

Best Management Practices: 1st Year Weed Control in Native Grass Plantings

You have followed all the recommendations to get your new native grass planted. You can learn more about fescue eradication to prepare for your new planting here:

<https://www.missourifgc.org/s/convert-tall-fescue-to-other-forages-final.pdf>

What's next after planting?

By far the most common reason for failure of native warm-season grass plantings is lack of weed control during that first growing season. **To prevent these failures IT IS IMPERATIVE that a new planting be checked for weed competition no later than early June.** Weedy competition robs vital sunlight, nutrients and moisture from native seedlings. We know enough about establishing these grasses today, that weed control should no longer be an issue that results in planting failure.

You can get help to identify weeds in your new planting at [Weed ID Guide // University of Missouri](#). Here is what to do depending on what you find when checking your planting in early June:

“I can easily see the drill rows of grass”

A good sign that your efforts are working! Mow any broadleaf weeds or weedy grasses leaving at least eight or more inches of stubble height to prevent injury to new grass seedlings. The weeds should not be allowed to form a dense canopy over the new seedlings. You may have to mow more than once through the summer. Do not mow if the native grass plants have bolted and are producing seed stalks. Do not use a sickle bar or disc mower as this tends to cover up desired seedlings. If possible, use a shredder that will throw the clippings to one side. Do not allow weeds to become so mature that when mowed you create thatch that covers native grass seedlings. Ensure timely mowings to reduce creating too much thatch. Mow when the weedy competition is 2X taller than the desired plants and raise the mowing height with each successive mowing to minimize clipping the desired plants.

“There is a lot of fescue coming back”

Imazapic can be applied at anytime with plantings of Big Bluestem, Little Bluestem and Indiangrass to control fescue. A total of 12 ounces can be applied in any year, so if you used Imazapic to aid in preparing the field for planting, be sure to apply no more than 12 ounces in total. If applying at the full 12 ounce rate in one application, expect slower than normal germination and/or growth of the tolerant plants. If using split applications to control fescue, results maybe inconsistent. Read and follow the label directions! If you have planted grasses such as switchgrass or eastern gamagrass which do not tolerate Imazapic, you will need to



wait for a killing frost and retreat the fescue with glyphosate or grass specific herbicides such as clethodim or sethoxydim.

“The field looks like I planted clover”

This will smother your native seedlings. Once native grass seedlings reach the 4-6 leaf stage or tillering has initiated, you can apply herbicides such as Chaparral, 2,4-D, Remedy, metsulfuron methyl (MSM) or Duracor. Results may vary depending on the maturity of the clover when application is made.

“The field is a solid stand of crabgrass/foxtail”

Imazapic herbicide can be applied on weedy annual grasses after the native grass seedlings have emerged. For best results, spray 6oz of Imazapic at planting and 45 days later spray another 6 oz. Even if no weeds are visible. Follow label directions. A total of 12 ounces can be applied in any year, so if you used Imazepic to aid in preparing the field for planting, be sure to apply no more than 12 ounces total. If you have planted grasses such as switchgrass or eastern gamagrass which do not tolerate imazapic, you can use Quinstar 4L or similar formulation of Quinclorac herbicide according to the label.

Crabgrass can grow rapidly and quickly canopy over native seedlings. Early identification of a crabgrass issue is important to provide for the most effective herbicide application. You can find how to tell the difference between native grasses and weedy grasses like foxtail and crabgrass here: [Know the Difference Between Native Grasses and Weedy Grasses](#)

“The field has a lot of broadleaf weeds and I have trouble finding the drill rows of native grass seedlings”

Once native grass seedlings reach the 4-6 leaf stage or tillering has initiated, you can apply herbicides such as Chaparral, 2,4-D, Remedy, or Duracor to control most broadleaves. Thinner stands of broadleaves can also be mowed high. When mowing, be sure to maintain an eight to 10 inch minimum mowing height to avoid injuring seedling grasses. Do not allow weeds to become so mature that when mowed you create thatch that covers native grass seedlings. Ensure timely mowings to reduce creating too much thatch.

While critical for maintaining a healthy, diverse, and native grassland system, some management actions during grassland bird breeding and brooding season (roughly April 15th to September 1st) may result in a decline in species while the system recovers. In order to make an impact against invasive or undesirable plant species, some management methods may need to occur during birds breeding/brooding period. When possible, providing large contiguous chunks of unmowed, unhayed or unburned grassland, while conducting habitat management techniques elsewhere, is a great option to help maintain grassland bird presence.

NOTE: If your new planting contains native forbs/wildflowers

If you have planted a pollinator mix or a diverse native forage mix, herbicides may not be an option. Eradication of fescue, brome or other undesirable species needs to be complete when preparing the field for winter planting. To address weedy issues during the first year, mowing is typically the only option. However, in a pollinator planting with little to no grass included in the planting mix, herbicides containing clethodim or sethoxydim with a labeled adjuvant can be used on fescue or annual grass infestation of the planting per label directions.