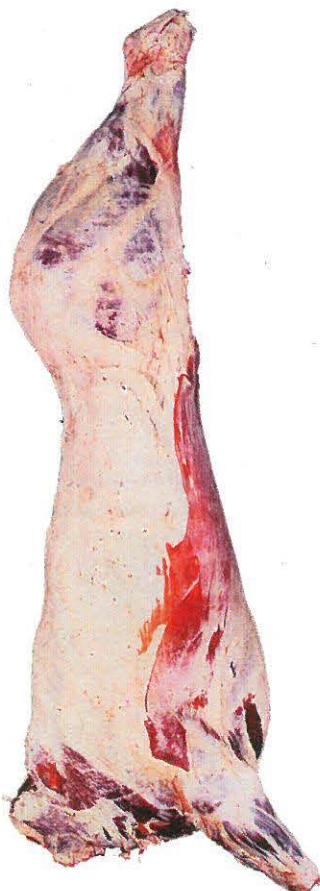


Marketing

what's under the hide

IOWA STATE UNIVERSITY
Iowa Beef Center



"These unselected Iowa cattle are much higher in quality than the last two National Beef Quality Audits."

—Dr. Daryl Strohbehn,
Iowa Beef Center

An Iowa Beef Center Report to Iowa Cattle Producers

"Grid Marketing Project Summary"

Today's beef industry is moving toward value-based marketing of finished cattle. This consists of selling cattle on a price formula that determines value of each individual animal based on quality grade and yield grade.

Current grid pricing systems differ from past ones because there are significant premiums offered for cattle achieving quality grades above low choice and for yield grades 1 and 2. However, producers must withstand discounts for lower quality grades and poorer yield grades, plus any cattle that do not meet weight specifications.

Iowa Beef Center Objectives

Iowa's cattle producers are keenly interested in this marketing method and have had many questions concerning whether they can compete successfully with their genetics and feeding systems. With this in mind, the Iowa Beef Center (IBC) initiated a Value-Based Marketing Grid Demonstration Project with the following objectives:

1. develop a database of Iowa produced cattle for grid comparisons,
2. analyze how various groups of cattle compare on different grids,
3. demonstrate potential marketing risks and rewards,
4. compare grid marketing to selling cattle in the beef,
5. and develop and fine tune a computer model which will assist producers in grid marketing decisions.

Initial Findings

ISU Extension field livestock specialists worked with over 40 Iowa producers to collect information on 93 groups of market-ready cattle.

Table 1. IBC grid demonstration compared to the National Beef Quality Audits.

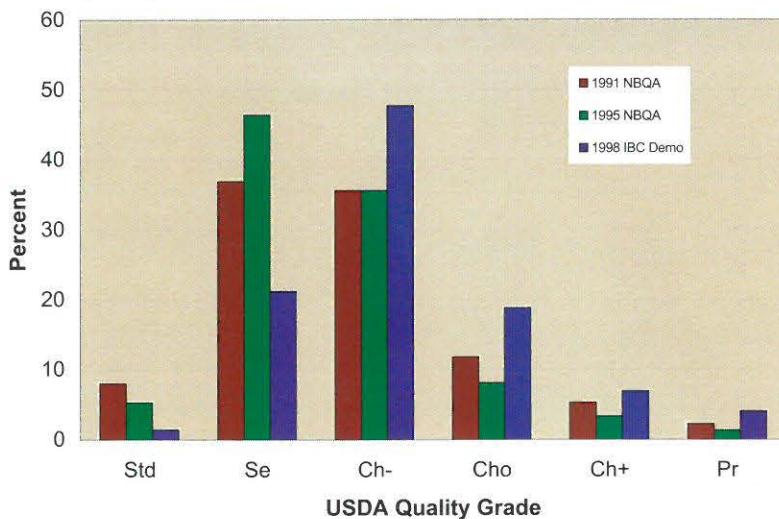
	1991 NBOA	1995 NBOA	1998 IBC Demo
Carcass weight (lbs)	760	748	746
Fat thickness (in.)	.59	.47	.44
Ribeye area (sq.in.)	12.9	12.8	12.5
KPH fat (%)	2.2	2.1	2.2
USDA Yield Grade	3.16	2.82	2.88
Marbling score	Sm ²⁴	Sm ⁰⁶	Sm ⁶⁰
USDA Quality Grade	Select ⁸⁶	Select ⁷⁹	Low Choice ⁶⁰
US Prime & US Choice	55%	48%	77%
Yield Grades 1 & 2	44%	58%	60%

Complete carcass data was obtained on a total of 2,654 head sold in the summer of 1998. Tables 1-2 show that the IBC demonstration cattle are superior in quality grade to the last two National Beef Quality Audits and a higher percent of them fall into the more desirable yield grades.

