



EXTENSION

# RANCHER'S THURSDAY LUNCHTIME SERIES

## Vac 45 Program Opportunities and Considerations

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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-yrrjMrGNEAuaK6dkost\\_a4uGLSUE\\_n](https://dasnr.zoom.us/j/92128322222)

## CONTACT

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# Vac 45 Program Health and Management Influence on Calf Prices

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Kellie Curry Raper

Livestock Marketing Economist

Rancher's Thursday Lunchtime Series

May 14, 2020



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# 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



# VAC45 Preconditioning Protocols

- 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

	Preconditioned	Non-Preconditioned
Percent Sick	9.2	36.4
Percent Dead	1.5	4.3
ADG	2.9	2.6
Conversion	6.3	6.9
Percent Choice	50.4	35.8
Percent “Outs”	2.5	6.9

\*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



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# Poll Question 1



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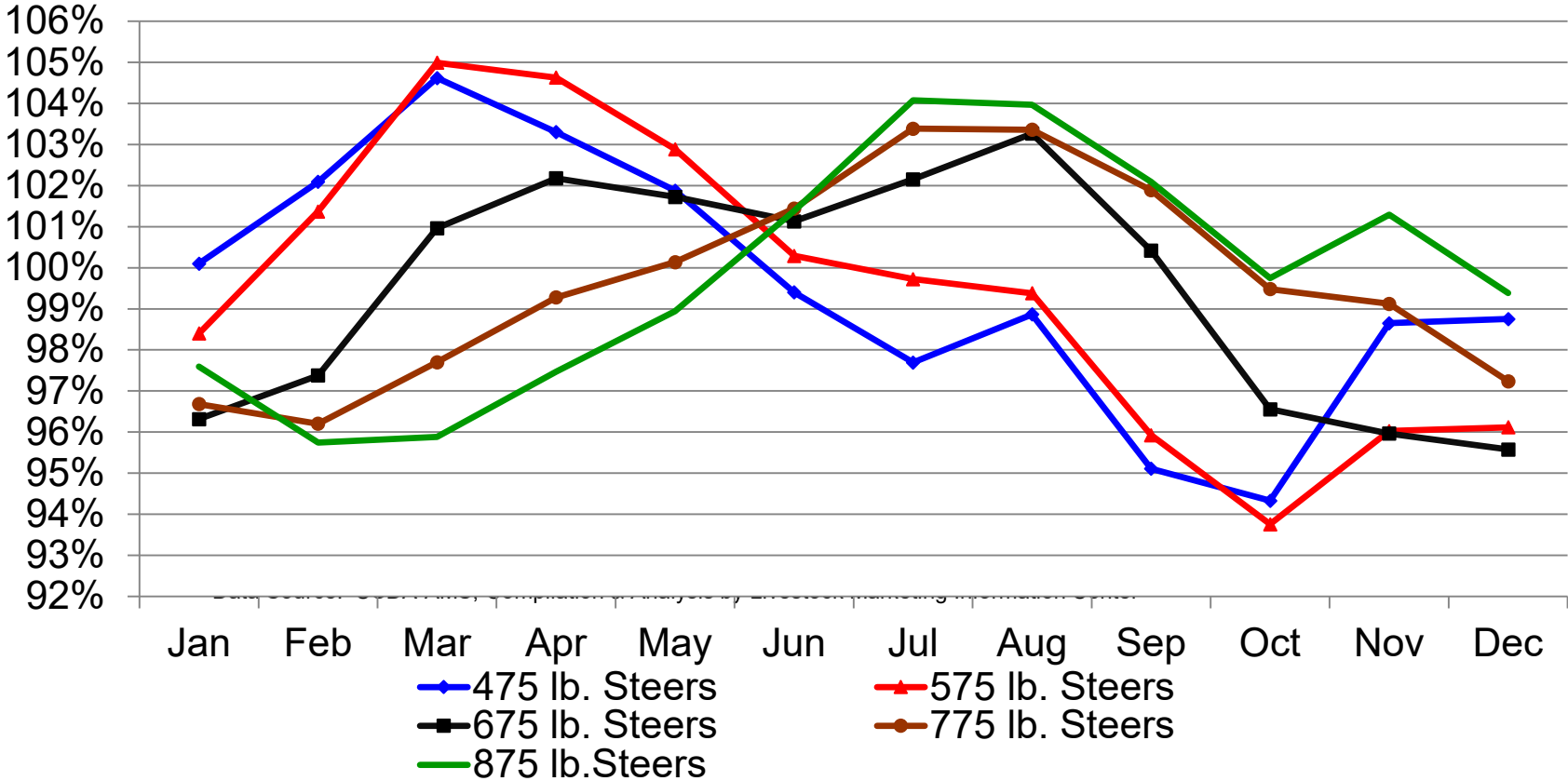
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# VAC45 Benefits to Producers

