

South TX Beef Meeting

July 26, 2019

John Merrill

Area Beef Manager-Tx. La

John.Merrill@genusplc.com

Chart of the Month

Average Cow/Calf Profit (Loss)
Cash Costs Only



Generate revenue and drive efficiency

- Aggressively Manage Reproduction
 - Front load calving season
 - Goal of 80% calves in 30 days
 - Drive pounds weaned/cow exposed
 - Older calves generate more revenue/profit
- Long Term Plan
 - Genetics are only permanent and additive input
 - Not a quick return but an investment
 - Have a plan where you want to go
 - Manage costs with feed efficiency and mature size
 - Use data and technologies available to you
- Who will buy your calves?
 - What do they want?
 - What drives value?
 - Where do you need to improve?



ABS 30 DAY GAME CHANGER

Combine proven ABS genetic gains with reproductive management tools to improve profits.

Pregnancy loss, early calving season, and low calf survival are significant factors that can reduce your bottom line.

Calves born earlier in the first 30 days after calving season have significantly higher chances of becoming pregnant early, leading to more calves remaining in the herd.

At 223 lbs of average daily gain, more calves born in the first 30 days represent the payweight of your calving.

HERD REPRODUCTIVE AUDIT

Date when first calf is born (start of calving season) _____

Date of the 30th day of the calving season _____

Number of calves born 30 days after the first calf _____

Number of calves born in the first 30 days _____

Total number of calves born during the calving season _____

Percentage of cows calving in the first 30 days _____

Synchronization and A.I. is a combination proven to increase the percentage of cows calving in the first 30 days.

Circle your ABS region for more information on how to implement these practices.
If unable, please call 1-800-468-7700 (24/7 FAX)

"Just a portion of the reproductive audit data from a pregnancy loss report 100 days to first and 300 days to calving to improve your herd's profit and efficiency!"

How do you know you need a genetic audit?

Benchmark against who?





Beef consumption

Last 50 years of US per capita consumption in lbs							
	Beef	Pork	Chicken	Turkey	Fish	Total	
1977	91.8	47.0	42.8	8.7	12.6	202.9	
1987	73.9	49.2	57.2	14.7	16.1	211.1	
1997	65.7	47.8	71.9	17.3	14.3	217.0	
2007	65.3	50.8	86.4	17.6	16.3	236.4	
2017 est.	57.1	50.8	91.6	17.0	15.5	232.0	
50 year change	-37.8%	8.1%	114.0%	95.4%	23.0%	14.3%	
USA's population increased 106,300,000 or 48.3% since 1977							
% after growth	-7.8%	60.3%	217.3%	189.7%	82.4%	69.5%	

