Experiences with Grid Marketing -
Summary of Chariton Valley Beef Sales for Year 2000

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H. Joseph Sellers, ISU extension field beef specialist, and Diana Bodenstiener, Chariton Valley Beef data coordinator

Summary
Producers in the Chariton Valley Beef organization have marketed more than 10,000 head of cattle into grid markets over the past three years. Data from 134 lots were summarized, with 3,791 head of cattle marketed into four grid markets. Producers averaged $26.05 per head premiums. Premiums and discounts ranged from a positive $79.01 to a negative $40.44 on lots delivered.

Introduction
Chariton Valley Beef (CVB) is an organization of 300 producers working to add value to the southern Iowa beef industry. This effort has included the coordinated marketing of fed cattle into grid markets. Many smaller feeders work with other members to ship split loads of cattle to one of seven different grids. Most producers in CVB market most or all of their cattle into grid pricing systems. The CVB project staff maintains a database of carcass data and value differences for individual feedback and group summarization. The premiums received by producers are compared with both the Nebraska weighted average fed cattle price and the Choice Yield Grade 3 base price.

Materials and Methods
As producers choose what grid to market under, several things are considered. Most local producers market cattle over several months, requiring constant monitoring of market factors. Many producers also feed various genotypes of cattle, so very few can lock into one grid as always the best choice. Changes in environmental conditions and management practices also will influence grid results.

The current market conditions and the price matrix of each grid must be evaluated. CVB has tracked base price movement and changes in premiums and discounts to help members evaluate their options. The USDA Choice Yield Grade 3 base prices of three grids used by Chariton Valley Beef are displayed in Figure 1.

Producers are sorting various types of cattle into different grids. Come grids that require high quality grades will provide the greatest rewards on many cattle, but cattle meeting lower quality grades are discounted severely. It may be advantageous to market these cattle into grids that will allow them to meet the average price and avoid discounts. As various processors offer different grids, Chariton Valley Beef classifies them into four categories:

- Quality-based grids
- Lean-based grids
- Internal-based grids
- Combination grids

Results and Discussion
The results from specific grids that meet these categories are displayed in figures 2 through 5. The solid lines on the charts are the USDA Agricultural Marketing Service (AMS) Nebraska weighted average price, which often is used as a base price. The dotted lines are the Choice Yield Grade 3 base price for each grid. The data-points are the average price received for each lot marketed on each specific date.

Choice 3 base prices for the Quality and Lean grids are established using USDA weighted average prices and plant choice averages. The base for the internal grid is established in-house, with on direct tie to USDA numbers. Choice base for the Combination grid uses USDA weighted-average and Select discount values, and pre-determined adjustment to Choice.

Quality-based grid
Results for this grid are shown in Figure 2. The quality grid rewards cattle that grade Choice and higher. Certified Angus Beef and Prime cattle receive large premiums. Yield Grade 1 and 2 carcasses are given premiums for cattle that grade Choice and better. Discounts for weight extremes, Yield Grades 4 and 5, and other non-conformance aspects can be severe.

The average premium of cattle delivered to this grid was $26.52 per head ($3.66 per hundred), with the maximum premium at $65.68 per head ($9.21/cwt) and largest discount at -$40.44 per head (-$5.07/cwt). Heaviest discounts resulted from non-conformance in maturity, weight and yield grade.

Lean-based grid
Results of the lean-based grid are found in Figure 3. This grid has smaller premiums for CAB and Prime, but allows a Yield Grade premium for 1s and 2s on Select or better carcasses. CVB producers primarily use this grid for cattle groups they believe are lower in marbling scores.
Many of these groups will fall at or below the Nebraska average.

The average premium of cattle delivered on the loan-based grid was $0.13 head ($0.01 per hundred), with a maximum of $14.57/head ($2.00/cwt) and minimum of - $19.21/head (-$2.60/cwt). Heaviest discounts resulted from low-marbling cattle with a higher percentage grading Select and Standard, from dark cutters and from marketing into a higher choice select spread.

**Internal-base grid**

Results of the internal grid are found in Figure 4. This grid often has a lower choice base than other grids, but has very high premiums for CAB and Prime, revised weekly. Yield grade premiums are applied to Select and better grades.

The average premium received on this grid was $30.22/head ($4.11/cwt). The maximum premium for a load was $79.01/head ($10.00/cwt), and the minimum was - $10.23/head (-$1.41/cwt). Producers selling into this grid indicate they are very selective about which cattle they market on this grid, and often sell a portion of their cattle on the spot market (in-the-beef of live) if they are unsure they will fit the grid. The largest discounts were for dark cutters, off-weights and maturity problems.

**Combination grid**

The data from the Combination grid are displayed in Figure 5. This grid often has a higher Choice 3 base price, with somewhat conservative quality premiums. Yield grade premiums apply to Select and batter. This grid uses calculated yield grade values rather than grader called yield grade for premium and discount determination.

The average premium received was $28.94/head ($33.82/cwt). The maximum was $65.89/head (8.24/cwt), with the minimum at -$10.64/head (-$1.51/cwt). Largest discounts resulted from dark cutters and off-weights.

**Implications**

Figure 6 shows overall results. On the average, producers received a substantial premium for marketing on a grid, with much higher potential realized by several producers. The higher end premiums were over $65 per head on three of the grids used. There are several producers who lost value below the base price by using this system. Many of these poor experiences could be improved by reducing "out" cattle that could easily be identified.

As CVB builds a larger, multiple-year database, the group must evaluate the repeatability of high, value-added experiences on grids. Risk analysis of grid marketing must include past history and how well we can predict future market value.

As producers gain experience with grids, they can reduce price risk by following changes in market factors and in their cattle. Some lots with lower premiums or discounts may be maximizing profit by selling earlier, with high feedlot efficiencies. There are other groups with high feedlot efficiency that also are reaching high value-added potential on the grid selected. There is continued need to incorporate production costs and animal growth, along with grid price values, as these marketing options are analyzed. This will be a focus of future CVB summarization.

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**Figure 1. Choice Yield Grade 3 base price on three grids.**

![Graph showing Choice Yield Grade 3 base price on three grids]
Figure 2. Nebraska weighted average, base price and price received on a quality based grid.

Figure 3. Nebraska weighted average, base price and price received on a lean based grid.

Figure 4. Nebraska weighted average, base price and price received on an internal based grid.
Figure 5. Nebraska weighted average, base price and price received on a combination grid.

Figure 6. Side by side results for the four grids.