



Overseeding Troubles Hit the Southwest

By Pat Gross

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Winter overseeding quality has suffered this year at many of the desert courses in Palm Springs, Las Vegas, Phoenix, and Tucson. High temperatures in October and November caused the bermudagrass to keep growing strong and smother the seedling perennial ryegrass despite repeat applications of growth regulators to keep the bermudagrass in check. Although conditions looked good in early November, much of what people were seeing was the actively growing bermudagrass. After a few days of frost in December, the bermudagrass is now dormant, producing a patchy appearance and disgruntled golfers who are used to seeing a perfectly green golf course.

What happened? Good overseeding quality is dependent on the proper air and soil temperatures at the time of seeding. Optimum conditions include:

Optimum temperatures for successful overseeding

- Daytime temperatures between 60° - 75°F.
- Night temperatures consistently between 50° - 60°F.
- Soil temperatures near 75°F.

Historical weather data in the Southwest indicates that temperatures are ideal for seeding in early to mid October in most areas of the region, but this was a year when the historical data got thrown out the window. Temperatures remained hot through November, quickly followed by frost in mid December. The following is a brief synopsis of weather data from the Palm Springs area:

Temperatures in Palm Springs - Fall 2001

- First daytime temperature below 90°F October 29th
- First daytime temperature below 80°F November 23rd
- First night temperature below 50°F November 26th

After visiting a few courses that have experienced problems, it was easy to see that there were plenty of seedlings present, but the plants were thin with only 2 to 3 leaves per plant. As you can see, conditions were never favorable until Thanksgiving, and by

then it was too late and too cold to get any new seed established.

What can you do? In most cases, the best thing to do is not overreact. Allow temperatures to gradually warm and this will stimulate perennial ryegrass growth. During this time, it is important to control traffic and keep the focus on playing quality. Verdant green perennial ryegrass is pretty to look at, but dormant bermudagrass provides a good playing surface as well. If you must start looking for a quick fix, here are a few things to try:

- Spot aerify the affected areas with 1/4" solid tines to slightly warm soil temperatures and stimulate perennial ryegrass growth.
- Consider pre-germinating perennial ryegrass seed and spot seed and weak areas. Pre-germinating seed can be done by using a clean 55 gallon drum or clean plastic tank filled with water. Next, place 25 lbs. of seed in a burlap bag and set the bag in water with a continuously running air hose at the bottom of the barrel. Change the water at 6, 12, and 24 hours. At the end of 36 to 48 hours, pour off the seed onto a fine screen and allow to dry. The seed should not have the white root (radical) exposed yet. If a small root is visible, the seed must be spread by hand. Seed affected areas in one direction at the rate of 10 - 15 lbs./1000 sq. ft. and brush the seed into the turf. Pre-germinating seed is not practical on a large scale and is only intended for small sections of the course.
- Topdress any reseeded areas with a light covering of organic compost.
- The use of *Poa trivialis* may be an option for spot seeding areas of fairways, rough, and tees. *Poa trivialis* germinates better in cold weather, but the seed is more expensive and germination often takes 14 days.
- Fertilize at a light and frequent rate using a combination of ammonium and nitrate based nitrogen fertilizers at a rate of no more than 3/4 lb. per 1000 sq. ft. every two weeks. Excessive fertilizer applications to push the turf should be avoided at all cost and will only serve to damage the existing seedlings.
- Restrict cart traffic to the greatest extent

possible.

- Green latex turf paint can also be used to cover spots of dormant bermudagrass.

Overseeding is a temperature game, but superintendents must make preparations for this time consuming practice based on the calendar and the needs of their course. In most cases, this leaves no option for seeding the course when temperatures are ideal. The result is poor overseeding quality during years when temperatures are above normal in October and November. Hopefully, conditions will bounce back soon.

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Quick Quote

"It is a well-known fact that badly drained land will positively not produce satisfactory turf for golfing purposes."

Donald Ross