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Jody G. Holthaus
District Extension Agent
Livestock and Natural Resources

Stockpiling Tall Fescue – Start Planning Now

Nearly any type of forage can be stockpiled, but tall fescue is the species most widely used for this purpose. Tall fescue typically makes a good amount of growth in the fall, it has a waxy layer on its leaves that makes them resistant to frost damage and weathering, and grazing to a low winter residual height has little effect on its spring regrowth or stand density. In addition, tall fescue forage accumulates a high concentration of soluble carbohydrates in the fall. The result is that stockpiled tall fescue not only has good forage quality, it maintains this quality extremely well through the winter. In fact, the total digestible nutrient (TDN) and crude protein (CP) content of stockpiled tall fescue is typically significantly higher than the average hay fed to beef cattle.

Stockpiling may also help reduce the toxicity of endophyte-infected tall fescue**.** A 2001 study showed that levels of the toxin Ergovaline found in endophyte-infected fescue dropped during the winter grazing period. In light of the slow decline in protein content and digestibility of stockpiled fescue forage, this makes a strong case for delaying the use of stockpiled toxic endophyte fescue as long as possible into the winter months. This can be done by grazing winter annuals or stockpiled summer forage first.

The following steps have proven successful for stockpiling tall fescue forage:

1. At 60 to 90 days before the end of the fall growing season, graze or clip pastures leaving 3 to 5 inches of forage growth.
2. Immediately after grazing or clipping, apply 40 to 80 pounds of nitrogen per acre. Both the rate and timing of nitrogen fertilizer have an important impact on yield. Applying fertilizer earlier than 90 days before the end of the growing season will not significantly increase the yield, but quality will be significantly lower. Delaying initiation of stockpiling will result in higher quality forage, but lower yields.
3. Defer grazing stockpiled tall fescue forage until late fall or winter. Be sure to properly use forage growth in other pastures before beginning to use stockpiled forage. However, late- season growth of warm-season species may be of low quality and thus may require supplementation.
4. If possible, stockpile 1 acre per cow. Under normal conditions, this will give a 75- to 90-day feed supply if grazed properly. (A 1,000-pound cow eating 2.6% of her body weight per day in dry matter consumes 26 pounds of forage per day. An acre of fescue stockpiled for 90 days typi- cally produces 3,000 pounds of forage. Assuming 70% efficiency during strip grazing, this translates to 2,100 pounds of usable forage, or about 80 days' worth of food.)
5. Although low quality, highly perishable material such as crop residues or stockpiled warm-season forage should be used first, once the use of stockpiled fescue has begun, start with the highest quality stockpiled fescue forage, because weathering causes more value loss in high- quality material than in low-quality material.

Once forage has been stockpiled, using it efficiently is important in developing a low-cost winter-feeding system. The most economical way is to strip graze the pastures. By allocating forage in strips calculated to be used within 3 days, animals consume 70% or more of the forage; by comparison, when given access to a 2-week feed supply, animals will consume 40% or less of the forage. That difference allows a significantly longer grazing period of quality forage for livestock.

Many producers like to allocate a new strip every other day, which works well. If stockpiled grass is available, hay will only need to be fed if there is a deep cover of snow (6 inches or more). However, as little as 1⁄4-inch of ice alone or as a crust on snow may prevent grazing of stockpiled forage.

Information for this article is from the Grazing Lands Conservation Initiative publication "Extending Your Grazing Season" by Dr. Don Ball, Auburn University, Ed Ballard, University of Illinois Extension, Mark Kennedy, State Grazing Lands Specialist, NRCS, Missouri, Dr. Garry Lacefield, University of Kentucky, and Dr. Dan Undersander, University of Wisconsin-Madison