

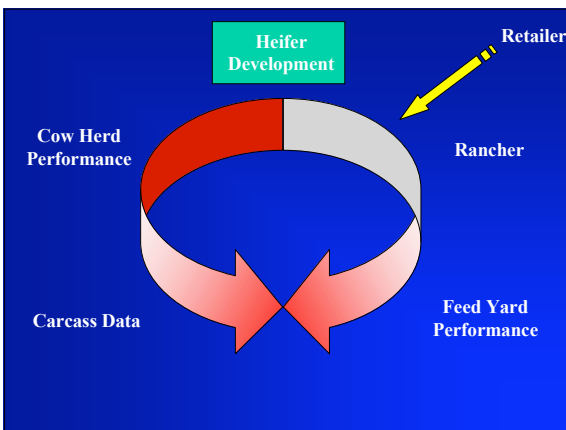
## Common Sense Heifer Management



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Heartland Cattle Company  
Prepared for  
Range Beef Cow Symposium  
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## Heartland Cattle Company Professional Heifer Development & Research Center

- Established in 1990
- A *unique, untried concept* within our industry
- Over 71,000 heifers developed and AI'd
- Nearly 120,000 bawling calves started
- Over 75,000 cattle fed to finish
- Over 97% annual customer retention rates
- Nearly 40 research projects completed
  - ✓ *Proprietary data trials*
  - ✓ *USDA trials for product clearance*
  - ✓ *Company sponsored research trials*



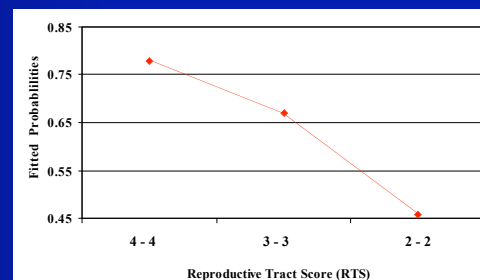
## Influence of Proper Heifer Development

- Early conception during the first breeding season
  - ✓ *Influences weaning weights*
  - ✓ *Allows additional time to rebreed*
  - ✓ *Enhances subsequent productivity*

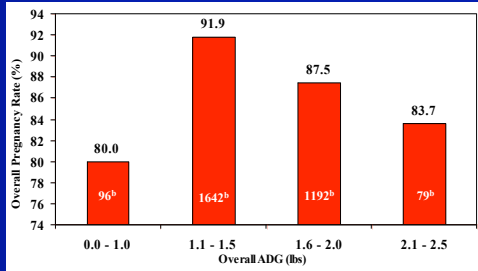
## Influence of Reproductive Tract Score (RTS) on Fertility

- Time of RTS is critical to its intended use
- RTS can indicate response to synchronization  
*Anderson et al., (1991); Smith et al., (1993)*
- RTS serves as an accurate indication of:
  - ✓ *Synchronized pregnancy rate*
  - ✓ *Breeding season pregnancy rate**LeFever et al., (1986), Brown (1986), Doornbos et al., (1983)*

## Influence of RTS on First Service Conception Rate



## Influence of Overall ADG on Pregnancy Rate<sup>a</sup>



<sup>a</sup>  $P < .01$

<sup>b</sup> Number of heifers within each ADG classification

## Influence of Body Condition Score (BCS) on Fertility

➤ Weight:Height Ratio influences puberty and pregnancy rates

*Frisch (1974), Nelson et al., (1982), Utter et al., (1993)*

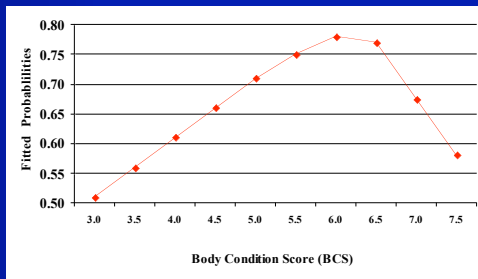
➤ Pregnancy rates tend to increase to BCS 6.7, then decline past that point

*Ferrell (1982)*

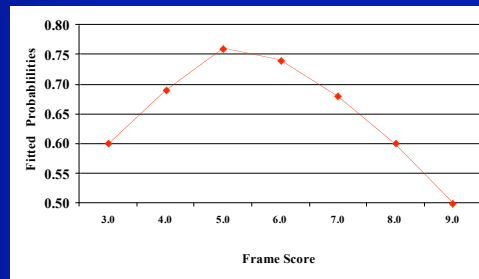
➤ Underfeeding and overfeeding reduces fertility

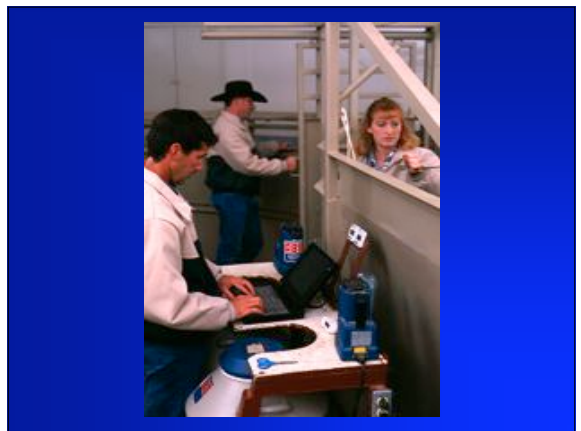
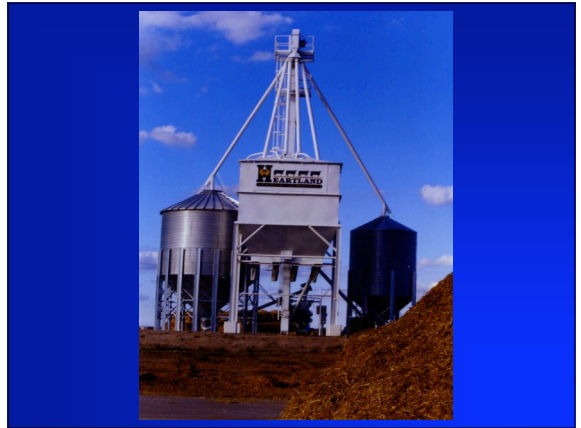
*Arnett et al., (1971), Ferrell (1982)*

## Influence of BCS on First Service Conception Rate



## Influence of Frame Score on First Service Conception Rate











Bottom-line....  
Professional heifer  
development should be  
about *more* than just  
feeding heifers!

**Actually,**  
**We are in the**  
**“Problem Solving”**  
**Business**

**“Problem Solving”**  
**equals**  
**Customer Services**

Problem:  
**Enhance Calf Crop Value**

- Estrus synchronization coupled with *TOTAL AI*
  - ✓ Older, more uniform calves
  - ✓ Utilize *high accuracy*, multiple trait sires for economically important traits
  - ✓ Reduce or eliminate calving difficulty
  - ✓ Superior genetics for growth, maternal and carcass traits
  - ✓ Simplifies subsequent nutrition and health programs

**Problem:**  
***Retention of Young Cows***

- Heartland's benchmark data shows an **8%** improvement in second-calf rebreed rate!
  - ✓ *Proper nutrition from weaning to first breeding*
  - ✓ *Eliminate "problem" heifers prior to first breeding*
  - ✓ *Heifers are bred prior to the mature cowherd, providing additional time to rebreed*
  - ✓ *Less calving difficulty results in improved rebreed rates*
  - ✓ *Young cows are managed separately from mature cows*
    - More efficient use of ranch forage resources

**Problem:**  
***Expense and Management Issues Related to Bulls***

- Total AI in heifers eliminates any need for "heifer bulls"
  - ✓ *Less total cash outlay for herd sires*
  - ✓ *Reduction of bull maintenance costs*
  - ✓ *Use of high accuracy sires is now possible*
  - ✓ *Simplifies pasture management systems*

**Problem:**  
***Placing Optimal Selection Pressure on Fertility***

- This is accomplished in several ways
  - ✓ *Provide a high roughage-limit fed diet*
    - Choose your level of development... 50, 60 or 65% of body weight?*
  - ✓ *Don't ever excuse poor performance*
  - ✓ *Limit the length of the breeding season*
    - 15, 30 or 45 days*

**Problem:**  
***Cowherd Disposition***

- Implement "Effective Stockmanship" principles
  - ✓ *"Teach" cattle how to handle easily*
    - Provide regular exercise and how to apply pressure*
  - ✓ *Results in less wear and tear on facilities and ranchers*
  - ✓ *Improves fertility, performance, immune response and meat quality*
  - ✓ *Quiet disposition is NOT a convenience trait...It is a necessity and an important marketing tool*

**Problem:**  
***Data Management & Summary***

- Effective data collection, summarization and information transfer improves long-term cowherd profitability
  - ✓ *The cattle industry must get beyond being "Data Rich but Information Poor"*
  - ✓ *Benchmark data helps identify cowherd strengths and weaknesses*
  - ✓ *Effective goal setting and marking progress*
  - ✓ *Ongoing cowherd consultation*

**Problem:**  
***Lbs of Beef Weaned /Acre of Grass***

- Mature producing cows are the most efficient harvesters of ranch grass resources
  - ✓ *Ranchers may want to consider outsourcing "problem" females (heifers and/or cull cows)*
  - ✓ *Increase mature producing cow numbers*
  - ✓ *More efficient use of ranch forage resources*
  - ✓ *More calves weaned=More lbs beef produced*
    - =Increased cash flow

# Range vs. Dry-lot Development?

## Range Developed Heifers

### ➤ Advantages

- ✓ Heifers remain in their home environment
- ✓ Not as susceptible to weather stress
- ✓ Utilizes non-harvested feedstuffs

### ➤ Disadvantages

- ✓ *Is this your best land mass/value opportunity?*  
*Why not run more mature, producing cows!!*
- ✓ Data collection is much more difficult
- ✓ Synchronization and AI is more difficult/costly
- ✓ Less total beef produced per acre of grass

## Dry-lot Developed Heifers

### ➤ Advantages

- ✓ Economies of scale
- ✓ Able to closely control inputs  
*Choose your level of development (50, 60, 65% of BW?)*
- ✓ Extensive data collection is possible
- ✓ Synchronization & AI labor/costs are less
- ✓ High-yield, land mass conservation practice
- ✓ More total beef can be produced per acre of grass

### ➤ Disadvantages

- ✓ Utilizes harvested feedstuffs
- ✓ Weather stress susceptibility

## Place A High Value On Economically Important Traits!

### ➤ Fertility

### ➤ Longevity

### ➤ Immune Response

### ➤ Fleshing Ability

- ✓ Feed Efficiency

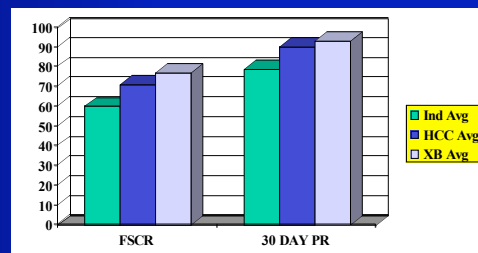
### ➤ Disposition

- ✓ Injury (Cattle and/or People)
- ✓ Carcass Quality/Red Meat Yield

## Crossbreeding Will Improve Economic Traits *Quickly!*

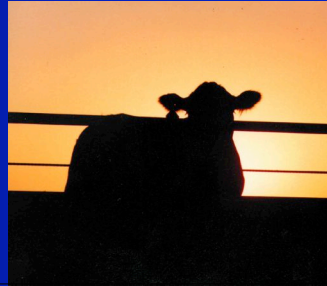


## Comparison of First Service Conception Rate (FSCR) and Pregnancy Rate (PR)



**Let's make sure we  
are concentrating  
on things that will  
make a difference!**

**HEARTLAND CATTLE COMPANY**  
*Celebrating 20 Years of Professional Heifer Development!*



*I'm often asked to explain the differences in a  
17 vs. 19 day MGA / PGF program...*

17 days...

Not bad.



19 days... Now  
that's synched!



**OK...**

**STOP  
MESSING  
AROUND!!!**

