

# 2024-2025 Replacement Heifer Forecast

**Presented and Developed by UNL Extension Professionals:**

Randy Saner, Beef Educator; Shannon Sand, Statewide Farm Management  
and Ag Economics Educator; and Matt Stockton, Farm Management  
Specialist



# Why does this matter?

- The breakeven value of replacement animals should be representative of what an operation can pay, which is a factor of costs and revenues
- Discovery of replacement animals value is complex and requires careful use of future and current biological, business and economic information
- Long term growth in net worth and annual profitability depend on a positive difference between revenue and costs.
- Profits in any other area of the business operation can be eaten up quickly by paying too much for the productivity received from replacement cows.



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# What's in the forecast model?

- *Revenue*
  - Value of Animal prices ten years into the future using the FAPRI baseline predictions
- *Cost*
  - Cull rates
  - Price changes using FAPRI as an index with three different Nebraska costs
  - Cost consistent across nine scenarios
- *Production, Biological and Environmental Information*
  - Cow and calf information based on age and size (GSL data)



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# Annual Cull Rates

- 14%
- 20%
- 28%



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# Nebraska Cost Levels



- Lo,      \$ 953.83/hd
- Med,    \$1,106.71/hd
- Hi,      \$1,337.10/hd



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# UNL's: “Cow-Calf Cost Cow-q-lator” an Excel Workbook available online



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Bulls		164.76	Calculated Cells	
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General, Replacement, and Breeding Inputs

			High	Low	Mean	Outcome	Variability
Expected interest rate	4.4%	percent	8%	2%	5%	4.41%	6
How many cows in the herd	299	cows	300	299	299.5	299.00	
Number of cows culled	20	females	21	19	20	20.00	
Expected average value of replacement cow?	\$ 1,431.90	dollars/head	1500	1300	1400	1431.90	
Average cull cow weight when sold	1,307	pounds	1400	1250	1325	1306.90	
Expected price per cwt for cull cows	\$ 64.29	dollars/cwt.	70	55	62.5	64.29	
Expected markeing cost to market cull cows	31	head	32	30	31	31.08	
Expected death loss	2.09%	percent	2.10%	2.00%	2%	2.09%	
Number of bulls needed	12	bulls	13	11	12	12.00	
Number of bulls culled	5		6	3	4.5	5.00	
Bulls cost (including delivery)	3,979	dollars/head	5500	2000	3750	3979.56	
Expected Bull Life	5	years	6	5	5.45	5.41	
How much does the average cull bull weigh when you sell him?	2,021	pounds	2100	1750	1925	2021.99	
Expected price for cull bulls?	\$ 71.28	dollars/cwt.					
Expected premium per cwt for bulls verses cows	\$ 6.99	dollars/head	10.00	5.00	7.50	6.99	
Cull Bull Value per head	\$ 1,440.47				1347.5		
What is the total spent on artificial insemination each year for all females?	0	dollars/year	0.0001	0.00001	0.000055	0.00	

Stoch Determ

Cull Cow Cost/Cow	95.78	93.489
Cull Cow Value/Cow	54.121	53.23
Bull Cost Factor	1.5464	1.4528
E Bull Cost		
Net Gain or (LOSS) from culling cows	41.66	40.259
Stoch Cull Rate	0.07	
Det Cull Rate	0.066777963	

Budgeted Cost

						Prices			
	Amount	Price	Stochasitc Cost/Cow	Expected Cow Cost	The Difference	High	Low	Mean	Outcome
Feed Costs									
Growing Season Grazing (Pairs)	6 months	41.05 / mo.	246.31	246.30	0.01	\$ 41.06	\$ 41.04	\$ 41.05	\$ 41.05
Growing Season Grazing (Cows)	months	/ mo.				\$ -	\$ -	\$ -	\$ -
Dormant Season Grazing (Pairs)	months	/ mo.				\$ -	\$ -	\$ -	\$ -

