

or too close during hot weather as this causes the roots to become exposed to the hot sun, thereby causing a great loss of grass.

Don't reduce your maintenance force! Watch your water supply closely and keep it in good repair.

I would like to hear through Golfdom the hot weather methods of other greenkeepers. We have very little rainfall and lots of hot winds in this section and the procedure I have described above enables us to handle the situation quite well.

A Longer Term for Greens Chairmen

By C. B. HILLS

THE greens chairman occupies a peculiar position with his club. The ideas he puts into practice depend for their success upon the "time" element. A man may little more than start a maintenance program or get no farther than "first base" on some grass-growing experiments when his term expires. His findings may be of immense

value to the club he serves yet he is apt to have half-truths by the time the annual election is held. The next man in office may continue his predecessor's theories or he may not. Perhaps he isn't of the experimental type. He may have been chosen greens chairman because of a pleasing personality or a noticeable amount of leisure.

When the wise heads who framed our constitution adopted a four-year term for Presidents, they decided that a man couldn't put over a constructive program in less time. So it is with the humble yet vitally essential office of greens chairman. He can't make grass grow overnight. He can't test all the worm killers and the brown patch cures in a short term. He can't work out the multitudinous problems of his administration in a year or even two years. In fact, he needs more time than that to become familiar with the best sources of supply for items that come within his jurisdiction.

Why not inaugurate a three- or possibly a four-year term for greens chairman? The right man will more than compensate for the less capable if such a policy is adopted.

Getting the Greens You Want

By FRANK W. CURRIER

Greenkeeper, St. Thomas Golf and Country Club

WHEN you build greens one of the first things to realize is that you can't hurry nature if you want permanently satisfactory results. Building and grading should be done at least three months before seeding or planting with bent so you will get greens that won't sag or sink.

The quickest and cheapest method of building greens starts with the employment of a team and scraper to take off the top eight inches of soil and sod, distributing it around the edges of where the actual green is to be so it will be handy for return to the green. When this is done the subsoil should be ploughed about four to six inches deep. Let it dry out for several days then harrow, level and roll.

The next matter is drainage. This all depends on the condition of your land. If the land is sandy it is unnecessary to drain unless the greens in a hollow, sur-

rounded by hilly land. If the green is on level ground or elevated, drainage offers no perplexities as the sandy soil will take all the water and allow quick drying. On heavy clay or loam it is absolutely necessary to pay particular attention to drainage, otherwise you will have lots of trouble that could be very easily avoided by proper care at the time of building.

It is my opinion that much of the trouble with worms and brown patch really is the result of faulty construction of greens. Improper drainage and excessive watering, I have noted, are certain forerunners of the dread grass disease. Too strong use of "dopes" for treatment tends to impoverish the soil and this, together with forcing methods and too close cutting early in season, makes the greens ready victims of brown patch. I haven't had an inch of it in the last 10 years and I am satisfied that it is because

our greens are built right and not worked to death by too intensive a schedule of mowing and treatment. To sane use of screened compost I also attribute a great deal of our good fortune in escaping brown patch. Basically, however, the right drainage is responsible for the condition of our greens.

Drainage Plan

With a moderately heavy loam 4 inch tile, 12 feet apart across the green and about 18 inches to 2 feet below the surface will care for the green's drainage requirements. With a heavy clay loam I have had best results with 4 inch tile 12 feet apart across the green and crossed by another 4 inch tile 12 feet apart and 2 feet below the surface so that it cares for each part of the green. Another method for heavy clay conditions, and the one I consider best in many instances, is a layer of heavy stones and gravel one foot thick laid about 18 inches below the surface.

When the necessary drainage is installed the top soil should be screened and should be distributed over the green. Let it stay in little hills as dumped from the wheelbarrows until it is thoroughly dried out. In this way the soil gets thoroughly worked up and aerated and the roots, fibres, stones, etc. are eliminated. There may still be weed seeds in the soil for there seems to be no such a thing as a weed-free green. When the top soil is distributed and has been exposed to the sun for a few days harrow well then smooth it with your team and a smoother, finishing the job by raking.

Rough material that is screened out can be used to advantage in building tees, bunkers, banks, in bad spots on the fairway, or in the compost pile.

Uses Little Water

After you have allowed your greens to settle for two or three months and do your seeding or planting, you will have an anxious couple of weeks. With creeping bent planted in the fall I have found that it is necessary to water for only 10 days after planting, after which time it can be left pretty much to the weatherman's mercies until the spring. The same practice can be followed with fall seeding. Many claim that creeping bent needs a lot of water, but my experience has been to the contrary. I planted a nursery with Washington bent in the fall with one square foot of bent grass 18 months ago.

I watered it for 10 days with a watering can. It was not watered again except by the rain last fall. This spring I planted two greens from that nursery and have added to the original nursery with its cuttings. This nursery is on fairly sandy soil and all the watering it gets is rain. By fall I will have enough bent to plant another large green. I also have seven large greens planted with Colonial bent and they are kept in good condition by a half hour's watering each day with a fine spray nozzle. All of these greens are built on light sandy loam so it may be seen that the heavy watering theory hasn't worked out as an essential factor with us.

Here's the Wrong Way

Building a green wrong is a pretty sure method of costing the club about 10 times what the correctly built green will cost in the long run. One wrong way is to plough up the land in the spring, keep it summer farrowed to kill the weeds, quack grass and other roots, grade off in the fall and plant. Another method is to plough and shake out the sod, grade off and plant. By these methods you can not clean out the soil so you give your greens a bad start by compelling the seed or stolons to battle with the weeds.

Don't seed or plant too heavily as this has tendency to stunt growth. In planting stolons I have found it good practice to roll a row after planting to tighten it down. Then cover by hand and not by shovel, with one-fourth inch of screened sand and compost—on sandy land three-fourths compost and one-fourth sand, on heavy land one-half sand and one-half compost. When covered take a little red top speed and broadcast it along the row and then roll it down. The red top has a quick growth and provides a covering for the bent. With close cutting the red top soon vanishes and leaves the bent in command.

When the green is completely planted spray with a fine nozzle. When it has dried out roll again and spray. Roll for about five days and spray for at least 10 days. In about two weeks the runners will be seen. When they are 5 to 6 inches long it is necessary to cover them again just enough to cover the runners. Before covering this time run over the green with the mower and roll. Cover by hand to get the covering properly applied. This has to be done about three times before the green is established.