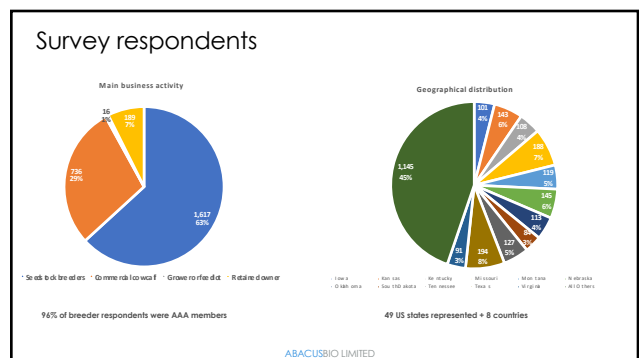
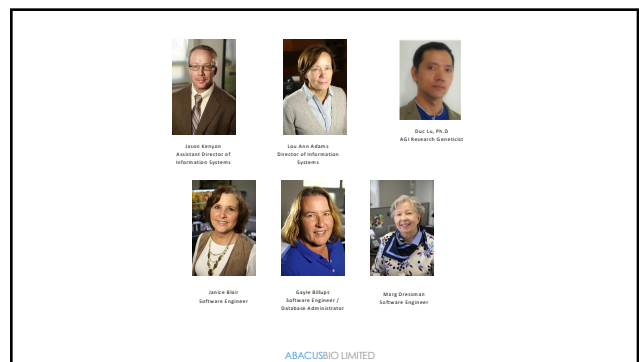
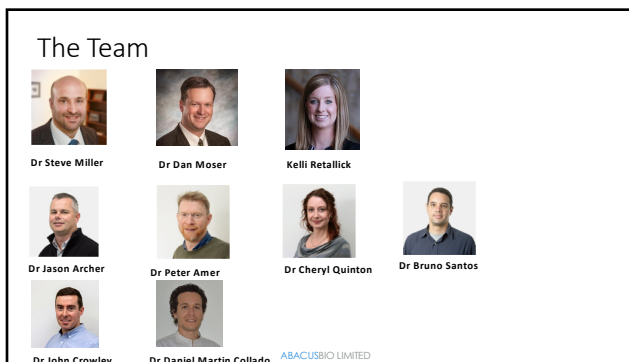
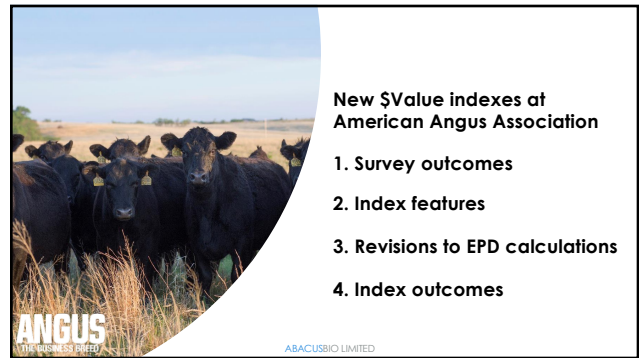




American Angus Association - \$Value Indexes Review

Demographics

Trait preference

A. What of the feeding systems below best describe the cow-off (30 remaining part of your operation)?

- ☐ These round grazing (cow and calves are fed year around on grass or crop residue with very limited supplemental feed)
- ☒ Cow herd is grazed year round on grass or crop residue but replacement heifers and bulls are fed cow waste
- ☐ Cows are grazed on grass and crop residue from spring through fall with supplemental feed fed in winter
- ☐ Cow herd is grazed year round on pasture (supplemental feed fed as early as feeding)
- ☐ Drylot where cow herd receives over 75% of their annual feed through feeding of hay, grain and other supplemental feed

1000medit
Preferences survey
Help you to understand your preferences and make better decisions

Which of these 2 (hypothetical) alternatives do you prefer?

