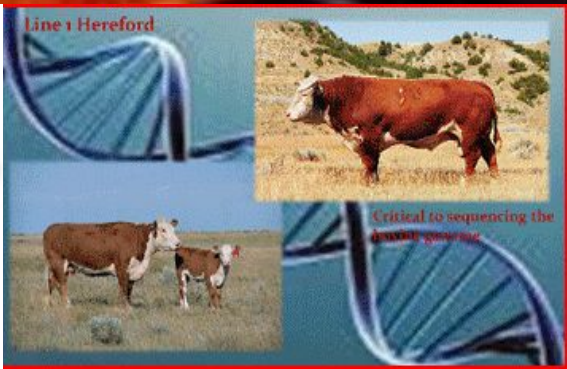
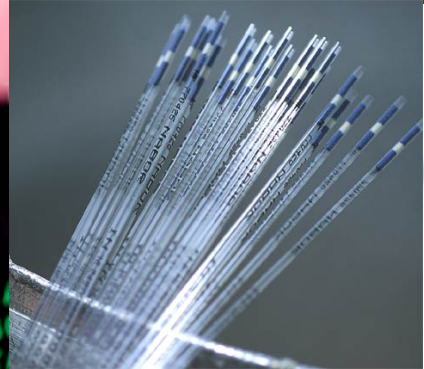


U.S. Genetic Trends, Production Numbers and Discussion on How Breed Associations May Need to Adapt

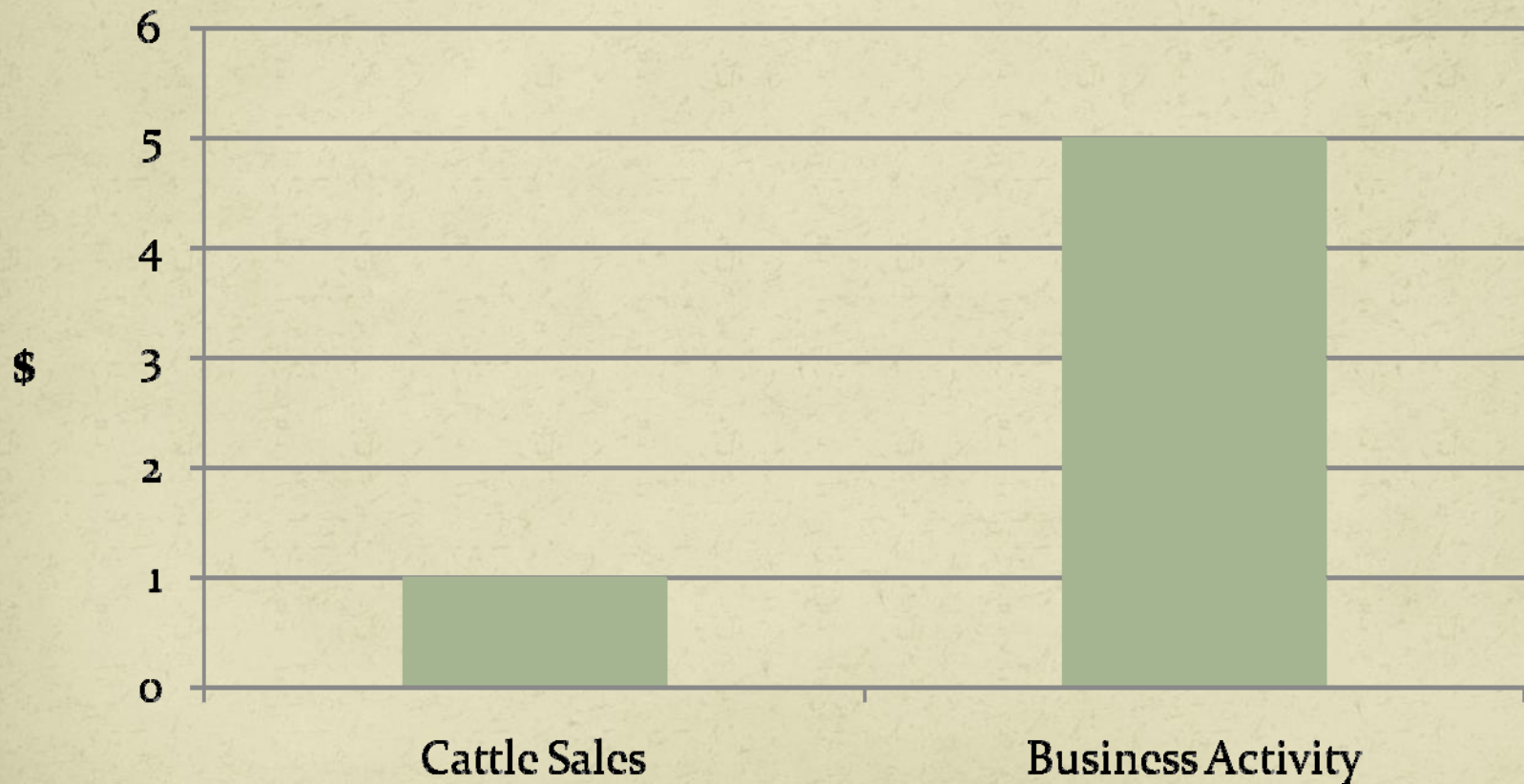
Robert Williams, Ph.D.

