



NZ Dairy Breed Societies DIGAD integration and TOP solution



Snapshot

Industry partner: Holstein Friesian NZ

Project length: 10 months

Start date: February 2020

Estimated completion date: December 2020

Industry funding: \$198,000

MPI funding: \$792,000

The NZ Dairy Cattle Breed Societies are developing a modern way to collect and record vital data on animal traits, which is used to shape the genetics powering our multi-billion-dollar dairy sector.

The opportunity

Each year the physical and behavioural traits of around 50,000 dairy cows are assessed to help evaluate the performance of New Zealand's top breeding bulls. The information is known as TOP (traits other than production) data. In future, the responsibility for collecting this important data will lie with the NZ Dairy Cattle Breed Societies. They are developing a new, independent solution which will integrate with the Dairy Industry Good Animal Database (DIGAD). The system will provide the NZ industry with access to the latest technology, improved data, and the ability to add new traits in line with world standards.

The solution

The TOP solution will provide industry-standard phenotypic data, through DIGAD, for New Zealand dairy cows. Dairy cattle breeding is undergoing a revolution with the use of genomic technologies. The great strength of these technologies is that they deliver more accurate evaluations on newborn animals. The key to utilising genomic technology is having access to accurate

phenotypes in suitable training populations. This is where NZ Dairy Cattle Breed Societies will play a major role in the future. A more flexible and adaptable TOP solution will facilitate the independent collection of phenotype data for calibration and validating genomic predictions.

The benefits

This project could benefit New Zealand by:

- providing accurate and independent phenotypic data for NZ's multi-billion-dollar dairy sector
- improving the accuracy of NZ's TOP breeding values
- delivering accurate and validated genomic predictions
- better environmental outcomes: Farmers can breed more efficient, profitable cows, which live longer, reducing the need to rear as many replacement heifers.