

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 27 th November 2025	Baseline Farm	Alternative Pasture Farm	Low Emissions Farm
Average Pasture Cover with silage paddocks	2,546	2,683	2,669
% of farm closed up for silage	16%	17%	22%
% farm out for turnips	9%	12%	9%
Pasture Growth (kg DM/ha/d, last 2 weeks) *	102	92	87
Rotation Length (days, last 10 days)	25	27	29
Cows in Milk/Total Cows	81/81	82/82	64/64
SCC (000's)	66	152	156
Production/cow/day (kg MS/cow)	1.71	1.79	1.90
Production/ha/day (kg MS/ha)	4.99	5.27	4.37
Production/cow season to date (kg MS/cow)	209	205	205
Production/ha season to date (kg MS/ha)	628	611	479
Supplement Offered Milkers (kg DM/cow/day)	0	0	0
Purchased Supp Fed season to date (kg DM/c)	PKE 482 Purch bale 24	PKE 409	PKE 246
Homegrown Silage Fed to date (kg DM/cow)	0	0	128
Homegrown Silage on hand (kg DM/cow)	177	128	0
Average Body Condition Score (Milkers)	4.13	4.14	4.15
% cows below BCS 4.0	0%	0%	0%
Nitrogen to date – 2025/26 Season (kg N/ha)	162	157	0
Managers Worry Score (1 = Low, 10 = High)	2	2	2
Rainfall (last two weeks)	103		

*Pasture growth rates are calculated using uncalibrated platemeter readings

CURRENT MANAGEMENT

- Rain last week has boosted pasture growth again. Pre-graze pasture covers and residuals have risen again on some paddocks, so we have dropped more paddocks out for silage, effectively speeding up the round length.
- Most of the calves have left the farm for grazing.
- Turnip paddocks were sown a few weeks ago but are showing poor germination in wet areas, with paddocks looking patchy. We will drill more seed into these areas, hoping to fill in the holes.
- We have stopped nitrogen applications, however if we see substantial rain coming in the next week or so then we will put some on behind the cows to grow a bit more leaf.