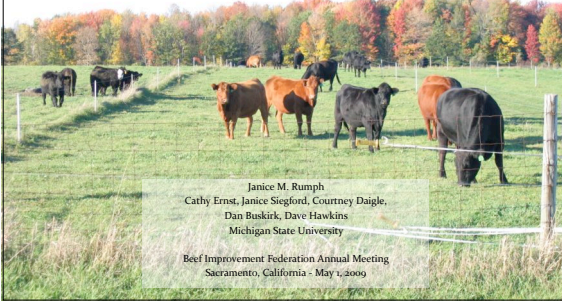


Correlation of Docility and Exit Velocity with Economically Relevant Traits



Two Projects

- Weaned Calves
 - Weaning
 - Prior to Transport
 - Arrival at Feedlot
- MCA/MSU Bull Test Bulls
 - On-Test
 - 28d Weigh Dates (thru 12d)
 - Sale Day

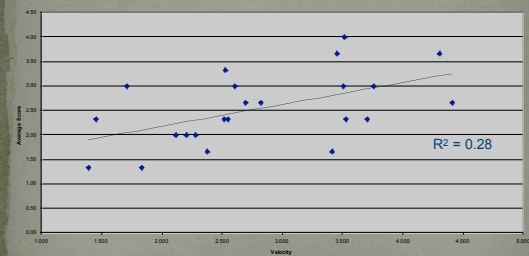


Weaned Calf Project

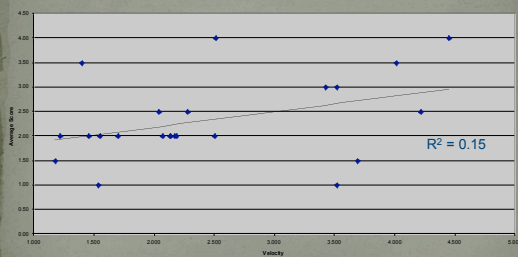
- 23 Weaned Limousin x Angus F2 calves
 - 98 - 166d (mean = 142)
 - 16 heifers, 7 steers
- Weaning
- 44d post-weaning/pre-transport
- 44d post-weaning/post-transport



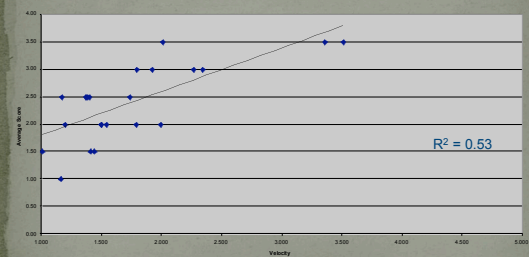
Weaning

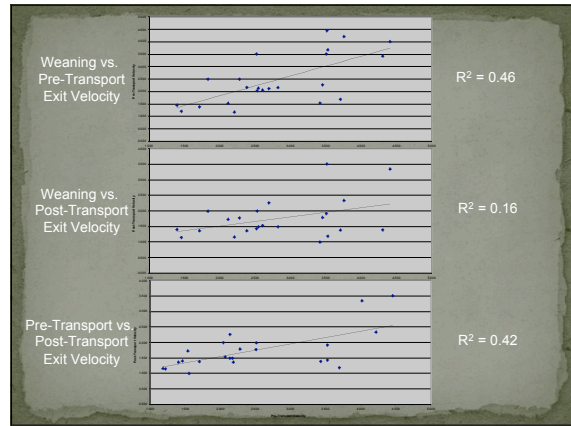
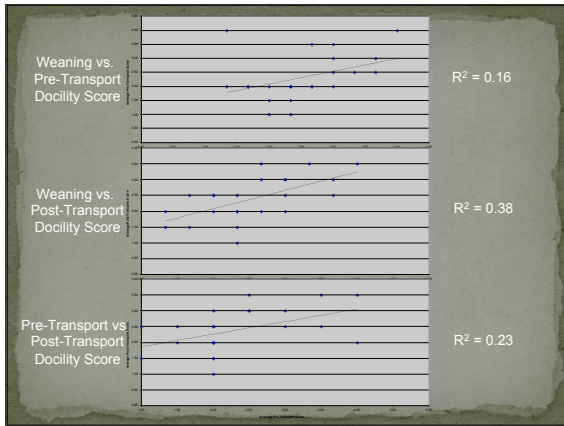


Pre-Transport



Post-Transport





Docility Correlated with Weight

	Hip Height	Birth Weight	Weaning Weight	Pre-Transport Weight	Post-Transport Weight
Docility Score					
Weaning	-0.02	0.10	0.02	0.07	0.10
Pre-Transport	-0.14	-0.12	-0.14	-0.04	-0.06
Post-Transport	0.07	0.35	0.09	0.11	0.15
Exit Velocity					
Weaning	0.17	-0.12	0.05	0.08	0.07
Pre-Transport	0.25	-0.17	0.20	0.10	0.18
Post-Transport	-0.09	0.10	-0.08	-0.07	-0.07

Future Plans

- Temperament
 - Pre-transport to harvest
 - At harvest
- Carcass Data
- Future Years (2009 and 2010 calf crops)

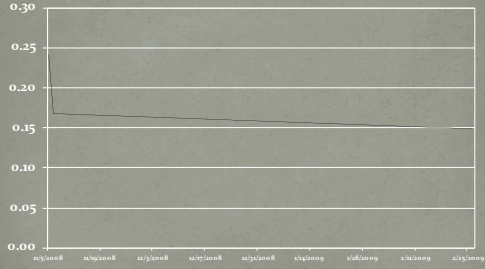
“Small Bull Syndrome Project”

