

# Win The War.

## Are You Battling...

- Discounts for light-muscled calves
- Small ribeyes & YG 3s and 4s
- Inefficient feed conversion
- Calving, weigh-up and color headaches
- Market flexibility

**Survival depends  
on targeted action.**



**LIMOUSIN**

**Muscle. Growth. Efficiency.**

# Beef Industry Battles for Profit

- Consumer demand for tender, lean beef, and industry evolution in favor of case-ready beef, represents a revolution in the way packers deliver products to retailers and consumers.
- Rapid development of technology, including electronic cattle management and grading, more accurately estimates each animal's value.
- Beef system integration through alliances and cooperatives sends a clear signal—cow/calf producers must be in the business of satisfying the consumer, feeder and packer.
- Given increasing costs of production and larger rewards for fed cattle meeting industry case-ready targets, cattle producers must retool crossbreeding and bull selection programs.
- Advances in genetics, crossbreeding and information technologies mean cattle producers must rapidly gather and incorporate new knowledge.

## From the trenches...

“The amount of feed required per unit of retail beef produced is the **ultimate biologic measure** of beef production efficiency. Limousin calves produced the same amount of trimmed retail product with roughly one-half as much feed from weaning to harvest as compared to Angus and Hereford calves.”

Gregory et al., J. Anim. Sci. 72:1154

# Win

## Mission: Efficiency

✂️ Get ready for a new definition of beef industry efficiency. Instead of considering each production segment separately, assess efficiency system-wide. System-wide efficiency from conception to the consumer goes beyond live weight (and even carcass weight) endpoints to quantity and quality of trimmed, case-ready retail product. When thinking system-wide every dollar counts and genetics play the crucial role.

US Meat Animal Research Center data prove Limousin require about one-half as much feed as Angus and Hereford to produce the same amount of retail product. In fact, Limousin's advantage in fewer feed dollars required per unit of retail product extends beyond Angus and Hereford to all other major Continental breeds. Given that system-wide efficiency is next to impossible to measure, the easy and practical way to incorporate genetics for efficiency is to incorporate the leader—Limousin—into your crossbreeding plan.

### The Limousin feed advantage

Amount and dollars (more) feed required from weaning to harvest to produce the same amount (463 lbs) of trimmed case-ready retail product as Limousin

	Mcal of ME Consumed /hd <sup>1</sup>	Dry Matter Consumed /hd (lbs.) <sup>2</sup>	Dollars More Feed Required/hd for Same Amount of Retail Product <sup>3</sup>
<b>Limousin</b>	<b>3675</b>	<b>2701</b>	<b>—</b>
Angus	8026	5899	\$204
Hereford	8953	6580	\$248
Gelbvieh	4305	3164	\$26
Simmental	4548	3343	\$38
Charolais	4243	3119	\$23

<sup>1</sup> MARC, JAS Volume 72, May 1994, page 1153

<sup>2</sup> 3.00 Mcal of metabolizable energy (ME)/kg of dry matter, times 2.205 lb/kg

<sup>3</sup> \$130/ton ration cost, weaning to harvest

# The War.

**Successfully defending profit depends on targeted action.**

## When every pound counts, muscle matters

Whether you're a producer who sells calves at weaning or stockers after backgrounding, degree of muscling is a real price factor. In Texas A&M research summarizing sale price where both price per cwt and added weight are considered, #1 muscled steers brought \$45 more per head than #2s, and \$89 more per head than #3s. Limousin delivers more muscle and efficiency in one cross than any other major Continental breed.

### From the trenches...

“Muscularity is one thing our producers could really work on to improve the value of their calves. As weight increases, buyers pay less of a difference for breed type. But muscling impacts the price, no matter the weight.”

*Tom Troxell, Livestock Extension Specialist, University of Arkansas, as told to BEEF magazine*

As packers aim at producing case-ready products, genetic focus shifts toward cattle whose live weight is effectively turned into yield of retail product. Assuming similar live fed cattle weights for each major breed, Limousin advantages in dressing percent and percent retail product add up.

