

**ISSUE 1**  
DECEMBER 2014

The formation of Beef + Lamb New Zealand (B+LNZ) Genetics earlier this year brings together the sheep and beef sector's levy-funded activity in the genetics space. With the support of government funding, we now have the resourcing to carry out more work that is specific to New Zealand beef and New Zealand environments.

B+LNZ Genetics aims to deliver genetic tools that will improve maternal performance on hill country, while also producing carcasses that meet market specifications.

Specifically, B+LNZ Genetics' beef plan involves:

1. Beef genomics (overseen by Dr Steve Miller, a specialist beef geneticist from Canada who joined AgResearch last year);
2. Economics and indices (overseen by Dr Tim Byrne, AbacusBio, who specialises in the economics of genetics);
3. Maternal genetics (overseen by Dr Jason Archer, AbacusBio, who has expertise in both genetics and farm systems); and
4. Extension and adoption.

While all of these projects interlink, a priority project is the Beef Progeny Test. It involves more than 50 AI bulls, 50 follow-up bulls, 1600 cows and 600 heifers across five large properties. Ultimately, it will quantify and demonstrate to commercial farmers the value of investing in genetics that deliver in New Zealand conditions. This first B+LNZ Genetics beef newsletter concentrates on this project.

We especially value the input of breeders and are working closely with PBBNZ. Please do contact me if you have any questions or comments.

**Graham Alder**

General Manager, B+LNZ Genetics  
*Graham.Alder@blnzgenetics.com*

**Beef Progeny Test: an overview**

The B+LNZ Genetics beef progeny test project is a partnership which includes Focus Genetics, Whangara Farms, participating herds and meat processors. It is about beef genetics at the commercial level and its goals include:

- Quantifying the economic value of genetics for commercial farmers;
- Demonstrating the use of genetic and genomic technologies under New Zealand farming systems; and
- Contributing data for research on new tools (including genomics) and measurements relevant to New Zealand commercial beef farming.

## Project details

The project involves artificially inseminating about 1600 cows and 600 heifers annually for two years, using more than 50 bulls of a range of BVs. It is being run under commercial conditions at Whangara Farms (Gisborne), Landcorp's Rangitaiki Station, Taratahi's Tautane Station (Hawke's Bay), the Black family's Mendip Hills Station (North Canterbury) and Lonestar's Caberfeidh Farm (North Otago).

The bulls are pedigree and performance recorded bulls, and represent a range of genetics used in New Zealand beef herds. The breeds used include Angus, Hereford, Stabilizer, Simmental and Charolais (see next page for a full list of AI sires). Some bulls are specifically included to provide genetic links to international programmes, where carcass data is being collected (e.g. the Australian Angus Sire Benchmark Programme, Hereford Progeny Test and Angus Sire Alliance).

Mated cows and replacement heifers will be weighed and condition scored three times during the year. Cows will be scanned following AI programmes to accurately determine conception date so that follow-up bulls can also be evaluated without calving beats to determine birthdate. All cows, calves and bulls will have samples collected for DNA parentage and future genomic research.

Steers will be measured for growth, carcass traits and carcass quality. Heifers will be measured for growth, antral follicle count as yearlings and ultrasound scan carcass traits. Heifers retained into the herd will be a random selection within sire groups and they will be mated to low birthweight bulls. They will then be measured as per the original mated cows.

## Outcomes

Over time, the test will:

1. Evaluate maternal performance and survival for different cow types in commercial conditions.
2. Generate potential new eBVs for cow performance - e.g. antral follicle counts (measured in heifers to predict cow fertility); cow condition score; and cow stayability.
3. Evaluate the relationship between maternal performance, finishing performance and carcass quality/market attributes.
4. Evaluate across breeds.

## Timeframes

The test is in the establishment phase, with most cows mated and AI for the final property occurring in January. The next step will be pregnancy scanning and measuring cow liveweight and body condition score.

