Turf Preparation for the '64 Open

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and
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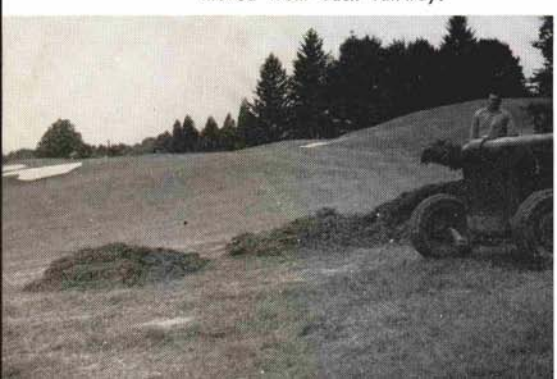
The golf course of Congressional Country Club, site of the 64th USGA Open Championship next month, consists of 27 holes. It is located in Montgomery County, Maryland, a suburb of Washington, D.C. This geographical area is neither in the northern or southern belts, but rather on the dividing line. Consequently, it is an area in which it is very difficult to maintain year-'round grasses. Eighteen holes comprising the championship course are watered.

In the past years and until the winter of 1962-63, considerable success has been obtained with native bermudagrasses and U-3 bermuda. During the summer months the bermudagrasses provide a nice green carpet for play, but after frost and before sufficient growth begins in June, it is a brown color. The severe winter of '63 resulted in substantial "winterkill" of the U-3 bermudagrass on fairways and tees. This was an experience shared by most golf courses in the Eastern United States.

On the advice of the Green Section of the United States Golf Association, a seeding of bentgrass was made in late August and early September over tees, fairways, and collars. It was hoped that the resulting bentgrass turf would supplement the bermudagrass. Because of the setback experienced last winter, it was the opinion of Alexander M. Radko, Eastern Director of the Green Section, that a combination bent-bermudagrass turf would offer far better insurance over the next few years than would allowing for weeds to supplement the grass. In his opinion, to do nothing would be risking weaknesses in the years ahead. Accordingly, on August 19, 1963, a major renovation was commenced. **(See Photo 1).**

Photo 1—Load after load of thatch, loose bermudagrass runners, and other vegetative matter was removed from each fairway.



First, a thatching machine cutting a swath of four feet and to a depth of 3/4 to one inch was used on the fairways. The thatcher was pulled by a tractor and operated off the tractor's power take-off. Following immediately behind this blade a tractor pulled a sweeper which was driven by its own motor and which picked up the thatch, loose runners, dead grass, and crabgrass seedheads in its hopper.

Second, the fairway was aerated 10 times to a depth of 1/2 to 3/4 inch. Aeration units were fitted with 3/4 inch spoons. At the completion of this operation a mixture of bentgrass containing 20% Seaside, 30% Astoria, and 50% Highland was sown at the rate of 70 pounds per acre. The fairways then were dragged with a heavy chain link fence drag after which they were mowed twice, cutting in opposite directions. **(See Photos 2-3).**

Third, 200 pounds of 0-20-0 superphosphate per acre followed by 400 pounds per acre of pelletized 10-10-10 fertilizer were applied. The fairways then were watered lightly daily until

Photo 2—Fertilizer spreader begins its work while the aeration unit is finishing up on this fairway.

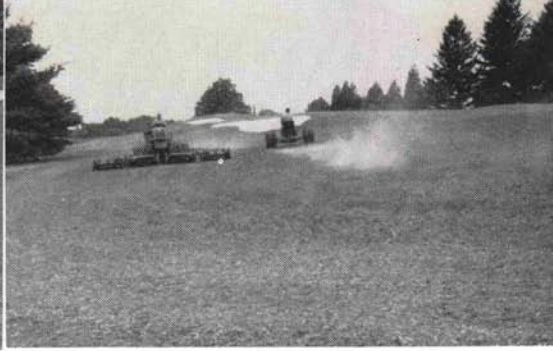


Photo 3—Dragging and mowing operations.

germination was complete. The same procedure used on the fairways then was used on the tees.

Fourth, the collars of the greens were mowed vertically twice, the thatch was raked with a lawn rake and they were then heavily aerated and dragged. The same application of seed and fertilizer was made after which collars were topdressed and watered.

Here is a tabulation of the dates on which the work was done, the acreage covered, and the man-hours required:

Monday & Tuesday—August 19-20, 1963:			
Front Nine			
Fairways	22.51	acres	25 hours Supervisor
Collars	.235	acres	205 man-hours
Tees	1.131	acres	
Monday & Tuesday—August 26-27, 1963:			
Back Nine			
Fairways	22.83	acres	27 hours Supervisor
Collars	.296	acres	234 man-hours
Tees	.959	acres	
Tuesday & Wednesday—September 3-4, 1963:			
Middle Nine			
Fairways	17.13	acres	14 hours Supervisor
Collars	.211	acres	236 man-hours
Tees	.856	acres	

The total areas so treated were 62.47 acres of fairways, .742 acres of collars and 2.946 acres of tees. The man-hours listed above take into account the normal breakdown and replacement of blades on equipment and also reflect the fact that the back nine and middle nine were farther away from the shop headquarters and the debris dump. The tremendous amount of thatch that was cut out and lifted from the course, and that had to be hauled away, accounted for a large proportion of the man-hours. An inspection of the course on September 18 by the USGA Green Section showed that a large percentage of the seed had caught and the general appearance was most satisfactory.

During the last two weeks in September an application of organic sludge at the rate of 700 pounds per acre was made. Because soil tests indicated a need for it, an application of 3,000 pounds of ground limestone per acre was made during October. On four of the fairways, where the tests showed the soil to be lacking in magnesium, the dolomitic type of limestone was applied. On the remaining fairways the regular ground limestone (60 mesh) was applied. **(See Photo 4).**

Each nine was closed through Friday of the week in which the work was done and membership reaction indicated that the treatment did not interfere with play. Results showing at this time have brought forth favorable comment from the golfers. It is our feeling that the thatching blade and a sweeping machine are a "must" for every greens crew in the general maintenance of weak areas that develop during the golfing year.

Photo 4—A view of the No. 3 hole from the championship tee six weeks after renovation.