Feed cows
8 more heifers per 100 cullings
Highly efficient use of good feed

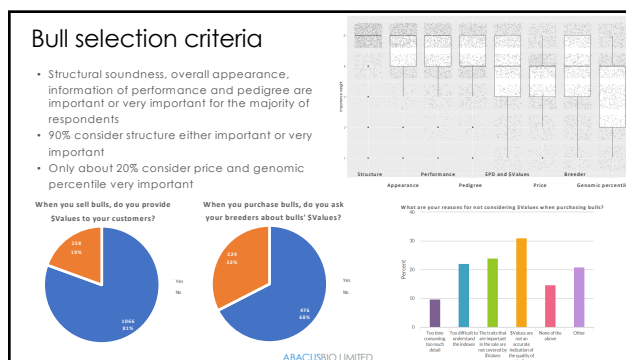
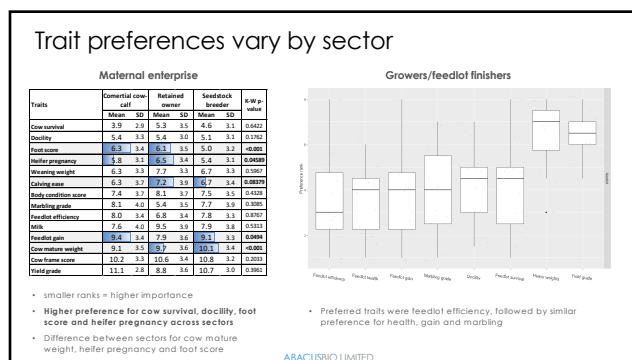
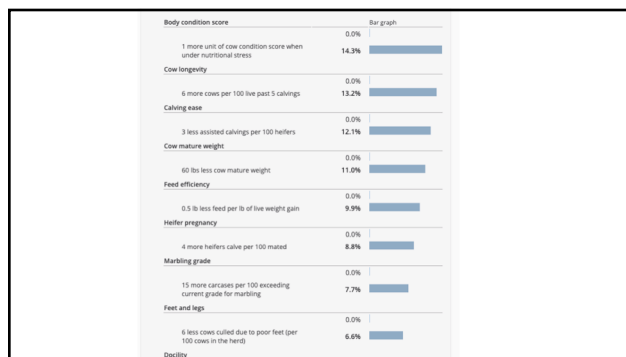
OR

