New Greens—Heavy Play—Drought—Clover —But We Licked 'Em All

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As Told to
BART J. SCANLON

WHEN I came to the new Mark Twain Community Golf Course in the spring of 1939, work on the first 9 holes had been completed. Official opening of this first 9 was set for May 27.

The greens on the new course averaged 7,000 sq. ft. in size. They were planted with Washington strain creeping bent and by that time had gone through two winters. They were in excellent shape except that they needed additional seasoning. After they had been mowed, with the mower adjusted to 5/16 in., and were topdressed and rolled, the greens were as solid and smooth as a billiard table.

Wilbur Stone

It usually requires at least 6 years to bring new greens to tip-top playing condition. We would have had no trouble with the greens, during the first season of play, except for the fact it was one of the driest summers in history in southern New York.

As the drought continued, I sprinkled the greens for as much as four hours each night. About this time, I noticed that some clover had begun to appear in all the greens.

About July 1, to satisfy the demand of the players for still faster greens I started mowing with the mower set to ¼ in. instead of 5/16 in. Instead of getting rid of the clover, it began to appear in increased amounts on all 9 greens.

It seems to me now that the explanation lay in the fact that cutting greens too close during a dry spell results in stimulating the growth of clover. This is due to the fact that clover takes nitrogen from the air and manufactures it in a nodule in its roots. I am now convinced that close cutting reduces the power of grass to obtain nitrogen without affecting the clover.

But to go on with the story of that first summer. By August, all the greens were extremely hard and fast. But since 40% of each green surface was clover, it was difficult for a ball to roll true. I decided to raise my mower and resume cutting the greens with the blade set at 5/16 in. The drought continued right through into September, with only an occasional light shower which hardly moistened the parched grass. But I noted that the clover's rate of growth had been slowed down.

In late September, I went over all the greens thoroughly with a spike roller and covered them with a topdressing of rich river loam, using a yard and a half on each green. I found that by using a fertilizer spreader to distribute the loam, more even distribution was achieved, and labor costs were reduced. After topdressing with loam, I covered each green with fertilizer, using an automatic spreader. The mixture was American Agricultural Country Club special 8-6-2, at a ration of 12½ lbs. for each 1,000 sq. ft. of green surface. The loam and the fertilizers were worked into the greens by dragging steel mats across them.

Topdressed Again in October

In October, I again topdressed the greens with loam, and fertilizer, using the same quantities. After this treatment, I applied arsenate of lead, using 10 lbs. to 1,000 sq. ft. The greens were mowed daily until the frost came.

The second half of the course was completed and ready for play with the opening of the 1940 season. While the entire course was in good condition, I urged the city manager to postpone play until May

25, and operate for the first month of play under winter rules.

At the beginning of the 1940 season, I made a detailed report to the city manager, describing the condition of every tee, fairway and green on the 18-hole course. Of the first 9 greens, only one had a serious amount of clover and two others did not have proper surface drainage. On the second 9 holes there were bare spots on two greens, caused by snow mold.

After the greens had been mowed, rolled and spiked in preparation for opening day, I started a campaign to get rid of the lingering traces of clover that survived the winter on the first 9 greens. For this purpose, I applied a water solution of sulphate of ammonia every three weeks, using 5 pounds to every 1,000 square feet of green surface. The continued application of the caustic solution soon caused the clover to burn up and die out. At the same time, it greatly stimulated the growth of Washington strain creeping bent.

During the spring and summer of the 1940 season weather conditions were in sharp contrast with the previous season. We had a normal amount of rain. The greens were mowed daily with the blade set at 5/16 inch. By June, there was only a negligible percentage of clover left on the greens.

No Clover on Second Nine

No clover showed up on the greens of the second 9 holes. I believe that by allowing the Washington strain creeping bent to get a good start, we avoided a similar battle with clover on the second 9. I am convinced that the trouble with clover on the first 9 was due to opening the first nine for play too early in an exceptionally dry year and cutting the grass too short.

While clover was my main headache during the first season, I also had trouble with "fairy rings" on the practice green. I first noticed that something was wrong on the practice green in July. The rings then appeared in the form of a half moon and about three inches thick. Each ring measured about three feet in diameter. When I first noticed them, there were five distinct rings, dark green in color, located around the edges of the practice green. Gradually the grass inside the rings started to fade and within a period of seven weeks, it had died out completely. I tried a lime treatment without results.

CHEERS GOLF WIDOWERS

Gas companies in Southern California make a neat play to women golfers and to the men who complain their wives cook with can-openers since taking up golf.

