



Replacement Females • Decisions that Matter

Randall Spare, DVM • Ashland Vet Center, Ashland, Kansas

“Why do I like my red truck?”



FEEDING QUALITY
FORUM

“Why do I like my red truck?”

**Performance Is Predictable
EXCEEDS MY EXPECTATIONS!**



2022 Chevy 2500 Silverado

- ✓ 6.6 L Engine
- ✓ 401 Horsepower @ 5200 RPM
- ✓ Tire size: LT275/65R2
- ✓ Trailering Capacity: 20,000 lbs.
- ✓ Gross vehicle weight rating: 10,850 lbs.
- ✓ Fuel Capacity : 36 gallons



ALL AGREE FOOD BUSINESS



USDA Prime KC Strip Steaks
\$15.48/lb



WHO ARE OUR CUSTOMERS?



- ✓ Stocker
- ✓ Feeder
- ✓ Commercial Cow-Calf
- ✓ Farm to table
- ✓ Consumer



COW-CALF PRODUCTION

“Price Taker”



COMMODITY

“Price Maker”



VALUE ADDED

“We are in the food business!”



COW-CALF PRODUCTION



COW-CALF PRODUCTION

Four Investments of Operation:

- 1. NUTRITION**
- 2. HEALTH**
- 3. TEMPERAMENT**
- 4. GENETICS**



TOOLS WE USE

EPD: Expected Progeny Difference is a prediction of how future progeny are expected to perform relative to progeny of other animals within the same database.

\$Indexes: Economic Multi-Trait Selection tool.
Value of output and the cost of production.



TOOLS WE USE

GENOMICS:

- Identifies genetic merit of animal
- Parentage
- Genetic defects
- Create EPDs for commercial animal



GENOMIC EPDs & INDEX EXAMPLE

Tag#	CED	DOC	CEM	CW	MARB	REA	MPI	ROI	SIRE NAME
#305	12.6	24	9.9	47	1.54	1.20	147	284	7488
#328	11.8	19	8.8	45	1.49	1.56	151	283	5680
#309	9.5	16	8.9	50	1.01	0.77	134	249	1039



CONVERSATIONS INITIATE CHANGE

- Involved
“Have you thought about this...?”
- Engaged
“What would happen if...?”
- Curious
“Think about this...”
- Why?
- How?



REAL WORLD POPULATION CHANGE



RANCH #1

800 HEAD

COW-CALF OPERATION



800 HEAD COW-CALF OPERATION

1992: Her to Ranch

- ✓ Bred 130 heifers using cross bulls
 - ✓ Calved in a dry
 - ✓ 3 hired hands plus me every 2 hours
- 30% dyst

It doesn't have to be this way!

5% death
Failure of Passive



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GENETIC CHOICE

CED +16	Production					YH +.2				MILK +26	Maternal			
	BW Acc % Prog	WW Acc % Prog	YW +130 Prog	RADG Acc % Prog	DMI Acc % Prog		SC Acc % Prog	HP Acc % Daus	CEM Acc % Daus		MkH MkD	MW Acc % Prog	MH Acc % Prog	\$EN %
+16 .40 2% 16	-1.2 .58 10% 22	+69 .46 40% 9	+130 .36 25%	+.33 .33 5%	+1.08 .33 55%	+.2 .51 80%	+.23 .47 90%	+10.5 .24 65%	+13 .29 10%	+26 .30 50%		+71 .36 40%	+.1 .39 75%	-21 65%

[Click here to show/hide Management EPD Section](#)

Management				
DOC +31	Claw		Angle	
	Acc % Prog	Acc % Prog	Acc % Prog	PAP Acc % Prog
+31 .44	+.56 .26 80%	+.58 .26 95%	+.62 .25 40%	+.27 .29 10%

[Click here to show/hide \\$Values Section](#)

