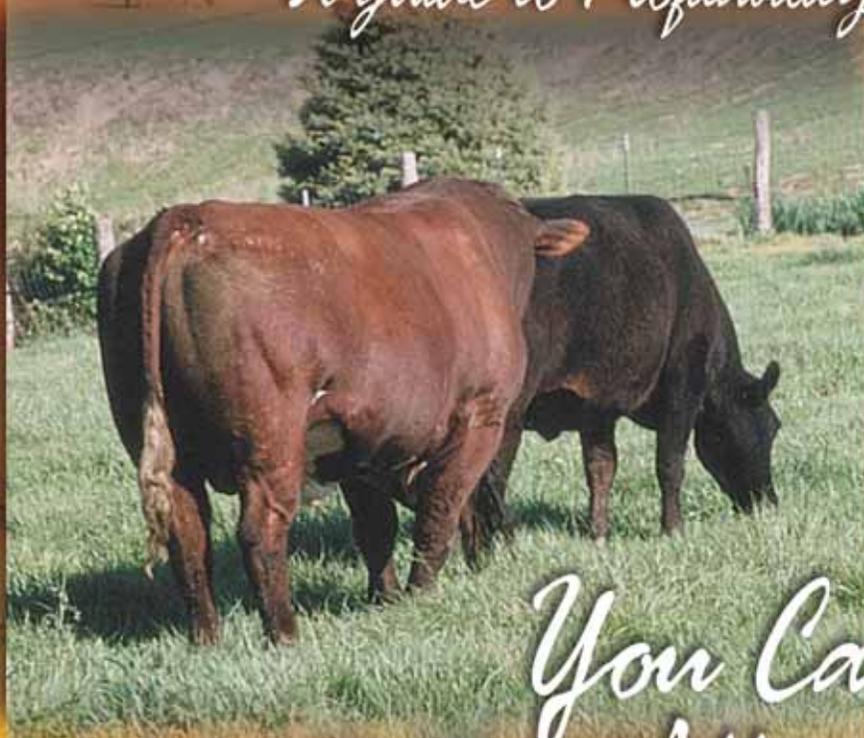


Crossbreeding

A guide to Profitability



**Only ONE breed offers
all of this to your
crossbreeding system -**

- High Marbling
- Lower Yield Grades
- Gain Potential
- Fertility
- Excellent Udders
- Tenderness
- Growth
- Calving Ease
- Docility
- Mothering Ability

*You Can't
Afford
Not To!*

SHORTHORN... *the Data Prove it!*

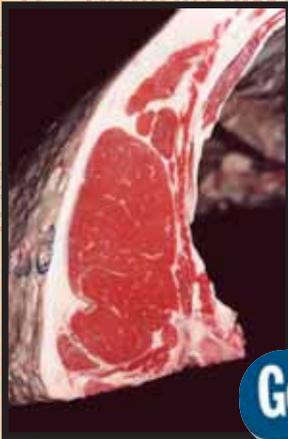
The USDA Meat Animal Research Center (MARC) is well known for conducting the largest unbiased, breed characterization of beef cattle in the world. Data from the Germplasm

Evaluation proved **SHORTHORN IS #1** for calving ease, average daily gain, marbling, percent Choice and Yield Grade.

MEAT ANIMAL RESEARCH CENTER

GERMPLASM EVALUATION - CYCLE IV

	Unassisted Calving %	ADG 200-400d lbs.	Marbling (age adj) mb.deg	USA Choice (age adj) %	USDA Yield Grade (marb adj)
Hereford/Angus	95.3	3.72	Small ³⁴	75.5	2.7
Charolais	90.8	3.89	Slight ⁹⁹	53.5	3.1
Gelbvieh	97.3	-	Small ⁰¹	48.0	2.9
SHORTHORN	99.8	3.98	Small⁵¹	78.0	2.1
Piedmontese	94.6	3.34	Slight ⁹⁵	46.0	3.4
Salers	97.3	3.78	Small ⁰¹	48.0	3.1



SHORTHORN... *#1 for Tenderness!*

Studies conducted by Australian researchers on seven breeds and thousands of head found that Shorthorn cattle carried two copies of the GeneSTAR Tenderness gene an astounding 97% of the time. That compared to 78% two-star animals in Angus and 70% two-star animals in Hereford.



