

June 2011 AG/Beef/2011-02

Major Factors or Inputs Affecting Profitability of Beef **Cow Herds in the Western United States**

J. Severe and D.R. ZoBell

Factors affecting the profitability of Western States beef cattle herds are numerous, diverse, and often interconnected. The impact of profitability factors may vary between Western States cattlemen due to geographic location. For example, the circumstances which impact the profitability of a remote Idaho beef herd located at 6500 feet above sea level can be significantly different from those that impact the profitability of a Western States beef herd located in Southern California. However, a review of topics addressed in the Nevada Cattlemen's Update from 2010 to 1998, reveal major factors or areas of concern that may affect the profits of nearly all beef producers in the Western United States. During the past 11 years the Nevada Cattlemen's Update has reported on specific issues in the following areas that affect profitability: herd health, herd genetics, feed cost, feed availability and quality, government, market conditions, and operational management (Cattlemen's Update, 2010).

Herd Health

The health of beef herds is a concern cattlemen worldwide (International Livestock Research Institute, 2010). But, Western United States beef growers have herd health problems unique to western locales that significantly affect profitability.

Public grazing lands in the Western United States are an affordable and profitable resource available to many cattlemen. But, the use of public grazing lands by Western States beef producers can expose range herds to unique health problems brought about by plants (Bagley, 1997; Ranson, 2011) and animals that cause stress, disease, or death (Clark and Johnson, 2009; Associated Press, 1992; Associated Press 1997; Belair, 2008). Cost of prevention and treatment of these health problems significantly impacts the profitability of Western States beef herds.

Physical and psychological changes also affect the health of Western States range herds. During weaning, calves which have spent most, if not all, of their lives away from men, buildings, corrals and machines go through an abrupt change of environment. Weaning stress can significantly impact profits (Carter, 2010) of Western States beef producers through weight loss, disease or death of calves.

Western States beef producers often have public grazing operations that span hundreds of miles. Large distances limit access to range herds for health management. This is a unique and challenging problem affecting profitability of western cattlemen. Herds which are spread out over vast distances cannot be monitored as efficiently as farm herds (Marsh, 1952). Consequently, western beef herds are more susceptible to disease, adverse weather, theft, and predation. All these challenges significantly impact the profitability of Western States beef herds.

Often Western State beef herds are transported by truck to summer range, winter range, sale yards, and feedlots, etc. Stress from shipping causes health problems in range cattle and therefore impacts profitability. Shipping stress can cause cows to abort (Fields & Perry, 2009). Shipping stress can also lead to bovine respiratory disease, infectious bovine rhinotracheitis, impact performance (Richeson et al., 2008), cause weight loss (Thomas, 2008) and require valuable time for animals to recover or even receive expensive medication (Holt, 2010). The large transportation requirement of western range cattle negatively impact beef producer profitability through herd health issues

Feed Cost, Availability, and Quality

There are many factors which determine feed cost for the cattlemen in western states. Climate (Rushton, 2010), world grain markets (Schmahl, 2010), feed types (Torell, 2010), geographic location of the beef producer, and competition for feed from other industries are all factors that positively or negatively affect feed cost (Torell, 2007). Arid conditions in the Western United States make cattlemen particularly sensitive to feed cost. During dry or winter seasons beef cattle in the Western U.S. have limited grazing and must have supplemental feed (Torell, 2010). Supplemental feed is a major factor that affects the profitability of Western States beef producers.

The cost of grazing on public lands is also a major factor affecting profits of cattlemen in western states (Easthouse, 1997). Cattlemen in western states have utilized public grazing land profitably for generations. But, in recent years, environmental activist have started competing for government grazing rights (Idaho Statesman, 1998). By bidding against legitimate cattlemen, activist have increased the cost of gazing or forced cattlemen to move their operations to less profitable locations (Stein, 2002).

Many Western States are experiencing rapid population growth. This population growth is causing the problem of urbanization (Sokolow, 2007). As pastures and range are developed for housing or other human activities, land becomes unavailable to western cattlemen, increasing costs of operation. Urbanization makes grazing land too expensive to purchase or rent for pasture.

Urbanization also negatively impacts the profitability of Western States beef herds through urbanite and cattlemen conflict. Often beef cattle operations and urbanite values do not exist harmoniously and conflicts arise. When litigation ensues the profitability of cattle operations can be greatly impacted.

Government

The profits of nearly every business in the United States are impacted by Government regulations and policies, both directly or indirectly including the profitability of beef herds in the Western States, and in fact all commercial beef producers. The impact of government on the profits of cattlemen is complex and diverse. The National Cattlemen's Beef Association identifies the following areas in which government impacts the beef industry: animal health, cattle markets, farm policy, federal lands, food safety and nutrition, international trade, national resource management, taxation and financial credit (Government Affairs, 2011).

