

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 Pastures 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 Rangi Trust.

Update 2 nd October 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2,648	2,471	2,257
Pasture Growth (kg DM/ha/d, last 2 weeks) *	89	68	38
Rotation Length (days, last 10 days)	29	28	27
Cows in Milk/Total Cows	81/83	82/83	63/65
Production/cow/day (kg MS/cow)	2.16	1.99	2.09
Production/ha/day (kg MS/ha)	5.96	5.74	4.41
Production/cow season to date (kg MS/cow)	109	103	105
Production/ha season to date (kg MS/ha)	326	306	245
Supplement Offered Milkers (kg DM/cow/day)	PKE 2.7	PKE 2.7	PKE 4.5
Purchased Supp Fed season to date (kg DM/c)	PKE 464 Purch bale 24	PKE 407	PKE 215
Homegrown Silage Fed to date (kg DM/cow)	0	0	128
Average Body Condition Score (Milkers)	4.0	4.10	3.96
% cows below BCS 4.0	25%	11%	21%
Nitrogen to date – 2025/26 Season (kg N/ha)	101	87	0
Managers Worry Score (1 = Low, 10 = High)	3	3	4
Rainfall (last two weeks)	57		

*Pasture growth rates are calculated using uncalibrated platometer readings

CURRENT MANAGEMENT

- Pasture growth has lifted significantly with the warmer days, but soils are still very wet in some areas.
- Baseline and Alternative Pastures herds are now on pasture only, with 5ha dropped out of both farms today for silage.
- The Low Emissions herd will continue getting 3kg PKE per cow until pasture covers rise sufficiently. We expect this will happen in the next 10 days.
- Mating has just begun and cows at BCS 3.5 or below will go on OAD milking to aid their recovery and cycling.
- We have switched back to Sustain, at 70kg/ha behind cows. This is to maximise pasture surplus which we will harvest for silage and use over summer.