97% - 

MORE POUNDS OF CALF ... MORE \$\$\$ IN YOUR POCKET!

By using Shorthorn genetics in your herd, you not only will gain free pounds from crossbreeding, but Shorthorn bulls and females readily transmit the ability to grow quickly and efficiently. As a group, the Shorthorn cross females in the MARC Study had the **HIGHEST 200-DAY CALF WEIGHT** of any English breed and continued that growth to post the second highest 400-day weight of all breeds.



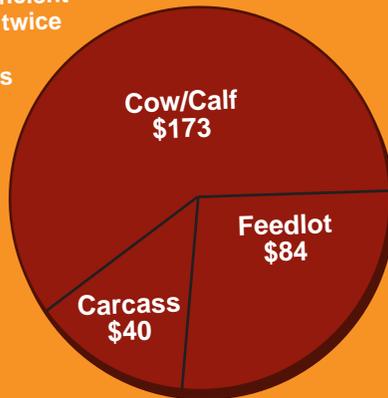
CALVING EASE...

Maternal Excellence

All cattlemen agree, more live calves at birth means more calves at weaning and less calving difficulty means higher breed-back rates. The (MARC) data confirmed English females bred to Shorthorn bulls calved **99.8% UNASSISTED** and Shorthorn cross females calved unassisted 98% of the time. Calving ease does not have to mean small, slow-growing calves and growth does not have to mean excessive birth weights. Spend less time worrying and wean more pounds of calf by introducing Shorthorns into your crossbreeding program.



PROFITABILITY ... An efficient cow herd is approximately twice as important as feedyard performance and four times as important as carcass merit. Maternally superior females matched to their environment and hybrid vigor are two of the most important traits to a profitable cow herd. Using Shorthorn genetics will give you both while producing cattle with the ability to receive today's carcass premiums!



FERTILITY...

Iowa State University research has stressed that reproductive efficiency is 100 times more important to financial viability than carcass traits. Shorthorn bulls are aggressive breeders that will yield high conception rates with minimal maintenance. MARC data proved Shorthorn heifers to have the second highest percent reaching puberty at 360 days and the Shorthorn cross females posted the highest percent of calf crop weaned. This results in more saleable pounds at market time and more dollars in your pocket. In addition, the Shorthorn female is valued for her longevity and stayability. Shorthorn females are well known for their ability to produce to the age of 13+, while maintaining their maternal superiority and both udder and structural soundness.

FEEDYARD... *Performance*

If you have ever fed cattle, you know how much money can be made or lost in the feedlot. Efficient gain and a reduced number of days on feed mean real dollars in your pocket. Wouldn't it be nice to brag about your high percent Choice without hiding the percent Yield Grade 4's, how long they were fed and the poor average daily gains and feed conversion?

Shorthorn cattle are bred to feed efficiently and gain quickly - **THE DATA PROVES IT!** 566 head of purebred Shorthorn steers were fed in three large, commercial feedyards in southwest Kansas and northwest Oklahoma from 1993 to 2004. Combined, they averaged 4.03 pounds of gain per day and 5.22 pounds of dry matter fed per pound of gain.



566 HEAD . . . 3 Producers . . . 3 Feedyards . . . 11 Years

Average Daily Gain

4.0
(lbs./day)

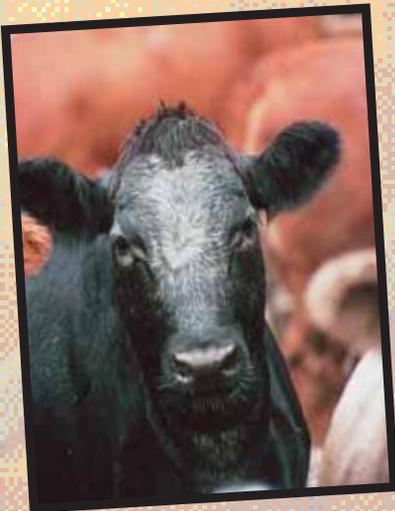
Feed Conversion

5.2
(lbs. DM/lbs. gain)

TIME AND TIME AGAIN!