Chicken leads the race

Day 43

Day 57

Day 71

Day 85

1957 Chicken Genetics



2001 Chicken Genetics



Pigs focusing on growth/efficiency

1972



836 Lbs



220 Lbs

FC: 3.8



32%

2007



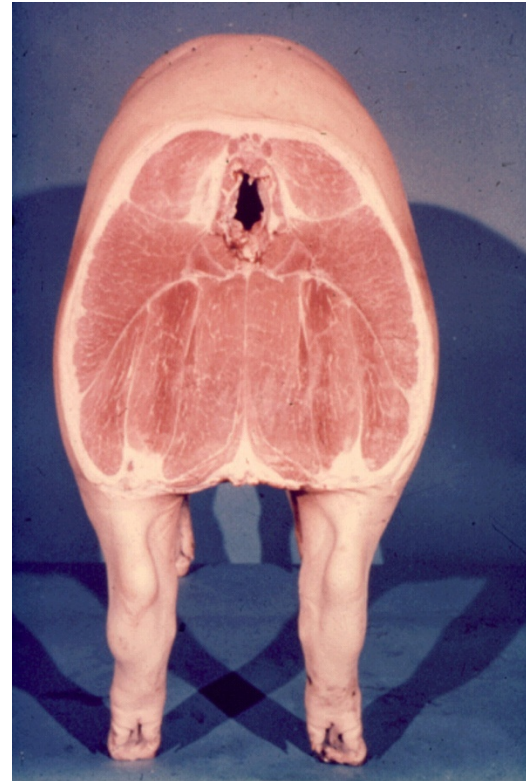
715 Lbs



275 Lbs

FC: 2.6

...and lean %

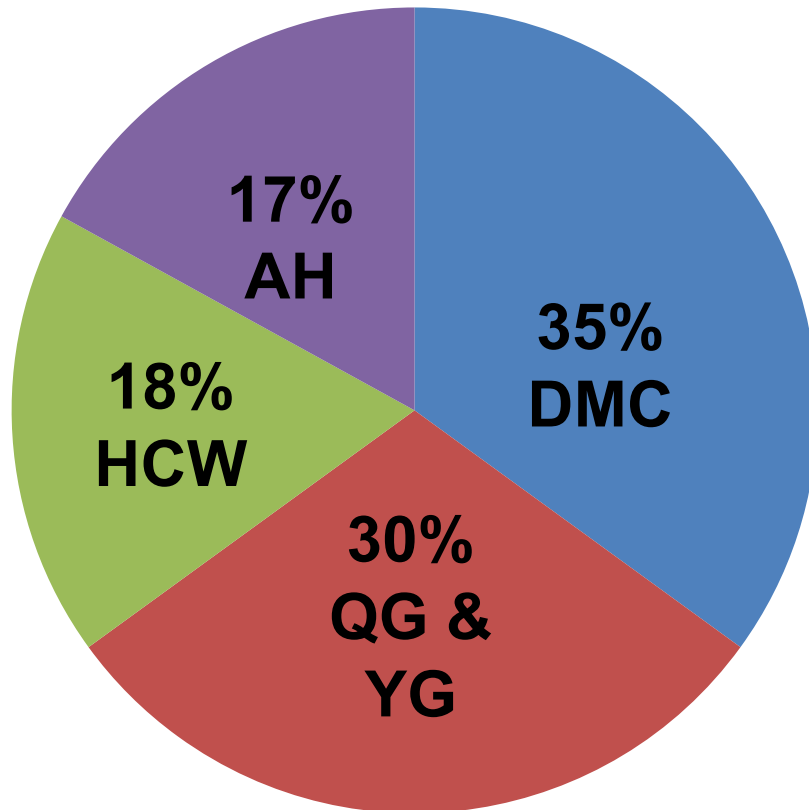


Will the way we sell/value
cattle change?

Using data to maximize customer profit from genetic progress

*Create, deliver and demonstrate the
value proposition*

Value Discovery and Feed Yard Profit Drivers



- Dry Matter Conversion (Feed Efficiency)
- Carcass Traits (Quality and Yield Grade)
- Carcass Weight
- Animal Health

Data drives improvement

- The Angus Sire Alliance continues to be an important part of our program
- Developed significant PT and validation capabilities to collect full lifecycle data (maternal, performance, **feed intake**, **carcass**, etc.) with other partners in Angus and other breeds

- Full lifecycle data collection for Beef x Dairy



Proven Sire Alliance bulls deliver profit and predictability from Pasture to Plate™

Long lasting, productive and profitable daughters

IN THE PASTURE

Beyond performance, carcass value and efficiency, daughters of Sire Alliance bulls are monitored for maternal function and profitability.

The Sire Alliance Maternal Index incorporates daughter productivity and fertility data including Heifer Pregnancy and Stobility.

High performing steers backed by documented efficiency genetics

IN THE FEEDLOT

The Sire Alliance is the longest running program of its kind with progeny individually measured for feed intake since 1998.

While high feed cost in recent years has made feed efficiency a hot trait of interest, no one can match the Sire Alliance's foresight and decade and a half of intake measurements.

Carcasses that deliver quality and documented efficiency genetics

ON THE RAIL

Today, the Sire Alliance and Circle A Ranch are the largest contributors to the American Angus Association carcass data base.

The typical Sire Alliance graduate has 20 steer progeny evaluated for carcass merit which by itself generates higher reliability and accuracy levels than 90% of the bulls that qualify for the Main Sire Summary listing.

The Angus Sire Alliance Program was initiated by Circle A Angus Ranch in 1998 to objectively measure commercial performance and real world value from birth-to-harvest. The program pioneered the use of selection indexes in the beef industry and remains the most comprehensive source of feedlot profit, efficiency and maternal performance.

ABS has been a marketing partner with Circle A since the first bulls graduated in 1998 and the Sire Alliance program has been an exclusive ABS progeny testing program since 2008. The data derived on ABS sires not only provides you, our customers, added accuracy and reliability, but also unique and valuable insight into feed efficiency and commercial profitability that is not available anywhere else today.

Beyond the proven Sire Alliance graduates offered in this directory, we are also utilizing Sire Alliance data to develop and select the next generation of ABS sires.

