

# Premiums and Discounts for Market Beef Cows and Bulls Sold at Auction

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## Background

### Beef Quality Assurance

THE BEEF INDUSTRY'S Beef Quality Assurance (BQA) program was created in 1987 to assist beef producers with raising, feeding, and harvesting high-quality beef. The BQA program provides a set of management guidelines for beef producers to ensure the quality and safety of beef for consumers. Through the use of scientific research and educational initiatives, the BQA program has identified production practices producers can implement each day. The ultimate goal of these BQA practices is to maximize consumer confidence.

Beef Quality Assurance is a nationally coordinated, state implemented program that provides systematic information to U.S. beef producers and beef consumers of how commonsense husbandry techniques can be coupled with accepted scientific knowledge to raise cattle under optimum management and environmental conditions. Beef quality assurance guidelines are designed to make certain all beef consumers can take pride in what they purchase and can trust and have confidence in the entire beef industry.

BQA programs focus on five key areas:

1. Care and husbandry practices
2. Feedstuffs
3. Feed additives and medications
4. Processing/treatment and records
5. Injectable animal health products

## Key Points

- Premiums of up to \$4/cwt are available by selling heavier cows that are in a body condition score of 5.0 or higher.
- Avoid discounts (\$1/cwt–\$13/cwt) by not selling lighter weight, thinner, or slightly lame cows. Consider adding weight to these animals prior to marketing to capture value.
- Selling emaciated cows, cows with lameness scores of 4 or higher, or cows that are sick or have more than one BQA defect will result in multiple minor and major discounts (up to \$16/cwt). Sell these animals in a timely manner, or euthanize them on the farm.
- Avoid discounts for selling visibly sick cows (\$16/cwt). Add value to these cattle by treating and holding until withdrawal times are met for antibiotic use.
- Cows with early stage ocular neoplasia (cancer eye) should be marketed in a timely manner (discount of \$4/cwt) rather than waiting until advanced stages of the disease (discount of \$15/cwt). Cows at advanced stages should be euthanized at home.
- Retained placenta diminished cow value by \$5.50/cwt.
- Signs of surgery, especially C-section, decreased cow value by \$8.00/cwt.
- Knots, sores, and blemishes decreased the value of the market cull cow by \$1/cwt to \$5/cwt.

## Quality audits

To gain a better understanding of the quality of the national beef supply and the effect of BQA education programs, the Beef Checkoff Program funds periodic quality audits at beef harvest facilities throughout the country. Audits focused on evaluating the quality of beef sourced from mature cows and bulls were conducted in 1994, 1999, and 2007. These audits allowed the industry to gain a better understanding of the existing quality defects and economic losses that can be corrected or minimized through effective management, monitoring, and marketing of cows and bulls.

## Our study

The study summarized in this publication is based on procedures that were utilized in previous quality audits and was designed to give beef producers more information about how their animals are valued within the beef chain when they are sold through auction markets.

For more information about the audits or the national BQA program, visit [www.bqa.org](http://www.bqa.org).

## Introduction to Study

According to the U.S. Department of Agriculture (USDA), nearly 3.8 million market (cull) beef cows and 578,000 market beef bulls were slaughtered in the U.S. in 2011. This represents 13 percent of the beef produced in the U.S. annually.

Results of the 2007 National Market Cow and Bull Beef Quality Audit indicate work needs to be done to improve the quality and consistency of market beef cows and bulls. Thirty-one percent of cattle evaluated in holding pens had at least one visible quality defect. While the greatest incidence of defects occurred in dairy cows (37%), 28 percent of defects occurred in beef cows and 24 percent in beef bulls.

The 2007 audit also reported a greater percentage of cow carcasses are fabricated into whole-muscle cuts compared with previous audits, resulting in an increase in the overall value of market cow and bull carcasses. Studies suggest that beef producers could capture more profit and add value to their market cows and bulls by managing to minimize quality defects, monitor health and condition, and market in a timely manner.

However, since only about 17 to 27 percent of cow/calf income is generated from the sale of market cows and bulls, it is typically not viewed as a product to which value can be added before slaughter.