Carcass						Angus-on-Dairy \$Values		\$Values					
CW Acc % Prog	Marb +1.84 Prog	REA +1.06 Prog	Fat Acc % Prog	Carc Grp Prog	Usnd Grp Prog	\$AxH % Prog	\$AxJ % Prog	\$M % Prog	\$W % Prog	\$F % Prog	\$G % Prog	\$BEEF +223 Prog	\$C % Prog
+50 .40 50%	+1.84 .38 1%	+1.06 .38 10%	-.047 .36 3%			+273 1%	+245 1%	+61 50%	+68 30%	+104 30%	+119 1%	+223 1%	+350 2%



800 HEAD COW-CALF OPERATION

2024: Commercial Angus Ranch

Calve 120 Heifers

- ✓ Range calving—no harvested forage —800 Acres
- ✓ Calve for 45 days
- ✓ Check two times per day
- ✓ Labor force includes ranch manager & two teenage sons
- ✓ One Dystocia
- ✓ Increased calf health



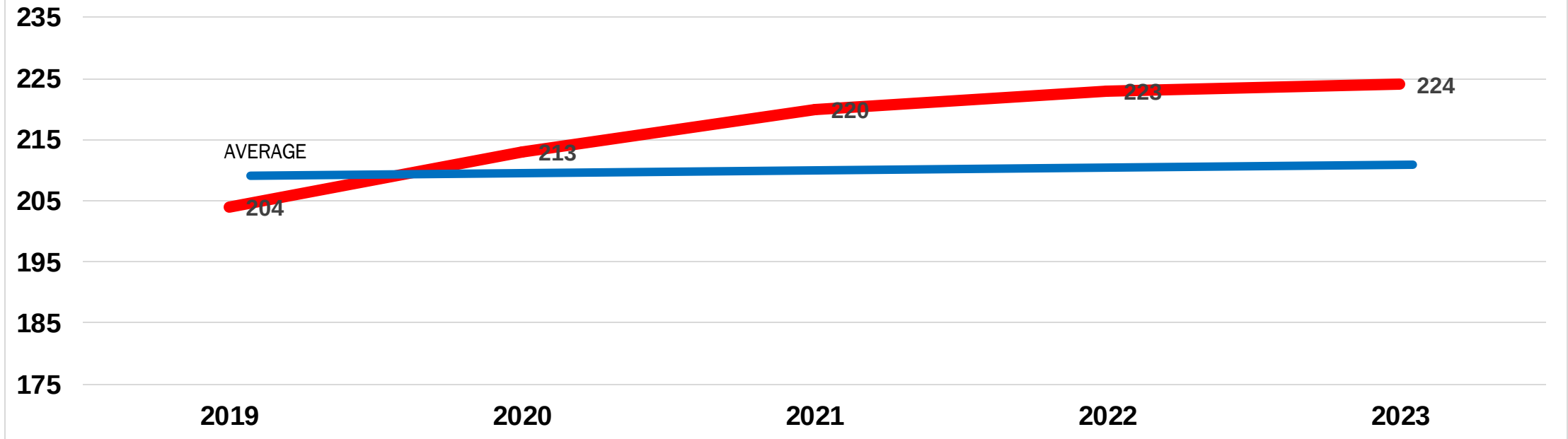
2023 HEIFERS • METHOD GENETICS EPDs

Ranch 2023 MG Averages				MG Commerical	Angus Average
EPD/Index	No. Hd.	Average		EPD/Index	Average
CED, %	236	12.4		CED, %	11.0
DOC, %	236	15		DOC, %	12
CEM, %	236	10.2		CEM, %	9.8
CW, lb	236	28		CW, lb	27
MARB, score	236	1.01		MARB, score	0.86
REA, sq in	236	0.82		REA, sq in	0.74
MPI, \$	236	132		MPI, \$	125
QPI, \$	236	115		QPI, \$	105
ROI, \$	236	224		ROI, \$	210



1197 HEIFERS TESTED

Within Herd Genetic Trend for
Retained Ownership Income (ROI) \$Per head Index
2019—2023



VALUE OF GENOMIC INFORMATION

COMMERCIAL FEMALES

Predictable Outcomes:

