

Stop 4. Turf Dormancy or Death?

Dr. Kevin Frank, Aaron Hathaway, and Jeff Bryan

The summer of 2012 will go down as one of the warmest ever on record. In Michigan, to date only three summers have been warmer and in the Lansing area it was the warmest July on record with an average temperature of 77.8 °F. At the HTRC rainfall from June 1-Aug. 8 was 2.58 inches and potential evapotranspiration was 13.8 inches. During this time period, rainfall returned approximately 19% of water loss through evapotranspiration. This type of water deficit combined with the record high temperatures have resulted in unirrigated turfgrass entering dormancy. For unirrigated, dormant turf, the concern has become whether or not the turf could have died or whether it will recover sufficiently this fall. For Kentucky bluegrass lawns (which are the majority of lawns in Michigan) there is usually no danger that the lawn is going to die unless water is lacking for 6-8 weeks. However, there are really no hard fast numbers for predicting whether the turf will die as many other factors will come into play such as high temperatures and traffic.

Here at the HTRC, we have several areas that have not received supplemental irrigation since June 1. At this stop there are four different species and one cool-season lawn mix. The species are fine fescue, Kentucky bluegrass, tall fescue, perennial ryegrass. The cool-season mix is the traditional mix of Kentucky bluegrass, perennial ryegrass, and creeping red fescue. In this unirrigated plot area, species definitely responded to this summer differently with some possibly requiring reestablishment and others that didn't appear to have any damage at all.