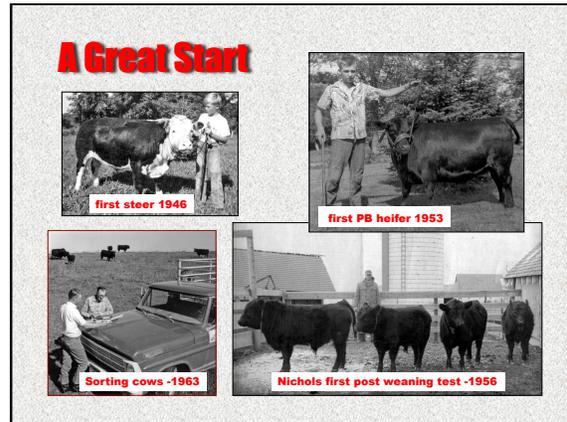




Dave Nichols
Bridgewater - Iowa

Nichols Farms
Superior Beef Genetics



Since 1950 the US beef industry has tripled the production per cow... With larger cows on significantly less land!

Year	Cows (000)	Beef Production (million lbs.)	*Beef Production per cow (lbs.)	Population (millions)
1950	42,100	8,600	204	163
1980	47,886	21,469	449	191
2013	39,772	25,500	638	317

*Bigger animals have an advantage because they use energy more efficiently. For instance, says Jennifer Johnson, a graduate student at the King Ranch, 100 cows that weigh 1,000 pounds each are equal to 87 cows that weigh 1,200 pounds each in terms of maintenance feed requirements. That means bigger cows have 20% more weight but only take 13% more feed.

The most important thing, which is reproduction," she notes. "Both cows are much more efficient than their counterparts, which didn't breed. A 90-pound difference in weaning weight is minimal compared to no calf at all."

Cross bred beef cows producing Composite sired calves Provide a 23.3 Improvement in Pounds of Weaned Calves and have 30% More Lifetime Production than straight bred cows.
—USDA Meat Animal Research Center

Carcass Merit Project - 1997 -

The Carcass Merit Project was an extensive four year project involving four universities, 15 beef cattle breed associations (16 breeds), and Celera AgGen. The project was funded and coordinated by NCBA and the Cattlemen's Beef Board, the beef breed associations, and Celera AgGen.

*The completion of a rough draft of the sequence of the human nuclear genome was announced in June 2000.

Genomic profiles which enhance EPDs For many of the major beef associations

- Residual feed intake
- Average daily gain
- Tenderness
- Marbling
- Quality grade
- Yield grade
- Fat thickness
- Rib eye area
- Heifer pregnancy rate
- Stayability
- Calving ease
- Docility
- Myostatin
- Coat color-- (homozygous black)
- Breed specific horn/pollled
- Multi-sire parentage
- Bovine viral diarrhea-- persistent infection
- (BVD-PI) diagnostic test
- Multiple breed - specific genetic defect tests

**Feeder Calves, Yearlings, Finished Cattle,
Carcass Beef, Retail Beef, Big Mac Hamburgers
and Prime Steaks at White Table Restaurants
are ALL Sold— Weight Times the Money!**

