

Managing Your Beef Herd: Highlighting Key Determinants of Success in Preconditioning

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What is Preconditioning?

The term preconditioning (PC) is generally accepted as a way to adequately prepare a calf for a successful feedlot experience. The details of various preconditioning programs have been annotated elsewhere. In all cases, calves are vaccinated for viral respiratory diseases and 7-8 clostridial organisms, dewormed, treated for lice/grubs, bulls are castrated and horned calves are dehorned. In most programs calves are weaned for 30-plus days and calves are trained to eat from a bunk and drink from a fountain/tank.

Many PC programs encompass a beef quality assurance – commonly known as BQA – component.

Preconditioning Advantages

Nearly every study shows that the cattle feeder that purchases PC calves is financially rewarded for purchasing these higher health status cattle. PC calves have reduced morbidity and mortality in the feedlot and tend to have improved gain and feed efficiency compared to their non-PC contemporaries. For some the question remains if the *producer* of PC calves receives equal financial benefits.



Keys to Preconditioning Success

In a recent paper (Hilton and Olynk, 2011) 11 years of data from an Indiana beef farm was summarized to uncover four key factors in enhancing the profitability of preconditioning:

1. Team Building

- Developing a team – It takes time and practice to develop a beef management team for your farm and acknowledge skill building. Beef production is becoming increasingly complex, and relying on advisers in health, nutrition, finances, pasture management and genetics to help guide you will yield the best results. Your herd health veterinarian and Extension educator can be key resource people for your team.
- Practice makes perfect – In our test herd, the owner averaged a return to labor and management of \$37.28/calf during the first three years on the program and averaged \$91.41/calf in years 9-11. Managerial skill building to successfully incorporate preconditioning into the farm operation will take time.

2. Weight Gain

- Pounds pay – Research on the profitability of PC points squarely to the fact that increased gain means increased profits. Calves gaining only 1-1½ pounds/day have the majority of their nutrition going to maintenance functions, while calves gaining 2.5-3 pounds/day have the majority going toward weight gain. You get paid for gain, not maintenance. Develop a ration where 2.5-3 pounds/day gain is possible.
- Efficiency pays – Newly weaned calves are very efficient in converting feedstuffs to beef. The cost per pound of gain generally increases as calves get heavier, so adding these “cheapest” pounds is very cost effective and is best done on the farm of origin.
- More days = more profit – In our study herd there was a positive relationship between days preconditioned and overall profit. Newly weaned calves are stressed and weight gain the first week postweaning can be negative to miniscule. If we have a 30-day

PC program, the first week of around zero gain is almost 25 percent of our total time. If we PC for 70 days, the first week becomes an almost insignificant 10 percent of the overall PC timetable.

3. Herd Health and Nutrition

- Nutrition is key – Newly weaned calves can consume a majority of calories from co-product feeds that are high in fiber. Prices of these feedstuffs tend to be lower than feedstuffs with similar energy values such as corn and oats. Working with a nutritionist will allow the cattle to eat a balanced ration that optimizes growth rate while adding muscle and not fat.
- Health during preconditioning – Calves weaned in a low-stress manner at the farm of origin experience minimal health concerns. Morbidity rates under 2 percent and mortality rates under 0.5 percent are common. With a solid vaccination, weaning, nutrition and environmental plan, health concerns should be nearly non-existent.

4. Marketing PC Calves

- PC bonus – Many papers on preconditioning focus mostly to exclusively on the PC bonus that the buyer pays because the calves have PC tags and/or paperwork. The study we conducted showed that 63 percent of the profit for preconditioning was because of added weight sold, and only 37 percent because of the bonus. Our conclusion is to focus on the items outlined in Nos. 1-3 above, which provide the best opportunity to make PC pay.
- Selling calves – If a bonus for PC is to be obtained, the herd owner must take a more active role in marketing the calves. Examples are to sell calves at a sale where PC calves are featured, or sell via private treaty. If calves are sold through normal marketing channels, the chances that there will be a PC bonus are remote.

Conclusion

Each beef herd is unique, and an assessment of cost-effective strategies should be examined with a team of advisers. In most herds, preconditioning calves before sale will have a significant impact on overall herd profitability.

Table 1. Indiana Beef Herd Preconditioning Results 1999-2009

Costs & Returns from Preconditioning	Value Per Calf	% of Total Cost
Gross returns from preconditioning (returns from preconditioned calf sale – estimated returns if sold at weaning)	\$174.30	
Co-product and concentrate feed	\$ 62.66	67%
Hay	\$ 8.01	9%
Salt, minerals, ionophore	\$ 3.19	3%
Veterinary and medicine (including labor)	\$ 12.20	13%
Interest	\$ 5.64	6%
Death loss	\$ 1.90	2%
Total costs associated with preconditioning	\$93.60	
Preconditioning net returns	\$ 80.70	100%

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