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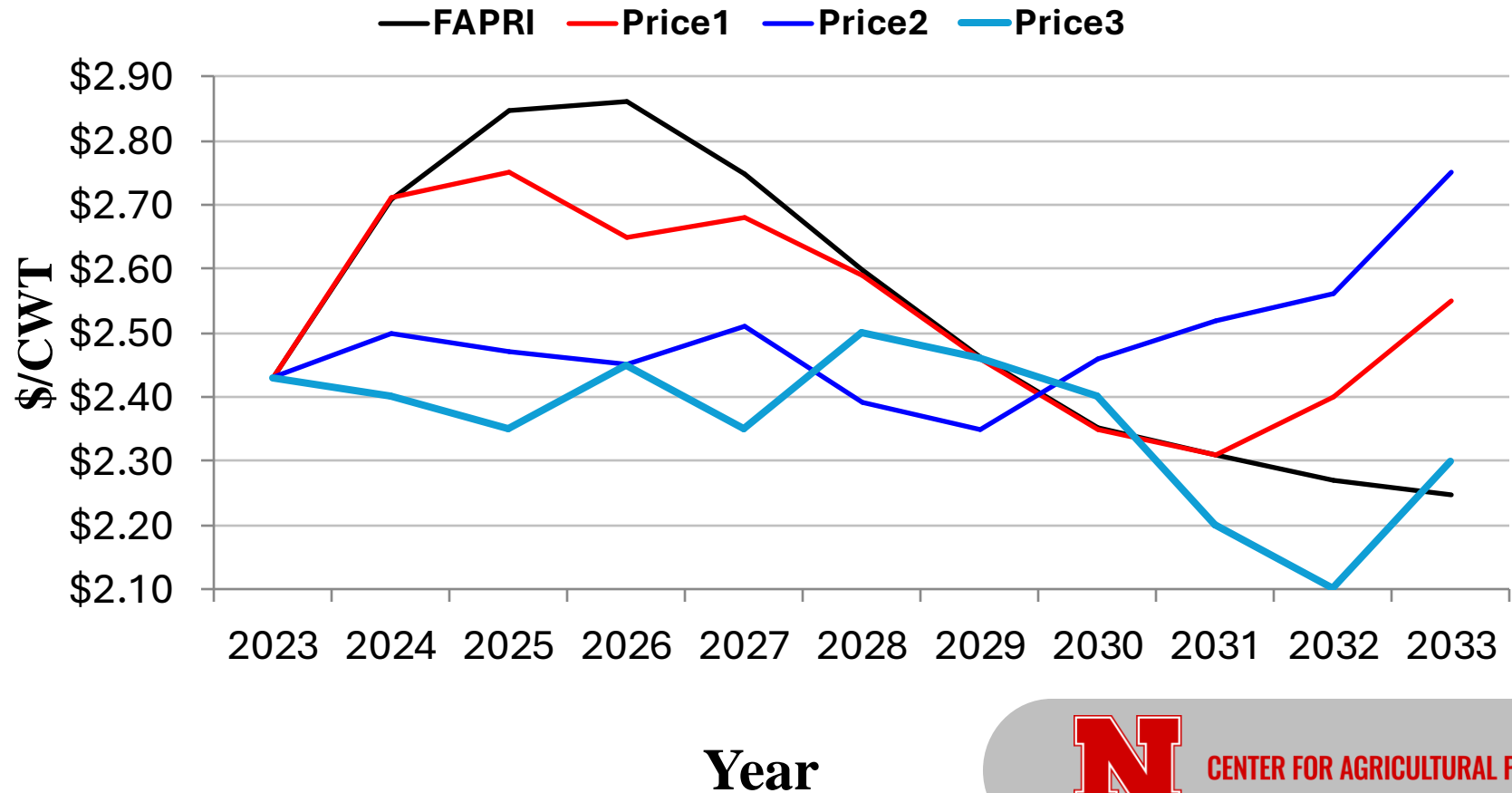


# The Nine Scenarios

- 1) FAPRI Baseline Projections with Nebraska costs and productivity inputs
- 2) Price1, cattle prices slightly lower than the baseline initial prices
- 3) Price2, prices stay near current levels and trend up the last several years
- 4) Price3, prices remain near current levels and trend down for the last several years
- 5) Constant 98% weaning rate for the FAPRI Baseline
- 6) Constant 88% weaning rate for the FAPRI Baseline
- 7) 25% debt level for replacement cows using FAPRI Baseline
- 8) 50% debt level for replacement cows using FAPRI Baseline
- 9) 75% debt level for replacement cows using FAPRI Baseline

# The four price series scenarios, FAPRI Baseline, Price1, Price2, and Price3

The 2024 -2033 600 to 650 lb. Beef Calf Prices for FAPRI Baseline  
and the Three Alternative Scenarios