Cow mature weight
60 lbs less cow mature weight

OR

OR

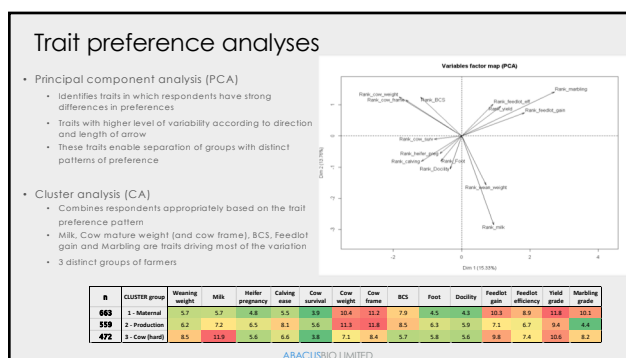
ABACUSIO LIMITED

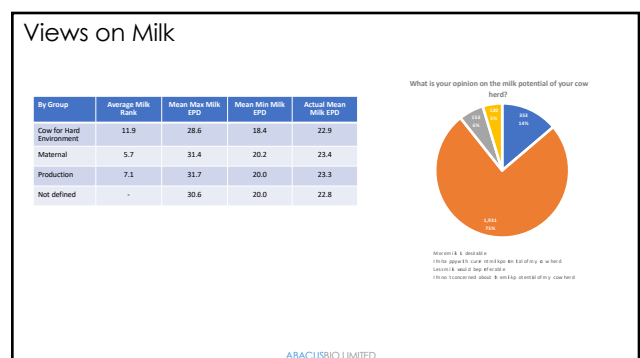
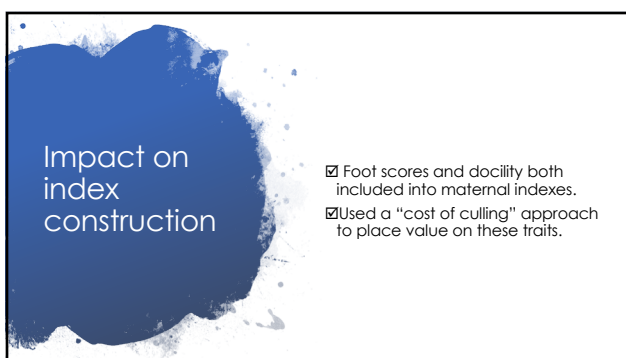
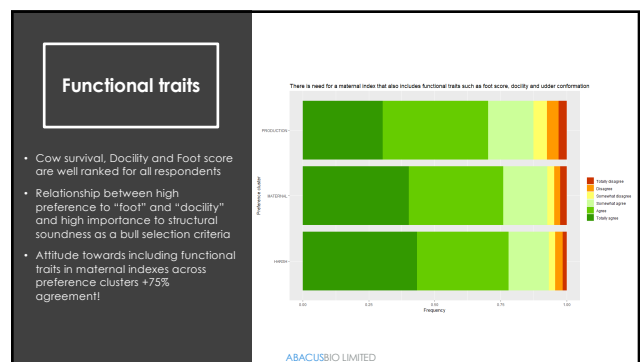
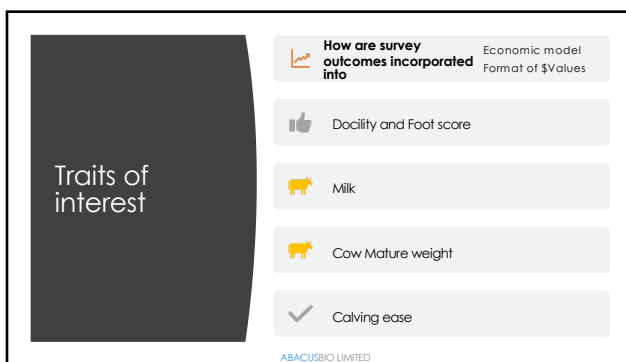
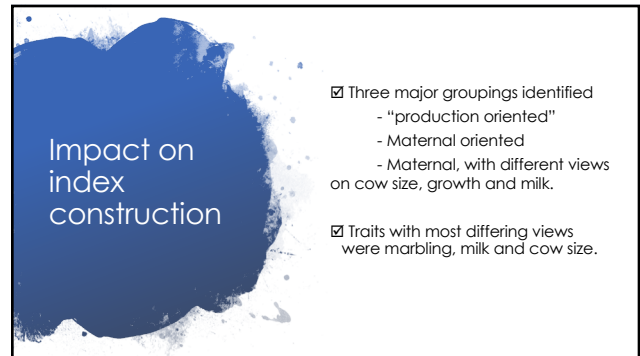
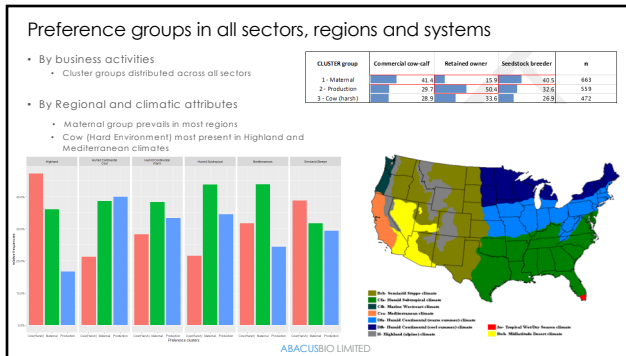


