Value Differences in Fed Cattle

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“If Attila the Hun were alive today, he would be a cattle buyer for a packing plant”

Baxter Black
Factors Effecting Live Fed Cattle Prices

- Probability of animal to produce a high percentage of retail product that fits in the range of consumer acceptance
  - Quality Grade
  - Yield Grade
  - Size of portions
- Seasonal Price Trends
- Age, hardbone
- Dark cutters
- Reputation

1999 Value Differences Discovered
IBC Grid Demo Project

In 66 groups with full carcass data
Average difference between most valuable and least valuable carcass was $358!!
Most uniform market group had a $156 difference
Least uniform market group had a $746 difference

Strohbehn & Loy, Iowa State
Grid Pricing Structures

- Pricing grids and contract specifications give an idea of what packers are most interested in buying
  - what their customers most want
- Buyers at sale barn are most interested in cattle that most likely fit same specs as grids or contracts
- Based on previous experiences
- If you decide to sell cattle on a grid you need to know how your cattle cut out to best pick a grid

Excel Carcass Specs

<table>
<thead>
<tr>
<th>Carcass Weight</th>
<th>REA min in²</th>
<th>REA min width</th>
<th>Discount $/CWT</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-599</td>
<td>11.4</td>
<td>2.75</td>
<td>-15 to 30</td>
</tr>
<tr>
<td>600-699</td>
<td>11.4</td>
<td>2.75</td>
<td>-4</td>
</tr>
<tr>
<td>700-999</td>
<td>11.4</td>
<td>2.75</td>
<td>base</td>
</tr>
<tr>
<td>1000-1050</td>
<td>12.4</td>
<td>3.25</td>
<td>-6</td>
</tr>
<tr>
<td>1051-1125</td>
<td>12.4</td>
<td>3.25</td>
<td>-12</td>
</tr>
<tr>
<td>&gt;1125</td>
<td>12.4</td>
<td>3.25</td>
<td>Sel-Utility</td>
</tr>
</tbody>
</table>
Tyson/IBP Real Time Grid
for beef breeds

<table>
<thead>
<tr>
<th>Quality Factors</th>
<th>Yield Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime</td>
<td>YG 1</td>
</tr>
<tr>
<td>CAB</td>
<td>YG 2</td>
</tr>
<tr>
<td>Choice</td>
<td>YG 3</td>
</tr>
<tr>
<td>Select</td>
<td>YG 4</td>
</tr>
<tr>
<td>Standard</td>
<td>YG 5</td>
</tr>
<tr>
<td></td>
<td>&lt;550lb car.</td>
</tr>
<tr>
<td></td>
<td>&gt;950lb car.</td>
</tr>
</tbody>
</table>

*premiums and discounts vary based on demands

Packerland Holstein Contract
Cattle on high energy at 350lb or less

- 70% Choice/ Prime
- premium on choice prime over 70%
- 61% Yield
- YG 4 (-$10/cwt) 5% allow
- YG 5 (-$20/cwt)
- Ungraded= cash price

<table>
<thead>
<tr>
<th>Carcass wt</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>650-900</td>
<td>Base</td>
</tr>
<tr>
<td>951 +</td>
<td>-$10/cwt</td>
</tr>
<tr>
<td>901-950</td>
<td>-$5/cwt</td>
</tr>
<tr>
<td>600-649</td>
<td>-$5/cwt</td>
</tr>
<tr>
<td>599 or less</td>
<td>-$15/cwt</td>
</tr>
</tbody>
</table>

Pricing Options:
1. Five area weighted average week prior
2. Chicago Mercantile Exchange
3. Floor Priced (putting in a floor)
What kind of live animals do the grid and contract specs equate to?

- **Holstein Carcass** weights 700 to 950 lb
  - 60% dress = 1200-1550 lb live
- **Beef Breeds** Carcass 600 to 950 lb
  - 63% dress = 1000 to 1500 lb
- Keep in mind target live weight will depend on animal’s frame size and muscling

Frame size* at 7, 15 months and expected weight at choice

<table>
<thead>
<tr>
<th>Frame score</th>
<th>7 month ht.</th>
<th>15 month ht</th>
<th>Wt. Choice**</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>40</td>
<td>47.1</td>
<td>950</td>
</tr>
<tr>
<td>4</td>
<td>42.1</td>
<td>49.1</td>
<td>1050</td>
</tr>
<tr>
<td>5</td>
<td>44.1</td>
<td>51.1</td>
<td>1150</td>
</tr>
<tr>
<td>6</td>
<td>46.1</td>
<td>53.0</td>
<td>1250</td>
</tr>
<tr>
<td>7</td>
<td>48.1</td>
<td>55</td>
<td>1350</td>
</tr>
<tr>
<td>8</td>
<td>50.1</td>
<td>57</td>
<td>1450</td>
</tr>
<tr>
<td>9</td>
<td>52.2</td>
<td>59</td>
<td>1550</td>
</tr>
</tbody>
</table>

*based on beef breeds only, ** heavy muscled cattle will finish heavier
**Choice- Select Spread**

- **2004**
- **2003**
- **2000**

![Graph showing prices over weeks](Chariton Valley Beef)

**Example Steer**

- 1190 pound live weight
- 63% dress
- 750 pound carcass
- $85/cwt live base price for choice

<table>
<thead>
<tr>
<th>Spread</th>
<th>Choice</th>
<th>$7</th>
<th>$15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcass</td>
<td>$135</td>
<td>$128</td>
<td>$120</td>
</tr>
<tr>
<td>Live</td>
<td>$85</td>
<td>$80.64</td>
<td>$75.60</td>
</tr>
</tbody>
</table>
Choice Select Spread

- Spring and late Fall tend to see wider spread
  - Partially due to higher demand for choice during grill season and holidays
  - Also due to feed yards bringing in new calves and “cleaning out”
  - Can be influenced by supply and demand like this past fall

Why the Beef/ Holstein Spread?