TOTAL PROFIT

- Real World Data™ for real world profit
- Complete performance data from birth to harvest including:
 - Calving Ease
 - Pre-weaning performance
 - Feedlot gain and intake
 - Carcass yield and quality
- Derived from large commercial contemporary groups
- The first modern beef selection index in 1996 and still the most comprehensive

Spring 2018 Sire Alliance Bull	TOTAL PROFIT (\$/CWT)	FEED INTAKE (lb/1000)	FEED EFFICIENCY (lb/1000)	PROFIT (\$/CWT)
1 BARPAGE	188.7	76.1%	76.1%	25
2 PROFITRE Bull	185.1	76.1%	76.1%	25
3 BRUIZER	184.0	76.1%	76.1%	25
4 FUTURE FOCUS Bull	184.0	76.1%	76.1%	25
5 BARPAGE	183.0	76.1%	76.1%	25
6 PROFITRE New	177.0	76.1%	76.1%	25
7 ESTABLISHED	174.0	76.1%	76.1%	25
8 FORESTAD	173.0	76.1%	76.1%	25
9 FINE ARTS New	171.0	76.1%	76.1%	25
10 HANNAKER P15	170.0	76.1%	76.1%	25
11 FUTURE FORCE	170.0	76.1%	76.1%	25
12 RESERVE	169.0	76.1%	76.1%	25
13 OUTRIGHT New	168.0	76.1%	76.1%	25
14 NEW LEVEL	168.0	76.1%	76.1%	25
15 BARKER BOW	168.0	76.1%	76.1%	25
16 ABSOLUTE	167.0	76.1%	76.1%	25
17 IMPRESSION	167.0	76.1%	76.1%	25
18 FRONT & CENTER	167.0	76.1%	76.1%	25
19 PROTOCOL	167.0	76.1%	76.1%	25
20 ROCKCUT New	166.0	76.1%	76.1%	25
21 LONESOME	166.0	76.1%	76.1%	25
22 SUBSTANTIAL	166.0	76.1%	76.1%	25
23 ALBERTA	166.0	76.1%	76.1%	25
24 EXPRESSION New	165.0	76.1%	76.1%	25
25 BONWENT	165.0	76.1%	76.1%	25
26 BARRONARD	165.0	76.1%	76.1%	25
27 PROOFER	165.0	76.1%	76.1%	25
28 BULLY BOO	165.0	76.1%	76.1%	25
29 FUTURE BULL	165.0	76.1%	76.1%	25
30 FOCUS POINT	165.0	76.1%	76.1%	25

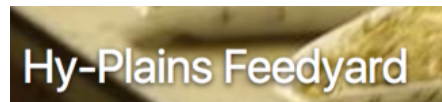
FEED EFFICIENCY

- The Feed Efficiency Index identifies the most profitable combinations of intake and gain
- Backed by 20 years of individual progeny intake data
- Feed efficiency genetics can account for as much as \$40 value difference per calf

Spring 2018 Sire Alliance Bull	FEED EFFICIENCY INDEX	FEED INTAKE (lb/1000)	FEED EFFICIENCY INDEX	FEED INTAKE (lb/1000)
1 PROFITRE	101.0	76.1%	76.1%	25
2 ABSOLUTE New	100.0	76.1%	76.1%	25
3 OUTRIGHT New	99.0	76.1%	76.1%	25
4 FRONT & CENTER	98.0	76.1%	76.1%	25
5 PROFITRE Bull	97.0	76.1%	76.1%	25
6 BARPAGE	96.0	76.1%	76.1%	25
7 IMPRESSION	95.0	76.1%	76.1%	25
8 UP RIVER	94.0	76.1%	76.1%	25
9 FUTURE FORCE	93.0	76.1%	76.1%	25
10 SUBSTANTIAL	92.0	76.1%	76.1%	25
11 WIND BREAK	91.0	76.1%	76.1%	25
12 BRILLIANCE	90.0	76.1%	76.1%	25
13 ROCKCUT New	89.0	76.1%	76.1%	25
14 PROFITRE New	88.0	76.1%	76.1%	25
15 FRONTMAN	87.0	76.1%	76.1%	25
16 NEW LEVEL	86.0	76.1%	76.1%	25
17 ESTABLISHED	85.0	76.1%	76.1%	25
18 PROTOCOL	84.0	76.1%	76.1%	25
19 FUTURE FORCE	83.0	76.1%	76.1%	25
20 FUTURE FORCE	82.0	76.1%	76.1%	25
21 FUTURE FORCE	81.0	76.1%	76.1%	25
22 COMPLEMENT	80.0	76.1%	76.1%	25
23 ROCKCUT New	79.0	76.1%	76.1%	25
24 FUTURE FOCUS Bull	78.0	76.1%	76.1%	25
25 FUTURE FOCUS	77.0	76.1%	76.1%	25
26 FUTURE FOCUS	76.0	76.1%	76.1%	25
27 SPECIAL FOCUS	75.0	76.1%	76.1%	25
28 CORE	74.0	76.1%	76.1%	25
29 HANNAKER P15	73.0	76.1%	76.1%	25
30 HIGH WOOD	72.0	76.1%	76.1%	25

