

plants rather than by direct evaporation from the soil.

The longer cut turf will also provide a playable surface in dry periods long after actual growth of grass has ceased. Given reasonably good soils, properly treated, and with proper management of the turf, quite a few golf courses in areas that have 30 inches or more of rainfall annually should be able to provide good

playing conditions during the greater part of the year without incurring the expense of a complete fairway watering system. Under conditions of very heavy play, however, or on soils with low water capacity, some sort of watering system is a necessity. On such courses the need for intelligent management is thereby increased in order to derive the maximum return from the investment a watering system involves.

HOW TO RECONDITION GREENS

EVERY year GOLFDOM receives many requests from clubs wanting information on improving greens that have been permitted to get into bad shape, and how to improve them cheaply and quickly so play will be interfered with as little as possible. Some greens at these clubs have been allowed to go from bad to worse, and it's evident something must be done soon, yet the clubs lack the money it would take to build new greens or rebuild the old. Chester Mendenhall, greenkeeper at the Mission Hills CC in the Kansas City district, has some comments on just this situation and how he worked it out at his club. He says:

Too many greens have been built with only one thought in mind—"getting them in play"—therefore, very little thought has been given to soil structure or the future of the green. After a green is in play any change in the physical condition of the soil, without stripping off the sod and resurfacing the green, is a long drawn out process. However, a green can be greatly improved over a period of two or three years, if the work is systematically done.

Poor soil condition in the top few inches of the green surface is not always due to improper soil structure. In a good many cases it is due to improper preparation of the topdressing. Layers of sand, peat and other materials are formed. In my opinion, these layers of sand or peat cause more trouble than poor preparation of soil at the time of building the green. Often root growth is checked at such layers, leaving a very shallow root growth, which will require very frequent watering during hot, dry periods.

We have had very satisfactory results improving such greens by forking and

working well-mixed topdressing down from the top. Of course, this is slow and it takes some time to greatly improve a green. My best luck has been to fork such greens the latter part of February.

We use a fork made out of pipe and a ½-in. rod. There are 10 tines placed 3 in. apart through a piece of 1¼ in. pipe. A piece of 1-in. pipe is welded in the center for a handle. The tines are made of ½-in. rod about 7 in. long, flattened a little and drawn to a point. We fork the greens with holes 4 in. apart.

The fork is pushed away from the man and pulled back to make the holes about one in. long at the top. The green is then mowed very close, to level the dirt that has been pushed up around the holes. This is done to let the topdressing down into the holes.

The green is then heavily topdressed, and is matted several times to get as much down the holes as possible. It is matted each day, and if the holes are not all full the green is again topdressed. The play is taken off the green until the grass begins to come through.

This process also helps build up your green with the proper mixture. The more topdressing you can get on a green in this condition, the better; also, each time a green is forked we change the direction in which it is forked. For example, if a green is forked from front to back the first time, the next time it is forked from side to side.

We make a regular practice of giving all our greens this treatment once each spring, and find it pays well. Some of our greens are badly layered with sand and peat and before we started regular spring forking we lost turf every summer.