## Purpose of Study

Many market (cull) cows and bulls are marketed through auction markets; however, there has not been any research to determine the effect that beef quality assurance-related defects may have on the sale price of these animals. Recognizing the importance of optimizing the value of market cows and bulls sold in the western United States, researchers in Idaho and California attempted to establish a baseline for the quality of beef market cows and bulls being sold in auction markets and determine the relationship between those quality defects and sale prices. The results of this study should provide meaningful information to beef producers to optimize the value of their market beef cows and bulls with the ultimate goal of improving the quality and consistency of market animals.

## Methodology

Data were collected at 10 major livestock auction markets with regular weekly sales (four locations in California, five in Idaho, and one in Utah) during two distinct seasons (spring 2008 and fall 2008). Uniform data collection procedures were established in an initial training and were based on practices used for data collection in previous quality audits in processing facilities throughout the United States. A scoring sheet was developed to allow for consistent data collection.

## Data collection

Researchers collected information on major characteristics including gender, breed, number of head in a lot, total lot weight, and selling price. Subjective scores based on established industry evaluation scales were assigned for body condition score (BCS), muscle score, and locomotion score.

**Body condition score.** Body condition scores were evaluated based on a 9-point system (table 1) that is commonly used within the beef industry, where 1 is “emaciated” and 9 is “obese.”

**Muscle score.** To gain some understanding of the potential carcass yield of the market cows and bulls in

**Table 1.** Description of body condition scores (BCS). (Source: Herd, D. B., and L. R. Sprott. 1986. Body condition, nutrition and reproduction. Texas Agricultural Extension Service B-1526.)

Score	Description
1 <i>Emaciated</i>	Bone structure of shoulder, ribs, back, hooks, and pins is sharp to the touch and easily visible. Little evidence of fat deposits or muscling.
2 <i>Very thin</i>	Little evidence of fat deposition but some muscling in the hindquarter. The spinous processes feel sharp to the touch and are easily seen with space between them.
3 <i>Thin</i>	Beginning of fat cover over the loin, back, and foreribs. Backbone is still highly visible. Spinous processes can be identified individually by touch and may still be visible. Spaces between the processes are less pronounced.
4 <i>Borderline</i>	Foreribs are not noticeable but the 12th and 13th ribs are still visibly noticeable. Transverse spinous processes can be identified only by palpation (slight pressure) and feel rounded rather than sharp. Full but straight muscling in the hindquarters.
5 <i>Moderate</i>	The 12th and 13th ribs are not visible unless the animal has been shrunk. Spinous processes can only be felt with firm pressure and feel rounded but are not visibly noticeable. Spaces between the processes are not visible and are only distinguishable with firm pressure. Areas on each side of the tail head are well filled but not mounded.
6 <i>Good</i>	Ribs are fully covered and not visibly noticeable. Hindquarters are plump and full. Noticeable sponginess over the foreribs and on each side of the tail head. Firm pressure is now required to feel the transverse processes.
7 <i>Very Good</i>	Ends of spinous processes can only be felt with firm pressure. Spaces between the processes can barely be distinguished. There is abundant fat cover on either side of the tail head with evident patchiness.
8 <i>Fat</i>	Animal takes on smooth, blocky appearance. Bone structure disappears from sight. Fat cover is thick, spongy and patchiness is likely.
9 <i>Extremely Fat</i>	Bone structure is not seen or easily felt. The tail head is buried in fat. Animal's mobility may actually be impaired by excessive fat.

this study, muscle scores (MS) from 1.0 (light muscled) to 5.0 (heavy muscled) were assigned to each animal.

**Locomotion score.** Lameness scores were also evaluated using a scoring system where 1 is “normal” and 5 is “severely lame.”

**Udder size.** Udder size has been shown to influence the dressing percent of market cow carcasses at harvest. To determine if buyers adjusted the prices they paid for market cows for various udder sizes, each cow evaluated in this study was given an udder score of small, average, or extra large.

**Additional defects.** Additionally, the researchers evaluated animals for specific BQA-related defects including foot abnormalities, mastitis evidence, retained placenta, brand presence, major brand(s) presence, horn presence/length, cancer eye score, prolapsed rectum/uterus, evidence of surgery, abscess/sore presence, other BQA defects including animals that were visibly sick or had other conditions that might affect sale price.