American-International Charolais Association

Director of Breed Improvement and Foreign Marketing

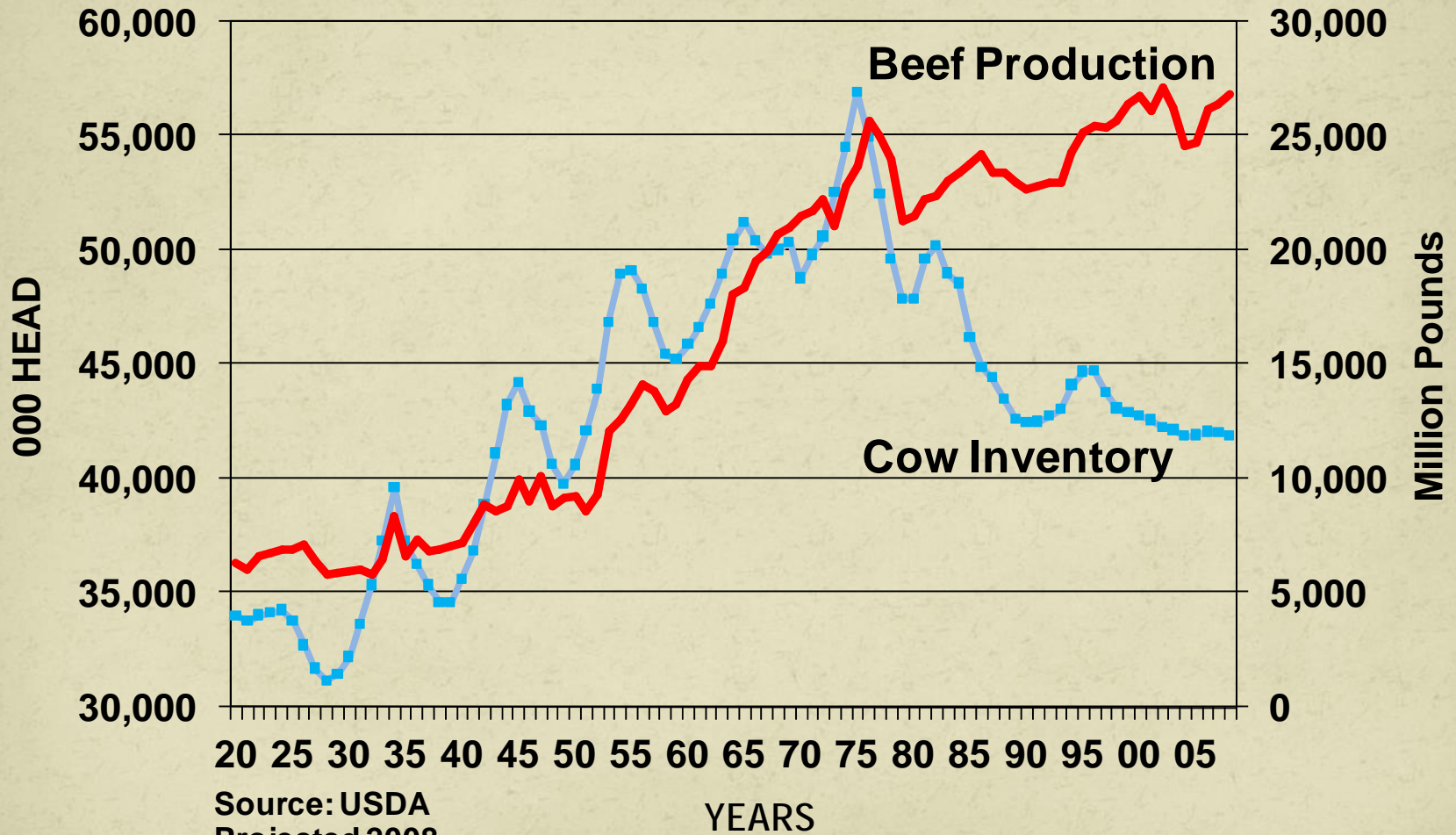


Economic Impact of U.S. Beef Industry



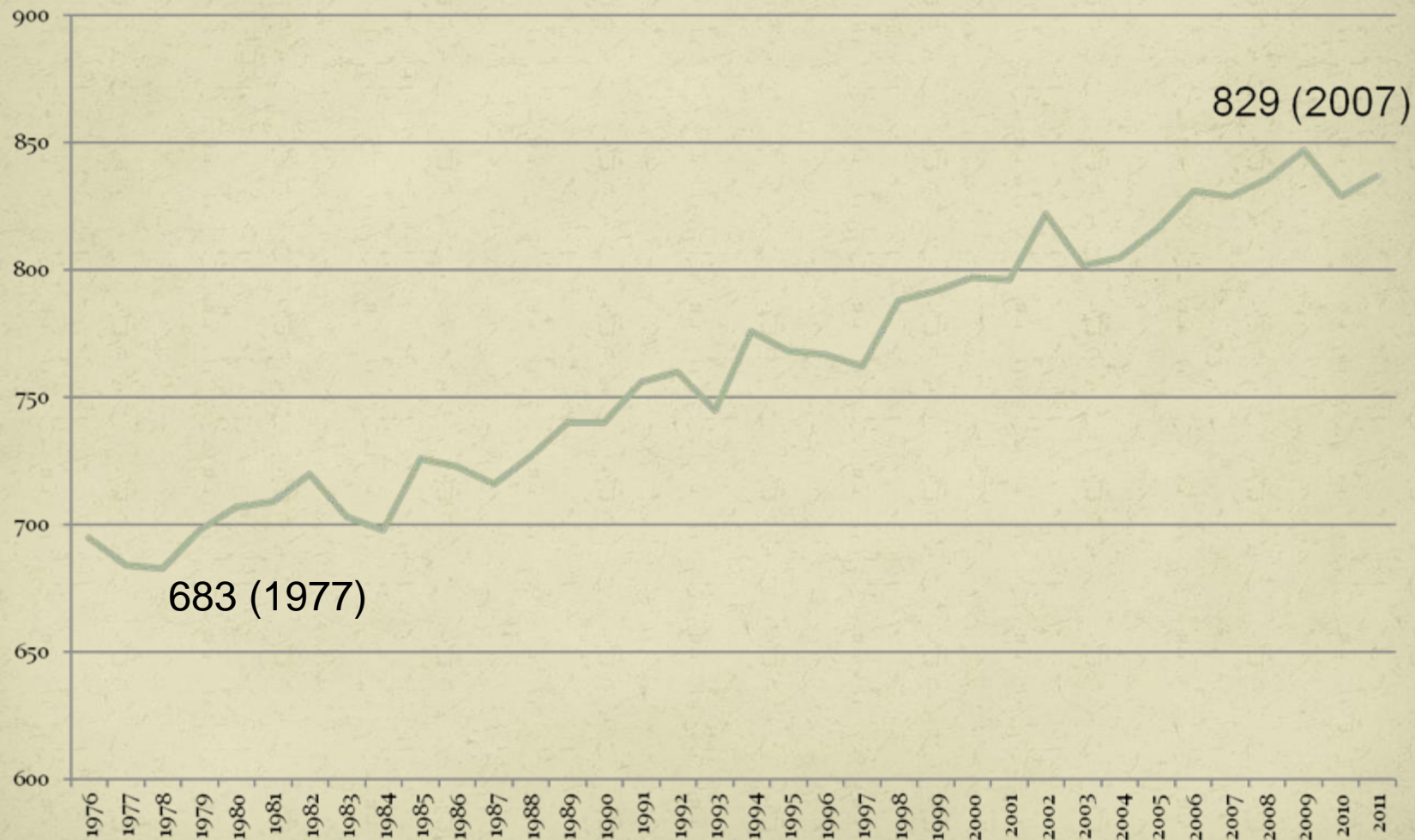
EPA

