RANCHER’S THURSDAY LUNCHTIME SERIES

Vac 45 Program Opportunities and Considerations

Join our Beef Cattle Extension team, experienced livestock marketers and ranchers to learn and share beef cattle production, management and marketing tips.

► Thursday, May 14, 2020 | 12:30 - 1:00 p.m.
  Vac 45 Program Health and Management Influence on Calf Prices
  - Kellie Raper, Extension Livestock Marketing Specialist

► Thursday, May 21, 2020 | 12:30 - 1:00 p.m.
  Considerations in Herd Health Programs Designed for Vac 45 Certification
  - Rosslyn Biggs, Beef Cattle Extension Specialist

► Thursday, May 28, 2020 | 12:30 - 1:00 p.m.
  Nutritional Programs and Implants for Vac 45 Programs
  - Paul Beck, Extension Livestock Specialist

► Thursday, June 4, 2020 | 12:30 - 1:00 p.m.
  Putting it Together: Budget and Breakeven Projections for Fall 2020
  - David Lalman, Extension Beef Cattle Specialist

► Thursday, June 11, 2020 | 12:30 - 1:00 p.m.
  Marketing Vac 45 Cattle: What We Have Learned the Last 20 Years
  - Bill Barnhart, Oklahoma City West Livestock Market
  - David Cantrell, Rancher and Extension Educator

► Thursday, June 18, 2020 | 12:30 - 1:00 p.m.
  Steps to Certify and Market Your Calves Through the Oklahoma Quality Beef Network
  - Jeff Robe, Oklahoma Quality Beef Network Coordinator

LIVE WEBINARS
► Register Online: dasnr.zoom.us/meeting/register/tJAvd-yrjMrGNEAuaK6dkost_a4uGLSUEn_

CONTACT
► David Lalman
  Extension Beef Cattle Specialist
david.lalman@okstate.edu
  405-744-6060
Vac 45 Program
Health and Management Influence on Calf Prices

Kellie Curry Raper
Livestock Marketing Economist
Rancher’s Thursday Lunchtime Series
May 14, 2020
Managing Calves for Value

- Moving calves off the ranch is stressful!
  - Calf health is critical to cow-calf producers, stocker operators, and feedlot managers
  - Avoid simultaneously weaning, mixing & transporting

- Benefits of lowering the stress?
  - Increased Feedlot and Carcass performance
  - Buyers recognize the value
A “typical” VAC45 program includes

- Castration of male calves, healed prior to marketing
- Horn management – dehorn or polled genetics
- Minimum 45 day weaning period pre-sale
- Vaccination protocol
- Bunk training/bunk broke
- Most require home-raised; specific programs for put-together calves are out there
- Deworming recommended or required
## VAC45 Benefits to Buyers

<table>
<thead>
<tr>
<th>metric</th>
<th>Preconditioned</th>
<th>Non-Preconditioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Sick</td>
<td>9.2</td>
<td>36.4</td>
</tr>
<tr>
<td>Percent Dead</td>
<td>1.5</td>
<td>4.3</td>
</tr>
<tr>
<td>ADG</td>
<td>2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Conversion</td>
<td>6.3</td>
<td>6.9</td>
</tr>
<tr>
<td>Percent Choice</td>
<td>50.4</td>
<td>35.8</td>
</tr>
<tr>
<td>Percent “Outs”</td>
<td>2.5</td>
<td>6.9</td>
</tr>
</tbody>
</table>

*Survey of Texas and Southwest Cattle Raisers Association Feedlot Managers

“Non-weaned calves were 3.4 times more likely to experience BRD than weaned calves….calves weaned less than 30 days were no different in health attributes than those weaned directly onto a truck.”

Glenn Selk, OSU
Poll Question 1
VAC45 Benefits to Producers

- Marketing calves at heavier weight
  - Weight gain during preconditioning period
  - Less shrink at sale time
- Market into typical seasonal upward price movement - October to December
- Capture potential price premiums for
  - Healthier calves
  - Better starting calves on wheat or in the feedlot
Oklahoma Steer Seasonal Price Index
Combined Auctions, 2007-2016

- 475 lb. Steers
- 575 lb. Steers
- 675 lb. Steers
- 775 lb. Steers
- 875 lb. Steers
### Practice Adoption in Oklahoma

<table>
<thead>
<tr>
<th>Adoption Rates for Producers Adopting at Least One Listed Practice (n=1108)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castration</td>
<td>71</td>
</tr>
<tr>
<td>Horn Management</td>
<td>77</td>
</tr>
<tr>
<td>Polled genetics</td>
<td>29</td>
</tr>
<tr>
<td>Deworm</td>
<td>73</td>
</tr>
<tr>
<td>45-day weaning</td>
<td>53</td>
</tr>
<tr>
<td>Respiratory vaccines</td>
<td>42</td>
</tr>
<tr>
<td>Feed bunk training</td>
<td>63</td>
</tr>
<tr>
<td>Castration, Horn Management</td>
<td>62</td>
</tr>
<tr>
<td>Castration, Horn Management, Deworming</td>
<td>56</td>
</tr>
<tr>
<td>Preconditioning Bundle (All of the Above)</td>
<td>24</td>
</tr>
<tr>
<td>Implant calves</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: Oklahoma Beef Management and Marketing Survey, 2018
Poll Question 2
Effect of Lot Size on Sale Price: 2010-2013 Sale Data

