



Update on Brahman BIN Growth and Carcase Data

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$$P = G + E$$



Where:

- **P** - Performance (Phenotype)
- **G** - Genetics (Genotype)
- **E** - Environment



How does BREEDPLAN predict the genetic package ?

(ie. remove the environment component)

1) Contemporary Groups.

2) Genetic linkage.

How are Contemporary Groups Formed ?

Automatic:

- Herd.
- Calving Year.
- ET v Natural.
- Twin v Single.
- Sex (Male v Female).
- Dam Age

Automatic (Breeder Influence):

- Weigh Date
- Calf Age/slicing.
- Sex (Bull v Steer)

Breeder Supplied:

- Breeder Defined Management Groups.

Contemporary Groups

- Banana (Steers)
- Barranga (Steers)
- Belmont (steers)
- Banana (females)
- Barranga (females)
- Belmont (females)



Brahman BREEDPLAN Traits

Growth	Fertility	Carcase	Other
Birth Weight	Scrotal Size	Carcase Weight	Flight Time
Milk	Days to Calving	Eye Muscle Area	Shear Force
200-day Growth	Calving Ease	Rib Fat Depth	
400-day Weight		Rump Fat Depth	
600-day Weight		Retail Meat Yield %	
Mature Cow Weight			



Data Collected and Analysed from Progeny

- Birth Date
- Birth Weight (Belmont)
- 200 day Weight
- 400 Day Weight
- 600 Day Weight
- P8 fat
- Rib Fat
- EMA



Other Data Collected

- Flight Time
- Tail Hair for DNA
- Structural Scores (feet, legs, navel, sheath)



Background

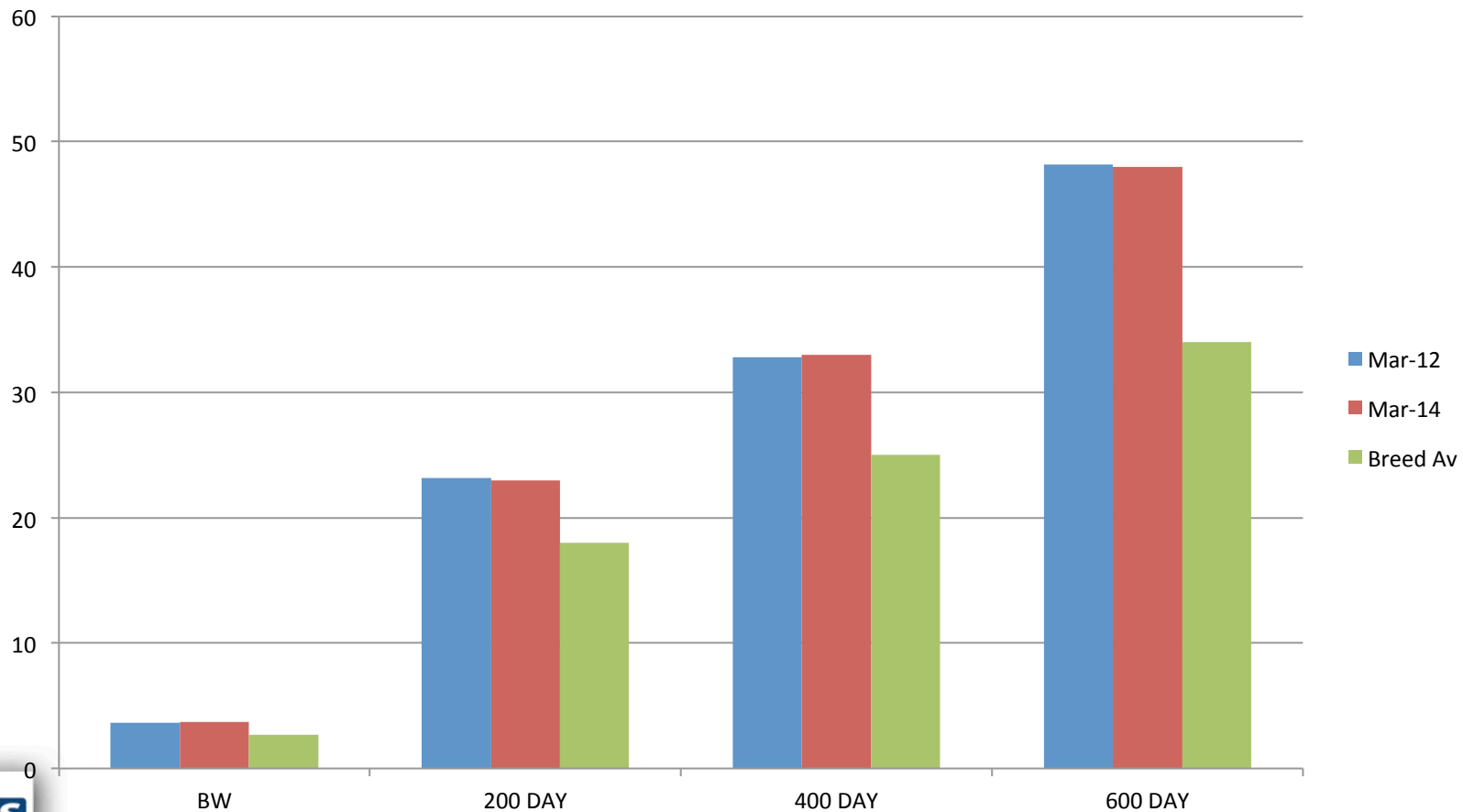
- **Round 1 & 2 – 48 Sires analysed**
- **11 Sires with no EBV's before BIN**
- **10 Sires with EBV's for EMA & Fat before BIN**