When public utilities recognize in their newspaper ad copy great interest of women in golf you may be sure that women's play is booming.

I let the greens go through the winter without further treatment. In the spring, no grass appeared inside the rings, so I had to remove the diseased sod and replace it with new sections of healthy sod.

Examination of the old sod indicated that it was apparently part of that left on the site during construction of the new course. Traces of a fungous growth, similar to mushrooms, appeared in the old sod. Bare spots on two of the greens in the second 9, which had been caused by snow mold, were treated in a similar manner.

'Crab' Hasn't Shown Yet

So far there hasn't been a trace of crab grass on any of the greens of the new course. Weeds are always an indication of lack of proper plant food. Regular use of fertilizer is the most important factor in keeping crab grass and weeds out of the greens, in my opinion.

The question of the opening date is always a difficult problem for any new course. Naturally the golfers who have

been waiting impatiently for the new course to be completed want to get playing as early as possible. Then, there is the pressing problem of finance. Green-fees rolling into the caddie house are the only answer to that question. But for the permanent benefit of the entire course, especially the greens, the opening date should not be set for too early in the season. If the opening day is postponed until the grass on the greens has a good start, then some of the headaches, like my battle with clover, can be avoided.

Let Facts Decide Opening

I believe that it is good practice to submit a detailed report on the physical condition of the entire course to the green-chairman at the beginning of each season. Then any decision made by the committee as to the opening date will be based on facts concerning the condition of the course, instead of resting entirely on questions of finance or player desire.

My practical experience as a greenkeeper dates from 1924 when I started as assistant greenkeeper at Elmira CC. From there I went in 1927 to the greenkeeper spot at the old Mark Twain municipal course in Elmira, remaining there until the new course opened in 1939.

I have found that attendance at special courses for greenkeepers is extremely helpful in my work. In 1933 I attended the short course at Penn State Agricultural School, and in 1940, the special class for greenkeepers at Massachusetts State College.

The new Mark Twain course is 6,761 yards long, with 19 greens, 83 sand traps and one water hazard. Given two more normal seasons with a good amount of rain, the course should be in peak condition and ready for tournament play.

No greenkeeper can ever relax his vigilance for a single day during the playing season. But once a new course and greens are safely through the first two seasons, any greenkeeper on a new course can at least breathe a sigh of profound relief.

It has been a valuable experience and I wouldn't have missed it for the world, but I'm glad it's over. I can agree with the old saying that "the first two years are the hardest." During that long dry first summer, there were many times when I wished that I knew some of the ancient Indian rituals used to get rain. To others who plan spring openings for their new courses, my best suggestion is that they pray ardently for rain.

Table Shows Quantity of Water in a Given Rainfall

GRASS uses from 500 to 700 tons of water per acre during a normal growing season. This amount of water is equivalent to 5 to 7 inches of rainfall.

One inch of rainfall:

Wets loam soil to a depth of 6 inches.

Is equivalent to 27,154 gallons to one acre.

Is equivalent to 2,172,320 gallons to an 80 acre course.

Is equivalent to 3,000 gallons to 5,000 square feet.

Is equivalent to the output from a sprinkler delivering 20 gallons of water a minute if it runs for 2 hours and 30 minutes over an area of 5,000 square feet.

The accompanying table showing quantity of water equivalent to depth of rainfall is one greenkeepers have found helpful.

Depth of rainfall in inches	Cu. ft. water to 1 acre	Gal. water to 1 acre	Tons water to 1 acre
1.00	3,630	27,154	113
2.00	7,260	54,308	226
3.00	10,890	81,462	339
4.00	14,520	108,616	452
5.00	18,150	135,770	565
6.00	21,780	162,924	678

Open New Courses for Employees—Second 9 of the Hercules CC, Wilmington, Dela., and a new 9-hole course for the Seaford (Dela.) G&CC were opened late in June. Hercules Powder Co. owns the Hercules course which is highly popular with its employees and officials. DuPont built the Seaford course for its Nylon plant employees.

Architects for both courses was A. H. Tull of Emmet, Emmet & Tull, New York City and West Chester, Pa., Tull recently designed a second 9 for the Lawrence Park GC, Erie, Pa., which is owned largely by General Electric Co. employees.

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700 Dozen Balls Stolen—Wilson Sporting Goods Co. store at Cleveland was robbed of more than 700 doz. golf balls in May. Most balls were of pro-only brands. Only golf balls were taken. If Wilson pro-only balls are being marketed by any store the Wilson organization will appreciate information to this effect in order to investigate possibility of such balls being from the stolen stock.