Kentucky bluegrass varieties slow to green up May 20, 2015

The below-average temperatures and wet conditions over the last month have dramatically slowed the green-up of some cultivars of Kentucky bluegrass. While not all, many of our newer low-mow and improved Kentucky bluegrass species are known to have a strong winter dormancy response. The warming trend in the 10-day forecast should be the winning prescription for these cultivars. While older cultivars seem to green-up when soil temperatures get into the mid-fifties, these cultivars may need soils to be into the sixties before they really get going. Amazingly, the zoysiagrass and buffalograss are out growing our Kentucky bluegrass at the East Campus Turf Plots right now.

The differences in green-up are most obvious in turf stands where species like turf-type tall fescue or older varieties Kentucky bluegrass are adjacent to each other. This commonly happens when a patch of the stand is sodded with a different species or cultivar (Fig. 1). These differences will become much less noticeable once the soils warm and all the areas resume "normal" growth. On way to accelerated spring green-up is to apply water-soluble nitrogen like urea or ammonium sulfate. The turfgrass will sense that fertilizer and will resume growth. This effect can also be observed when late-fall (after Halloween) applications of fertilizer are applied. Research shows us that late-fall apps do little for the plant going into winter (no impact on rooting, carbohydrate storage, and N uptake is minimal). Instead, the nitrogen fertilizer either sits in the soil until spring or is leached out during winter precipitation. That residual N is then taken up in spring and promotes rapid regrowth (frequently at the expense of carbohydrate storage). A more efficient way to promote spring regrowth is to apply fertilizer in spring, not late-fall.

Be patient with the slow bluegrass green-up. June is around the corner and bluegrass (and bentgrass for the golf course superintendents) will be actively growing soon. If you need growth now, apply some quick release nitrogen and hope for a rapid warm-up.

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Figure 1. Spring green-up of some varieties of Kentucky bluegrass and all bentgrasses have been slow to break winter dormancy this year. The warming weather should ignite some more growth soon. For now, use water-soluble nitrogen to help break dormancy. Turf will resume active growth once those soil temperatures get past 60F.

Photo: Kim Todd

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the United States Department of Agriculture.