How to Overseed Dormant Bermudagrass

by Dr. Leah A. Brilman

The exact methodology for establishing cool season grass into a bermudagrass stand may depend on the bermudagrass usage on golf course green, fairway, tee or rough to sports field or home lawn. Which species of cool season grass you utilize for overseeding may also depend on the underlying bermudagrass cultivar and the turf usage. The ultimate aim is to grow a stand of cool season grass with the least harmful influence on the bermudagrass. The difficulty is that overseeding must be scheduled around potential use. Described here is the best preparation done for maximum effectiveness.

Sports Fields, Golf Course Fairways, Tees, Roughs

1. During the summer, well before overseeding, remove any excessive thatch. Improved seeded bermudagrass or common bermuda develop less thatch than vegetative hybrid bermudagrass. Remove debris from dethatching. Summer timing of this process allows for maximum recovery and health of the bermudagrass base.

2. Aerify the bermudagrass if soil compaction is evident. This is also best done in the summer so the bermudagrass recovers before overseeding. Drag or rake to break up cores.

3. Stop fertilizing the bermudagrass one month before overseeding is scheduled and raise the height of cut two weeks before by 40 to 50% (i.e., if mowing at .5 inch, bring it up to .75 inch).

4. Purchase seed for overseeding (listed from highest to lowest turf quality)
   a. 100% 3-way blend improved Perennial ryegrass
   b. 30% Transitional (intermediate) ryegrass and 70% Perennial ryegrass
   c. 50% Transitional ryegrass and 50% Perennial ryegrass
   d. 100% Transitional ryegrass
   e. 100% Annual ryegrass

5. Additional seed choices for golf course fairways, tees and roughs:
   a. 20–30% Chewings fescue or Slender creeping red fescue and 70–80% Perennial ryegrass
   b. 20% Poa trivialis (rough bluegrass) and 80% Perennial ryegrass

6. Date of overseeding depends on weather and any events scheduled. Ideally, it should be done about one month before frost. Plan to overseed mature stands from late September through mid-November when night temperatures drop under 60 degrees F. If your schedule forces you to overseed earlier make sure you provide Pythium (seedling damping off) protection.

7. Stop watering bermudagrass seven days before overseeding (or cut watering in half and stop 1–2 days before).

8. Scalp the bermudagrass by reducing the mowing height (back to normal height). This opens up the stand so the seed can reach the soil. Light de-thatching may help open up stand also, but do not perform an aggressive dethatching in the fall.

9. Drop the seed in two directions at 8–20 pounds of seed per 1000 sq. ft. total. Seed rate depends on turf use, species seeded, growing zone and desired appearance.

10. Rake or drag seed into soil or cover lightly with a topsoil or mulch. You can mow seed in without grass collector on the mower to form a mulch layer for seed.

11. Water 3–4 times per day for a short period each time to keep seedbed moist, but not saturated. After seed germinates, start reducing water frequency for the next 10–14 days. Check with your local university extension agency for watering winter turf.

12. Start mowing when ryegrass is 2 inches tall. Mow a 1/2 inch off. Gradually reduce mowing to desired height. Never remove more than 1/3 of the turf height at one time when mowing.

13. You now need to shift management to winter turf. Fertilize with 0.25–0.5 pounds of soluble nitrogen every 2–3 weeks or use 1 pound slow-release nitrogen every month. Keep watering and mowing to keep the cool season grass actively growing through the winter and spring.

Transitioning back:

1. Transition back to bermudagrass starts when temperatures warm in spring. Warm springs have better transition with more bermudagrass regrowth.

2. Start reducing mowing height by 35% and increasing frequency of mowing when temperatures are above 70 degrees F. Extensive verticutting or aeration at this time is just as likely to damage the regrowing bermudagrass as the overseeded grass.

3. Fertilize and irrigate to encourage growth of bermudagrass. Check with your local extension agent for spring and summer bermudagrass care.

4. Use herbicide transition aids in cooler locations. Check with your local distributor for products, timing and rates. Remember bermudagrass is best if it has 100 days summer growth without overseeded grass on it.
Golf Greens, Lawn Bowling, Grass Tennis Courts

1. During the summer maintain the greens with regular brushing, grooming, topdressing and aeration to control the amount of thatch. Excessive verticutting on ultradwarf bermudas may damage the stand.
2. Stop fertilizing 3 weeks before overseeding date, and raise mowing height slightly 10 days before (roll greens to maintain speed).
3. Purchase seed for overseeding. Species choices below. Species chosen based on seed size (listed largest to smallest and special use. Smaller seed size is better for ultra-dwarf Bermudas).
   a. 100% 3-way blend of improved perennial ryegrass (30–35 lbs/1000 sq ft)
   b. 30% Chewings fescue or Slender creeping red fescue and 70% Perennial ryegrass (25–30 lbs/1000 sq ft)
   c. 20% Poa trivialis, rough bluegrass and 80% Perennial ryegrass (20–30 lbs/1000 sq ft)
   d. 20% Velvet bentgrass and 80% Poa trivialis, rough bluegrass (6–10 lbs/1000 sq ft)
   e. 20% Velvet or Colonial bentgrass and 80% Chewings fescue or Slender creeping red fescue (8–15 lbs/1000 sq ft)
   f. 20% Creeping bentgrass and 80% Slender creeping red fescue (8–15 lbs/1000 sq ft)
   g. 100% Creeping bentgrass (2–5 lbs/1000 sq ft)
4. Seeding date recommendations are the same as for the sport field section. If seeding early, purchase seed with fungicide treatment for Pythium control.
5. On overseeding day brush the greens to raise stolons and scalp the bermudagrass. Light verticutting only to remove leaves from bermudagrass if necessary. Too much fall verticutting can influence how well your bermudagrass returns in the spring. Fertilize with a balanced fertilizer.
6. Drop the seed in two directions for more uniform coverage and then top-dress and roll.
7. Water the greens lightly, multiple times during the day, to keep the seedbed moist while seed is germinating. Gradually reduce watering after emergence.
8. Start mowing 2 weeks after emergence and gradually reduce to desired mowing height and frequency.
9. Fertilize and irrigate to maintain the cool season grass in the winter using at least 0.25 lbs of soluble nitrogen every 2 weeks. The aim is to keep the grass actively growing. Topdress as necessary to maintain firmness and control thatch. Spike aerify if needed.

Transitioning back:
1. Stop fertility in mid-spring as the temperatures start to warm up over 70 degree F to prepare for transition.
2. Transition can often be accomplished by lowering the height of cut or scalping as the temperature increases. Transition herbicides can be used but may be more objectionable on greens and less necessary.
3. Fertilize with 3/4 lb N per 1000 sq ft at time of scalping and fertilize again with 3/4 lb N per 1000 sq ft one week later to encourage bermudagrass growth. Keep the green moist to encourage new bermudagrass roots.
4. Traditionally it was recommended to aerify and verticut to help remove the cool-season grass and warm the soil for better bermudagrass regrowth. Recent research suggests this may harm the bermudagrass more than desired during the critical regrowth period.

Easy Home Lawn Overseeding

1. Mow the bermudagrass very short (scalp).
2. Drop the seed in two directions.
3. Drag the seed into soil.
4. Top-dress the seed with soil or mow without clipping collection bag to cover the seed and help hold moisture.
5. Water lightly a few times during the day to keep seed moist.
6. Start mowing in 2 weeks and never remove more than 1/3 lawn height.