- From 5 to 10 hd, $2.58/cwt
- From 10 to 15 hd, $1.22/cwt
- From 15 to 20 hd, $0.89/cwt
Defined Calving Seasons

Source: Oklahoma Beef Management and Marketing Survey

Overall
- Undefined: 66%

Defined: 34%
- Spring: 61%
- Winter: 24%
- Fall: 8%
- Summer: 0%
- Late Dual: 4%
- Early Dual: 3%

Defined Calving Seasons

Back to Basics
Poll Question 3
Before We Talk Premiums…Let’s Talk Discounts

- **Fleshy** ~ $2.00-$3.50/cwt = $10-$33.50/head
  - Mintert 2003; Ward, Ratliff, Lalman 2017

- **Bull calves** ~ $6-12/cwt = $30-$60/head
  - Williams et al 2014
  - Castrate after 3 months = 20# less gain; 12 additional days in the feedlot

- **Horns** ~ $3-6.30/cwt = $15.75-$31.50/head
VAC 45 Program Examples

- Superior Livestock Auction
  - http://www.superiorlivestock.com/value-added-programs/superior-vaccination-programs

- MFA HealthTrack
  - https://mfa-inc.com/healthtrack

- Oklahoma Quality Beef Network
  - oqbn.okstate.edu
Superior Livestock Program
Premiums Relative to VAC 24

Table 1. Effect of value-added health protocols within region¹ on the sale price of beef calf lots sold through summer video auctions from 2010 through 2018

<table>
<thead>
<tr>
<th>Value-added health protocol administered to the lot</th>
<th>Number of lots</th>
<th>Least squares mean of sale price ($/100 lb)</th>
<th>Regression coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Central</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAC 34 or VAC 34+</td>
<td>1,590</td>
<td>166.70¹</td>
<td>4.25</td>
</tr>
<tr>
<td>VAC 45 or VAC 45+</td>
<td>1,838</td>
<td>171.80¹</td>
<td>8.63</td>
</tr>
<tr>
<td>Weaned: viral vaccinated²</td>
<td>638</td>
<td>167.49¹</td>
<td>5.04</td>
</tr>
<tr>
<td>Non-weaned: viral vaccinated²</td>
<td>223</td>
<td>164.27²</td>
<td>1.82</td>
</tr>
<tr>
<td>VAC 24</td>
<td>510</td>
<td>162.45²</td>
<td>0.00</td>
</tr>
</tbody>
</table>

VAC 24 ~ Calves vaccinated at 2-4 months; sold off the cow unweaned
Superior Livestock Auction Programs

- Vac 24 – Calves vaccinated at 2 to 4 months of age, sold off the cow
- Vac 34 – Vaccinated three to four weeks prior to weaning, sold off the cow
- Vac 45 – Calves weaned for 45 days and given two rounds of vaccinations
- Vac Precon – Similar to Vac 45, but for put-together calves as opposed to ranch-origin calves
MFA HealthTrack Premiums

Steer Health Track advantage over non-program steers

450 LBS.: $121.27  
550 LBS.: $85.40  
650 LBS.: $85.40  
750 LBS.: $61.18

$26.95/cwt  $15.53/cwt  $13.13/cwt  $8.16/cwt
2019 OQBN Premiums by Weight Class and Gender

<table>
<thead>
<tr>
<th>Weight Class</th>
<th>300-399</th>
<th>400-499</th>
<th>500-599</th>
<th>600-699</th>
<th>700-799</th>
<th>800-899</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steers</td>
<td>4.73</td>
<td>19.52</td>
<td>11.34</td>
<td>10.58</td>
<td>16.19</td>
<td>-2.43</td>
<td>0.00</td>
</tr>
<tr>
<td>Heifers</td>
<td>19.58</td>
<td>13.48</td>
<td>9.32</td>
<td>15.20</td>
<td>15.50</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
OQBN Premium over Calves Marketed with No Preconditioning ($/cwt)*
All calves, 2011 -2019

*Premiums calculated as difference in weighted average prices at same sale
## Probability of Positive Returns for Various Management Practices

<table>
<thead>
<tr>
<th>Practice Adopted</th>
<th>Net Returns ($/cwt)</th>
<th>Probability of Positive Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weaned</td>
<td>$5.13</td>
<td>0.59</td>
</tr>
<tr>
<td>Vaccinated</td>
<td>$6.01</td>
<td>0.64</td>
</tr>
<tr>
<td>Dehorned</td>
<td>$6.31</td>
<td>0.59</td>
</tr>
<tr>
<td>Weaned and Vaccinated</td>
<td>$5.36</td>
<td>0.59</td>
</tr>
<tr>
<td>Weaned, Vaccinated, and Dehorned</td>
<td>$10.98</td>
<td>0.67</td>
</tr>
<tr>
<td>Weaned, Vaccinated, Dehorned, and Certified</td>
<td>$12.90</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Data Source: Oklahoma Livestock Auctions
Marketing Your Management…

- Marketing is just as important as the managing!
- Selling versus marketing
  - Venue matters
  - Market volume matters
  - Reputation matters
    - Third-party verification as a proxy for your own reputation
- VAC 45 Programs focus on BOTH management and marketing
Value-added programs begin by removing some of the risk that buyers assume exists in a specific group of cattle.”
Questions?