

## 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** – 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 Rangī Trust.*

Update 27 <sup>th</sup> June 2024	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha)	2425	2542	2472
Pasture Growth (kg DM/ha/d, last 2 weeks) *	43	40	36
Rotation Length (days, last 10 days)	65	82	75
Cows in Milk/Total Cows	0/84	0/85	1/63
Production/cow season to date (kg MS/cow)			
Production/ha season to date (kg MS/ha)			
Supplement Offered (kg DM/cow/day)	PKE 5.4	PKE 5.4	PKE 2.7
Purchased Supplement Fed season to date (kg DM/cow)	PKE 106	PKE 118	PKE 65
Homegrown Silage Fed to date (kg DM/cow)	0	0	0
Homegrown Silage on hand (kg DM/cow)	0	0	103
Average Body Condition Score (Dries)	4.96	4.95	4.97
Manager Worry Score (1 = Low, 10 = High)	2	2	2
Nitrogen to date – 2023/24 Season (kg N/ha)	23	23	0
Rainfall (last two weeks)	105 mm		

\*Pasture growth rates are calculated using uncalibrated platometer readings

### **CURRENT MANAGEMENT**

- Good pasture growth rates and utilisation has lifted covers to the calving target of 2,400 kg DM/ha.
- Targeting a 70 day grazing rotation now and will use the spring rotation planner to gradually reduce this down to 30 days by mid-September. Alternative pastures farm may speed up quicker in September as these pastures go to seedhead a month earlier than ryegrass.
- Most cows have reached target calving condition. PKE feeding will stop on the Low Emissions Farm and reduce to 2 kg DM/cow on the other two farms. The new covered feed pad is now being used.
- Magnesium supplementation will start to all cows with lime flour added for the colostrum cows. Calf sheds are almost ready for calving.
- Sustain at 60 kg/ha will continue behind the cows on the Baseline and Alternative Pastures Farms.