- ✓ Objectively describe steers
- ✓ Identify parentage of heifers
- ✓ EPD created on all females
- ✓ Breed all heifers:
 - Short breeding season - 45 d
 - Sell or retain any female
 - Risk/Benefit of feeding (opens/steers)



RANCH #2

180 HEAD COMMERCIAL COW HERD

Sire Selection Criteria

Top 5% CED

Top 25 % YW

< 50% YH, Milk, and MH

Top 25% Doc

Top 1 % Marbling

Top 10% Ribeye



RANCH #2 GENOMIC EPDs • 2023 HEIFERS

EPD/Index	No. Hd.	Average		EPD/Index	Average
CED, %	82	12.8		CED, %	11.0
DOC, %	82	20		DOC, %	12
CEM, %	82	10.2		CEM, %	9.8
CW, lb	82	36		CW, lb	27
MARB, score	82	1.21		MARB, score	0.86
REA, sq in	82	0.93		REA, sq in	0.74
MPI, \$	82	136		MPI, \$	125
QPI, \$	82	136		QPI, \$	105
ROI, \$	82	245		ROI, \$	210



82 HEAD SYNCHRONIZED AI & BULL BRED

Multiple End Point Valuations

Date	Weight/lbs.	Per Head Value
March 15	850#	\$1,900*
June 30	1,000#	\$2,200*
* Pratt Sale Barn		

19 Opens sent to FY		
November 15	1,500# @ \$2.00/#	\$3,000
	FEED COST	— \$500 COG
NET VALUE		\$2,500

Added Value: \$600 X 19 = \$11,400



RANCH #2 USPB RESULTS 2024

Feedyard:		Cattle Settlement Works	National Beef
Lot #:			
Method:			
Slaughter:	8/8/2024 Plant: Dodge City		
FY Lot #:	8968 Pen #: 79		

**Net Live Price
\$202.18**

1557#

**Gross Value
\$3148.0/ hd**

Lot Statistics

Live Wt:	118,339	Hot Yield:	64.80%	Avg Live Wt:	1,557	Net Live Price:	202.18	Net Live Prem/Disc:	180.09/Head
Hot Wt:	76,688			Avg Hot Wt:	1,009	Net Hot Price:	311.98	Difference:	11.57/cwt

Base Price	
USPB USDA KS Average	190.61
Formula Allowance	0.75
Grid Allowance	0.00
Base Live Price	191.36
Hot Yield Threshold	63.50%
Base Hot Price	301.35

Prem Summary	
Choice	17.40
Prime	19.55
CAB	5.94
CHB	2.00

Steers	Head	Live Wt	Hot Wt	Base Price	Amount	/cwt
Base Lot Amount	76	118,339	76,688	301.35	231,099.29	301.35
Quality Grade Adjustments					7,297.69	9.52
Yield Adjustments					67.20	0.09
Weight Adjustments					-1	
Other Adjustments					2	
Total Cattle Proceeds	76	118,339	76,688		239	

