

Economic Considerations of Expanding the Beef Herd: Buying vs. Raising Replacements

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Key Expansion Questions of Focus Today

- *Should I Expand My Herd?*
- *IF YES*
 - *Should I Raise Replacement Heifers?*
 - *Should I Buy Replacement Heifers?*
 - *Should I Consider Buying Cows Instead?*



Should I Expand My Herd?

- Note long-term nature of decision
- Do you agree or disagree with the concept: “a bird in hand is worth two in the bush?”
- Are you comfortable with the ever-changing industry environment?

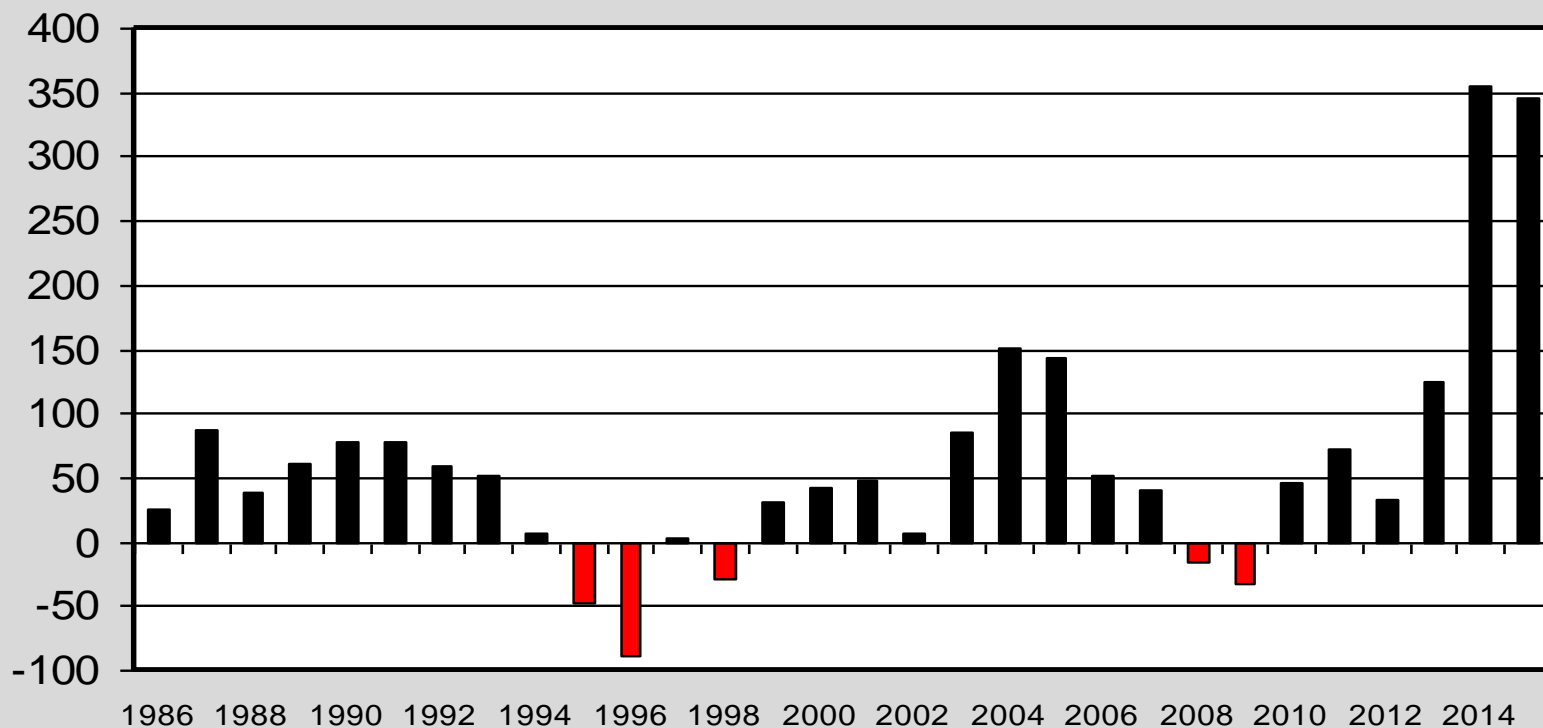


Should I Expand My Herd?

ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual

\$ Per Cow



C-P-66
01/29/14

Livestock Marketing Information Center Data Source: USDA-AMS & USDA-NASS, Compiled & Analysis by LMIC

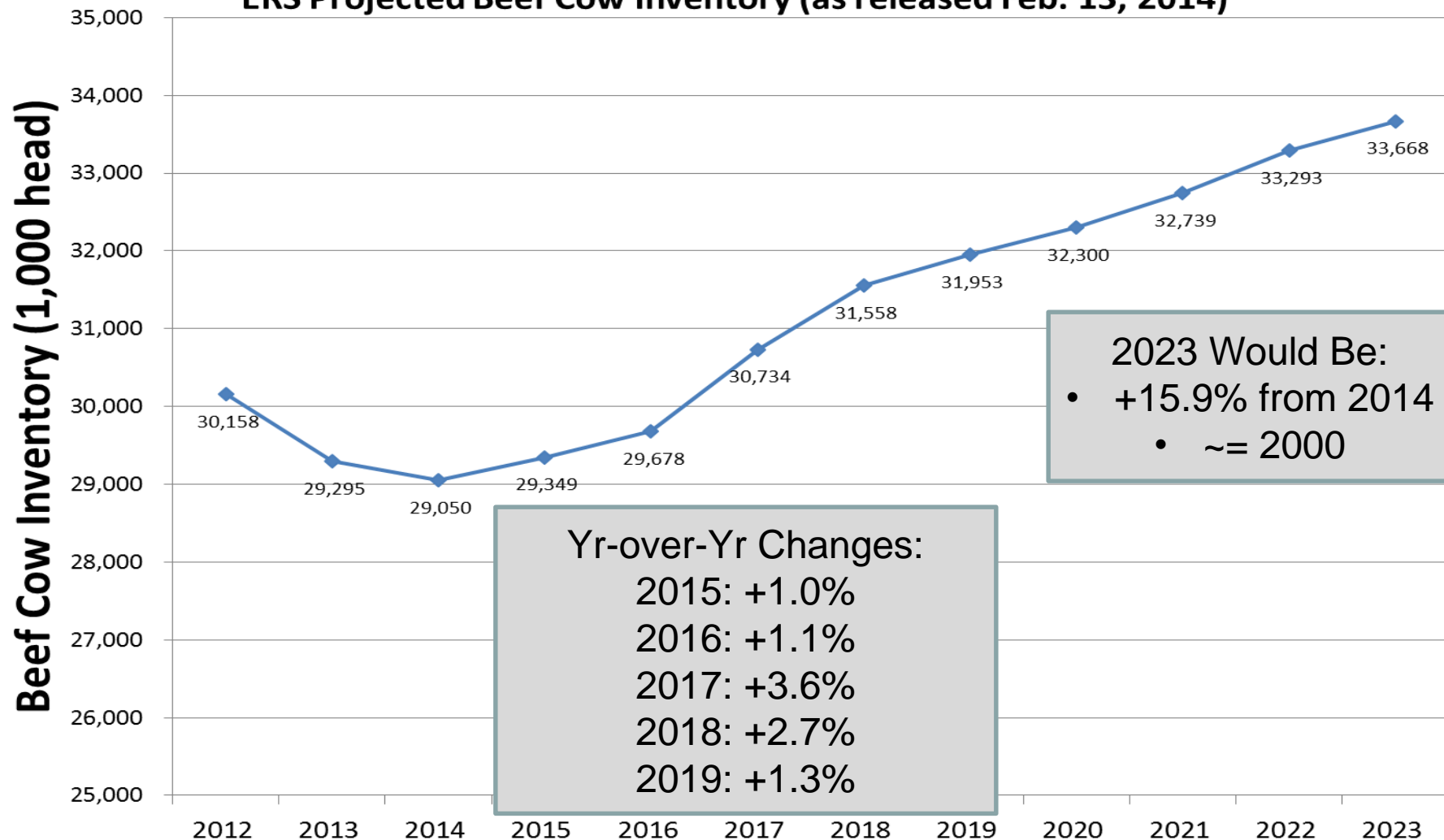
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ERS Projects Herd Expansion

<http://www.ers.usda.gov/publications/oce-usda-agricultural-projections.aspx>

ERS Projected Beef Cow Inventory (as released Feb. 13, 2014)



Should I Raise Replacement Heifers?

- Most common approach to herd growth
 - 83% per 2007-08 USDA APHIS
(http://www.aphis.usda.gov/animal_health/nahms/beefcowcalf/downloads/beef0708/Beef0708_dr_PartI_rev.pdf)
- Yes if:
 - It truly cost you less to raise than buy
 - Genetic base is acceptable already
 - Calving ease, milk prod, etc. /// also consider meat impact
 - Your environment is stressful for “imported” heifers
 - Climate, feed resources, parasites, etc. vary
 - You are concerned about open-market availability



Should I Buy Replacement Heifers?