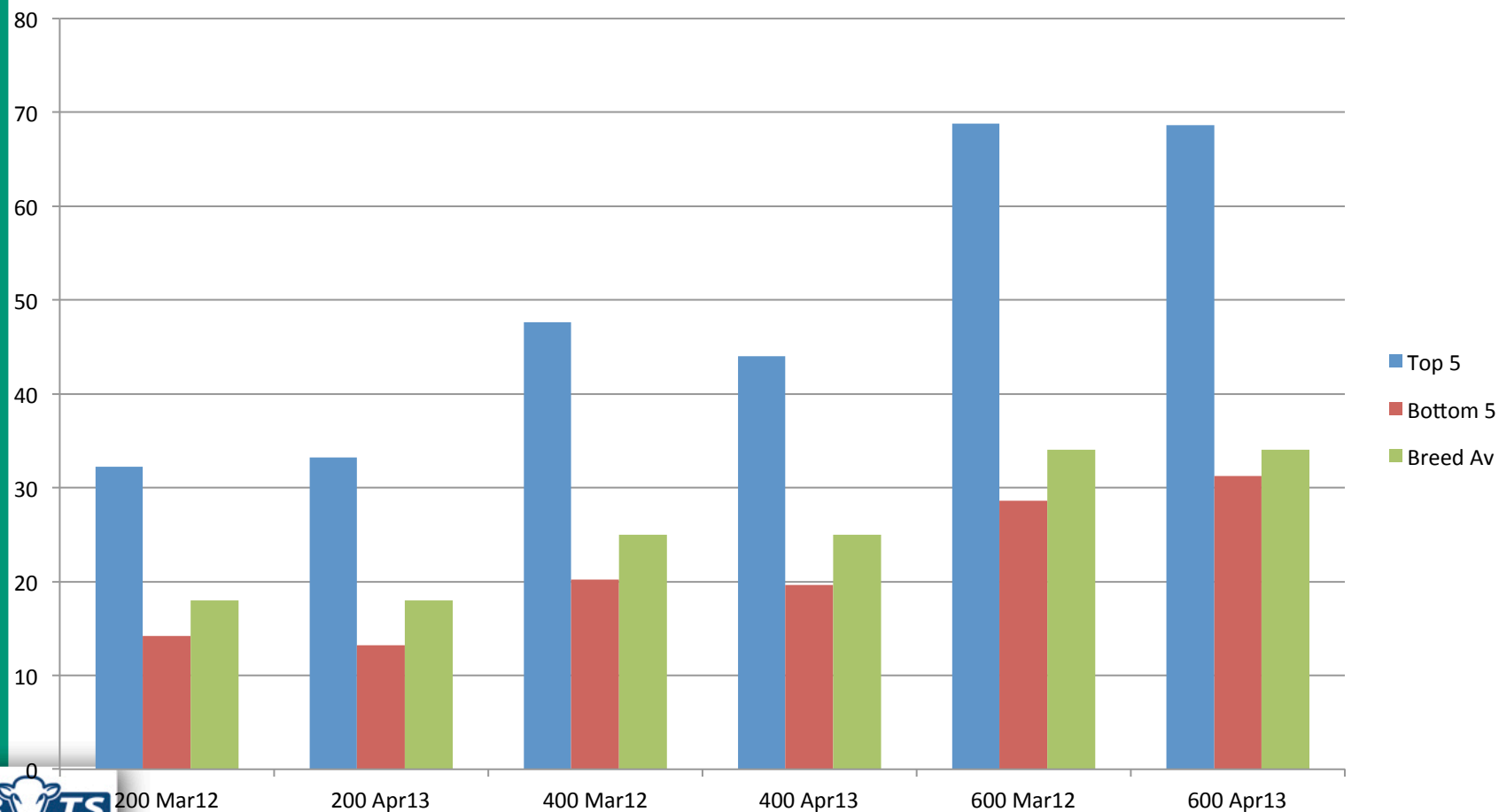
Results So Far



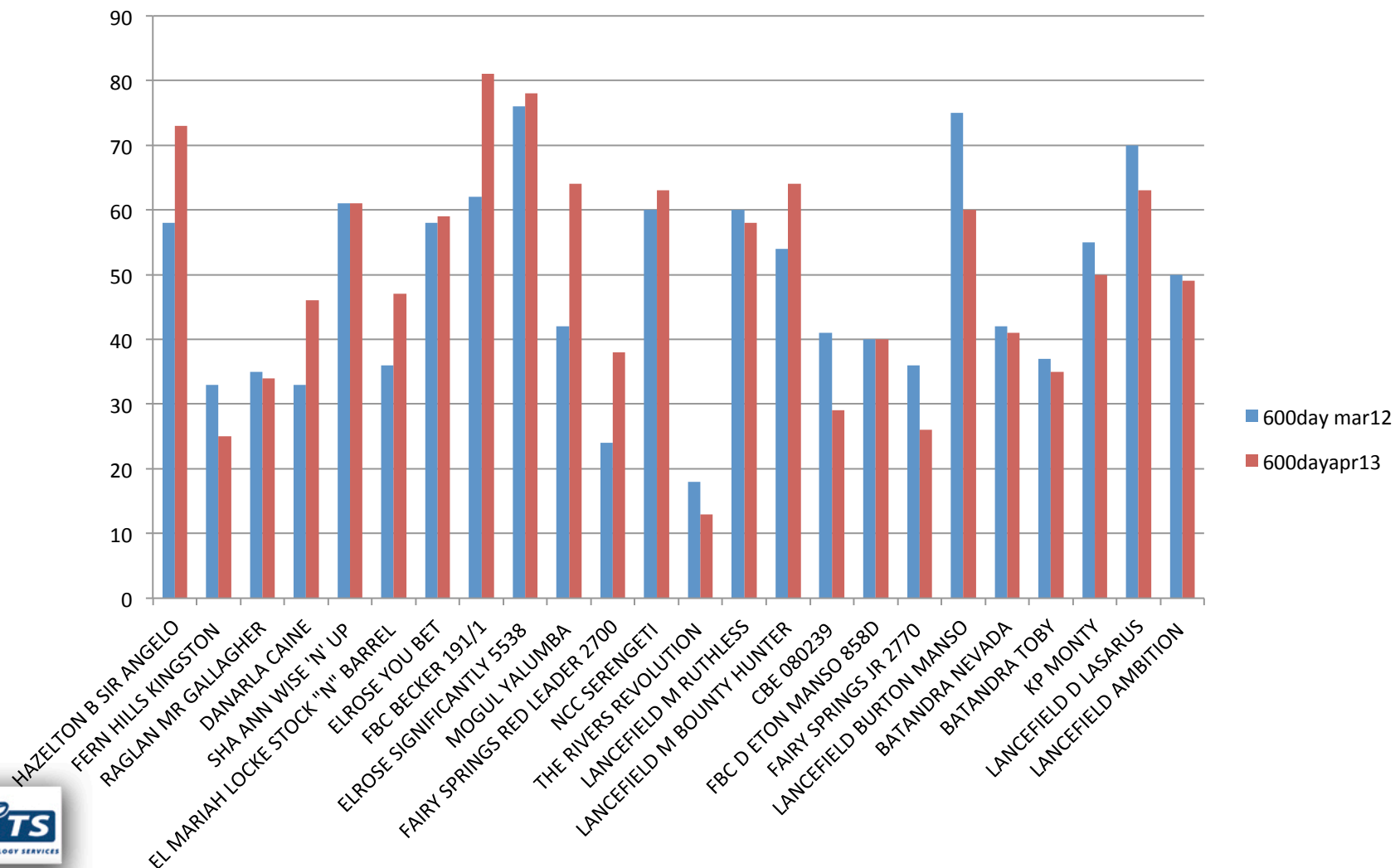
Change in Growth EBV'S Average for all Round Sire



