

## 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 29 <sup>th</sup> May 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	1,961	1,831	1,944
Pasture Growth (kg DM/ha/d, last 2 weeks) *	38	35	46
Rotation Length (days, last 10 days)	58	67	54
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)	430	398	450
Production/ha season to date (kg MS/ha)	1,289	1,188	1,002
Supplement Offered (kg DM/cow/day)	0	0	0
Purchased Supplement Fed season to date (kg DM/cow)	PKE 583 Baleage 214	PKE 546 Baleage 251	PKE 331
Homegrown Silage Fed to date (kg DM/cow)	340	239	360
Homegrown Silage on hand (kg DM/cow)	0	0	136
Average Body Condition Score (Milkers)	4.50	4.79	4.53
Nitrogen to date – 2024/25 Season (kg N/ha)	173	174	0
Managers Worry Score (1 = Low, 10 = High)	4	6	2
Rainfall (last two weeks)	63		

\*Pasture growth rates are calculated using uncalibrated platometer readings

### CURRENT MANAGEMENT

- Pasture covers got too high on the Low Emissions Farm and kikuyu growth was inhibiting the Italian ryegrass seedling growth. To help control this we cut 12% of the farm for silage.
- With 22% of the farm out for re-grassing, the Alternative Pastures Farm has been struggling for adequate pasture cover. Recent nitrogen applications along with this warmer weather should help getting this back on track.
- We will introduce supplement and lengthen the rotation out to 80-100 days next week on the Baseline and Alternative Pastures Farms now that the new season is beginning. We hit our 800kgDM/c supplement cap on these farms in April so were unable to feed PKE in May.
- Cow condition has been steadily improving, we are on track to have all cows 5.0+ by calving.
- Nitrogen will continue behind the cows at 60 kg/ha Sustain.