# Breakeven values (BV) where weaning rate averages 93%

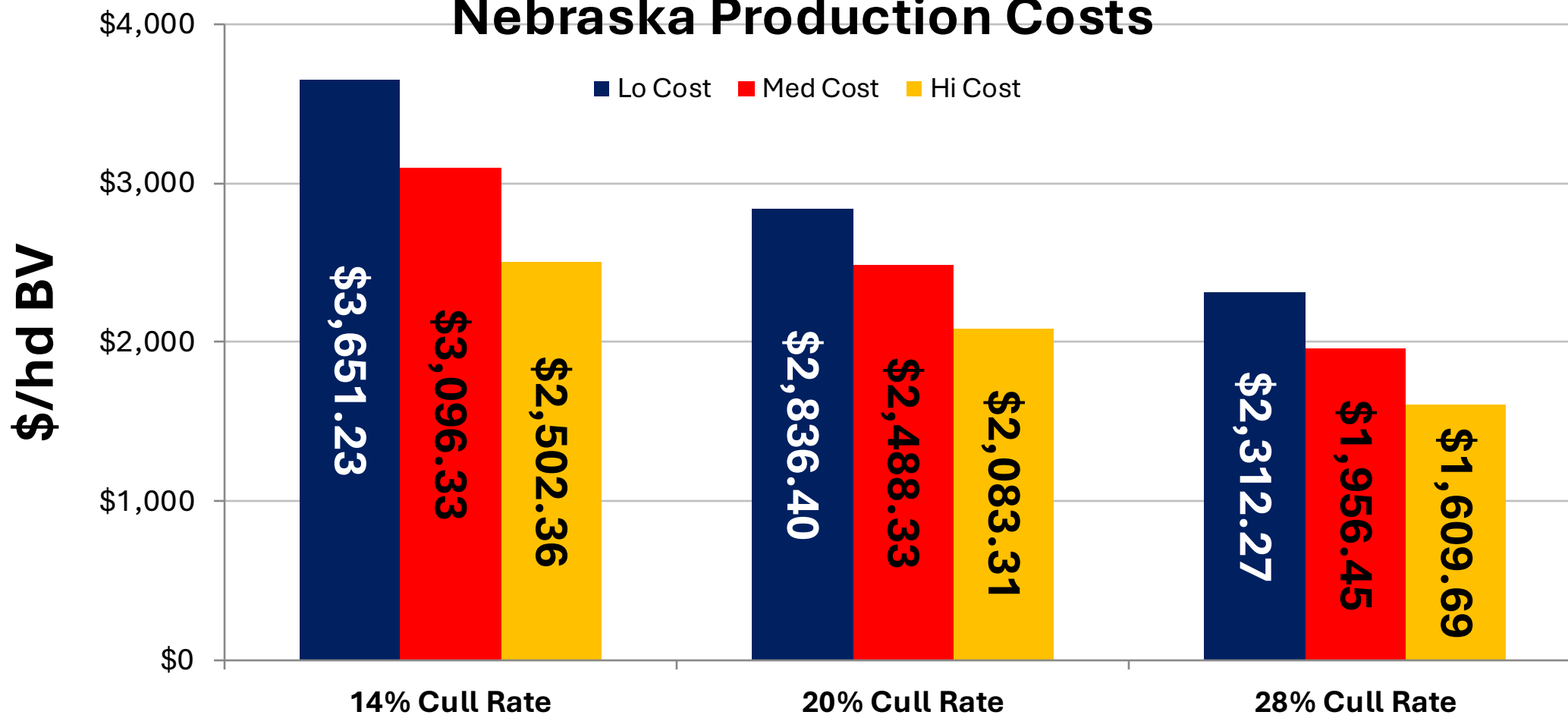
	Lo Cost	Med Cost	Hi Cost	
<b><u>Cull Rates</u></b>	<b><u>\$953.83</u></b>	<b><u>\$1,106.71</u></b>	<b><u>\$1,337.10</u></b>	
<b>28%</b>	\$2,662.96	\$2,244.67	\$1,517.59	BV (\$/head)
<b>20%</b>	\$3,220.01	\$2,514.94	\$1,696.46	BV (\$/head)
<b>14%</b>	\$3,692.48	\$2,966.54	\$1,883.42	BV (\$/head)



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# FAPRI Baseline Forecast of Breakeven Value (BV) Using Three Cull Rates and Three Levels of Nebraska Production Costs



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# Dollars increased/decreased in BV for each percent decrease/increase in replacement rate

## Changes in BV due to cull rate changes

Cost Levels	Group 1	Group 2
	14%-20% Cull Rates	20%-28% Cull Rates
(Lo) \$953.83	(+/-) \$135.80	(+/-) \$65.52
(Med) \$1,106.71	(+/-) \$101.33	(+/-) \$66.49
(Hi) \$1,337.10	(+/-) \$69.84	(+/-) \$59.20



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# Dollars increased/decreased in BV for each one dollar decrease/increase in costs

## Changes in BV due to cost level changes

Costs/Hd./Year	14% Replacement Rate	20% Replacement Rate	28% Replacement Rate
Category A: Lo-Med \$953.83 - \$1,106.71	(+/-) \$3.41	(+/-) \$2.14	(+/-) \$2.18
Category B: Med-Hi \$1,106.71 - \$1,337.10	(+/-) \$2.58	(+/-) \$1.76	(+/-) \$1.51



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# Why is this important?

- What you think and believe will affect your decisions.
- Solid choices don't occur in a vacuum
- Using information outside your experience can help expand your ability to make better choices
- Complex decisions requires added information to reduce the complexity of finding the best choice for you
- Questions that require future knowledge can be difficult to navigate and generally requires using the idea associated with chance and probability



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# Questions?