Some governmental influences that impact profits of Western United States cattlemen are unique from those experienced by other beef producers in the United States. Environmental policies governing the use of federal lands and threaten or endangered species have cut deeply into the profits of many cattlemen in the Western United States (Brokaw, 2005; Bagley, 1997). Wolf reintroduction and expansion of grizzly bear habitat are examples of government programs that have significantly impacted the profits of many Western States cattle producers (Clark & Johnson, 2009). These programs have cost Western States cattlemen profits through loss of National Forest and BLM grazing allotments and predation (McClatchy, 2010; Christian Science Monitor, 1992; Wallace, 1991).

Government trade policies can negatively and positively impact the profitability of Western States beef producers. Through policies which control the amount of foreign beef entering U.S. markets, the profits of Western States producers are protected. Government trade policies have also been implemented to influence countries to import beef from the Western United States. For example, the U.S. government has been very active in getting beef into China, Korea and Japan (Gatula, 2010; Japan, 2010; Seoul, 2010; Adams, 2010).

Government energy policies that have mandated ethanol production have impacted the profits of western states beef producers by increasing grain cost and consequently the price of forages (Torell, 2007). Grain prices are at record level. Therefore, farmers have plowed out forages to plant more profitable grain and created forage shortages. High forage costs precipitate the downsizing of beef herds and hence the size of future calf crops, therefore impacting calf numbers.

Herd Genetics

Through beef herd genetics profits of Western States beef producers are impacted in many feed efficiency, ease of calving, maternal characteristics, beef quality and hardiness to climate can increase or diminish profits of cattlemen (Angus Advantage, 2011).

Conclusion

The same factors which affect the profitability of beef herds throughout the United States such as growth rates, feed, death loss, and reproductive management, etc., also affect the profitability of beef herds in the Western States. However, within these common factors which affect beef herd profitability, are circumstances and conditions unique to Western States producers. Western States beef producers may not be able to control many of the actions, events, or conditions that affect the profitability of their beef herds. But, through education, good management practices, and political involvement, Western States beef producers may minimize or eliminate the impact of factors that negatively impact their profits and enhance the factors that increase profitability.

References

- Adams, J. (2010). Taiwan curbs US beef imports in latest Asia trade frictions. Health concerns and angry protests have prompted partial bans on US beef imports in Taiwan, Japan, and South Korea -most recently by Taipei on Tuesday. The recurring dispute has strained relations .The Christian Science Monitor, January 5, http://www.proquest.com/(accessed January 21, 2011).
- Angus Advantage. (2011). Retrieved January 21, 2011, from American Angus Association: http://www.angus.org/Education/AngusEducation.asp x
- Associated Press (1992). Rancher Sues U.S. Over Cattle Disease. The Salt Lake Tribune, January 6,

- http://www.proquest.com/ (accessed January 21, 2011).
- Associated Press (1997). USDA plan would allow infected bison to graze on public lands: [Final Edition]. Las Vegas Review Journal, February 9, http://www.proquest.com/ (accessed January 21, 2011).
- Bagley, C. V. (1997). Halogeton Toxicity in Cattle. Retrieved Jan 20, 2011, from Utah State University: http://extension.usu.edu/files/publications/factsheet/A H_Beef_17.pdf
- Belair, D. (2008). Free Range Farming: Livestock Health Problems Associated With Unrestricted Farming . Retrieved January 22, 2011, from http://www.suite101.com/content/free-range-farming-a43878
- Brokaw, C. (2005). Prairie dogs ruined land, ranchers say Trace problem to end of federal poisoning Associated Press. The Commercial Appeal, p.A9. Retrieved January 21, 2011, from ProQuest Newsstand. (Document ID: 796277741).
- Carter, C. P. (2010). Minimizing Weaning Stress on Calves.
 Retrieved January. 20, 2011, from Cattlemen's
 Update 2010:
 http://www.ag.unr.edu/ab/Resources/Nevada_Cattle
 men/Cattlemens Update 2010.pdf
- Cattlemen's Update (2010). Retrieved January 20, 2011, from University of Nevada Reno: http://www.ag.unr.edu/ab/Resources/Nevada_Cattle men/Default.aspx
- Christian Science Monitor (1992). Desert Tortoise vs.
 Grazing Cattle Ranchers angry at federal order to
 temporarily move cattle from public lands: [All
 02/12/92 Edition].(pre-1997 Full text),February 12,
 http://www.proquest.com/ (accessed January 21,
 2011).
- Clark, P. E., & Johnson, D. (2009, June 24). Wolf-Cattle Interactions in the Northern Rocky Mountains.