MATERNAL PROFIT

- This index looks at lifetime value difference of a bull's daughters
- Includes Milk, Heifer Pregnancy, and Cow Stayability data in addition to performance, efficiency and carcass merit
- An excellent guide to balancing all economically important traits if you are retaining heifers



ABS Feed Intake / Efficiency testing

- Started with Angus Sire Alliance relationship
- 20 years of progeny intake data
- Over 200 Sires tested
- Represents most sire lines in the Angus breed
- Results published as Profitability Index



Feed Efficiency

- The Feed Efficiency Index identifies the most profitable combinations of intake and gain
- Backed by 20 years of individual progeny intake data
- Feed efficiency genetics can account for as much as \$40 value difference per calf

Spring 2018 Sire Alliance Data		Feed Efficiency Index	Feed Efficiency %Rank	ADG EPD	ADG Acc	ADG %Rank	Intake EPD	Intake Acc	Intake %Rank
1	BRUISER	\$ 27.69	Top 1%	+10	.76	Top 10%	-.77	.55	Top 3%
2	ASSERTIVE (New)	\$ 21.62	Top 1%	+08	.60	Top 15%	-.59	.35	Top 5%
3	OUTRIGHT (New)	\$ 20.90	Top 1%	+22	.47	Top 1%	+42	.36	
4	FRONT & CENTER	\$ 20.53	Top 1%	+03	.35		-.93	.32	Top 2%
	PROTÉGÉ (Ref)	\$ 19.87	Top 1%	+14	.56	Top 3%	-.09	.41	
5	RAMPAGE	\$ 19.73	Top 2%	+11	.38	Top 5%	-.31	.32	Top 25%
6	ABSOLUTE	\$ 18.67	Top 2%	+15	.70	Top 2%	+04	.53	
	DAYBREAK (Ref)	\$ 18.33	Top 2%	+11	.78	Top 5%	-.23	.60	Top 35%
7	MONUMENT	\$ 17.72	Top 3%	+11	.71	Top 10%	-.22	.51	Top 35%
8	EMBLAZON 999 (New)	\$ 17.69	Top 3%	+09	.40	Top 10%	-.34	.32	Top 20%
9	UP RIVER	\$ 17.58	Top 3%	+04	.45		-.69	.35	Top 4%
10	RESERVE	\$ 17.17	Top 3%	-.05	.51		-1.25	.48	Top 1%
11	PAYWEIGHT 1682	\$ 16.16	Top 4%	+01	.67		-.77	.43	Top 3%
12	SUBSTANTIAL	\$ 15.20	Top 5%	+05	.64	Top 25%	-.45	.49	Top 10%
13	WIND BREAK	\$ 14.74	Top 5%	+01	.63		-.72	.49	Top 4%
14	BRILLIANCE	\$ 14.20	Top 10%	+02	.76		-.60	.61	Top 5%
15	ROCKMOUNT (New)	\$ 14.14	Top 10%	+01	.49		-.72	.36	Top 4%
16	PROFICIENT (New)	\$ 13.67	Top 10%	+07	.46	Top 20%	-.28	.32	Top 25%
17	FRONTMAN	\$ 12.36	Top 10%	-.03	.65		-.84	.47	Top 2%
18	NEW LEVEL	\$ 11.22	Top 15%	+09	.78	Top 10%	+04	.61	
19	DESTINATION 630	\$ 11.13	Top 15%	+01	.56		-.56	.45	Top 10%
20	PROTOCOL	\$ 11.01	Top 15%	+14	.37	Top 3%	+35	.32	
21	RESOLUTE	\$ 10.62	Top 15%	+05	.63	Top 30%	-.23	.46	Top 35%
22	FUTURE FORCE	\$ 10.39	Top 15%	+05	.40	Top 30%	-.19	.36	
23	FINAL PRODUCT	\$ 10.07	Top 15%	+08	.68	Top 15%	+04	.48	
24	COMPLEMENT	\$ 9.08	Top 20%	+10	.78	Top 10%	+19	.59	
25	HOMESTEAD (New)	\$ 8.66	Top 20%	+09	.49	Top 15%	+13	.34	
	FUTURE FOCUS (Ref)	\$ 8.62	Top 25%	+04	.76	Top 35%	-.18	.62	
	IN FOCUS (Ref)	\$ 8.35	Top 25%	+06	.79	Top 25%	-.03	.54	
26	BLUESTEM	\$ 8.24	Top 25%	-.00	.60		-.48	.42	Top 10%
27	SPECIAL FOCUS	\$ 7.94	Top 25%	-.00	.62		-.43	.42	Top 15%
28	2U66	\$ 7.42	Top 30%	-.01	.59		-.50	.51	Top 10%
29	RAINMAKER P175	\$ 7.29	Top 30%	+07	.68	Top 20%	+12	.47	
30	HIGH NOON	\$ 6.58	Top 35%	+04	.75	Top 35%	-.09	.55	