Total Cow Inventory & Commercial Beef Production



Source: USDA
Projected 2008

U.S. Average Dressed Carcass Weight - Steers



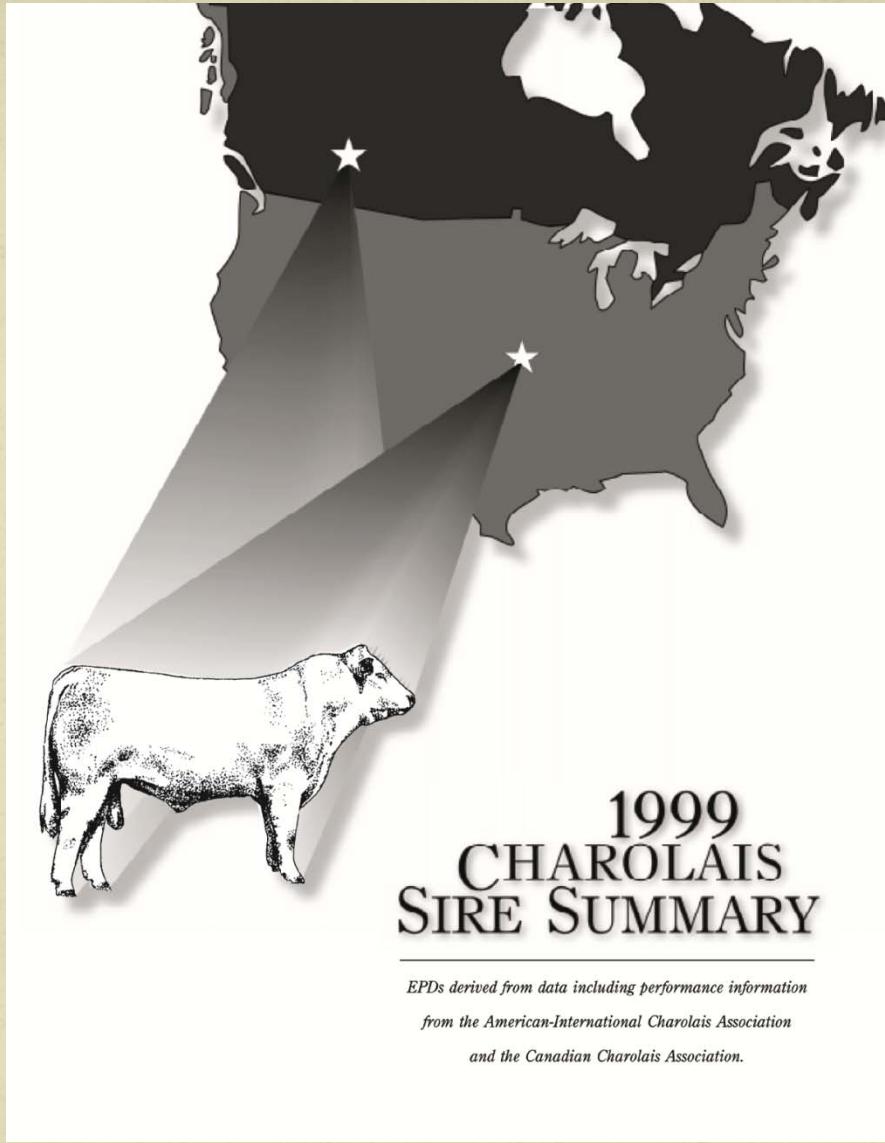


Genetics

Health

Nutrition

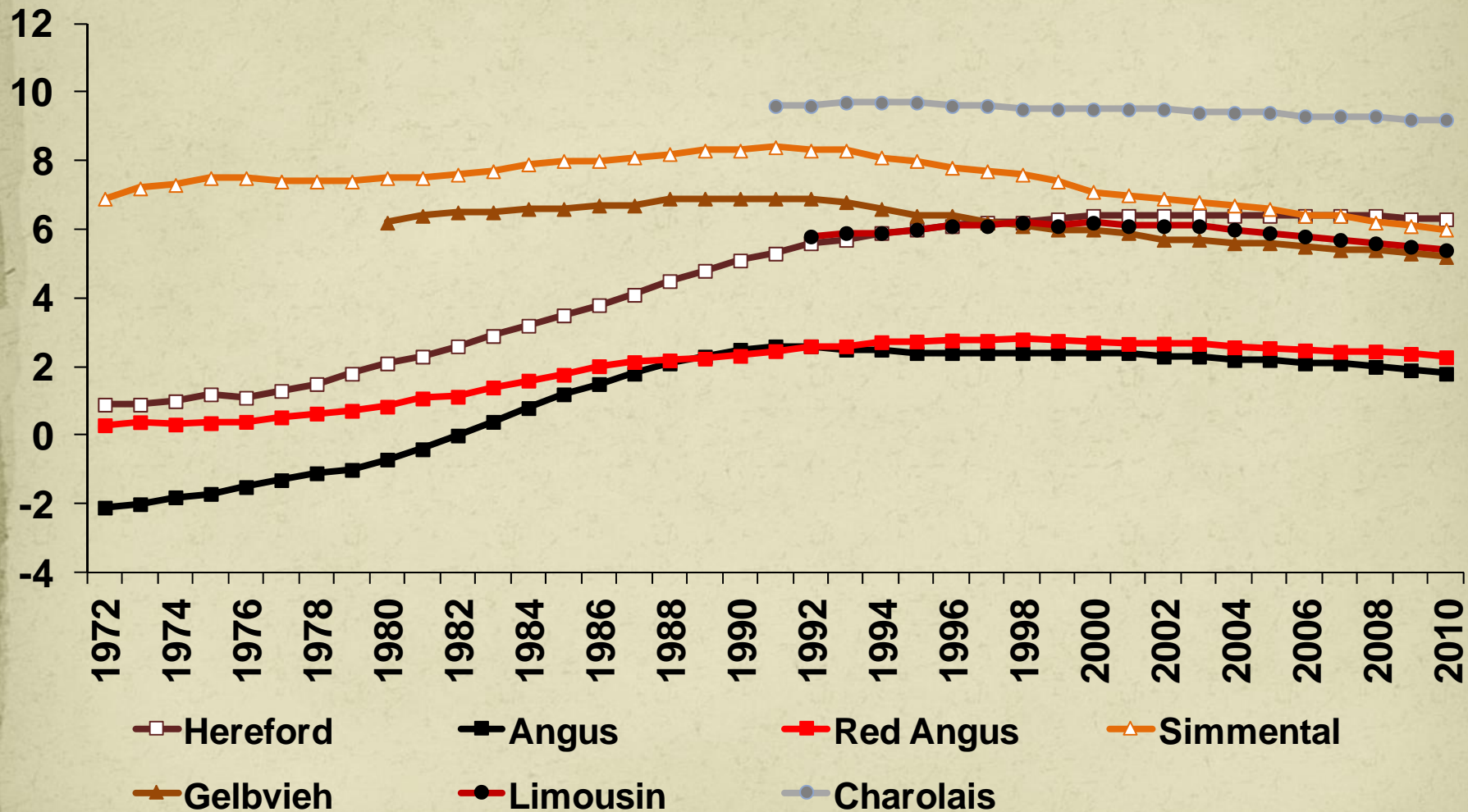