 Retrieved January 21, 2011, from United States Department of Agriculture,

 ARS:http://www.ars.usda.gov/research/publications/publications. htm?seq_no_115=246628
- Easthouse, K. (1997). Grazing Loss Compensation Urged Environmental Group Suggests Payments To Ranchers If Court order Forces Cattle off Public Grazing Lands. The Santa Fe New Mexican, September 11, http://www.proquest.com/ (accessed January 21, 2011).
- Fields, S., & Perry, G. (2009). Effects of Shipping and Heat Stress on Embryonic Mortality in Cattle. Retrieved January 22, 2011, from TheBeefSite: http://www.thebeefsite.com/articles/2081/effects-of-shipping-and-heat-stress-on-embryonic-mortality-in-cattle
- .Gatdula, J. (2010). TradeTripper. BusinessWorld, October 8,http://www.proquest.com/(accessed January 21, 2011)
- Government Affairs (2011). Retrieved January 21, 2011, from National Cattlemen's Beef Association: http://www.beefusa.org/governmentaffairs.aspx

- Holt, K. (2010). Progressive Cattleman. Retrieved January 20, 2011, from Minimize shipping stress by planning ahead:

 http://www.progressivecattle.com/index.php?option=
 com_content&view=article&id=3376:minimizeshipping-stress-by-planning-ahead&catid=120:herdhealth&Itemid=159 I
- Idaho Statesman (1998). Ranchers are being smeared by hate-peddling, greedy extremists. June 22, http://www.proquest.com/ (accessed January 21, 2011).
- International Livestock Research Institute (2010). Retrieved Jan 20, 2010, from http://www.ilri.org/home: http://www.ilri.org/home
- Japan, (2010) USA discuss resumption of talks on beef imports. 2010. *BBC Monitoring Asia Pacific* July 23: http://www.proquest.com/ (accessed January 21, 2011)
- Marsh, H. (1952, March). *National Center for Biotechnology Information*. Retrieved Jan. 26, 2011, from Disease Problems in Range Livestock': http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1791 416/pdf/vetsci00220-0009.pdf
- McClatchy, E. (2010). Not_just wolves_killing livestock Tribune Business News. Washington: Dec 12, 2010.
- Ranson, S. (2011, January 11). Cattlemen's Update makes Northern Nevada tour. Retrieved January 20, 2011, from Lahontan Valley News: http://www.lahontanvalleynews.com/article/2011011 1/NEWS/110119976
- Richeson, J., P. Beck, M. Gadberry, S. Gunter, T. Hess, D. Hubbell, and C. Jones (2008). Effects of on-arrival versus delayed modified live virus vaccination on performance, and serum infectious bovine rhinotracheitis titers of newly received beef calves 1. *Journal of Animal Science* 86, no. 4, April 1):999-1005. http://www.proquest.com/ accessed January 26, 2011).

- Rushton, M. (2010). A not-so-happy home on the range. *The News*, November 2, http://www.proquest.com/ (accessed January 21, 2011)
- Schmahl, R. (2010). Grain prices could be near a top. 2008. *Dairy Today*, July 7, http://www.proquest.com/ (accessed January 21, 2011).
- Seoul (2010). Seoul rules out negotiations on US beef imports. 2010. *BBC Monitoring Asia Pacific* December 8; http://www.proquest.com/ (accessed January 21, 2011).
- Sokolow, K. R. (2007). The Economic Roots of Solano County Agriculture. Davis, CA: University of California Agricultural Issues Center.
- Stein, T. (2002). Idaho Group Battles Grazing Permits on Rangeland in Two Colorado Counties. Knight Ridder *Tribune Business News* February 51. http://www.proquest.com/(accessed January 21, 2011).
- Torell, R. (2007). Impact of Ethanol Production on the Livestock Industry. Retrieved January 22, 2011, from University of Nevada-Reno: http://www.ag.unr.edu/ab/Resources/Nevada_Cattle men/Cattlemens_Update_2008.pdf
- Torell, R. (2010). Matching Hay Quality to Cow Needs.
 Retrieved January 20, 2011, from Cattleman's Update 2010:
 http://www.ag.unr.edu/ab/Resources/Nevada_Cattlemen/Cattlemens Update 2010.pdf
- Wallace, A. (1991). Environmental Range War Pits Butterflies Against Cattle Grazing: Status of rare butterfly could have a bearing on grazing rights for 50,000 acres of public land in San Diego County: [San Diego County Edition]. Los Angeles Times (pre-1997 Full text), October 14, http://www.proquest.com/ (accessed January 21, 2011)

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.