Table 2. Quality grade comparison: IBC Demonstration vs. National Beef Quality Audit.

"To successfully market in a grid, feeders must understand base prices, a packer's schedule and their cattle."

—Dr. John Lawrence,
Director, Iowa Beef Center



What about Grids?

Most grid/formula pricing systems utilize a base price for low Choice, yield grade 3 carcasses that weigh between 600 and 950 lbs. Then premiums and discounts are applied for the various quality and yield grades and off weight carcasses. Currently, for grids offered locally this base price is determined by using the Nebraska weekly direct weighted averages for dressed basis sales and the reported price spread between Choice and Select grading cattle.

Four currently available grid/formula markets were utilized in this demonstration project. Two of the grids would be considered to be high quality oriented, while one was cutability oriented and the fourth a balanced grid with smaller rewards for quality and yield grade.

To best analyze how cattle perform in these grids all groups were tested using \$100/cwt as the Nebraska weighted average price. Next, three different Choice-Select price spreads were examined: \$3/cwt, \$6/cwt and \$12/cwt. Each group was run through a grid analysis computer model using the three price spreads, with premium and discount data being collected each time.

Grid Analysis Findings

Analysis of data show that 72% of the time these producers would have received at least the Nebraska weighted average price or higher. Depending on the grid and the Choice-Select price spread this ranges from 61% to 80%. The Nebraska weighted average price would match closely to what "In-the-Beef" prices would be if the producers were to sell on the carcass basis.

The average premium per head was \$7.93 in all four grids as reported in table 3, but the range under the various price spreads is large. In general, as the Choice-Select spread increases the amount of premium awarded increases. However, it is important to notice that this trend is not consistent across all grids. Why? For instance, in the two high quality grids, the difference between Grid 1 and Grid 2 base prices widens as the Choice-Select spread increases, thus shifting the preference from Grid 1 to Grid 2.



Table 3. Premiums/head received above Nebraska weighted average price with varying Choice>Select price spreads.

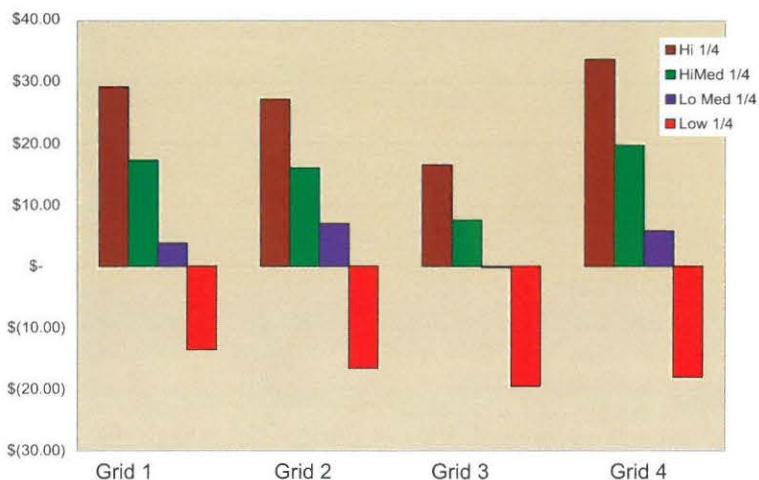
	Choice>Select Spread		
	\$3	\$6	\$12
Grid 1 (High Quality Grid)	\$9.59	\$8.94	\$7.57
Grid 2 (High Quality Grid)	\$6.70	\$10.10	\$16.62
Grid 3 (High Cutability Grid)	\$5.24	\$8.15	\$13.99
Grid 4 (Balanced Grid)*	\$2.08	\$0.91	\$5.29

Premium amount goes up in the high cutability grid because as the Choice>Select spread increases the premiums paid for Select, yield grades 1 and 2 become less important and quality grade drives the determination of total premiums paid.