Management



1999 CHAROLAIS SIRE SUMMARY

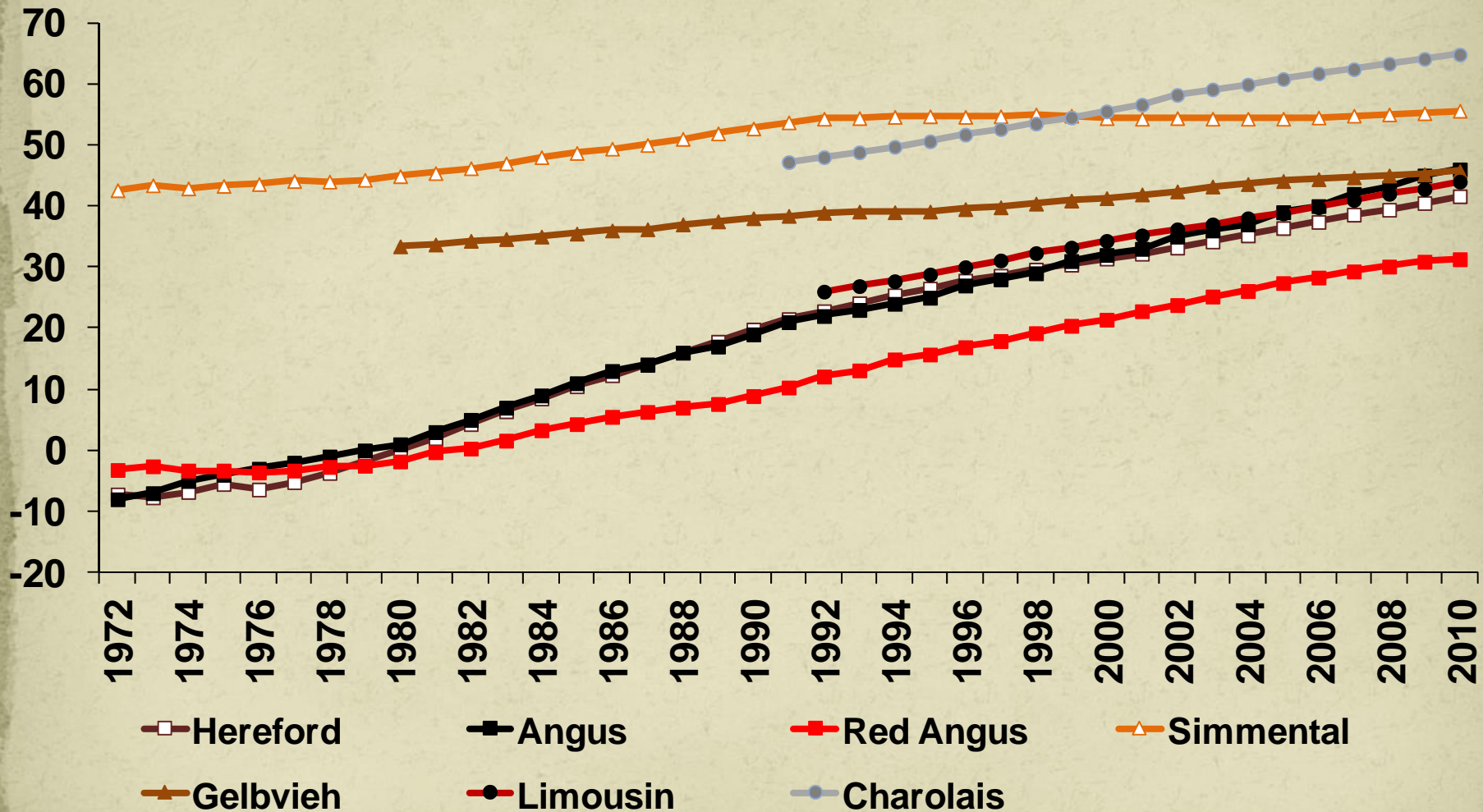
*EPDs derived from data including performance information
from the American-International Charolais Association
and the Canadian Charolais Association.*