In study after study, Shorthorn genetics prove their ability to efficiently gain pounds of muscle. In a joint Oklahoma State/Kansas State University Study, 217 Shorthorn steers posted an average daily gain of 3.67 pounds and a feed conversion rate of 5.58 pounds of feed per pound of gain!

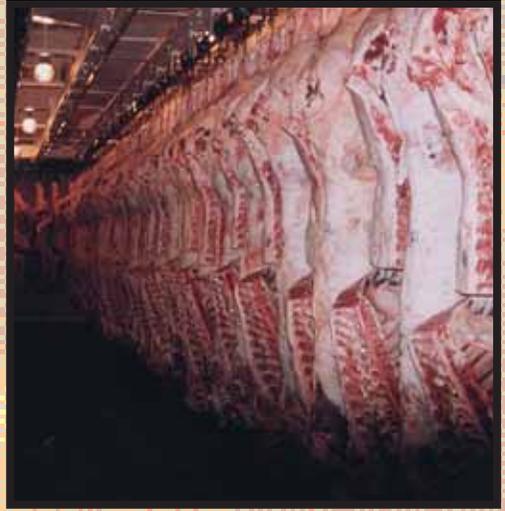
In the National Cattlemen's Beef Association's Carcass Merit Project, Shorthorn sired steers posted similar results. The Shorthorn steers had an average daily gain of 3.63 pounds with 5.81 pounds of feed per pound of gain. Better yet was their 32 cent feed cost per pound of gain and a 42.5 cent total cost per pound of gain. More pounds at lower costs means more money in your pocket.



CARCASS...*Merit*

If you want to make money selling on the rail, consistently produce Choice, Yield Grade 2 carcasses, Shorthorn cattle can do just that!

Beef industry experts are urging producers to improve quality and consistency of our product in order to increase beef's market share. But, sacrificing muscle for marbling and then marbling for muscle has resulted in undesirable and un-uniform product. Commercial cattlemen, feedyards and packers are realizing Shorthorns are the answer for improving yield grades without sacrificing quality grade. **THE DATA PROVES IT!**



HALF SHORTHORN - 67% CAB

The Shorthorn sired steers in the NCBA Carcass Merit Project included 10 purebred Shorthorn steers and 25 Shorthorn sired steers from commercial cows. The 25 Shorthorn cross steers included 15 black hided calves. All the Shorthorn sired steers harvested valuable carcasses,

grading 94% Choice and Prime. In addition, 10 of the 15 black-hided Shorthorn cross steers also received the coveted CAB (Certified Angus Beef) stamp. That is 67% of the black-hided Shorthorn sired steers reaching CAB. Nationally less than 20% of black-hided cattle hit the CAB target.

AVERAGES OF THE ENTIRE SHORTHORN CARCASS DATABASE!

4,473 Head . . . 527 Producers . . . 100's of Feedyards . . . 23 Years

Live Wt.	Carcass Wt.	Ribeye	Back Fat	Yield Grade	Quality Grade
1,230	772	12.9	.42	2.8	CH ⁺

Great data on a single pen - phenomenal data on an entire breed!

CROSSBREEDING . . .!

You Can't Afford Not To!

The benefits of crossbreeding have been documented and reported time and time again. The advantageous of breed complementarity and heterosis are real dollars in the pocket of commercial cattlemen. Breed complementarity is necessary to allow producers to take advantage of the differing strengths and weaknesses of each breed, since no one breed can excel at all economically important traits. Heterosis is the advantage of crossbred calves over the average of their parents. Heterosis is the closest thing cattlemen have to a "free lunch." The best aspect of heterosis is that it has the greatest effect on traits that are lowly heritable and difficult to improve through selection.

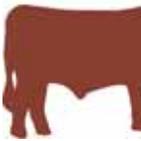
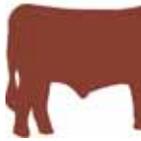
Traits like percent calf crop weaned, pounds weaned per cow exposed, cow longevity, and cow lifetime productivity are vital to a commercial producer's bottomline. These are also the traits that are improved most by heterosis. A commercial producer running a straight-bred cow herd, of any breed, is forfeiting real dollars through lower weaning weights, decreased fertility and decreased cow longevity. Not to mention the fact that they are missing out on the advantages of breed complementarity.

