



Informing New Zealand Beef (INZB)

Quarterly Progress Report: April – June 2023

Background

Beef + Lamb New Zealand with the support of Ministry for Primary Industries is leading the Informing New Zealand Beef (INZB) programme. The overall aim of the seven-year programme is to improve profitability and enhance sustainability across the beef industry through the development and adoption of improved genetics.

The objectives of the programme are to:

1. develop a beef genetic evaluation system that includes traits that are important to NZ beef farmers and supports a sustainable beef farming industry in NZ,
2. create easy to use tools which enable data to be efficiently collected, managed, analysed and used by farmers to make profitable decisions for their operation,
3. create a new approach to extension design with the goal of increasing farmer engagement across the beef industry.

Summary of progress during this quarter

Selection index development research plan created

A research plan has been developed to build selection indexes for the NZ beef industry, with work set to kick off in July. Selection indexes contain information on several different traits, including the monetary value of these traits, and allow farmers to make selection decisions that are the most profitable for their system. The index development work involves:

- 1) developing prototype indexes (terminal, maternal and dairy-beef)
- 2) evaluating the impact of new indexes on GHG emissions
- 3) estimating the impact of proposed new traits on indexes and genetic progress.

Greenhouse Gas (GHG) cattle genetics workshop held

A GHG cattle genetics workshop was held in April and included key researchers across the cattle sector in NZ. The purpose of the workshop was to create an aligned and efficient approach to GHG genetics research in cattle in NZ. Organisations involved in the workshop included AbacusBio, AgResearch, B+L NZ, CRV, DairyNZ/NZAEL, Pamu/Focus, LIC, Massey and MPI.

Beef Progeny Test (BPT) activities

Pregnancy scanning was carried out at Lochinver, with 338 cows (58.1%) in calf to AI (artificial insemination) sires. Pregnancy scanning was also carried out at the Shorthorn Progeny Test site, with 53.1% of cows and 55.6% of heifers in calf to AI.

At the end of May, the first lot of BPT animals were processed. Carcase quality data was recorded through Silver Fern Farms Beef EQ programme. Fat cap and rumen samples were also taken from the carcase to contribute to GHG trait research.

A call for bull (Angus, Hereford and Simmental) nominations for both the Kepler and Lochinver BPT sites was released in June. As with last year, Angus and Hereford bulls will be crossed with Angus and Hereford cows at Kepler and at Lochinver, Angus, Hereford and Simmental bulls will be crossed with Angus cows.

Commercial farmer recruitment ramps up

Ten new commercial farmers have signed up to be part of the INZB programme this year. We have worked alongside each of these commercial farmers to create an operational plan for data recording on these farms. Farmers will receive a hardcopy welcome pack with relevant programme information and answers to frequently asked questions.

Several INZB commercial farmers have already completed DNA sampling and genotyping of in-calf cows. The team is now working on a system whereby genotype data can flow through into the B+LNZ research database.

Progeny test data being loaded into research database

INZB Beef Progeny test (BPT) data continues to be loaded to the research database, with close to 400,000 measurements on approximately 16,600 animals. This includes data from the Kepler and Lochinver herds and includes measurements such as liveweight, Body Condition Score (BCS), docility, pregnancy diagnosis, structural assessment scores, meat scanning and slaughter traits. This data is used to facilitate development on the genetic evaluation system.

As well as BPT data, Focus Genetics data has also been loaded into the research database with data from five herds on almost 20,000 animals. We are also progressing the loading of data from commercial farmers involved in the programme.

INZB programme podcasts produced with Sarah Perriam-Lampp

The INZB team is producing a series of podcasts with Sarah Perriam-Lampp. Three podcasts have been launched so far and are available on the B+LNZ Knowledge Hub:

- 1) An Introduction to the Beef + Lamb New Zealand Informing New Zealand Beef programme
- 2) How Beef + Lamb New Zealand's Informing New Zealand Beef programme will supercharge farmers' genetic gains
- 3) What cattle traits are important to New Zealand farmers?

A further 3 podcasts are planned, with the next one including a focus on commercial farmers that are part of the programme.



Beef Breeder Forum held in May

Around 80 beef stud breeders, farmers and rural professionals attended the Beef Breeders Forum in Palmerston North to hear from world-leading experts and discuss the future of New Zealand's beef industry. A highlight for a number of participants was Melissa Clark-Reynolds, who set the scene for the day saying that the future for beef was bright, perhaps a lot brighter than food products that can more easily be replicated, but disruptive technologies should not be ignored.

Better Beef Breeding workshops held across seven regions

Seven regional Better Beef Breeding workshops have been held and two more are planned before the end of September 2023. These workshops are designed to help farmers make good decisions about bull buying to ensure they can add value to their farming operations. Key concepts covered include setting a breeding objective, choosing a bull breeder that matches your objective(s), and using genetic and physical information to assess bulls at sales.

Key highlights and achievements

- GHG cattle genetics workshop held
- Commercial farmer genotyping kicked off
- Significant amount of data being loaded into research database
- Beef Breeders Forum held in May
- Better Beef Breeding workshops held across 7 regions

Upcoming

- Commence selection index development
- Bulls selected for BPT matings
- 2 more regional Better Beef Breeding workshops to be held
- USA/Canada Beef Breeders study tour
- GHG Portable Accumulation Chamber measurements on 120 BPT heifers from Kepler

Investment

Investment period	Co-investor contribution	MPI contribution	Total investment
During this Quarter	\$415,132	\$276,754	\$691,886
Programme To Date	\$2.77 m	\$1.85 m	\$4.62 m