

## Future Dairy Farm Systems Project – NARF (Dargaville)

This project compares the productivity, profitability and impact on people and the environment on three farms, being:

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 3 <sup>rd</sup> April 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	1,718	1,746	1,710
Pasture Growth (kg DM/ha/d, last 2 weeks) *	19	13	15
Rotation Length (days, last 10 days)	27	27	30
Cows in Milk/Total Cows	68/68 OAD	0/68 Dry	55/55 TAD
Production/cow/day (kg MS/cow)	1.03	-	1.18
Production/ha/day (kg MS/ha)	2.56	-	2.36
Production/cow season to date (kg MS/cow)	405	398	412
Production/ha season to date (kg MS/ha)	1,214	1,188	917
SCC (000)	91	-	78
Supplement Offered (kg DM/cow/day)	1.9 PKE 2.1 Baleage	0 PKE 0 Baleage	2.9 PKE 2.9 Home Bale
Purchased Supplement Fed season to date (kg DM/cow)	PKE 573 Baleage 201	PKE 538 Baleage 251	PKE 285
Homegrown Silage Fed to date (kg DM/cow)	340	239	325
Homegrown Silage on hand (kg DM/cow)	0	0	81
Average Body Condition Score (Milkers)	3.96	3.78	4.02
Nitrogen to date – 2024/25 Season (kg N/ha)	161	145	0
Managers Worry Score (1 = Low, 10 = High)	7	7	7
Rainfall (last two weeks)	71		

\*Pasture growth rates are calculated using uncalibrated platemeter readings

### CURRENT MANAGEMENT

- 68mm of rain at NARF in the last 24 hours, while we had only 12mm for the whole of February and March.
- Pasture covers are low, but we can be confident that kikuyu will respond quickly. It is too late for the Alternative Pastures Farm which we dried off 10 days ago, however this rain will allow us to keep milking the Baseline and Low Emissions farms.
- We mulch and drill (with Italian ryegrass) every kikuyu paddock every year. This mulching and drilling started 10 days ago with us doing every second paddock that was grazed. We usually move to a 40 day rotation on mulched paddocks. We will step up to doing every paddock on the Low Emissions Farm, where stocking rate is low enough to handle a 40 day rotation, while the Baseline Farm will remain at every second paddock.
- Zinc continues through the Dosatron.