

Future Dairy Farm Systems Project – NARF (Dargaville)

This project compares the impact on productivity, profitability, people and the environment on three farms:

1. **Baseline (Current) Farm** – Kikuyu & ryegrass based pastures with up to 190 kg N/ha/annum, 3.1 cows/ha
2. **Alternative Pasture Farm** – Tall fescue & cocksfoot based pastures, up to 190 kg N/ha, 3.1 cows/ha
3. **Low Emissions Farm** – Kikuyu & ryegrass based pastures, designed to reduce methane emissions by 25% and nitrous oxide by 50%, no nitrogen applied, 2.3 cows/ha

This project is funded by DairyNZ, MPI (Sustainable Food & Fibre Futures) and Hine Rangī Trust.

Update 30 th April 2026	Baseline Farm	Alternative Pasture Farm	Low Emissions Farm
Average Pasture Cover	2,080	1,967	2,184
% farm out for regrassing	9%	12%	9%
Pasture Growth (kg DM/ha/d, last 2 weeks)*	75	58	59
Rotation Length (days, last 10 days)	40	32	38
Cows in Milk/Total Cows	81/81	82/82	64/64
SCC (000's)	124	105	183
Production/cow/day (kg MS/cow)	1.43	1.38	1.23
Production/ha/day (kg MS/ha)	4.10	4.09	2.86
Production/cow, season to date (kg MS/cow)	442	427	439
Production/ha, season to date (kg MS/ha)	1,309	1,257	1,024
Supplement Offered Milkers (kg DM/cow/day)	3.3 PKE 3.2 Baleage	4.4 PKE 3.2-6.3 Baleage	2.9 PKE 0-4.1 Baleage
Purchased Supp Fed, season to date (kg DM/c)	PKE 793 Purch bale 24	PKE 763	PKE 450
Homegrown Silage Fed to date (kg DM/cow)	159	291	258
Homegrown Silage on hand (kg DM/cow)	170	57	239
Average Body Condition Score (Milkers)	4.1	4.1	4.3
Nitrogen to date – 2025/26 Season (kg N/ha)	170	164	0
Managers Worry Score (1 = Low, 10 = High)	2	3	1
Rainfall (last two weeks)	46		

*Pasture growth rates are calculated using uncalibrated platometer readings

CURRENT MANAGEMENT

- Nice to have some fine weather but our pasture wedges are dropping off with some cooler days.
- Baseline and Alternative Pastures herds are drying off in the next week. The Low Emissions herd will dry off the following week. Culls are booked in and R2yr heifers came home today.
- There is a lot going on with setting up for our new trial. We will be milking around 80 cows through the winter for our Extended Lactation Trial.
- All new grass paddocks have now been sprayed for broadleaf weeds. We used the drone to reduce soil damage as paddocks were still soft. Our new kikuyu plants are up and competing with Poa Annua.