

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 11 th December 2025	Baseline Farm	Alternative Pasture Farm	Low Emissions Farm
Average Pasture Cover with silage paddocks	2,132	2,163	2,126
% of farm closed up for silage	0%	0%	0%
% farm out for turnips	9%	12%	9%
Pasture Growth (kg DM/ha/d, last 2 weeks) *	62	74	69
Rotation Length (days, last 10 days)	26	27	28
Cows in Milk/Total Cows	81/81	82/82	64/64
SCC (000's)	86	152	176
Production/cow/day (kg MS/cow)	1.67	1.47	1.85
Production/ha/day (kg MS/ha)	4.87	4.31	4.15
Production/cow season to date (kg MS/cow)	232	226	230
Production/ha season to date (kg MS/ha)	697	674	537
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)	4	0	128
Homegrown Silage on hand (kg DM/cow)	311	350	259
Average Body Condition Score (Milkers)	4.00	4.05	4.07
% cows below BCS 4.0	17%	16%	15%
Nitrogen to date – 2025/26 Season (kg N/ha)	162	157	0
Managers Worry Score (1 = Low, 10 = High)	3	4	2
Rainfall (last two weeks)	18		

*Pasture growth rates are calculated using uncalibrated platemeter readings

CURRENT MANAGEMENT

- Pasture growth crashed from 100 kg DM/ha/day two weeks ago to 30 – 40 kg DM/ha/day last week due to hot dry conditions. Paddocks cut for silage have been especially slow to come back.
- We are restarting PKE feeding on the Baseline and Alternative Pasture farms due to a drop in pasture covers. The lower stocked Low Emissions Farm is currently fine on pasture only.
- With the drier weather we will stretch the rotation to 30 days on all farms.
- Turnip paddocks are looking good where we had a good strike initially. Poor germination in wetter areas were redrilled a couple of weeks later, however the dry weather seems to be compromising further germination.
- Unlikely we will be putting any more nitrogen on until autumn.

Pasture Growth, 4 Year Average & 2025/26