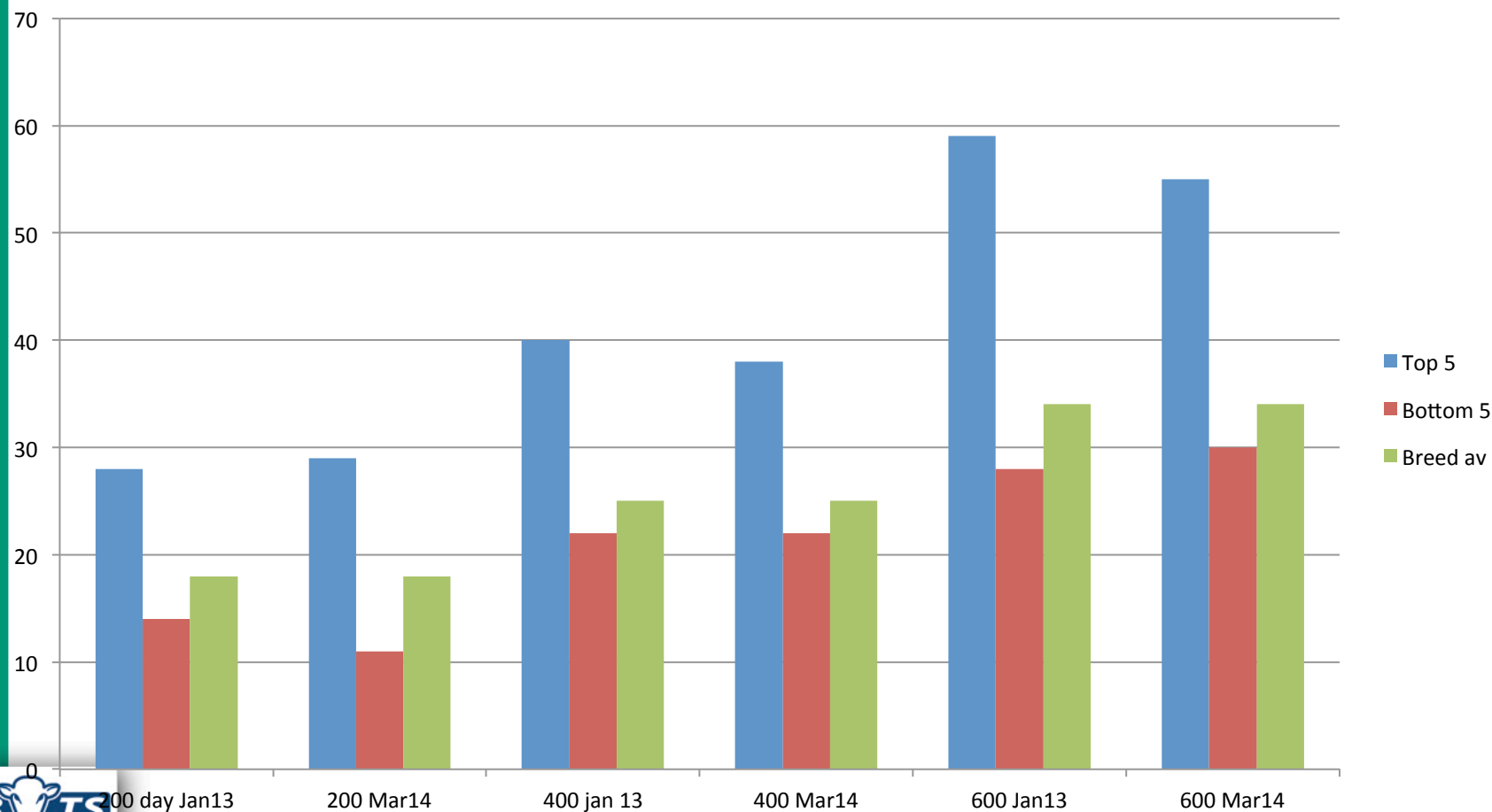
Change in Growth EBV'S Average for Top and Bottom 5 Round 1 Sires



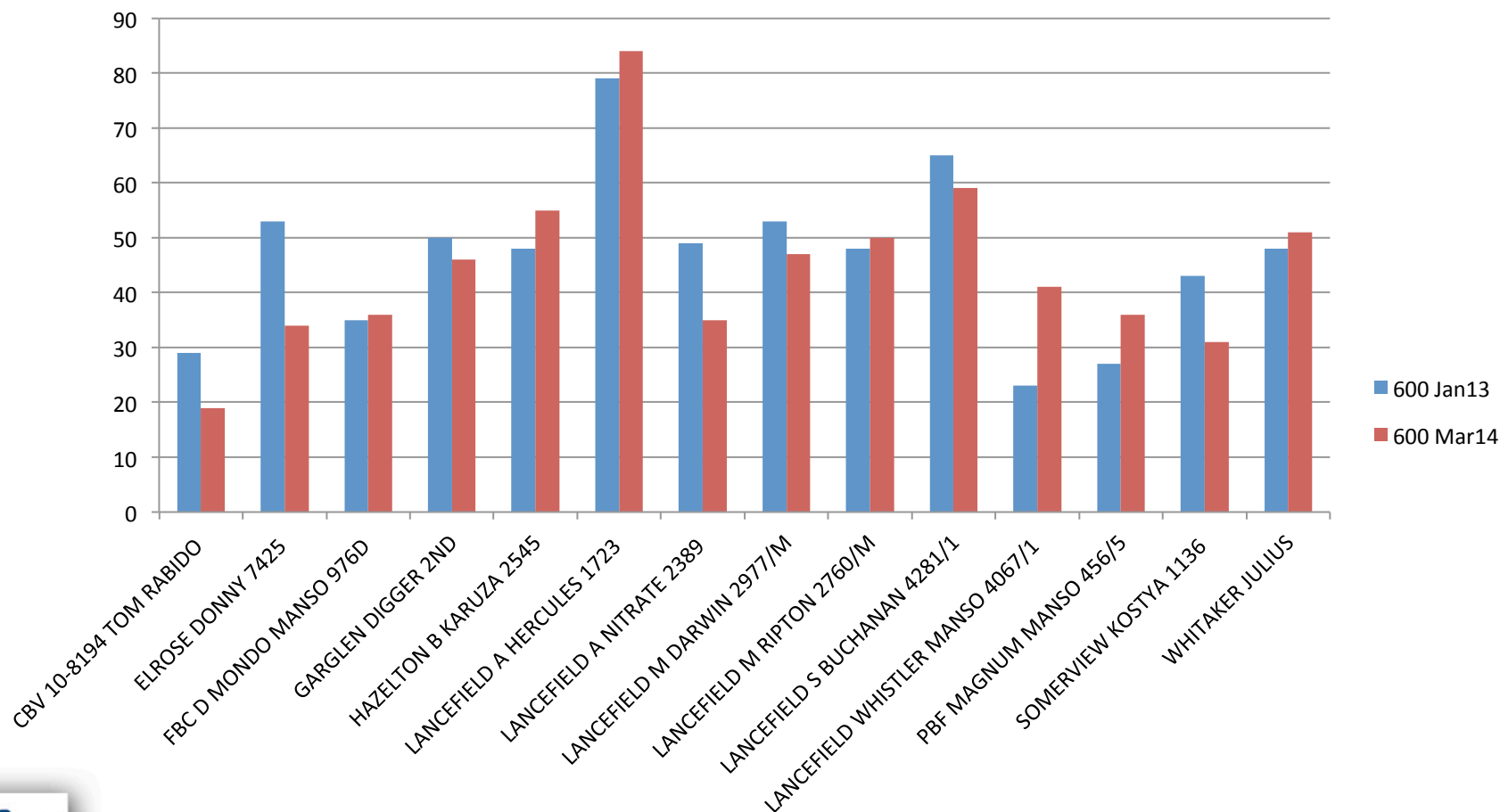
Change in Individual EBVs for 600 day Round 1 Sires



