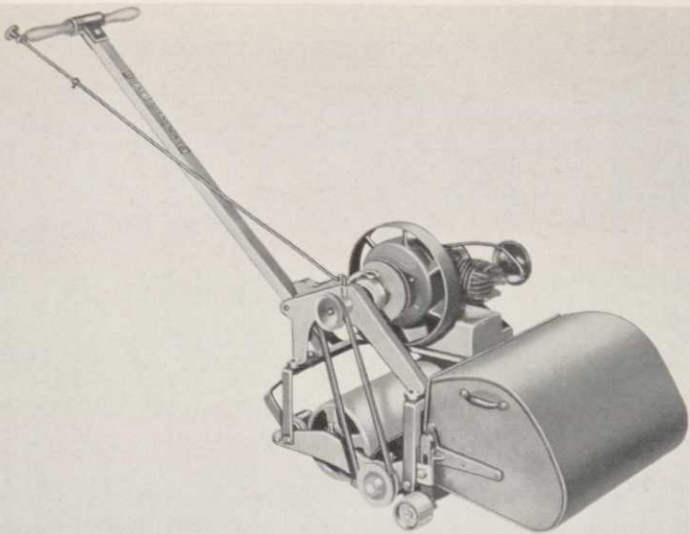
We also find that at the end of the season the mower is in very good shape and will need very little in the way of repairs to put it in shape for next season's work.

Yours very truly,

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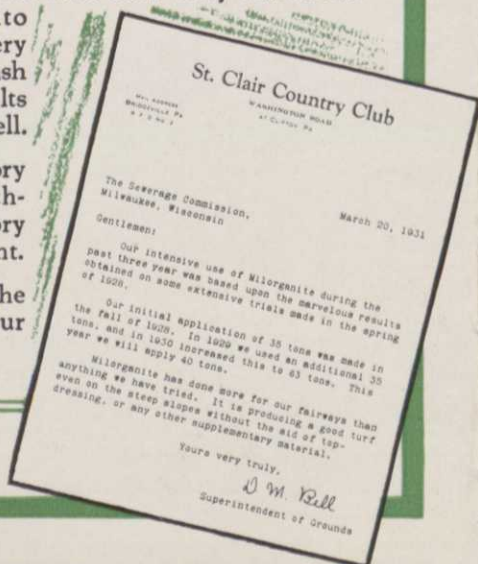
Thin fairways have been converted into dense turf, which afford a good lie for every shot. Its ease of application, failure to wash down slopes, and long continued results produced by Milorganite delight Mr. Bell.

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ing been made from subsoil taken from the sand trap near by, on the theory that bent grass will grow in anything if you use dope. This is the trouble and worry of many greenkeepers today—they have nothing to grow grass in except a hard, compact, clayey substance which would not grow black-eyed peas, let alone the tender grasses a putting green should be composed of.

One thing is certain, you cannot go wrong topdressing a poor soil often, as long as you do not blind the grass. You are only giving it something to grow in and feed upon, besides making a porous condition for light, air and water to penetrate, without which nothing can grow well, especially grasses.

How Many Men—and Where?

Now let us look over the force of men the greenkeeper has in charge and send them out to their respective jobs on the course. I have always tried to team men together at work they seem best suited for. It is useless to send a good truck driver out with a scythe when another can do a better job and would rather have that kind of work, or to put a good ditch digger mowing the greens or a good shovel man driving the tractor when he can pile up and mix more topdressing than two other men on your crew. So it is up to the man in charge to find out where best to place his men to accomplish more and do better work. This means efficiency and money saved.

Joe's Daily Labor Routine

First, the tractor man goes to mow the fairways or the rough; another takes the truck to do the hauling of various and sundry things of which there always is plenty.

Next in order are the men who pole the greens which should be done first thing to break up any mycelia or fungus growth, to remove worm casts and to clean the greens ready for watering and mowing. When this is done the men are ready to start sprinkling. At this point I would like to say that, personally, I prefer and do water the greens by hand in the morning for several reasons: first, to break up and wash off any fungus growth if any should be left there after poling; second, because I firmly believe and know a green can go through the heat of the day much better in its moist condition by morning watering than it can in the half dry state

it surely is when watered the evening before; and third, I believe in letting nature do its work and leave the dew on the grass as long as possible all through the night. The grass is punished enough in the daytime, so let it rest at night under a blanket of dew, nature's stimulant, and it will then be ready for a good drink to start a hard day in the morning when all things should move with the rising sun.