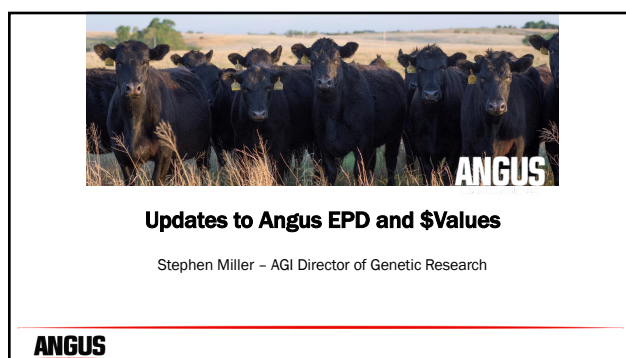
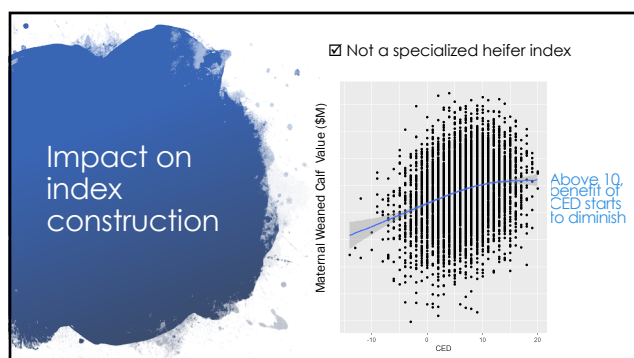
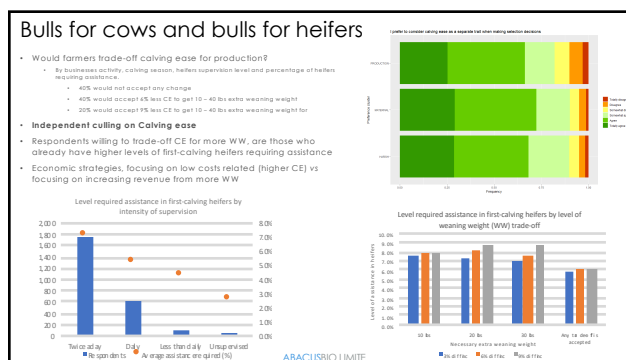
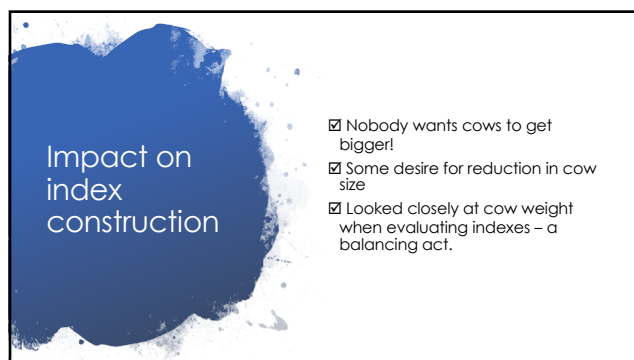
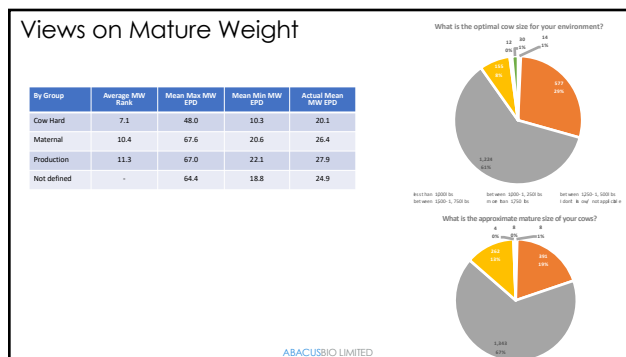
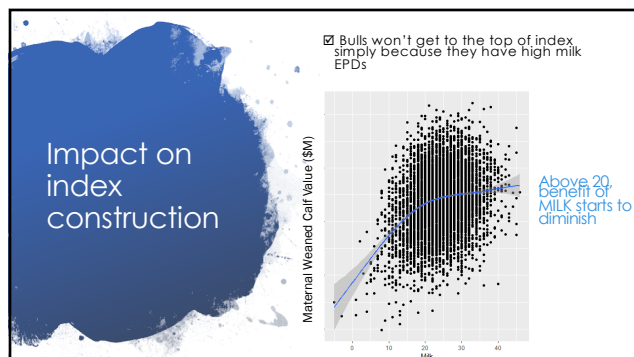
Impact on index construction

- High priority placed on functional cow traits – many of these relatively new EPDs (or EPDs don't yet exist).
- Importance of structure - include structural assessments into index

ABACUSIO LIMITED

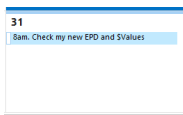






Angus breeders awoke to a changed tool box May 31

- New \$Maternal
- New \$B
- Better Mature Weight EPD
- Better Feed EPD
- Opportunity to test-drive a Combined Index

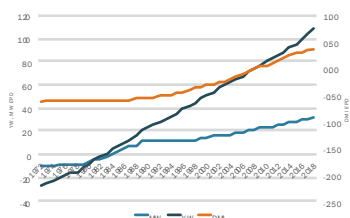


ANGUS
THE BUSINESS BREED

UPDATES TO EPD MODELS

ANGUS
THE BUSINESS BREED

See anything wrong with our current genetic trends?



ANGUS
THE BUSINESS BREED

Our Current Models

	Growth (BW, WW, YW)	Mature (MW)	Feed (RADG, DMI)
Number of Animals in Evaluation	11 M	1.4 M	1.2 M

Both the Mature Weight evaluation and Feed Intake Evaluation include Yearling Weight, but not Weaning Weight

ANGUS
THE BUSINESS BREED

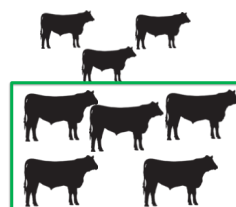
Why is including weaning weight important?



Variation in Weaning Group

ANGUS
THE BUSINESS BREED

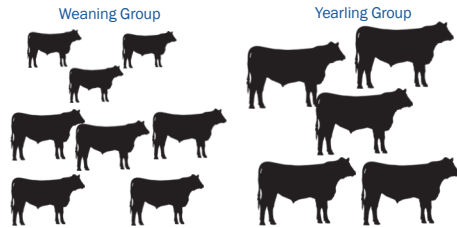
Why is including weaning weight important?



But typically only Heaviest go on to have Yearling Weights

ANGUS
THE BUSINESS BREED

Which group has higher average Yearling Weight EPD?