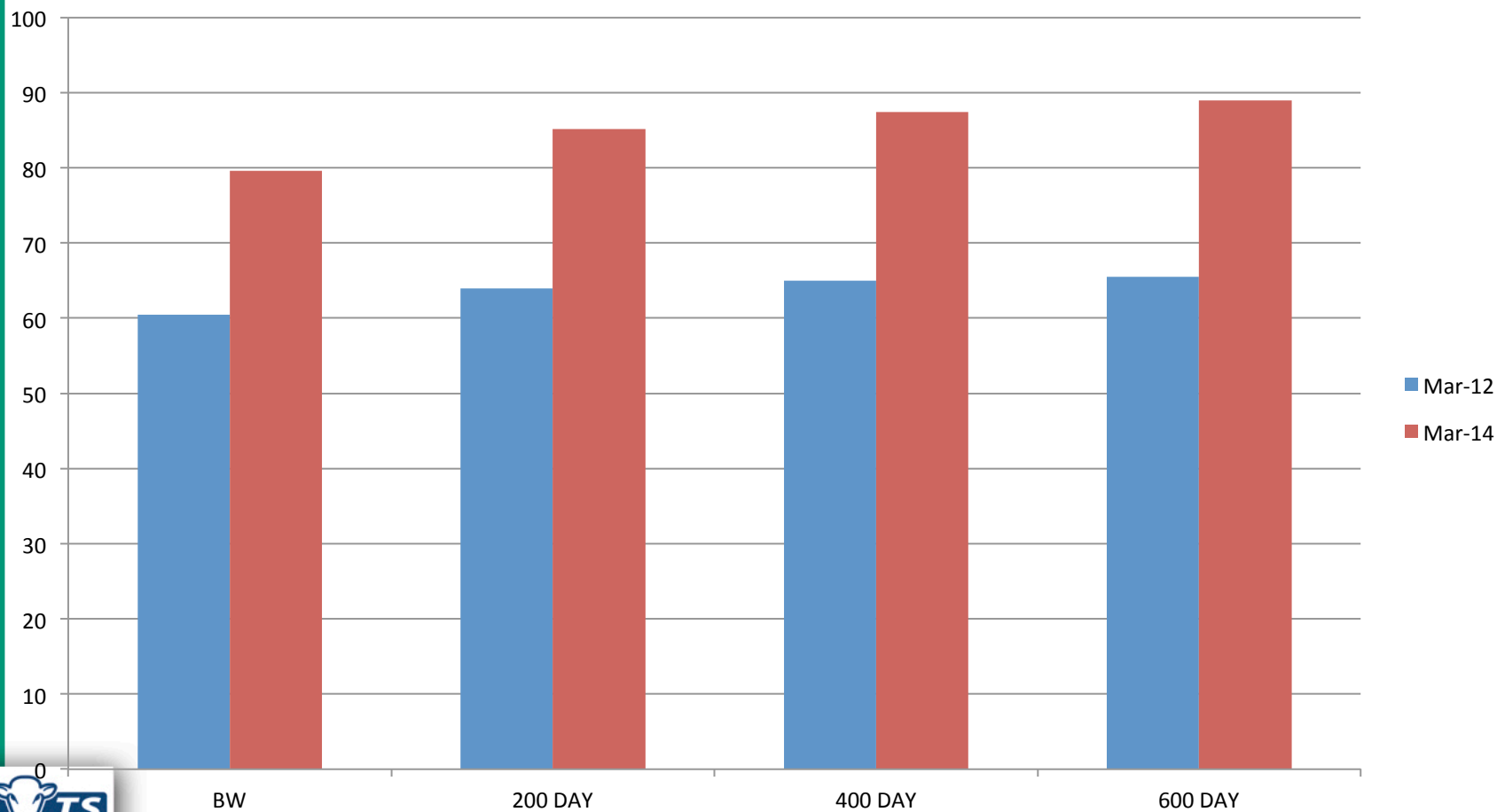
Change in Growth EBV'S Average for Top and Bottom 5 Round 2 Sires



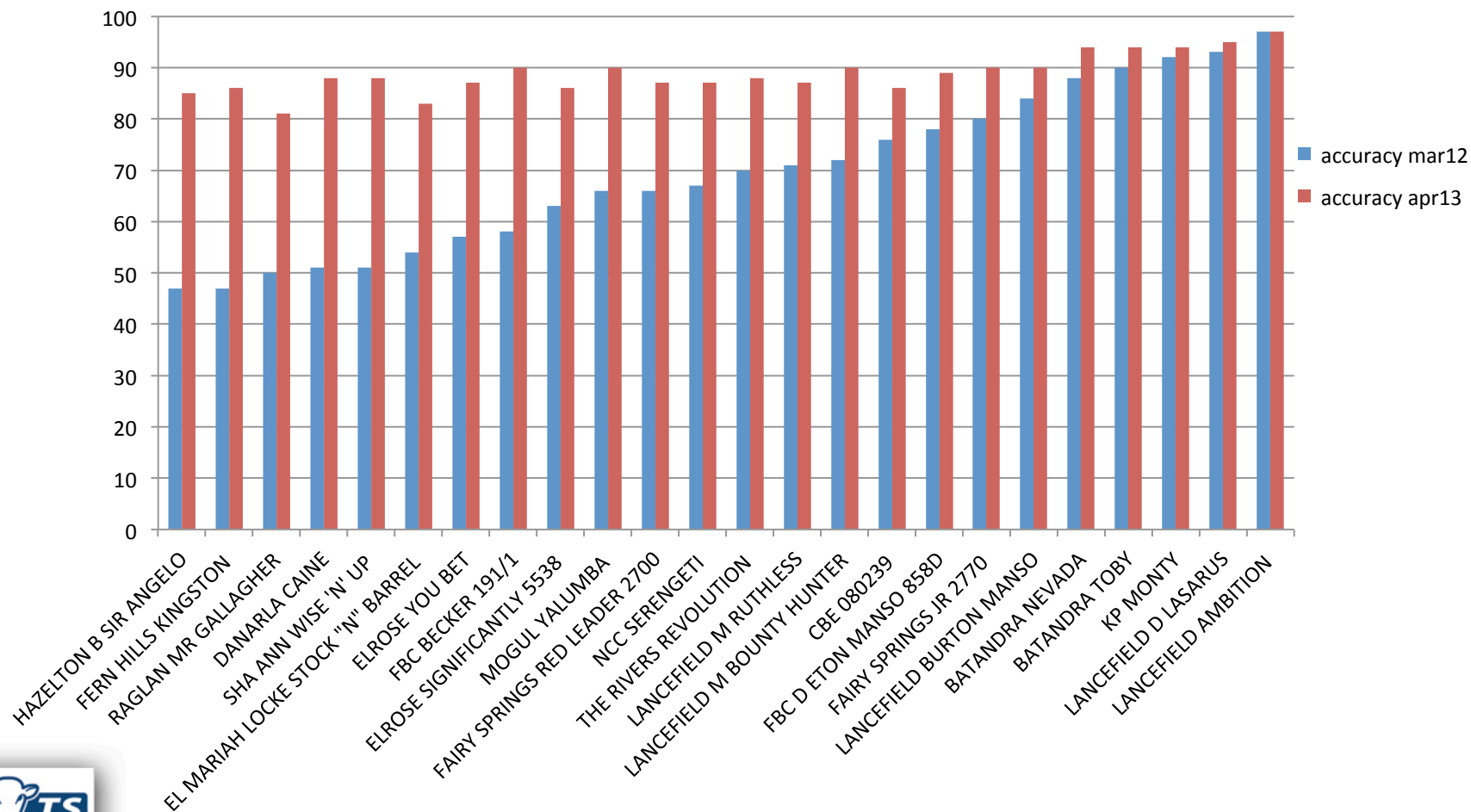
Change in Individual EBVs for 600 day Round 2 Sires



