



UNITED STATES GOLF ASSOCIATION GREEN SECTION

Mid-Continent Turfletter

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No. 1

February - 1963

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HOW DRAINAGE AFFECTS TEMPERATURE

The temperature of soil is not subject to any radical human regulations; however, management methods that influence soil moisture do provide for small but biologically vital modifications.

Let us compare briefly the temperature relations of a well-drained soil and a poorly drained soil. A poorly drained soil has a high specific heat which means that large amounts of radiant energy must be absorbed to raise the soil temperature by only a few degrees. This raise in temperature can quite often be a critical one. Also, in a poorly drained soil, excess water will not percolate through the soil, and much of it is removed by evaporation which causes the soil temperature to go even lower.

In general, a poorly drained soil may be expected to have a range of from 6° to 12° F. lower in the surface layer than in a comparably well-drained soil. Heat passes from soil to water approximately 150 times faster than from soil to air which further indicates the cooling effect of water in the soil. As more and more water is added to the soil, the soil air is decreased. As air is decreased by moisture in the soil, heat conductivity is increased; and the soil also requires more and more heat to warm it up again. Because of these conditions it would seem that a well-drained soil would tend to bring temperatures within the optimum growth range earlier in the season and to give some degree of protection against cold weather damage.

*** GREEN SECTION EDUCATIONAL MEETINGS ***

A series of educational meetings are to be held in various sections of the country again this year by the Green Section. The meetings are scheduled for Seattle, Washington, on March 18; Dallas, Texas, on March 20; and Tifton, Georgia, on April 9.

With the exception of the Tifton meeting, the meeting time will be from 10:00 a.m. to 5:00 p.m. The Tifton meeting is being held in connection with the 17th Annual Southeastern Turfgrass Conference and is scheduled from 9:00 a.m. to 4:30 p.m.

Each member club of the USGA is invited to send two member delegates to the meeting in their area.

ACT NOW TO PREVENT WINTERKILL ON BERMUDA--

One of the chief causes of winterkill is the drying out of the plant tissues. Lack of snow cover and drying winds are contributors to this condition. If you have bermudagrass areas exposed to the effects of dry winds, it would be well to take advantage of any warm spells to get some supplemental moisture onto the areas. If it is not feasible to turn on the water system, even a spray tank full of water may help in critical areas.

It appears that warm spells in late winter followed by severe cold are particularly rough on bermudagrass. Guard against desiccation at such times.

PLAN NOW FOR MONTHS AHEAD

With spring just around the corner, now is the time to make sure things are in good order and all those numerous details which slow us down so much later in the year have been taken care of.

Very soon now all of the work classed as "off-season" jobs should be complete, and we will once again plunge into the routine of our busy season. In many cases, your planning and work during the winter months will determine how hard or how easy the coming season is to be.

Following is a check list to aid you in making sure your preparations are complete:

1. Green mowers overhauled and ready?
2. Tee mowers overhauled and ready?
3. Fairway and rough mowers overhauled and ready?
4. Tractors overhauled and ready?
5. Aerifiers and vertical mowers overhauled and ready?
6. Parts for emergency needs during the season ordered, i.e. spark plugs, chains, filters, discs, repair links, spoons, carburetor parts, knives, etc.
7. Spray equipment overhauled and spare parts on hand for emergency repairs?
8. Fertilizer spreader repainted and in good repair?
9. Fungicides ordered for first application?
10. Fertilizer and weed killer ordered?
11. Sand for traps on hand?
12. Topdressing mixed?
13. Access roads in good repair?
14. Drainage areas in good repair?
15. Condition of shelters, benches, ball washers, flags and poles, drinking fountains, sprinklers, and water pumps checked?
16. Trees trimmed?
17. Trees planted?
18. Tree roots around green and tees cut?
19. Members informed of new projects started and/or completed since last fall?

**** COMING EVENTS ****

- February 18-21. Pennsylvania State Turfgrass
Conference
Pennsylvania State University
University Park, Pa.
- February 18 Kentucky Turfgrass Conference
University of Kentucky
Lexington, Kentucky
- February 27 - March 1 Minnesota Educational Conference
Lowry Hotel
St. Paul, Minnesota
- February 25-28 Cornell Turfgrass Conference
Statler Hall, Cornell Univ.
Ithaca, New York
- March 4-6 Midwest Regional Turf Conference
Purdue University
Lafayette, Indiana
- March 7-8 Univ. of Massachusetts Turfgrass
Conference
University of Massachusetts
Amherst, Mass.
- March 12-14 Annual Turfgrass Short Course
Iowa State University
Ames, Iowa
- March 18-19 Annual Short Course on Turf and
Grass
South Plains College
Levelland, Texas
- March 18. USGA Regional Educational
Meeting
Seattle, Washington
- March 20. USGA Regional Educational
Meeting
Dallas, Texas
- March 21-22 Michigan Turfgrass Conference
Michigan State University
East Lansing, Michigan

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Permit No. 80

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