ANGUS
THE BUSINESS BREED

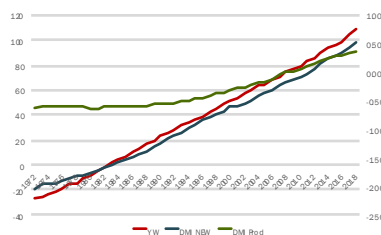
Updated Models

	Growth (BW, WW, YW)	Mature (MW)	Feed (RADG, DMI)
OLD - Number of Animals in Evaluation	11 M	1.4 M	1.2 M
New - Number of Animals in Evaluation	11 M	11 M	11 M

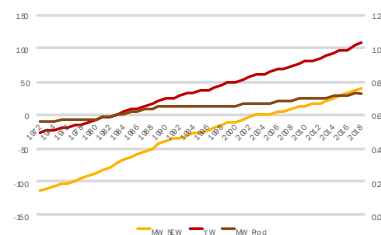
Weaning Weight now included in Both the Mature Weight evaluation and Feed Intake Evaluation

ANGUS
THE BUSINESS BREED

DMI better tracks YW


ANGUS
THE BUSINESS BREED

MW better tracks YW


ANGUS
THE BUSINESS BREED

New EPD highly correlated to old EPD

Current Sires	MW Prod	MW New	DMI Prod	DMI New	RADG Prod	RADG New
Correlation	0.82		0.79		0.81	
EPD SD						
Average						
Min						
Max						

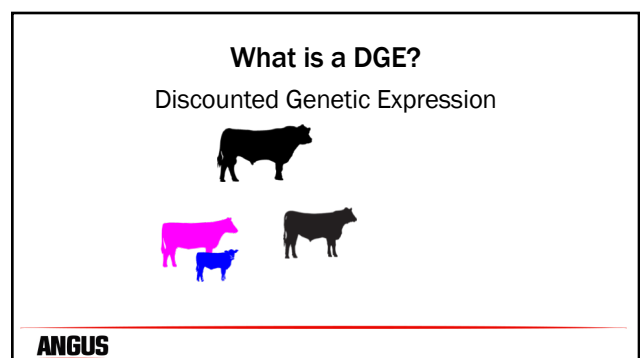
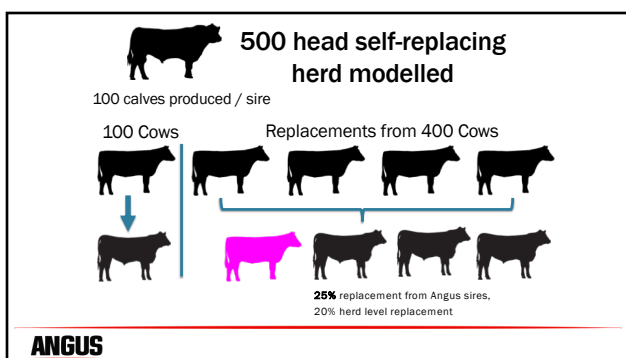
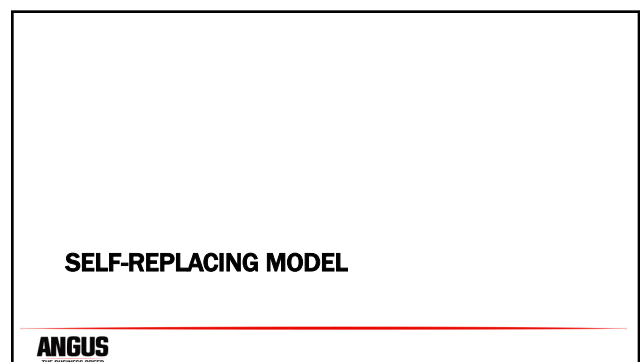
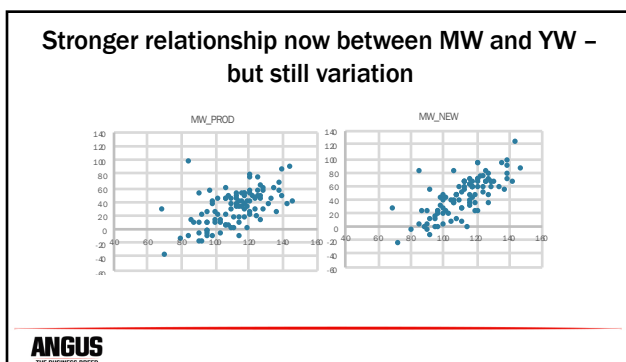
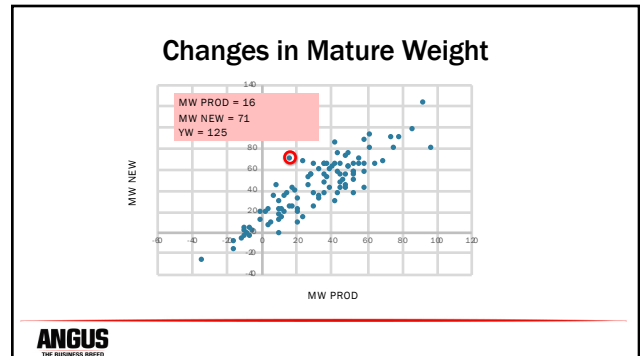
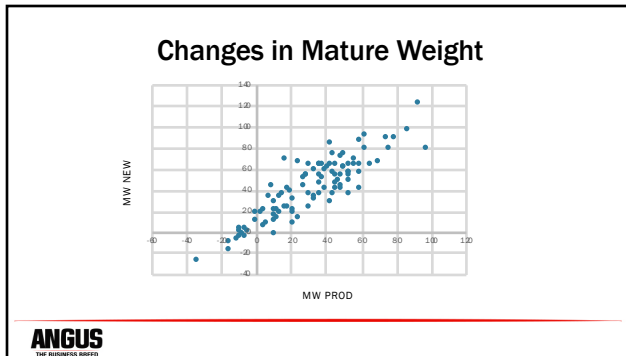
ANGUS
THE BUSINESS BREED

