Perennial Ryegrass Competition Affects Bermudagrass Health

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Objective

Determine how duration of overseeded perennial ryegrass competition affects bermudagrass cover and biomass accumulation.

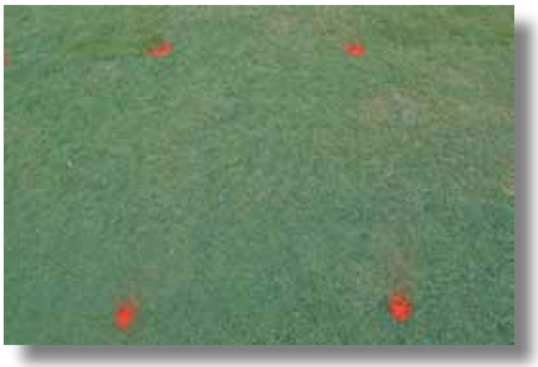
Summary

In the transition zone and desert Southwest, bermudagrass requires considerable competition-free time to remain healthy. Competition from overseeded grasses and an extreme environment can lead to thin bermudagrass cover and poor playing conditions while overseeded grasses are removed. Poor bermudagrass performance can extend into the summer.

In each of two years, individual plots of Patriot, Midiron and Riviera bermudagrass were overseeded with perennial ryegrass in the fall. In spring, a herbicide was applied every week for 24 weeks to a previously untreated plot to remove the overseeded perennial ryegrass. Bermudagrass cover was visually rated in mid-August to assess the performance of the herbicide application dates. The number of competition-free days was counted and growing degree days (GDD) or heat units were determined for the competition-free period to determine quality of those days for bermudagrass recovery.

Results

- Bermudagrass needs both time and heat units to recover from overseeding after perennial ryegrass has been removed.
- In most cases, 60 to 120 competition-free days will provide a full recovery, given sufficient heat-unit accumulation during the recovery period.
- More aggressive bermudagrass varieties need fewer days of noncompetitive growth and cumulative noncompetitive growing degree days to obtain acceptable bermudagrass cover.



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