

# Mid-Summer Maintenance

## Some Methods of Fighting Plagues of the Bustling July-September Period

By T. H. RIGGS-MILLER



A three-pronged fork is best implement for extracting crab grass

THESE is no harder time to keep a golf course in playing condition than the period beginning about July first and ending about the first of September, and longer if the usual September showers fail us. In this case the spell might last until the end of September.

It is during this period that the seven plagues of Egypt visit the greenkeeper, to emphasize the reality we have the locusts with us this year. The first plague is the brown-patch and for good measure the crab grass shows its pretty petals. With the preventive measures taken with one—and the digging out of the other (with after treatments which are necessary in both instances) these tasks, together with ordinary upkeep work, would be ample for the golf course crew.

But it generally forgets to rain at this time also, so that irrigation is an absolute essential, as is the top-dressing of greens. It might be that the fairway will require cutting only once a week and even that with the reels raised, but there are many other things for the tractor and mechanic to do, such as the screening and preparation of compost if the compost piles are made in the open. Should the club be fortunate enough to have a shed large enough to do this work inside, the mechanic can do some other essential work and leave the preparation of compost for rainy days, thus using the full crew. A compost shed of sufficient capacity should be the objective of every club.

Grubs from the different Japanese beetles (there are three kinds), as well as our own

June beetle will now begin to show their turf destroying ability and those clubs who have not taken the precautions, so admirably presented and laid down by Prof. Leach in his articles in *GOLFDOM*, will have time to ponder over their sins of omission, when the possibilities are that it will be too late for the remedy. I, personally, owe a deep debt of gratitude to Prof. Leach, for relieving my mind on the incertitude of grub control. In writing for *Golf Illustrated* on the meeting of the U. S. G. A., Green Section Meeting at the Astor Hotel, New York, last February, I said, "To my way of thinking, Mr. Leach's paper on 'Grub, Worm and Weed Control,' by the use of arsenate of lead, is the finest thing in greenkeeping this year. He is to be congratulated for counteracting the greatest menace known to the golf course world."

So with all these things the greenkeeper is expected to keep the course with the spring-like look all the year. That he attends to them as well as he does, certainly qualifies the average greenkeeper as a first-class manager of men. In fact, I know of very few field operations where so much continuous work is accomplished. It is no cinch pushing a mower with a temperature of 100° in the sun.

### "Preparedness" the Motto

Preparedness should be the motto of the chairman and greenkeeper. It is bad policy to wait until the plague is on you to purchase the remedies, or to leave the repairing of water lines until you are ready



Mason lines are three feet apart so each boy has only an 18-inch strip. He does a better job here than on a wider strip

to water. This same thing holds good all down the line.

Every greenkeeper should have on hand at least a small quantity of brown-patch preventive or arrester, and either begin by using light preventive applications or wait until the attack actually occurs and apply the dosage recommended by the manufacturers. To those who cannot afford high pressure spraying apparatus, a sprinkling barrel will answer the purpose. It is more economical to have two of them, in this way one can be in use whilst the other is being filled. I have done as many as 18 greens with two barrels and three men in 12 hours. A good top-dressing with a light dose of sulphate, urea or ammo-phos is necessary after any of these treatments.

### Crab-Grass and Tap-Rooted Weeds

There is only one way to thoroughly eradicate these terrible pests. Get down on your marrow bones and pull out each and every plant. Divide the green with mason lines about three feet apart. Start two persons from both sides of the green and they will meet in the center. This gives each one only an 18 inch strip to do and gives an opportunity for the man in charge to see that the work is done thoroughly. A three-pronged fork is the best implement that I have found to extract crab grass, and a small sharp knife for tap-rooted weeds. Crab grass should never be allowed to seed before it is taken out, to do so is time lost.

It stands to reason then that the work

must be done in the shortest space of time possible. Five boys for 10 days equal 10 boys five days or 20 boys two and a half days. Caddie boys between the ages of 10 and 15 I find the best for this work. The best way is to get 20, 30 or even 40 boys according to the amount of crab grass and weeds that infest the greens. Start them from both sides of the green with one or two men looking after them. In this way you will get a quick job whilst the boys are interested and you are through before they go stale on the job.

