

## 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 10 <sup>th</sup> June 2024	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha)	2207	2289	2303
Pasture Growth (kg DM/ha/d, last 2 weeks) *	30	33	31
Rotation Length (days, last 10 days)	62	74	72
Cows in Milk/Total Cows	0/84	0/85	0/63
Production/cow season to date (kg MS/cow)			
Production/ha season to date (kg MS/ha)			
Supplement Offered (kg DM/cow/day)	PKE 3.6	PKE 4.5	PKE 2.7
Purchased Supplement Fed to date (kg DM/cow)	PKE 36	PKE 45	PKE 27
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)	4.50	4.67	4.72
Manager Worry Score (1 = Low, 10 = High)	3	3	3
Nitrogen to date – 2023/24 Season (kg N/ha)	20	19	0
Rainfall (last two weeks)	33 mm		

\*Pasture growth rates are calculated using uncalibrated platometer readings

### **CURRENT MANAGEMENT**

- Pasture covers have bounced up with warmer temps and longer rotations.
- PKE is being fed to all herds to boost BCS in time for calving, rotation lengths are being extended as residuals allow.
- We will set up the spring rotation planners in the next 2 weeks to follow between start of calving (early July) and mid September
- N is being applied behind cows on Baseline and Alternative Pastures farms at 60kg/ha urea. We expect to do a top up dressing at about 30-40 days as rotations lengths are too long to wait until next grazing.
- Soil conditions are excellent and cows are being well fed. Magnesium supplementation will begin shortly
- The feedpad is nearly finished and we are looking forward to feeding all three herds in bins on the pad.