

For year-round green fields, overseeding turns the trick

The key to effective overseeding is adequate year-round maintenance of your warm-season athletic turf.

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■ Overseeding warm-season sports fields with cool-season grasses during the fall and winter can:

- ✓ improve appearance,
- ✓ develop higher-quality facilities,
- ✓ smooth out the playing surface,
- ✓ yield superior traction, and
- ✓ increase traffic tolerance.

and pest tolerance, and manageability. The "intermediate" ryegrasses tend to perform as the name implies: between annual and perennial ryegrass.

Cultivars that perform well in the fall and do not persist in the spring are generally ideal for football fields, like first-generation perennial ryegrasses (such as Derby, Manhattan, Pennfine and Yorktown II) and intermediate ryegrasses (like Agree, Oregreen and 3CN). More persistent and traffic-tolerant cultivars (Prelude II, Palmer II, Gator, Fiesta II, Birdie II, Citation II and Assure, to name a few) are more suited to spring sports like baseball and soccer.

The overseeding rate (see table) is one of the more important factors affecting establishment and spring transition. Seeding rates of 300 lbs./acre or more

seed that is free of annual bluegrass (*Poa annua*) is essential. It is also important to use seed treated with fungicides (such as Apron, Koban or Subdue)—particularly for early fall overseeding—to help prevent seedling blight diseases.

If overseeding is properly timed, a gradual transition from warm-season turf to cool-season turf and back again results. Common timing indicators include: temperatures at a four-inch depth approaching 75°F; night temperatures consistently in the 50s, average midday temperature below 70°F; or two to four weeks prior to the average annual first killing frost date.

Preparation—Overseeding preparation generally consists of close mowing or scalping, verticutting and coring. For areas with little thatch, sweeping with power brooms and scalping is often enough preparation. As a rule, the more the turf is opened, the better the establishment rate, the better the wear and stress tolerance, and the more competitive the cool-season turf will be in the spring.

The steps:

- 1) Seed and drag into soil.
- 2) Lightly irrigate (three to five times daily until seedlings are well established, then gradually reduce to normal watering).
- 3) Minimize traffic during establishment.
- 4) Mow when seedlings are 30% higher than desired. Use a mower with sharp blades and mow when the grass is dry to reduce seedling injury.
- 5) Begin fertilization after seedling emergence, which is generally three weeks after seeding. Earlier nitrogen fertilization may encourage warm-season turf competition. (Generally, 1 lb. N/1000 sq. ft./month is adequate.)

Proper transition—Fertilization, irrigation, mowing, thatch and traffic control, cultivation and pest management throughout the year affect transition. A good transition also requires knowing and making use of normal climatic conditions. Most warm-season turfgrasses resume growth when soil and night temperatures approach 60°F. Sometimes, forcing soil



Landry: Seeding rates of 300 lbs./acre or more tend to decrease establishment time of overseeded warm-season athletic fields.

Successful overseeding involves selecting the proper seed, proper timing and preparation, maintenance, and transitioning out in springtime. It also requires maintaining a healthy warm-season turf throughout the year. It is particularly important to maintain proper soil fertility, to relieve soil compaction, and to prevent excessive thatch.

For best results, select the appropriate overseeding grasses. Annual ryegrass has rapidly been replaced by perennial ryegrasses, fine fescues and rough bluegrasses because of improved turf quality, stress

tend to decrease establishment time and increase spring transition time because of greater competition.

Using high quality, "certified" blue tag

Suggested turfgrass overseeding rates

Location	lbs./1000 sq. ft.	lbs./acre
soccer/football	7-10	300-400
baseball outfield/sidelines	5-10	200-400
baseball bench areas/infield	7-10	300-400

Source: Dr. Landry

temperature increases by aeration can lead to early spring growth and premature reduction of overseeding, particularly when cool spring temperatures follow.

Maintaining a mowing height that prevents the ryegrasses from shading out the bermudagrass is critical to a smooth transition. Lowering the cutting height when soil temperatures increase stresses the cool-season turf and aids in warming the soil. Although coring, verticutting and topdressing also may help increase soil temperatures, these practices recently have been shown to inhibit warm-season recovery and thus should be avoided during green-up.

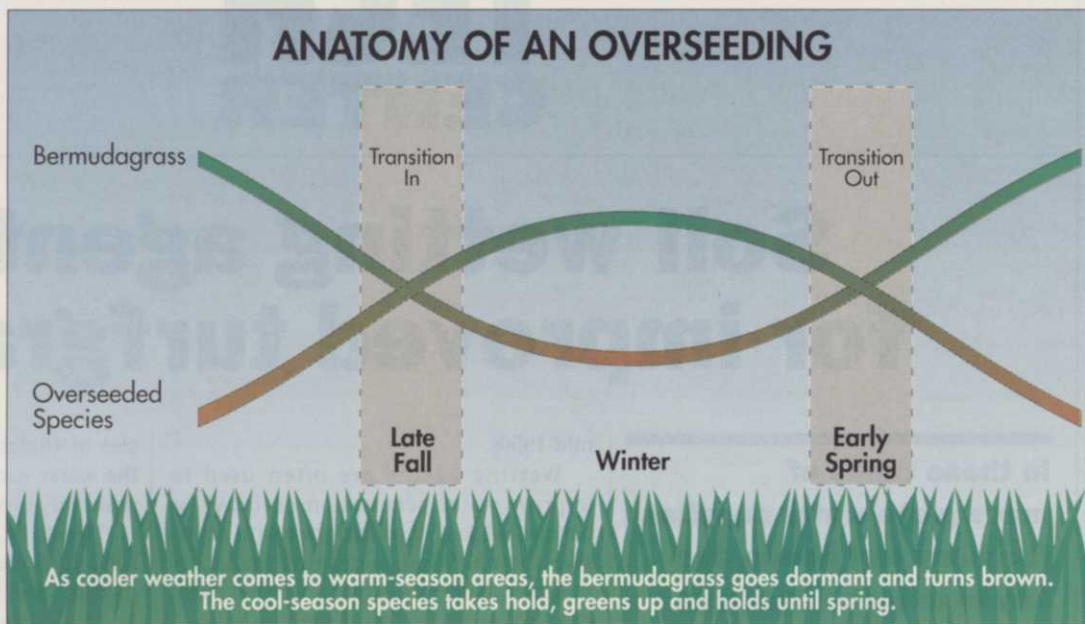
When temperatures are high enough, an application of soluble N can stimulate warm-season growth and encourage cool-season decline. Chemicals such as Retard

or Slo-Gro, Embark, Kerb and some crabgrass pre-emergence herbicides also have been shown to encourage transition by reducing cool-season grass survival.

The key to successful overseeding is the same as with most other turf management programs: it requires proper year-round turf management and understanding to

what degree growing conditions are dictated by weather.

—As extension turfgrass specialist with the University of Georgia, Dr. Landry provides leadership in developing statewide educational programs in turf management. He is president of the Sports Turf Managers Association.



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