

## 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> July 2024	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha)	2487	2623	2466
Pasture Growth (kg DM/ha/d, last 2 weeks) *	34	37	27
Rotation Length (days, last 10 days)	58	66	63
Cows in Milk/Total Cows	11/84	8/85	5/63
Production/cow season to date (kg MS/cow)			
Production/ha season to date (kg MS/ha)			
Supplement Offered (kg DM/cow/day)	PKE 4.5 (M)	PKE 4.5 (M)	PKE 4.5 (M)
Purchased Supplement Fed season to date (kg DM/cow)	PKE 136	PKE 149	PKE 81
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	5.2	5.07
Manager Worry Score (1 = Low, 10 = High)	2	2	2
Nitrogen to date – 2023/24 Season (kg N/ha)	30	28	0
Rainfall (last two weeks)	25 mm		

\*Pasture growth rates are calculated using uncalibrated platemeter readings

### **CURRENT MANAGEMENT**

- Pasture growth has dropped with cooler temps, but with low demand, pasture covers have continued to rise. Ground conditions are excellent for this time of year.
- We are using the spring rotation planner to gradually reduce rotation length 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 on dry cows only occurs when they are stood off paddocks. The new covered feed pad is now being used. Milkers will get 2kgPKE unless residuals fall below target
- Magnesium supplementation is going to all cows with lime flour added for the colostrum and milking cows.
- Sustain at 60 kg/ha will continue behind the cows on the Baseline and Alternative Pastures Farms.