Strategies To Lower Production Costs In Small Cow-Calf Operations

By Stephen D. Lukefahr

KINGSVILLE, Texas: A recent USDA report from the Livestock Marketing Information Center projected for 2016 that cow-calf producers will expend in total costs about $851 per cow while average calf returns will only be about $86.

If average pounds in calf weaned per cow exposed is figured at 400 pounds, the cost per pound is $2.13. At 500 pounds figure $1.72, although heavier calves do not relate to higher profits as will be explained later. No doubt, ranchers have little control over market prices. For some time now the writing has been on the wall: Production costs have to be lowered to maintain a healthy profit margin. Needless to say, production costs will only continue to rise but certain costs are easier to control than others.

In 2015, total direct and overhead costs in my cow-calf operation were about $23 per acre and $276 per cow. However, in this article I am not attempting to make an apples-to-apples comparison. The above cited figure of $851 total costs per cow reflect certain expenses that I have the Continued on p. 6
An important point here is that I winter my calves on their dams and wean at 10 months in early March, so figures for pounds weaned per acre and per cow are actually higher; hence, I am being conservative.

In terms of returns to the land, at a stocking rate of one cow per 12.2 acres, a yield of approximately 40 pounds in calves weaned per acre per cow exposed was realized. Also a profit of $50 per acre and $610 per cow were calculated based on the average across all 2015 calves at a fall market price of $155 per cwt. Actually, I should also point out that I do better than this because I sell most calves as breeding animals, but in this article I wish to demonstrate how it is possible as a small rancher to reduce costs and make a healthy profit at conventional market prices.

I wish to share how my production levels and costs were achieved and how each of the various factors of production can be examined with the aim of lowering costs in mind. Emphasis will be placed on costs on both a per acre and on a per cow basis to focus on land and cow management and/or efficiency. In addition, while this article reflects management of a small operation, it will become evident that certain principles and strategies can be broadly applied to any size operation.

First, some background is needed so here is a brief description of my business: I run about 50 cows on nearly 500 acres of land that is mostly leased. Since 2005, I have developed a composite herd of Red Angus, Senepol, and Tuli breeds.

This rare combination of African genetics with high hybrid vigor levels imparts heat tolerance and/or adaptability qualities to match the sub-tropical, south Texas environment.

I contend that having appropriate or inappropriate genetics can either make or break your cattle business. I focus on the breeding of adaptable, early maturing, and low maintenance
cows that are highly fertile and efficient (average mature weight is about 1,100 pounds).

In a recent article by Dr. Kris Ringwall (BeefTalk: Controlling Cow Size Aids in Controlling Cow Costs; Nov. 3, 2016) it was stated that the stocking rate for an 1,100-pound cow was 20% more compared to a 1,450-pound cow, which resulted in the sales of 20% more calves. The net result was a 10% increase in total revenue, even though heavier cows typically wean heavier calves. This point clearly explains why the cow-calf business should focus on the land as well as the cow.

Let's now examine the factors of production or business line items that contributed to the total cost in 2015 of only $23.63 per cow and $276.03 per cow.

**LEASE COSTS**

I will start with my largest cost item of lease payments, which is about 50% of my total variable costs. I make quarterly payments on a cash basis at a rate of $18/acre/year. This rate is typical for the region with improved pastures. The figure also reflects a stocking rate of 10 acres per cow and monthly payments of $95/acre. Lease contracts were originally prepared for all landowners and are updated annually. Many readers are well aware of the lowered business risk associated with leasing as opposed to owning land. A couple of years ago I paid off my own land from cattle revenue.

In 2015 the total lease cost was $11.22 per acre and $136.82 per cow. These two figures are lower than standard rates ($11.22 vs. $12 per acre and $136.82 vs. $189 per cow) because not all landowners charge a lease fee. Some are content in having their land and infrastructure (fences, sheds, and water) well managed and receiving a tax benefit for keeping their land in Ag use.

In the future, I doubt if I can lower lease costs simply because I feel it is not appropriate or even very smart to ask the other landowners whether or not they would consider lowering lease payments as this is an important source of income for them. Rule 1 in leasing land is to keep the landowner happy.

**SUPPLIES**

When it comes to supplies, I consider myself frugal. Maybe I adopted this behavior from my parents, or maybe it was reading books by Greg Judy and Joel Salatin! Likewise, it is important to note that I have no overhead expenses in terms of major buildings and equipment. I do not have any buildings of my own, although there are barns or sheds at some of my leases.

A set of work pens at my home property was assembled over 20 years ago out of used King Ranch cattle pipe panels. My stock trailer is over 15 years old. In 2015, the total supply cost was $4.17 per acre and $45.62 per cow. Most of this cost was from the purchase of ear tags (custom made and enough to last for several years), a simple hand-held spring scale to record birth weights (an important trait if in the breeding as opposed to the commercial business), and t-posts. In most cases, the landowner purchases t-posts; the ones that I purchased were for my own humble 20-acre property. Not much opportunity here to reduce supply costs in the future.

**VETERINARY COSTS**

In 2015, the total veterinary cost was $2.96 per acre and $35.39 per cow. Major related costs were for vaccines and for bull fertility and Trich's tests (I know that bull-related costs could have been excluded from the cow budget but these costs were low when averaged). A Costs and Returns Budget report prepared in 2015 by the Texas A&M AgriLife Extension Service showed a figure of $32 per cow. Vaccination is a controversial practice but I am a firm believer in biosecurity and disease prevention, especially because I live close to Mexico and wish to protect my herd from diseases like Brucellosis and Texas Cattle Fever, which can easily spread between herds. However, it has been several years now since I last dewormed my herd.

