Turf M.D.

THE DOCTOR IS IN THE HOUSE

n areas where bermudagrass goes dormant, winter overseeding will begin shortly. The most popular area for winter overseeding is in the southwestern United States and, to a lesser degree, in the southeastern United States. A major reason for overseeding is for aesthetic purposes, which drives resort golf course revenues. An emerald green turf provided by overseeding is quite pleasing to golfers, especially those migrating to the warmer climates during winter and early spring.

Agronomic advantages of winter overseeding include providing a degree of wear and traffic protection to the bermudagrass and helping reduce winter weed pressure. Nonoverseeded bermudagrass has higher soil temperatures, which enhances weed germination, and lacks plant competition to slow weed development. Thus, non-overseeded bermudagrass often requires herbicides to control winter weed invasion.

Winter overseeding, however, is costly both monetarily and from an environmental and plant health perspective. Overseeded bermudagrass often requires more water, fertilizer, and pesticides, than non-overseeded bermudagrass. Since early 2000 the cost of overseeding has become more of an issue. Cutbacks in budgets have put this practice under closer scrutiny. As an example, the cost of mowing is a concern because of rising fuel costs.

From a plant health perspective, maintaining a healthy bermudagrass year-round while overseeding is difficult because of the introduction of competing turfgrass species. To enhance autumn establishment of the overseeded turf, practices that slow the growth of bermudagrass prior to overseeding may not be ideal for its health. If bermudagrass is in poor health before entering winter — either because of fall overseeding practices (scalping, verticutting) or environmental causes (shade, poor drainage areas, pests) — getting it to transition back to the following spring is a concern. Bermudagrass is more susceptible to winter injury and slower to transition (if it survives the winter) when it is in a weakened state going into winter.

During spring transition, a phenomenon

Overseeding: Fall's Well, Ends Well

BY KARL DANNEBERGER



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called spring root decline (SRD) can occur and can devastate bermudagrass in an overseeded situation. Prior to spring greenup, soil temperatures begin to increase, promoting regrowth of stolons, rhizomes and new shoots. If soil temperatures, however, increase rapidly prior to spring greenup, rapid-shoot-growth demands on the plant's energy reserves can cause a root to die back to the crown (Sifers, Beard, & DiPaola, 1985).

Unfortunately, in overseeded bermudagrass this also corresponds to the time for cool-season turfgrass growth. The ability for the bermudagrass to compete for light, and thus plant energy, in an overseeded situation is greatly reduced, which only exasperates SRD.

There are some advances in winter overseeding that may help minimize the worry of spring transition. New herbicide chemistry (sulfonylurea) and use strategies are available for effective control of *Poa amnua* prior to and after overseeding. These products and use strategies may help reduce the intensity or severity of fall overseeding practices.

Superintendents must focus more on fall practices that increase bermudagrass health vs. stopping its growth. A healthy overseeded bermudagrass going into the winter and early spring will provide a greater level of confidence or security when the overseeded turf is transitioned out in the spring either chemically or culturally.

Overseeding is neither right nor wrong, just another agronomic or business decision, which requires distinct planning and execution over a period of several months. So spend the necessary time to critically evaluate the advantages and disadvantages of overseeding.

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