## Premium and discount determinations

Premiums and discounts for the various BQA traits were determined in comparison to a “par,” or base, animal. For the cow model, the par animal was a healthy, red-hided cow that was sold in a single lot during the fall sale season, weighed 1,200 to 1,400 pounds, had a 5.0 body condition score, 3.0 muscle score, and 1.0 lameness score, and had no horns, brands, knots, sores, cancer eye, or feet problems. For the bull model, the par bull was a single, healthy, red-hided animal that sold in the fall, weighed 1,500 to 1,800 pounds, and had no visible health issues.

## Results

Incidence rates of BQA traits in market beef cows and beef bulls were collected on 9,249 lots (8,213 cow lots and 1,036 bull lots) of cattle during the spring and fall of 2008. A total of 10,390 beef cattle (9,299 cows and 1,091 bulls) were evaluated.

**Table 2.** Sale price distribution of market beef cows and bulls sold at auction in California, Idaho, and Utah, 2008.

Sale price (\$/cwt)	Cows (%)	Bulls (%)
<\$10	0.7	0.4
\$10-\$20	0.7	0.1
\$20-\$30	3.0	0.5
\$30-\$40	18.3	2.6
\$40-\$50	50.2	14.8
\$50-\$60	24.6	48.6
\$60-\$70	2.2	29.0
>\$70	0.5	4.2

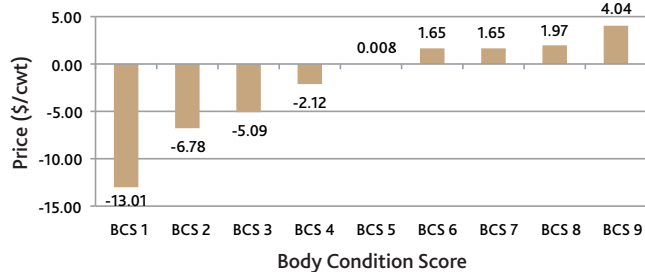
### Sale price

The mean sale price of market beef cows was \$45.15/cwt (table 2). The majority (93.0 percent) of the market cows sold in the range of \$30.00/cwt to \$60.00/cwt. The mean sale price of market beef bulls was \$56.30/cwt. The majority (92 percent) of the market bulls sold for \$40.00/cwt to \$70.00/cwt.

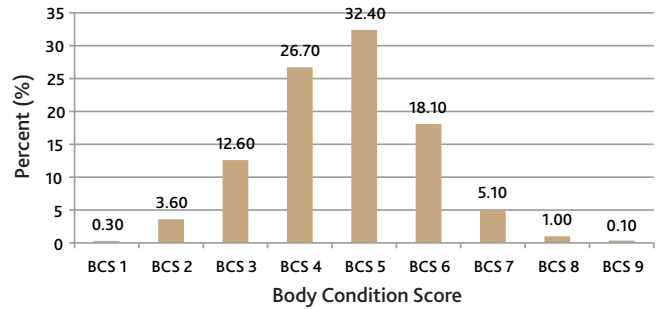
### Body condition score (BCS)

The mean BCS of market beef cows and bulls was 4.7 and 5.3, respectively.

**Cows.** Cow buyers desired market beef cows with moderate to heavy body condition. This is shown by the premiums of \$0.00 to \$4.04/cwt for cows with BCS of 5.0 to 9.0 (figure 1). While cows with a less-than-desirable BCS of 3.0 to 4.0 are in much less demand, they still represented greater than a third (39.3%) of the market beef cows evaluated (figure 2). Emaciated and near-emaciated cows (BCS 1.0 or 2.0) represented a small percentage (3.9%) of the cows evaluated in the study and were discounted \$13.01 or \$6.78/cwt, respectively.



**Figure 1.** Premiums and discounts associated with body condition scores of market beef cows sold at auction in California, Idaho, and Utah, 2008.



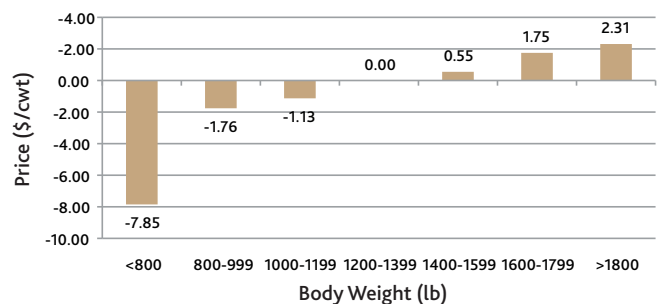
**Figure 2.** Body condition score distribution of market beef cows sold at auction in California, Idaho, and Utah, 2008.

