

2. Hard compact soils which are impervious, drain poorly, and thus repel water. Most of whatever moisture is available does not reach the root area but is lost as "run-off."
3. "Layering" in a green. Layers of different texture and structure in a putting green not only act to reduce root systems but interfere with proper water percolation in soils.
4. Location of large trees, shrubs, etc., near a green, or tree root competition. Another reason to keep competing tree roots pruned.

There are, no doubt, other factors which are secondary causes for desiccation damage. However, if the above conditions are corrected and the following precautionary measures are taken, winterkill from drought can be reduced or avoided.

1. During periods of extended drought it appears that only a small amount of water can "pull the green through." Almost every superintendent should be able to locate a large 200 to 500 gallon wagon. A large spray rig of 200 gallons or even 150 gallons capacity will suffice. When it is apparent that drought is severe and no precipitation is in sight apply a tank of water to each green. This is a minor task when one considers that a large percentage of turf on greens can be lost through desiccation.
2. In areas where snow fall is expected but the snow is likely to be swept from the greens by winds, brush is often used. Brush piled on greens will tend to hold the snow or moisture. However, more severe snow mold damage can be expected when such a practice is followed - be sure snow mold preventive fungicides are applied.
3. Aerification can play a strategic role in desiccation problems. If soils are sandy and drain well it may be a mistake to aerify in late fall and "leave the green open." Such a practice may assist moisture to escape to the atmosphere. However, if green soils are hard, compact, layered and impervious, late fall aerification may be helpful in preventing desiccation by adding soil "traps" which will catch and hold water thus reducing surface run-off.
4. Make absolutely certain that greens are thoroughly soaked before draining the watering system.

FERTILIZATION OF BENTGRASS GREENS

Fertilizer for greens should provide nitrogen (N), phosphorus (P_2O_5), and potash (K_2O), in the ratio of 3-1-2. Use 1/2 pound (Do not use more. Let this be the maximum) of nitrogen per 1000 square feet per month on bentgrass in hot weather, and 1 pound per month during cool months. This practice will provide about 9 pounds of N per 1000 square feet per year.

If the 3-1-2 ratio material is used, you will apply 3 pounds of P_2O_5 and 6 pounds of K_2O . These nutrients do not leach readily and may be applied in spring and fall when weather is cool.

Knotweed (Polygonum aviculare L.)

Knotweed begins to make its appearance in early spring wherever there are bare areas and in hard, compacted soils where traffic is heavy. When seedlings are young, knotweed is pale green and leaves are soft and tender. As the plant grows older, leaves turn darker and toughen and the stems become woody and fibrous.

If treatment is made early, knotweed may be controlled by applications of 2,4,5-T at 1 quart of 40% acid equivalent material per acre with 1 pint of 40% 2,4-D. This mixture of weed killers should be applied in 80 gallons of water, and application should be made as a coarse spray. A wetting agent will improve coverage.

Seedling grasses may be injured by 2,4-D - 2,4,5-T sprays. It is therefore advisable to treat with these materials only on established turf.

TURFGRASS CONFERENCE SCHEDULE

- Minnesota - St. Paul, Minn., Lowry Hotel - February 25-26-27
- Purdue - Lafayette, Indiana, Purdue University - March 2-3-4
- Iowa - Ames, Iowa, Iowa State University - March 9-10-11
- Michigan - East Lansing, Mich., Michigan State University - March 12-13

A Thought -

Get the facts. Approach each new problem not with a view of finding what you hope will be there, but to get the truth, the realities that must be grappled with. You may not like what you find. In that case you are entitled to try to change it. But do not deceive yourself as to what you do find to be the facts of the situation.

--Bernard M. Baruch

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