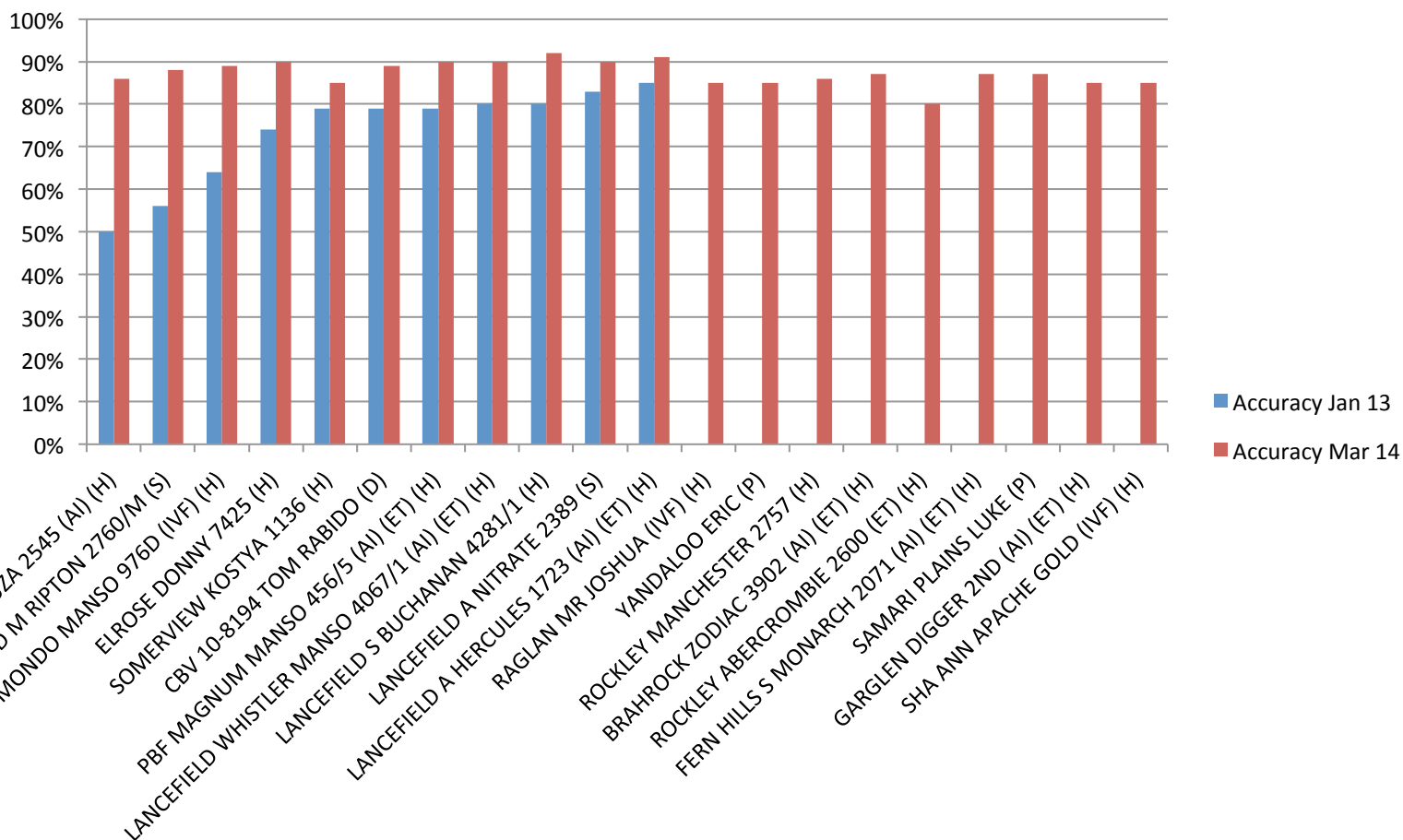
Change in Growth EBVS Accuracy for all Sire



