
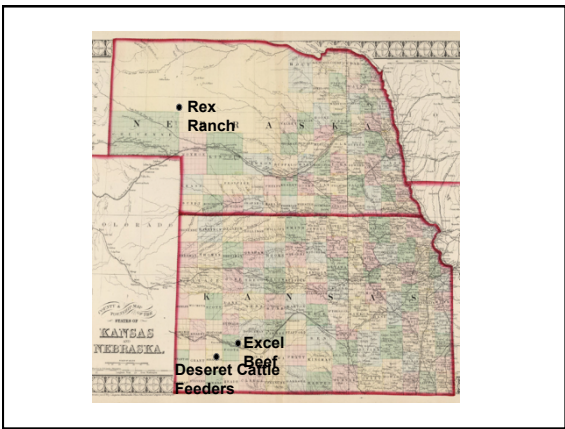


In Search of Beef Production Nirvana

Things a cow-calf producer learns when you own a feedyard: what drives profit?

Nirvana: What does that mean?

- In the Buddhist tradition, nirvana is described as the extinguishing of the *fires* that cause suffering and rebirth.^[29] These fires are typically identified as the fires of attachment (*raga*), aversion (*dvesha*) and ignorance (*moha* or *avidya*).
- In Hindu philosophy, it is the union with Brahman, the divine ground of existence, and the experience of blissful

Challenges we face:

- Weather volatility
- Price volatility
- Trust between segments
- Adding real value to our production
- Answers come excruciatingly slow (Environment or Genetic?)
 - 2 year conception to harvest
 - 7 year genetic interval
 - Applying research findings correctly in various systems

The following events are based on a true story.

Weather Volatility

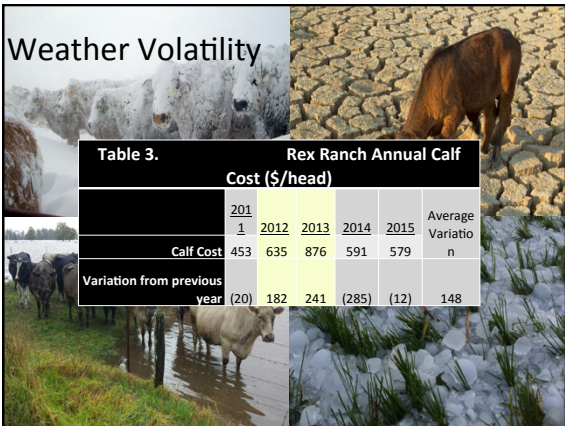


Table 3. Rex Ranch Annual Calf Cost (\$/head)

	2011	2012	2013	2014	2015	Average Variation
Calf Cost	453	635	876	591	579	
Variation from previous year	(20)	182	241	(285)	(12)	148

Price Volatility





Table 2. Percentage variation in revenue per head from one year to the next


	2012	2013	2014	2015	2016	5 year avg. ^d	Avg. \$/head ^e
Jan-Mar 550 lb. Steer ^a	16%	-2%	26%	28%	-30%	20%	\$ 241
Jan-Mar Fed Steer ^b	14%	1%	15%	12%	-16%	11%	\$ 203
Jul-Sep Fed Steer ^c	15%	2%	30%	-9%	-17%	13%	\$ 218

^aFormula = From Table 1 (2012 price / 2011 price) - 1 (rounded to nearest percent)
^bFormula = From Table 1 (2012 price / 2011 price) - 1 (rounded to nearest percent)
^cFormula = From Table 1 (2012 price / 2011 price) - 1 (rounded to nearest percent)
^dSum of absolute values of the year to year percentage changes from 2012 to 2016 divided by the 5 years
^eSum of absolute values of the year to year dollar changes from 2012 to 2016 divided by the 5 years

Trust between segments



- Weighing conditions
 - Do what is best for the cattle instead of worry about the weather
- Streamline operations
- Sharing in added value ???



Zero sum game vs. Adding Value

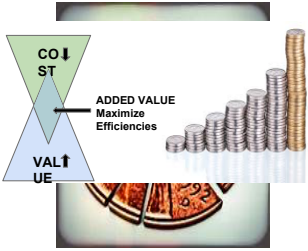



Diagram illustrating the relationship between Cost (CO ↓ ST) and Value (VAL ↑ UE). The central concept is "ADDED VALUE Maximize Efficiencies".

Communicating Added Value

- Need a common language
- Contribution margin (Revenue - variable costs)




Output or Input	% Change	Quantity Change
Fed-price	2% increase	\$2.40 /cwt.
Corn-Price	8.9% decrease	(\$ 0.36 / bu.)
Dry-Matter Conv.	11.0% decrease	(.66 lb.)
Mean %	2.8% increase	

Adding Value

Increased % roughage in ration for first 60 days for Holstein calves

- Increased DMI from 1.6% to 1.9% of BW
- Decreased founder incidence from 7% to 0%




Adding Value

Changed to a less aggressive implant strategy on Holstein calves

Results:

- ADG 3.8 to 3.1
- DMC 6.7 to 6.2
- Hot Carcass Yield 58.5% to 61.5%




Adding Value

Correct use of EPDs can significantly change cattle performance within a generation interval.

Example #1: Deseret Cattle and Citrus (2000 to 2005):
Culled 1/3 of the bull battery based on low accuracy in-herd EPDs and temperament score

Results:

- Improved calf fed ADG from 2.6 to 2.9 lbs.
- Decreased DMC from 6.7 to 6.2 lbs.



Adding Value

Correct use of EPDs can significantly change cattle performance within a generation interval.


Example #2: Rex Ranch (2008 to 2015):
Focused on calving ease and marbling

Results:

- Distocia moved from 25% to 8%
- Choice or better moved from 50% to 80%

In Wt.	HCW	ADG	DMC	% Choice or better	% Y1s & Y2s	% Y4s
761 lbs.	841 lbs.	3.76 lbs.	6.23 lbs.	87%	44%	10%

1737 head of calves entered the feedyard in 2015



Adding Value


Nutritional environment matters from conception to carcass.

Table 4. Calves weaned from two different ranches experiencing extreme drought *

	2012 Preg Rate	2013 Preg Rate	In Wt.	Out Wt.	HCW	Death Loss	DoF	ADG	DMC	COG
Ranch A	91%	92%	621	1,408	901	1.1%	209	3.74	5.57	\$ 1.03
Ranch B	93%	91%	538	1,382	885	10.5%	288	2.71	6.34	\$ 1.23

* Both ranches calves had been weaned in growyards prior to entering the feedyard. Ranch A's calves stayed in the growyards 45 days longer.

Adding Value



In search of Beef Production Nirvana

- What role do I play in adding real value to the system?
- How can I improve?
- How do I get compensated fairly for my contribution?