

# BEEF IMPROVEMENT FEDERATION-2007

*Selection Decisions*

FT. COLLINS, COLORADO

## How do genetic differences influence animal value?

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North American Limousin Foundation

### CSU/NALF Bull/Female Price Study

- 2,500 bulls and 3500 females primarily sold at public auction during 2005 and spring 2006
- Registered and unregistered
- Qualitative and quantitative traits
- Extreme sales prices excluded from analysis

"PEOPLE DON'T BUY FOR  
YOUR REASONS-THEY BUY  
FOR ***THEIR*** REASONS."

*Jeffery Gitomer*  
*Little Red Book of Selling*

### Registration Pays 25-to-1!



#### It pays to brand with NALF registration:

- Registered animals are worth more. A Colorado State University study demonstrates commercial buyers pay \$427 more for registered bulls. That is a 25-to-1 return on the average \$17.00 registration fee.
- Registration verifies needstock with reliable pedigrees, performance and EPDs.
- Registration enables comprehensive breed marketing, progressive research, and a variety of member services.
- Registrations are the hallmark of breed success.

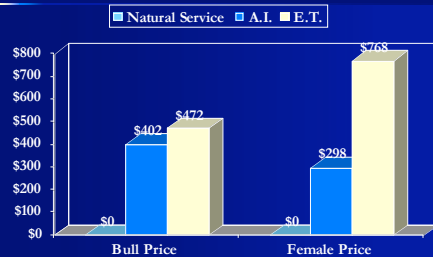
Registration Pays!  
Register Now.

**LIMOUSIN**  
North American Limousin Foundation  
Together We Can.

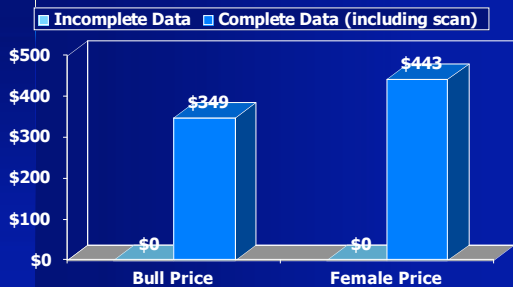
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www.nalf.org

### Limousin Bull and Female Price Differences- Produced by Natural Service, AI, ET



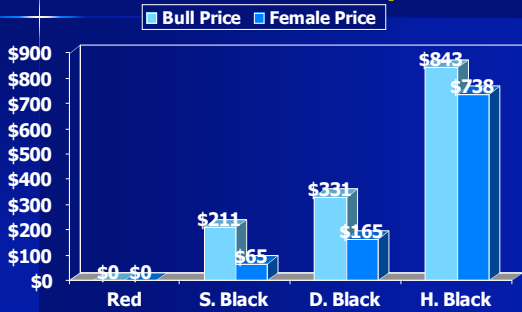
### Influence of complete performance information, including ultrasound scan data, on Limousin bull and female sale prices



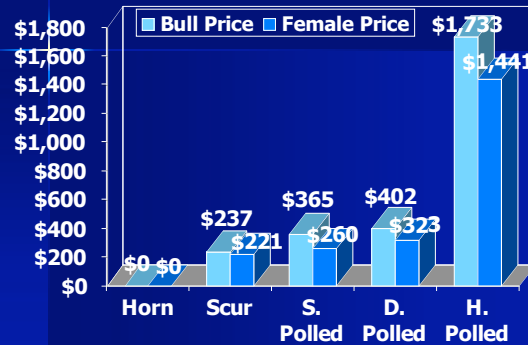
### Qualitative Traits

Horned/Polled  
Red/Black

### Influence of color on Limousin bull and female sale prices



### Influence of horned, scurred and polled on Limousin bull and female sale price



### Quantitative Traits

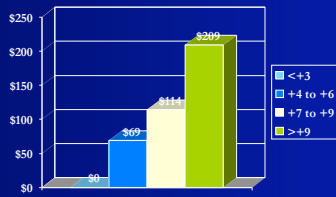
Controlled by many genes

### EPDs rank animals

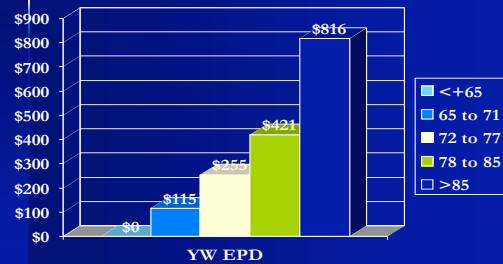
#### PERCENTILE BREAKDOWN CURRENT Sires OF 2004-2006 BORN CALVES

