



Identifying and Treating Winter Kill in Turf by Dr. Clint Waltz, UGA

We've received many questions regarding grass that has failed to green-up this spring. With variations among four different warm-season species, multiple climatic conditions, and because of the wet conditions leading to a likelihood of disease, there is much to be said on the topic of "winter kill". In many incidents there are circumstances and extenuating factors that make a specific diagnosis difficult. If there were a year for winter kill, after the cold conditions this past winter and early spring, this would be the year for it.



Dr. James McCurdy at Mississippi State has written a good blog on winter kill in his state, and over the past 30 to 45 days I've seen many of the same issues in Georgia so my comments would be consistent with his.

- In many cases, bermudagrass has greened-up and is beginning to grow. I've seen a few lawns and pictures of some bermudagrass that is still brown. Patience may be the key with bermudagrass. Soil temperatures have only been conducive for growth for about two weeks. Remember bermudagrass has rhizomes, below ground stems, that were likely well insulated by soil. Warmer temperatures and time will likely be suitable for bermudagrass recovery. Check for extenuating factors like shade and ask questions about how long ice or snow remained on the lawn / grass. I have seen some incidences where sledding occurred and the brown tracks are consistent with the path of wintertime fun.
- Hybrid bermudagrass have recovered better than common-type (i.e. seeded) bermudagrasses. The commons are recovering all be it slowly.
- Zoysiagrass have fared well but are slow to resume active growth. See my comments for bermudagrass regarding soil temperatures and patience. Remember, zoysiagrass is inherently a slow growing species, so recovery is going to take time. It too has rhizomes and with time will regenerate itself as environmental conditions become favorable for growth. To help, vertical mowing (i.e. verticutting) can aid in getting light and warmth to the soil surface. This cultural practice can help remove dead leaf material and speed recovery.
- Centipedegrass and St. Augustinegrass have suffered the greatest. There are many cases where reestablishment is going to be the best option. Consider making the decision early (i.e. now) and getting started with sodding or seeding as soon as possible (see slides)
- In my plots the three primary St. Augustinegrass cultivars grown in Georgia (i.e. Mercedes, Palmetto, and Raleigh) have had some degree of damage. The difficulty with

St. Augustinegrass is that in sod production it typically does not "lift" well during the spring, so it's early summer before producers can provide a quality product. If a homeowner is considering re-sodding St. Augustinegrass they can start site prep now but be prepared that quality sod may not be available until mid-June.

- Typically I don't consider environmental injury as a primary culprit to turfgrass loss, but after last summer and this past winter it's real this year, especially for centipedegrass. I've seen several centipedegrass, and St. Augustinegrass lawns, that will likely need complete re-grassing. There is little that can be done to recover these lawns in a timely manner and "sanding" will likely be of little help. TifBlair does have improved cold hardiness relative to common centipedegrass but this year I've seen it injured too. But that seems specific to areas that remained under ice or snow for several days. TifBlair in more open areas where the sun shortened the duration of snow cover seems to be delayed but greening.
- If reestablishment either from sod or by seed is desired now is an appropriate time for either practice. In fact, if seeding is chosen the earlier the better. If the lawn was healthy going into the fall, seeding may be the better option. The homeowner can mow the existing lawn low (i.e. scalp), collect the biomass (i.e. clippings), opening the canopy for seeds to make soil-to-seed contact. By keeping some of the existing grass it may help speed recovery and provides a medium for seed to become established (i.e. a nurse grass). The caveat to this is there was no preemergence herbicide applied this winter or spring. If so, then don't seed. The herbicide will kill the germinating centipedegrass seed too. Lastly, follow watering and establishment practices for a newly planted lawn.