

**Effect of Selected Characteristics on Sale Price
of Stocker Cattle in South Texas: 2004 Summary
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Story in Brief

We hear beef cattle producers respond to new ideas by asking “ How do I get paid for that?” That is a great question because it challenges cattlemen to remember that the cattle business is just that—a business! Many of times producers cannot change what price they receive at their local auction barn. Unfortunately, these prices are affected by supply and demand, feed prices, forage availability, etc... But there are some things beef cattle producers can do to get paid more for their cattle.

Data from survey studies, in five different auction barns across south Texas, indicate a distinct preference for cattle that were heavy muscled. Intact bull calves received higher prices than their comparable heifer and steer counterparts. Hereford, Longhorn, and Simbrah cattle were discounted relative to prices received for Beefmaster cattle. Black baldies, Simmentals and Charolais received premiums. Color within the Beefmaster breed also indicated some significant price difference.

Introduction

The most prominent segment of the cattle industry in south Texas is the cow/calf segment. Calves produced by small to medium beef cattle producers in South Texas are primarily sold at weaning in local auction barns. This accounts for the largest segment of the cattle that are marketed in the area.

The general price of cattle is affected by conditions of supply and demand including consumer beef demand, feedlot occupancy, feed prices, and forage availability. Ranch profitability is affected by these factors and individual cattlemen can do little to influence the effect of these market trends.

There are other factors affecting cattle prices that can be controlled by the individual cattleman. These factors have significant effects on prices, animal performance and profitability. These factors were targeted for observation in our 2004 auction barn study.

Order buyers appraise individual characteristics as predictors of quality and animal performance and adjust bids accordingly. Previous studies in Rio Grande City and Alice, Texas , by Texas Cooperative Extension Agents and Specialists, found significant differences in prices received for cattle marketed in special sales. The purpose of this study was to determine the extent to which selected characteristics of stocker cattle affect sale prices at auction barns, throughout south Texas, in a given year.

Materials and Methods

A survey instrument was developed to record cattle characteristics that are known to influence price. A training session was conducted in January 2004 at R.Y. Livestock Sales, Inc. in Rio Grande City, Texas, for Extension agents who were to grade the cattle in the 2004 study. The purpose of the training was to coordinate the grading and classifying of stocker cattle characteristics for consistency amongst the agents.

Texas Cooperative Extension County Extension Agents observed and recorded the characteristics of 1,135 head of stocker cattle. Surveyed cattle were sold in five different sale barns throughout south Texas. Data was collected monthly and whenever possible, the data was collected within a one weeks time throughout that month for better comparisons.

Data recorded on each animal included weight, gender, price, muscle thickness, frame, color, horns, breed influence and visual problems. Jersey and roping cattle were excluded from the analyses.

Results and Discussion

Gender and Price Trend:

Steers made up 13 % of the total cattle from May through July across all five sale barns. Heifers accounted for 42 %. Bull calves accounted for the largest percentage, 45 %. The lower number of heifers sold relative to the number of steers and bull calves may be indicative of the number of females retained by producers as replacement females. Bull calves sold for an average \$112/cwt. Steers sold for \$2/cwt less than that of bull calves. Heifers also sold at \$5/cwt less when compared to bull calves. The price difference for heifers relative to steers and bull calves reflects problems characteristic to females including reduced daily gain and lower feed efficiency associated with estrus and unexpected pregnancies. The price may also reflect a generally lower quality animal in that better heifers are retained as replacement females. There was statistically significant (but small) decrease in price at Rio Grande City from May through July. On average, each passing month was associated with 1.5 cent decline in price. The price fluctuation could be attributed to the historically larger number of cattle that are sold March through May that are now on pasture and thus reducing the demand. The summer months are also associated with low rainfall and reduced forage availability which could also reduce demand and negatively affect price.

Sale Weights:

Most cattle had sale weights less than 500lbs. Approximately 51% of the total number of stocker cattle sold weighed less than 500 lbs. As body weight increased for all classes of cattle surveyed at Rio Grande City, sale price decreased. On an average this accounted to a one tenth cent decline for every pound of gain. The average weight of all stocker animals surveyed was 490lbs. across all sale barn locations.

Breed Type:

Factors affecting prices for different breeds reflect buyer perceptions relative to growth rate, reproductive traits, carcass traits, and other factors that may affect animal performance and producer profitability. In the Rio Grande City sale barn, cattle classified as Beefmaster were used as a base to calculate price discounts or premiums for other breed classifications. Beefmasters were used as the basis due to the popularity (based on the number of Beefmaster animals sold in that barn) of the breed in that area. Relative to cattle perceived as Beefmaster, Black Baldies, Simmentals and Charolais sold at greater prices (\$13/cwt, \$7/cwt, and \$3cwt respectively). Longhorn, Hereford and Simbrah sold at very large discounts (\$12/cwt, \$9/cwt, and \$6/cwt respectively) relative to Beefmasters.

Frame Size, Muscling, and Horn:

Thin muscled stockers sold for a discount. At Rio Grande City we measure a four cent price decline for every increase in the muscle score index (1-4). This preference for heavier muscle is highly confounded to breed characteristics and as a result can be perceived as greater growth potential for these cattle. There was no significant change in price related to frame score. The same non-significant results were obtained with horn/dehorning.

Color:

Color was compared within the Beefmaster breed in the Rio Grande City data. Beefmaster was again chosen due to its popularity and most importantly due to its larger variety of color within the breed. The most popular Beefmaster breed color was red, which accounted for 73% of the total stockers sold in Rio Grande City in 2004. Red, dark brown and black colored Beefmaster stocker cattle sold at higher price in comparison to light colored cattle. Paint colored cattle were heavily discriminated. There was an \$8/cwt price difference between red and paint colored cattle.

Implications:

Many factors influence the sale price of cattle, some of which producers may control such as herd selection and herd health management. It is imperative that cow/calf producers and those in the stocker cattle industry understand the market needs and preferences as reflected by market prices. Understanding the impact of these market preferences and their relationship with animal performance can significantly contribute to profitability. We will collect more data across south Texas in the coming year, and expect to make stronger conclusions in the future.

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