



Westmoreland CC (Chicago dist.), as may be suspected from typical wooded view in clubhouse area, had many problems of tree roots clogging drain tiling.

Rodding Corrects Drainage At Big Saving

By **DON STRAND**

Supt., Westmoreland Golf Club, Wilmette, Ill.

When a golf course can take an afternoon downpour of 4 in. and an onpour of early morning golfers the following day, it has no drainage problems.

Through the years, this was generally the case at Westmoreland. But then, during the 1950 season, we began noticing that the after-rain recovery was taking longer and longer with each successive rainstorm. Investigation confirmed our suspicion that tree roots were invading the drain tile. Tile-joints, originally cemented had been completely shattered by root masses.

In trying to reuse the old tile, so many were broken that it was deemed wise to purchase all new tile for replacement. Costs of this operation proved that some other solution to our drainage problem had to be found.

I had heard of the National Power Rodding Corp. of Chicago and the work it was doing for other golf courses and so I called the company's men in to look over our drainage system and its growing reluctance to water. Inspection coupled with logic revealed that approximately 1200 ft. of tile was being strangled by tree roots.

Removes Willow Stopper

The following day some unique equipment arrived at our course.

One consisted of a truck on which was mounted a large power driven revolving reel of a continuous spring steel rod capable of turning and driving a cleaning head 1000 ft. through the tile. A probe into the first line attempted, removed a solid wick

of willow roots 15 ft. long. This mass of roots was so compact that the only possible flow of water through the tile was seepage.

Tree roots were found in each section of the 1200 ft. that was bored. In three days the power rodding operation was completed and all lines were flushed. The flow of water indicated the job to be successful.

Our drainage system operated very efficiently, then, until the summer of 1954 when the rain-fall broke all previous records. There were indications of restricted flow in parts of the main drainage line and numerous lateral lines that had not been cleared in 1950.

Again we called the National Power Rodding Corp. Since we did not know the course of many of the lateral lines, it was agreed that a survey and plot of the drainage system would be made at the time of the boring. (It is possible to trace the exact course and size of the tile lines in the process of power rodding.) Subsequently, we were furnished with an accurate blueprint of over 9,000 ft. of the drainage system, some of the data obtained from our own records.

As work progressed, obstructions were found in nearly all of the lines. In four days, over 4,000 ft. of tile was cleared. The success of the job done was proven shortly after completion, when, on Saturday and Sunday, October 10 and 11, over ten inches of rain fell. Early Monday morning, the entire bottom area of our course was under-water from fence to fence. At noon Tuesday, golf was being played over the same area.

Avoids High Costs

The drainage system at Westmoreland runs at a depth from 18 in. to 6 ft. with

the tile size varying from 4 in. to 2 ft. Much of it lies in quicksand with overlying muck bottom soil.

To replace or to relay tile under these circumstances, costs run excessively high since digging operations present more than the usual problems such as caving and shoring and difficult grading. Rebor-ing, however, made digging unnecessary and we were able to have 4,000 ft. of tile cleared and cleaned for approximately twice the cost of relaying 100 ft. of 20-in. tile, four years earlier (and, incidentally, tile costs were less then).

What's more, with the exception of two instances where the power rodding revealed broken tile and in another section where no catch basin existed, the sod was left undisturbed. In areas where the ground was particularly soft, equipment mounted on special, lightweight, large-tired trailers was used to prevent damage to the course.

When systematic use of copper sulphate fails, power rodding is the answer to the most persistent golf course drainage tile problem—tree roots. It's fast, thorough, economical, does not interfere with play and does not mar the beauty of the course.

Routine Work Demonstrated By New England Supts.

Golf Course Supts. Assn. of New England recently staged an educational program on routine procedures in maintenance. All supts. (including non-members) in New England were invited to attend and bring their key men.

Those present said the "refresher" lessons were very valuable in calling attention to details that have been improved in doing work that generally is so much standard operating procedure there's a tendency to skip education of maintenance employees.

The program:

- Care of Traps and Aprons—Bill Ash
- Mowing Greens—Phil Cassidy
- The Operating Mechanics of Power Greens Mowers—Albert Allen
- Changing Cups—Guy Tedesco
- Top Dressing Greens—Paul O'Leary
- Fertilizing Greens—Howard Farrant
- Watering Greens—Ted Murphy
- Fine Turf Identification, etc.—Manuel Francis
- Use of The Proportioner—Arthur Anderson
- Tees—Changing Markers, etc.—Arthur Cody
- Weed Control—George Webster
- Fairway Mowing—Narry Sperandio

Supt. Looks Calmly At Golf Car Problem

BY JAMES W. BRANDT

Supt., Danville (Ill.) Country Club
(At Midwest Regional Turf Conference)

I believe that Bill Daniel asked me to serve on this panel dealing with golf car use from the superintendents' viewpoints because two years ago, while serving on a similar panel, I made a rash statement.

Then I expressed the opinion that golf was played for the exercise of the sport and for that reason motorized cars on golf courses never would be much of a maintenance problem.

I must admit that I was far from being correct.

Now, having confessed to my error, and being somewhat balmed inwardly by the suspicion that I am not the first and only one to make a wrong guess in golf, I will tell you how I adjusted myself to the reality of the golf car being here to stay and growing in use.

My present second-guessing may help other superintendents and chairmen prepare to handle the golf car situation.

Preparing for golf cars I would say comes in two phases: First, the superintendent must prepare himself mentally; second, there are some physical changes that may have to be incorporated into the course.

I would like to try to point out to my fellow superintendents that the advent of motorized cars isn't the worst calamity that has befallen superintendents. To do this, I will take you through the reasoning process I followed before I realized that cars weren't so terrible.

Let me ask the question "Why were we hired?" We were hired to maintain a course that will be well groomed and a pleasure to play. If golf were played primarily for exercise, then as much exercise could be obtained from the playing of a course maintained at the cow-pasture level as could be attained from playing a finely conditioned course. Golfing superintendents who work all day on the course certainly do not play golf in their off duty hours for the exercise, fresh air, or sunshine. They play golf for pleasure.

If a portion of our membership derives greater pleasure from the use of cars, then should we object to their so doing?

For a moment let us look at the brighter side of the motorized car picture and see what it may do for our course: