

Price Differences for Slaughter Heifers

For various technical reasons, prices for heifers are lower than prices for steers at the feeder, slaughter, and carcass levels of sale.** The main question, however, is whether or not heifer discounts are reasonable and consistent. This article focuses on these issues.

An examination of steer and heifer price differentials in markets of interest to Arizona producers and feeders reveals a number of interesting relationships. In the two and one-half year period, January, 1969, through June, 1971, average weekly Oklahoma City prices for 300-500 pound choice heifer calves varied from \$2.40 to \$6.90 per hundredweight less than the price for similar steer calves (Figure 1). In general, the differential ranged between \$4.00 and \$6.00 per hundredweight, with a period average of \$5.08.

For yearlings weighing 500-700 pounds, the discount on heifers ranged from \$1.75 to \$4.00 per hundredweight, with an average of \$3.08. Thus, the heifer discount was about \$2.00 per hundred less for yearlings than for calves. As feeder cattle weights increase, prices tend to decline but at a slower rate for heifers than for steers.

Prices for California 900-1100 pound choice slaughter heifers for the same period ranged from \$1.00 to \$3.75 per hundredweight below prices for steers of the same class. The average differential for the two and one-half years was \$2.13. Los Angeles average weekly wholesale prices for 500-600 pound choice heifer carcasses ranged from \$0.60 to \$4.70 per hundredweight below 600-700 choice steer carcasses, with an average of \$2.59 for the period.

The differentials on prices between steers and heifers fluctuate perceptibly at all levels of sale. Given the fact that there are technical differences between steers and heifers, which do not change appreciably, two questions remain: (1) does the average level of discount reflect real differentials in value, and (2) are the observed, relatively large discounts warranted?

Also, as shown by the graphs, there is a tendency toward inverse relationships between the levels of discounts on slaughter heifers and those on heifer carcasses. It is difficult to envisage a reason why discounts on slaughter heifers should increase when

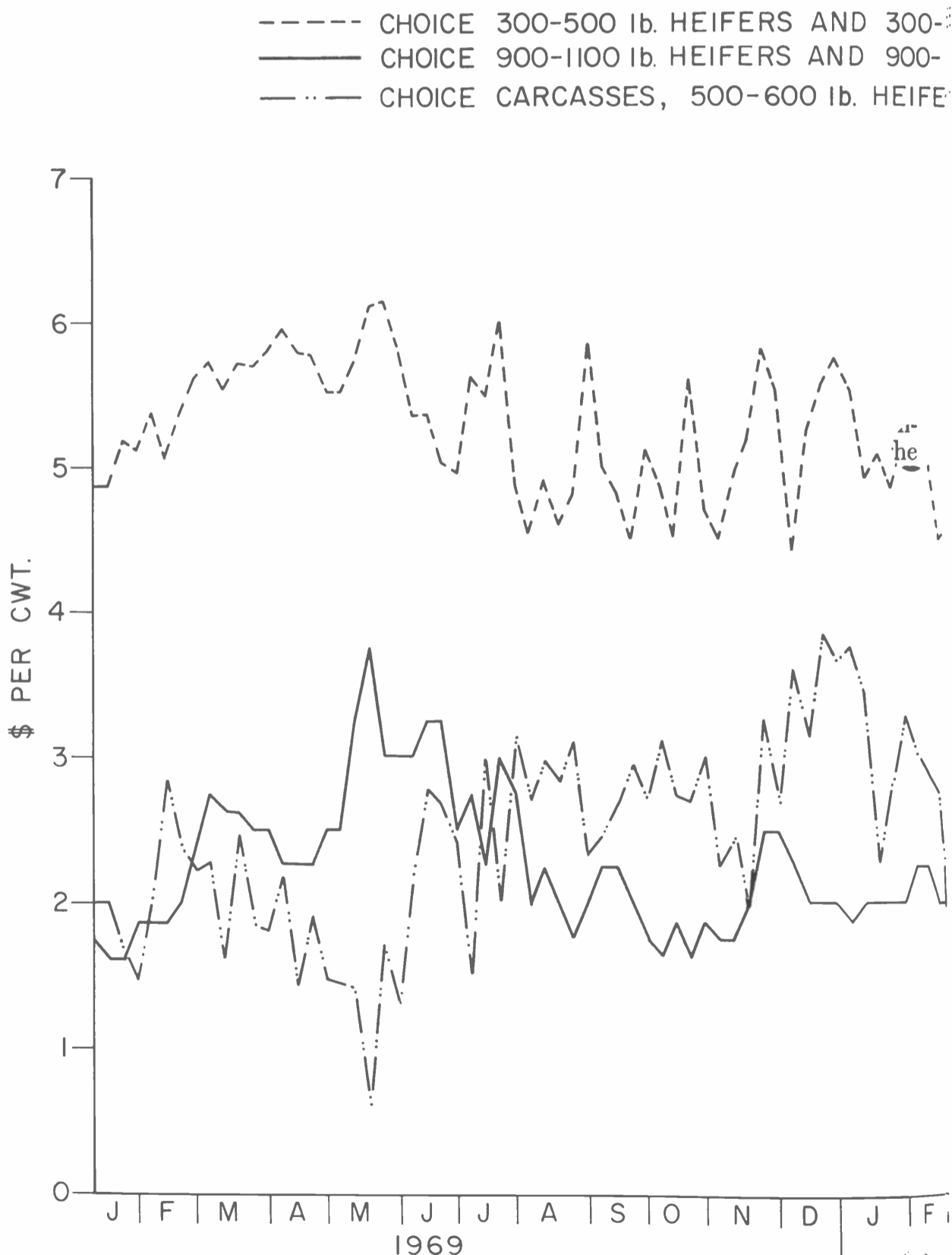
by Elmer L. Menzie, C. Curtis Cable, Jr. and William P. Gotsch*

discounts on heifer carcasses are decreasing, and vice versa. Yet, both of these situations have occurred for extended periods.

Relatively few heifers are fattened in Arizona and California, suggesting

that these are not favorable market areas for heifers. Colorado cattle feeders, on the other hand, feed a much greater percentage of heifers. This appears to be a reflection of the Denver market demand for slaughter cat-

FIGURE 1. DIFFERENCES BETWEEN WEEKLY AVERAGE PRICES



Slaughter Steers and Heifers

tle and for beef.

Slaughter heifer discounts in Denver fluctuated between \$0.50 and \$1.00 per hundredweight, or about one-half the discount in the Los Angeles market. The wholesale price discounts on heifer carcasses in Denver vary from zero to \$2.50, but average about \$1.00 per hundredweight.

This is less than half of the discount on heifer beef in Los Angeles.

Based on 130 weeks of carcass prices in the Denver market, 88 weeks had less than \$1.25 discount for heifers. The differential was this low for only one week in Los Angeles (Table 1). (See page 16) By contrast, 93 weeks in Los Angeles had differentials

in excess of \$2.25 per hundredweight, while only one weekly differential in Denver was this large.

It is evident that the market in Denver is more favorable for heifers than the Los Angeles market. It is not so evident why this should be so.

Effects of Variations in Discounts

The effects of the differences in discounts on heifer carcasses, as indicated by the Denver and Los Angeles market quotations, are illustrated below: The average discount for the past two and one-half years, on heifer carcasses, in the Denver market was \$1.01 per hundredweight. On a 600 pound carcass, this amounts to a total of \$6.06 or \$0.606 per hundred on a 1,000 pound slaughter animal. Thus, if a cattle feeder purchased 400 pounds heifer calves and sold them as slaughter animals in the Denver market, the average discount needed, relative to steers of the same weight and grade, to cover the price differential on the carcass would need to have been \$1.51 per hundredweight.

However, if a 600 pound heifer carcass is discounted \$2.59 per hundredweight, the average for the Los Angeles market for the past two and one-half years, the total cost is \$15.54. This amounts to \$1.55 per hundredweight for a 1,000 pound slaughter animal. Heifer calves purchased at a weight of 400 pounds to be fed for sale in the Los Angeles market would need to be discounted \$3.88 per hundredweight relative to steers of the same class, to make up for the carcass price differential.