- Yes if:
 - It truly cost you less to buy than raise
 - You value alternative uses of \$ &/or time
 - You value the reduced bull needs
 - Genetic control is valued & worse than desired
 - You want to grow herd faster



Should I Buy Replacement Heifers?

- Which set of conditions fits you?
- **Must know your situation and comparative advantage!!!**



Hands-On Examination: Buy instead of Raise

- Likely most common situation:
 - Producer typically raises their own heifers and wants (or should) compare to buying instead.
 - Use Iowa State University resource (B1-73 “*Buying Heifers for Beef Cow Replacement*”) to identify changes in returns and costs that follow from buying rather than raising.



Hands-On Examination:

Buy instead of Raise

DRIVERS OF PROS/BENEFITS

- Added Returns
 - Sell a heifer you otherwise would have retained
 - Possible revenue increase from improved genetics
- Reduced Costs
 - Save feed, vet., fixed, etc. costs of NOT raising heifer

DRIVERS OF CONS

- Reduced Returns – Not applicable
- Added Costs
 - Purchase a heifer you otherwise would have raised



Hands-On Examination: Buy instead of Raise

DEFAULT ISU SITUATION:

- Total Added Returns: \$2,003.49/hd
- Total Added Costs: \$1,950.00/hd
 - **Net change in returns of \$53.49/hd**
 - Any multi-year gain (i.e. genetics) would increase this value.

Open & Demo Spreadsheet Here

(<http://www.extension.iastate.edu/agdm/livestock/html/b1-73.html>)



Should I Buy Cows Instead of Heifers?

- Yes if:
 - Market encourages that
 - Compare NPV of Replacements Available to Buy



KSU-Beef Replacement spreadsheet

<http://www.agmanager.info/livestock/budgets/production/default.asp>

Net Present Value of Beef Replacements

Year	# of Calves	Base Case
2014	1	\$1,316
2015	2	\$1,502
2016	3	\$1,692
2017	4	\$1,838
2018	5	\$1,943
2019	6	\$2,026
2020	7	\$2,085
2021	8	\$2,130
2022	9	\$2,166
2023	10	\$2,192

Hypothetical Example #1:

If Bred Heifer available for \$2,200 &
4 year-old Bred Cow available for \$1,500

>> All else equal, Buy Bred Cow

Hypothetical Example #2:

If Bred Heifer available for \$1,900 &
4 year-old Bred Cow available for \$1,800

>> All else equal, Buy Bred Heifer

* NPV is Net Present Value of a replacement expected to produce the number of saleable calves listed in the "Number of Calves" column before a cow is culled for age-related reasons.

What To Do?

- Ask yourself key questions including:
 - Do you regularly utilize available resources?
 - herd expansion tools, these events, etc.
 - Do you know your comparative advantage?
 - Having a favorable cost structure is imperative
 - Be aware of “overpaying” for replacements
 - Recognize opportunity costs of retained heifers
 - How comfortable are you with “the new environment?”
 - Political & regulatory uncertainty
 - Customer/consumer distinction
 - Technology feasibility & acceptance distinction



What To Do?

I encourage you to:

- Recognize this “isn’t your father’s world” anymore and manage accordingly...
 - *Be willing to do something different*

- “Think globally, manage locally, and stay informed”



Decision Aides & Resources to Note

- K-State
 - KSU-Beef Replacements (Excel tool & Video tutorial)
<http://www.agmanager.info/Tools/default.asp#LIVESTOCK>
 - Factsheets: Replacement NPV Regional Analysis & Sensitivity
<http://www.agmanager.info/livestock/budgets/production/default.asp>
 - MF2566 Raising Beef Replacement Heifers
<http://www.ksre.ksu.edu/bookstore/pubs/mf2566.pdf>
 - Updated projections, charts, etc.:
<http://www.agmanager.info/about/contributors/Presentations/Tonsor/presentations.asp>
- Iowa State (Schulz and Gunn, Jan. 2014)
 - B1-73: Buying Heifers & Raising Heifers for Replacements
<http://www.extension.iastate.edu/agdm/livestock/html/b1-73.html>
- Univ. of Nebraska-Lincoln
 - <http://www.extension.unl.edu/agriculture/beef/components/homestudy/replesson6.pdf>



More information available at:



This presentation will be available in PDF format at:

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