



Poa annua dominated this heavily shaded site. The turf declined when a tree was removed because the lush grass was exposed to intense direct sunlight.

WHEN TURF LOSS FOLLOWS TREE LOSS

BY BOB VAVREK | REGIONAL DIRECTOR, CENTRAL REGION

Tree removal is a frequently discussed topic between golf course superintendents and other decision-makers. Obtaining approval to remove a high-quality tree that causes shade issues often requires some strategic lobbying. In the long run, increasing the amount of direct sunlight that turf receives is beneficial. However, depending on the turf species that once thrived in the shaded environment beneath a tree, turf decline can even occur after removing a problematic tree because the growing environment has changed.

Why should a tree be removed if there is turf already growing in a shaded environment? Direct sunlight is critical for driving photosynthesis, drying the turf surface so prolonged leaf wetness does not increase the likelihood of disease occurrence, melting ice that can cause winter injury and warming the turf in winter to avoid cold temperature kill. *Poa annua*, which has a shallow root system and is highly susceptible to both

winter injury and disease, is often found in the shaded areas because it tolerates this growing environment better than creeping bentgrass or Kentucky bluegrass. During mild weather *Poa annua* can survive, but extreme summer or winter weather combined with *Poa annua* growing in the shade is recipe for turf loss.

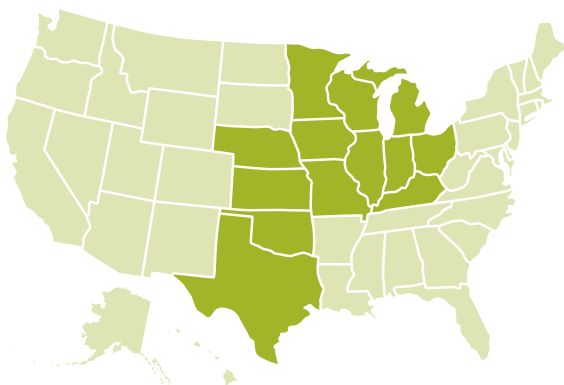
Poa annua does not tolerate heat or drought stress well regardless of the growing environment. When *Poa annua* that is acclimated to growing in the shade experiences a sudden change in the growing environment by exposing it to more direct sunlight, heat and drought stress are more likely to cause decline. While declining *Poa annua* is unsightly, it provides an opportunity to establish a turf species that is better suited to grow in full sun. Evaluate the turf populations near future tree removals and be prepared to seed any areas with high *Poa annua* populations.

Increasing the amount of direct sunlight that turf receives is always beneficial. However, if *Poa annua* populations in a once-shaded environment are high, turf decline may seem like a half step backward when trees are removed. Fortunately, the decline of *Poa annua* presents an opportunity to establish a healthy stand of turf that produces more consistent playing conditions.



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CENTRAL REGION AGRONOMISTS:

Bob Vavrek, Regional Director, bvavrek@usga.org

John Daniels, Agronomist, jdaniels@usga.org

Zach Nicoludis, Agronomist, znicoludis@usga.org

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