

ammonium sulfate. The turf of creeping bent is so dense that there is little opportunity for crab grass or other weeds to get a good foothold. The contrast with bluegrass in this regard is very noticeable. Bluegrass turf becomes open in midsummer thus giving crab grass a chance to start at the season when it thrives best and when the bluegrass is somewhat dormant.

Brown-patch was not observed when the turf was new and caused very little trouble in the extremely dry summer of 1926. During the past season it has been extremely serious. Both the small and large brown-patch appeared repeatedly and caused some damage to the turf of all varieties of bent. Some plats were treated every few days throughout the entire summer. Perhaps the treatments have been less effective than usual or the benefits of shorter duration because of unusually frequent showers and high humidity from May to September. Experience has taught us that in order to combat brown-patch successfully one must be on the job every day to observe the very first signs of an outbreak and to apply the treatment immediately.

During the dry weather when watering was done in late afternoon and evening birds, especially robins, came to the plats in great numbers, apparently in search of insects and for material with which to build their nests. The turf would often be torn up in spots producing a roughened surface. As many as 50 of these torn places were found on 100 square feet of turf. Most of the damage was done soon after dawn when robins would flock to the plats in great numbers and work industriously until the middle of the forenoon when it began to get hot, leaving the torn spots to suffer from the heat of the day. This trouble was largely overcome by watering earlier in the day so that the surface would be fairly dry before evening. No damage was done immediately following showers as the birds then seemed to go elsewhere for food and nest building material.

The experimental work in Kansas up to this time leads to the conclusion that the routine essentials in maintaining good putting turf in this section are close mowing, frequent, light watering, use of compost and fertilizers, and close attention to the control of the brown-patch disease.

“How often we see courses where the approaches have not only been overlooked by the architect, but also forgotten by the green-keeper.”—The Links.

QUESTIONS AND ANSWERS

All questions sent to the Green Section will be answered in a letter to the writer as promptly as possible. The more interesting of these questions, with concise answers, will appear in this column each month. If your experience leads you to disagree with any answer given in this column, it is your privilege and duty to write to the Green Section.

While most of the answers are of general application, please bear in mind that each recommendation is intended specifically for the locality designated at the end of the question.

1. Winter greens for the South.—We have always sowed Kentucky bluegrass on our Bermuda greens so as to furnish turf for winter playing. We find however that on certain other southern courses the regular Bermuda greens are not used during the winter but a temporary green is selected on the fairway and sown to a winter grass. Is it known definitely which of these is the better practice? (Georgia.)

ANSWER.—There is a good deal of difference of opinion in the matter you bring up. A winter grass sown on Bermuda greens, such as bluegrass, redtop, or Italian ryegrass, has a tendency to retard the recovery of the Bermuda in the spring. We are inclined to advise that where it is practicable to do so, temporary greens of winter grass be used.

2. Scum on turf.—I am sending you a sample of turf from one of our greens on which the grass has been killed by a slimy growth, which can still be noticed on the sample. This is a bent green. It was doing well until the middle of July, at which time some brown-patch appeared, but from which it recovered under treatment with ammonium sulfate and compost. Toward the end of August however these dark slimy patches began to appear, and have since covered the entire green. This green has received 15 pounds of ammonium sulfate once a month, with compost, and has been thoroughly watered twice a week during dry weather. (Ohio.)

ANSWER.—The scum on your sample is a fungous growth commonly referred to as algae, but the cause of which is not definitely known. It has been observed however that it usually appears on poorly drained soils and on putting greens which are over-watered, that is, on greens which have been soaked with water until they are in a soggy condition. We have found that daily moderate sprinkling of putting greens gives better results than soakings at longer intervals. In case you have no reason to suspect that the drainage of your green is defective, we would suggest as a remedy for the trouble that you scratch the surface of the soil lightly and then topdress with a compost consisting of about 50 percent sand, 25 percent rotted manure or other composted organic matter, and 25 percent loam. This topdressing should be brushed well into the turf and kept moderately sprinkled each day until the grass has recovered.

3. Late fall treatment of turf.—Do you advise fertilizing grass as late as October in this latitude? (New York.)

ANSWER.—Our practice in maintaining turf has always been to keep up our regular treatment as long as the grass grows, this including watering, cutting, and fertilizing if the stand is thin. After the growth of the grass ceases in the fall we do not find that it is necessary to give it any treatment. A light topdressing is however highly beneficial in early spring as soon as growth is resumed.

4. Pea and butter bean vines in compost.—We can secure quite a lot of pea and butter bean vines at no expense beyond that of hauling for a few miles. Would you advise us to use the vines in compost? (Delaware.)

ANSWER.—Yes, but they should be composted with a considerable quantity of loam in order to get a fairly compact mass which would hasten the decomposition of the vines.