

result of the traffic the dollar spot development in early July was increased from 18% of the turf area infected on the uncompacted side to 54% on the compacted side. Apparently the golf shoes carried the inoculum from plot to plot.

Results of the use of wetting agents to rewet a hydrophobic sand at Boyne Highlands near Petoskey were consistent in 1975 with earlier studies. Coring treatments gave only short term improvement of turf. Hydro-Wet and Aqua-Gro proved the only consistently effective wetting agents among the nine which were applied in these studies. Hydro-Wet was somewhat more effective than Aqua-Gro under the conditions. The higher rates (32 ounces per 1000 square feet) gave longer improvement than 16 ounces from a one time application. In two years the effects of the wetting agent treatments have nearly dissipated. Repeat applications appear necessary to prevent the hydrophobic soil condition from redeveloping. Frequency and rate of reapplication will vary with the wetting agent, soil, and the degree to which the hydrophobic condition has developed. When the hydrophobic condition has become severe the rate of application of wetting agent may need to be higher, multiple treatments may be necessary and rate of turf improvement may be much slower than when treatments are applied at the first sign of a localized dry spot.

There is concern for the possibility of phytotoxicity to the grass from the use of wetting agents. No injury has been observed on the plots at Boyne Highlands even at rates up to 32 ounces per 1000 square feet. Injury has often been observed, however, even at lower rates of application, on turf. In a phytotoxicity study initiated at East Lansing in 1975 Aqua-Gro proved slightly more injurious than Hydro-Wet at comparable rates of application. But Aqua-Gro provided a day or two longer effect on suppression of dew formation on bentgrass than did Hydro-Wet. The use of more water when applying the wetting agents reduced the degree of injury observed as well. Watering the wetting agent into the turf after application will also reduce the potential for injury.

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