



THREE STRIKES AND BERMUDAGRASS IS OUT

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By late spring and early summer, it is time for bermudagrass to emerge from winter dormancy. Bermudagrass utilizes carbohydrates stored in underground rhizomes to produce new leaves every spring when temperatures in the top 4 inches of soil reach about 65 degrees Fahrenheit. According to Dr. James Beard, bermudagrass has about three chances to produce new leaves while trying to emerge from under the shade and competition of overseeded grasses before it will strike out and die. If a new leaf is unable to capture sunlight – strike one. This process repeats several times until, you guessed it, strike two and strike three. After strike three the bermudagrass has spent its entire carbohydrate reserves and sampling the soil will reveal hollow rhizomes. However, if the rhizomes snap like breaking apart a celery stick, the bermudagrass still has some carbohydrate reserves left and a chance to get back to the plate.

A proactive management regime is necessary to encourage successful bermudagrass recovery. Here are five key components of a successful transition for the desert southwest:

1. Height of cut – Height of cut is critical. Begin lowering the height of cut on all overseeded areas in late January. The rough height of cut should not exceed 1 inch after January 31 and should be progressively lowered through the spring to reach 0.625 inch by late March. Some courses further lower the rough height of cut to fairway heights near 0.350 inch by mid-April. Many golfers like the short rough, enjoying the wider landing areas and often finding it visually attractive.

2. Soil moisture management – Dry conditions equal poor bermudagrass recovery during late spring and early summer. It is critical to prevent areas from becoming chronically dry from April through early June because it will delay bermudagrass transition.

3. Chemical removal – Many courses use a variety of tactics to chemically remove overseeded ryegrass without injuring the understory bermudagrass. However, don't wait until June to employ this strategy, because much of the bermudagrass may have already struck out. This tactic is much more effective when used mid-April to mid-May.

4. Nitrogen inputs – Soluble nitrogen sources such as urea and ammonium sulfate should be applied in coordination with chemically removing overseeded grasses. Soluble nitrogen sources stress ryegrass during warm daytime temperatures while providing nutrients for emerging bermudagrass.

5. One hundred days plus – To stick with the baseball analogy, it would be nice to give bermudagrass 162 days of growth in the absence of competition from ryegrass. However, 100 days is the guideline courses should keep in mind when planning overseed dates and timing chemical removal of overseeded grasses. If ryegrass growth is retained well into June, the ability of bermudagrass to develop the rhizome growth necessary to recuperate the following year will be severely limited. In other words, maintaining ryegrass into June could result in a season-ending injury for bermudagrass.

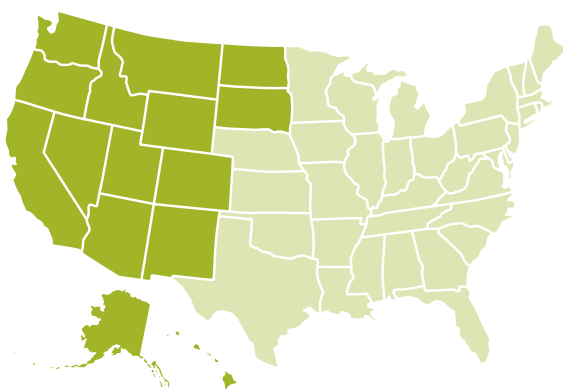
Growing two grass crops annually is a tenuous situation. Extending the ryegrass growing season into June at the expense of bermudagrass health is analogous to a baseball pitcher having Tommy John surgery – it's at least one year of rehab for 100-percent recovery.

For more information on strategies to optimize summer and winter turf conditions, contact your regional [USGA Agronomist](#).



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