

Managing Native Grass Forages

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Comparing Native Grasses to Summer Annuals

Native warm-season grasses make most of their contribution to a forage program when they are actively growing, late April through early September. Another forage option available during this time is summer annuals such as, crabgrass, pearl millet, or Sudex. So how do natives compare to these annuals?

The most obvious difference between these two forage options is that the natives such as, big bluestem, switchgrass, eastern gamagrass are all perennials that can, with good management, last for a decade and more. Although natives can be expensive to establish, the long life of the stand allows that cost to be spread out over a longer period. Annuals, on the other hand, require the yearly expense of seed, seedbed preparation, and planting. The result? Natives actually produce cheaper gain (\$0.31 vs. \$0.75 per pound) and cheaper hay (\$53 vs. \$83 per ton) based on 2011 prices.

Another advantage (of any perennial) is that there is no risk associated with repeated establishment as there is with annuals. There also is no decision to make about when or even if to plant. If you rely on volunteer crabgrass, you will be at the mercy of late spring and early summer rains – making such forages much less reliable than perennials. Indeed, perennials are available year after year, dry spring or wet.

Also, perennials, including natives, are available much earlier in the season than annuals, typically early May vs. early or even mid-June. Of course tall fescue is still productive during this period, but natives will provide much better rates of gain (and no toxicosis) during this period making it advantageous to move cattle to the warm-season forage. One other advantage of the perennial natives is the lack of nitrate or prussic acid issues that can occur in summer annuals.

Based on recent studies conducted at UTIA, average daily gains (pounds) for bred heifers were 1.15 (eastern gamagrass), 1.54 (switchgrass), 1.64 (Sudex), and 2.01 (big bluestem/indiangrass blend). For bred heifers, all of these are acceptable rates of gain. However, the annual provided fewer pounds of total gain per acre (129) than the perennial natives (158 for big bluestem/indiangrass blend, 180 for switchgrass, and 205 for eastern gamagrass) because of the longer grazing season they provided.

It should be clear that perennials have a number of advantages over annuals. That does not mean that there is not a role for summer annuals though. But what it does mean is that you will be “money ahead” (literally!) by basing your long-term plan for addressing summer forage production on perennials. It is also clear, based on data from various studies at UTIA and elsewhere, that natives are a perennial summer option worth considering. For more information, see UT Extension publications SP731-C (*Grazing Native Warm-season Grasses in the Mid-South*) on line at <https://utextension.tennessee.edu/publications/Pages/foragesLivestock.aspx> or <http://nativegrasses.utk.edu/publications/default.htm>.