

## 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 7 <sup>th</sup> August 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2,175	2,263	2,123
Pasture Growth (kg DM/ha/d, last 2 weeks) *	22	25	20
Rotation Length (days, last 10 days)	46	65	52
Cows in Milk/Total Cows	67/83	65/83	45/66
Production/cow/day (kg MS/cow)	1.58	1.93	2.01
Production/ha/day (kg MS/ha)	2.55	2.27	2.07
Production/cow season to date (kg MS/cow)	14	10	12
Production/ha season to date (kg MS/ha)	41	31	28
Supplement Offered Milkers (kg DM/cow/day)	PKE 3.6	PKE 2.7	PKE 2.7
Purchased Supp Fed season to date (kg DM/c)	PKE 197	PKE 222	PKE 45
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)	4.42	4.63	4.36
% cows below BCS 4.5	35%	16%	35%
Nitrogen to date – 2025/26 Season (kg N/ha)	34	33	0
Managers Worry Score (1 = Low, 10 = High)	5	4	4
Rainfall (last two weeks)	48		

\*Pasture growth rates are calculated using uncalibrated platemeter readings

### CURRENT MANAGEMENT

- Recent cold weather has dropped pasture growth rates and pasture covers. There has been some frost burn on kikuyu, but this is now recovering. Pasture cover is holding better on the Alternative Pastures farm where kikuyu presence is lower.
- The spring rotation planner has us currently targeting 48 days. The grazing rotation on the Baseline farm has been a bit fast due to a fast-calving pattern, we will hold pasture allocation now and increase supplement to get this back on track.
- Annual ryegrass paddocks are finally coming into the rotation. These were late sown due to climate challenges in autumn and have been holding the farms back.
- Nitrogen at 100kg/ha of Ammo36 continues behind the cows on the Baseline and Alternative Pastures farms. We also have given some mid rotation paddocks an extra dose.