# Informing New Zealand Beef (INZB)
## Quarterly Progress Report: April - June 2022



## 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.

## 4.1 Summary of progress during this quarter

**Trait feasibility work completed and Farmer Trait Prioritisation survey ready to deploy**

A number of approaches are being used to decide what traits should be included in NZ specific genetic evaluations. We have had input from the Industry Advisory Group (IAG) as to what traits they believe are important to the NZ beef industry. We have also had an independent trait feasibility assessment carried out by AbacusBio to consider what traits should be developed within the INZB programme. This independent assessment considered ease of implementation of traits, as well as their potential economic, social and environmental impact. Now, we are going out to industry to get their input on what traits are important to them. This will be done with the Farmer Trait Prioritisation survey. Results from this survey, along with IAG input and the independent assessment, will help direct what traits will be carried forward in the

INZB programme, and most importantly will influence the future of the NZ beef industry.

**Beef Progeny Tests**

A second Beef Progeny Test (BPT) site has been recruited to be part of the INZB programme – Lochinver Station, which is part of Rimanui Farms Ltd. This BPT will include Angus, Hereford and Simmental.

At the end of June, a call for bull nominations was advertised. Nominations are open until 22nd August. Selected bulls will be used for artificial insemination at both the Kepler and Lochinver BPT sites – with Angus and Hereford bulls being used at Kepler across both Angus and Hereford cows in December 2022, and Simmental, Angus and Hereford bulls being used across Angus cows at Lochinver in January 2023.

**Discussions progressing with commercial farmers**

Commercial farm visits commenced in May. Currently there are 7 commercial farmers being onboarded to the programme. We aim to have 10 onboarded by the end of this financial year.

INZB Genotyping Guidelines, as well as a Genotyping Subsidy Policy are in development to help guide commercial farmers on what level of genotyping is required and to outline criteria around the genotype subsidy. A data sharing agreement for commercial farmers is also in development.

**Genetic evaluations to support farmers and a sustainable beef industry**

Genetic Evaluation Specialist, Jie Kang, has joined the INZB team, taking on Beef Progeny Testing analysis and reporting, as well as Genetic Evaluation strategy development.

In May we had our first Evaluation Advisory Group meeting, where we consulted with the group on our Genetic Evaluation strategy.

Focus Genetics has signed a data sharing agreement to provide data to the INZB programme to aid genetic evaluation development. We are working through the process of onboarding this data into the Beef nProve database.

**Extension activities and development of an Extension Strategy**

A number of extension activities have been carried out this quarter, with the goal of helping farmers use the tools they already have available to them, to breed better beef.

Better Beef Breeding online workshops were held in April, with a focus on helping farmers understand and interpret the information presented in bull sales catalogues, how to carry out a structural assessment and understanding fertility testing. Two of these 2-part workshops were held with 30 attendees across both workshops.

Development of content for these workshops means we will be able to continue to offer an online version of the workshop throughout the INZB programme (annually). An online learning module, based on the Better Beef Breeding workshops, is in development.

In addition to the Better Beef Breeding online workshop, a Bull Breeders webinar was held in place of an in-person forum. Technical Advisory Group (TAG) member Professor Wayne Pitchford and INZB Science Lead, Dr Jason Archer, presented to 89 attendees at this webinar on the topic of maternal productivity and reproduction.

A Beef Structural Assessment video featuring Accredited Structural Assessment technician Bill Austin and Dr Jason Archer was created and can be found on the Beef + Lamb NZ Knowledge Hub (https://beeflambnz.com/knowledge-hub). This video, along with a Scene + Herd podcast featuring INZB (https://beeflambnz.podbean.com/) have been popular content this quarter (764 downloads of Podcast and 633 views of the Structural Assessment video). The video covers assessing the phenotype and structure of beef bulls using the Beef Class Structural Assessment scoring system.

An Extension strategy has been developed using a design thinking approach with the goal of driving adoption of the genetic tools produced as part of the INZB programme. This approach includes an iterative approach to four phases – discovery, defining, consolidation/validation and innovation. Effectively, it involves interviewing a large number of farmers to identify key drivers of genetic-based decisions and genetic tool uptake, consolidating the findings and designing extension activities based on these finds – and then continually iterating on them. The design team, led by Beef + Lamb NZ Design and Capability Lead, Ange McFetridge, had its first meeting in June and is planning their first in person get together mid-July followed by 8 farmer interviews before the end of September 2022.

## 4.2 Key highlights and achievements

- Independent trait feasibility assessment carried out by AbacusBio
- Industry Trait Prioritisation survey developed with input from Industry Advisory Group and Farmer Research Advisory Group
- Second Beef Progeny Test (BPT) site identified – Rimanui Farms Lochinver station
- Bull nomination call announced for both BPT sites
- Commercial farm visits commenced for onboarding purposes
- Genotype Subsidy policy and Genotyping Guidelines in development, along with data sharing agreement – for commercial farmers
- Genetic evaluation strategy developed to development – with input from Evaluation Advisory Group
- Good engagement with extension activities carried out and extension strategy developed and design team bought together

## 4.3 Upcoming

- Farmer Trait Prioritisation survey to be deployed to industry in July
- Extension discovery work - farmer interviews and associated design workshop
- Complete onboarding of 10 commercial farmers into programme
- Post-winter/pre-calving measurements at Kepler
- Development of the Better Beef Breeding online learning module

## 4.4 Investment

| Investment period | Co-investor contribution | MPI contribution | Total investment |
|---|---|---|---|
| During this Quarter | $249,089 | $166,059 | $415,148 |
| Programme To Date | $1.40 m | $953,431 | $2.34 m |