HETEROSIS IMPROVES

- Fertility
 - Cow Longevity
 - Calf Survival
 - Weaning Weight
 - Yearling Weight
 - Average Daily Gain
- Lifetime Cow Productivity by 25%



The 1st
F₁ E



*An efficient
heterosis*

GET 1,000 FREE CALVES

The collective advantages of heterosis over time can be quite staggering. A commercial producer running 200 cows and weaning 500 pound calves could increase his weaning weight per cow exposed by 25% through maximizing heterosis in his cow herd and calves.

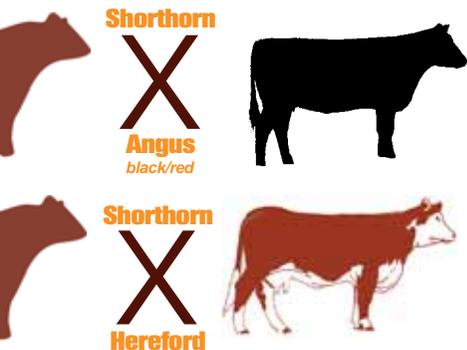
Over a 20 year period, this would be like getting 1,000 free calves.



"Color discrimination is a fad without the facts. Red breeds bring \$1,000 or more than a red cow's performance and EPD's. In our test we have seen the profit. It appears to me that cattlemen who are laughing all the way to the bank. Not only do they get more money with the progeny." - Dean Haggard



deal English Female



ent crossbreeding program maximizes
and yields the most consistent cattle.

The Truth About Color

The truth is that average and low quality calves can bring more money simply because they are black. The question is how many deserve it and how long will it last? The fact is that a black hide does not represent quality or even designation of any one breed. Feeders and packers across the country are being over-run by low performing, straight-bred cattle and are actively seeking crossbred calves for improved gain and yield.

It is also the truth that high quality calves of any color top the market. Just ask Dr. Jerry Crownover of Southwestern Missouri who has been marketing calves at the Southwest Regional Stockyards in Springfield, Missouri, for years. His black commercial calves weighed within five pounds of his Shorthorn calves, but the multi-colored Shorthorn calves sold for a \$5 to \$6/cwt premium over the blacks. The truth is color is never a replacement for quality.

In today's value-based marketing and retained ownership environment, color matters very little. But, if you are still not convinced, try putting a solid red Shorthorn bull on a solid black commercial cow herd. The resulting calf crop will be nearly all solid black and have significant advantages in performance over the straight bred alternative.



s to support it. Black bulls of all
or 'flower' bull with superior
een an equal distribution of color when comparing it to
o have been buying these off-colored bulls have been
ey purchase those bulls at a reduced price, they make
ldock, Commercial Cattle Improvement Program (CCIP)

SHE'S BETTER THAN ANGUS...



Half-blood Shorthorn Angus cow

SHE'S CROSSBRED!

**Producers
across the
country
are realizing
they have a
choice!**

Are you tired of sacrificing profitability for popularity?

Commercial cattlemen, feeders and packers are all taking note of lower fertility rates, worse disposition, lower feed conversion, increased days on feed and higher yield grades resulting from running a straight-bred commercial cowherd.

The Shorthorn Angus crossbred female can give you 25% more pounds of calf at weaning per cow exposed, increased longevity (lowering replacement costs), and increases in calving rate and calf survival. Plus the Shorthorn Angus crossbred steers is equal to straight Angus steers on marbling with less Yield Grad 4's and greater tenderness (97% 2 Star GeneSTAR Tenderness compared to 67% for Angus).

**Can you afford to give all this up for perceived premiums
on lighter weight straight bred calves?**

For more information, contact any Shorthorn breeder or contact the American Shorthorn Association for more information on using Shorthorn genetics in your cattle operation.



Ron Bolze
8288 Hascall Street
Omaha, Nebraska 68124
402-393-7200
FAX: 402-393-7203
www.shorthorn.org

Nick Hammett
207 Essex Drive
Smithville, MO 64089
816-582-5277
nick@shorthorn.org