

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 4 th September 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2,110	2,096	1,881
Pasture Growth (kg DM/ha/d, last 2 weeks) *	49	45	29
Rotation Length (days, last 10 days)	34	36	34
Cows in Milk/Total Cows	71/83	68/83	57/66
Production/cow/day (kg MS/cow)	1.99	2.08	2.15
Production/ha/day (kg MS/ha)	5.06	4.89	4.19
Production/cow season to date (kg MS/cow)	53	49	53
Production/ha season to date (kg MS/ha)	158	148	123
Supplement Offered Milkers (kg DM/cow/day)	PKE 7.2 Baleage 3.9	PKE 4.5	PKE 2.7
Purchased Supp Fed season to date (kg DM/c)	PKE 330 Purch bale 17	PKE 300	PKE 107
Homegrown Silage Fed to date (kg DM/cow)	0	0	128
Homegrown Silage on hand (kg DM/cow)	0	0	0
Average Body Condition Score (Milkers)	4.02	4.17	4.06
% cows below BCS 4.0	16%	12%	21%
Nitrogen to date – 2025/26 Season (kg N/ha)	60	54	0
Managers Worry Score (1 = Low, 10 = High)	7	5	6
Rainfall (last two weeks)	68		

*Pasture growth rates are calculated using uncalibrated platometer readings

CURRENT MANAGEMENT

- Warmer weather has lifted pasture growth and covers finally. Demand is increasing though with calving coming to an end so we are still feeding supplement to all three herds.
- The Baseline herd will continue to get 8kg PKE per cow per day, without silage. The Alternative Pastures herd will continue getting 5kg PKE/c/d, and the Low Emissions herd will increase to 5kgPKE/c/d as their residuals are below target levels and our feed wedge does not look great without N going on.
- All farms will stay on 30d or longer rotations as we wait for growth to catch up to demand. The tall fescue has seedheads emerging so we will likely speed up the rotation on that farm in the next week or so.
- We are catching up with Ammo behind the cows now that things are drying out and soil temps are improving.