**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. 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 egolessness.

---

**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>
<thead>
<tr>
<th>Year</th>
<th>Cost ($/head)</th>
<th>Rex Ranch Annual Calf Cost ($/head)</th>
<th>Average Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>453</td>
<td>635</td>
<td>(22)</td>
</tr>
<tr>
<td>2012</td>
<td>676</td>
<td>876</td>
<td>182</td>
</tr>
<tr>
<td>2013</td>
<td>591</td>
<td>579</td>
<td>(285)</td>
</tr>
</tbody>
</table>

Table 3. Weather Volatility
**Table 2.** Percentage variation in revenue per head from one year to the next.

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>5 year avg</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-Mar 550 lb. Steer</td>
<td>18%</td>
<td>18%</td>
<td>28%</td>
<td>-30%</td>
<td>20%</td>
<td>$ 241</td>
<td></td>
</tr>
<tr>
<td>Jan-Mar Fed Steer</td>
<td>14%</td>
<td>16%</td>
<td>11%</td>
<td>21%</td>
<td>16%</td>
<td>$ 218</td>
<td></td>
</tr>
<tr>
<td>Jul-Sep Fed Steer</td>
<td>18%</td>
<td>22%</td>
<td>22%</td>
<td>28%</td>
<td>28%</td>
<td>$ 241</td>
<td></td>
</tr>
</tbody>
</table>

- From Table 1 (2012 price / 2011 price) – 1 (rounded to nearest percent)
- From Table 1 (2012 price / 2011 price) – 1 (rounded to nearest percent)
- From Table 1 (2012 price / 2011 price) – 1 (rounded to nearest percent)

**Zero sum game vs. Adding Value**

| COST | VALUE | ADDED VALUE | Maximize Efficiencies | Communication

**Adding Value**

- Increased % roughage in ration for first 60 days for Florida calves
  - Increased DMI from 1.6% to 1.9% of BW
  - Decreased founder incidence from 7% to 0%

**Communicating Added Value**

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

<table>
<thead>
<tr>
<th>Output or Input</th>
<th>% Change</th>
<th>Quantity Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fed price</td>
<td>2% increase</td>
<td>$2.40 /cwt.</td>
</tr>
<tr>
<td>Corn price</td>
<td>8.9% decrease</td>
<td>($ 0.36 /bu.)</td>
</tr>
<tr>
<td>Dry Matter Conv.</td>
<td>11.0% decrease</td>
<td>(.66 lb.)</td>
</tr>
</tbody>
</table>

**Adding Value**

Changed to a less aggressive implant strategy on Holstein calves:

- 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 ⅓ 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%

**Nutritional environment matters from conception to carcass.**

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

<table>
<thead>
<tr>
<th></th>
<th>2012 Preg Rate</th>
<th>2013 Preg Rate</th>
<th>In Wt</th>
<th>Out Wt</th>
<th>HCW</th>
<th>Death Loss</th>
<th>DoF</th>
<th>ADG</th>
<th>DMC</th>
<th>COG</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranch A</td>
<td>91%</td>
<td>92%</td>
<td>621</td>
<td>1,408</td>
<td>901</td>
<td>1.1%</td>
<td>209</td>
<td>3.74</td>
<td>5.57</td>
<td>$ 1.03</td>
<td></td>
</tr>
<tr>
<td>Ranch B</td>
<td>89%</td>
<td>91%</td>
<td>538</td>
<td>1,382</td>
<td>885</td>
<td>10.5%</td>
<td>288</td>
<td>2.71</td>
<td>6.34</td>
<td>$ 1.23</td>
<td></td>
</tr>
</tbody>
</table>

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

**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?