**Quality Grade Premium
\$7297.69**

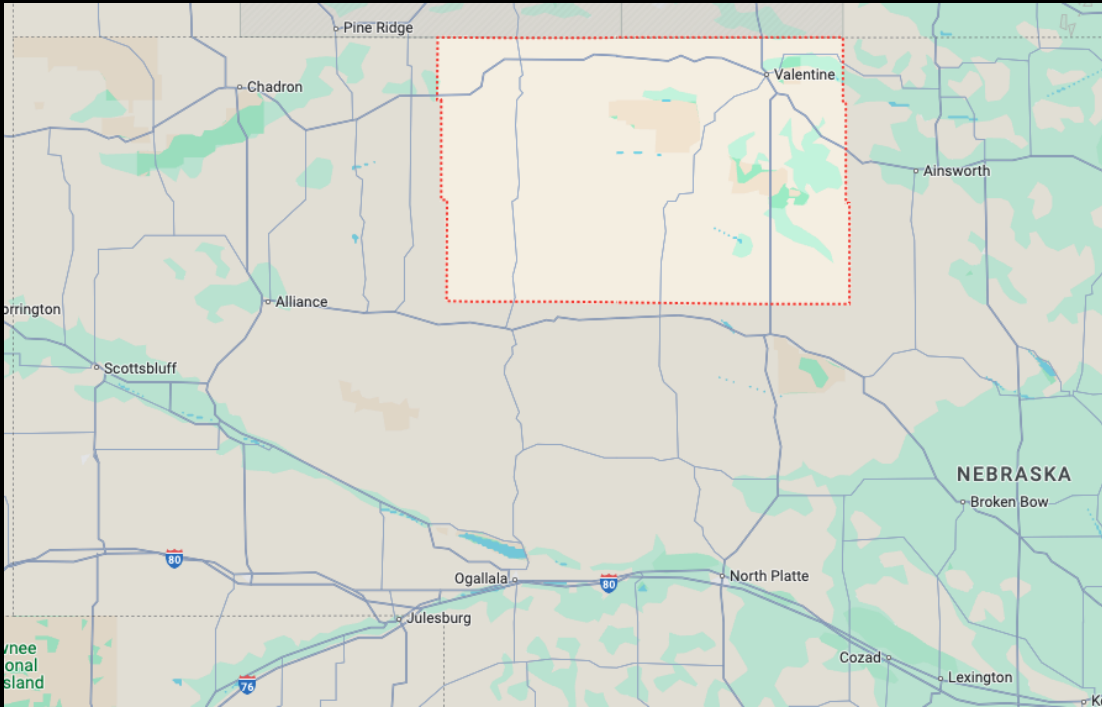
	Head	Hot Wt	Actual	TH	Price	Wt D
Quality Grade Adjustments						
Prime	17	16,849	21.97%		19.55	16,8
Choice Or Higher	76	76,688	100.00%	70.00%	17.40	23,0
					0.00	53,682
Select	0	0	0.00%		0.00	0
No Roll	0	0	0.00%		-7.08	0
Hard Bone	0	0	0.00%		-35.00	0