- 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





# Practice Adoption in Oklahoma

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

Source: Oklahoma Beef Management and Marketing Survey, 2018



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# Poll Question 2

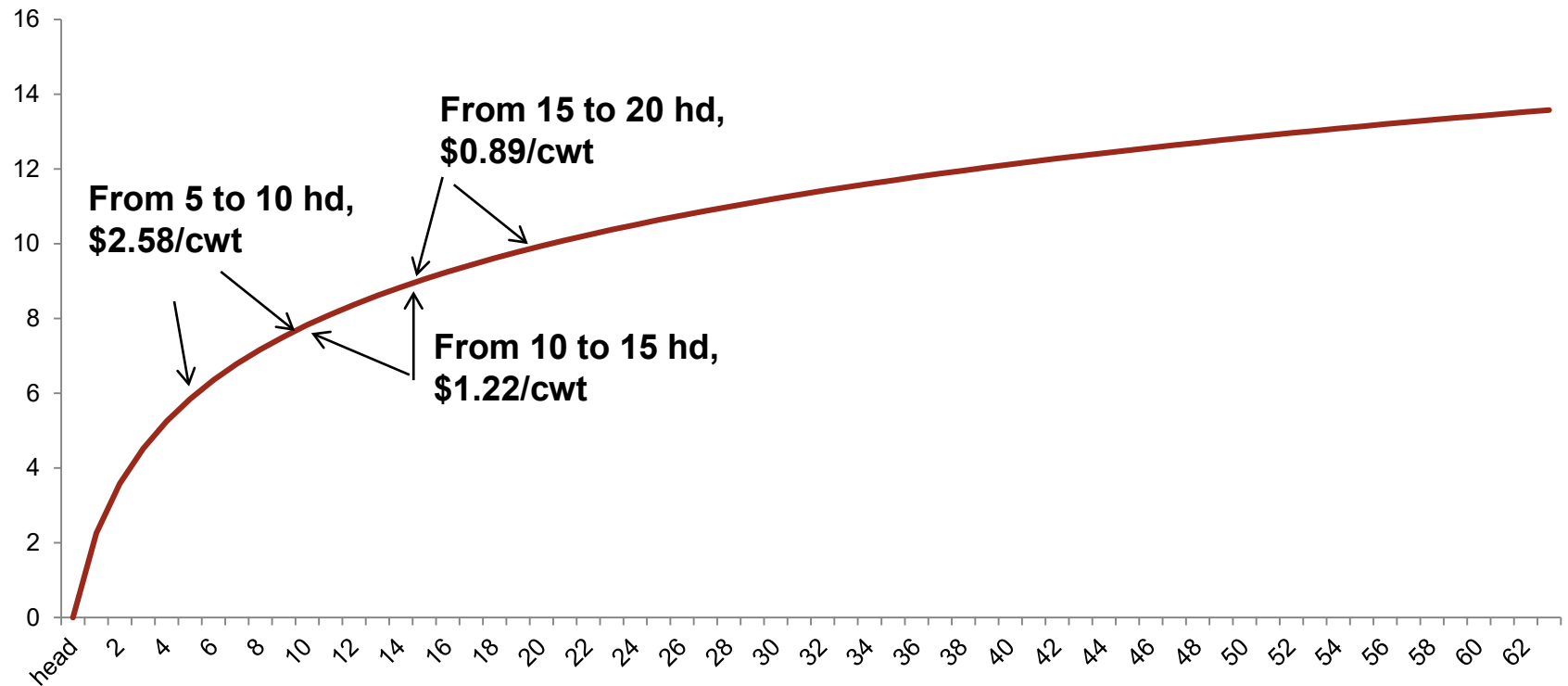


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# Effect of Lot Size on Sale Price: 2010-2013 Sale Data