COWS

Do they eat the same?

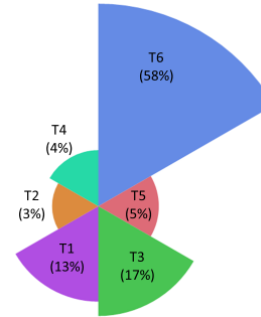
- USDA Clay Center data says no
 - Some cows eat twice as much as others – and still weight the same.
- University of Lethbridge data says no
 - Top 1/3 eat 10% more than the bottom 1/3.
- Data says:
 - Big eaters eat as much as **3 tons more dry matter per cow per year.**
- What does that cost? \$150 - \$300 / cow?



Profit From Genetic Progress



Partnering with a leading US feedlot to develop profitable terminal genetics



Longstanding ABS beef genetics customer

R&D partnership to discover value of terminal genetics in customer system

Proprietary profit-focused index being finalised

<2015

2016

2017

2018

2019+

Starting to collect data on total profitability from birth to harvest

Sire Index



Develop a scalable commercial supply and value share model



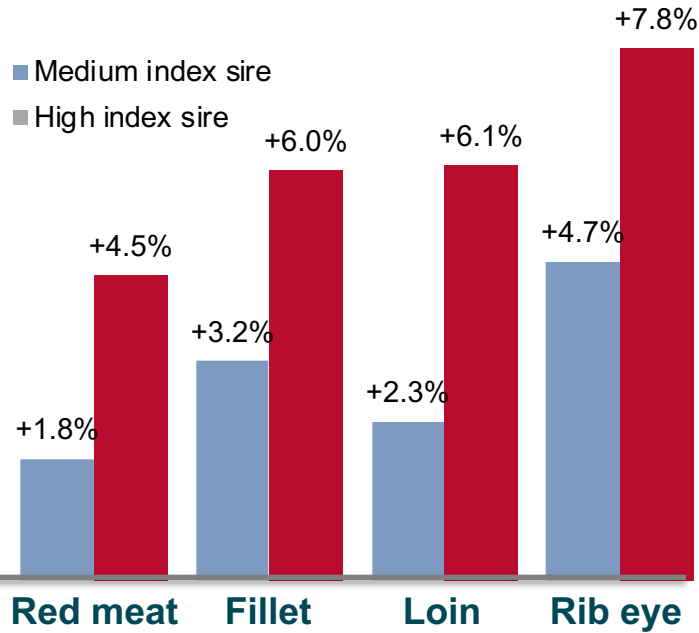
US Terminal Index validation results

	Steers		Heifers	
	Sire 1	Sire 2	Sire 1	Sire 2
Index	High	Average	High	Average
Number Progeny	56	50	44	40
Hot Carcass Weight (lb)	934	902	812	785
Yield Grade	3.2	3.4	2.5	3.0
Marbling Score (QG)	572 (CH ^o)	494 (CH ⁻)	495 (CH ⁻)	451 (CH ⁻)
Feed Conversion	5.5	6.0	4.7	5.4
Carcass Value	\$1,675	\$1,577	\$1,486	\$1,395
Production Costs	\$506	\$527	\$345	\$387
Marginal Value (Breakeven)	\$1,170	\$1,050	\$1,140	\$1,008
Sire Advantage	\$120/hd	--	\$132/hd	--