Total Quality Grade Adjustments						7,297.69



FEEDING QUALITY
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RANCH #3

700 COWS • CHERRY COUNTY, NEB



Purchased *value* bulls from seedstock
1,250 heifers since 2014

Sold “gate cut” heifers for 9 years

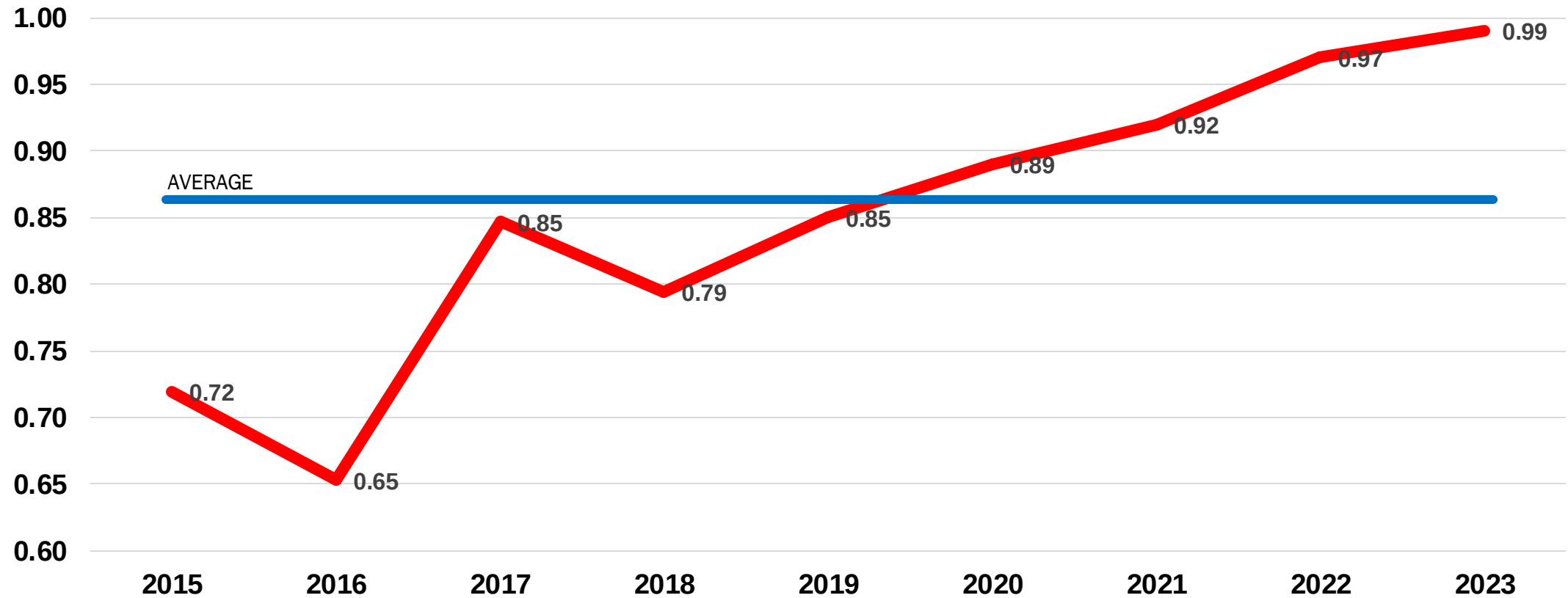
After 5 years rancher was curious about:

