

varying the amount from two and one-half to four pounds per 1000 square feet, depending on weather conditions.

3. Will refer you to answer No. 2 which I think covers this question. However, I will say that I lighten my topdressing and sulphate treatment during the summer months.

4. I think over-feeding and over-watering hastens fungus diseases. During periods of fungus diseases I lighten all of my treatments and watering.

5. I have not observed the various diseases on greens that have been dried out for lack of water, but that have received plenty of air.

Am happy to say that I have had no trouble with my greens this season with the exception of the one attack of small brown patch on three greens as I mentioned above, which happened on July 18th, but which recovered very quickly after treatment.

This is an 18-hole course and has had heavy play for a private club, but my greens have stood up in fine shape. We have had a very dry and hard season this year as every greenkeeper knows, so I am very thankful for conditions on my course.

Brown Patch At Ann Arbor

By WM. SLACK, *Greenkeeper*

*University of Michigan Golf Course,
Ann Arbor, Michigan*

IN REPLY to your questionnaire, I hereby submit the following answers:

1. Did not have webworm.

2. Had both small and large brown patch. On May 12th had small brown patch very bad on three greens. Used corrosive sublimate with excellent results, then gave light topdressing without fertilizer and had no trouble with said three greens since. For large brown patch I used Semesan and Nu-Green.

3. I use no organic fertilizer after June. Perhaps over-feeding or over-watering hastens brown patch but as I do neither and get disease just the same it is hard to say with any certainty whether it does or not.

5. No, not on this course.

Note—Greenkeepers are Requested to Send in Letters for Publication Next Month.

Birds Kill Webworms

By JOS. WILLIAMSON, *Greenkeeper*
Scioto Country Club, Columbus, Ohio



JOS. WILLIAMSON

THE sod webworm made its appearance on several Scioto greens this summer, but the birds were able to combat this pest and did not find it necessary to use chemicals of any kind to eliminate them, the birds kept them well under control.

2. Our greens were affected at intervals with small brown patch and especially No. 2, a new green, had a severe attack of the large patch. I depended solely upon Calo-Clor as a preventative with good results and used a 10-6-4 fertilizer in small quantity, well watered in.

3. I do not use organic fertilizers during the summer.

4. Over-feeding and over-watering are the fatal mistakes of many greenkeepers and cause most of the troubles, especially does it hasten fungus growth.

5. No, but I have seen a deal of scald and sunburn this summer and thinning out of the grasses on greens owing to the many rains during July and August. The root system being close to the surface the grasses were unable to stand the many hot, scorching days of the past few weeks.

Brown Patch At Hartford

By J. O. CAMPBELL, *Golf Course Superintendent*
Wethersfield Country Club, Hartford, Conn.

WE HAVE had no webworms so far and I have heard of none in the Hartford district.

I have had brown patch and plenty of it, but have been able to check it, before it had damaged my greens to any great extent, although some greens in this district were completely destroyed. I used Semesan and some Nu-Green applied at the rate of one-half pound to 1000 feet, every three days until there were no signs of the fungus.

When the weather was hot and humid, I watched very closely and on the slightest indication of the

disease, I gave the greens an application. I have been unable to find a chemical to prevent the growth.

I composted about every 15 days, using both organic and inorganic fertilizers lightly, and spiked the greens frequently. I have always used organic fertilizers during the summer and have never found that they caused either large or small brown patch.

Watering has an effect on brown patch. Too much water during the hot weather has a tendency to produce the disease, but allowing one's greens to get too dry is just as bad. So, during the brown patch season, I give lots of attention to watering, practically all of my watering being done at night.

I have observed various diseases on greens that have been dried out, the principal one being brown patch. I believe it is caused under these circumstances by a weakened condition of the grass, either by over-fertilization (too much sulphate of ammonia, acid phosphate, etc.) or by the lack of fertilizer.

It will be interesting to read of the conditions on other courses in different parts of the country and compare my methods with other greenkeepers. Most of our trouble here is brown patch.

Poor Drainage Hurt Aurora

By SPENCER MEISTER, *Greenkeeper*

Aurora Country Club, Aurora, Ill.

WITH reference to your inquiry of September 8th, I wish to quote the following: Our golf course started to suffer with the extreme heat and humidity of the latter part of June. Immediately we got busy with fungicides.

I used corrosive sublimate and Semesan with

equally good results which were effective throughout with the exception of some spots on our 7 and 14 greens, which places were poorly drained and where these greens were water-logged is where the serious damage was done.

I can best explain the damage which occurred, when I mention that No. 7 was affected to the extent only of having to wait 45 days for these affected parts to grow in, which on No. 14 it was necessary to lift and replace about 20 square feet of turf where the large brown patch in the poorly drained area would have taken too long to recuperate and grow back in.

We continued playing these greens, however, and they were better than any temporary green we could have provided as far as a putting surface was concerned.

I did not use any organic fertilizers in any top-dressing after this trouble and as a matter of fact, I let up for a couple of weeks after this hot spell on any fertilizing plan and also cut down on the water applied, thinking that the fertilizer was adding too much added heat to the soil and that the water was adding to that almost steaming condition which existed.

Whether or not this helped me and if so to what degree I am at a loss to say. While I did not have any further attacks of brown patch (I used preventative measures of mercury compound meanwhile) it left my greens with an unhealthy color. The grass did not grow so fast and became thinner and then I decided I must feed the greens and get water on them as I felt the starving of them was bad from a golfing standpoint, appearance of color, lack of ability to hold a ball and also too fast a putting surface.

About a week after using fertilizers and water I also got some favorable weather and the greens showed a marked improvement and at this writing they are in excellent condition.

I was not troubled with webworms. Had a few so-called large cutworms but noticed no damage from them.

I also noticed no damage on what bent we had on fairways which were not watered or fertilized except the natural burnt appearance and this all left after the last couple of rains which restored their color. The bent referred to on fairways is on one of the lowest places on the course and probably gets a little air as any area.



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