



Using Preconditioning Programs as a Management Tool for Value Added Calves

Jessica Crozier, B.S., and Kerry A. Rood, M.S., DVM

Introduction

Stress caused by weaning, transportation, mixing with other cattle, bad weather and poor nutrition can cause severe health problems (Lalman and Smith, 2002). These problems can be controlled by a management tool called preconditioning.

Preconditioning means various things to different producers and there is confusion on exactly what is being talked about when the topic is discussed. Preconditioning programs range from simple practices done right after weaning, but before cattle are shipped, to systems where owners retain ownership and keeping the calves for another 30 to 45 days. For the sake of this paper, preconditioning refers to a system in which ranchers retain ownership of their calves. This period usually lasts 21 to 30 days, but the benefits of a 45-day program are becoming more clear (Dhuyvetter, 2004). During this time, calves are weaned and started on a nutritional program which introduces them to dry feed and feed bunks (Bailey and Stenquist, 1996).

Calves are usually dehorned, castrated (if not already), and/or implanted with growth promotants (Dhuyvetter, 2004; Dhuyvetter, et al., 2005). Keeping the calves near or on the home place helps reduce stress and strengthens the calf's immune system so future stressors, like travel, won't cause as much damage (Dhuyvetter, 2004).

Preconditioning programs have proven to lower death loss, reduce weight loss, increase feed

efficiency and weight gain at the feedlot and increase carcass value (Bailey and Stenquist, 1996; McCollum and Gill, 2000).

VAC-45

An example of a preconditioning program promoted is the VAC-45 program. VAC is an abbreviation for value added calf. This program requires producers to wean calves at least 45 days before selling them. The VAC-45 program also requires vaccinations, dehorning, castration, and bunk training. Such programs as the VAC-45 program cost approximately \$35 to \$60 per head

(Avent, et al., 2004; Lalman and Smith, 2002). This variation is due to the fact that owners have differing overhead and feed costs depending on where they are located. The pay back for participating in the VAC-45 program ranges from



Figure 1. Weaned calves being bunk trained.

\$6.50 to \$8/cwt. A similar preconditioning program, the VAC-34 program, has premiums ranging from \$2.45 to \$4.68/cwt.

Added Value

The benefits of a preconditioning program can vary, but buyers are usually willing to pay premiums for calves that have been through a preconditioning program. These premiums vary depending on the market at the time of sale (Bailey and Stenquist, 1996). One study concluded that a preconditioned calf returned \$14 more when compared with a calf that had not been through a similar program (Dhuyvetter, et al., 2005). Extra income is not the only reason producers might consider a preconditioning program. Preconditioned calves normally do better in feedlot or backgrounding facilities because their immune systems are stronger and they are better able to handle the stress of transportation and can adjust to a new environment faster (Seeger, et al., 2011). Another animal health benefit is less sickness, less death, and lower medicine costs. The last few benefits are aimed at feedlot or backgrounding operations, but by supplying these facilities with superior calves, cow-calf producers create a good reputation for providing high quality calves (Lalman and Smith, 2002).

Pointers

Some tips to consider before, during and after implementation of a preconditioning program are:

- Develop a projected budget that fits your situation. This will help determine if a preconditioning program will be cost effective for you. Include in your budget costs for vaccinations, feed, handling and death loss (Dhuyvetter, 2004).
- Consider if you have the facilities to handle keeping calves for an extra 30 to 45 days. This could be a set of corrals, a dry lot, or a pasture. If you don't have access to something like this be sure to factor in the cost of leasing ground into your budget so you have a place where you can wean your calves.
- Talk with a local veterinarian and a local livestock extension specialist to make sure that the program fits the ranch

financially and works with local weather patterns (Bailey and Stenquist, 1996).

- Document what and when health products are used. Your veterinarian can assist with this.
- Identify the right markets. Often a producer will need to locate buyers willing to pay a premium for preconditioned calves. Start long before the calves are weaned (Dhuyvetter, 2004; McCollum and Gill, 2000).
- Once you have found a market, plan to deliver what buyers want (McCollum & Gill, 2000).
- Increase the value of your calves by dehorning, castrating and sorting into large uniform lots (Seeger, et al., 2011; Smith, et. al, 1998; Schulz, et al., 2010).
- Buyers pay more for uniform calves (including color) that will finish. Dairy and longhorn cattle have consistently sold for less than other breeds (Schulz, et al., 2010; Smith, et al., 1998).
- Market healthy, clean animals. Cattle that are seen as unhealthy or lame receive the highest discounts (Avent, et al., 2004). Cattle with rough or muddy coats receive slight discounts too (Smith, et al., 1998).



Figure 2. Uniformed black calves being backgrounded. From: www.oklahomafarmerreport.com

Summary

A preconditioning program may benefit your operation. These benefits can improve overall cattle health and can bring extra income to a ranch. As with other management tools, producers have to decide if a preconditioning program is right for their situation. The benefits of a preconditioning program can be realized, but may take a bit of extra work and ingenuity. By using management tools, like a preconditioning program, producers can increase their income while also increasing the health of their cattle herd.

References

- Avent, R. K., C. E. Ward, and D. L. Lalman. (2004). Market valuation of preconditioning feeder calves. *Journal of Agricultural and Applied Economics*, 36(1), 173-183.
- Bailey, D. and N. J. Stenquist. (1996). Preconditioning calves for feedlots. *Managing for Today's Cattle Market and Beyond*, Livestock Marketing Information Center (LMIC). Available at <http://ag.arizona.edu/arec/wemc/todaysCattlepub.html>. Accessed October 20, 2011.
- Dhuyvetter, K. C. (2004). Economics of preconditioning calves. Kansas State University Agricultural Leaders Conference, Kansas State University.
- Dhuyvetter, K. C., A. M., Bryant, and D. A. Blasi. (2005). Case study: Preconditioning beef calves: Are expected premiums sufficient to justify the practice? *The Professional Animal Scientist*, 21, 502-514.
- Lalman, D. and R. Smith. (2002). Effects of preconditioning on health, performance and prices of weaned calves. Oklahoma State University Cooperative Extension Service. Available at <http://www.ansi.okstate.edu/exten/beef/>. Accessed on October 20, 2011.
- McCullum, T. and R. Gill. (2000). Preconditioning pointers. Retrieved from: http://beefmagazine.com/mag/beef_preconditioning_pointers/index.html
- Roeber, D. and W. Umberger. (2002). The value of preconditioning programs in beef production systems. Available at <http://agecon.lib.unm.edu>. Accessed on October 20, 2011.
- Schulz, L., K. C., Dhuyvetter, K. Harborth, and J. Waggoner. (2010). Factors affecting feeder cattle prices in Kansas and Missouri. Department of Agricultural Economics, Kansas State University.
- Seeger, J. T., M. E. King, D. M., Grotelueschen, G.M., Rogers, and G. S. Stokka. (2011). Effect of management, marketing, and certified health programs on the sale price of beef calves sold through a livestock video auction service from 1995 to 2009. *Journal of the American Veterinary Medical Association*, 239(4), 451-466.
- Smith, S. C., D. R. Gill, S. C. Jones, and B. A. Gardner. (1998). Effects of selected characteristics on the sale price of feeder cattle in eastern Oklahoma. Stillwater, Oklahoma: Oklahoma Cooperative Extension Service, Oklahoma State University.
- Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.
- Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.
- This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.