lot size effect  
\$/cwt

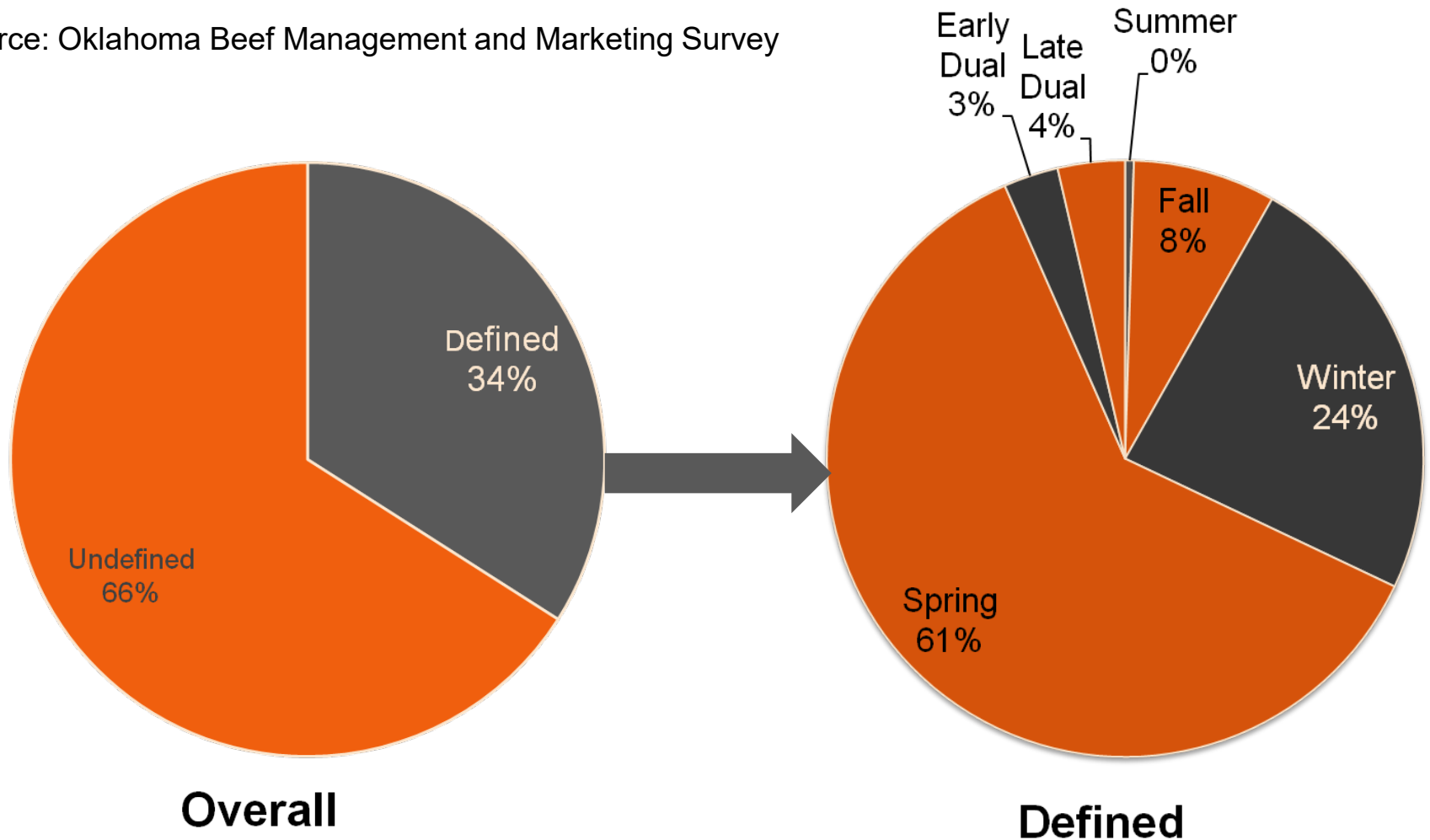


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# Defined Calving Seasons

Source: Oklahoma Beef Management and Marketing Survey



Overall

Defined



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# Poll Question 3



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# 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
  - Russell et al 2015; Ward, Ratliff, Lalman 2017; Williams et al 2014



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# 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](http://oqbn.okstate.edu)



# Superior Livestock Program Premiums Relative to VAC 24

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

Value-added health protocol administered to the lot	Number of lots	Least squares mean of sale price (\$/100 lb)	Regression coefficient
South Central			
VAC 34 or VAC 34+	1,590	166.70 <sup>a</sup>	4.25
VAC 45 or VAC 45+	1,838	171.80 <sup>b</sup>	8.63
Weaned: viral vaccinated <sup>2</sup>	638	167.49 <sup>a</sup>	5.04
Non-weaned: viral vaccinated <sup>2</sup>	223	164.27 <sup>c</sup>	1.82
VAC 24	510	162.45 <sup>c</sup>	0.00

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

Source: KSU Research Report, Volume 6, Issue 2, Article 14, 2020.





