

Making Holistic Genetic Improvement Despite Environmental and Genetic Antagonisms

Crossbreed & Select for Profit!



Wade Shafer

American Simmental Association

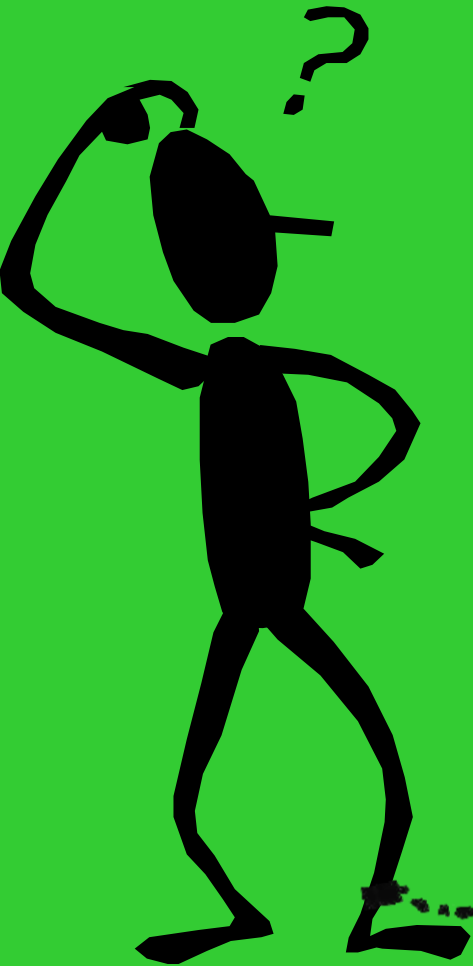
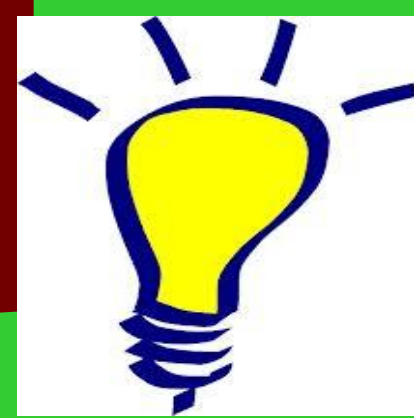
Antagonisms!



In the pursuit of genetic improvement all traits are antagonistically related to each other



What is Genetic Improvement ????????



Increased Marbling
Bigger Scrotals
Easier Calving
Increased Profit!!!!!!!
Easier Fleshing
Higher Growth
Better Fertility
More Muscle
Reduced Birth Weight



How Do We Select for Profit?

Measure It!



$$\text{Profit} = \$\text{Output} - \$\text{Input}$$

Measuring Profit



Profit = \$Output - \$Input



= (Output Traits)(Prices) - (Input Traits)(Costs)

Calf Survival
Weaning Weight
Carcass Weight
Yield Grade
Marbling
Salvage Weight

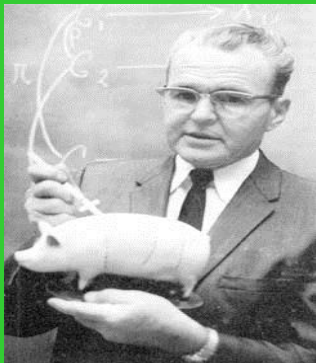
Replacement Rate
Cowherd Intake
Feedlot Intake

Measuring Profit

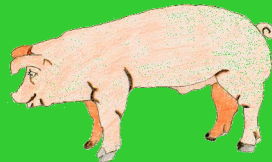


The Economic Selection Index

“Genetic Accounting”



Lanoy Hazel, 1943



It's Time to Pontificate



To maintain our share of the protein market we must leverage technology much more effectively



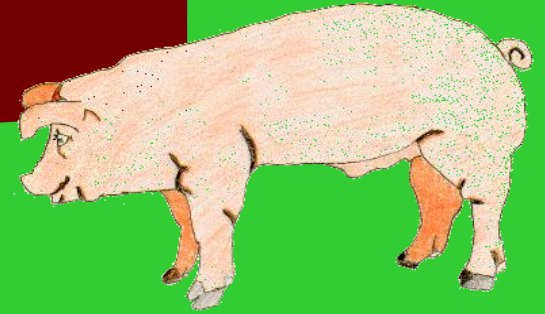
Sizing Up Technology Use

| <u>Source</u> | <u>Beef*</u> | <u>Pig/Chicken</u> |
|-------------------|--------------|--------------------|
| Actual Measures | 7% | 0% |
| Adjusted Measures | 8% | 0% |
| Ratios | 21% | 0% |
| Visual Appraisal | 31% | 0% |
| EPDs | 28% | 100% |
| Economic Index | 5% | 100% |

*Results of March 2007 ABS producer meeting survey in SD, NE

Swine Seedstock

History



Breed
Associations

Performance
Indexes



Corporations



Maintain
Registry

Performance
Testing



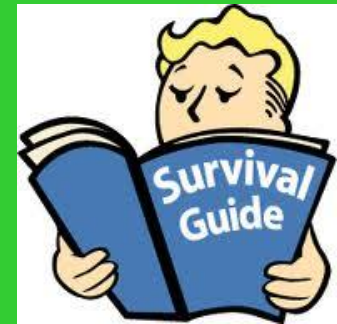
Commercial
Industry

Commercial
Industry



Final Rambling... & Summary

Leveraging technology more effectively may be critical to the survival of our way of life



Crossbreed & Use Economic Indexes!

