

Green Section Record

REGIONAL UPDATE

April 6, 2018



Diffuse and patchy may be the best descriptors for this winter's damage caused by cold temperature injury.

IT COULD HAVE BEEN WORSE

BY JIM SKORULSKI | AGRONOMIST, NORTHEAST REGION

Most golf courses across the region appear to have survived this rollercoaster winter, including the recent Nor'easters. However, not all golf courses escaped unscathed. Some annual bluegrass greens have experienced injury; injury that appears to have resulted from exposure to very cold temperatures and flash freezes that occurred in late December and January.

This season's damage is not as widespread or severe as what has been experienced in the past. Injury is now becoming more evident on some coastal golf courses north of Boston, around Cape Cod, and in parts of Connecticut where the weather and ground conditions left exposed sites more vulnerable to damage. Golf facilities farther north are unsure of what to expect as the snow there continues to recede. Also unknown is the extent of injury on bermudagrass greens in the Mid-Atlantic. Most of the concerns there are about turf in slow-draining areas on greens.

The damage patterns on greens this season appear to be different from what we normally see. The damage is more diffuse and widespread across greens. Low, pocketed areas have been damaged as well but in most cases are not devastated. Perennially wet greens seemed to have less-severe injury. Damaged areas also lack the characteristic “smell of death” commonly associated with winter-damaged turf.

There are some interesting observations as the winter puzzle comes together:

- Based on damage patterns and the weather, it appears that the injury we have seen so far is related to the cold temperatures and flash freezes that occurred during January.
- Windy conditions during the arctic blast may have indirectly influenced the cold temperature injury by removing protective layers of snow. However, it is unlikely that desiccation is a primary factor behind this season’s injury.
- Some greens protected by permeable covers at several golf courses suffered injury similar to that observed on uncovered greens.
- Turf beneath the seams of permeable covers appears less injured, probably due to the added insulation provided by the thicker material at the seams.
- Greens protected by white-colored, impermeable cover systems and some sort of insulation fared much better than uncovered greens.
- Surprisingly, higher soil moisture may have offered some protection against rapidly falling temperatures.



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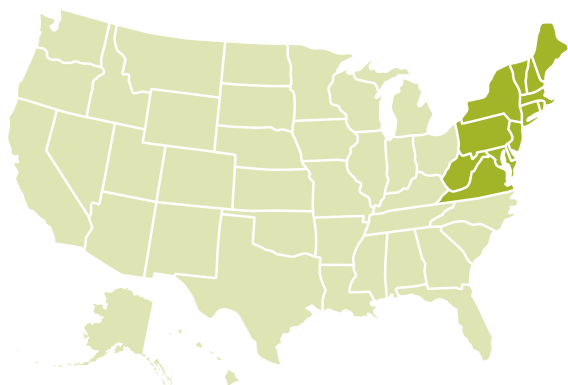
Annual bluegrass that shows some signs of injury may still be alive but remains vulnerable as we transition into spring. Focus on keeping those compromised plants alive using covers to protect against desiccating winds and getting irrigation systems operational as soon as possible.

The diffuse damage patterns should make recovery a bit faster and easier. Keep damaged areas closed as long as possible to speed the recovery process. Areas with more severe damage should be kept closed to play longer as they will be much slower to recover and are more vulnerable to traffic.

If needed, use various overseeding strategies and tactics to establish new plants and warm the soils to hasten establishment. Patching and plugging with nursery sod are also good options for more extensively damaged areas. Contact a regional USGA Agronomist to further discuss the best recovery strategies for your site.

The winter of 2018 might not be remembered for producing widespread, devastating turf damage but it serves as a reminder of just how vulnerable annual bluegrass is to severe winter weather. We often hear sports commentators use the term “game of inches” in their play-by-play coverage; that term seems

equally appropriate for describing the fickle nature of cold temperature injury. A few inches of snow cover or a couple degrees difference in temperature can have a very real impact on turf survival during winter. Judging by the way January began, I say we were fortunate that the damage was not more severe and widespread.



NORTHEAST REGION AGRONOMISTS:

David Oatis, Regional Director, doatis@usga.org

James Skorulski, Agronomist, j Skorulski@usga.org

Elliott Dowling, Agronomist, edowling@usga.org

Paul Jacobs, Agronomist, pjacobs@usga.org

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