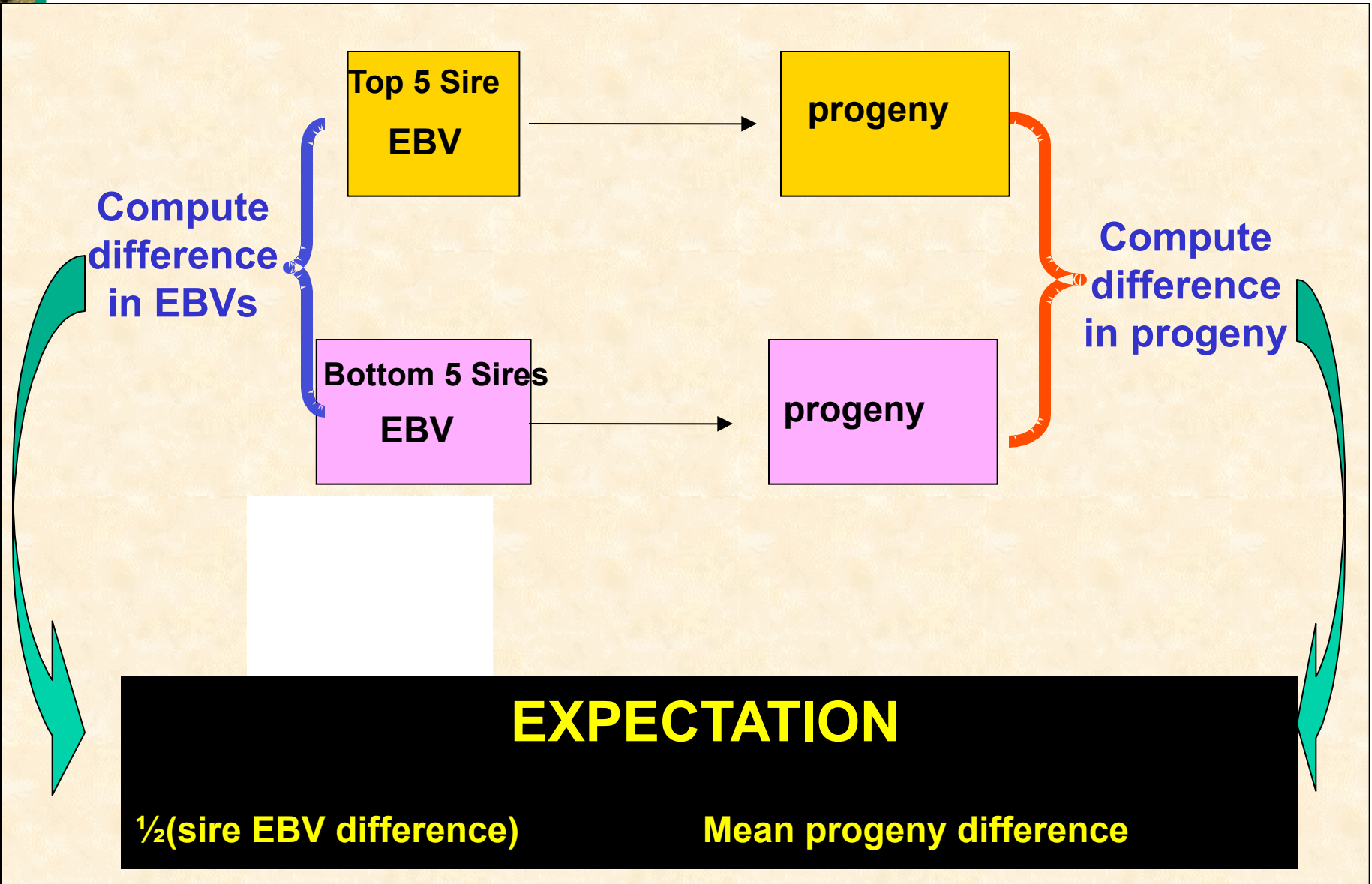
Change in Accuracy 600 day weight R1



Change in Accuracy 600 day weight R2



Evaluating EBVs



Weight EBV's

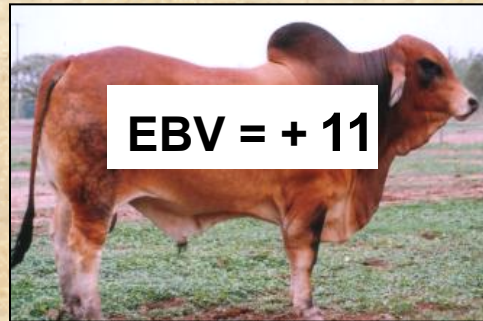
- **R1 Steers from Banana**
- **R2 Steers from Barranga**



“Banana R1 Steers”

**200 Day
Weight**

Bottom 5 Sires



Top 5 Sires



Expect 12.5 kg

Breed Av 2012 born animals 18 kg
Round 1 bin sires 24 kg



207 kg

**11 kg
difference**

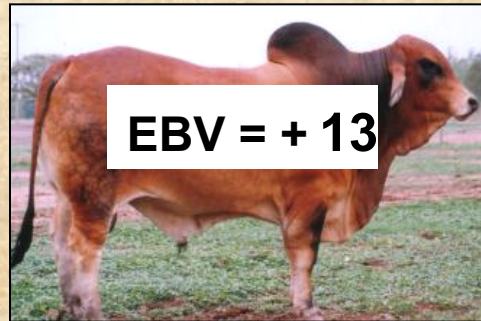


218 kg

“Barranga R2 Steers”

**200 Day
Weight**

Bottom 5 Sires



Top 5 Sires



Expect 8.5 kg

Breed Av 2012 born animals 18 kg
Round 2 bin sires 21 kg



233 kg

**9 kg
difference**

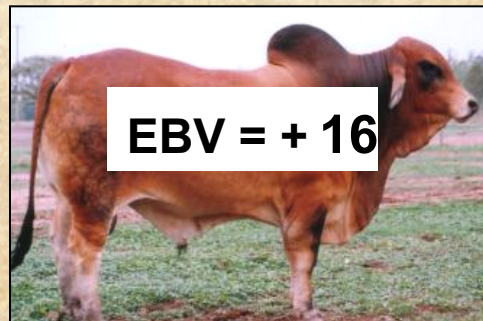


242 kg

“Banana R1 Steers”

400 Day
Weight

Bottom 5 Sires



Top 5 Sires



Expect 16.5 kg

Breed Av 2012 born animals 25 kg
Round 1 Bin Sires 29 kg



240 kg

17 kg
difference

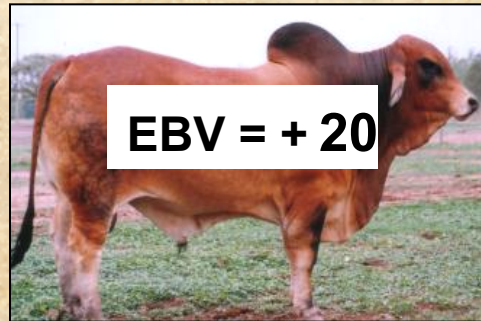


257 kg

“Barranga R2 Steers”

**400 Day
Weight**

Bottom 5 Sires



Top 5 Sires



Expect 11 kg

Breed Av 2012 born animals 25 kg
Round 1 Bin Sires 34 kg



275 kg

**15 kg
difference**

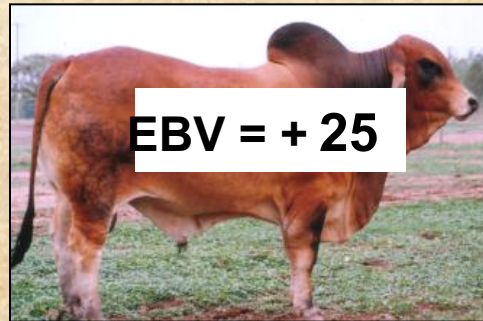


290 kg

“Banana R1 Steers”

**600 Day
Weight**

Bottom 5 Sires



Top 5 Sires



Expect 23.5 kg

Breed Av 2012 born animals 34 kg
Round 1 Bin Sires 49 kg



377 kg

27 kg
difference

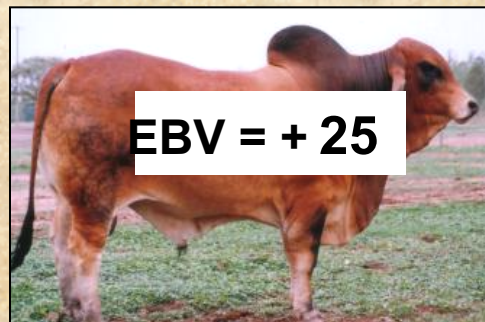


404 kg

"All R2 Steers Adjusted for Age, Wt & Origin"

