Is preconditioning your calves the right decision?

by Jason Bradley, Economist with Noble Research Institute

There's profit potential in preconditioning, but get a sharp pencil and make it dull before making any decisions. Many reports show a cow-calf operation can gain value by preconditioning its calves before marketing. Let's look at what the current preconditioning outlook shows us and a couple of other items to consider when deciding whether or not preconditioning is for you.

Two things you must consider when thinking about preconditioning are the value of gain (VoG) and the cost of gain (CoG). The VoG is the value added to the animal with every pound it gains, while the CoG is what it costs you, the producer, to put that pound of weight on.

Value of gain

To begin, we need to find the VoG. We can do this by estimating the selling value and the weaning value. But where do these values come from? This is where we use the futures market and a historical basis. In the futures markets traders from all around the world come together with information and try to outguess each other. This provides us with the best guess at where the price for a group of 62 steers weighing 800 pounds and located somewhere near the region where cattle are fed is going to be at some time in the future — which is why we call it the futures market.

But not all of us have 62 steers weighing 800 pounds, so we have to adjust that futures price. This adjustment is the basis. Basically, basis accounts for all the differences between your cattle and those in the futures contract. Since the cash market and the futures generally follow one another, a historical basis can be figured for almost every cattle type. Taking the basis for a particular set of cattle and adding it to the futures price, we can get an expected value.

By making some assumptions, we can come up with the prices for the cattle at weaning and after preconditioning. The assumptions are that:

- We are weaning 600-pound calves.
- The weanling calves will experience 5% shrink due to the stress of the selling process.
- The preconditioned cattle will experience 1.5% shrink.
- The livestock auction OKC West is our sale barn.
- Our weaning date is going to be Oct. 2, 2019.
- The preconditioned cattle are going to gain 2.75 pounds per day.

Based on these assumptions, our payweight on the weanling calf is going to be 570 pounds. Based on the current futures prices (as of this writing) for October of $151.48 and a historical basis for steers and heifers of about $1.10, our estimated sale price is around $152.58 per cwt.

Historically, we've seen a discount of around $10 for a bawling calf at this weight. This makes our final weaning price $142.58 and an estimated value of $812.68 per head.

One of the most common preconditioning programs is to wean for 45 days with a vaccination protocol. Using our assumed average daily gain of 2.75 pounds per day for 49 days (so the sale date matches up), our estimated ending weight after preconditioning is 734.75 pounds. Subtracting the 1.5% shrink leaves us with a payweight of 723.7 pounds. Using the January futures of $148.03 and a basis of -$8.29, our estimated price is $139.74 with a value of $1,011.34 per head. Now we can find our VoG. With $198.66 of added value divided by the 134.75 pounds the animal put on, our VoG is $1.47 per pound.

Cost per pound

The next step is to look at what the CoG is going to be. We'll say a standard vaccine protocols is going to run us around $15 per head. Then we'll add in the feed of $1.25 per day.

So, adding up 49 days of feed at $1.25 per day plus $15 for the vaccines, our preconditioning cost is $76.25 per head. Dividing this by the estimated 134.75 pounds of gain gives us an estimated CoG of 57 cents per pound.

In this scenario, our VoG is $1.47 per pound and our CoG is 57 cents per pound, resulting in a margin of gain of 91 cents per pound.

A 60-day preconditioning program is similar to the previous one except the calves have been weaned for at least 60 days. The health protocols are generally very similar to the 45-day program, so using many of the same assumptions, the selling price after 63 days of preconditioning is $1,055.92 per head, giving us a VoG of $1.40 per pound.

At 54 cents per pound, the CoG is a little less since we can spread the vaccine cost out over more pounds. In the end, our margin of gain is 86 cents per pound.

So, economically, based on the first example, does this scenario make cents? Yes, about 91. I know, bad joke … but does that mean you should precondition your calves?

Well, like all great answers, I'd start with saying it depends. That's because it really does.

There are other things to consider when preconditioning calves:

- It's going to take a lot more of your time.
- Weaning is a stressful period for cattle, and it requires you to be ready for any health issues that may arise.
- Not having the facilities to handle this process could prevent you from preconditioning.

If you think preconditioning is for you, make sure you evaluate the VoG and CoG using your operation's information.