**Bulls.** The majority of market beef bulls (89.0%) had desirable BCS between 4.0 and 6.0. Only 4.0 percent of the bulls evaluated had BCS of less than 3.0. Bull buyers clearly sought moderately conditioned bulls. When compared to a par BCS 5.0 beef bull, BCS 6.0 bulls, BCS 7.0 bulls, and BCS 8.0 bulls were discounted by \$5.65, \$15.67, and \$31.52/cwt, respectively. There was a slight premium (\$0.07/cwt) for BCS 3.0 bulls. No premiums were found for BCS 2.0 or 4.0 bulls.

### Body Weight

Average body weight of cows was 1,208 pounds, and the average body weight of bulls was 1,656 pounds.

**Cows.** Premiums and discounts paid on the basis of body weight were similar to the premiums and discounts for the various body condition scores. When compared to the base cow (1,200 to 1,400 pounds), lighter cows received discounts and heavier cows received premiums. The discounts for cow weights of 1,000 to 1,200 pounds, 800 to 1,000 pounds, and less than 800 pounds were \$1.13/cwt, \$1.76/cwt, and \$7.85/cwt, respectively. The premiums for cow weights of 1,400 to 1,600 pounds, 1,600 to 1,800 pounds, and more than 1,800 pounds were \$0.55/cwt, \$1.75/cwt, and \$2.31/cwt, respectively (figure 3).

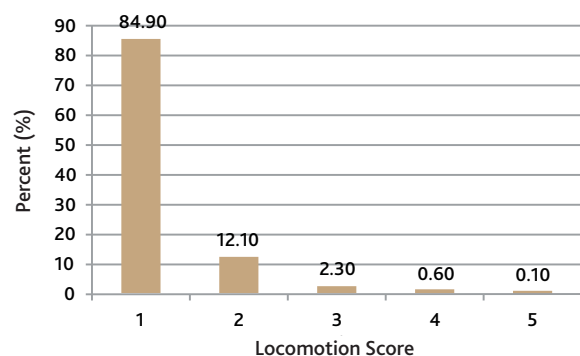


**Figure 3.** Premiums and discounts associated with body weights of market beef cows sold at auction in California, Idaho, and Utah, 2008.

**Bulls.** Similarly, when compared to the base bull (1,500 to 1,800 pounds), lighter bulls received discounts (\$3.45/cwt for 1,200 to 1,500 pounds and \$2.59 for 900 to 1,200 pounds) and heavier bulls received premiums (\$2.55 for more than 1,800 pounds). However, there were no premiums or discounts for the bulls in the lightest (less than 900 pounds) and heaviest (more than 2,400 pounds) body weight categories.

## Lameness

Most beef cows (84.9%) (figure 4) and beef bulls (85.0%) were free of lameness issues and were characterized by a locomotion score (LS) of 1.0. The average LS for both beef cows and bulls was 1.2.



**Figure 4.** Locomotion score distribution of market beef cows sold at auction in California, Idaho, and Utah, 2008.

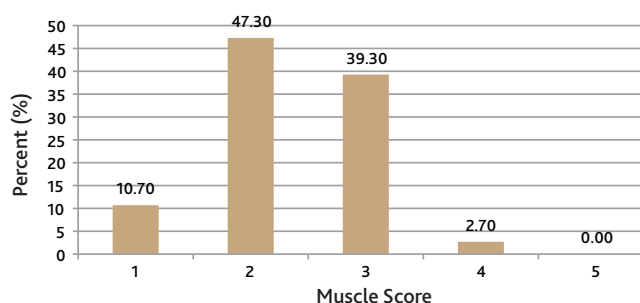
**Cows.** Discounts in selling price based on LS were dependent on the severity of lameness exhibited by the market animals. Compared to the base cow with LS 1.0, cows with LS 2.0, LS 3.0, LS 4.0, or LS 5.0 were discounted by \$1.32/cwt, \$2.23/cwt, \$8.55/cwt, or \$14.88/cwt, respectively.

**Bulls.** The selling prices of market beef bulls with LS 2.0 or LS 4.0 were discounted by \$1.38 or \$7.08, respectively. There were not enough market bulls in the study that were designated in the LS 3.0 and LS 5.0 categories to accurately estimate the associated premiums and/or discounts.