Delivering more profitable beef genetics to a leading European beef processor

Demonstrating which genetics produce more profitable carcasses

Carcass yield compared with low indexing sire

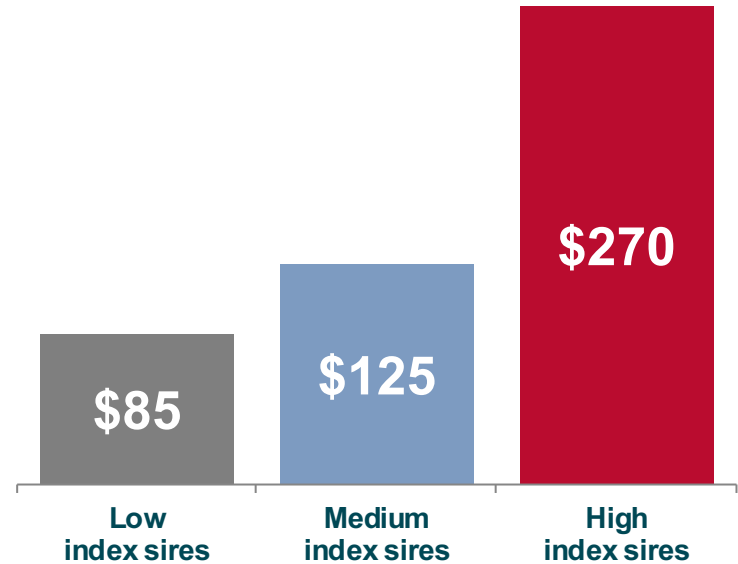


Baseline:
low index
sire



Delivering incremental profit

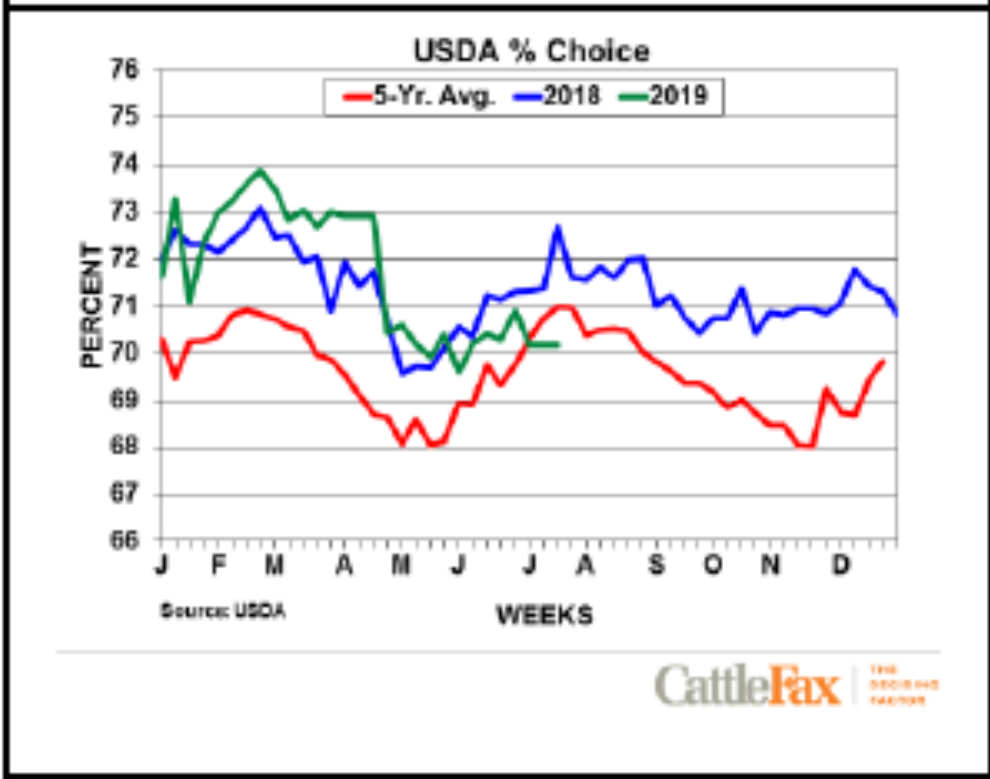
Profit per head of cattle realised by our customer



Source: Actual data from leading UK customer

Close the loop and capture value

- Connections will lead to more transparency
- Document health, nutrition and genetics
- Validation of genetics
 - Reduce the risk
 - Know how to manage
- Predict the outcome
 - Angus Sire Link and similar programs
 - Validation programs like we are working on with Cactus Feeders