### Limousin advantage per head in transforming live harvest weight into value of retail product\*

Limousin Advantage versus:	Limousin Dress Advantage	Limousin Dress \$ Advantage <sup>1</sup>	Limousin Retail Product Advantage	Limousin \$ Advantage Live to Retail Product <sup>2</sup>
Angus	2.1%	\$33	10.8%	\$322
Hereford	3.1%	\$48	12.2%	\$379
Charolais	2.8%	\$43	3.6%	\$165
Simmental	3.6%	\$57	3.9%	\$196
Gelbvieh	3.5%	\$54	2.3%	\$154

<sup>1</sup> \$ advantage for dressing percent assumes 1,300 live weight and \$1.20/lb carcass price.  
<sup>2</sup> \$ advantage for live to retail product value difference used 2002 All Fresh Beef Price per Pound of \$3.04 and assumed similar quality grade.

## When every calf counts, calves and calving ease matter

Oklahoma State University researchers summarized results from six different studies comparing major breeds for calving ease, birth weight and calf survival. Compared to other major Continentals, none excelled Limousin in the combination of calving ease, sensible birth weight, calf vigor and survivability.

**Consumer demand for lean beef has escalated. McDonald's is dealing with a shortage of lean, domestic beef. Ranchers have to find a way to produce more lean beef to satisfy the demand, says John Hayes, senior director, US food and packaging, McDonald's.**



# Mission: Carcass



**Muscular and lean**

**Tender, healthy beef**

**Superior dressing percent**

**Industry-leading yield grade, percent retail product and case-ready yield**

**Optimum carcass weight**

**When every customer counts, lean yield and palatability matter**

As a cow-calf producer, you pull the genetic trigger for efficient production of lean, healthy, tender and affordable beef products.

In study after study, Limousin delivered higher dressing percent, more desirable yield grades and higher

Breed	Dressing Percent	Carcass Weight	Adjusted Fat Thickness	Ribeye Area	Percent Retail Product	Percent Fat Trim	Sensory Tender*
<b>Limousin</b>	<b>63.4</b>	<b>728</b>	<b>0.17</b>	<b>13.4</b>	<b>72.3</b>	<b>13.4</b>	<b>5.75</b>
Hereford	60.3	675	0.46	10.5	60.1	25.5	5.63
Angus	61.3	697	0.46	10.5	61.5	24.4	5.80
Gelbvieh	59.9	750	0.14	13.0	70.0	14.2	5.30
Simmental	59.8	767	0.16	12.6	68.4	15.5	5.83
Charolais	60.7	767	0.14	12.5	68.7	15.0	5.23

Technical Bulletin Number 1875, U.S. Meat Animal Research  
\*MARC Progress Report 21. Higher scores = more tender product

percent retail product than Angus, Hereford, Charolais, Simmental and Gelbvieh. With less feed, Limousin genetics put more lean meat in the retail case.

Consumers are our most important customers. Compared to traditional beef, healthy Limousin products are leaner, with less cholesterol and fewer calories. The latest US MARC data (June 2001) document Limousin beef as superior in tenderness, flavor and juiciness to beef from Charolais and Gelbvieh.

Limousin—superior genetics for efficient production of healthy, palatable beef products.

# Mission: Maternal



**Easy calving**

**Moderate mature size**

**Optimum milk**

**Longevity**

**Biological efficiency**

**When every cow counts, efficiency, calving ease and moderation matter**

Seasoned producers know: maternal efficiency focuses on optimums. True efficiency through weaning includes weight and value of calves produced relative to feed and management inputs for all cows exposed.

US MARC documents Limousin advantages in maternal efficiency, starting at calving, where Limousin females have less calving difficulty due in part to lighter progeny birth weights than other major Continental breeds. Limousin cows are moderate in mature size and have optimum milk production. These advantages translate into lower year-round feed costs for Limousin cows.

More importantly, MARC biological efficiency data rank Limousin females near the top across both low and high feed availability. Maternally, Limousin are more flexible and efficient across a wide range of environments.

Get the bonus of easy cow and calf color management along with cow longevity and industry leading salvage value. Get the Limousin maternal efficiency advantage.

Breed	Calf Birth Weight (lbs)	Calving Difficulty (%)	Cow Weight (lbs)	Cow Hip Height (in)	12-Hour Milk Yield (lbs)	Efficiency Rank (low feed)	Efficiency Rank (high feed)	Composite Rank (high & low feed)*
<b>Limousin</b>	<b>86.4</b>	<b>15.7</b>	<b>1213</b>	<b>52.4</b>	<b>10.2</b>	<b>2</b>	<b>2</b>	<b>1</b>
Angus	74.4	8.8	1094	49.6	9.3	1	5	2
Hereford	79.4	16.5	1091	50.0	6.7	3	6	5
Gelbvieh	95.2	21.5	1266	53.9	12.7	4	4	4
Simmental	94.2	23.9	1272	54.3	13.1	6	2	5
Charolais	98.1	19.5	1349	53.9	10.5	5	1	3

\* Biological efficiency ranked by grams of calf weaned per kilogram of dry matter intake per cow. Composite rank across high and low feed compiled by NALF.  
Sources: USDA-ARS Technical Bulletin 1875, 1999 and Jenkins and Ferrell, JAS 72:2787, 1994.

