

Making Preconditioning Pay – Small Producers

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Introduction

There is no question that times have changed in the cattle business, and that the trend is toward known identity cattle and rewards to producers for the value that they build into their product. In the past there have been disincentives to putting that hard work into production systems because of the perception that cow/calf producers are not rewarded for added value. Because of this problem, in the past producers were focused on producing calves for a generic commodity market, and the primary way they were rewarded was through selling more pounds. Obviously “premiums” were realized for basic practices such as castration, dehorning, and genetics (including breed and muscling), but casual observation of a typical regular sale can lead a producer to doubt that they are paid for even the most basic practices.

As producers develop and/or modify production systems with an eye on the future it is important that they; 1) take into account what production practices and traits add value to the cattle, 2) maintain the identity of their cattle so that any premiums flow back to them, and 3) improve the efficiency of their production system so that increased returns are realized. It is possible for producers to spend more adding value to their cattle than they can hope to recapture in marketing premiums, and that is something that must be avoided if producers are to achieve their goal of increased profits.

Adding value to cattle

There are a myriad of ways producers can add value to their cattle. Selecting improved genetics that improve muscling, quality grade, and growth rate will enhance value of feeder cattle. Utilizing good basic production practices

such as castration and dehorning (or using polled genetics) at a young age result with fewer problems down the road, increasing their overall value. In general, these practices are a given and have been embraced by producers for many years, and in most cases they have been rewarded by the market (Troxel et al. 2007). Less obvious upon visual appraisal is the improved value of cattle imparted by a good preventative health and weaning program, commonly referred to as preconditioning.

There actually is a limited amount of data showing how much preconditioning actually increases the value of cattle, and more research in this area is warranted. Lalman and Smith (2002) reviewed preconditioning literature and concluded that cattle that had been weaned 45 days and that received a prescribed health program including two doses of a modified-live respiratory vaccine deserved a premium of \$3-8/cwt over cattle sold directly off the cow without a vaccination program.

A recent summary of data from Superior Livestock Auctions (King et al., 2006) suggests that buyers are becoming more aware of the increased value of cattle that have gone through a good health and weaning program. Cattle were classified as 1) having no vaccinations and being sold off the cow, 2) having a vaccination for Clostridials, IBR, PI3, BVD, BRSV and Mannheimia haemolytica (with or without Pasteurella multocida) three to four weeks before weaning (Vac 34) or 3) being vaccinated twice for Clostridials, IBR, PI3, BVD, BRSV, and Mannheimia haemolytica (with or without Pasteurella multocida), and being weaned at least 45 days before shipping. Cattle in the Vac

34 program received a \$3.47/cwt premium over the non-vaccinated cattle, and the Vac 45 program received a \$7.91/cwt premium. The price premium offered for calves in these certified preconditioning programs increased nearly every year over the 10 year period studied.

Many states and pharmaceutical companies have developed third-party certified preconditioning programs to help producers use standardized management and health programs that will consistently add value to cattle. An example of this is the Virginia Quality Assured Feeder Cattle Program which has operated for 10 years in Virginia. These cattle are generally sold in tractor trailer lots and show an average premium of \$29/head over cattle sold in Virginia commingled graded sales (Hall et al., 2008), with premiums increasing over the time the program has been in existence.

Obtaining marketing premiums

Adding value to calves is one thing, but getting paid for that value is completely another. The most obvious marketing premium results from selling like cattle as a group rather than individually. Programs such as commingled graded sales have been a big success in the past, primarily because the buyer uses less effort to purchase the cattle needed to fill a specific order. Being able to purchase groups, and the ability to make such purchases over the telephone is much more efficient than sitting in a sale barn and purchasing cattle one at a time, thus resulting a marketing premium. In North Carolina, selling at a commingled graded sale has resulted in typical market premiums of \$4-5/cwt (Miller and McCraw, 2001). It is important to note that in such sales, basic practices such as castration and dehorning are required, but cattle are not required to be weaned or to receive viral vaccinations. In a sale where all the cattle have undergone the same health program and a 45-day weaning program an additional premium is often realized.

While there are premiums offered for like cattle sold in groups no matter how small the group, the best way to capitalize on the “group effect” is to offer cattle in truckload lots.

As you consider how you are going to improve your marketing leverage, you should look to find ways to package your cattle into truckload lots. There are a variety of opportunities to sell truckloads of cattle; directly off the farm, in conjunction with traditional auctions, or through special video or Tele-Auctions. Consider the opportunities in your area and talk to representatives of the variety of sales options that are available to you.

In the Mid-Atlantic, cattle that are preconditioned and sold off the farm in truckloads will bring about a \$5-8/cwt premium over cattle sold in a traditional graded sale (Hall et al., 2008). One big advantage of selling cattle as a truckload is that the identity is preserved which is usually not the case in the commingled sales. Cattle can be described in terms of the genetic base, health program, specifics of the weaning program and will generally be supported by the reputation of the marketing representative, or the collective reputation of the marketing alliance.

It is relatively easy for a large producer to package calves into truckload lots because they can sort through a large number of cattle and make uniform groups. Large producers also may choose to retain ownership on the cattle which allows them to capture all the value they have built into their calves if they are marketed on the rail using the optimal grid. Medium and small producers are much more challenged when it comes to retained ownership or truckload marketing of calves. Uniformity becomes an issue, and danger of an unfavorable market swing makes retaining ownership without a good hedging program a big risk. A producer with less than about 250 cows needs to do all they can to tighten up their calving season, have as uniform as possible a genetic base, and grow cattle to heavier weights if they are to market in truckload lots.

