



BEEF
GENETICS
FORUM

Ceri Lewis

Mount Linton Station

GENETICS AND NEW ZEALAND'S HIGHEST BEEF EQ RATES



MOUNT LINTON BREEDING OBJECTIVES

- BREED CATTLE THAT LOWER THE COST OF PRODUCTION
- MATERNAL EFFICIENCY AND FERTILITY
- DTC
- THE ROLE OF FAT AND EMA
- MATURE PATTERN
- GROWTH , MUSCLING



Your grading showed 19 out of a total of 40 of your mob have achieved the master grade.



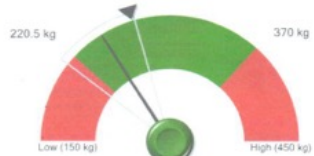
Fat Colour

The colour of the fat lateral to the ribeye muscle is measured. Fat colour is determined by the concentration of B-carotene stored in the fat (B-carotene is found in grass). Consumers prefer whiter colour fat.



Meat Colour

Meat colour is assessed at the ribeye muscle area. It is scored against a set of colour reference standards that reflect the colours expected by consumers.



Weight

Carcass weight is important as it allows us to have primal cuts of a size our customers wish to purchase, not too small or too large.



Rib Fat

Rib fat is measured as the depth of subcutaneous fat. This standard aims to reduce temperature variation within the carcass muscles during chilling, producing a more consistent and predictable eating quality.



pH Level

This measures the level of lactic acid present. It is measured in the ribeye muscle using a pH meter. High pH can have a detrimental effect on meat colour, texture, shelf life and eating quality.



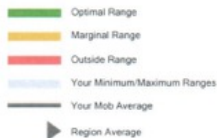
Marbling

Marbling is assessed by the amount and distribution of intramuscular fat within the ribeye muscle. It has a positive effect on eating quality and its influence is greatest across the high value loin cuts.



Ossification

Maturity of a carcass is measured by ossification - the process of cartilage turning to bone in the vertebrae. As an animal matures, the meat fibres become stronger, more rigid and less likely to be broken down during cooking, resulting in tougher meat.

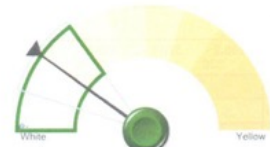


The EQ Master Grade System has weightings across pH, Marbling and Ossification as they are not absolute attributes for entry into the EQ specification (hence marginal range). These scores are weighed against each other. It is possible for your mob to be outside a range in one or more of these scores, but acceptable grades achieved in the other attributes may compensate creating an overall acceptable grade.

For more information on the EQ Master Grade System visit the supplier portal of www.silverfernfarms.com

We thank you for this supply and trust our service was to your expectations.

Your grading showed 60 out of a total of 70 of your mob have achieved the master grade.



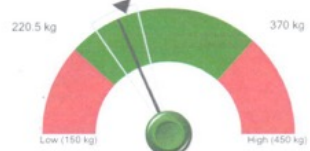
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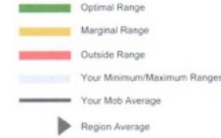
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ECONOMICS OF BEEF EQ RESERVE GRADE



- BEEF EQ PREMIUM.25c/kg
- 300kg CWT \$75/ HEAD
- 70% HIT RATE 1350 ANIMALS
- \$68,000 LAST YEAR
- RESERVE GRADE
- 6 CRITERIA

CARCASS QUALITY GENETICS



- AUSTRALIA
- RENNYLEA
- TAKES TIME

MATCHING EBVS TO BEEF EQ

RENNYLEA G420(APR)(AI)

Animal ID: NORG420
 Date of Birth: 25-Jul-2011
 Sex: Male
 Status: Active

Sire Name: TE MANIA BERKLEY B1(AI)
 Sire ID: VTMB1

Dam Name: RENNYLEA E528(APR)(AI)(ET)
 Dam ID: NORE528
 Sire of Dam ID: USA13058662

	Calving Ease		Birth		Growth				Fertility			Carcase					
	Calv. Ease Direct	Calv. Ease Dtrs	Gest. Len	Birth Wt.	200 Day Wt.	400 Day Wt.	600 Day Wt.	Mat. Cow Wt.	Milk	Scrotal Size	Days to Calv.	Carcase Wt.	Eye Muscle Area	Rib Fat	Rump Fat	RBV%	IMF%
NORG420	+4.7	+5.0	-6.4	+2.6	+47.0	+95.0	+120	+91.0	+19.0	+1.6	-9.0	+69	+7.5	+2.0	+2.7	-1.2	+3.8
	70%	60%	92%	91%	88%	88%	89%	80%	67%	89%	59%	75%	77%	77%	78%	73%	72%
Breed Avg. EBVs for 2014 Born Calves	-0.1	+0.0	-3.5	+4.3	+41	+75	+98	+87	+14	+1.6	-3.6	+54	+4.4	+0.0	+0.0	+0.2	+1.5

Other Countries

Angus Pure Self Replacing

NORG420	+237	+197
Breed Avg. EBVs for 2014 Born Calves	N/A	N/A



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EBVS FOR BEEF EQ



- IMF
- 400 & 600D GROWTH
- RIB AND RUMP FAT
- EMA

CHALLENGES TO HIT RATES



- MARBLING
- PH - MEAT COLOUR
- OSSIFICATION
- FAT COLOUR
- DOCILITY

IMF- HOW MUCH IS ENOUGH?



- HISTORICALLY EBV 2.5-3.5
- 3 DISQUALIFIED 8+
- HEIFER IN SO LAST YEAR
7 AT 17M
- LAST 2 YEARS EBV 3.5-6
- WHERE TO FROM HERE?

ANGUS PURE INDEX - RELEVANCE TO BEEF EQ



- STRONG GROWTH 4-600d
- EARLY MATURITY
- MARBLING
- LOW MCWT

MANAGEMENT TO MAXIMISE GENETIC POTENTIAL



- MINIMISE STRESS
- WALK TO THE YARDS
- NO HUNTAWAYS
- NIGHT BEFORE
- LOADING

NUTRITION AND HIT RATES - BEEF EQ



- 66% OFF GRASS AT 17 MONTHS
- 86% OFF BEET AT 50 DAYS
- 93% OFF BEET AT 80 DAYS
- CWT EMPTY 54-56% YIELD
- CWT PLANT 58% YIELD

KEY MESSAGES



- NO SUBSTITUTE FOR FERTILITY
- SCAN REPLACEMENTS
- GENETICS
- NUTRITION
- MANAGEMENT

Thank you.