# Defend Profit

## Using the UltraMate Three-Step Plan:

### 1. Scope out your cows

An accurate inventory of your cowherd is the first step — as easy as counting cows.

#### How many of your cows are:

- British & British Cross (e.g. Angus)
- British-Continental Cross (e.g. Limousin-Angus crosses)
- Continental (e.g. Limousin)
- Brahman Cross (e.g. Brangus)

### 2. Determine your target market

The proportion of fed cattle marketed on grids and formulas has grown from 10 percent in 1990 to over 50 percent in 2002.

Recognizing producers make genetic decisions two years in advance of whenever fed cattle are marketed, profits depend on producers' ability to take aim at a target market now. Three distinctly different target markets exist for beef producers in North America (see 2).

### 3. Select your genetic solution

The final step of the UltraMate system is to select the best bulls to put your next calf crop in the profit zone. Follow the profitable crossbreeding steps at right (see 3).

Limousin and the new Lim-Flex line of Limousin-Angus hybrids, provide you with a full seedstock range to hit carcass and maternal targets.



Genetic selection targeting specific carcass endpoints doesn't have to be complicated. The UltraMate Crossbreeding System provides a simple crossbreeding plan to efficiently hit end-product and maternal profit targets.

#### 2. Determine your target market.

Aiming at the Target Market	Zone for Profit	Favored Breed Blends (in fed cattle)
<b>Mainstream</b> (55% of market)*	Yield Grade 1s & 2s Low Choice & Select Zero Misfires**	1/2 Limousin and 1/2 Angus (British) For Southern Producers: add ≤ 1/4 Bos Indicus
<b>Muscle</b> (15% of market)	100% Yield Grade 1s and 2s Tender & Low Fat Zero Misfires***	at least 3/4 Limousin or Continental (selected for muscle)
<b>Marbling</b> (30% of market)	Mid Choice & Higher Yield Grade ≤ 3 Zero Misfires**	at least 3/4 Angus and/or British Cross ≤ 1/4 Continental (selected for marbling)

\*Projected optimum scope of the market based on 2000 National Beef Quality Audit  
 \*\*Misfires = Yield Grade 4s and 5s, Standards, over weights, under weights, dark cutters  
 \*\*\*Misfires = Yield Grade 3s, 4s and 5s, Choice (depending on market), over and under weights, and dark cutters

#### 3. Steps to profitable crossbreeding.

Step #1 Scope Out Your Cows	Step #2 Aim at the Target Market	Step #3 Fire with the Right Bulls	Breed Blends of Progeny
Angus (British) & British Cross	Mainstream	→ Limousin	= 50/50*
	Marbling	→ Lim-Flex	= 25/75
Angus (British) Continental Cross	Muscle	→ Limousin	= 75/25
	Mainstream	→ Lim-Flex	= 50/50
Continental (high percent)	Marbling	→ Lim-Flex	= 25/75
	Muscle	→ Limousin	= >75
Brahman Cross	Mainstream	→ Lim-Flex	= 62/37
	Muscle	→ Limousin	= 75/12/12
	Mainstream	→ Lim-Flex	= 50/37/12

\*Indicates **approximate** percentage of Limousin, Angus (black or red) and Brahman, respectively (i.e. 50/50 = 50% Limousin, 50% Angus). British may also include Hereford and Shorthorn, which impacts sire selection strategy (e.g. when using Hereford cross cows and targeting mainstream market, select sires for higher marbling as compared to Angus and Shorthorn cross cows).

# UltraMate: Strategic Selection

## Mainstream Market

Select sires with the best combination of:



EPDs for growth, ribeye area and marbling

Ultrasound scans for ribeye and percent intramuscular fat (IMF)

## Muscle Market

Select sires based on:



EPDs for growth and ribeye area with less emphasis on marbling

Ultrasound scans for ribeye area

## Marbling Market

Select sires based on:



EPDs for growth and marbling with less emphasis on ribeye area

Ultrasound scans for percent IMF



# Progressive Genetics, Targeted Crossbreeding, Strategic Selection

## Limousin and Lim-Flex deliver

With superior genetics, a simple crossbreeding plan, state-of-the-art selection tools and a full range of seedstock to serve profit-minded producers, the Limousin breed is on your side.