## Summary

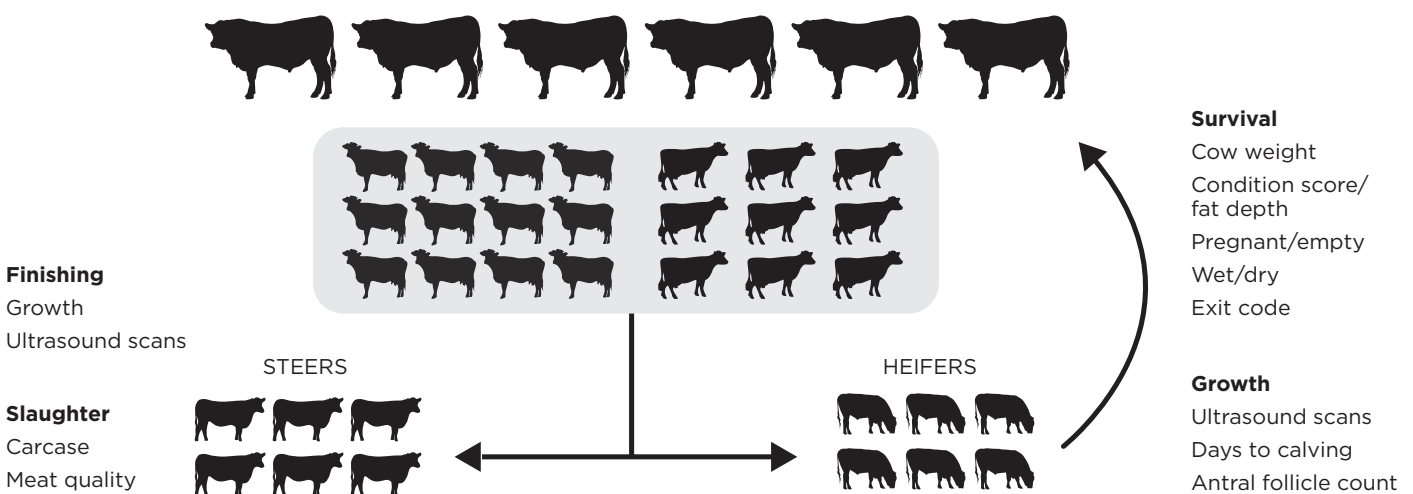
This particular project is about expression of appropriate beef genetics in commercial environments and quantifying the value of using good genetics for beef production.

Data will be used to validate genetic and genomic tools under New Zealand conditions, while also providing useful carcass information (currently scarce in New Zealand), genetic links to Australian carcass data, and the opportunity to develop new genetic and genomic tools.

## Want to know more?

Email [info@blnzgenetics.com](mailto:info@blnzgenetics.com)

## Beef Progeny Test: evaluating finishing and/or maternal performance



## Table of bulls involved in the Beef Progeny Test

Sire	Owner
<b>Angus Benchmark Bulls<sup>1</sup></b>	
Turihaua Crump E5	Meadowlea
Pinebank 64/10	Pinebank
Glanworth Wiagroup 1213	Glanworth
Matauri Outlier F031	Matauri
Fossil Creek Hero H006	Fossil Creek
Te Mania 11 533	Kakahu
Totaranui 238	Totaranui
Storth Oaks H41	Storth Oaks
Focus Prominent 100104	Focus Genetics
Focus Resolute 120992 (ET)	Focus Genetics
Ngaputahi E38	Ngaputahi
<b>Nominated Angus Bulls</b>	
Focus 135057	Focus Genetics
Focus 135252 (ET)	Focus Genetics
Focus 135262 (ET)	Focus Genetics
Mt Linton 13007	Mt Linton
Turihaua Liberation	Turihaua
Tangihau Kaino H29	Shian
Matauri Reality 839	Matuari
<b>Angus International AI Bulls</b>	
Conneally Revenue 7392	Select Sires
HPCA Intensity	Select Sires
Rennylea Edmund E11	ABS Global
GAR Momentum	Select Sires
EF Complement 8088 <sup>2</sup>	ABS Global
PA Safeguard 021 <sup>2</sup>	ABS Global
S A V Bruiser 9164 <sup>2</sup>	ABS Global
<b>Charolais Bulls</b>	
Silverstream Performer	Silverstream
Welcome Swallow Easy Gain F508	ABS Global

Sire	Owner
<b>Hereford Bulls</b>	
Otapawa Spark 3060	Otapawa
Waikaka Turning Point 110015	Locharburn/Beanbah
Okawa Davis 7046	Okawa
Okawa Marshall 0109	Okawa
Matariki Holy Smoke	Matariki
Nithdale Elvis	Nithdale
Beechwood Turk 0051100094	Beechwood
Bluestone 120061	Bluestone
Wirruna Daffy D1 <sup>3</sup>	ABS Global
Glendank Park Top Gun W42	Mendip Hills
Koanui Rocket 0219	Morrison Farming
<b>Stabilizer Bulls</b>	
Focus Big Gene 121293	Focus Genetics
Focus Forefront 121599	Focus Genetics
Focus Forceful 135159	Focus Genetics
Focus Trinity 135263	Focus Genetics
Focus 135361	Focus Genetics
<b>Simmental Bulls</b>	
Waikite AA2036	Whangara Farms
Kerrah 393	Whangara Farms
Rissington AB5185	Focus Genetics
Rissington New Standard AU158	Focus Genetics
Glen Anthony Y-arta AY02 (ET)	Glen Anthony
Glenside Atomic A5	Leafland
Kerrah A456	Leafland
Tokaweka Handsome AH801	Ailsa G.R.
Kerrah XFactor AX187 (ET)	Kerrah

<sup>1</sup> Benchmark bulls listed have been included in the Australian Angus Sire Benchmark Programme

<sup>2</sup> Bulls with progeny and carcass data from the Angus Sire Alliance Programme

<sup>3</sup> Bull used in the Herefords Australia Progeny Test Project