- ✓ Performance
- ✓ Genomic test
- ✓ Breeding
- ✓ Economic return

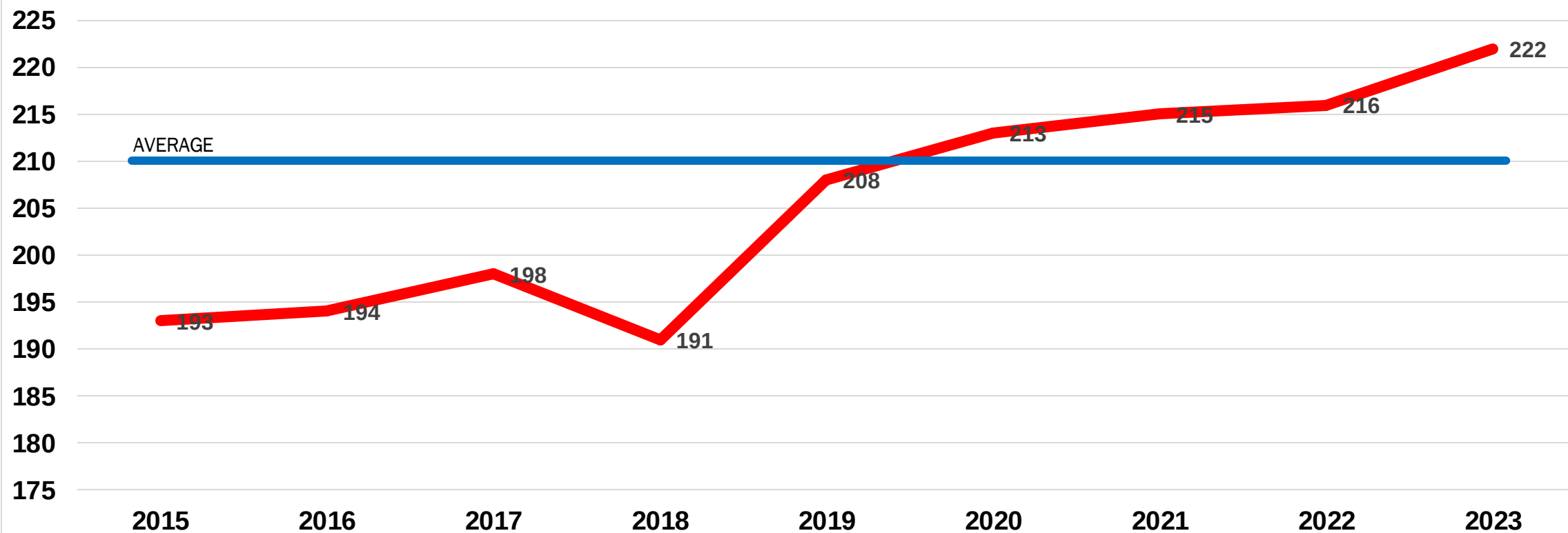


Within Herd Genetic Trend for Marbling EPD

2015—2023



Within Herd Genetic Trend for Retained Ownership Income (ROI) • \$ Per Head Index 2015—2023



METHOD GENETICS 2023 HEIFERS

Retained Heifers

EPD/Index	No./Hd.	Average
CED, %	161	11.0%
DOC, %	161	14%
CEM, %	161	9.7%
CW, lb	161	31
MARB, score	161	1.12
REA, sq in	161	0.77
MPI, \$	161	131
QPI, \$	161	120
ROI, \$	161	227

Heifers Sold

EPD/Index	N	Average
CED, %	147	10.4%
DOC, %	147	14%
CEM, %	147	9.7%
CW, lb	147	30
MARB, score	147	0.83
REA, sq in	147	0.76
MPI, \$	147	132
QPI, \$	147	107
ROI, \$	147	218



TOP NINE SIRES • 2023 HEIFERS

No.Calves	CED	CW	MARB	REA	ROI	ROI%
25	11.7	45	0.45	1.03	251	35
16	7.7	37	1.38	0.97	241	46
15	13.1	30	1.47	0.69	235	53
14	15.6	43	1.57	0.54	269	18
13	7.4	52	1.13	1.10	255	31
12	15.7	27	1.27	0.89	286	7
12	11.6	26	1.32	0.78	236	52
11	13.4	24	1.65	0.87	264	23
11	13.4	19	1.20	0.56	233	55

129 Calves



2024 Heifer Sire Average

CED	YW	YH	Milk	Doc	Marb	REA	\$B	MPI	QPI	ROI
+12	+120	+.46	+24	+22	+1.95	+.78	+208	+147	+168	+281
15%	40%	65%	27%	35%	1%	30%	3%	31%	7%	12%



USPB RESULTS 2018—2024

Harvest Date	S/H	Head	Wt	Dress%	CW	Choice or Higher	Prime	CAB	Week's Mkt	\$Above Base
2/6/2018	H	27	1,402	62.74%	880	100%	0.00%	70.21%	\$125.98	\$1.66
12/13/2023	S	40	1,608	62.03%	998	100%	19.99%	77.15%	\$170.93	\$7.55
1/16/2024	S	32	1,560	62.48%	975	100%	39.51%	44.58%	\$171.84	\$6.38
1/16/2024	H	26	1,469	65.26%	959	100%	57.57%	26.83%	\$172.76	\$15.96
2/19/2024	S	116	1,473	61.59%	907	99.47%	27.08%	57.18%	\$179.88	\$1.00



RANCH #3 2023 MANAGEMENT CHANGES

Genomic test heifers on the ranch

- ✓ Keep heifers – genomic targets
- ✓ Sell remainder at steer price
- ✓ Sell sires not meeting specific genomic benchmarks
- ✓ Breed heifers for 45 days
- ✓ Feed open heifers
- ✓ Target sire selection with higher \$Beef



AVC's MARKET MAKER'S BEEF

2nd Quarter 2024 • 15,000 head inseminated

TRAIT	EPD	%RANK	BREED AVG.
CED	+14	6%	+6
YW	+133	23%	+112
YH	+.53	47%	+.5
MILK	+25	56%	+26
MARB	+1.89	2%	+.60
REA	+1.07	9%	+.61
\$BEEF	+228	2%	+143



UNIQUE
OF
CONNECTED TO
PEOPLE.



FEEDING QUALITY
FORUM

Thank You

