Winter Overseeding

by

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Fall is the time to overseed lawns and fields for winter green color, to establish protective covers for warm-season grasses, and to provide acceptable playing sports surfaces. If green swards are on your agenda of things to do before hibernating for the winter, it's not too late to prepare and seed cool-season turfgrasses in most of the South. In the upper South, warm-season turfgrasses stop growing and turn brown after the first hard frost of fall. Even in the Deep South, subtropical species like centipede and St. Augustine are not at their best in winter and are particularly susceptible to chilling and cold damage. Bermudagrasses generally go dormant over the entire winter season and do not begin to 'revive' until temperatures reach the upper 60s in late spring. So if a green winter lawn is important or if the big game is around the corner, it's now or never to overseed.

Year-Round Management With Overseeding In Mind

Ideally, preparation is year-round. Keeping your base warm-season turf is the key to a successful overseeding and spring recovery. Before the warm-season turf goes dormant, proper fertilizing, watering, and soil preparation is essential. Pre-plant soil-based applications of lime, phosphorous, and potassium will help to protect the base grass from cold injury and promote the rooting of overseeded turf. Lime helps to correct soil acidity and brings the reactive soil pH to the optimal zone for growing turfgrasses (pH 5.5-6.5). Phosphorous is associated with rooting and seed establishment. Potassium is important for improving cold and winter desiccation tolerance of both cool- and warm-season turfgrasses, and for improving wear tolerance of overseeded athletic field turf. Moreover, reducing the N:K ratio in your turf fertilizer will help reduce the competitiveness of bermudagrass and other warm-season grasses without compromising the heath of the turf. Alleviate soil compaction and reduce thatch accumulation through core aerification throughout the optimal growing period. The above practices, along with vertical grooming, are necessary to develop a good seed bed for overseeding.

Overseeding Timing

The best time to overseed is when the warm-season grass is slowing down. This reduces competition from unwanted grasses. Typically, overseeding should be initiated two weeks prior to the first frost in the upper South and in high elevation areas or when soil temperatures reach about 65-70° F. In coastal North Carolina and Virginia, the last cutoff date is early-mid November. Gulf Coast states can overseed through November, and much of Florida can overseed through mid December.

Overseeding And Winter Lawn Pointers

Before seeding, first remove excess thatch through verticutting, slicing, spiking, or core aerifying to encourage seed and soil contact. Very close mowing and clipping removal just prior to seeding will further open the turf up. Soil coring should be done a few weeks before the seeding date. After drying, the soil should 'dragged' back into the turf with link fence mats. This is also the optimal time to level low areas. Apply sufficient quantities to bring the surface back up to grade to provide a level playing area.

Seed in at least two directions. Rake seed into soil and lightly topdress for seed coverage. Next, prudent watering is essential. Apply light applications at least twice a day until seeds have germinated and a solid green cast appears. Then reduce irrigation frequency to reduce disease pressure. Once mowing is initiated, water only on an 'as needed' basis. Maintain your winter lawn/field as you normally would. Mow when grass reaches 1-2 inches height. Fertilize on a regular basis to encourage rapid growth and recuperation after heavy play. The first fertilization after establishment should be made about one week following full germination with a complete fertilizer at a nitrogen rate of 0.5 lb. per 1,000 sq. ft.

Seed Types

There are more grass genera and varieties within the genera than ever before. For most lawns and athletic fields, perennial and annual ryegrasses remain the most popular, especially when cost is a concern. Ryegrasses are quick to establish and have excellent wear tolerance. When considering perennial ryegrass, specify 'turf' types which are finer-textured, dark green cultivars. Even though more expensive than common perennial or annual ryegrasses, 'turf type' perennial ryegrasses provide high value and superior performance. Choose late (e.g.,'Delray' , 'Prelude') or early (e.g., 'Manhattan', 'Derby') aggressive ryegrass varieties based on your need.

Consider blends of ryegrasses for diversity and mixtures, too. Ryegrasses are often mixed with fine fescues and rough bluegrass. Moreover, don't overlook tall and fine fescues, rough (*Poa trivialis*) and Kentucky bluegrasses, and even bentgrasses as stand-alone overseeding candidates. Many of these types are used throughout the South on golf courses with great success; so why not use them on other venues?

Cost impacts seed quality. Strive for the least amount of crop and weed seed in your mix, and always specify 'blue tag' certified seed if it is available in your region. Set high standards for purity and percent germination. Fungicide-treated seed is a must for athletic turf areas, as treated seed is less susceptible to *Pythium* diseases. Seeds should be treated with either Subdue, Apron or Koban. When using untreated seed, keep on the lookout for disease development. It can occur quickly and can be devastating if not treated. Purchase a bit of extra seed for re-applying to poorly germinating areas or areas which receive excess wear.

Seeding Rate

Rates are dependent upon the grass selected and the intended use. Small-seeded grasses like Kentucky bluegrass can be seeded at lower rates compared to large-seeded types, such as ryegrasses and fescues. Areas receiving a lot of play will need higher rates than areas that are being overseeded just for aesthetic green color. When cost is not a limitation, high seeding rates will provide a more uniform color and cover. For lawns and fields, seed ryegrasess at 10-15 lbs. per 1,000 sq. ft. For ball fields, apply ryegrass at up to 20 lbs. per 1,000 sq. ft. when seeding high-use areas such as infields, goal areas, benches, and sidelines. For low-use outfields, seed at 5-10 lbs. per 1,000 sq. ft. Overseeding rates for lawns with bentgrass, bluegrass or fescue are 1, 3, and 7 lbs. per 1,000 sq. ft., respectively.

Spring Transition

To allow for the permanent grass cover to regain dominance, do not encourage temporary winter grasses in the spring. Most cool season turfgrasses will lose vigor with a little assistance from you. First, discontinue fertilization in late February and March. Reduce watering and mow closely. Combined, these cultural practices will stress the winter turf. As soil and air temperatures increase along with day length, the warm-season turf will emerge from dormancy primed for competition and a new season of growth. Once out of dormancy, follow your normal warm-season maintenance program.

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