

Re-turfing Florida Golf Courses

BY JOE A. ROSEMAN

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REBUILDING and re-turfing Florida golf courses may or may not be interesting to Northern greenkeepers. But my experience in this sand and swamp or lowland district may prove valuable to the greenkeeper who goes south to follow his vocation in that part of our country where only Bermuda and Carpet grass will live throughout the summer and neither of which will mat closely at any time unless given constant care and fertilization.

In this country where vegetation of all kinds attains an almost torrid-zone growth in the fall of the year, weeds, scrub palms, and a thousand varieties of plants appear to grow an inch or two every twenty-four hours during the rainy season.

It was my experience to recondition a golf course which had never been finished and lay dormant for more than a year. After having been complimented on the condition of the course with the statement that "there is no better turf in all Florida" than is now found on this course, the writer feels that he is qualified to offer for your consideration, the routine and methods employed. Visualizing that this one hundred and forty acres was covered with vegetation, the growth of which was so dense that a man could not travel more than two miles per hour, picking his way through the undergrowth, it is surprising to learn that two months from the day we started cleaning the property, golf players from Boston, New York, Cleveland, Pittsburgh and Chicago came to Fort Lauderdale from Miami to play on this course because it was in better condition and had a better layout than the courses they had been accustomed to play in Miami.

Vegetation Cut With Sickles

EMPLYING a crew of seventy-five laborers to cut with large sickles, the debris was placed in large mounds similar to straw stacks, sprayed with kerosene and set afire. Branches of trees were collected and the entire property raked by hand. New sand traps were constructed where necessary, to tighten greens and give the course a good appearance.

The entire course was disced using both teams and tractors so that the long runs of Bermuda grass were cut and the stolons rerooted themselves making the turf three or four times as dense as before. The ashes from the burned vegetation were spread on the fairways, tees and approaches to greens. Because the grass had been retarded by this wild vegetation, it was necessary to sow Italian Rye grass to fill in on the fairways and give an immediate turf for the coming winter months. This Rye grass produced a noticeable turf within two weeks and within six weeks from the day we started cleaning, the fairways were almost as green as those on a northern course. We knew however, that the Rye grass would not live beyond May first of the following spring but that the Bermuda



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grass stolons would have taken root and produced a carpet of grass over all the fairways after the next fall rains.

Exceptionally large water mains were installed twenty-four inches below the ground and from December fifteenth until February fifteenth, this course was constantly sprinkled without turning off a single faucet which accounts for the fact that a good turf was had in so short a time.



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How Greens Were Treated

ALL eighteen greens were disced and floated and then a mixture of cottonseed meal, lime and Parisgreen was placed on them. The proportion of the mixture was:

100 pounds Cottonseed Meal
100 pounds Lime
3 pounds Parisgreen

to each green. The Parisgreen effectively eradicated grub worms, commonly known as the Army Worm, and various other forms of insect life. Bermuda stolons were then planted and Rye grass seed was worked into the soil with a gang of spiked rollers. The cottonseed meal and lime stopped the sand from blowing away and gave a firmness to the soil, if you could call it soil, because it is practically all clear white sand.

Having learned that other Florida greenkeepers were using tankage and black swamp muck, the writer decided to use a fertilizer which had given good results in the North. So we applied one hundred to two hundred and fifty pounds of this fertilizer on each green and kept these greens wet for the following two weeks after which they were sprinkled each night.

The reader will understand that a new green in Florida, unless it has a foundation of clay, dries out within five hours from the time the sprinklers stop so we kept the sprinklers working day and night for the first two weeks. This same fertilizer was used on the tees and approximately seven hundred and fifty pounds was spread on each seventy linear yards of fairway.

My experience on this job, which had to be done in a hurry, convinced me if I should ever build a new course in Florida, I would find some clay before building the greens and if possible secure clay to mix with the sand on the fairways. If one should be able to secure clay for the base of the greens that is about 12 inches below the surface, 75% of the moisture would be retained instead of passing through the sand as it does and leaving the young grass roots without very much nourishment. Lacking this clay, it is necessary to use as much cottonseed meal, lime and such fertilizers as we could obtain which would make the grains of sand stick together and hold some of the water.

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Due to the fact that so much water is necessary to keep the roots damp, the surface of the ground is inclined to become sour from this constant sprinkling but the mixture of cottonseed meal and lime corrected this condition through applications made every two weeks. We always included the Parisgreen in this mixture to keep out the grubs and bugs.