**600 Day
Weight**

Bottom 5 Sires



Top 5 Sires



Expect 18 kg

Breed Av 2012 born animals 34 kg
Round 2 Bin Sires 43 kg



410 kg

**20 kg
difference**



430 kg

Round 1 Steers

- **Steers went onto Leucaena in January**
- **AV 490KG**
- **Range 388 – 578 kg**
- **Slaughtered in May**



Carcase EBV's

- **Heifers from Banana**
- **Heifer & Steers Barranga**



Change in Carcase EBV'S

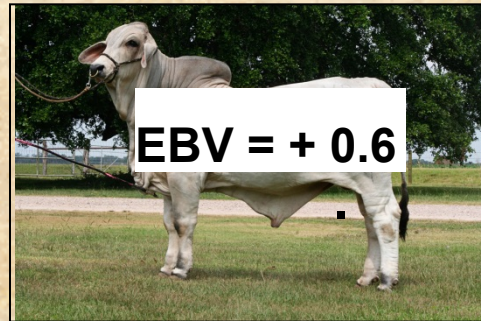
- Before BIN- 10 Sires with Carcase EBV's
- March 2014 – all 48 bulls have carcase EBV's



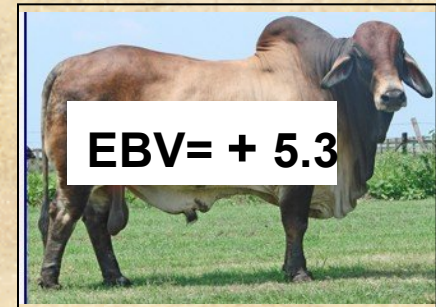
“Banana R1 Heifers”

EMA

Bottom 5 Sires



Top 5 Sires



Expect 2.35 sq cm

Breed Av 2012 born animals 2.3 sq.cm
Round 1 Bin Sires 3.0 sq.cm



49 sq.cm

4 sq.cm
difference

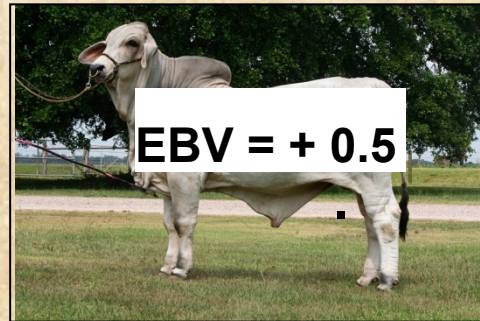


53.sqcm

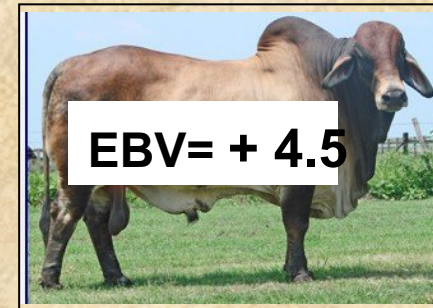
“Barranga R2 Heifers”

EMA

Bottom 5 Sires



Top 5 Sires



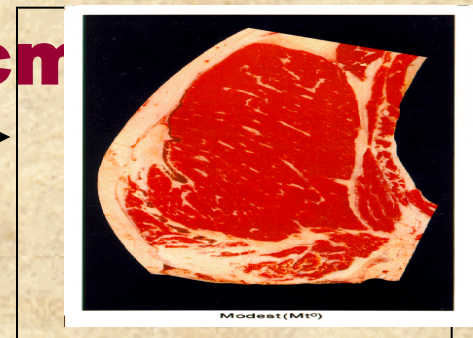
Expect 2.0 sq cm

Breed Av 2012 born animals 2.3 sq.cm
Round 1 Bin Sires 3.0 sq.cm



48.8 sq.cm

2.1 sq.cm
difference

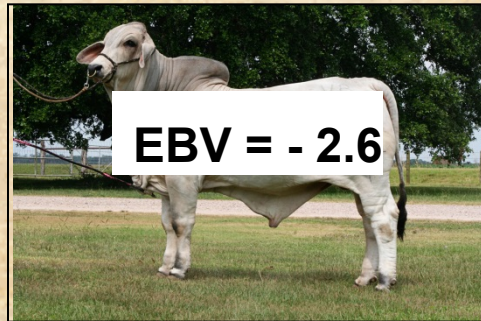


51.sqcm

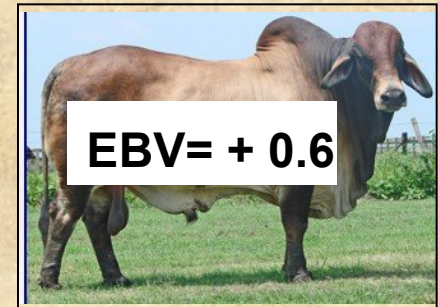
“Banana R1 Heifers”

Rump Fat

Bottom 5 Sires



Top 5 Sires



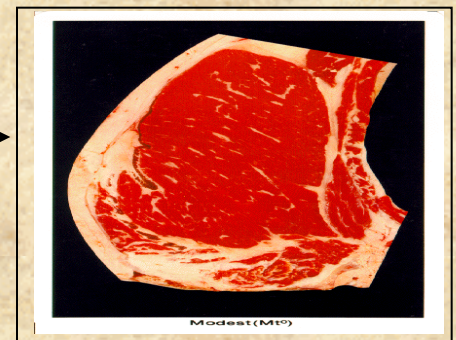
Expect 1.6 mm

Breed Av 2012 born animals - 0.4 mm
Round 1 Bin Sires - 1.0 mm



3.8 mm

1.4 mm
difference



5.2 mm

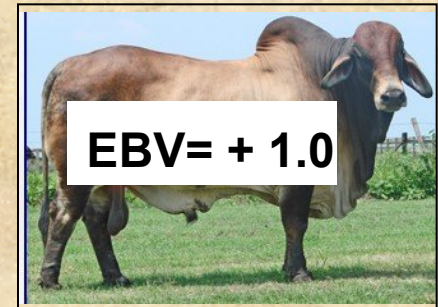
“Barranga R2 Steers”