| Upper Percentile Group | Culling Ease | Birth Weight | Weaning Weight | Yearling Weight | Milking Ability | Culling Ease Material | Scrotal Circum. | Stayability | Ductility | Carcass Weight | Ribeye Area | Yield Grade | Marbling Score | SMI |
|------------------------|--------------|--------------|----------------|-----------------|-----------------|-----------------------|-----------------|-------------|-----------|----------------|-------------|-------------|----------------|-----|
| 1%                     | 18           | -3.0         | 60             | 104             | 33              | 11                    | 1.1             | 25          | 32        | 50             | 0.69        | -0.22       | 0.16           | 50  |
| 2%                     | 16           | -2.2         | 57             | 100             | 31              | 10                    | 1.0             | 24          | 30        | 43             | 0.62        | -0.18       | 0.13           | 49  |
| 3%                     | 15           | -1.7         | 55             | 97              | 30              | 9                     | 0.9             | 24          | 29        | 40             | 0.57        | -0.16       | 0.11           | 48  |
| 4%                     | 14           | -1.3         | 54             | 94              | 29              | 8                     | 0.8             | 23          | 28        | 37             | 0.53        | -0.15       | 0.09           | 47  |
| 5%                     | 13           | -1.0         | 53             | 93              | 28              | 8                     | 0.8             | 23          | 27        | 35             | 0.51        | -0.14       | 0.08           | 47  |
| 10%                    | 11           | -0.2         | 49             | 87              | 26              | 7                     | 0.7             | 22          | 24        | 28             | 0.41        | -0.11       | 0.06           | 46  |
| 20%                    | 9            | 0.7          | 45             | 81              | 24              | 5                     | 0.5             | 20          | 21        | 22             | 0.31        | -0.07       | 0.03           | 44  |
| 30%                    | 8            | 1.3          | 42             | 76              | 22              | 4                     | 0.4             | 19          | 18        | 19             | 0.23        | -0.04       | 0.00           | 43  |
| 40%                    | 7            | 1.8          | 40             | 73              | 20              | 4                     | 0.3             | 18          | 16        | 15             | 0.17        | -0.02       | -0.01          | 42  |
| 50%                    | 6            | 2.2          | 38             | 70              | 19              | 3                     | 0.2             | 17          | 13        | 13             | 0.11        | 0.01        | -0.03          | 41  |
| 60%                    | 5            | 2.6          | 35             | 67              | 18              | 2                     | 0.1             | 16          | 10        | 10             | 0.06        | 0.03        | -0.04          | 40  |
| 70%                    | 4            | 3.1          | 33             | 63              | 16              | 1                     | 0.0             | 14          | 8         | 7              | 0.01        | 0.05        | -0.05          | 39  |
| 80%                    | 3            | 3.6          | 30             | 59              | 15              | 0                     | -0.1            | 13          | 5         | 3              | -0.05       | 0.08        | -0.07          | 38  |
| 90%                    | 1            | 4.4          | 26             | 52              | 13              | -2                    | -0.2            | 11          | 0         | -3             | -0.13       | 0.12        | -0.10          | 37  |

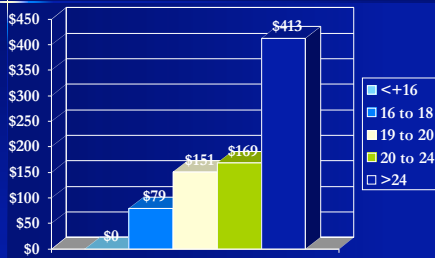
### Calving Ease Direct (CED) EPD – Influence on Bull Sale Price



