

Marketing

what's under the hide

IOWA STATE UNIVERSITY



Grid Demo - 1999

How the Demo Cattle Fit Grid Markets



Introduction

Grid marketing consists of selling cattle on a price formula that determines value of each animal based on its quality grade, yield grade and hot carcass weight.

Grid markets offered to Iowa producers differ from past quality and yield grade systems because significant premiums are given for cattle that achieve quality grades above low choice and for yield grades 1 and 2. However, large discounts are assessed against cattle that have poor quality and yield grades and for those that do not meet carcass weight requirements.

Iowa Beef Center Objectives

The objectives of this value-based marketing grid demonstration project were:

- ◆ work with Iowa producers to develop a database of cattle for grid comparisons,
- ◆ analyze how cattle groups compare on different grids,
- ◆ demonstrate potential marketing risks and rewards,
- ◆ compare grid marketing to selling cattle in the beef,
- ◆ develop a computer model to assist producers in grid marketing decisions.

Initial Carcass Data Results

The analysis of the carcass data from this project on 3,159 head in 79 marketing groups is summarized in a companion fact sheet, IBC-6 2000.

Major findings include:

- ◆ 76.2% graded Low Choice or better
- ◆ 61.6% were Yield Grade 1 and 2
- ◆ 4.7% graded Prime and 22.8% graded in the upper two-thirds of Choice

Four Grids

These groups of cattle were tested against four different grids offered to Iowa producers. All four grids use a base price for Low Choice, yield grade 3 carcasses that weigh between 550 and 950 lbs. Premiums and discounts are applied for the various quality and yield grades and off-weight carcasses. The base price for these grids is determined by using the Nebraska weekly weighted averages for dressed basis sales and the reported price spread between cattle grading Choice and Select.

All of these grids would be considered quality based; two of which are considered more aggressive toward higher-cutability type cattle. For this summary all cattle were priced into the grids using markets for the week the cattle were sold.

“Some cattle groups simply have too much variation to work in grids.”

— John Lawrence,
Director, Iowa Beef Center

Table 1. Premiums per head paid in the various grids.

	Average Premium	Highest Premium	Lowest Premium
Grid 1, \$/head	\$23.17	\$65.40	-\$51.76
Grid 2, \$/head	\$19.92	\$60.95	-\$53.19
Grid 3, \$/head	\$23.10	\$60.04	-\$36.98
Grid 4, \$/head	\$13.97	\$51.98	-\$49.99

Value Differences Discovered

Large differences in cattle value within a group were observed. Of the 66 groups with full carcass data, the average difference between the most valuable carcass and the least

“The top 60 to 70% of Iowa’s cattle groups succeed in getting grid premiums above extra costs.”

— Daryl Strohbahn,
Iowa Beef Center



valuable carcass within a group was \$358. Marketing group size ranged from 168 head to 12 head, with an average of 40 head. The most uniform market group had a \$156 difference, while the least uniform group had a \$746 difference between the top and bottom carcass. Upon further sorting, it was found that the top 25% lots for uniformity had an average top-to-bottom difference of \$255, while the bottom 25% lots had an average top-to-bottom difference of \$474.

Grid Analysis Findings

Using a grid calculator program developed by the Iowa Beef Center, all cattle groups were analyzed and data on premiums were collected. Summarization of the premium data showed that 88% of the time producers would have received at least the Nebraska weighted average price or higher. Because most of the grids charge \$3 per head in fees, it was found that 83% of the time the producers would have covered that cost plus received the Nebraska weighted average price. On average the cattle would have achieved a premium per head of \$20.04 across all grids tested. This is substantially higher than the \$7.93 found in the 1998 analysis. Why? The Choice/Select price spread in 1999 averaged \$9.97/cwt. In comparison, the average standardized spread used in 1998 was \$7/cwt.

When cattle groups were tested in the four grids, returns above or below the base price varied. The differences in premium per head between the most and least rewarding grid for a set of cattle averaged \$13.44. This clearly indicates that analysis of cattle with known historical carcass performance can pay off.

What does it take to succeed in a grid?

Performance within the grids by groups of cattle varied a great deal. Table 2 shows that across all grids the top one-fourth of the groups received a premium of over \$40 per head, while the bottom one-fourth were discounted just over \$7 per head. The spread between the top and bottom one-fourth groups was similar across all the grids.

Table 2 shows the carcass performance differences between the quartile groups across all grids. Differences that separate the top one-fourth from the bottom one-fourth:

- ◆ % Prime, 9.5% vs. 2.9%
- ◆ % Upper 2/3 Choice, 30.9% vs. 18.0%
- ◆ % Standard and Off Grades, 0.1% vs. 3.8%
- ◆ % Yield Grade 4s & 5s, 2.6% vs. 7.8%
- ◆ % Carcasses over 950 lbs, 0.1% vs. 3.5%

Table 2. Difference in carcass performance by premium quartile groups across all grids.

	Top Quarter	2 nd Quarter	3 rd Quarter	Bottom Quarter	Average
Premium per head, \$	\$40.33	\$26.27	\$14.55	-\$7.14	\$20.04
% Prime	9.5%	4.3%	2.9%	2.9%	4.9%
% Upper 2/3 Choice	30.9%	25.8%	22.0%	18.0%	24.2%
% Low Choice	51.9%	52.5%	53.2%	43.9%	50.4%
% Select	7.6%	17.0%	21.1%	31.4%	19.3%
% Standard & Off Grades	0.1%	0.3%	0.8%	3.8%	1.2%
% Yield Grade 1 & 2s	64.1%	64.4%	57.6%	58.4%	61.1%
% Yield Grade 3s	33.3%	33.1%	37.4%	33.8%	34.4%
% Yield Grade 4 & 5s	2.6%	2.5%	5.1%	7.8%	4.5%

Prepared by Daryl Strohbahn, extension beef specialist, Iowa Beef Center and professor, Department of Animal Science.

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Bottom Line

- ◆ Selling into a grid market is not a guarantee to profit.
- ◆ Currently cattle that grade 75% Choice and better with less than 5% Yield Grade 4s and 5s are very likely to receive premiums above the base price in grids similar to the ones tested here.
- ◆ Grid marketing transfers quality grade, yield grade, off-weight carcass, bruise trim and condemnations from packer to producer.
- ◆ Premiums for many cattle groups vary widely depending on the grid market, thus analysis of cattle with known historical carcass performance can pay off.
- ◆ The most rewarding grid to market into may change drastically as base price fluctuates and as the Choice-Select spread widens or narrows.