Genetic Trends for Birth Weight, lb



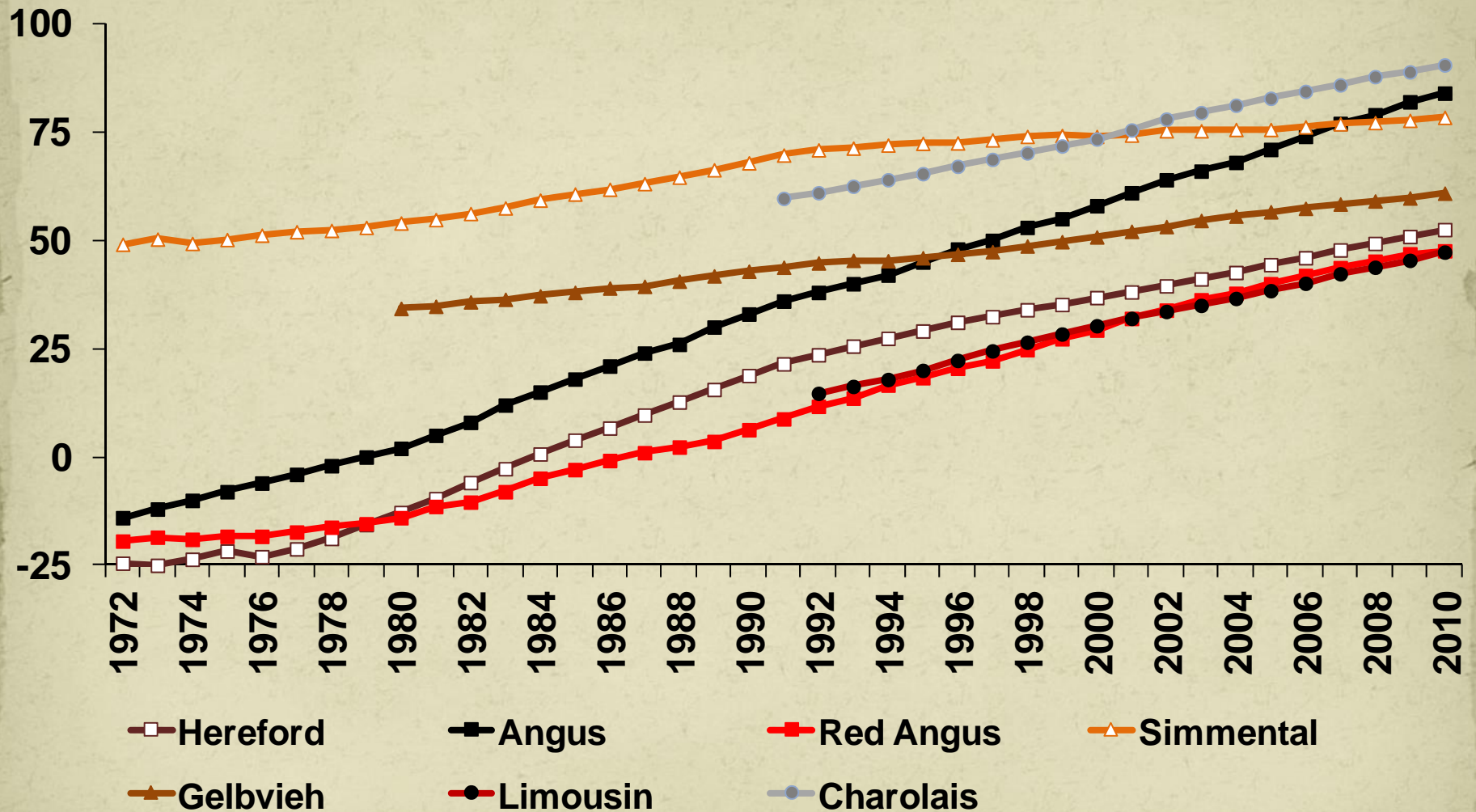
Adapted from Spring 2012 Genetic Trends from Breed Associations and 2012 AB-EPD factors – Larry Kuehn, MARC