Sand Too Porous for Root Growth

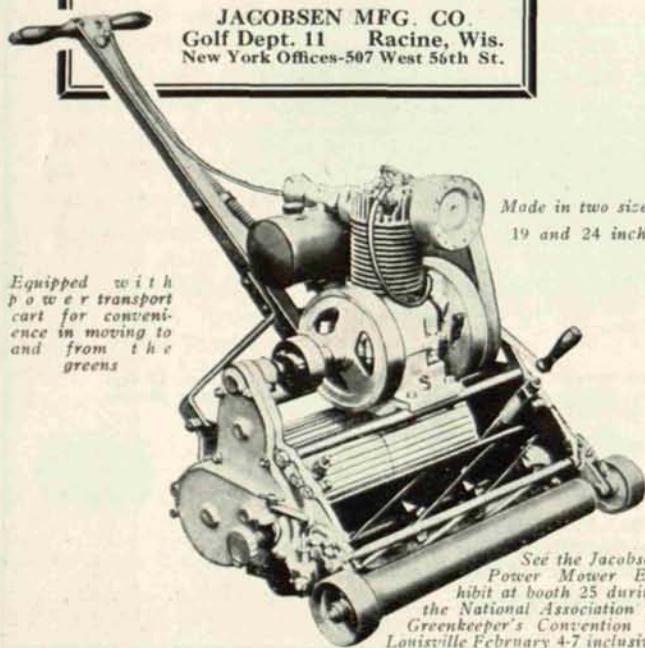
THE sand seems to have a lot of food required for turf life, but it is so porous that grass cannot live until it has rooted itself six or eight inches below the surface and it cannot root itself unless the sand is kept moist. Chemical fertilizers are of some value because they seem to make the sand pack about the grass root but black dirt is almost as valuable as gold.

I would say if any greenkeeper can obtain sufficient clay, black dirt or a fertilizer which will make the grains of sand stick together, then keep this so-called soil damp enough to permit of seed germination and growth for about two months, he will have no trouble in securing a dense turf for the reason that the sunlight is there day in and day out. And when he has used Parisgreen in the proportion of three pounds to two hundred pounds of cottonseed meal and lime mixture, there will be no bugs, worms or vermin to destroy his turf.

It is natural however, to expect that angle worms will accumulate as the putting green soil becomes thicker and richer but they are easily removed and the greenkeeper may rest assured that he has a good turf when angle worms are found in it.

We made another application of our northern fertilizer this last fall even though the Bermuda grass had matted very closely on the fairways, with the result that golf players who live in Miami the year round are coming to Fort Lauderdale because, as they tell us, the turf on this course is so much better than on any of their older courses.

A second application of this northern fertilizer was placed on the putting greens and Italian Rye grass sown on the greens November first to fifth so that on December first, the putting greens compared very favorably with those of our metropolitan golf courses.



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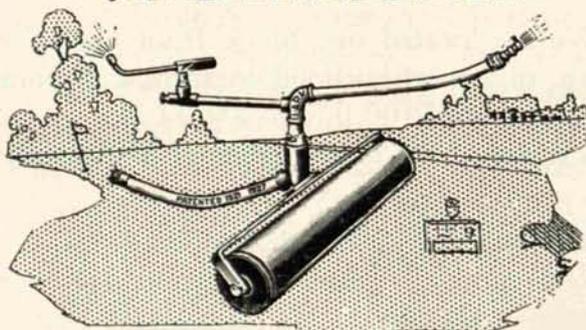
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Good Turf Must Have Moisture

THE sum and substance of this experience merely proves that a good turf is dependent upon having a soil which will retain the moisture; one which is not so light that it can be blown away yet light enough to be aerated, compact enough to permit of stability to the grass root and one having sufficient food to afford sturdy growth of turf. To this combination, add fresh water and the sunshine which is ever present, and there will be no secret to growing a good turf in Florida.

You will understand that all putting greens must be reseeded each fall with either straight Italian Rye grass or a mixture of Italian Rye, Red Top and Blue Grass or Italian Rye and Red Top only. This seed, if planted and mixed right in with the ever present Bermuda grass at the rate of about one hundred and seventy-five pounds per green, will give you a good putting turf from December first until May first, after which only the Bermuda grass will survive but the Bermuda is thoroughly well matted by this time and gives a fairly good putting surface in the summer.

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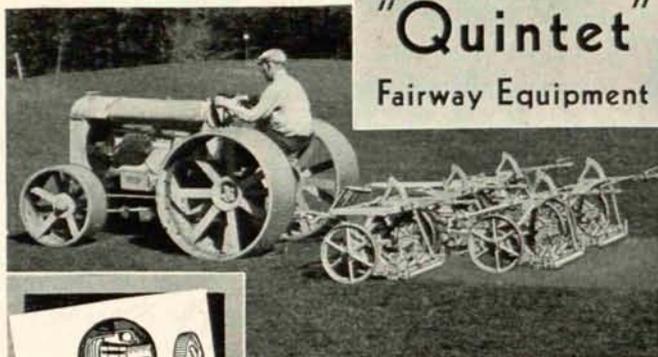
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