Progressive producers recognize the advantages of hybrid vigor from environmentally adapted cross-bred cows:

- 20 percent more pounds of calf weaned per cow exposed (due to hybrid vigor for age at puberty, conception date, survival to weaning, milk production and weaning weight)
- 1.3 years additional cow longevity
- 30 percent greater lifetime cow productivity

Savvy producers understand consistently hitting carcass targets depends on matching cows to the right sires. Both straightbred and hybrid sires may be needed to uniformly manage breed composition, gain the benefits of hybrid vigor, quickly incorporate the genetics of more than one breed and efficiently hit mainstream carcass targets.

Lim-Flex is a registered, pedigreed blend of Limousin and Angus (black or red) that ranges from one-quarter to three-quarter Limousin, with the remainder Angus. Whether you're in need of a full-shot of muscle and efficiency from straight Limousin, or a Lim-Flex blended shot with added marbling and maternal ability, Limousin and the newly developed Lim-Flex hybrid, deliver.

Different battles call for different strategies. With Limousin and Lim-Flex on your side, carcass and maternal battles are easily won.

### *From the trenches...*

“Limousin bulls can transform an average to below average set of cows into a set of calves that will top the market. No other breed puts the muscle shape and expression on a set of calves like Limousin.”

*John Campbell, Winter Livestock, La Junta, Colorado*



# Arm Yourself with **Lim-Flex.**

**Easy, uniform breed management with an extra shot of muscle.**

## What is Lim-Flex?

Pedigreed blends of twenty-five percent to seventy-five percent Limousin and red or black Angus.



Crossbreeding for the right blend of muscle, maternal ability and profit just got easier. Introducing registered Lim-Flex seedstock, Limousin-Angus hybrids. With the introduction of Lim-Flex, there's a Limousin genetic product to fit your every need. Choose Lim-Flex hybrids for a profitable blend of Limousin's famous muscle and efficiency, with Angus marbling and maternal.

## Why Lim-Flex?

- Flexible seedstock for simple, manageable crossbreeding
- Flexible market progeny that hit dressing percent, yield and quality grade targets
- Flexible females adapted for efficiency across a wide range of environments
- **FLEX** stands for **L**imousin **E**fficiency **C**ross—the beef industry's answer to profitable system-wide production of case-ready products

### *From the trenches...*

“A carefully constructed British X Continental can come a lot closer to hitting most of the targets for reproduction, production and end-product than any straightbred I'm aware of.”

*Dr. Jim Gosey, Beef Specialist,  
University of Nebraska*

### **How can Lim-Flex help manage crossbreeding?**

Lim-Flex takes the worry and difficulty out of crossbreeding by providing a just-right shot of Limousin and Angus genetics. Lim-Flex keeps you in the optimum breed composition zone, without the extra management of rotational crossbreeding.



# On Your Side.

## With unmatched service and programs, North American Limousin Foundation provides:

- **Commercial newsletter:** The *Bottom Line*, your free guide to cattle management, is mailed quarterly to commercial users of **registered and transferred** Limousin and Lim-Flex bulls.
- **Updated performance information:** Help yourself to a myriad of performance information, including EPDs, through NALF's online, 24 hour-a-day animal search and sire selector. Access this free, simple-to-use service at [www.nalf.org](http://www.nalf.org).
- **Feeder fax listings:** Need help marketing your Limousin and Limousin-cross calves? NALF will advertise semi-load lots of Limousin and Limousin-cross calves for free.
- **Limousin feeder sales:** NALF coordinates with auction barns throughout the country to host special sales highlighting Limousin-influenced calves.
- Publishes an international sire summary twice a year in cooperation with the Canadian Limousin Association. Provides information 24/7 on NALF's website at [www.nalf.org](http://www.nalf.org).
- Sponsors university research projects targeted to enhance profit for commercial users of Limousin genetics.
- Conducts research, performance and service programs through one of the leading breed association teams in the country.
- Documents favorable breed trends for calving ease, growth, milk, scrotal circumference, docility, stayability and carcass.

Contact NALF or a breeder near you for more information.

## Muscle. Growth. Efficiency ... on YOUR side.



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