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How to be Profitable with a Small Cattle Operation

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Many cattle operations across the United States are considered "small," and one of the most common questions for small producers is how to be profitable. "Small" is not going to be defined here as that may be a relative term. What is going to be discussed are thoughts on how to improve profitability in cattle operations that may be more specific to smaller herd sizes. These thoughts and observations stem from nearly a decade of research and working with cattle producers with as few as five head to over 1,000 head of cattle in Tennessee. Some of these thoughts and observations may also contribute to improved profitability in larger operations.

The purpose of this publication is to provide some thoughts on practices that may contribute to profitability in cattle operations. Not every idea will be appropriate for every operation, but every operation will likely benefit from at least one cost saving or revenue enhancing idea.

Reducing Fixed Costs

Fixed costs on cattle operations are largely associated with buildings (e.g. equipment shed, hay barn), handling equipment (e.g. corral, working chute, head gate), and machinery (e.g. tractor, disc mower, rake, baler, cattle trailer, rotary mower, pasture sprayer). The costs associated with these resources come in the form of depreciation, interest, insurance and repairs. Many cattle producers feel as if they must have all of these and justify them by saying they are necessities. Some things, like having the ability to provide a health program to cattle, are necessities, but many of these resources are not necessities.

A full complement of hay machinery is a good example of what many cattle producers consider a necessity but may not be. The thought process is that hay equipment is a necessity in order to harvest hay in a timely fashion. A full complement of new hay machinery with no power unit may cost more than $50,000. Additionally, there will be fuel, maintenance, repair and labor costs associated with harvesting hay, transporting hay and feeding hay.

If a person only considers the initial hay equipment investment of $50,000, how much hay or other feedstuffs could be purchased? Assuming a person can mow, tedder, rake and bale hay at a cost of $20 per 1,000 pound bale ($40/ton) or it can be purchased for $40 per bale ($80/ton), a producer could purchase 2,500 bales or 1,125 tons of hay with the same money spent on the hay equipment. This is conservative in that it does not consider the nutrient/fertilizer value of the purchased hay or the ability to graze the forage that would typically be used for hay, reducing total hay needs.

Increase Grazing Days

The second practice that may be considered to increase profitability on a cattle operation is to increase the number of grazing days in a year and thus reduce the cost of harvested feed such as hay. This practice falls in line with the idea of reducing fixed costs by not owning hay equipment. If forage that is typically harvested for hay is converted to pasture usage then this practice itself should reduce the number of days hay and other harvested feedstuffs are needed to feed cattle. A second consideration is to reduce the stocking rate on the operation. Reducing the stocking rate generally results in an increase in the number of grazing days in a year and thus a reduction in the number of days hay is fed (Boyer et al., 2020), which can reduce feed cost by $15 to $45 per day for a 30-cow herd (Griffith et al., 2019). However, this must be balanced, because reducing the stocking rate also reduces revenue in that fewer animals can be marketed each year.

Reproductive Efficiency

Reproductive efficiency can be measured at several different production points, but the important value from a profitability standpoint is the number of calves marketed relative to the number of cows exposed to a breeding bull and how early the cows get bred during the breeding season. Griffith and Rhinehart (2021) evaluated the impact of marketing percentage and calving distribution on returns to a cattle operation. They determined that increasing the marketing percentage from 88 percent to 92 percent increased returns by nearly $30 per head. Similarly, shifting the calving distribution of a 90-day calving season from 40 percent in the first 30 days, 35 percent from day 31 to day 60, and 25 percent the last 30 days to 50 percent in the first 30 days, 30 percent from day 31 to day 60, and 20 percent the last 30 days increased returns per cow by $9 per head. These two factors together can increase returns per cow by $39, which is a large number for a thin margin business.

Improved Marketing

Production aspects of the cattle business tend to take precedence over marketing. However, marketing is often the aspect of the business that can garner the largest return. How can a producer step up their marketing game? This may take the form of joining a marketing alliance, retaining ownership of cattle in a commercial feedlot, finishing cattle at home and marketing them to a commercial packer, or finishing cattle at home and using direct marketing methods. One may have to change production practices to participate in a more valuable marketing method. However, it may be worth weighing the costs against the benefits to determine if additional value can be captured. For instance, cooperative feeder cattle marketing avenues in Tennessee have consistently displayed added value through price alone of nearly $80 per head (Griffith and Ferguson, 2019). Similarly, Tennessee producers retaining ownership of cattle in a commercial feedlot have averaged $35 per head (Tang et al., 2017) over several years.

Practices with Strong ROI

Several production practices have shown a strong return on investment (ROI). When capital is limited, it is important to put the dollars where the strongest return is. Producers should consider many practices and the ROI on each. However, three practices that seem to have a strong return and that can serve as an example are castrating bull calves, deworming calves and utilizing growth implants. Martinez (2020) demonstrates that bull calf (400-600 lbs.) prices are generally $7 to $11 per hundredweight lower than same weight steers, which means a revenue reduction of $28 to $66 per head on male calves. The cost of castrating male calves is less than $1 per head, which means the ROI is very strong. Similarly, deworming calves and the use of growth promoting implants in calves and stocker cattle show returns of approximately $20 each (Lawrence and Ibarburu, 2006), which is related to improved feed efficiency and marketing heavier calves. These two practices also have a strong ROI in that each practice only costs between $1 and $4 per head.

Alternative Cattle Enterprise

Many cattle producers are comfortable doing what they have always done. In Tennessee, this generally means carrying a few cows and marketing calves a couple of times each year. However, many small operations may see more of a return if they change the type of operation. Alternative operations may include buying and selling small groups of stocker cattle, contract grazing, custom preconditioning, custom heifer development, purchasing and breeding heifers, utilizing a confined feeding system, using cow herd as recipient cows for a registered herd or buying feeder cattle to place into a freezer beef or retail beef business. This is not an exhaustive list of alternatives, but this list should provide an idea on the way to think of alternative cattle businesses for small operations.

Conclusions

Producers who manage small cattle operations frequently look for methods and ways to increase profitability. There is no guarantee of profitability in farming, but there are a few ideas that can be put into practice that increase the probability of being profitable. There are sure to be more ideas than those listed here, and all of these ideas are not appropriate for every cattle producer. However, most small cattle producers and even some larger operations should consider these ideas and put pencil to paper to determine if some of these ideas are worth putting into practice.

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