Let your greens rest at night and I am sure they will respond and give better results. I do not know of anything that grows which is punished or tantalized more than a hard working putting green at all times, and many of them are fondled to death and killed by over indulgence. Nurse them along and treat them kindly with common sense and stop some of the punishment.

Watch Watering

The men who have returned from poling the greens are now ready to do the watering and I venture to say that far too little attention is given to this all-important part of greenkeeping—how it is done or how much water is poured on at one time. Watering is too often done in haphazard manner by sprinklers. Because you have a sprinkler whirling around for a given time is no assurance that a green has been watered properly. Wind plays havoc with a sprinkler, carrying the water wherever it wills, often leaving the soil hard and dry on one side of the sprinkler. Yet the sprinkler is moved to another location because the given time is up. This to me is all wrong; one area saturated and overwatered, becomes soggy, closes up the air spaces in the soil, crippling the grass roots and causing a thinning out of the grasses and poverty of the soil, while the other, underwatered and neglected, turns brown and you wonder why.

When the men are through sprinkling, mowing is next in order. They are paired two to a green and they take in order one to eighteen, cutting the most convenient low numbers of the first nine, so that they keep ahead of the players starting out. I have found this system most successful. The men cut 4 or 5 widths around the green before starting straight across and reverse the direction each time the green is cut, north to south, east to west, and diagonal, which has a tendency to stop the grass from growing or running all one way. Cuttings are disposed of immediately by scattering them thinly through the rough, leaving no unsightly

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places by dumping them around everywhere.

After mowing, these men take care of the sand traps and the work in general through the course, of which there is plenty at all times, mowing banks and slopes which can be done only by hand and the other jobs—fertilizing, topdressing, etc.

Tees and approaches are cut regularly by the same man who is responsible for the power machine he uses, and no other man is allowed to handle it; in this way better results are obtained, and the man in charge of this work feels his responsibility.

There is now on the market a greens rake which I have termed a scarifier and consider a most wonderful and efficient tool, especially as a labor saver. It does a much better and more thorough job than can be done by hand rakes. It is 30 inches wide and pushes like a mower, with flexible wire teeth one-half inch apart. The man pushing it can put on any desired pressure. This scarifier rakes up all dead grass and the runners of the bent without tearing and leaves the grass after mowing clean and upright, just what is needed for good putting. My own greens have shown a remarkable change since using it. It also prepares the green much better for topdressing. I would advise the use of this machine on all greens at least twice a month and am sure you will be pleased with the results.

Topdressing Is Important

To me topdressing is one of the most vital and important parts of greenkeeping. It hides the scars of weeds and carelessness and cloaks from view the results from brown-patch when that pest has been neglected. It trues up a rough green.

My topdressing is prepared from the compost pile by pulverizing, screening and mixing with sand and when piled in the shed ready for use is loaded into coal sacks with handles on each side and hauled to the green. There it is carried to the men waiting with wheelbarrow and shovels to spread it broadcast. Two men do the broadcasting, one on each side of the wheelbarrow, and take a strip from the far side of the green about 15 feet wide, backing off until that strip is covered, then they continue with another strip until the entire green is gone over. When the men broadcasting have completed the first strip and are out of the way, two men drag or brush it in with a

flexible steel mat 6 feet wide. A little speed with the mat puts the dressing well into the grass, leaving it smooth and true, ready for immediate play and in much better shape than it was before.

By using the sacks it saves much shoveling and handling as the one operation puts it right where it is going into the wheelbarrow on the green without being dumped on the side of the green to be shoveled up again, leaving an unsightly place, especially if it rains. Also by using the sacks a quick retreat can be made back to the shed with the topdressing under cover.

