YOUR TURF PROBLEMS
. . . and their solution

QUESTION: During July and August turf on our greens turns brown in spots, and then a green scum covers the area. Is this the result of faulty watering practice, or is some other cause responsible? We have been advised to water thoroughly at infrequent intervals.

ANSWER: Yes, failure to modify method of watering is responsible for your trouble. Soil in the areas first becomes dry, then grass begins to wilt and turn brown. As it thins out the soil surface becomes exposed and algae start to flourish. This forms the thin, skin-like scum. Algae are normal soil inhabitants which do not multiply as long as turf density is sufficient to exclude light.

With the approach of summer both root systems and soil moisture should be watched closely, because shallow roots or dry soil are the causes underlying the trouble.

When soil becomes dry in localized spots, the areas should be forked deeply and then drenched thoroughly with water to restore normal soil moisture. Several drenchings may be necessary. The holes formed by the ordinary spiker are too superficial to correct the condition.

Where shallow roots are the cause, it may be necessary to water greens one or more times every 24 hours to prevent serious wilting and consequent loss of grass. During hot or windy periods, greens should be inspected at mid-day even though the water was applied during the preceding night. Wilting grass takes on a characteristic bluish metallic color.

At the first sign of wilting, greens should receive just enough water to restore moisture in the shallow layer of soil to which roots are confined. Otherwise, serious loss of grass may take place.

The idea that daytime watering always burns grass is erroneous. Even in bright sunlight, no harm results, provided water does not collect in pools. Handwatering is the safest method, especially on heavily contoured greens. Water can be directed to the higher spots and surface run-off allowed to care for low areas.

If grass thins enough to permit growth of algae, a light application of hydrated lime usually checks their development. Because hydrated lime is caustic, it must be used carefully at not to exceed 2 to 5 pounds per 1,000 square feet. Fertilizer containing ammonia compounds cannot be used a week before or after applying hydrate.

Besides these temporary measures, steps should be taken in the fall to correct the underlying cause.

Among other things, localized dry spots may be due to an excessive surface mat of grass. If this is the case, the surplus should be removed by alternate raking, or brushing, followed by close cutting. Excessive soil acidity is another possibility. This may be corrected by the moderate use of lime.

Provided other factors are favorable, periodic thorough watering is stressed as a means of encouraging deeper root formation. So during the cooler portions of fall and spring, best practice is to water at irregular intervals. Because days are shorter and temperatures lower, serious wilting is less likely to occur at these seasons. During the interval between applications of water, the surface soil should become partially dry, but this does not imply that surface soil should be allowed to become thoroughly dry. As already pointed out, such soil refuses to absorb applied water. Sufficient water should be applied to re-establish contact with sub-surface moisture.

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Turf Service Bureau

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