A thorough raking, seeding, top-dressing and rolling, will see even the worst greens back in condition in three weeks. I am referring to extreme cases only, where it might be well to make a temporary green for about 10 days. As this work is generally done at the latter part of August, the grass and turf re-establishes itself very quickly. This method succeeded beyond my fondest expectations. I have eradicated crab grass in one season from greens that it was almost impossible to see anything else.

### Irrigation

Fortunately indeed is the club that has an irrigation system like the first of Wendell Miller's plans in June GOLFDOM, but the last plan, that of the Detroit Country club, thrice blesses the club that has it. There is nothing that saddens the greenkeeper's heart as much as seeing the fairways turn brown in the middle of summer, and sadder to say, members think it is his fault. The great function of water—its making plant food available—because the only way a plant can take food is in a liquid form.

If those responsible for the starting of a golf course would only realize the benefit



Extracting crab grass so thick that it choked out putting grasses

from a mere monetary point of view, that of the added income irrigated fairways mean, to say nothing of the added pleasure of the game, they would undoubtedly insist on a thorough irrigation system right from the start, but they realize it too late.

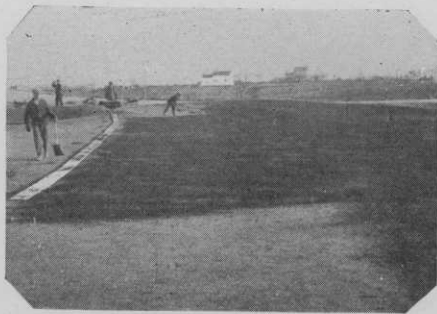
Each grass leaf has what is known as a stomata, which exhales water taken up by the roots. On a hot day a plant will transpire, within 10 hours, as much as its own weight in water. In the formation of one pound of dry matter within the plant, about 300 pounds of water is transpired. For every two tons of dried clippings taken from a golf course, about 600 tons of water has been transpired. From this can be seen the necessity of first class tile drainage to help conserve moisture in the soil and an adequate irrigation system to renew the supply.

Every course must at least have a sufficient supply of water to greens and tees. Evening watering is most favored on account of less evaporation. The type of sprinkler is generally chosen according to the pressure and size of the pipe line at point of delivery. It is needless to point out that a good pressure with large pipe line outlet and sprinkler will deliver a given amount of water in much less time than one with a smaller pressure-outlet and sprinkler. Some courses have, and all should have, drinking fountains at several points on the course. These can be cooled by ice if necessary, by one of these cooling devices I saw in May GOLFDOM. These items really come under the heading of refinements and whilst we are on the subject, a thought should be given to shelter houses, more especially at this time of the year when thunder showers are so frequent.

### Top-Dressing

The main function of top-dressing during summer is to conserve moisture, in much the same way as a farmer mulches his crops. This should be applied about once a month: a small amount of any of the concentrated nitrogenous fertilizers such as sulphate of ammonia, urea or ammo-phos should be added. Then every second week an application of liquid fertilizer can be made with a sprinkler barrel about one pound to 50 gallons of water of sulphate or ammo-phos; or one-half pound to 50 gallons of water for urea.

Professor Leach has dealt with grubs so



Well considered plan of top-dressing is vital detail of proper maintenance in mid-summer

thoroughly that anything I might say would be superfluous. But I dread to think of the trouble that would be in store for greenkeepers had his discovery not been made. Some 13 years ago I was called up to Albany, N. Y., to know what the crows were doing digging up the turf. It was a case of the June beetle grub. That was the cause, the poor old crow was the effect. The only cure we knew of in those days was a mixture of paris green and quick lime which would make about a 10 per cent kill. About 1920 the sodium cyanide treatment was tried out at Merion and the treatment for 36 holes cost around \$4,000. This is by no means lasting, as the effects of the poison entirely disappear within ten days, not only that, when you make it strong enough to kill the grub, you almost kill the turf as well. After this came the carbon disulphide emulsion, and it was a choice of these two methods that had to be taken before the advent of the arsenate of lead treatment. It is only after having gone through this evolution that one can appreciate the value and simplicity of Prof. Leach's discovery.

