

FORAGES FOR GRASS-FED BEEF PRODUCTION

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Success grass-fed beef production is dependent on several factors. Often producers will focus on cattle issues such as calf health and marketing. But often minimizing feed cost and optimizing average daily gain are two factors that are not considered as much as they should be. These are two factors that can have huge influences over whether an operation makes or loses money. One way to positively influence both of these factors is through a good forage program.

In order to have a successful forage program there are two primary issues to consider: a) when do you need grazing, and b) what level of daily gain is desired. These two factors will influence the forage species that are selected and the number of acres that are required. Below are points to understand and consider when developing a forage program grass-fed beef operations.

- **‘Kentucky 31’ tall fescue will severely limit cattle gain.** The endophyte found in KY 31 tall fescue causes severe reductions in calf performance. Research has consistently shown that daily gains of 1 lb are about all that can be expected from calves grazing endophyte-infected tall fescue.
- **Non-toxic endophyte infected tall fescue is a useful tool.** The tall fescue varieties give the opportunity to have the persistence of KY 31 without the toxicosis. Research shows these varieties offer huge opportunities for grass-fed operations.
- **Clovers can help reduce the toxicosis caused by the endophyte.** For KY 31 tall fescue, one way to reduce the effect of the endophyte is to add clovers to the. Although it will not eliminate the problem, weight gain will be increased by approximately one-half pound per day.
- **Most other forage species can support 2 lb/day gain.** Research from across the southeast has shown that, other than KY 31 toxic tall fescue, most all forage species can provide forage for 2 lb/day gain. In general, cattle grazing legumes will gain more than if they graze grasses, and annuals will produce slightly more gain than perennials. But the difference in performance of calves on various forage species is not as great as many producers think.
- **Grazing management has a large influence on the level of weight gain.** The amount of forage available for cattle to eat will influence their diet quality and intake. If pastures are grazed too low, animals can’t be selective and eat the high quality portions of the plant. The quality of their diet will decrease, as will their intake. All of this leads to reduced weight gain. To get the best performance from a calf, adequate forage needs to be provided, which will allow for animal selectivity and a higher quality diet.
- **Select a forage species based on when it produces forage.** Since daily gain is more influenced by forage availability than forage species, primary criteria for selecting a forage for an operation should be its production season. Use forages that will produce during the periods of the year when grazing is needed. When selecting additional forages, evaluate which periods lack adequate forage, and choose forages that will grow during that period, thereby improving forage availability during that time.
- **Use grass/legume mixes whenever possible.** Legumes provide extra benefit for grass pastures by adding nitrogen to the soil. Fertilizer expenses are often one of the major

costs associated with pasture production. The opportunity to take advantage of nitrogen fixation and decrease nitrogen fertilizer application can dramatically cut costs.

There are many factors to consider when developing a forage program. Although there isn't a "one-size fits all" program, paying attention to the points listed above can help improve their forage production, animal performance, and the profitability of their grass-feed operation.