Genetic Trends for Weaning Weight, lb



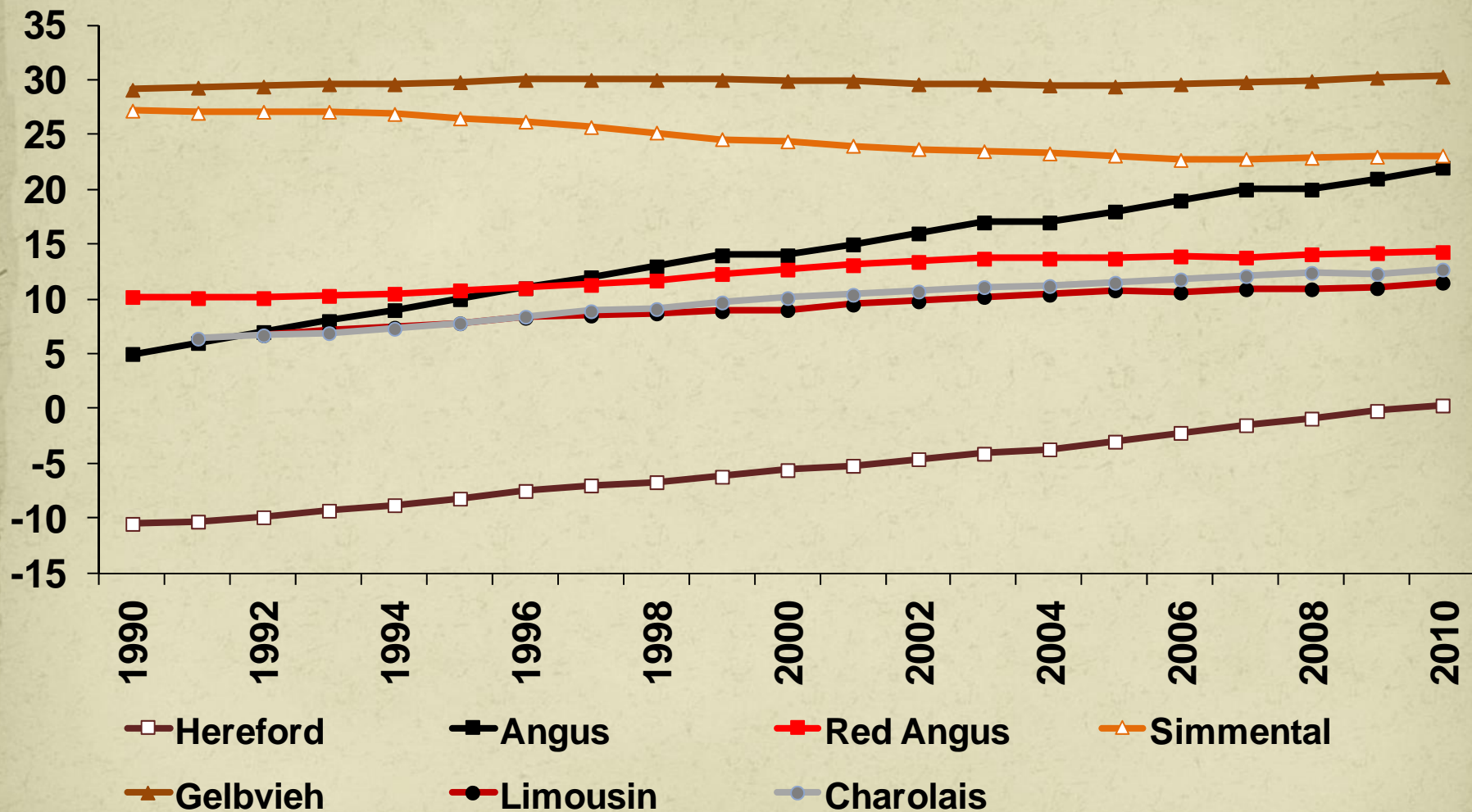
Adapted from Spring 2012 Genetic Trends from Breed Associations and 2012 AB-EPD factors – Larry Kuehn, MARC

Genetic Trends for Yearling Weight, lb



Adapted from Spring 2012 Genetic Trends from Breed Associations and 2012 AB-EPD factors – Larry Kuehn, MARC

Genetic Trends for Maternal Milk, lb



Adapted from Spring 2012 Genetic Trends from Breed Associations
and 2012 AB-EPD factors – Larry Kuehn, MARC