In conclusion, it is very hard to give blanket advice on the maintenance of a golf course during the mid-summer season. The reason will be found to be fundamental; that is, when the course was built too little attention given to the tillage, fertilization, depth of top-soil on greens, tees and mounds, etc.? If so, these omissions have to be rectified. If on the other hand, the course has been constructed well, the fault lies with those in charge. By carrying out a plan of systematic fertilization you make up for the terrific loss of plant-food occasioned by mowing. (This means fairways as well as greens.) Be

ready to attack with no uncertain measures any enemy of the turf; there is no reason why the greens and tees (and fairways where there is an irrigation system) should not be kept in the same state of perfection, during these two or three trying months, as at any other time of the year.

## Northeastern N. Y. Pros in Membership Drive

**N**ORTHEASTERN New York P. G. A. is making a drive for more members and in campaigning to get a 100 per cent representation of the territory's qualified pros on the Northeastern New York roster is sending out a letter outlining the organization's plans.

Club officials, as well as pros, will be interested in the following excerpts from this letter as it gives a good line on what the P. G. A. organizations are trying to do to help the profession and the game.

The letter, which is signed by C. S. McBride, 1041 Stanford Bldg., Shenectady, N. Y., sec.-treas. of the association, reads in part:

"The National P. G. A. comprising many sectional branches, includes in its membership some 2,000 golf professionals. These Pros represent the cream of the country's best golf instructors, club-makers and players. They have organized for a common purpose and are gradually becoming a power in the golf industry.

"A number of committees functioning under the direction of able officers are accomplishing great things. Through the efforts of these committees the P. G. A. is reaching out an assisting hand to professionals in every section. It carries on a benevolent work for the relief of deserving members. It endeavors to find suitable positions for those desirous of changing. It endeavors to properly train its younger members so that they may be a credit to the profession. It does and will do other good work for its members.

"What does such an organization mean to you? Can it help you? The answer to these questions is a question and it is this—what are you willing and able to do for the P. G. A.? Will you put something into this enterprise, as you do any other enterprise when you expect a return?

"And so you have before you just a small size view of what the P. G. A. is doing now and what it might do if you take hold and help,

"Have you felt the price-cutting competition common these days? Are large numbers of your members buying equipment and balls from stores or in groups at bargain prices? Have you been forced to choose equipment from certain houses after the best numbers of the selection had been put aside for the stores? And are other things which were yours and yours alone slipping away?

"If these things are happening in your case, you owe it to yourself to get in the P. G. A. Work for it and with it and thus be enabled to put up a real fight to such competition and such trade practices.

"Doctors, lawyers and other professional men recognize the need for organizing—why not golf professionals? Yours is a profession and only by working together with common purposes can you maintain your standing in the ever expanding golf business.

"Dues are \$12.50 per year and are payable April 1st of each year. Assistants are \$5 per year.

"Professionals desirous of becoming members are asked to send word to the secretary giving the following information:

- Position held for the past three years.
- Present Club.
- Reference to some professional Standing with dealers.
- Standing with club members.

**Y**OU CAN'T standardize maintenance costs until you know how your course compares with the standard, or average. GOLFDOM heard of one case where the greenkeeping force was being sharply criticised because its costs were out of line with those of other courses in the vicinity. The man at the head of the job took a tape and checked up. He found that at his course the average green was approximately 8,000 square feet. The average on the neighboring courses was about 6,000 square feet. His course had a sand area of 170,000 square feet and one of the courses being held up to him as a cost model had sand area of around 80,000 square feet. The time spent with the tape showed the club what it was up against.

**E**VERYBODY seems to want a matched set, so to those who might duck at the price of a matched set why not suggest that you have individual clubs in stock that you would match up perfectly with the clubs now being carried by the prospective buyer?