I also believe in the prevention of parasites through selective breeding for more resistant cattle and proper grazing management. Mentioned previously, I winter-calve on their dams and wean calves at 10 months in early March (also called natural weaning). Besides less weaning stress, I once calculated the savings of about $100 per calf in energy and protein feed costs (not including labor and transportation costs). After years of selective breeding, in 2016 average birth weight was 69 pounds, so further savings are realized in lower veterinary costs involving cases of calving difficulty or dystocia, which are now rare.

**FEED AND MINERAL COSTS**

It has been over 15 years since I last fed hay to my cattle. Instead, I aggressively stockpile forage in my pastures, practice rotational grazing, promote legume pastures, and maintain a conservative stocking rate. My plan is to stockpile as much as a year's supply of forage to prepare for the next drought so that destocking later is not necessary.

In addition, ranchers have an unfair advantage in south Texas where seldom do long and sustained freezing temps occur in winter. Tall stands of stockpiled forage protect the underlying green and more nutritious forage at the base. So, it has been several years since I last fed energy or protein supplements during winter, or at any other time for that matter. However, there are as substitutions for minerals. I provide free-choice mineral.

In 2015, the total feed cost was $6.28 per acre and $74.14 per cow, whereas the total mineral cost was $6.99 per cow and 12.11 per cow. In the same previously cited Costs and Returns Budget publication by the Texas A&M AgriLife Extension Service, figures of $50 in feed (hay) and $40 in mineral costs per cow were reported. In terms of feed development costs in feed, I calculate the number of months (usually 12 months) between weaning and calving and charge before pasture cost in feed. This is deducted from the cow budget. I figure that heifers consume on average 50% of the forage intake level of the cow budget. Therefore, $12.80 to $11.22 per acre. Similar to the sup-
piles and veterinary cost factors (and later labor, brush control, and other costs), I doubt that I can strategically reduce these costs in the future.

**TRANSPORTATION COSTS**

Each year I monitor my fuel costs and mileage figures. I apply standard IRS rates (0.54/mile) to mileage. In 2015, the total transportation cost was $5.45 per acre and $66.50 per cow. Here is a line item that I truly need to work on! In my defense, to a certain extent this high cost is a reflection of running a small operation and having cattle spread out at separate lease locations. However, the frequent visits to the herd do pay off in terms of my high production levels.

Possible solutions are to expand and run more cows and on leases closer to home, maybe check cattle less often, buy a more fuel efficient truck, use drones, etc. However, already by November of 2016 my travel costs have been cut by about 50% so progress has been made.

**DEPRECIATION**

Because of erratic market prices, in 2015 my cow depreciation cost was only $0.27 per acre and $3.33 per cow. Going forward into the future, one strategy is to develop low-cost heifers and sell them later as bred cows before their value appreciably declines and at a time when prices tend to be higher. In addition, I could increase the value of salvage cows, for example, sell as pregnant and in good body condition and before they get too old, and increase the number of years that my very best cows are productive in the herd.

**BRUSH CONTROL COSTS**

My pastures are in good shape. Some years ago when I acquired new leases I invested both time and money to control brush, mostly mesquite and huisache (acacia). Now I only have to spray or cut a few sporadic plants. In 2015, the total cost for brush control was $0.41 per acre and $5.04 per cow. Again, not much elbow room here to reduce this expense into the future.

**LABOR**

This line item is brief because in 2015 I did not hire any help but did all the work myself. In the future, I may likely hire workers temporarily to assist in maintenance activities such as fence work, brush control, and working cattle. But should I pay myself a salary for my own time? In 2015 I kept a log of my time, which was a total of 703.3 hours (averaging nearly 2 hours/day and more than one hour/month/cow). It is well known that smaller producers manage their livestock and that as a result production is generally higher.

Of total time expended, I dedicated about 35% in monitoring cattle and pastures and about 14% in record keeping, emailing customers, and updating my website (because I sell breeding cattle). Realistically if I paid myself even a salary of $20/hour there would be substantially less profit to show based on commodity market prices.

Calculating the opportunity cost (net benefit minus labor cost), my previous figures of $50.01 profit per acre and $610.18 profit per cow dramatically decrease to $17.07 profit per acre and $208.29 profit per cow. My break-even cost of labor is $30.37. However, perhaps I should seek ways of using my own time more efficiently. 2016 began with me no longer keeping a log of my hours.

**OTHER COSTS**

In 2015, other costs averaged at $0.85 per acre and $10.09 per cow.

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The only major cost of note was from a large bill to service my aging well, which arguably could have been amortized over three to five years. In the same previously cited Costs and Returns Budget publication by the Texas A&M AgriLife Extension Service, a miscellaneous cost figure of $10 per cow was reported so for this area I am at par.

**CONCLUSIONS**

The bottom line is that I doubt that I can further reduce my expenses. From a low-input production costs standpoint, 2015 was a good year in the future my main business strategy is simply to continue to avoid unnecessary costs by maintaining my frugal behavior. I do not plan on constructing a new shed or a set of work pens and my stock trailer should last at least another five years.

One specific strategy though is to take advantage of value-added opportunities to expand my niche market sales of breeding cattle. Examples include positioning sales when peak prices are reached such as for breeding bulls at 1-1/2 years of age instead of shortly after weaning age (realizing that there is an added cost as well as risk of mortality). However, I will continue to give discounts to repeat buyers and for multiple bull purchases.

In addition, I could further diversify my operation. For example, selling pregnant heifers and retaining ownership of grassfed calves. I also plan to continue to further reduce transportation costs by selling cattle directly to buyers from my own operation.

In conclusion, despite discouraging market trends there are definitely ways that small ranchers can still make a healthy profit to stay in the cattle business.

A focus on proper land management and appropriate genetics is key to a successful low-input system.

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