

# **Grass Genetics and Grass Finished Beef**

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The popularity and acceptance of grass-fed beef has gained significant momentum over the last decade. This popularity is driven by several factors including perceived human health benefits, enhanced environmental friendly production practices as well as animal welfare issues, ie: the revelation that a cow is meant to be a “grazing animal”.

This “grass-fed” niche has created opportunities for beef producers to increase net profits not only from lower production costs but also adding value in marketing their product. As with most agricultural products marketed into a commodity system, most of the value in a beef animal is captured after it leaves the farm.

Discussion examines a proven small cow calf operation (less than 100 head) that has created a sustainable grass-finished beef program. The program began as an experiment to determine if a consumer acceptable beef product could be produced within a total grazing system. The experiment proved successful and has evolved into a small business that markets grass-finished beef direct to the consumer.

Lessons learned for discussion include: packaging configurations for whole animal utilization, pricing, regulations, distribution, marketing, consumer preferences/dealing with the public and the type beef animal (genotype/phenotype) necessary for consistent production of a consumer acceptable product.

The primary reason consumers eat beef is flavor and the factor that provides that distinctive flavor is fat. Intra-muscular fat or marbling is the subjective measure that determine USDA quality grade in beef cattle. One of the main challenges today’s beef producers encounter is the absence of beef cattle genetics that can consistently attain Choice quality grade on forage. The mainstream beef system has created a corn dependent animal that, though totally grass fed, won’t finish on forage. These lean, hard-doing cattle that so dominate the mainstream industry are not genetically programmed to provide a consumer acceptable grass-finished beef product (Choice quality grade or higher). Additionally, the replacement females from corn-based genetics require greater external inputs and are becoming less profitable with each succeeding generation. The industry has taken a “solar powered animal and created a fossil fuel dependent machine”. Remember, Expected Progeny Differences are only measures of outputs.

Success of any sustainable grass-finished beef program begins with proper genetics. Cattle must be genetically programmed for consumer acceptance before management can assist in creating a consistent, positive eating experience. Also, multi-generation selection on total grazing has a positive effect on the type replacement females that are needed to decrease cow-herd maintenance, thus improving profitability.

As external costs associated with beef production continue to rise, those beef cattle genetics requiring the highest maintenance will generally not sustain your operation. Genetics selected for efficient cow-herd maintenance focused on end-product acceptability will more often than not, generate a profit.