23% more variation in MW and DMI EPD

Current Sires	MW Prod	MW New	DMI Prod	DMI New	RADG Prod	RADG New
Correlation	0.82		0.79		0.81	
EPD SD	26.5	32.8	0.17	0.21	0.07	0.05
Average			0.33	0.80	0.21	0.20
Min	-93	-187	-0.51	-0.40	-0.07	-0.04
Max	129	160	1.13	1.59	0.56	0.40

EPD Spread MW
 DMI
 RADG

ANGUS
THE BUSINESS BREED



What is a DGE?

Where is the weaning weight of this bull expressed?

ANGUS
THE BUSINESS BREED

Discounting

A dollar paid today is worth more than a dollar paid next year

ANGUS
THE BUSINESS BREED

What about maternal expressions?

Where is the "Milk" of this bull expressed?

ANGUS
THE BUSINESS BREED

Must account for this daughter having multiple calves over time

100 Progeny modelled results in more than 100 DGE for maternal and terminal traits

ANGUS
THE BUSINESS BREED

Units of Expression

ANGUS
THE BUSINESS BREED

SVALUE UPDATES

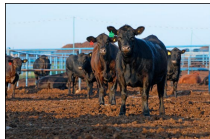
American Angus Association \$Value Indexes Updated

Updates are based on a major research effort and are now effective

ANGUS
THE BUSINESS BREED

Beef Value (\$B)

- Profitability differences post-weaning
Weaning → Rail
- Breeding objective: Weaned calf in the feedlot and value priced based on rail grade



ANGUS
THE BUSINESS BREED

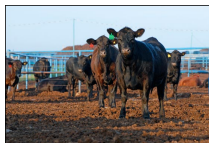
Updated
Terminal
Index
includes
same traits
as \$B

Trait	Current \$B	New \$Beef
CED		
BW		
WW		
YW	✓	✓
CEM		
MILK		
MW		
DOC		
HP		
FS (Foot)		
DMI	✓	✓
CWT	✓	✓
REA	✓	✓
MARB	✓	✓
FAT	✓	✓

ANGUS
THE BUSINESS BREED

New \$B is Highly Correlated with Current \$B

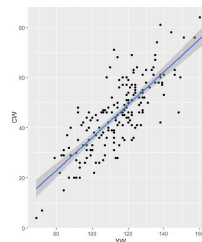
- More correct definitions of:
 - Endpoint
 - Dressing Percent
 - Grid Assumptions
- Correlation in heavily used sires is above 0.90



ANGUS
THE BUSINESS BREED

Relationship between YW and CWT

- Rewards cattle with more carcass at a given live weight



ANGUS
THE BUSINESS BREED

More Value in Price Grid for Marbling AND Yield

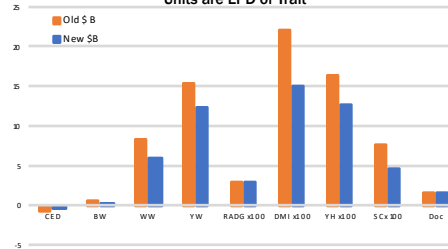
	CURRENT	NEW
Prime	13	21
CAB	4	5
Select	-10	-12
Standard	-26	-35
YG1	4	6
YG 2.0-2.5	2	3
YG 2.5-3.0	1	3
YG 4	-11	-13
YG 5	-17	-19