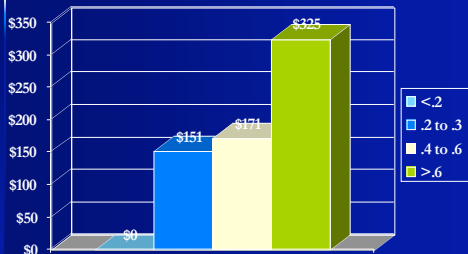
### Yearling Weight (YW) EPD – Influence on Bull Sale Price




### Milking Ability (MA) EPD – Influence on Bull Sale Price



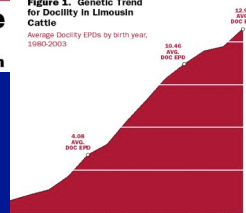
### Scrotal Circumference (SC) EPD – Influence on Bull Sale Price





"Thanks to the diligence of Limousin breeders across the country, not only does New Century Limousin have superior muscle and unmatched yield and efficiency, they're calmer now than ever before."

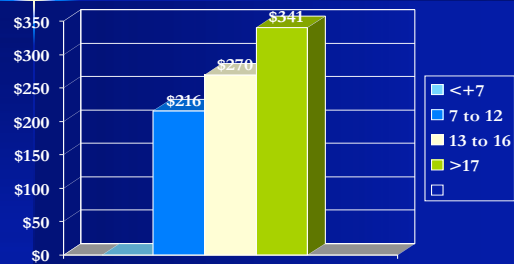
**Figure 1. Genetic Trend for Docility in Limousin Cattle**  
Average Docility EPDs by birth year, 1980-2003



| Year | Average Docility EPD |
|------|----------------------|
| 1980 | 2.00                 |
| 1985 | 2.25                 |
| 1990 | 2.50                 |
| 1995 | 2.75                 |
| 2000 | 2.90                 |
| 2003 | 3.01                 |

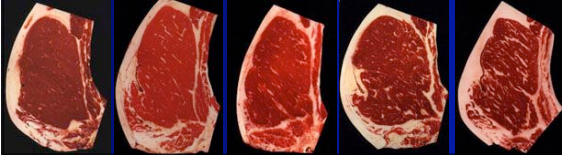
**Limousin Breeders Tackle Temperament**  
Genetic Trend Shows Power of Selection

### Docility (DOC) EPD – Influence on Bull Sale Price

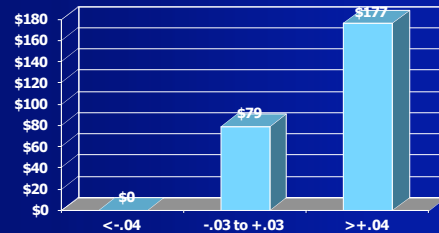


**Value difference between average weight (842 lbs.) carcasses of different quality grade - May 28, 2006**

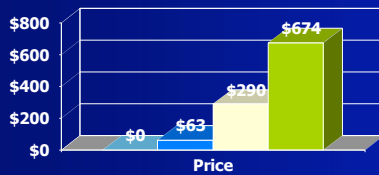
- Choice - \$1,162
- Select - \$994 (\$168 discount)
- Standard - \$808 (\$354 discount)



**Influence of marbling EPD on Limousin bull sale price**



**Influence of ribeye area EPD on Limousin bull sale prices 05/06**



- Light Muscled (REA EPD: <0)
- Below Average (REA EPD: .01 to .10)
- Above Average (REA EPD: .11 to .30)
- Heavy Muscled (REA EPD: >.30)

**Phenotype and structure makes a difference in value as well as EPD's**



**What buyers pay premiums for**

- Calving ease
- Growth
- Milk
- Marbling
- Muscle
- Docility
- Complete performance data & registration documents

**Too much of a good thing "Popeye" 1941-2006**

- "So very very sad, he was a good customer", --SGOA



## How much can producers "stand" of certain traits?

### *Antagonisms*

- Growth as it relates to mature size of cows and maintenance requirements
- Milk related to reproductive performance in programs of limited feed resources

Seedstock suppliers **must** insure their **customers profitability**

***The reward must outweigh the cost***

Outstanding strategic instincts driven by unrelenting executorial diligence.

***That balance of capabilities is the defining characteristic of high performers.***