Care in Fertilizing

Fertilizing is a part of greenkeeping which is very often much overdone and the cause of a deal of our troubles. Over-fertilization is just as harmful as not enough; many greens have been badly burned and set back by applying too heavy a dose of what have you, and the sun beating down before you get it watered in. This is the experience of many of my fellow greenkeepers, and I know it.

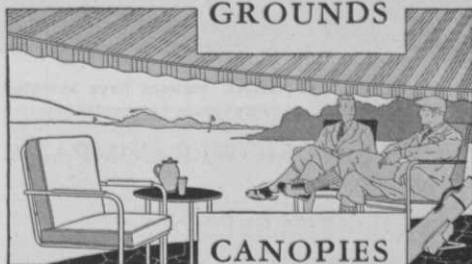
Many fertilizers are over-used and cause an unnatural growth out of season, when most grasses should be dormant. This causes a mushy and soft blade to spring up in a hurry through having been forced, and leaves the green in a weakened condition. A little thought and caution before you apply your fertilizer will pay you well. You must know the condition of your soil and its make-up, and if it really needs another dose. Perhaps your turf is hide-bound and in need of a good massage or scarifying to loosen it up for light and air? Very often this is what is needed to refresh and bring about a transformation on many greens.

In regard to the ever-present question of brown-patch, so much has been said and done that I will not dwell upon this, for as you all know, it is the greenkeepers' woe; but I am sure Professor Dickinson of Massachusetts Agricultural College has ably covered this subject. I heartily endorse and can confirm his findings as being correct as I have checked with a recording thermograph to prove to my satisfaction that he is right. The only thing I can say is—keep your eyes open for the appearance of brown-patch, then get busy, scarify and give it the knock-out.

For many years I have kept a daily diary of each green's treatment and find it a great help in keeping a record without guess work, of when and how a green was

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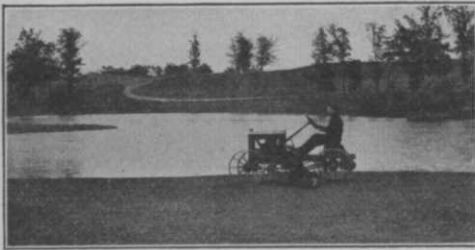
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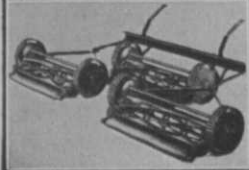
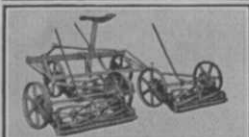


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treated when I last topdressed or fertilized and how much was used. From this diary or record I know just how my greens have responded. It only takes a few minutes and will often stop doubling up by mistake, which sometimes occurs with disaster.

It is good policy to have a sod nursery kept in good shape at all times for emergency to replace by patching a damaged green. It is mighty convenient when a green goes wrong, and it is worth the trouble.

In conclusion, I would like to remind you that it is the little details which count on a golf course. It is like the old adage—"Take care of the pence and the pounds will take care of themselves." Cleanliness and neatness are most important. How rough and ill-kept a place looks when fallen tree limbs are left lying around! And rubbish piles, tin cans, and bottles are left to litter up an otherwise well-kept place. They not only mar the beauty of the course but also detract from the qualities of good workmanship and cast reflections upon the greenkeeper for his lack of attention to these little things which count.

Clean towels regularly on the tees, changing the discs every day, and the cups in the greens moved often, with a nice, clean flag on the flag pole, all go to show how well the course is cared for and is noticed more by the players in general than the big things on the golf course.

Fertilizer Barrels Adjacent to Greens Saves Money

OTTO HACKBARTH, pro superintendent of the Cincinnati (O.) Country Club, is trying out a plan of sinking permanent fertilizer mixing barrels adjacent to each green.

Off hand, this seems to us to be a very excellent idea. Oak barrels are not expensive, and once put in the ground they would always be available for quick, convenient mixing of fertilizer for use in spraying greens. Due to the fact that they do not protrude above the surface, there will be no interference with play and the advantages gained are obvious. A small portable pressure pumping outfit can be rigged up inexpensively and the greens' fertilizing operation heretofore being somewhat complicated, is now made easy.—*Toro News.*