Southern Dairy Hub
Future Farm Systems Demonstration

Research, trial and demonstration that provides real-time tangible data direct to our farmers through farmlet trials

VISION

To be the most trusted research and demonstration hub for southern – and all New Zealand – dairy farmers.

MISSION

To provide economic, social and environmentally sustainable solutions for southern dairy farmers and our community.

OUR GOAL

To identify and measure outcomes from a future dairy farming system that can be adopted by Southland/Otago dairy farmers. We will be a focal point to stimulate ideas and discussion on future farming systems.

WHAT WE ARE DOING

We are implementing a multi herd comparison that will measure the performance of two contrasting farm systems.

- **Standard herd** – average BW Southland herd stocked at 3.2 cows per ha wintered on swedes.
- **Future herd** – Higher genetic merit cows (127 BW difference) with a lower stocking rate (2.5), less imported lactation supplement, wintered on baleage.

OBJECTIVES

Research, test and report on how environmental footprint (water quality and GHG emissions), can be reduced with minimal impact on profitability by:

A) Using a lower stocking rate in the future herd focusing on increased efficiency to minimise profit impact, and improved animal comfort.

B) Identifying the critical success factors to improving per cow production in a lower input system.

C) Showing leadership to our farming community by demonstrating a future proofed southern dairy farming system.

D) Identifying opportunities to partner with providers of emerging technologies that will help reduce environmental footprint, improve animal welfare and deliver cost benefits.

HOW WE MEASURE SUCCESS (KPIs)

Environmental

Demonstrate best farm practice with focus areas: water quality, greenhouse gas emissions, nitrogen efficiency to support the production of high-quality food.

Examples of measures:

- Purchased N surplus in the lower quartile (Fonterra)
- Nitrogen use efficiency – kg MS per kg N applied
- % total feed grown on farm
- Greenhouse gas emissions per kg MS – $kgCO_2e$/kg MS
- Biological GHG emissions per ha – $kgCO_2e$/ha
- Water quality

Animal

Create excellence in breeding management underpinning profitability with purposeful life strategy, including the opportunity for dairy beef in the dairy system. Utilising technology at a cow level to maximise cow health, comfort and performance i.e. Every Cow Counts.

Examples of measures:

- Lameness score – cases as % of peak cows
- Mastitis – cases as % of peak cows
- Body condition score – measured fortnightly. Less than X% of herd below target at key times
- Winter cow comfort – lying time
- Calf fate: proportion of calves born entering the value chain

Financial

Determine the financial outcomes of both systems and identify and highlight the levers to maximise profitability in a lower input system.

Examples of measures:

- Labour Cost | ha
- Feed Spend | ha
- Feed as a % of FOE*
- FOE | ha
- FOE | kg MS
- FOE | cow
- Operating profit | ha
- Operating profit | cow
- Operating profit | kg MS

*FOE = farm operating expenditure

People

Encourage and cultivate a positive work environment that nurtures collaboration and innovation and leads to increased overall efficiency and positive staff retention.

Examples of measures (farm level):

- Hours/week
- Hours/kg MS
- Hours/$ operating profit
- Staff satisfaction / wellbeing measures
- Cows/FTE

SOUTHERN DAIRY HUB