Variation exists in the amount of premiums per head paid for the groups of cattle. Table 4 shows what the various quartile groups do from a premium standpoint.

This IBC study found that as the Choice-Select spread increases the difference in premiums between quartile groups is greater and yield grade becomes less of a factor. Additionally, this IBC study found that the quartile groups average almost exactly with those reported at the 1997 Iowa Cattlemen's Convention by Dr. Ken Conway, then with Angus America. Dr. Conway reported their average premium per head above the Nebraska weighted average price was \$10.58. Their upper one-fourth cattle garnered a premium of \$30.15 and the lower one-fourth cattle were discounted \$8.15.

Table 4. Range in premiums with grids using a \$6 Choice>Select spread.



"There are premiums in these grids for top cattle, but you better have above average quality and yield grading cattle."

—Dr. Daryl Strohbehn,
Iowa Beef Center

"The best grid premiums are no better than a 10-20% improvement in feed efficiency."

—Dr. Dan Loy,
Iowa Beef Center



Strategies for Successful Grid Marketing

- Collect carcass data on the cattle you feed.
- Analyze and determine the quality and yield grade distribution of your cattle.
- Obtain and study the grids available in your region.
- Apply your cattle data to available grids prior to marketing.
- Consider sorting cattle to fit grids, but beware of potential problems in marketing out cattle.
- Secure the current base price on the grids and ask how they were determined.
- Keep up to date on changes in grids and compare your cattle data to the changes.
- Keep historical records on groups that succeed and fail under grid markets.
- Study your data for genetic improvement possibilities and prescription management strategies.

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What does it take to succeed in a grid?

Table 5 shows the carcass performance of the various quartiles in Grid 1; a high quality based grid. Notice that getting a high percent of Prime and upper 2/3's Choice cattle is imperative to success, while keeping yield grades 4 and 5 at a low level. No doubt as time advances there will be new grids available with more emphasis on yield grade and less on quality.

Table 5. Difference in carcass performance by premium quartile groups in grid 1.

	Hi 1/4	Hi Med 1/4	Lo Med 1/4	Low 1/4
% Prime	9.1%	3.6%	1.4%	0.3%
% Upper 2/3 Choice	40.4%	25.7%	15.8%	12.5%
% Low Choice	43.4%	51.2%	50.4%	43.5%
% Select	5.9%	19.2%	30.3%	39.8%
% Yield Grades 1 & 2	61.8%	59.5%	62.1%	61.1%
% Yield Grade 3	33.9%	37.7%	34.0%	30.5%
% Yield Grade 4 & 5	4.3%	2.8%	3.9%	8.4%
Premium per head	\$29.20	\$17.29	\$3.75	-\$13.50

No Magic Profit

Marketing finished cattle on a grid is not a magic solution to profitability. As this study shows upper one-fourth cattle gained a marketing advantage of \$25 to \$35 per head, while middle performing groups received premiums in the \$5 to \$20 range. As table 6 shows, sound feedlot management practices provide similar cost reduction during the feeding phase; thus there is a need to keep grid premiums in perspective.

Table 6. Impact of management practices on returns per head.

	Added Return per Head	
	\$2 Corn (\$70/t Ration)	\$3 Corn (\$95/t Ration)
Using an Ionophore	\$12	\$16
"Middle-the-Road" Implant Strategy	\$17	\$21
"Aggressive" Implant Strategy	\$31	\$39
Reduce Death Loss .50 Percent	\$4	\$4

Bottom Line

Selling cattle in a grid market is not a magic ticket to profit. As shown earlier, top 1/4 performing grid cattle garner premiums similar to 10% to 20% gains in feed efficiency.

Grid marketing your cattle transfers quality and yield grade risk from the packer to you. Therefore, it is important to know what your cattle are capable of doing from a carcass standpoint.

Be sure to understand that the Nebraska weighted average dressed beef price matches closely to an "In-the-Beef" carcass bid. The Choice, Yield Grade 3 base price is determined from this Nebraska price and should be higher than an "In-the-Beef" price.

And finally, the most profitable grid to market into may change dramatically as base price fluctuates and as the Choice-Select spread widens or narrows. Thus, requiring constant attention to market analysis and making a separate marketing decision on each pen of cattle.