Managing Native Grass Forages

Patrick Keyser, Professor and Director, Center for Native Grasslands Management

Why Use Native Warm-season Grasses? Profitability

In recent articles, I have pointed out that native grasses can provide valuable benefits to cattle operations with respect to stockering, backgrounding, heifer development, improved drought resiliency, and reduced exposure to fescue toxicosis. Based on these benefits, it should not be a surprise that native grasses can also contribute to your operations' bottom line.

All of the benefits listed above really come down to either more or cheaper gain than many of the alternatives. Native grasses produce good rates of gain at a very low per unit cost – about $0.30 - $0.40 per pound. Since so much of the costs to produce a marketable calf come down to forage, having a low per unit cost of gain is important. After all, no one buying your calves will be concerned whether it cost you $0.40 or $1.40 per pound for that gain. But you should!

Why are per unit costs for gain so low on native grasses? It really comes down to two basic facts. First, natives typically produce both high volumes of forage and rates of gain, about 1.5 – 2.5 pounds per day, depending on species in question and time of season. Many other forages generally produce lower rates of gain. For instance, most bermudagrasses typically only produce about 0.9 – 1.2 pounds per day. A very desirable and widely used summer annual, Sudex, typically produces about 1.7 pounds per day.

The second factor is input costs. Even when relatively high establishment costs (mainly seed) are factored into the analysis, the low fertilizer requirements of natives keep annual production costs low. Bermudagrass requires substantial inputs of both nitrogen and potash to maintain high productivity. Summer annuals incur annual planting costs. Cool-season grasses such as tall fescue and orchardgrass produce less forage than warm-season grasses and thus, production costs are spread over fewer pounds (or tons when considering hay production), resulting in higher per unit costs.

When it comes to drought resiliency of natives, improved profits come from a reduced likelihood of stand loss and subsequent reseeding. In addition, drought-tolerant natives will sustain rates of gain better than less drought-tolerant forages. Finally, because natives can continue to supply good forage even during pretty substantial droughts, you will be better able to avoid purchased feed. And purchased feeds are easily the most expensive source of gain for cattle.

By reducing the impact of fescue toxicosis, natives may improve profits through improved calving rates and weaning weights. Together, these two factors add up to pounds weaned per cow or per acre. As long as production costs do not vary much, more pounds produced per unit means lower per unit costs and more profits.

In conclusion, native grasses can contribute to your bottom line in a number of ways. For more information on the economics of native grass forages, see *Economic Implications of Growing Native warm-season Grasses for Forage in the Mid-South* (SP731-E) at extension.tennessee.edu/publications/Pages/default.aspx.