

When to Apply Spring PREs and Nitrogen March 29, 2016

Our last Turf iNfo covering early spring weed control has stimulated a lot of conversation. Besides the **typo** that says dandelions are best controlled in spring (**dandelions are best controlled in late fall**), a majority of the discussion centered on early spring preemergence herbicide (PRE) applications for control of grassy weeds like crabgrass. Let's dig deeper into the timing of spring PREs and spring nitrogen (N) fertilization.

What a difference two weeks makes; Nebraska weather never disappoints. The four-inch soil temperatures were in the mid-fifties, which is the typical trigger to apply PREs for crabgrass. In fact, we were noticing some crabgrass germination in areas near sidewalks and driveways around Lincoln. Since then, a major snowstorm and dramatic temperature decline have reduced soil temperatures back into the lower forties across much of the states. Any annual grassy weeds that did germinate were likely killed by the hard freeze. **If you did not get a PRE out before the cold, then wait until soil temperatures warm back into the mid-fifties.** Preemergence herbicides applied before the cold snap will still be effective, but the early timing will require a second application in early June to sustain control throughout the entire season. Make sure the second application doesn't exceed the maximum annual use rate for the PRE. That information can be found on the label (commonly in bold font).

It is best to apply a standalone PRE instead of a PRE + N fertilizer combination product in early spring. Warm and wet weather plus soil N mineralization causes the turfgrass to grow rapidly by mid-April. This is one reason a rarely fertilized turfgrass stand looks good immediately after green-up. Early spring fertilization will further accelerate growth and make it difficult to keep up with mowing. It can also deplete sugar reserves that are used to help with summer stress and rooting. For a well-established turf stand, wait until the turfgrass quality starts to decline in late spring to early summer. This typically occurs from mid-May until mid-June. Use of a combo PRE and N fertilizer product make sense during that time.



Figure 1. A never fertilized hillside naturally looks great after green-up; no fertilizer required.

Like everything, there are a few exceptions where early spring N fertilization can be helpful. For example, turf stands like athletic fields that will receive traffic can benefit from light amounts of spring N to encourage green-up. Young or thin stands of turf can also benefit from added spring fertilization. The goal with these stands is to promote density going into summer. Even consider a starter fertilize on areas that were seeded last fall to accelerate establishment if the area is still thin. Use low rates of soluble fertilizer with all of these early spring applications to prevent excessive top growth.

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