


Beef Cow Efficiency



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*...in compilation and utilization of performance records to **improve efficiency**, profitability and sustainability of beef production*

- Guidelines For Uniform Beef Improvement Programs, 9th edition, 2010.

"Efficiency" reflects the relationship between outputs and inputs

"Input-Output" models commonly used in econometrics

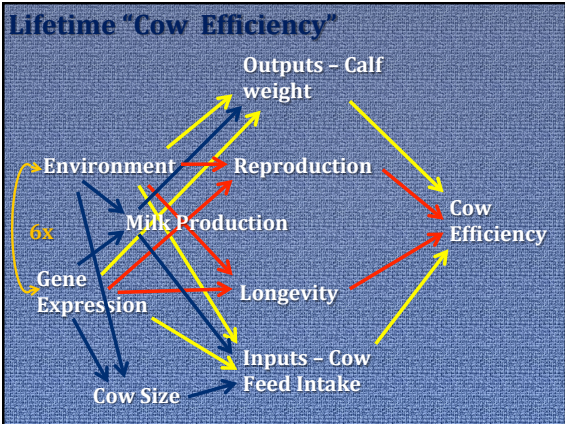

Selection is the primary force for changing average genetic merit of a population

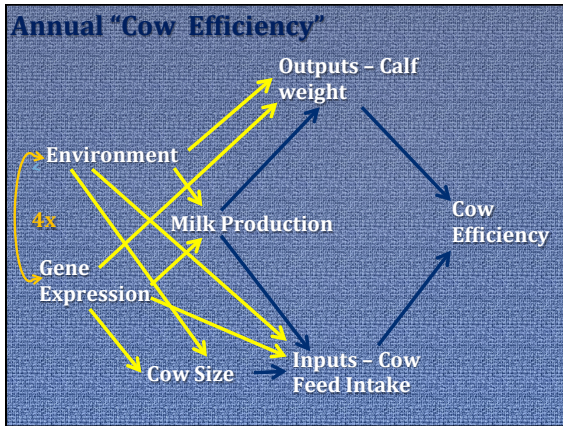
Response to selection is both cumulative and permanent

Requires discipline and consistency in the use of performance records

"Cow Efficiency"

"When I use a word it means exactly what I want it to mean, nothing more and nothing less."





Certainly, *cow efficiency* is a function of several contributing traits

Virtually all breed associations currently publish one or more multi-trait indexes that are intended to reflect differences in cow efficiency

Our purpose is to review various facets of what is currently known about components of this biological function

Ultimate goal:

Measuring cow efficiency and productivity: What do we know from the research? Mike Davis, The Ohio State University

Series of 7 papers
 "LIFE-CYCLE EFFICIENCY OF BEEF PRODUCTION"
 with Jack Rutledge, Larry Cundiff and Ed Hauser

Cow efficiency and productivity: The MARC Perspective, Larry Kuehn, USDA – Agricultural Research Service

Long established litany of work – 55 refereed articles

From: Dave Notter, Jim Sanders, Gordon Dickerson, Gary Smith, Tom Cartwright

Through: Cal Ferrell, Tom Jenkins, Harvey Freetley, Rafael Nunez-Dominguez, Ronnie Green, Eduardo Casas

To: Tara McDanel, Larry Kuehn

et al.

National Cattle Evaluation: Approaches to cow productivity and efficiency, Scott Speidel, Colorado State University

2009 - Frank Baker Award

"Genetic Analysis of Longitudinal Data in Beef Cattle"

Instrumental in genetic evaluations conducted by Colorado Genetic Improvement Laboratory

Grand Challenge: Can we (as BIF) come to an agreement about the general architecture of an index that would facilitate selection to improve lifetime cow efficiency?