

## The Most Important Summer Work on the Golf Course

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The first thing a greenkeeper or chairman of the green committee should be sure of is that he appreciates the relative importance of the various pieces of work to be done on a golf course at any given time. The next thing is that he has his force so organized that these things can be given the attention they need. During most of the active playing season the greens require more careful and constant care than any other part of the course, or, in fact, all other parts of the course combined. For courses having essentially the same conditions as those obtaining in the general latitude of Washington, and this means most of the northern courses, the summer is the time of the year when greens must not be neglected. Fairways or rough or bunkers may be slighted if it is actually necessary to slight them, and usually they will not show the evidence of neglect for any considerable length of time after good treatment is renewed; but neglect of the greens is not as easily corrected.

It is rarely the case nowadays that a club is over-supplied with labor; in fact, most clubs are calling for more help. Competent laborers are far from plentiful. Therefore the problem is to use the available ones where they will do the most good. It too frequently happens that groups of men are put at work cutting weeds in unimportant places or making repairs here and there—in short, polishing up the course—when every available man should be pulling crab grass out of the greens. This is poor management indeed.

It is scarcely possible to pick out one piece of work as being of the greatest importance, but nearly all will agree that there is a group of things that should be done in the summer even to the neglect of all other work on the course.

In the vicinity of Washington, and as a matter of fact in most parts of the North, the greens are the first daily consideration at this time of the year. The order of importance of the work that should be done on them is about as follows: mowing, watering, weeding (particularly removing crab grass), top-dressing with good compost when needed, and spraying or dusting to prevent or check the brown-patch disease when this is necessary. If these things are done properly and when they should be done, there will, as a rule, be time enough to care for the fairways and the rough.

**MOWING.** While there is much difference of opinion regarding the height at which putting greens should be cut during the summer months, particularly in hot weather, the game requires that they be kept with an even surface. This virtually means cutting every day. To some of us who have observed greens closely in this latitude it is clearly evident that if the best possible turf is to be maintained they must not only be cut practically every day but they must be cut closely. This applies especially to bent greens made by planting stolons or runners. A considerable period of observation and study has resulted in this conclusion. Time, with changing or with newly introduced factors or greater opportunity for investigation, may prove the fallacy of the doctrine of close cutting. From the way it looks at present, close cutting is to be advised. Cut bent greens every day

during the summer and cut them closely. See that the mower is well adjusted, and remove the clippings.

**WATERING.** As in the case of mowing, there are differences of opinion with regard to watering. Some—in fact, many—contend that greens should not be watered during periods of hot, bright sunshine. It is very doubtful if there is any real evidence in support of this contention. Summer showers frequently occur on hot days and are followed by bright sunshine. This is the rule rather than the exception. The late Fred W. Taylor, of Philadelphia, conducted some experiments in the time of applying water and the rate of its application but from the results of his investigations it was not possible to draw any very definite conclusions. There seems to be reasonably good evidence against light sprinkling during periods of hot, bright sunshine, and there is what constitutes almost positive proof that heavy watering is what is needed. These are about the only really settled points in the matter of watering putting greens. Taking experience and experiments into account, the matter of watering shapes up about as follows: water the greens when they need it, and do so abundantly, preferably not in hot, bright midday, but in any event soak them thoroughly. Do not stress too much the matter of depth of rooting of the grass. The appearance of the turf should be the guide as to when to turn on the water.

As for the relation of watering to the brown-patch disease, this subject is by no means settled. The weight of evidence at present is in favor of heavy watering, even though it be done late in the afternoon. Water the greens thoroughly and as often as needed, which may and frequently does mean every day during hot, dry times.

**WEEDING.** Outside of controlling weeds by the use of fertilizers there is only one satisfactory way so far known for keeping them out of putting greens. That way is hand-weeding. The important weed to fight in the latitude of Washington at this time is crab grass. Do not waste time cutting or pulling weeds out of the fairway, the rough, or the bunkers, when crab grass is in evidence on the greens. Do not let any one tell you that the time to eradicate crab grass is after it has started to branch. The time to pick crab grass is when it first becomes evident, and it becomes evident when it is in the very early seedling stage. One man can remove more crab grass plants in this stage than can three men after the plants have started to branch. Water the greens just before starting to pick crab grass. The young plants pull out more easily when the ground is wet than when it is hard. If you have anything like a full gang of men on your course, do not listen to the contention that if the crab grass plants are allowed to grow to a good size they can be removed by means of a special rake. True, you can get a lot of them this way and with relatively little labor, but there is a very great percentage that you can not remove; and besides, the severe raking necessary to get even a fair percentage of the crab grass plants proves detrimental to the turf grasses in this vicinity. It will probably do so elsewhere. Crab grass has ruined more greens in this latitude than all other weeds combined, and it has done so largely because it has not been removed in the early stages of its growth. Get the crab grass while it is in the harmless stage. It will not remain in this stage long.

**TOP-DRESSING.** For the production and maintenance of fine turf, good compost evenly applied as a top-dressing is a prime necessity. It begins to look as though the application of good compost comes in a class with mowing and watering in the summer treatment of putting greens. Heavy applications at this time are rarely desirable, but light applications one-eighth of an inch or less help the turf wonderfully throughout the summer months. Every two weeks during the summer is not too often to top-dress greens. The benefits from the use of compost as a top-dressing are very generally recognized, but there are too few that appreciate the advantages of top-dressing greens frequently during the summer. A good compost may be made from one-third clay loam, one-third well decomposed manure or mushroom soil, and one-third sand. These ingredients should be thoroughly mixed and well screened. If compost as good as this is not available, use the best that materials at hand will afford. To compost may well be added some sulfate of ammonia, approximately  $1\frac{1}{2}$  pounds per 1,000 square feet of turf for summer treatment, or about double this quantity for spring and fall applications. Top-dressing with compost gives the grass a new lease on life, and besides it seems to be an exceedingly helpful treatment in the relief of brown-patch.

**DUSTING OR SPRAYING BORDEAUX FOR BROWN-PATCH.** When brown-patch threatens to injure the greens, study the progress of the disease carefully and use Bordeaux judiciously. While it is now quite certain that big brown-patch can be prevented by keeping Bordeaux on the leaves of the grass at all times, such treatment has been known to result disastrously to the turf, presumably from an overdose of copper, which is the active ingredient of Bordeaux. Therefore it is recommended that Bordeaux be dusted or sprayed upon the grass lightly and only when brown-patch is active, or when the weather conditions are such as clearly to indicate that it will put in its appearance. Exceedingly hot, humid weather greatly favors attacks of brown-patch. The little brown-patch, which kills out turf on areas from one to four inches in diameter, is apparently immune to Bordeaux, and it hardly appears worth while to use this fungicide with the view to its prevention or control. Bordeaux should be applied to greens in the late afternoon, the object being to have the dust or spray on the leaves of the grass during the night and early morning, when brown-patch is the most active. See to it that your laborers are not wasting their time on something else when Bordeaux should be applied to the greens.

There are a great many things that must be done on the golf course during the summer in addition to the ones mentioned here. Fairways must be mowed, the rough must be cut occasionally, bunkers must be raked and mowed, and other things almost without end; but do not forget that the greens are passing through the critical time of the year, and for them the important items of treatment and care must not be neglected.

**A new putting green rake.**—This rake can be attached to any hand mower for use on greens and tees. By its use the grass is made to stand nearly erect and therefore is cut closer. It is claimed that the use of this rake greatly reduces the amount of crab grass in greens.

