



# RESEARCH UPDATE

September 2023

Beef + Lamb New Zealand's (B+LNZ) research team spearheads a diverse array of research on behalf of farmers. This quarterly newsletter offers a comprehensive overview of ongoing research projects. Feel free to distribute this newsletter among the broader farming community and contact [research@beeflambnz.com](mailto:research@beeflambnz.com) to find out more.

## Getting to know a member of the research team

Cara lives in Martinborough with her husband, Chris and dog, Wilburforce. She has been at B+LNZ for over three years and is the Principal Advisor of Animal Health Research. In her previous roles, her focus has been animal health, particularly diagnosing animal diseases. Cara manages research projects and identifies research opportunities related to animal health. She has a special interest in science communication – making sure the information is getting to the right people in the right way. Cara has a PhD from the School of Veterinary Sciences at Massey University where she investigated mortalities of farmed Chinook salmon in the Marlborough Sounds. When not at work, she can often be found by or in the sea.



## New resources from research

**The parasite chronicles:** Farmers tell their stories about how and why they reduced drench inputs on their farm:

- > [Tom Brown](#)
- > [Andrew Law](#)
- > [Dave McKenzie](#)

**Informing New Zealand Beef Programme:** The INZB programme is producing podcasts with Sarah Perriam-Lampp, check out the first three:

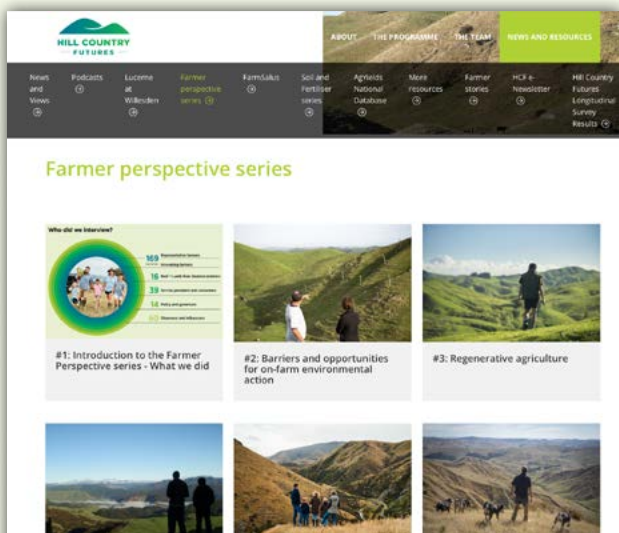
- > [An Introduction to the Beef + Lamb New Zealand Informing New Zealand Beef programme](#)
- > [How Beef + Lamb New Zealand's Informing New Zealand Beef programme will supercharge farmers' genetic gains](#)
- > [What cattle traits are important to New Zealand farmers?](#)

## Hill Country Futures (HCF) Partnership Programme

After five years, HCF is ending, having offered varied resources for farmers and rural professionals, such as tools, materials, and technical information. Listen to our podcast series for a program overview where team members discuss their research achievements for farmers. [Listen here](#).

To sum up, the programme delivered resources for:

- **Resilient farmers**
  - [Farmer perspective series](#) - A science communication series detailing key farmer issues and their solutions.
  - [FarmSalus](#) - A resource package promoting resilience and well-being across four pillars - Healthy farmer, Healthy farm business, Healthy environment, and Healthy connections.
  - [Twelve farmer stories](#), highlighting positive social and environmental outcomes were created for mainstream media.
- **Resilient forages**
  - [Forage growth trials](#) and [AgYields](#) open-source national database.
  - [Modelling legume yield](#) to estimate yield and suitability of forage legumes across New Zealand.
  - [Farm-scale mapping of soil properties](#) (temperature and moisture) in the hill country landscape to provide robust data to support and link to the forage models.
  - Increased knowledge of alternative forage species like legumes and [native plants](#).



# We want your sheep poo

Take part in groundbreaking Facial Eczema (FE) research by collecting sheep poo – it's as easy as taking a walk in your paddock. The three-year study will help B+LNZ understand how widespread FE is in the North and South Islands and inform how we manage this disease in future.