A producer with less than 150 cows will have difficulty putting together a truckload of cattle from their own cows. A medium sized producer who doesn't have enough of their own cattle should consider purchasing enough cattle similar to their own, precondition them and

group them with their own cattle for marketing. Not only will they make some profit on the purchased cattle (assuming that they make good purchasing decisions), this will add value to their own cattle because they can capture the truckload premiums.

Small producers are the most challenged to capture value that they build into their cattle. Commingled, preconditioned sales have been the most common way small producers have captured value in the past. During the last 10 years, cooperative marketing programs or local alliances have shown real promise for small producers.

As a case study we worked with a small producer in 2007 who was a member of the Southern Virginia Beef Alliance. This producer owned 35 cows calving in September and October and had a fescue-based forage program. The calves were weaned in late May, and 16 steers were fed in a group for an 82-day preconditioning period. These calves were fed 9 lbs of a byproduct-based concentrate with pasture available. Weaning value was based on a commingled graded sale at Lynchburg, VA. Final value at the same commingled graded sale in August was determined from published results for that sale, while actual value was obtained through the marketing alliance for a commingled tractor-trailer load sold under the Virginia Quality Assured Feeder Cattle Program.

The producer kept detailed records of costs associated with the preconditioning program including labor, feed purchase, pasture cost, etc. The preconditioning budget is shown in Table 1. The total cost of preconditioning and marketing these cattle was \$173.86 per head. Based on value of the cattle in May and August at the local commingled graded cattle sale, revenue increased by \$151.44, for a net loss of \$13.76 per head. When value was based on the actual sale price of these cattle through the alliance, however, they received a premium of \$7.10/cwt over the commingled sale, resulting in a net profit of \$44.77 per head. In this scenario, the producer would have been better off selling at weaning if they were not part of the marketing

alliance. Similar calculations with other producers participating in marketing alliances show that in many cases small producers would be better off selling at weaning in a commingled graded sale if they are not involved in a program designed to certify that a preconditioning protocol has been followed, and the cattle are somehow coordinated into truckload lots.

Table 1. Preconditioning Budget, Goosriver Farm, Oxford NC, Summer 2007

Item	\$/head
Total feed ¹	90.54
Hauling feed	11.77
Vaccines/eartags	5.00
Dewormer	0.45
Labor	30.00
Shipping	6.56
Sales cost	19.51
Misc. Equipment	10.00
Total Cost	\$173.86

¹Includes \$65.12 concentrate, \$22.96 pasture, and \$2.46 minerals.

Improving economic efficiency of preconditioning programs

As discussed above, producers can add value to their calves and by using a good marketing program they can be paid premiums for those cattle. However, this will not always improve economic returns because preconditioning programs can be expensive. Producers can use several approaches to reducing the cost of preconditioning. Costs include pharmaceuticals (vaccines, dewormers,

implants), feed, facilities and labor. The local alliances mentioned earlier can also pool their purchasing power to obtain inputs at a lower cost. Grouping cattle at weaning for custom backgrounding is an option some alliances use to improve economy of scale in facilities, labor and feed cost making them more competitive with the larger operations.

Of all the inputs, feed is likely to be the biggest single expense in a preconditioning/backgrounding program. There are a number of commercial preconditioning feeds available that are very good quality products but they have a relatively high price. Work in North Carolina in the early 1990s (Allison and McCraw, 1993a,b) showed that home mixed concentrates reduced the cost of preconditioning relative to commercial preconditioning feeds, and that the most economical gains were achieved when cattle were preconditioned in high quality pasture with a limited amount of grain supplement.

It is very important to get cattle started eating immediately after weaning, and the use of one of the commercial starter feeds or a high quality home mixed feed is recommended. Calves may be challenged with coccidia at this time, so use of a product to control coccidia is recommended early in the weaning process. In general you will be most successful in weaning if you offer calves very high quality grass hay in a feedbunk, and pour the grain on top to get the calves eating. Limited creep feeding prior to weaning will also be very helpful in getting calves started. If the weaning feed is homemade, it should contain adequate protein from a good quality protein source (e.g. soybean meal) and should deliver adequate levels of trace minerals and a coccidiostat.

Once calves are weaned and on feed, a less expensive feed can be used for the growing program. Use of local byproducts to form the concentrate supplement, along with high quality pasture as the forage is likely to be the most economical approach. In general we recommend feeding calves about 1% of body weight of a byproduct-based concentrate. We have had good luck with soybean hulls, either

loose or pelleted, pelleted wheat midds, or in some cases corn gluten feed, which give similar performance to standard concentrates (Poore et al., 2002).

Many of these byproduct commodities are inexpensive relative to commercial mixes, and often using less expensive feeds will result in increased returns by up to \$25/head during a 90 day period. Of course this depends on making good purchasing decisions on the byproducts as they can experience dramatic spot market swings. Currently, it is more and more common to find commercial blenders of byproduct commodities, and the blends probably have some nutritional advantage over single byproducts although that is not well understood.

Alternative supplementation strategies may help smaller producers manage labor costs during the growing period. Our recent results (Drewnoski et al. 2008) show that three times a week supplementation with a 50:50 blend of corn gluten feed and soybean hulls resulted in similar growth rates as compared to daily supplementation with an improvement in feed efficiency noted for the three times a week program. These results don't necessarily agree with other work evaluating frequency of providing energy supplements, so this is an area that deserves additional research.

Summary

To improve economic returns, cow/calf producers need to focus on adding value to their calves in an efficient way and then use an aggressive marketing program to get paid for that added value. Finding a way to market the calves directly off the farm in truckload lots will be the best approach for maximizing returns and giving the producer the most control over their program. Growing cattle to heavier weights on the farm after preconditioning will help producers package cattle in truckload lots, and if feed costs are kept under control will be an opportunity for additional profit on the gain. Small producers should consider developing production and marketing alliances in their local areas to enhance economies of scale in input purchases and to help package cattle in truckload lots.

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