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Managing Turf in the Shade

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Growing quality turf is "shady business" for some turfgrass managers!

In the late 80's Federal monies were appropriated for planting shade trees in urban centers, and promoting efforts to affect Global Warming.

Additionally, residents' appreciation for wooded landscapes is at an all-time high, as trees can significantly enhance the real estate values in communities, bringing a premium to developers. According to one estimate, one-fourth of the turfgrass in the United States grows in shade.

Growing turf in the shade is a challenge for turf managers. Keeping density up and disease down is no easy feat in the transition zone of North Carolina.

Like all plants, turfgrasses require sufficient light to grow. They grow poorly on sites getting less than four hours of full sun each day. Food reserves of plants growing in dense shade are drained, resulting in weak plants and shallow root systems.

Besides sunlight, turfgrass must compete with trees for water and nutrients. Evergreens and shallowrooted trees, such as maples, dogwoods and birches, create an especially competitive environment for grasses, as do trees with dense canopies. Hull, R. J., 1992, Energy Relations and Carbohydrate Partitioning in Turfgrasses, in Turfgrass, Number 32 in the series Agronomy, Am. Society of Agronomy, Madison, Wisconsin, pp 175-205.

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Air movement across turf is frequently impeded by shade, or screening hedges which thwart wind circulation, increasing the threat of disease in the summer.

If an area gets less than 50 percent open sunlight each day, consider making some changes in the landscape. Some possible solutions include:

- removal of selected trees that will not detract from the landscape;
- if removal is not an option, then limb up trees and thin others;
- consider the use of ground covers or mulching in lieu of turf;
- tree rings of mulch improve the health of trees and reduce maintenance time;
- use shade-tolerant cultivars of turfgrass, i.e. hard fescue;
- mow turf at the top of it's recommended mowing height;
- irrigate turf deeply and infrequently;
- follow soil test recommendations to keep the turf thriving;
- keep an eye out for diseases and treat per label instructions.

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