

WINTER OVERSEEDING: OLD PRACTICE GROWS UP

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Overseeding bermudagrass greens as they enter winter dormancy is not new. Studies on overseeding with annual ryegrass date back to the mid-20's. What is new is the development and marketing of overseeding mixtures by seed companies to serve this special need.

Overseeding protects the dormant warm-season turfgrass, usually bermudagrass, while improving appearance and playability of greens and other surfaces. Competition from overseeded cool-season

Courses from the transition zone to southernmost Florida overseed.

turfgrasses can hold back encroachment by annual bluegrass during dormancy of the primary turfgrasses. Traffic wear to dormant grasses is also reduced by overseeding. The purpose of overseeding is more than for appearance.

The area to be overseeded need not be a golf green, nor bermudagrass. St. Augustine and centipedegrass are overseeded in some cases. Golf course superintendents from Florida into the transition zone use overseeding for winter management. Purdue University's William Daniel advises overseeding of zoysia is not necessary for protective reasons.

The primary seed used for overseeding are annual and perennial ryegrasses; bentgrass (often Sea-side); rough bluegrass (*Poa trivialis*); red, hard, or chewing fescues; and Kentucky bluegrass (*Poa pratensis*). Research in the 60's prove mixtures of these grasses performed better than single members alone. Most commercial mixtures have three or more of the above

turfgrasses.

Annual and perennial ryegrass are included for fast germination. Bentgrass is slow to establish but offers appearance and transition benefits the following spring. Texas A&M's Jim Beard reported decline of the ryegrasses in very cold weather with recovery in March. Rough bluegrasses showed good cold tolerance in Beard's study. It yields slowly in the spring to the warm-season turfgrass for good spring transition. The fescues establish quickly in the fall and these tough grasses provide protection to less wear tolerant grasses. Kentucky bluegrass is slow to establish but can provide color benefits in late winter and spring.

These grasses are applied at very high seed rates and remain juvenile throughout the period. They can be vulnerable to diseases during establishment. If the seed does not make good soil contact it is virtually wasted.

Timing varies according to location. Seeding should take place in late September in the northernmost limits and in early December in southern Florida.

If seeding is done too early, the competition from the warm-season grass will render it useless. If done too late, the temperature may be too low to achieve good germination. Three weeks of preparation may be required before seeding.

O. M. Scotts recommends very low mowing without scalping followed by vertical mowing in several directions to open up the soil, remove thatch, and prevent obvious rows. Debris should be removed. Coring to solve compaction should take place three weeks prior to seeding to allow the holes to heal. Some of these steps can be consolidated by use of a seeder which uses a disc to cut grooves for the seed.

The seeding rate can approach 20 lbs. per 1,000 square feet or more.

After the seed is down, the area may be dragged to improve seed/soil contact.

Research has shown that topdressing greatly improves germination. Daniel recommends spiking between seeding and topdressing. A complete starter fertilizer should then be applied and the area kept moist for three weeks or more. Application of a fungicide is often recommended to prevent serious brown patch injury.

Mowing can begin a week after seeding at a 5/16-inch until the mixture is established. A second application of nitrogen should follow germination with regular feeding thereafter.

In the spring as the temperatures rise and the warm-season turfgrass begins growing again, the cool-season grasses should not compete with it. Whereas bermuda may leave dormancy in less than two weeks in the deep South, it may

Winter overseeding protects warm-season grasses while in dormancy.

take five weeks or more in the transition zone. This should be considered when selecting an overseeding mixture. Also, different species and cultivars respond differently to overseeding. Some adjustment may be needed.

John Madison, former turfgrass specialist at the University of California, recommended in his book, *Practical Turfgrass Management*, that heating cables in the soil surface could eliminate the need for overseeding by preventing dormancy of the warm-season turfgrass. This idea has apparently lost out to the believers in overseeding. **WTT**