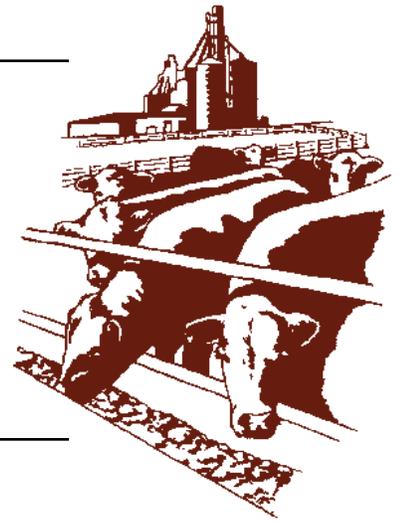




Beef Cattle Handbook



BCH-11300

Product of Extension Beef Cattle Resource Committee

Maximizing The Value Of Beef Cattle Hides

Tom Field, Ph.D., Department of Animal Sciences, Colorado State University

While the hide is not the primary determinant of the value of beef cattle, it does have a significant impact on profit margins for the industry. Hide value accounts for six to eight percent of the total value of a fed beef animal. In the first half of 1992, whole cattle hide exports were valued at one-half billion dollars, according to the U.S. Department of Commerce. However, fewer than one-fifth of all cattle hides produced in the U.S. qualify to be manufactured into high quality leather products.

Because whole cattle hides are marketed as a commodity, price trends for hides are typically cyclic in nature, which often impacts packer margins. For example, as hide prices increase, packers experience more desirable margins, which often results in enhanced demand for cattle. As part of the National Beef Quality Audit, packers ranked hide defects caused by branding, parasites, insects and mud, feces, or urine as their number one concern relative to factors impacting the "quality" of beef. While cow-calf producers are not directly affected by the profitability of the hide market, the indirect effects and potential opportunity cost consequences are sufficient to warrant a concentrated effort at protecting the value of cattle hides.

Branding

Branding is a centuries-old animal identification practice most commonly utilized in the western and southwestern U.S. Just over twelve percent of U.S. cow-calf producers brand calves prior to weaning, which accounts for 37.6 percent of the U.S. beef calf crop (USDA, 1993). Forty-nine percent of all branded calves originate in the eleven western continental states. Fourteen percent of

calves are rib branded, 23.2 percent are branded on the hip or shoulder, with the remaining 0.4 percent branded on other anatomical locations (USDA, 1993).

Brands create problems from the standpoint of creating scar tissue, which weakens the fiber structure and breaks the grain, thus lowering the usefulness and value of leather originating from affected hides. Both hot-iron and freeze branding diminish hide value. Brand location also has a significant impact on hide value. Native or non-branded hides command the highest price, while shoulder or butt-branded hides are discounted to intermediate levels, rib-branded hides or collies receive the most severe discounts.

Producers are encouraged to avoid the use of side brands. If branding is necessary, the location should be limited to an area behind the hooks or in front of the shoulder. Furthermore, brand size should be minimized to the extent possible. Ideally, brand application should be restrained to replacement breeding stock and multiple brands should be avoided to minimize effects on hide value.

Insect and Parasite Damage

Insect and parasite damage contribute significantly to the loss of hide value. Insect and parasite damage may be manifested in the hide as discoloration, alteration of grain pattern, various sized pits, holes and other texture irregularities.

Robert Koeppen, chief tanner for Blueside Companies, the largest tannery in the U.S., has summarized the average incidence of insect and parasite damage. In the course of one year's time, 69 percent of hides

have pitting defects, 36 percent are discolored and/or rough textured due to mange, 23 percent are damaged because of warts, 21 percent are defective due to ringworm, and 5 percent of cattle hides are defective due to the presence of grubs.

These defects are problematic to tanners and users of raw leather stock because of problems with uniform dyeing, undesirable textures or grain patterns, and loss of usable material due to pitting, holes or other blemishes.

In addition to hide damage, the impact of insects and parasites may be observed as loss of growth performance, a decline in feed efficiency, and proliferation and spread of some diseases. An insect and parasite control program can yield both direct and indirect economic benefits. Development of prevention and treatment programs should be carried out under the direction of a licensed veterinarian.

Mud Control

An additional value loss in cattle hides is the occurrence of mud locks on the hair of cattle. This problem is somewhat seasonal in nature and is compounded by the potential microbial contamination of the carcass at the time of harvest. Mud locks are a problem to the tanner because the hide may be penetrated or gouged as the hide passes through the fleshing process.

A vast majority of mud problems are created at the feedlot level and thus, improved drainage, sanitation and lot management needs to be implemented at this level.

Summary

One of the primary principles of total quality management is to focus on improving continuously all products of an industry. Alteration of management and identification protocols can assist in the production of high quality cattle hides that assure the sustainability of the hide market and thus improve the overall profitability of the U.S. cattle industry.

References

- Koeppen, Robert. 1991. "An Attempt to Quantify Common Parasite and Insect Damage as well as Urine/Manure Damage Over a Full Year." *J. American Leather Chemist's Association*, Vol. 86.
- United States Department of Agriculture, APHIS:VS. 1993. "Branding Practices in Beef Cow/Calf Herds." *Beef Cow/calf Health and Productivity Audit Report*.

Author:
Tom Field, Ph.D., Department of Animal Sciences, Colorado State University

This publication was prepared in cooperation with the Extension Beef Cattle Resource Committee and its member states and produced in an electronic format by the University of Wisconsin-Extension, Cooperative Extension. Issued in furtherance of Cooperative Extension work, ACTS of May 8 and June 30, 1914.