

RE-ESTABLISHING TALL FESCUE PASTURES

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Why would anybody even bring up the subject of re-establishing tall fescue pastures in a December news article? Well, there are several good reasons to begin thinking about this now. NOW is the time to begin making plans to renovate and re-establish tall fescue. Re-establishing tall fescue is a major undertaking. It takes time to plan and do things right. The renovated pasture will be out of production for several months, especially if a novel endophyte tall fescue is to be used to replace toxic tall fescue. So, plans will need to be made in order to supply extra feed or reduce animal numbers during this period.

Before we go on, however, you should know that pretty much everything I say from here on will be based on the assumption that you'll have the good sense to plant a tall fescue variety that is non-toxic, novel endophyte ('Jesup MaxQ'). I'm assuming that you have been convinced by all of the research and economic studies that have shown that novel endophyte tall fescue is the beef cattleman's best option for new tall fescue plantings. This is true, despite the fact that it is a bit more expensive at the outset. As my economics professor used to say, "There's a difference between sense and cents. Sometimes too much focus on cents in the short run doesn't make sense in the long run."

To successfully replace toxic tall fescue (for example, KY-31), it is necessary to follow a four-step process. These four steps are 1) preventing the existing toxic endophyte-infected stand from producing seedheads in the spring, 2) destroying the existing stand, 3) seeding the new variety, and 4) managing the new planting.

Step 1: Preventing Seedhead Production

The endophyte in tall fescue is spread via seed. If seed is produced by the existing stand of toxic tall fescue, then the chances are high that toxic endophyte-infected plants will regenerate in the new stand. Therefore, it is critical to prevent the existing stand of tall fescue from producing a seedhead during the spring prior to planting a novel endophyte tall fescue. Stands should be mowed when seedheads begin to develop but before they fully emerge. Two such mowings prior to viable seed production are normally required to prevent seed formation. Heavy grazing may prevent some seedhead production, but it may merely delay seedhead emergence. Therefore, it is almost certain that mowing will be required.

Step 2: Destroying Old Stands

There are two methods for destroying an existing stand of toxic tall fescue. The first method is generally referred to as the "spray-smother-spray" method. This involves preventing seedhead formation as described above, spraying the existing stand with a moderate to heavy rate of glyphosate (Roundup or the generic equivalent), growing a smother crop such as pearl millet during the summer, and then spraying surviving tall fescue plants and weeds again in the fall with a moderate to heavy rate of glyphosate before planting the new stand. Unfortunately, this method is very expensive and more problematic for most small producers than the "spray-spray-plant" method.

The "spray-spray-plant" method was developed by forage researchers at UGA. The research has shown that spring seedhead suppression and an application of glyphosate in late summer and a second application made 4 – 6 weeks later (followed by planting within 1 day of the second herbicide application) will achieve a successful kill of the existing fescue. The timing of this application protocol is critical, as sufficient regrowth by the survivors of the first application is needed to get a complete kill.

Destroying the stand with an herbicide in either of these two methods will be faster, cheaper, and much more effective than multiple tillage operations. Plowing alone will not provide sufficient kill of the existing stand and is not recommended. However, there may be some cases where the preparation of a tilled seedbed is desirable. In this case, the same protocol of two herbicide applications (regardless of method) is recommended prior to seedbed preparation.

Step 3: Seeding the New Variety

Planting with a no-till drill should follow immediately (within 1 day) after the second application of glyphosate has been made. Killing fescue pastures with an herbicide and sod-seeding into the killed sod is advantageous for

pastures with severe slopes. Plantings can also be made into a firm, prepared seedbed. In the Piedmont region, successful plantings can be made between mid-September and late October. Plantings in the Limestone Valley/Mountains region should occur between early September and early October. Spring seedings are generally not successful and should be avoided. Regardless of region, a planting rate of 15 – 20 lbs per acre is required for successful stand establishment.

Step 4: Managing Novel Endophyte Tall Fescue

Like all tall fescue plantings, new plantings need special treatment. Do not cut or graze new plantings until the plants have achieved at least 6 inches of growth. Even then, only a light grazing is recommended to avoid stand damage. A light mowing can help control weeds and encourage the tall fescue to grow and thicken-in (i.e., tiller), however, care should be taken not to cut tall fescue below a height of 6 in. in the spring following establishment. An early cutting of hay (prior to May) should not be taken from new seedings of tall fescue. If the novel endophyte tall fescue has been clipped to control weeds in early spring, a late cutting of hay (after mid-May) can be successfully made if the planting resulted in an acceptable stand. The tall fescue stand should be managed to allow light to reach the base of plants, which will encourage tillering; however, do not defoliate the plants too frequently or too severely.

Soon after the stand has been established (April or May following a fall seeding), novel endophyte tall fescue should be tested for the extent of novel endophyte infection. This will ensure that the novel endophyte is present in the tall fescue, that at least 80% of the tall fescue contains the novel endophyte, and that little or no toxic endophyte-infected tall fescue is present. More information on testing the endophyte status of tall fescue stands can be found on this web page: <http://www.caes.uga.edu/commodities/fieldcrops/forages/questions/testingtallfescue.html>.

Although novel endophyte tall fescue generally is as persistent as toxic endophyte-infected tall fescue, some management differences are worth noting. Like all tall fescues, at least 2 ½ – 3 in. of growth should be maintained on novel endophyte tall fescue stands at all times. Unlike toxic tall fescue, livestock may continue to graze novel endophyte varieties during tall fescue's summer dormancy or in periods of drought. This can lead to severe overgrazing that can cause stand loss that may not have occurred with toxic endophyte-infected tall fescue. Therefore, it is critical to reduce the stocking rate or rotate the animals to warm season pastures to avoid overgrazing the novel endophyte tall fescue, especially when pastures are dormant or under moisture stress.

More information on re-establishing tall fescue pastures can be found on the Georgia Forages website (www.georgiaforages.com). A detailed description of techniques for re-establishing tall fescue can be found in the Extension bulletins entitled "Georgia Forages: Grass Species" or "Novel Endophyte-Infected Tall Fescue." Of course, your local University of Georgia Cooperative Extension Agent can also provide you with additional information and advice on how to re-establish tall fescue in your forage program. If you have questions about how to adapt these recommendations to your operation, contact your local Extension office by dialing 1-800-ASK-UGA1.