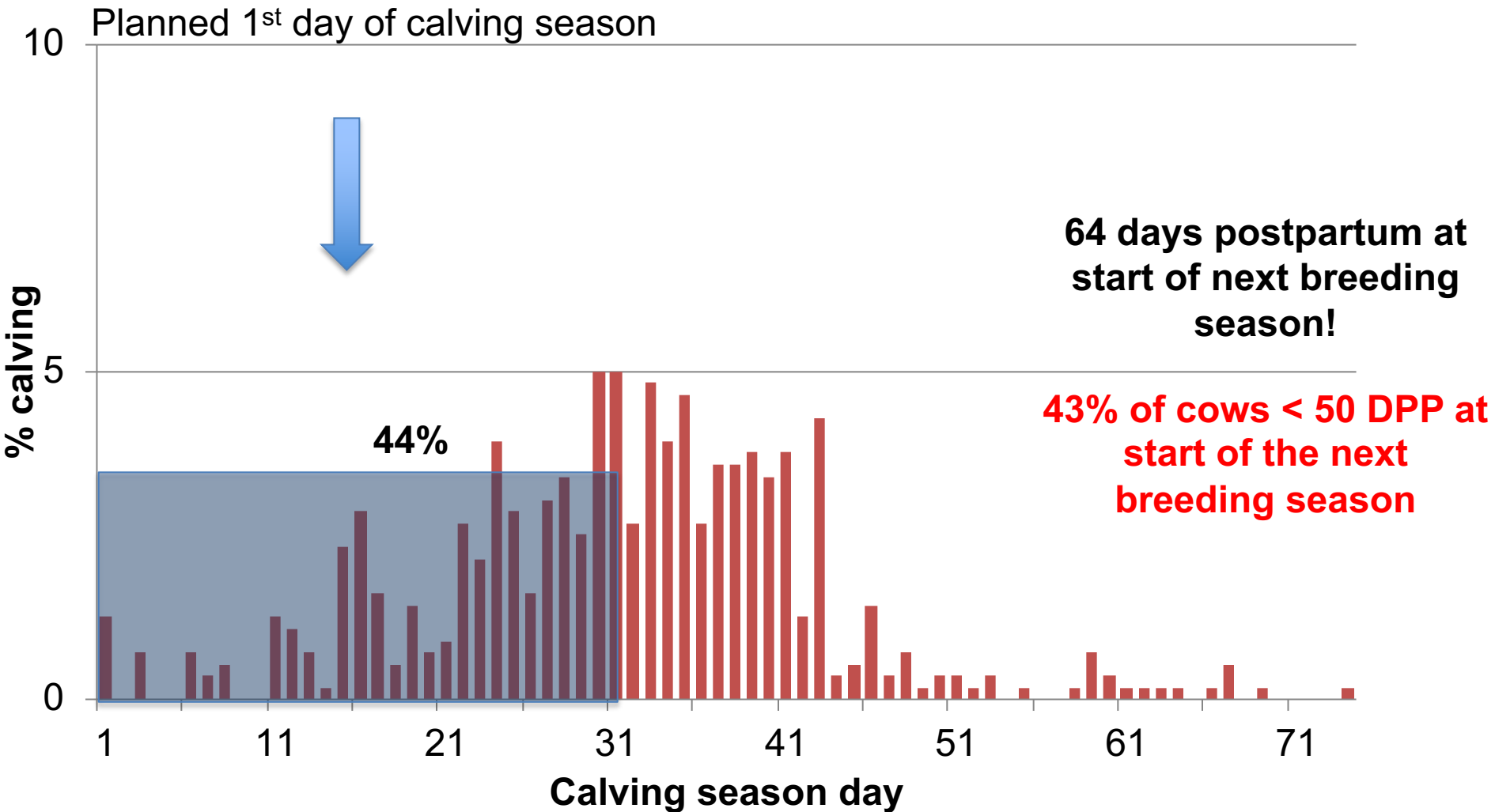
The percentage of cattle grading Choice through the first half of the year averaged 71.8 percent, .4 percent above the first half of 2018 average of 71.4 percent, and well above the five-year average of 69.6 percent. Improving herd genetics contributed to the historically high percentage of the cattle grading Choice.

