

United States Golf Association member clubs receiving Green Service service (2 copies per club).....	2,200
Privately owned or daily-fee golf courses receiving similar service (2 copies per course).....	38
Canadian clubs receiving Green Section service (2 copies per club).....	12
Canadian clubs receiving the Bulletin through the Royal Canadian Golf Association.....	165
Private subscriptions, domestic.....	382
Private subscriptions, foreign.....	69
Municipal courses receiving the Bulletin without charge...	45
Complimentary mailing list.....	221
<b>Total Bulletin mailing list.....</b>	<b>3,132</b>

It is very gratifying to report that the New Jersey State Legislature made an appropriation of \$5,000 for work to be carried on at the New Jersey Agricultural Experiment Station at New Brunswick, and it is understood that this appropriation will be continued from year to year. This research work, under the direction of Dr. Jacob G. Lipman, Dr. Howard B. Sprague, and Mr. Evaul, is being conducted for the development and improvement of turf for golf courses, parks, and homes. It is to be hoped that other legislatures may take similar action where the State agricultural colleges are cooperating with the United States Golf Association in research work.

It is a pleasure to report that Dr. R. A. Oakley has returned to Washington, and while he has not entirely regained his health and strength is still actively interested in the direction of the work of the association.

It is earnestly hoped that the Green Section will continue its active work for the next year and many years to come.

## Carpet Grass for Southern Fairways

By Robert White

Ocean-Forest Country Club, Myrtle Beach, S. C.

(Mr. White was requested to present to readers of the Bulletin these experiences of his with certain Southern turf problems as detailed by him in a discussion of the subjects at the annual meeting of the Green Section in New York City, January 10.—Editors.)

In the construction of our course at Myrtle Beach we proceeded on the assumption that Bermuda was the only grass suitable for seeding fairways in the South. It is indeed the prevailing grass over most of the South for both putting greens and fairways. The suggestion, however, was made that we try some carpet grass in the fairways. We accordingly seeded the fairways with a mixture of 90 per cent Bermuda grass and 10 per cent carpet grass. Much to our surprise we got parts of fairways that are all carpet grass, and the percentage of carpet grass all over the course is increasing rapidly. It has proved to be much better for us than Bermuda grass. Like Bermuda grass, carpet grass wilts after a frost, but unlike Bermuda grass it will produce green leaves again after a few warm days have come. We have reached the conclusion that the solution of our fairway turf problem in our climate is carpet grass.

Southern golf courses should be grateful to Dr. Hinman and his associates for developing the system of double greens in the South. Of course we have to depend on Bermuda grass for our putting green turf during summer, and in providing a winter putting turf we have followed the prevailing custom in the South of sowing in the fall either redtop or rye grass, or both, on top of the Bermuda turf in the greens we use for summer play. This is the third year we have tried to make winter greens on the Ocean-Forest course in this way. The first two years we were fairly successful. I have always considered, however, that we were sowing the redtop or rye grass a little too late.



Club house of the Ocean-Forest Country Club. The foreground shows the type of sandy soil on which the course is built

So this year we sowed the rye grass the last week in September and followed later with redtop. Then, unfortunately, we did not have any cold weather. We had a rather hot fall, with the result that the Bermuda grass kept on growing and there was as much of it at the end of October as at the end of September, so that the redtop did not have a chance to grow. I went down there early in December, when they had just had their first frost. This year we have seeded these greens two or three times with redtop and are now, in January, gradually getting them covered. Conditions are doubtless worse in this respect in South Carolina than they are in Georgia, in that frost comes a little earlier with us and the season for Bermuda grass is apt to be shorter than in Georgia. As Dr. Hinman has pointed out, however, with two sets of separate greens, one for summer play and the other for winter, it is possible to skin the Bermuda off the winter greens before sowing them in the fall with the winter grass. Putting on top of dead Bermuda is all right, except for its looks. You can putt well enough, but the green looks badly. The greens we have this year, instead of being green all over, as they were the previous winter, show a great deal of the white stolons of the dormant Bermuda grass be-

cause the rye grass and redtop had been unable to make proper growth.

In the control of the mole cricket we have had some success with the use of arsenate of lead as a poison, but we have to use tremendous quantities of it. The mole cricket is a serious pest with us. We have tried in many ways to rid the turf of these insects, and have not been able to achieve any success with carbon bisulphide in our sandy soil.

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## Some Turf Problems of the South

By Thomas P. Hinman

Druid Hills Golf Club, Atlanta, Ga.

(An address delivered at the annual meeting of the Green Section in New York City, January 10, 1930)

Golf turf problems in the South are different from those in the North. The basic soil in our section is red clay. At Druid Hills we started with sand greens, first keeping them wet, as they did at Augusta, Ga. Then we put oil on the sand greens. Later we used fuel oil or road oil to make a putting surface. Instead of a flag we had a small post. On the end of the post we put a cross-piece, and then a bit of carpet was put over that. It was about 2 feet wide, and when you went to putt the caddy dragged the cloth across the green; and that gave you your putting line. Later, about 1914, George Adair, who was one of the men in charge of the greens (and he was a man who probably did more for golf in our region than anyone else), figured that it was possible to combine a grass green with a sand green. Accordingly he put in the center of the grass green, which of course was of very poor quality, a small sand green about 6 feet in diameter. After a while we found that did not work well. Then we started to develop a putting green grass.

In the South we play all the year round. So far the only satisfactory grass that we have found is Bermuda grass. However, the trouble with Bermuda grass is that just as soon as a heavy frost comes it stops growing and when freezing weather arrives it becomes dormant. So it made a very unsatisfactory putting surface for winter play. After the Bermuda died down in early winter, annual bluegrass (*Poa annua*) began to come in on the greens. It appeared in little bunches all over the greens, so that after the latter part of January we could not putt at all.

In 1916, Scott Hudson, who is president of the Atlanta Athletic Club, conceived the idea of sowing a winter grass for winter play. He first sowed redtop, red fescue, and rye grass on the summer green. We then discovered that after a green had been played on all winter, the constant trampling on the dormant Bermuda grass so injured it that it was the latter part of July before the grass would recover sufficiently to make a satisfactory putting surface. Thereupon Mr. Hudson decided to make two greens for every hole; and that is the procedure we are following in our district today.

The new course of the East Lake Country Club has very large greens; and they are splendid. There are two types of these double greens; one is a very large green divided in the middle and the other is two separate greens. The latter type is certainly the more desirable. Unless Bermuda grass is protected over winter it does not