## Muscle score

The mean muscling score (MS) for cows was 2.3 and the mean muscling score for bulls was 3.1 (figure 5).

**Cows.** Discounts for lighter muscled market cows ranged from \$1.51/cwt for MS 2.0 to \$4.75/cwt for MS 1.0. Heavier muscled cows (MS 4.0) received a premium of \$2.16/cwt.



**Figure 5.** Muscle score distribution of market beef cows sold at auction in California, Idaho, and Utah, 2008.

**Bulls.** Similarly, in market bulls, there were discounts of \$3.16/cwt (MS 2.0) and \$4.27/cwt (MS 1.0) for lighter muscled animals. However, there were no premiums or discounts for heavier muscled (MS 4.0 and MS 5.0) bulls.

## Udder size

Approximately 96 percent of the market cows had udder scores of small or average. Compared to a market cow with an average udder, cows with extra large udders received a discount in their sale price of \$1.74/cwt.

## Foot abnormalities

Foot abnormalities (long toes, screw toe, etc.) were observed in about 0.3 and 0.7 percent of market beef cows and bulls and received a discount of \$3.34/cwt and \$8.35/cwt, respectively, when compared to normal cows and bulls.

## Bottle teats and mastitis

The incidence of bottle teats, a common reason for culling lactating cows, was relatively high (5.6%) when compared to the 0.65 percent of cows with mastitis severe enough to be visible. Bottle teats reduced selling price by \$0.32/cwt, and cows with visible mastitis sold for \$3.49/cwt less than cows with no apparent symptoms.

## Horns

The presence of horns on cattle was divided into three different length categories (< 1 inch, 1–5 inches, > 5 inches). A smaller percentage of market cows had horns (9%) than bulls (13.6%). The highest percentages of cows and bulls with horns were in the longer-than-5-inches range (5.9 and 10.2%, respectively). Even though horns of this length are a concern, primarily due to the bruising they can cause on other animals

and their interference with ease of flow through the harvest facility, relatively small discounts were assigned to cows and bulls with horns (\$0.54/cwt and \$1.08/cwt, respectively).

### **Ocular neoplasia (“cancer eye”)**

Among the animals evaluated, only 0.6 percent of cows and 0.29 percent of bulls exhibited ocular neoplasia. Unfortunately, a small percentage of these animals were assigned a score of 3 to 5, which indicates a cancerous stage of ocular neoplasia. Market cows with ocular neoplasia in the pre-cancerous stage (score of 1 or 2) were discounted and sold for \$3.91/cwt less than cows with no sign of “cancer eye.” A severe discount of \$14.95/cwt occurred in cows with ocular neoplasia in the cancerous stages (3, 4, or 5 score) compared to cows free from this condition. This severe discount is likely due to the possibility that these animals will be condemned and deemed not suitable for processing at the harvest facility.

### **Retained placenta and prolapse**

Small percentages of market cows had a visible retained placenta (0.06%) and prolapse (0.07%). Cows with a retained placenta were discounted by \$5.43/cwt when compared to normal cows. Evidence of recent surgery (displaced abomasum, caesarean section, etc.) was limited (0.14%), but if present, did lead to a discount of \$8.23/cwt. An increased risk of condemnation at harvest is perhaps the primary driver behind these substantial discounts.

### **Body sores**

The presence of “active” or recently acquired body sores (red in color, bleeding, etc.) was evaluated among market beef cows and bulls. It was assumed by the project leaders that sores might identify animals that had recently fallen or been injured. Percentages among cows and bulls were 0.4 and 0.19 percent, respectively. The majority of sores on cows (0.39%) and all of the body sores on bulls (0.19%) were located in the hip region. The sores on the hip led to a discount of \$1.02/cwt.

### **Body knots**

Visible injection site knots were recorded by location on the animal (neck, shoulder/rib, or rump region). Knots were present on a small percentage of cows and bulls (0.23 and 0.29%, respectively). The majority of the

visible knots were located in the neck region (0.13% for cows and 0.19% for bulls). An animal was discounted \$5.04/cwt if a knot was located in the shoulder/rib region. The low incidence of recorded body knots could be attributed to the speed at which the animals were sold, the side of the animal visible while being sold, or potentially both.

