

Marketing

what's under the hide

IOWA STATE UNIVERSITY



Grid Demo - 1999

A Summary of Carcass Data

Summary Points

- ◆ 3,159 head of cattle from 29 producers in 79 marketing groups
- ◆ 76.2 % USDA Low Choice and better
- ◆ 61.6 % calculated Yield Grade 1s and 2s
- ◆ 4.7 % USDA Prime
- ◆ 22.8 % Upper 2/3s of USDA Choice
- ◆ 3.0 % under 600 lbs Hot Carcass Weight
- ◆ 1.5 % over 950 lbs Hot Carcass Weight
- ◆ 4.9 % calculated Yield Grade 4s and 5s



Introduction

Marketing cattle successfully on a grid or under a formula requires that the producer take a few initial steps, such as:

- ◆ 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 prices on the grids under consideration.

In 1999 the Iowa Beef Center (IBC) with its field staff cooperated with 29 different producers to obtain either full or partial carcass data on 3,159 head of cattle in 79 marketing groups. Marketing group size ranged from 12 head to 168 head with an average of 40 head. Group sizes tended to group closely around a one load lot.

IBC Grid Demo vs. National Beef Quality Audit

The cattle involved in the 1999 grid demonstration project again were superior to the cattle evaluated in the last two National Beef Quality Audits. For two years in a row the grid demonstration cattle beat the national audits by 18 or 19 percent for the USDA Prime and Choice grades while also exceeding the audits in yield grade 1 and 2 carcasses by 2 to 4 percent.

Distribution Analysis for QG and YG

Imperative to analyzing the success of marketing cattle into a grid is how they fit from a quality and yield grade perspective. On average, the 1999 grid demonstration cattle would fit into most high-quality grids very well. Table 2 shows the quality and yield

“High quality with acceptable yield grades seems to be the rule for Iowa cattle.”
— Daryl Strohhahn,
Iowa Beef Center

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

	1991 NBQA	1995 NBQA	1998 IBC Demo	1999 IBC Demo
Carcass weight (lbs)	760	748	746	761
Fat thickness (in.)	.59	.47	.44	.46
Ribeye area (sq.in.)	12.9	12.8	12.5	13.0
KPH fat (%)	2.2	2.1	2.2	2.1
USDA Yield Grade	3.16	2.82	2.88	2.74
Marbling score	Sm ²⁴	Sm ⁰⁶	Sm ⁶⁰	Sm ⁷²
USDA Quality Grade	Select ⁸⁶	Select ⁷⁹	Low Choice ⁶⁰	Low Choice ⁷²
US Prime & US Choice	55%	48%	77%	76%
Yield Grades 1 & 2	44%	58%	60%	62%

“Iowa cattle need to maintain quality and become leaner if we want to compete in the future.”

— John Lawrence,
Director, Iowa Beef Center



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... and justice for all

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grade distribution for these 3,159 cattle. Keep in mind this is the average and that there is a great deal of variation. For instance, if one sorts the 79 lots by either the percent that grade Low Choice and better or by the percent that are yield grade 2 or better, one finds that the top and bottom quartiles look entirely different (see table 3).

Table 2. Quality and Yield Grade Distribution Analysis.

Yield Grade	Prime	Upper 2/3		Select	Standard & Off Grades	Totals
		Choice	Choice-			
1	0.1%	1.4%	5.4%	5.1%	0.7%	12.7%
2	1.9%	9.4%	24.2%	12.6%	0.7%	48.9%
3	2.2%	10.1%	16.8%	4.1%	0.2%	33.4%
4	0.4%	1.6%	2.3%	0.2%	0.0%	4.6%
5	0.1%	0.1%	0.1%	0.0%	0.0%	0.3%
Totals	4.7%	22.8%	48.7%	22.1%	1.7%	100.0%

Table 3. Comparison of cattle groups when sorted by Quality Grade and Yield Grade.

	Sorted by % Choice & Above		Sorted by % Yield Grade 2 & Better	
	Top	Bottom	Top	Bottom
Prime	11.5%	1.9%	4.7%	5.4%
Upper 2/3 Choice	36.4%	20.2%	23.0%	30.5%
Choice	49.5%	37.1%	45.0%	51.9%
Select	2.5%	37.9%	24.4%	11.6%
Std	0.1%	2.8%	2.9%	0.6%
Yield Grades 1&2	45.6%	67.2%	86.3%	33.9%
Yield Grade 3	47.0%	29.3%	12.6%	56.3%
Yield Grades 4&5	7.4%	3.5%	1.2%	9.8%

The beef quality audits indicated there was too much variation in carcasses used in the retail and hotel/restaurant trade. Complaints of ribeyes that were either too large or too small or cuts from carcasses that were too large were common. Iowa cattle appear to suffer from these same problems. As Table 4 shows, 8.5% of cattle were either too light (<600 lbs) or too heavy (>900 lbs) from a carcass weight perspective. In addition 4.1% of the cattle were over 16 sq. in. in ribeye, which has been deemed to be too large, and another 7.9% were under 11 sq. in., thus making them too small for a majority of the beef sale trade. Another problem is excessive finish on the end product. A target would be .35 inches of backfat with no cattle over .60 inches. More than 23% of the cattle in this grid demonstration project had an excess of .60 inches of backfat.

Table 4. Carcass Trait Distribution Analysis.

Hot Carcass	Rib Eye			Fat Cover				
	Weight	Number	Percent	Area	Number	Percent		
<600	95	3.0%	<11	227	7.9%	<.1"	5	0.2%
601/649	234	7.4%	11-11.9	525	18.3%	.1"-.19"	40	1.4%
650/699	454	14.4%	12-12.9	698	24.3%	.2"-.29"	273	9.5%
700/749	639	20.2%	13-13.9	614	21.4%	.3"-.39"	532	18.5%
750/799	672	21.3%	14-14.9	482	16.8%	.4"-.49"	860	30.0%
800/849	556	17.6%	15-15.9	201	7.0%	.5"-.59"	490	17.1%
850/899	336	10.6%	16-16.9	87	3.0%	.6"-.69"	412	14.4%
900/949	125	4.0%	17-17.9	27	0.9%	.7"-.79"	140	4.9%
>950	48	1.5%	>18	6	0.2%	>.8"	116	4.0%
Totals	3159	100%	Totals	2867	100%	Totals	2868	100%
Count	3159		Count	2868		Count	2868	
Sum	2405240		Sum	37394		Sum	1314.4	
Average	761.4		Average	13.0		Average	0.46	

Future Summary

The second summary from this project will show how these cattle perform in various types of grid markets. The Iowa Beef Center will test them across various market conditions.