# Improve production with low-cost inputs

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Mining is an extractive process, removing a desired mineral such as coal or a metal ore from the land. Few inputs are used other than what is needed to remove the product, and the land is left in poorer condition than previously. Manufacturing is the production of desired products from inputs of raw materials, energy and labor, which with good procedures can be environmentally benign.

### Beef cow-calf mining operations

A few beef cow-calf producers have farms that function much like mining operations with calves being harvested each year using very few inputs. Mediocre cows and bulls survive together year round on large areas of poor pasture lacking cross fences and receiving no seed, fertilizer or herbicide. Little or no hay and protein supplement is fed. Once or twice a year, calves are rounded up for sale. The good news is that input costs and labor needs are low so any sale is mostly profit. The bad news is that cow conception rates and calf weaning weights are low, so the saleable calf production per acre is small.

In the past, this type of operation was fairly common in many areas when land was cheap, taxes low and less was known about growing and managing good pasture. Today, with rising land prices and higher taxes, beef cattle "mining operations" have become much less common

even though they are easy to operate.

### Beef cow-calf factories

A well-managed beef cow-calf farm can be compared to a factory. The raw material is the grass and clover grown in pastures and harvested with self-propelled four-legged harvesting machines. The manager is in the business of growing and efficiently converting this raw material, pasture and hay, into saleable calf for use in the beef industry.

Basically, the manager is a grass farmer who is growing and marketing this commodity through the animal. To do this, the manager must grow and be able to utilize grass, minimize waste and produce a weaned calf suitable for the market.

This calf factory requires excellent animal management, good breeding stock, health care and a controlled-breeding season to match forage quality to the needs of the grazing animal. In addition, the calf factory manager needs excellent forage management skills to make the system work efficiently and economically. Unfortunately, some producers have developed good animal management skills, but their forage management needs improvement. These skills take time to learn, but they are worth learning. Fortunately, there are some products and ideas available that can make pasture management more productive, dependable and profitable.

# **Improving** pasture management

It is common to look for a single new input such as planting a new grass variety or installing a new grazing method that will greatly improve the operation. However, a new more-productive grass or elaborate grazing method

will not help much if it is poorly managed. Before doing anything radical or costly, evaluate what you now have and ask questions about what you can do better with existing pastures and hayfield at less expense.

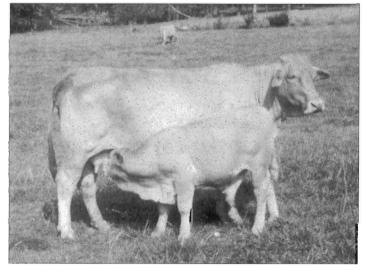
Do you soil test and apply needed fertilizer? Do you need to control weeds in your pastures? Are you broadcasting clover seed in tall fescue pastures to reduce toxicity problems? Do you have a few cross fences to allow better grazing control and less waste? Do you have a controlled breeding season? Have you considered cutting hay when it is less mature to improve quality and reduce cost of feed supplements? Do you store hay bales under cover and use bale racks during feeding to reduce waste? If you are a small cow-calf producer, have you calculated the cost of owning equipment and harvesting your own hay?

It may be cheaper to either buy hay or have a custom operator harvest your hay. Think about taking care of simple lowercost items before spending a lot of money on items such as replanting grass pastures or installing a new grazing system. Efficient cow-calf production depends on keeping inputs as low as possible while maintaining high reproduction rates and good calf weaning weights.

## Higher input items to improve forage management

There are some forage improvements that involve more expense or substantial changes in management. They offer an excellent manager the potential to improve productivity beyond that achieved with lower-cost inputs.

Tifton 85 bermudagrass. This hybrid developed by UGA and USDA-ARS at Tifton, Ga., has very rapid spreading stolons, produces 26 percent more dry forage and is 26 percent more digestible than Coastal bermudagrass. This means higher yield and quality of pasture and hay, resulting in better animal performance. Tifton 85 is the best bermudagrass for the Coastal Plain area. It is not cold hardy further north except in the extreme lower Piedmont area.



MaxO tall fescue. This new variety developed by UGA and AgResearch in New Zealand furnishes excellent animal performance similar to endophyte-free grass but also has the toughness and stand persistence of toxic Kentucky 31 tall fescue. During the 2000 grazing season at the Northwest Georgia Branch Station, beef calves weaned 60 pounds heavier on MaxO than on toxic infected tall fescue. Beef steer daily gains on MaxQ have been twice that of toxic infected tall fescue. Stand survival in pastures has been good during the last three drought years. It is recommended for planting in areas north of the Coastal Plain.

Rotational stocking. Rotational stocking, often called rotational or controlled grazing, involves dividing a large pasture into smaller units with single strands of electric polywire fence. A high stocking rate is imposed on a paddock for a few days, and the cattle are then shifted to the next paddock during periods of surplus growth. One or more paddocks may be harvested for hay while animals are rotated through other paddocks more quickly. There are significant advantages to this method: carrying capacity increased 20 to 35 percent because of increased leaf growth and less waste; better stand persistence of pasture plants sensitive to close continuous grazing; better distribution of feces and urine; less weeds because they are eaten when young; and cattle become more docile and can be easily examined at frequent intervals when they are moved to another paddock.

## From mining to manufacturing

Very few cow-calf producers today function as mining operations. However, many farmers still continue some parts of their operation with little or no input that reduces their potential to reach satisfactory levels of production and profitability. There are many lower-cost inputs that should be utilized on many farms. When this is done, some producers can benefit from more costly inputs if they are managed well. Remember, manufacturing beats mining.

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