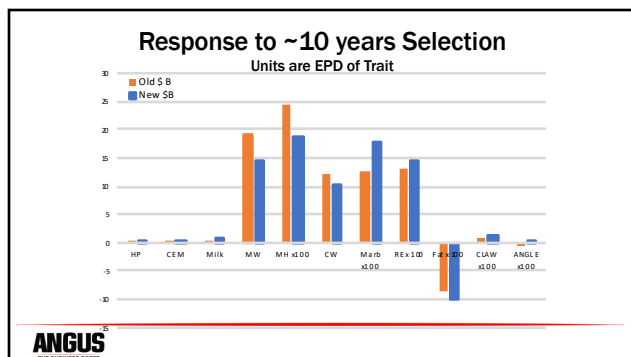
ANGUS
THE BUSINESS BREED

Response to ~10 years Selection

Units are EPD of Trait



ANGUS
THE BUSINESS BREED



Maternal Weaned Calf Value (\$M)

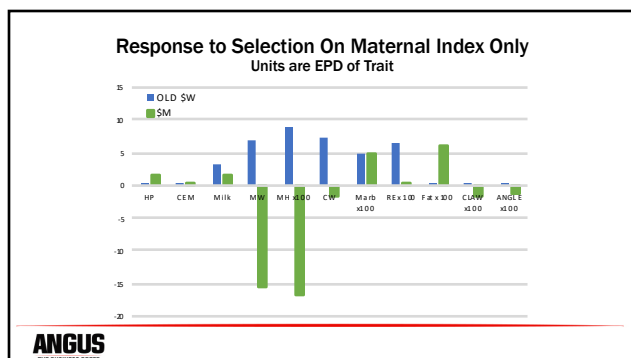
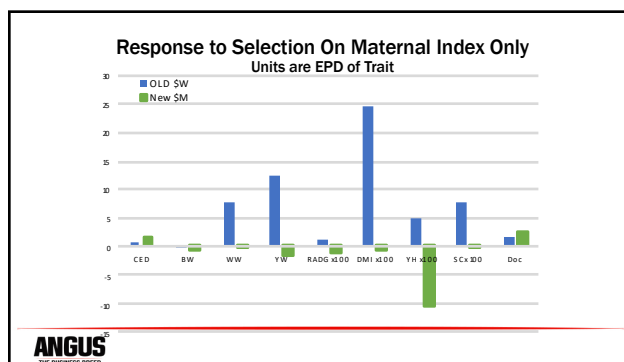
- Profitability differences pre-weaning
Conception → Weaning
- Breeding objective: keeping replacement females and selling cull females and steer mates as feeder calves

ANGUS
THE BUSINESS BREED

New Maternal Index includes twice the trait count

Trait	\$W	Now \$M
CED		✓
BW	✓	✓
WW	✓	✓
YW		✓
CEM		✓
MILK	✓	✓
MW	✓	✓
DOC		✓
HP		✓
FS (Foot)		✓
FEED		
CWT		
REA		
MARB		
FAT		