[beeflambnz.com/news/FEresearch](https://beeflambnz.com/news/FEresearch)



Facial Eczema Three-Year Research Study

## Animal health, production, and welfare

**B+LNZ seeks farmers for groundbreaking Facial Eczema study.** B+LNZ is inviting farmers to contribute to a pioneering research project on Facial Eczema by collecting sheep poo. This three-year investigation aims to enhance B+LNZ's understanding of Facial Eczema's prevalence across New Zealand and its potential links to a warming climate. The disease, stemming from a toxin-producing fungus, affects livestock and lacks a cure.

The toxin can cause permanent liver damage, leading to sunburn and reduced production if the animal survives. The estimated annual cost of Facial Eczema to the country's livestock sectors is around \$332 million per annum.

Participating farmers—350 from 16 regions—are essential to this research's success. We need farmers to collect samples from a mob of sheep approximately every two weeks from October to May over the three years. B+LNZ provides sampling kits, instructions, and covers lab courier costs.

Participating farmers will receive prompt faecal spore count results, monthly updated spore count maps, and a Prezy Card at season's end upon submitting all samples. Register your interest in the Facial Eczema research study by providing your details [here](#) by end of September.

**The Non-invasive Facial Eczema (FE) tolerance test is advancing.** Key biomarkers have been narrowed down for the test and will undergo evaluation for commercial lab suitability. Validation will occur using stored and new samples from the upcoming RamGuard season. If successful, the test could be accessible to farmers in 6-12 months. While progress is positive, the comprehensive analysis required means more time is needed.

**For those cutting back on drench use, consistent monitoring, proper feeding, and strategic grazing are crucial.** This insight stems from a Massey University-led project. The study analyzed 17 farms across NZ with reduced drenching compared to peers. Other findings include:

- There's no specific farmer profile for drench reduction.
- Successful reduced-drench farming is attainable regardless of location, size, or system.
  - However, it demands careful thought, holistic decision-making, and incorporating parasite control into overall farm management.

**Parasite management group aids farmer changes.** A pilot group completed its initial year, assessing its impact on knowledge, confidence, and action. Evaluation shows:

- Many group farmers share learned insights with others.
- Farmers are adjusting parasite management, primarily in grazing.

The group will continue for at least two more years, adapting to needs. B+LNZ researchers are hoping to expand these groups nationwide in the coming year.



## Informing New Zealand Beef (INZB) Programme

**Informing New Zealand Beef team pick up key insights from North American study tour.** The INZB group joined representatives of New Zealand's major beef cattle organisations including Performance Beef Breeders NZ, Angus New Zealand, NZ Herefords, AngusProNZ, New Zealand Beef Shorthorn Association and Simmental NZ on the visit to Canada and the United States.

The group attended the Beef Improvement Federation BIF2023 research symposium and convention in Calgary, Canada, in early July before a whistle-stop tour of seven US states visiting farms, universities and research facilities and businesses. Key insights from the trip were shared on the [BLG Facebook page](#).



### **Pregnancy scanning, processing and call for bull nominations for across breed Beef Progeny Test (BPT).**

Pregnancy scanning at Lochinver showed 338 cows (58.1%) in calf to artificial insemination sires. 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.

**Beef data continues to flow into research database.** INZB 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 measurements such as liveweight, Body Condition Score, 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 (data from five herds on almost 20,000 animals) and data from commercial farmers involved in the programme (in progress) have also been loaded.

**Beef Breeder Forum held in Palmerston North in May.** About 80 beef stud breeders, farmers, and rural professionals convened to hear global experts and deliberate on New Zealand's beef industry's future. A standout moment was Melissa Clark-Reynolds, who set an optimistic tone, emphasising that beef's prospects are promising, potentially surpassing easily replicable food products. She cautioned against dismissing disruptive technologies.

**Better Beef Breeding workshops held across seven regions with two more planned before September.** Workshops are designed to help farmers make good decisions about bull buying to 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.

## Acknowledgements

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*We also acknowledge all the farmers who have provided access to their farms for studies, samples for testing, and shared their knowledge and expertise.*



*The first calf born in this year's cohort for the across-breed Beef Progeny Test at Pāmu's Kepler Farm*