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# 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



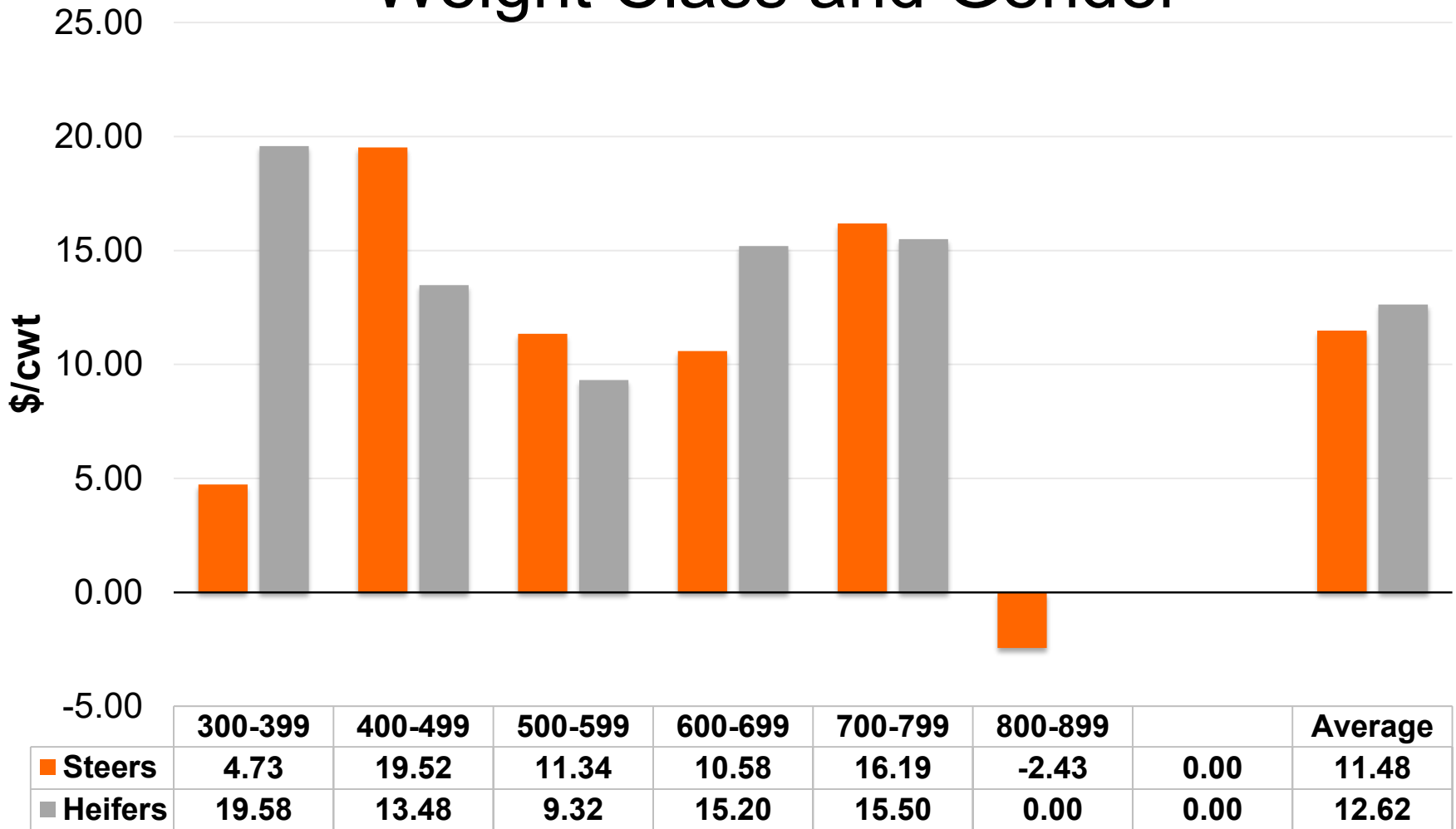
# MFA HealthTrack Premiums



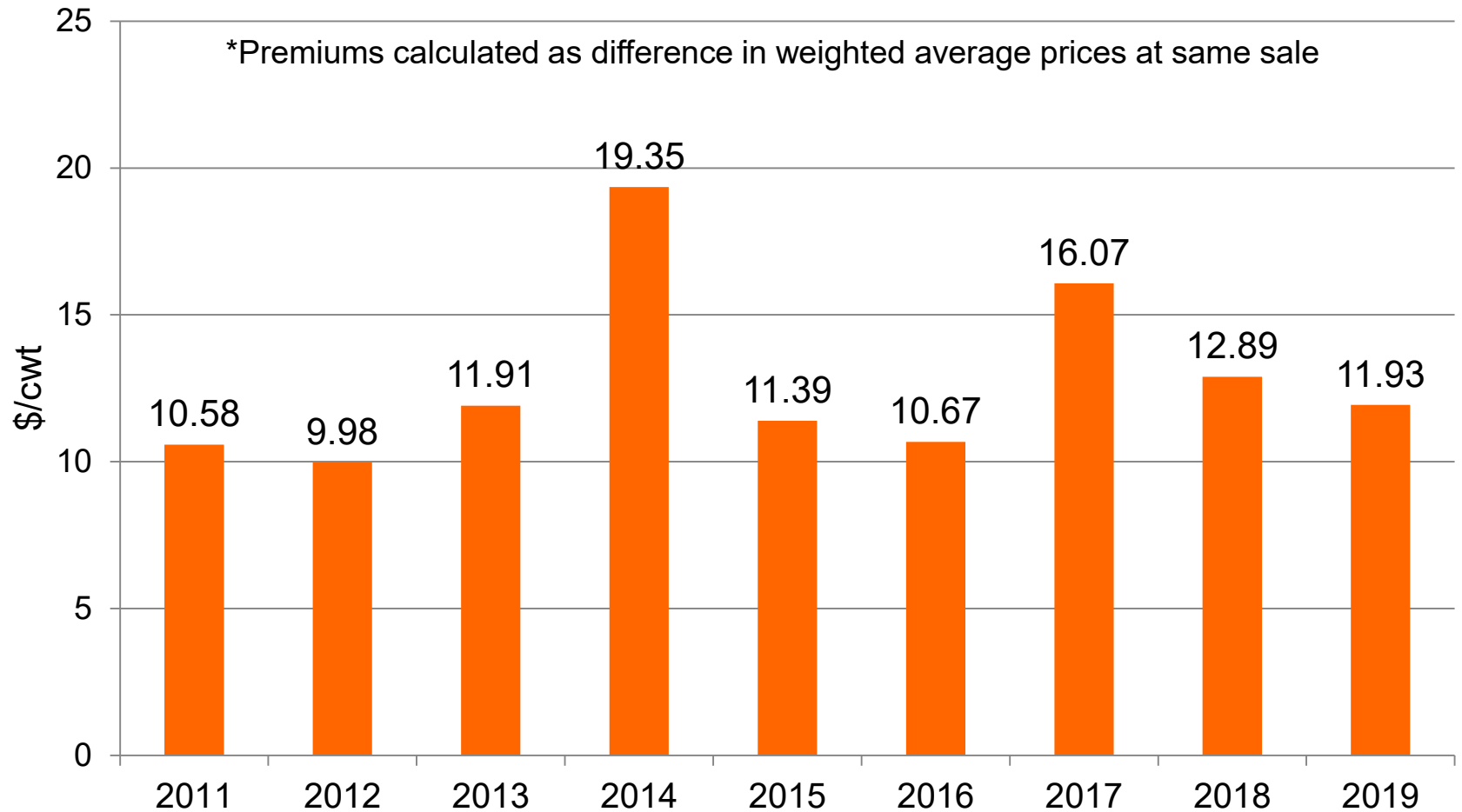
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# 2019 OQBN Premiums by Weight Class and Gender



## OQBN Premium over Calves Marketed with No Preconditioning (\$/cwt)\* All calves, 2011 -2019



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# Probability of Positive Returns for Various Management Practices

Practice Adopted	Net Returns (\$/cwt)	Probability of Positive Returns
Weaned	\$5.13	0.59
Vaccinated	\$6.01	0.64
Dehorned	\$6.31	0.59
Weaned and Vaccinated	\$5.36	0.59
Weaned, Vaccinated, and Dehorned	\$10.98	0.67
Weaned, Vaccinated, Dehorned, and Certified	\$12.90	0.79

Source: Williams, et al (2014)

Data Source: Oklahoma Livestock Auctions



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# 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.”**





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