THE DIGESTIVE TRACT

Backgrounding could add profit margin

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The profitability of a cow-calf operation is influenced by reproductive success and

managing input costs. I have written about the relationship between nutrition and reproductive success several times, and will continue in the future to focus on managing that aspect of your operation. However, for producers and operations who have a good handle on the "big things," there still exist many opportunities to add to the profit margin.

How many times have you thought you had good pregnancy rates, good calving and weaning percentages, and managed your feed costs, yet were still disappointed in the final paycheck (and ultimately profit/loss) for your calves?

There are many external factors that affect supply and demand of feeder calves, and sometimes cow-calf producers are at the mercy of unfortunate timing. However, there are options when it comes to managing/marketing that weaned calf. Do you sell directly off the cow at weaning? Do you retain ownership through a backgrounding phase?

Backgrounding

There could be several reasons to consider backgrounding calves prior to sending them to the feedyard. Ultimately, like any decision, you need to consider the costs and benefits. Will the gain you put on the calves be worth more than the

costs associated? It seems simple. However, like most things, it may not be all that simple to predict.

One of the main reasons to consider backgrounding is to realize value from "cheap" gain on calves. Other reasons to consider backgrounding include adding value by getting calves through the weaning process or "straightening them out."

Also, if you are a spring-calving herd that weans calves in the fall, backgrounding the calves would allow you to market calves later when prices are historically better. Other producers may want to background calves through the winter to be able to graze calves on early spring grass.

If your primary motivation for backgrounding calves is to capture

value from cheap gain, this will ultimately be determined by the growth potential of the calves and the availability of inexpensive feedstuffs. Calves that have the genetic potential for growth, but are thin or "green" at weaning will likely experience more rapid and efficient growth during a backgrounding phase.

Keep in mind these calves are also the ones that are worth more per pound if you were to sell them at weaning. That should make sense. Calves that have the ability to achieve rapid, efficient gain are worth more. So, the question then becomes do you have the facilities, equipment, available feedstuffs, management skills and desire to background your own calves?

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Facility considerations

The facilities and equipment necessary obviously will depend greatly on the size of the operation and the geographic location. If you are going to feed large numbers of cattle through the winter months in regions of the country that are wet and muddy or that have extreme winters, you need to have the proper facilities. I could easily write an entire column about the options available and currently being utilized across the country.

If the cattle are going to be maintained on dirt lots, the space requirement will vary greatly depending on rainfall and mud potential and recommendations range from 100 to 500 square feet (sq. ft.) per head. If the calves are housed in a bedded pack barn, that requirement will range from 25 to 35 sq. ft.

Bunk space is a very important consideration. Will you be feeding the calves *ad libitum* or limit-feeding? If limit-feeding,

recommendations range from 18 to 24 inches (in.) of bunk space per head. However, when feeding *ad libitum*, recommendations range from 6 to 12 in.

The availability of inexpensive quality feedstuffs is critical to the success of your backgrounding operation. Initially, the key is to get the calves broke to the bunk. High-quality grass or grass-alfalfa hay is ideal for getting the calves to the bunk.

What you transition the calves to next will depend on available feedstuffs and your desired growth rate. You need to determine how long you want to feed the calves and what rate of gain you are targeting. In regions of the country where corn coproducts are available, they are often a logical choice.

Energy- and protein-dense feeds are preferred. Initially, calf intake will be low and the more energy- and protein-dense the ration, the more nutrient intake the calves will receive.

There are multiple regionally specific byproduct options that should be considered for backgrounding operations. The key to utilizing these byproducts is to have a feed analysis done. For example, distillers' grains and corn gluten feed are excellent feeds due to their energy and protein content. However, they are also high in phosphorus and sulfur, which should be taken into consideration when determining the appropriate mineral supplement.

If you know the nutrient analysis, you can determine how best to use that specific byproduct.

Management

There are several other management practices that warrant consideration if you are going to background your own calves. First, you should work with your veterinarian to determine the most appropriate vaccination protocol. Additionally, you should have a plan for how you will manage health

during the backgrounding phase. One of the easiest ways to wipe out all of your profit potential is to have a high morbidity rate and/or high mortality rate.

Other management practices that add value during the backgrounding phase include utilizing growth implants and feeding an ionophore. Growth implants easily return \$10 for every \$1 invested. The implant choice will again depend on the targeted length of the backgrounding phase.

Backgrounding calves is an opportunity for cow-calf producers to add value to their calves. With proper facilities, availability of inexpensive feedstuffs and good genetics, producers can reap the rewards of good management.

Editor's note: "The Digestive Tract" is a regular column in the *Angus Beef Bulletin* focused on nutrition for the beef cattle life cycle. Dan Shike is associate professor in animal sciences at the University of Illinois.