Challenges Facing Beef Breed Associations

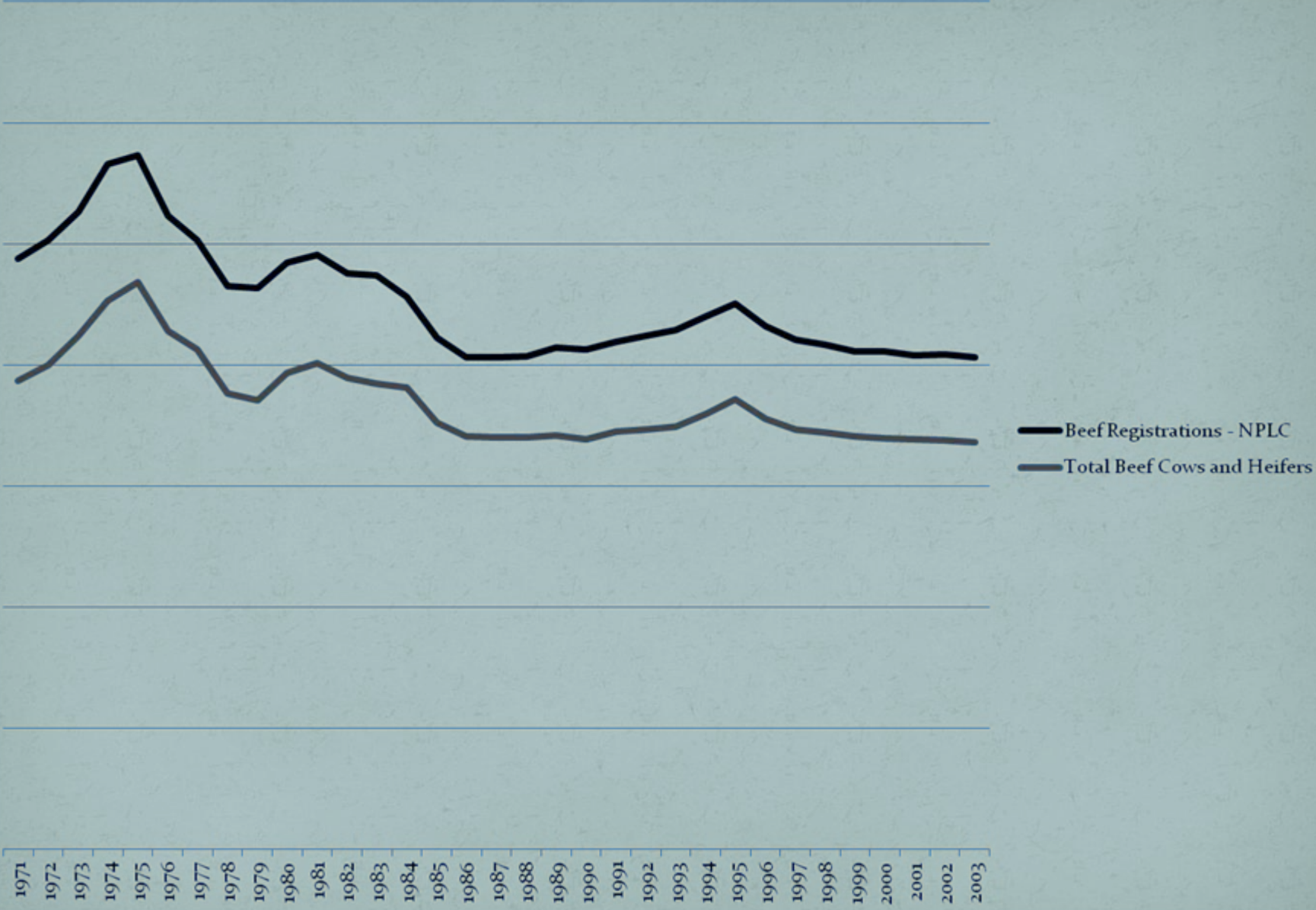
Association Membership Profile

- Most US Beef Breeds have opted for an inventory based program

- Charolais

- Less than 5% of our membership accounts for 50% plus of the total registrations
 - 53% of our membership opts for a registration only program (non-performance) – and accounts for 8% of the registrations





Decreasing Beef Cow Inventory and it's Impact on U.S. Beef Breed Budgets


- The industry needs approximately 400,000 fewer bulls today than it did in 1975
- The decreasing size of commercial beef cow numbers is the direct cause for a loss of approximately 430,000 registrations for U.S. Beef Breed Associations from 1975
- This accounts for a direct loss of income to breed associations of approximately \$ 11,000,000 annually

Genetic Evaluation Services

- Beef Breed Associations in cooperative efforts with a few Land Grant Universities have been the driving force behind genetic evaluations
- More responsibility in recent years has been shifted to the industry to support the development of genetic evaluation tools and take on the responsibility of identifying new genetic evaluation service providers

