

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 10 th July 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2,286	2,328	2,170
Pasture Growth (kg DM/ha/d, last 2 weeks) *	44	45	39
Rotation Length (days, last 10 days)	68	89	79
Cows in Milk/Total Cows	0/84	0/85	0/66
Production/cow/day (kg MS/cow)	-	-	-
Production/ha/day (kg MS/ha)	-	-	-
Production/cow season to date (kg MS/cow)	-	-	-
Production/ha season to date (kg MS/ha)	-	-	-
Supplement Offered (kg DM/cow/day)	PKE 2.1	PKE 3.2	Home Baleage 4.8
Purchased Supp Fed season to date (kg DM/c)	PKE 137	PKE 167	PKE 9
Homegrown Silage Fed to date (kg DM/cow)	0	0	134
Homegrown Silage on hand (kg DM/cow)	0	0	0
Average Body Condition Score (Milkers)	5.1	5.2	5.1
% cows below BCS 5.0	20%	0%	19%
Nitrogen to date – 2025/26 Season (kg N/ha)	13	17	0
Managers Worry Score (1 = Low, 10 = High)	3	4	4
Rainfall (last two weeks)	Unknown (lots)		

*Pasture growth rates are calculated using uncalibrated platometer readings

CURRENT MANAGEMENT

- Slow rotations, N fertiliser and some warmer days have boosted pasture covers. Soil conditions remain very wet.
- Supplement is being fed on all farms to keep rotation as slow as possible while feeding cows during periods of standing off. The Low Emissions herd has finished their silage and are now on PKE to keep maintenance feeding. If soils were dry enough to keep cows on paddocks we would not be feeding supplement to this herd.
- Cow condition score is close to calving target on all herds now and calving is underway with 22 cows calved across all farms so far.
- Spring Rotation Planners have been set for each farm. We will allocate 40 sq.m/day to dry cows, and use the balance of the daily area allocation for milkers. PKE will be fed to top up intakes, particularly during this period of poor utilisation.
- Nitrogen will continue behind the cows at 60 kg/ha Sustain during low risk weather periods.