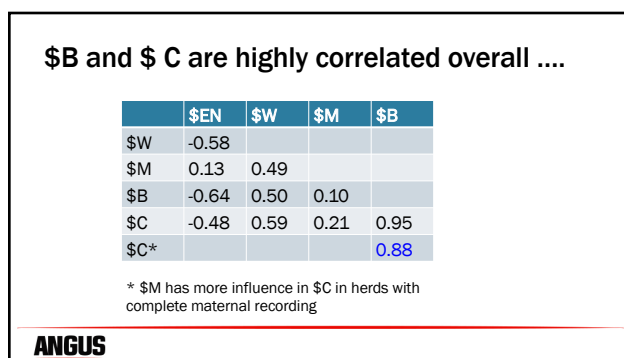
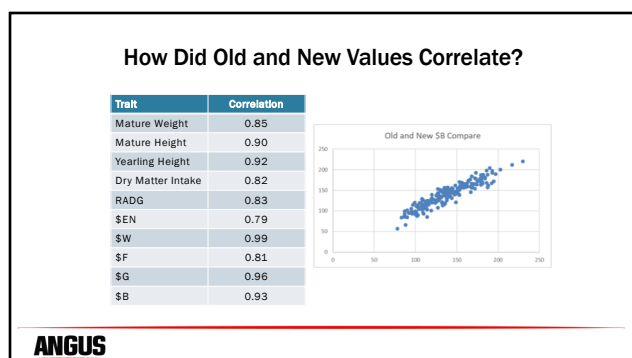
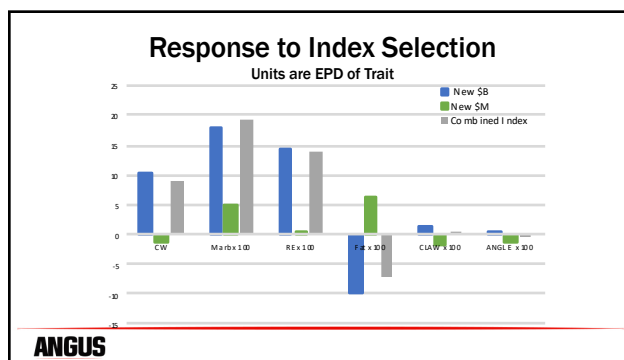
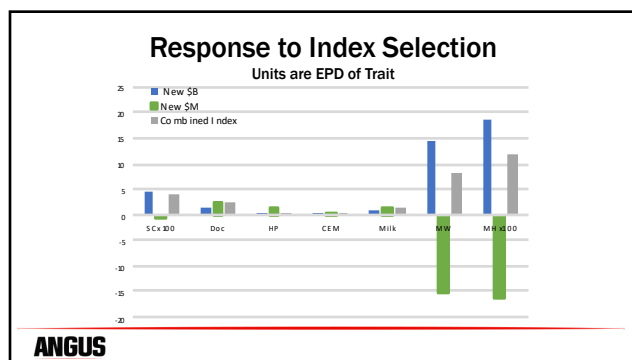
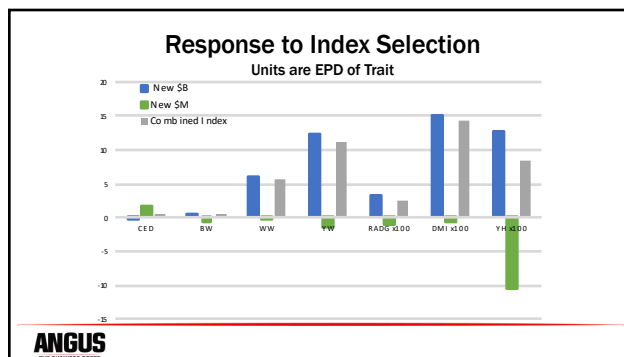
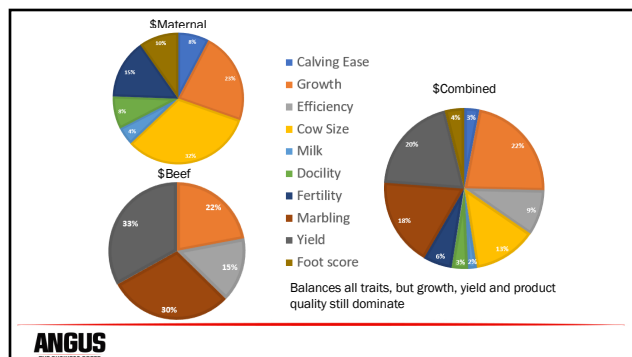
ANGUS
THE BUSINESS BREED



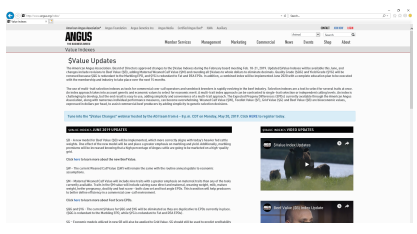
A Combination of Maternal and Terminal Indexes Considers All Traits

Trait	New \$M	New \$B	New \$C
CED	✓		✓
BW	✓		✓
WW	✓		✓
YW		✓	✓
CEM	✓		✓
MILK	✓		✓
MW	✓		✓
DOC	✓		✓
HP	✓		✓
FS (Foot)	✓		✓
FEED		✓	✓
CWT		✓	✓
REA		✓	✓
MARB		✓	✓
FAT		✓	✓

ANGUS
THE BUSINESS BREED



Angus.org/index



ANGUS
THE BUSINESS BRED



Questions & Discussion

Dan W. Moser, Ph.D. dmoser@angus.org Stephen Miller, Ph.D. smiller@angus.org Kelli Retallick, M.S. kretallick@angus.org	Director of Performance Programs 816-383-5196 Genetic Research Director 816-383-5157 Genetic Services Director 816-383-5190
---	---

ANGUS
THE BUSINESS BRED