

## 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 2 <sup>nd</sup> May 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2,049	2,062	2,122
Pasture Growth (kg DM/ha/d, last 2 weeks) *	49	43	50
Rotation Length (days, last 10 days)	47	40	45
Cows in Milk/Total Cows	50/68 OAD	0/68 Dry	55/55 OAD
Production/cow/day (kg MS/cow)	0.76	-	0.89
Production/ha/day (kg MS/ha)	1.39	-	1.78
Production/cow season to date (kg MS/cow)	423	398	438
Production/ha season to date (kg MS/ha)	1,270	1,188	974
SCC (000)	142	-	130
Supplement Offered (kg DM/cow/day)	0	0	0
Purchased Supplement Fed season to date (kg DM/cow)	PKE 583 Baleage 214	PKE 538 Baleage 254	PKE 331
Homegrown Silage Fed to date (kg DM/cow)	340	239	360
Homegrown Silage on hand (kg DM/cow)	0	0	52
Average Body Condition Score (Milkers)	4.26	4.26	4.21
Nitrogen to date – 2024/25 Season (kg N/ha)	161	150	0
Managers Worry Score (1 = Low, 10 = High)	4	4	4
Rainfall (last two weeks)	138		

\*Pasture growth rates are calculated using uncalibrated platometer readings

### CURRENT MANAGEMENT

- What a change in the last month, from drought to mud!
- Pasture growth rates shown above include a lot of recently mulched paddocks. Kikuyu paddocks that have recovered from mulching are mostly growing 60 – 100 kg DM/ha/day.
- We have almost finished mulching and drilling or air-seeding Italian ryegrass into our kikuyu based paddocks. With kikuyu growing so fast we are concerned that the Italian ryegrass seedlings may get swamped, so we will speed up the round length for the next few weeks to keep pre-graze covers from getting too high. We also delay putting nitrogen on kikuyu until June to keep growth lower and reduce shading of Italians.
- We plan to keep milking the Baseline and Low Emissions herds for another fortnight, which will also help keep round length shorter. Cow condition is rising, we are confident we will get to 5+ by calving.

- The heifers have returned to farm in good condition.