- Bulls with larger scrotal circumferences were being noticed to be more docile
 - Scrotal Circumference
 - Exit Velocity
 - Docility Score

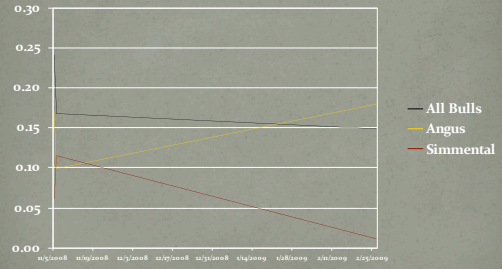
MCA/MSU Bull Test

- 106 Bulls
 - 9/1/2007 - 4/16/2008 (Mean = 1/27/2008, s.d. = 51.5d)
 - Angus - 56
 - Charolais - 2
 - Hereford - 4
 - Red Angus - 1
 - Simmental - 43
- 3-week warm-up
- 11/5/2008 and 11/6/2008 on-test
- 28 d weigh dates
- 112 d off-test
- Sale Day

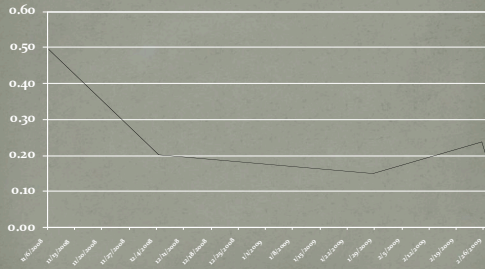
Docity Score: Weigh Days vs. Sale Day



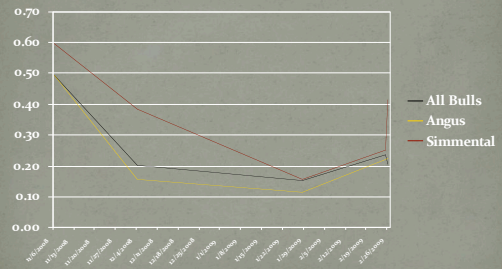
Docity Score: Weigh Days vs. Sale Day



Exit Velocity: Weigh Days vs. Sale Day



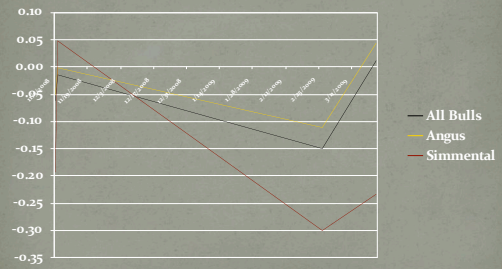
Exit Velocity: Weigh Days vs. Sale Day



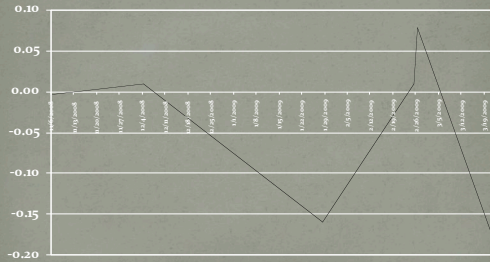
Docity Score vs. Scrotal Circumference



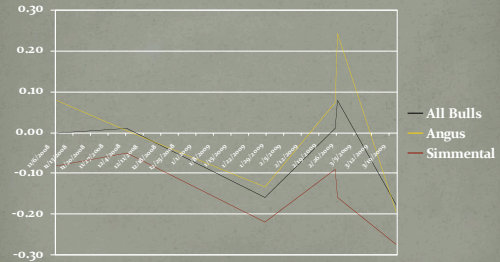
Docity Score vs. Scrotal Circumference



Exit Velocity vs. Scrotal Circumference



Exit Velocity vs. Scrotal Circumference



Sale Price vs. Sale Day Temperament

	Angus	Simmental	All Bulls
Docility Score	-0.04	0.14	0.01
Exit Velocity	-0.07	0.29	0.02

What are Michigan producers buying?

Trait	\$ Value/unit	Range in Bulls
Ribeye Area EPD	\$480.53/sq. in.	-0.3 to +0.7 sq. in
Average Daily Gain	\$334.26/lb/day	3.01 – 4.96 lb/day
Frame Size	\$-78.20/score	4.2 – 7.4 score
Birth Weight EPD	\$-113.55/lb	-2.7 – +5.5 lb
Adj. Scrotal Circumference	\$53.43/cm	31.0 – 38.9 cm
Actual Birth Weight	\$-26.22	62 – 115 lb
Weaning Weight EPD	\$13.26/lb	+13.7 – 72.0 lb
Off-Test Weight	\$0.74/lb	1010 – 1735 lb

Economically Relevent Traits vs. Temperament

Trait	Off Test Docility	Off Test Exit Velocity	Sale Day Docility	Sale Day Exit Velocity
Ribeye Area EPD	-0.12	-0.22	-0.16	-0.22
Average Daily Gain	0.09	-0.05	-0.07	0.06
Frame Size	0.02	-0.13	-0.27	-0.21
Birth Weight EPD	-0.06	0.06	-0.17	-0.26
Adj. Scrotal Circumference	-0.15	0.08	0.01	-0.18
Actual Birth Weight	-0.03	0.01	-0.03	-0.08
Weaning Weight EPD	-0.16	0.03	-0.13	-0.16
Off-Test Weight	-0.01	-0.06	-0.17	0.07

Future Years

- Continue to collect data
- Sire groups
- Additional traits
 - Semen Test
 - Weights
 - EPDs
- Follow the calf crops



Questions?

