Informing New Zealand Beef (INZB)

Quarterly Progress Report: July – September 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.

Summary of progress during this quarter

Results in for Farmer Trait Prioritisation survey

A number of approaches have been used to decide what traits should be included in NZ specific genetic evaluations and indexes. We have had input from the Industry Advisory Group (IAG) as to what traits they believe are important to the NZ beef industry, as well as an independent trait feasibility assessment carried out by AbacusBio to consider what traits should be developed within the INZB programme. This quarter, we asked farmers what traits are important to them, with the Farmer Trait Prioritisation survey.

In total, 720 farmers responded to the survey (with 439 complete responses). The majority of respondents were commercial beef breeders, finisher/traders and bull breeders. While the most common primary breed of cattle in respondents' operations being Angus, followed by Hereford and Dairy-Beef crosses. There was strong support among respondents for using EBVs and selection indexes, with 72% agreeing that NZ systems require specialist indexes. There was also strong support for including functional traits in indexes. The survey showed

two distinct types of respondents – a carcase-orientated cluster and a maternal-orientated cluster. The carcase-orientated cluster prioritised feed efficiency, carcase and eating quality traits alongside maternal traits, while the maternal-orientated cluster placed more emphasis on calving ease, fertility and functional traits.

Overall, the survey results suggest that farmers priorities for trait development are fertility, functionality (feet, udder, docility, temperament), calving ease, feed efficiency, growth and weight traits (including carcase) and Body Condition Score (BCS). Of these traits, feed efficiency/intake, mature cow BCS, fertility and cow functionality traits align with the traits identified as a priority for further development within the programme by the independent trait assessment and IAG input.

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.

Bulls nominated for this year's Beef Progeny Tests Artificial Insemination (AI) matings

Bull nominations for the two Beef Progeny Test (BPT) sites were advertised and selections made during this quarter. We had 42 bulls nominated and 19 have been selected – 7 Angus, 7 Hereford, 5 Simmental and 1 overseas bull (Angus). A list of the bulls will be available once semen has been collected. Artificial insemination will take place at Kepler in December and Lochinver in January.

Calving of the second cohort of Kepler BPT calves commenced this quarter. Calves from an Angus bull cross Angus cow and Angus bull cross Hereford cow are pictured here.

First ten commercial farmers onboarded

The INZB team has worked with these commercial farmers to develop operational plans for data recording. These plans differ from farmer to farmer and include information such as current recording practices, whether they would like to use AI as part of the programme, level of interesting in DNA sampling and genotyping, what traits they would like to record as part of the programme and what assistance and/or training is required.

Technical Advisory Group (TAG) met to discuss the programme

In September, the TAG met to discuss index development and consider traits for development within the programme. The group also discussed the proposed INZB Greenhouse Gas (GHG) research and the genetic evaluation strategy.

Online learning module in development

The Better Beef Breeding online learning module is well and truly in development, with filming being carried out on two farms to create content for this module. This online learning tool will be completed later in October and once it is ready will be made available on the B+LNZ Knowledge Hub.

Key highlights and achievements

- Farmer Trait Prioritisation survey received 729 responses
- Ten commercial farmers were onboarded into programme
- Second cohort of BPT calves born at Kepler site
- Post-winter/pre-calving measurements carried out at Kepler
- Technical Advisory Group met to discuss the programme
- Development of the Better Beef Breeding online learning module is underway

Upcoming

- Farmer Trait Prioritisation survey results will be reported to industry
- BPT maternal and carcase trait reports will be published
- Expressions of interest will be advertised for commercial farmers who are interested in being part of the programme
- Better Beef Breeding online learning module will be completed

Investment

Investment period	Co-investor contribution	MPI contribution	Total investment
During this Quarter	$284,359	$189,573	$473,932
Programme To Date	$1.69 m	$1.13	$2.81 m