### **Visibly sick**

About 0.8 percent of market cows and 0.1 percent of market bulls were characterized to be “visibly sick” as they displayed one or more of the following subjective characteristics: severe lethargy, extreme weakness, significant panting, drooping ears, or extreme gauntness. While it was not possible to collect objective data including body temperature or respiration rate to verify illness, severely ill animals were easily recognized by evaluators. Severe cases often resulted in an animal not selling at any price or being sold contingent upon passing inspection at the packing plant and suffering a severe discount of \$16.20/cwt for cows and \$46.28/cwt for bulls. Additionally, these animals were more difficult for auction market personnel to handle and move because of their weakened or unresponsive state.

### **No sales**

Among cows evaluated in this study, 0.15 percent of the animals offered for sale to auction market buyers were “no sales” or “passed out” since no buyers would purchase them at any price. These cows typically did not sell due to the presence of one or more major BQA defects, including, but not limited to, severe lameness, visible illness, emaciation, advanced cancer eye, or being extremely lightweight or light-muscled.

### **Brands**

Evidence of hot iron brands was observed in the majority of beef cows and bulls (60.6 and 57.3%, respectively) and incurred an estimated premium of \$1.05/cwt. Major brands (very large brands or several brands) were observed in 20.5 percent of market beef cows and 16.4 percent of market beef bulls. No premiums were paid for animals with major brands.

### **Predominant hide color**

The majority of the beef cows and bulls marketed were predominantly black-hided (60.9 and 71.3%, respectively). When compared to red-hided cattle

(30.8% cows and 20.1% bulls), black-hided animals brought a premium of \$1.69/cwt.

## Pricing Model Application

As part of this project, the researchers developed a pricing model to predict selling prices and total value of assorted animals being considered for market. The model helped identify major factors and/or discounts that should be avoided when selling market cows.

Table 3 provides a summary of the discounts and/or premiums associated with various BQA traits. While the authors of this report recognize that culling decisions are based on the fact that a cow's performance has been affected by various traits and that not all defects can be avoided, producers can optimize the value of an animal by:

1. Avoiding selling animals that are visibly sick, very lame, have cancer eye, or have evidence of surgery.
2. Identifying traits that are relatively minor in terms of severity but more common in terms of incidence. These traits can quickly add up and adversely affect an animal's selling price, for example, a thin animal with a below-average body condition score, visible sores, or minor lameness.
3. Recognizing potential opportunities to add value by improving carcass quality and yield by improving body condition score and body weight and reducing udder size.

**Table 3.** Beef quality assurance (BQA) traits and associated discounts and/or premiums on selling price of market cows (OK?) at auctions in California, Idaho, and Utah, 2008. Values are in comparison to a par<sup>1</sup> animal (\$/cwt).

Trait	Discounts	Premiums
Body condition score 1 to 4	-2.12 to -13.01	
Body condition score 6 to 9		1.65 to 4.04
Weight < 1,200 pounds	-1.13 to -7.85	
Weight > 1,399 pounds		0.55 to 2.31
Muscle score 1 or 2	-1.51 to -4.75	
Locomotion score 2 or 3	-1.32 to -2.23	
Locomotion score 4 or 5	-8.55 to -14.88	
Small udder		0.64
Large udder	-1.74	
Foot abnormality	-3.34	
Mastitis	-3.49	
Retained placenta	-5.43	
Surgery evidence	-8.23	
Visible sores	-0.03 to -1.02	
Visibly sick	-16.20	
Cancer eye	-3.91 to -14.95	
Horns	-0.54	

<sup>1</sup>Par animal was a red-hided cow that was sold as a single-head lot during the fall and was healthy, weighed 1,200–1,399 pounds, had a 3.0 muscle score, 1.0 locomotion score, and average-sized udder, and had no horns, brands, knots, sores, cancer eye, foot abnormalities, udder defects, or reproductive defects.

### Example of applying the pricing model: comparing two market beef cows

The first animal (Animal A) is similar to what can be described as “par.” The characteristics of the “par,” or base, animal were determined in part from the results generated from previous beef quality audits. These results highlighted traits of animals that had no quality defects.

Animal A is a red-hided cow that sold as a single-head lot during the fall and was healthy; averaged 1,300 pounds; had a 3.0 muscle score, 1.0 locomotion score, and average-sized udder; and had no horns, brands, knots, sores, cancer eye, foot abnormalities, udder defects, or reproductive defects. Predicted price of this cow is \$57.77/cwt with an initial market price of \$60.00/cwt. Deductions to the predicted price

result from the low locomotion score (-\$2.23). Total value of Animal A is estimated to be \$751.01.