- **Less muscle (meat)**
  - Rib eye area is smaller
  - Dressing percentage a little less
    - 60% compared to 63%
  - Tends to be a little higher percentage of hardboned (old cattle)
  - Higher percentage of stags
    - Castration method
Holsteins

- Shorter, thicker, wider over the top are more likely to hit the target
- High Energy finished
- Taller lanky ones even if finished do not yield as much retail product per cwt of live weight
- Good Holsteins will bring better or equal to average beef breed steers

Some decent high energy steers
Some examples

- Decent thickness
- Needs improvement

Exhibits good thickness
Example steer

1324 live, 790 carcass wt., 0.3 backfat, 59.6% dress
11.5 REA, ave choice, yield grade 3.1

Example steer

1392 live, 830 carcass wt., 0.2 backfat, 59.6% dress
11.8 REA, low choice, yield grade 2.7
Example steer

1392 live, 830 carcass wt., 0.2 backfat, 59.6% dress
11.8 REA, low choice, yield grade 2.7, 62.3% retail product

Example Beef Steer

1436 Live wt, 927 carcass wt., 0.3 backfat, 15 in² Ribeye
64.5% dress, low choice, yield grade 1.9, 65.9% retail product
Impact of Muscling on % Retail Product

750 lb Carcass with .4” fat and 2.5% KPH

<table>
<thead>
<tr>
<th>Rib Eye Area</th>
<th>YG</th>
<th>% Retail Prod.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>3.3</td>
<td>62.1</td>
</tr>
<tr>
<td>12</td>
<td>3.0</td>
<td>63.3</td>
</tr>
<tr>
<td>13</td>
<td>2.7</td>
<td>64.6</td>
</tr>
<tr>
<td>14</td>
<td>2.4</td>
<td>65.8</td>
</tr>
<tr>
<td>15</td>
<td>2.1</td>
<td>67.0</td>
</tr>
</tbody>
</table>

Strohbehn & Loy, Iowa State

Rib Eye Area

- 12 to 14 square inches is the target
- 11 to 15 is acceptable
- Much over 15 is too big for consumer acceptance on their plate
Rib Eye Comparison

Background on Rib Eye Comparison

- Holsteins
  - 494 head
  - Approx 100 are high energy, the rest are yearlings
    Wisconsin project

- Beef
  - 3,159 head
  - All calf feeds
  - Predominantly angus, and angus cross
  - High energy fed
    Tri-county Steer Futurity/ Iowa State Project
Holstein Rib Eye Help

- An intelligent, planned implant program can help increase rib eye size
- Optaflexx®
  - Might be some opportunities

Age- Size

- Due to BSE concerns there may be more discounts for cattle that may be older than 20 months
- Size/ appearance will be one factor used to estimate age
- Mouth teeth exam also used
Holstein Age Example

- Weaned at 175 pounds – 1.5 months
- Grower to 350 pounds – 3 months
  - 2.0 lb a day 90 days
- Put on grass up to 700 pounds – 6 months
  - 2.0 pounds per day 180 days
- Feedlot to 1400 pounds – 8.3 months
  - 2.75 pounds per day for 250 days
- Total age at finish = 19 months

Hard Boned

- Refers to calcification of joints
  - Occurs naturally as animal ages
- Can be influenced by extremely aggressive implant program
- Some “calves” have been around a long time
  - Not as bad as it used to be, but it takes a while to get rid of an unfavorable reputation
Determining Age

- Note the white cartilage buttons at the tips of the chine bones
- Indicates a young carcass
- Note evidence of ossification (red) in tips of top (posterior most) buttons
- Indicative of A/B borderline maturity

Schmidt, Auburn U.

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Determining Age

- Note ossification (red) in buttons at tips of chine bones
- Ossification becomes less obvious moving down (towards anterior)
- Cartilage is ~ 40% ossified, typical of middle C maturity

Schmidt, Auburn U.
Relationship between maturity and marbling on quality grade

10 Year Seasonality for Beef Cattle 1995-2004
**Stomach Fill**

- Cattle with a lot of fill (full stomachs) bring less per pound than those that are not filled.
- Packers don’t want to buy what they can’t use
- Rumen contents could be 80 pounds
  - $80/1300 = 6\%$ difference in live weight
- Often the total money per head is about the same

**Manure and Mud**

- A 1250 pound steer with 50 pounds of mud balls
  - 775 pound carcass
  - 1250 wt = 62\% dress
  - 1300 wt= 59\% dress
- Also a bigger concern with E.Coli O157H7
Reputation

- Plays a huge part in attracting buyers
- Buyers that have had a good experience with your cattle are more willing to come back and buy them again
- Some barns announce seller before bidding, some advertise in papers

Other Opportunities

- Sell on grade and yield basis removes the guess work of the live buyer
- Branded programs
- Niche markets
- Direct marketing
Questions???