ECONOMICS OF IMPLEMENTING TAI PROGRAM

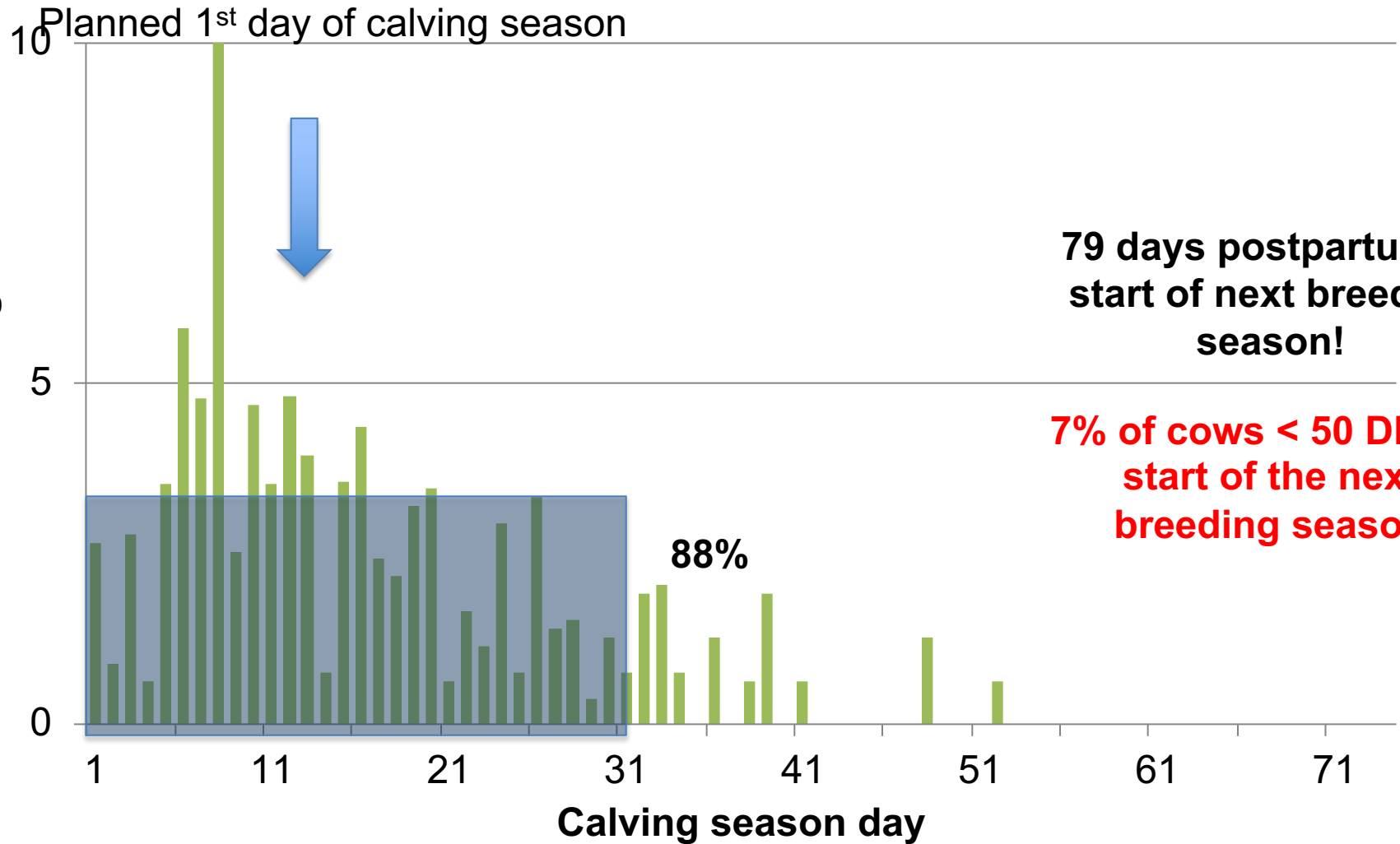


**Pregnancy has 4 times
greater economic
impact than any other
production trait!**

CALVING DISTRIBUTION AFTER EXPOSURE TO BULLS



CALVING DISTRIBUTION AFTER EXPOSURE TO AI AND ES





123 years ago . . .

The work of breeding good animals is a work for a long time, requiring pluck, patience, a high degree of intelligence, and a close practical judgment.

Money will buy such animals, but it will not breed them successfully even after it has bought them.

That is the work of brains.

A handwritten signature in cursive script that reads "W. D. Hoard".

Founder, 1885