Thus the differences between the discounts needed on heifer calves fed for sale in the Los Angeles market and those fed for the Denver market averaged \$2.33 per hundredweight. This amounts to over 45 percent of the average discount observed on 300-500 pound heifer calves over the past two and one-half years, in the Oklahoma market.

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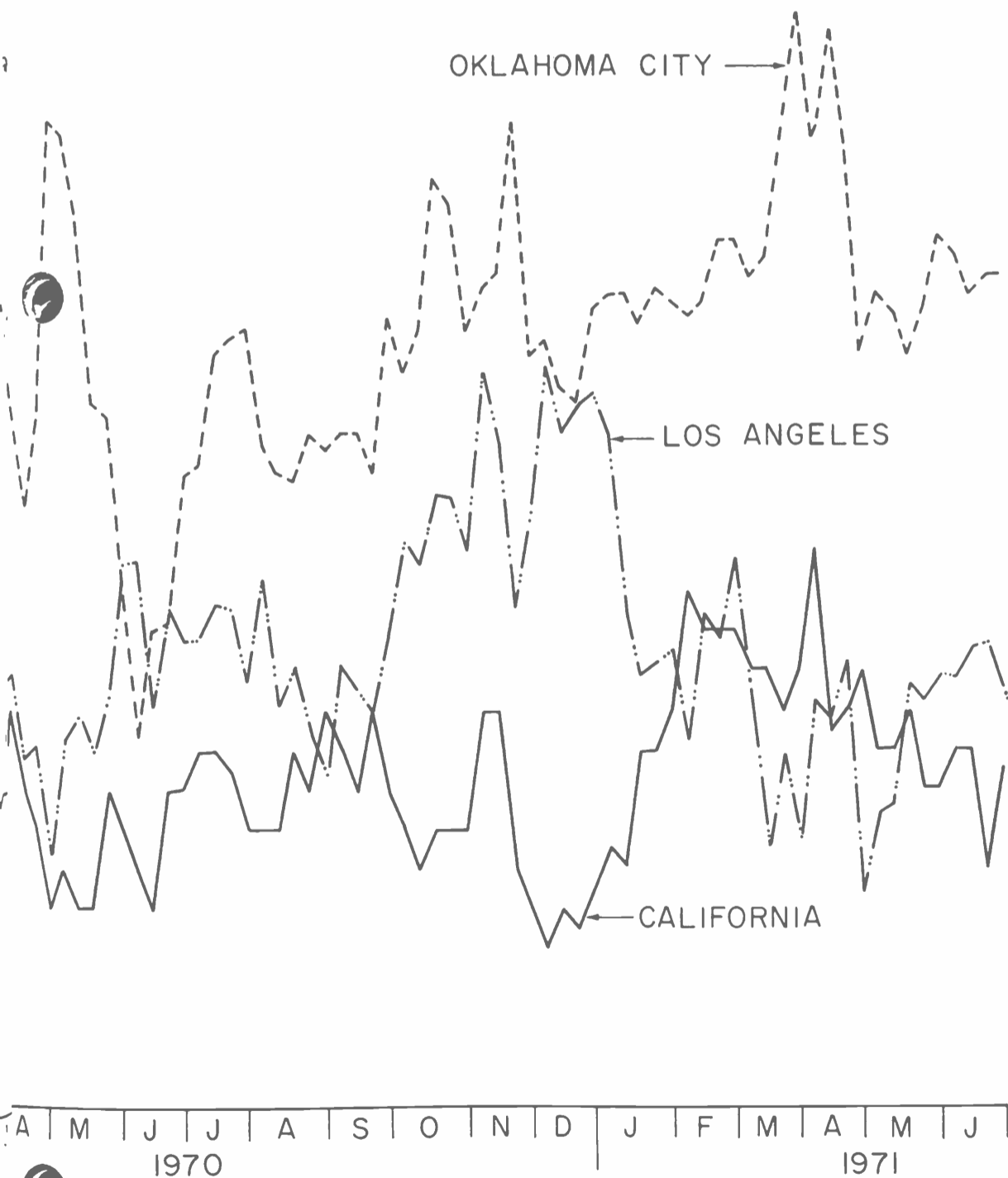
**Differences in price ranchers receive for steers and heifers was partially explained in an earlier article; see *Progressive Agriculture in Arizona*, January-February, 1971