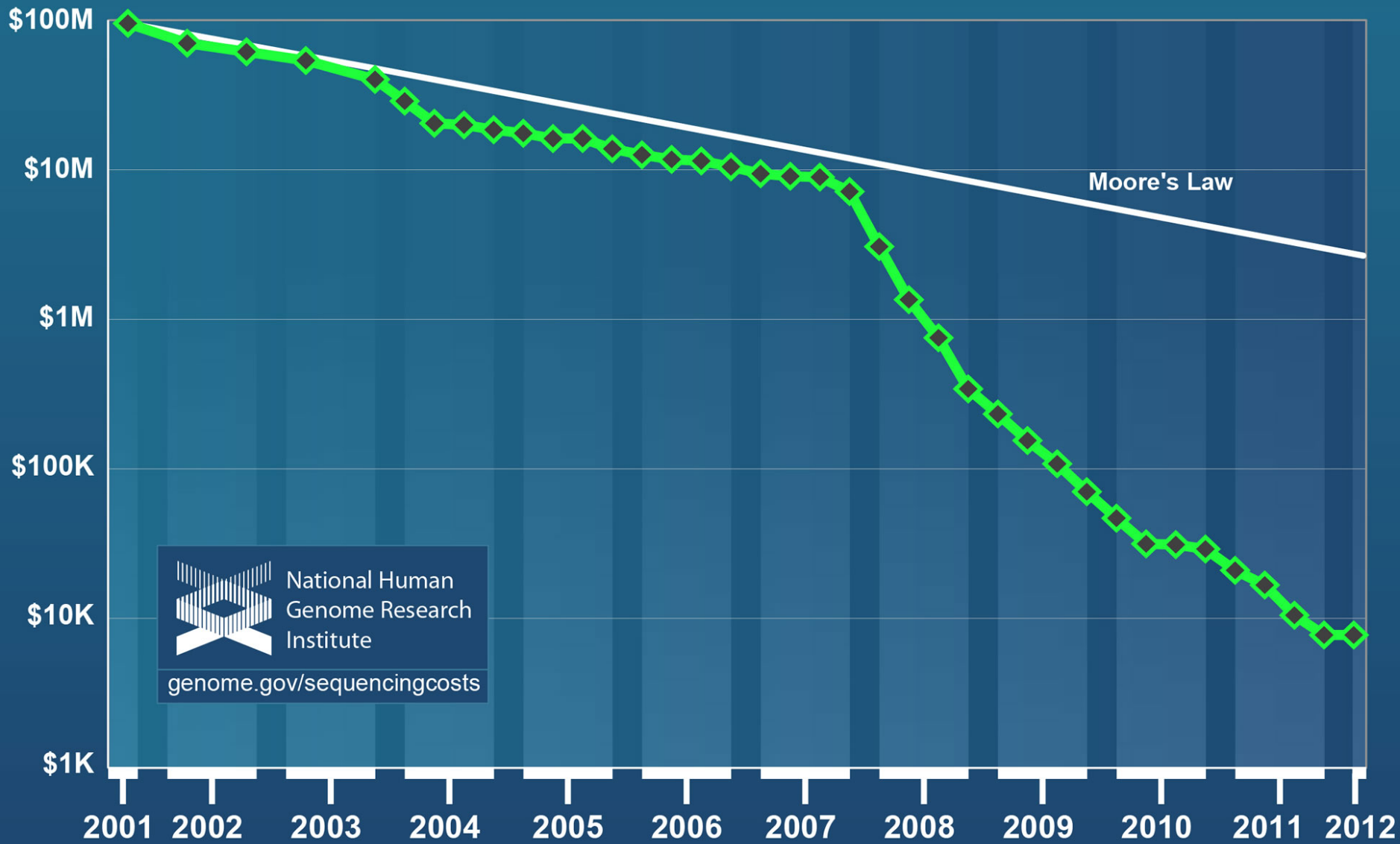
Data complexity



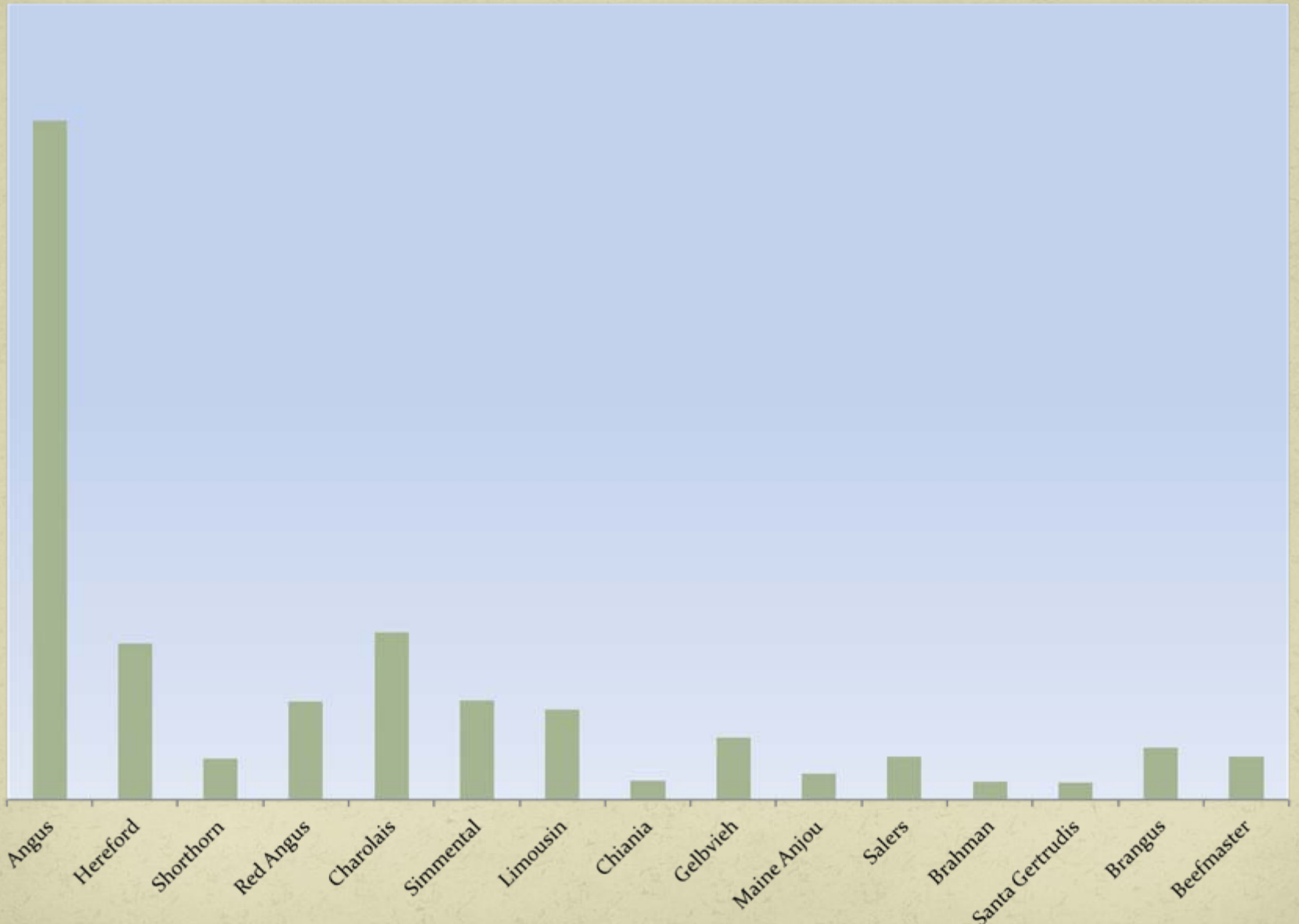


The question whether to use
genomic Information will be
replaced by how to use
It efficiently. I. Misztal, 2010

Cost per Genome



 National Human
Genome Research
Institute
genome.gov/sequencingcosts



NPLC, 2005

Summary

- Continue to measure, report and expand the capture of phenotypes for existing and new traits that will keep our industry competitive



Summary

- Support research and education initiatives into technology that address sustainability, efficiency, production and healthfulness of beef to better characterize the genetics of our beef populations



Summary

- Identify and adopt synergies between associations and between researchers to reduce duplication
- Domestically and Internationally