Rump Fat

Bottom 5 Sires



Top 5 Sires



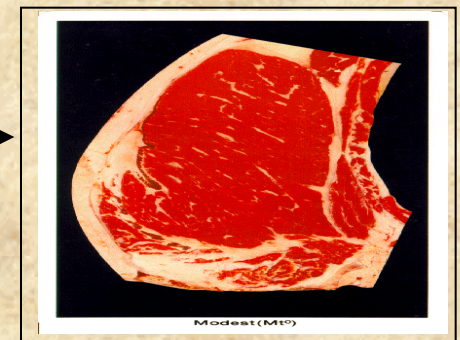
Expect 1.4 mm

Breed Av 2012 born animals - 0.4 mm
Round 2 Bin Sires - 0.6 mm



2.9 mm

1.1 mm
difference



4.0 mm

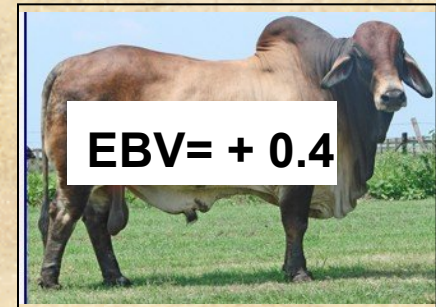
“Banana R1 Heifers”

Rib Fat

Bottom 5 Sires



Top 5 Sires

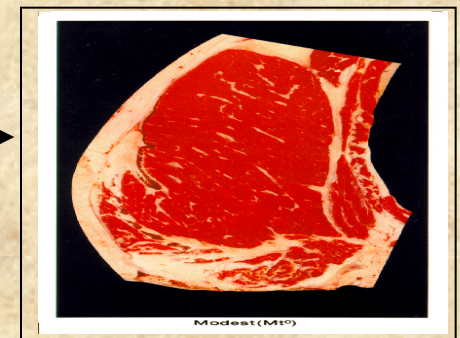


Expect 1.2 mm

Breed Av 2012 born animals - 0.4mm
Round 1 Bin Sires – 0.7 mm



0.5 mm
difference



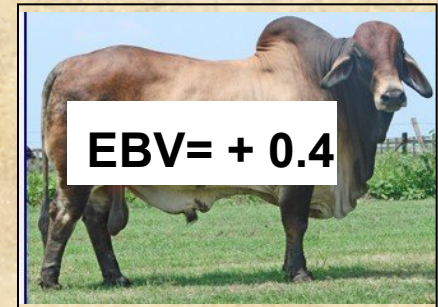
“Barranga R2 Steers”

Rib Fat

Bottom 5 Sires



Top 5 Sires



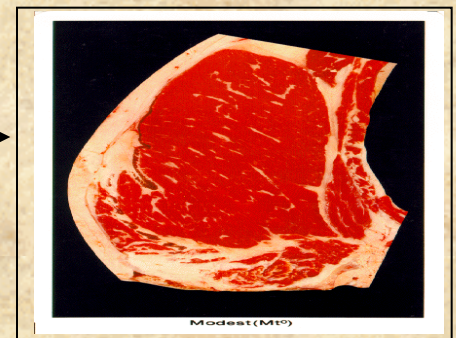
Expect 0.85 mm

Breed Av 2012 born animals - 0.4mm
Round 2 Bin Sires – 0.6 mm



1.1 mm

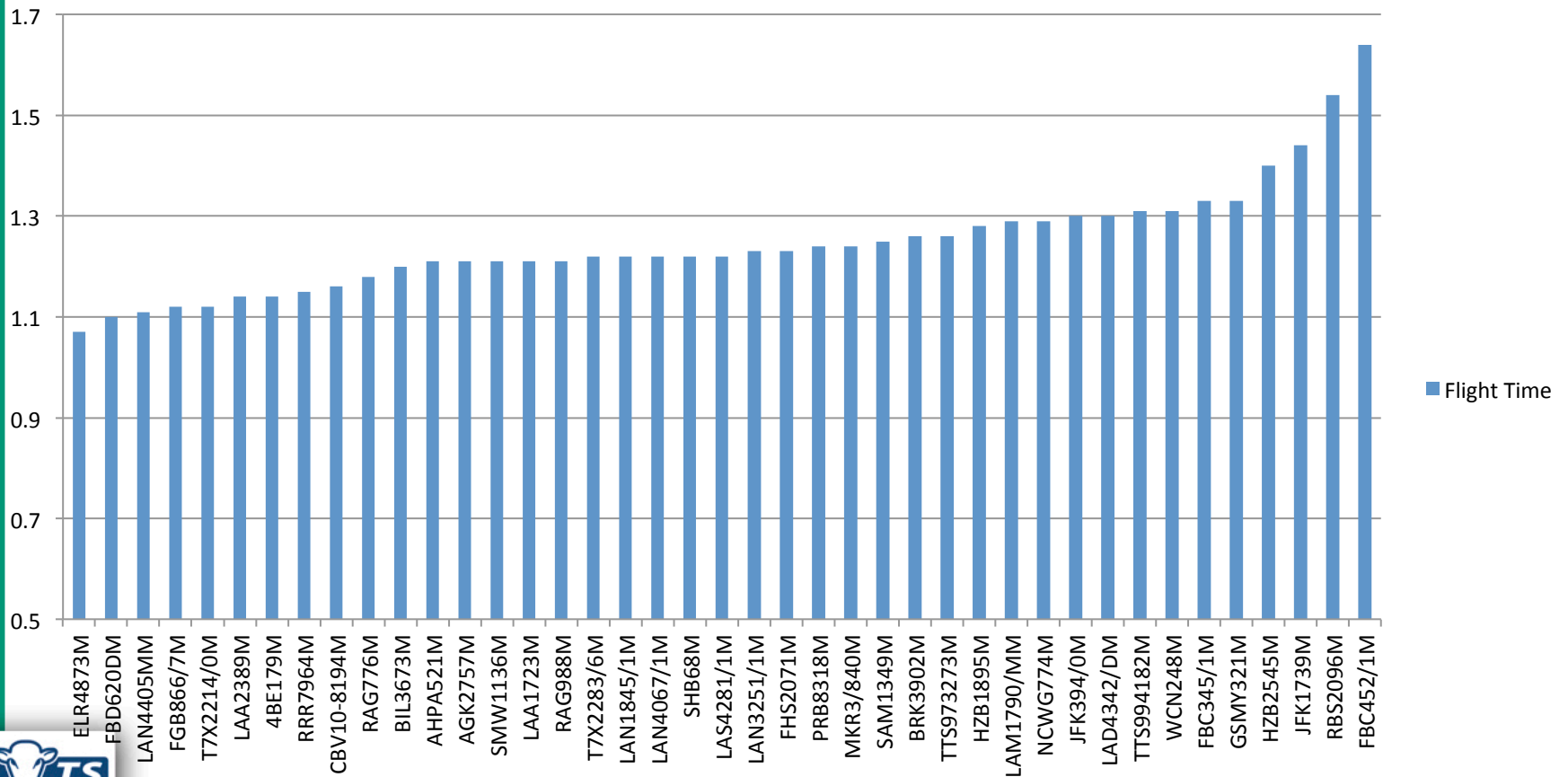
1.1 mm
difference



2.2 mm

Round 3 Sires Flight Time

Flight Time



Questions?