FOR:

lb. STEERS, OKLAHOMA CITY

lb. STEERS, CALIFORNIA

AND 600-700 lb. STEERS, WHOLESALE, LOS ANGELES



(Please turn to page 16)

Price Differences

(From page 9)

Heifers and Steers Differ

There are numerous technical differences between heifers and steers at all levels, including the feeder, packer, and retailer. Heifers are slightly lower in efficiency of feed conversion. Packers require some margin for error due to uncertainty as to whether the heifer is open or not. Dressing percentages differ slightly and in some cases carcass size is smaller, thus resulting in higher kill costs per pound of meat and in smaller cuts.

Insufficient data exist on the real cost of these technical differences. Generally speaking, for choice grade animals of the same weights, a difference of 1/2 to 1 1/2 percent will exist in the retail weight of meat from steer and heifer carcasses. A 1,000 pound animal with 60 percent dress for steers may dress only 59 percent for heifers, resulting in a 600-pound steer carcass and a 590-pound heifer carcass. If the steer carcass has a 70 percent retail cutout and the heifer 69 percent, the final retail weight differential is 13 pounds.

Conclusions

While technical differences do account for some differential in prices of steers and heifers at all market levels, they do not explain the variations in the differences as observed in some markets over the past two and one-half years. Extreme fluctuations in the differentials have occurred at all levels. Discounts on heifer carcasses in the Los Angeles market have demonstrated considerable inconsistency with discounts on heifers in the Denver market for both the carcass and the slaughter animal were observed to be about half those in the Los Angeles market.

There is not enough information available to accurately assess technical differences between heifers and steers. However, it is needed for accurate assessment of market performance.

Producers might well ask:

1. Why do some retail markets seem to more readily accept heifer beef than others?
2. Do consumers have a preference for steer beef?
3. Can consumers actually distinguish between steer and heifer cuts of beef? And,
4. If so, is this difference reflected in retail prices?

TABLE. 1. Comparison of Average Weekly Wholesale Prices for Choice 600-700 pound Steer Carcasses and Choice 500-600 pound Heifer Carcasses in Los Angeles and Denver, January 1969 through June 1971.

| <i>Steer Beef Price Greater Than Heifer Beef Price</i> | <i>Los Angeles Market</i> | <i>Denver Market</i> |
|--|-------------------------------|--------------------------|
| <i>(Dollars/cwt)</i> | <i>(Number of weeks)</i> | |
| Less than \$.75 | 1 | 35 |
| \$.75 to \$1.24 | 0 | 53 |
| \$1.25 to \$1.74 | 16 | 36 |
| \$1.75 to \$2.24 | 20 | 5 |
| \$2.25 to \$2.74 | 38 | 1 |
| \$2.75 to \$3.24 | 32 | |
| \$3.25 to \$3.74 | 12 | |
| \$3.75 or more | 11 | |
| | 130 | 130 |

Forward Pricing with Cotton

(From page 3)

ing. If contract prices are favorable relative to expected growing costs, and if lenders involved in financing cotton production in Arizona understand this opportunity, the stage may be set for a substantial expansion in cotton planting in 1972.

While considering the possibility of forward contracting, the cotton grower must understand that when he fixes his price in advance he no longer has the opportunity to "play the market" on the contracted quantity of cotton. This means that the grower must be prepared to accept the fact that at

harvest time market price may be above his contract price. If this occurs he needs to remind himself that based upon the information available to him at contracting time there was probably an equal possibility that the market price at harvest time could be several cents below his contract price. The adage "a bird in the hand is worth two in the bush" is appropriate here.

Has Arizona cotton production and marketing entered a new era? It is still too early to do anything more than speculate about the answer to this question. But as long as a wide spread between government loan value and market price continues, the prospect is good that forward pricing and contracting of Arizona cotton will not only continue but increase in volume in future years.

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to: