COST COMPARISON OF METHODS OF HEIFER REPLACEMENT

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INTRODUCTION

• Why?

I. Observing growing up

II. Profitability for Producers

III. Producers Have Enough to Worry About
INTRODUCTION - DECISIONS

- Decisions
  1. Producers Make them Everyday
     1. When to Sell?
     2. When to Buy?
     3. Feed Programs?
     4. Vaccines?
     5. Genetics?
     6. Cull and Replacement?
INTRODUCTION – TWO METHODS

- Raise Replacements from Existing Calf Crop
INTRODUCTION – TWO METHODS

• Buying Bred Heifers Just Prior to Calving
• Each method of replacement could be right, depending upon the producers goals and needs in terms of their cow herds, and what resources they have available for their cow herd.
OVERVIEW OF COW – CALF HERD

• Wyoming and Rocky Mountain Region
  I. Feed Pregnant Cattle Winter Rations
  II. Calve The Cows in Early or Late Spring
  III. Summer Pasture Cows and Calves on Grass
  IV. Breeding Occurs During Summer as Well
  V. Sell Weaned Calves in Fall and Select Possible Replacements if Method is Chosen
  VI. Cull of Older or “Bad” Cows
OVERVIEW OF REPLACEMENT

• Producers Replace with Heifers to Replace the Cull Population and Future Death Loss.

• Producers Replace 15-25% of total herd with incoming Heifers. (Fuez)

• Heifer – Cow that has not yet calved
• Replacement Heifer – Heifer of Breeding Quality
METHODS

Similar Studies

- Dillon M. Feuz, University of Wyoming Alum. Date Unknown

- Harlan Hughes, for Beef Magazine. 2007
METHODS ASSUMPTIONS

• Just a Cost Analysis Per Head Basis
• Current Market Prices: Feed, Cattle, Pasture
• Replacements Placed in Feedlot for Winter Feeding to get targeted Avg. Daily Gain
• $3000 Bulls Breeding for 4 years
METHODS STEP BY STEP

• Raising Replacements
  1. Weaning - Wean Calves in Fall and Select Best Heifer Calves for Breeding the Next Summer. Opportunity Cost of Not Selling Heifers.
  3. Breeding to Pregnancy Check – In summer and early fall, heifers are turned out on grass with bulls for breeding.
  4. = Total Cost $ of Raising Heifer
METHODS STEP BY STEP

• Buying Bred Heifers
  1. Buy Bred Heifers from Auction Prior to Calving
  2. = Total Cost $ of Heifer
# Results Raising Replacement Heifers

<table>
<thead>
<tr>
<th>Phase 1 Weaning</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity Cost of Not Selling the Heifer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weaning Weight</td>
<td></td>
<td>500 lbs</td>
</tr>
<tr>
<td>Market Price Oct. 25th 2009 For Feeder Heifers $/cwt</td>
<td></td>
<td>$96.41</td>
</tr>
<tr>
<td>Opportunity Cost of not Selling the Heifer</td>
<td></td>
<td>$482.05</td>
</tr>
</tbody>
</table>
# Results Raising Replacement Heifers

## Phase 2 Weaning to Breeding

<table>
<thead>
<tr>
<th>Feed</th>
<th>Lbs/Day</th>
<th>Feed Price</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>9</td>
<td>$3.43/bu 56 lbs/bu @ 180 days</td>
<td>$100</td>
</tr>
<tr>
<td>Minerals</td>
<td></td>
<td>.025 tons total @ $150/ton</td>
<td>$3.75</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>6</td>
<td>$100.00/ton @ 180 days</td>
<td>$54</td>
</tr>
</tbody>
</table>

### Total Feed Cost

$157.75

### Total Weight

765

### Feed Cost

$157.75

### Lot Rent for 180 days

$20

### Vet and Medicine

$20

### Death Loss

$15

### Total

$212.75
RESULTS RAISING REPLACEMENT HEIFERS

<table>
<thead>
<tr>
<th>Phase 3 Breeding to Pregnancy Check 137 Days</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADG on grass = 1.5 lbs/day*137 days= 205.5</td>
<td></td>
</tr>
<tr>
<td>Price per pound of gain $.32/lb of gain*205.5</td>
<td>$65.76</td>
</tr>
<tr>
<td>Breeding Costs =1 bull @ $3000 breeding 20 cows for 4 years,</td>
<td>$37.50</td>
</tr>
<tr>
<td>Costing = $350/year feed costs</td>
<td>$4.38</td>
</tr>
<tr>
<td>Total</td>
<td>$107.64</td>
</tr>
</tbody>
</table>
## RESULTS RAISING REPLACEMENT HEIFERS

<table>
<thead>
<tr>
<th>Time Spent on Heifers Overall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>317 days spent with heifers avg of 1 hour/20 head of cattle/day</td>
<td></td>
</tr>
<tr>
<td>1 hr/ 20 is 3 min individually/day 3 min * 317 days=951 min</td>
<td></td>
</tr>
<tr>
<td>951/60min/hr= 15.85 hrs spent on each individual heifer</td>
<td></td>
</tr>
<tr>
<td>15.85 hrs * $7.00/hr</td>
<td>$110.95</td>
</tr>
<tr>
<td><strong>Total Costs for Heifer up to Pregnancy Check</strong></td>
<td><strong>$913.39</strong></td>
</tr>
</tbody>
</table>
## RESULTS BUYING REPLACEMENT HEIFERS

| Purchasing Bred Heifers |  |  |  |  |  |
|-------------------------|-----------------|-----------------|-----------------|-----------------|

Market Price for Bred Heifers on 10/25 weighing 975lbs = $855.00

$855.00
RESULTS PRICE COMPARISON

• Raising Your Own Heifers
  • Price = $913.39

• Buying Replacement Heifers
  • Price = $855.00
  • Cheaper by $58.39
RESULTS FROM DILLON M. FEUZ

• Cost of Raising Replacement Heifers
  = $690 - $717

• Cost of Buying a Bred Heifer
  930 lbs @ $68.00/cwt = $632.4

• Difference of $84.60

http://agecon.uwyo.edu/Marketing/mngtcmkt/RplcHeifr.pdf
RESULTS FROM HARLAN HUGHES STUDY

- Cost of Raising a Replacement Heifer = $1,146
- Cost of Buying a Replacement Heifer Projected = $1,147.47
- Difference of $1.47

http://beefmagazine.com/hughes/beef_heifer_economics_part/
ALTERNATIVES

- Feed Hay and Mineral Rations to Wintering Calves
- Project Profitability for 7 Years
- Buy Bred 3 Year Old Cows
- Buy Premium Heifers
- Better or Worse Bulls
## RECOMMENDATIONS – ADV. DISADVANTAGE

### RAISING YOUR OWN CATTLE

**Advantages**
1. Raising Cattle Your Way
2. Chosen Genetics

**Disadvantages**
1. Cost
2. Time Spent

### BUYING BRED HEIFERS

**Advantages**
1. Cost
2. Time Saved

**Disadvantages**
1. Unknown Handler
2. Unknown Genetics
RECOMMENDATIONS

• For Each Individual Producer
1. Sit Down and Figure Out What is More Important to You, Genetics or Cost?
2. Look at Market Outlooks and Trends Certain Years it will be better to Retain Heifers and Others it Will Be Better to Buy Them.
3. Look at resources available. Pasture, Feed, and Bulls
CONCLUSION

• Producers are Faced With Many Difficult Decisions Every Year Especially With Heifer Replacement
• Typical Rocky – Mountain Cattle Producer
• Trends of Late Cheaper to Buy Bred Heifers but Each has Individual Advantages, Disadvantages
• Depends Upon The Producer for Which Method is Best


The End

Any Questions?