

CHALKBOARD

TIPS FROM THE PROS

SPRING TRANSITION - REMOVING OVERSEEDED RYEGRASS

Overseeding warm-season turfgrasses with cool-season grasses to improve color, playability and durability during the fall, winter and early spring is becoming a common practice on golf courses and sports fields in the South. As more sports turf managers overseed, more questions are being raised about the competition between turfgrasses, especially during spring transition.

"Overseeding is a physically damaging process to a turf," warns Gil Landry, extension turf specialist for the University of Georgia in Athens. "In addition, the cool-season grass provides competition to the warm-season grass for sunlight, nutrients and water. Minimizing that competition during the spring can be very important."

Landry says there is very little scientific data to support management practices commonly recommended and used to encourage transition from overseeded ryegrass to a warm-season turf. Most of the research has been limited to bermudagrass putting greens. Other factors, such as intense traffic, can also have a harmful impact on dormant warm-season turf and need to be explored.

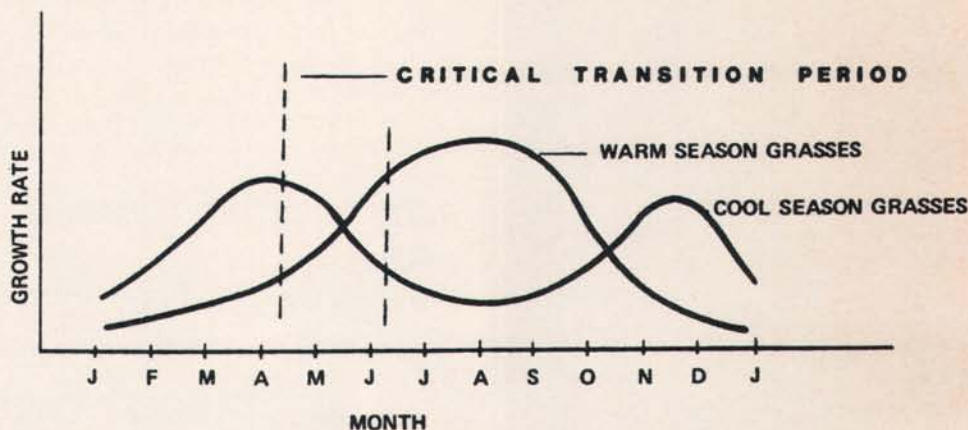
Based upon current research, the following suggestions are provided by Landry for your consideration. The accompanying graph illustrates the seasonal growth patterns of both warm-season and cool-season grasses. Note that late spring and early summer are critical transition periods for warm-season turfgrasses.

The following spring cultural practices should enhance warm-season growth while discouraging the cool-season grass:

- Lower the mower height several weeks before expected spring green-up. This reduces shading, warms the soil, and sets back the overseeded grasses.
- Core aerify weeks before expected spring green-up to promote turf growth by warming the soil.
- Wait to fertilize until two to three weeks after spring.
- Maintain good soil moisture for the new roots being produced by the turf.

"However, probably the most important factor relating to a successful transition is proper management throughout the entire growing season, not during the transition period," Landry advises. "Proper mowing, fertilization, irrigation, pest management, thatch control, and traffic control during the summer and fall are very important to transition the following spring." The condition of the warm-season turf as it enters dormancy

SEASONAL GROWTH PATTERNS OF GRASSES



has a big influence on its competitiveness the following spring.

Some research suggests that plant growth regulators such as mefluidide (Embarc) are a possible means of hastening transition. Herbicides are also being tested for use in smoothing transition. Recent research by Dr. B. J. Johnson at the University of Georgia demonstrated that an April application of either pronamide or paraquat decreased the percentage of ryegrass during the summer by 20 percent or more. Untreated check plots were still 30 percent ryegrass in July (see table).

Meanwhile, seed producers are beginning to select ryegrasses with lower heat tolerance for overseeding so they will not compete as vigorously with the bermudagrass in the spring. Certain ryegrasses are so heat-tolerant and disease-resistant they can hang on almost year-round. At the same time, some turf managers are beginning to lower fall overseeding rates, sacrificing the deep green

color of dense seedings for lower ryegrass population in the summer.

Research by Dr. Vic Gibeault, which is nearing completion at the University of California in Riverside, will reveal the competitiveness of certain cool-season grasses and will show the effect of wear during fall and winter on both dormant warm-season turfgrasses and overseeded cool-season ones.

Good spring transition, according to Landry, begins the previous growing season. Springtime practices which encourage warm-season turf growth include low mowing heights, drying wet soil, irrigating dry soils, and properly timed fertilization. As more research is carried out, a clearer picture of spring transition will emerge.

Editor's Note: This month's Chalkboard was adapted from an article by the same title by Gil Landry of the Extension Agronomy Department at the University of Georgia, Athens, in the Winter 1989 edition of Turfgrass Topics.

Influence of Herbicides on Transition From Overseeded Ryegrass to Bermudagrass, 1987.

Treatments	Ryegrass to bermudagrass transition (%)					
	May		June		July	
	Bermuda	Rye	Bermuda	Rye	Bermuda	Rye
Untreated	50	50	60	38	68	30
Pronamide	53	47	60	40	88	11
Paraquat	66	8	85	9	94	1

B.J. Johnson. Journal Amer. Soc. Hort. Sc., 113 (5): 662-666. 1988
Herbicides applied April 20, 1988