

Establishing and Maintaining Turfgrasses Under Shade

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Approximately 20 to 25% of existing turf must be maintained under some degree of shade. Often this poses a significant challenge to the turf manager. Although the obvious reduction of light is a critical factor, shaded turf areas are also characterized by restricted wind movement and high relative humidity. The reduced light results in a weakened turfgrass plant while high humidity favors the incidence of disease. The result of these two conditions is a severe thinning of the turfgrass stand.

The selection of a proper shade-tolerant species and cultivar is the first step toward the successful management of turf under shade. In recent years, several shade-tolerant Kentucky bluegrass cultivars have been developed. Some of the common ones are Nugget, Glade, A-34, Birka, and Bristol. To obtain maximum benefits, two or more of these cultivars should be blended together. The Kentucky bluegrass blend should then be combined in a mixture with one or more fine leaf fescues such as Pennlawn, C-26, or Ruby. Under wet shaded conditions, Polis rough bluegrass may be incorporated into the mixture. For proper mixtures and seeding rates, see Table I.

Following establishment of the proper turfgrass cultivars, several modified cultural practices are necessary. A cutting height of 2 to 2.5 in. will allow the sward to absorb a greater amount of light. Excessive nitrogen fertilization results in succulent tissue which is more susceptible to disease and wear injury. Therefore, nitrogen should be maintained at a level just high enough to avoid nitrogen chlorosis. Late morning irrigation should be deep and infrequent, wetting the soil to a depth of at least 6 in. Strict traffic control is essential since the recuperative rate of turf growing under shade is severely reduced.

Some benefits have been realized by modifying the shade environment. For example, pruning the lower limbs of isolated trees 8 to 10 ft. above the ground will allow more morning and evening sunlight to reach the turf area. Dense plantings of trees and shrubs should be avoided since maximum wind movement above the shaded turf area is important in avoiding temperature and humidity stratifications which are favorable for disease. Under extreme shade, shade-adapted ground covers such as English ivy, goutweed, myrtle, and pachysandra are recommended.

Wastewater Conference Scheduled

On November 13 and 14, 1978, a conference sponsored by the American Society of Golf Course Architects Foundation, the National Golf Foundation and the Green Section of the United States Golf Association will be held at the Arlington Park Hilton, Euclid Avenue & Rohlwing Road, Arlington Heights, Ill. 60006. The theme of the 2-day conference is "Wastewater Irrigation of Recreational Turf Areas." The conference's objectives are: (1) to produce "State of the Art" information and to document what is now known as it applies to recreational turf; (2) to generate additional information on wastewater uses; (3) to produce "Guide Line" information for publication.

Everyone interested in land disposal of wastewater (effluent and other) is cordially invited. A monumental bit of work has been done in this area. Interest in wastewater has quietly mushroomed due to concern for possible future limits on fresh, potable water for recreational purposes. Representatives of all recreation turf installations — golf, park and recreation, industrial, military, government, irrigation, landscape and water works are invited.

Mark these dates on your calendar now — plan to attend!

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