The second cow analyzed in this example (Animal B) faces more negative price impacts due to negative quality factors. Like the first cow, she is a red-hided cow that sold as a single-head lot during the fall and averaged 1,300 pounds and is branded. However, this animal has a large udder (-\$1.74/cwt), a cancerous condition in one eye (-\$9.43/cwt), BCS of 2 (-\$7.56/cwt), and a locomotion score of 4 (-\$8.55/cwt). She also exhibits evidence of a recent surgery (-\$8.23/cwt) and has a visible sore on her hip (-\$1.02/cwt). Her projected sale price is \$23.47/cwt and her total value is \$305.11. This is a \$445.90 loss compared to animal A.

## Implications

The best strategy for producers is to avoid major discounts through management and timely culling. This study underscores the existing industry recommendation to cull animals in a timely manner as one of the best measures to maintain their value and enhance their carcass quality. Timely culling will optimize revenue opportunities and decrease the likelihood of market cows entering the marketplace in marginal condition.

Body condition score materialized as one of the most important factors in determining potential premiums that beef cattle producers might receive for their market cows when selling them through auction yards. Beef cattle producers ought to consider adding value via improved BCS to thin market cows prior to sale at auction to acquire readily available premiums for fleshy cows. The results of this study can also aid producers in concluding if such an approach is cost-effective by comparing the potential added revenue with other costs such as feed and medicine. Time and labor involved should also be considered when deciding to keep an animal on the ranch when it has no potential to return to the producing operation.

Other factors also influence the price of cull beef cows and bulls. Cows with ocular neoplasia (cancer eye) either in the precancerous state or in the cancerous stages of infection are discounted. Severe discount can be avoided if cattle are marketed in the early stages (precancerous) of ocular neoplasia. Cattle which are visibly sick are a strong price deterrent. Cows with reproductive problems, especially retained placenta, are sold at a discount. Cows with visible signs of surgery are also discounted in the sale ring. Other types of sores and blemishes diminish the value of the cull cow.

While this study does support the theory that premiums exist in the marketplace for market cows of higher quality, an individual operation's economic analysis should also be a part of the decision-making process. The economic likelihood of trying to positively influence certain traits such as body condition score through management practices should be carefully considered, particularly in periods when input costs are high. A better strategy may be to simply avoid severe quality defects associated with major discounts such as severe lameness and severe emaciation by marketing

animals earlier. Animals with extreme defects such as major illness should be humanely euthanized on farm to address both welfare and consumer perception issues.

The primary obstacle to educating beef cattle producers about Beef Quality Assurance principles has stemmed from the limited income generated from market cattle, and an apparent lack of perceived ability to add value. Ultimately, this research will help to meet consumer demand for high-value beef by improving the quality, consistency and safety of beef products from beef cattle.

## Summary

In the 2007 National Market Cow and Bull Beef Quality Audit, 31 percent of cattle evaluated in holding pens had at least one visible quality defect. Twenty-eight percent of the defects occurred in beef cows and 24 percent of the defects occurred in beef bulls. Market cows and bulls represent 17 to 27 percent of a beef cattle operation's gross income (UI Department of Agricultural Economics and Rural Sociology cow-calf budgets). Therefore, the opportunity to enhance income from animals going to market can be considerable.

Traditionally, market animals have been viewed as a commodity to be sent to town as soon as possible rather than a potential income opportunity. Yet some factors that can be improved before marketing, such as body condition scores or locomotion scores, can add much value for relatively low cost. One method producers can use to capture additional value is to segregate animals that need additional attention. This gives those animals time to heal and/or add weight before being marketed. The potential benefit is more take-home dollars for the producer.

Beef quality assurance studies have shown that adding value to market animals will allow them to go into higher-value cuts and products in the marketing system. In addition to fast food restaurants, many cuts now go into the quick-serve segment of the restaurant business where the higher end use will translate into a higher price to the rancher. Beef supplies are at an historic low and conditions are such that any turnaround will be several years out and slow to build up supplies. Thus the need of the market for beef will continue to support prices that optimize adding value to cull market animals.



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**For more information about the pricing model**, please contact Benton Glaze at [bglaze@uidaho.edu](mailto:bglaze@uidaho.edu)

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