

## 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 Rangī Trust.*

Update 17th October 2024	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha)	2,201	2,320	2,232
Pasture Growth (kg DM/ha/d, last 2 weeks) *	76	71	60
Rotation Length (days, last 10 days)	27	28	27
Cows in Milk/Total Cows	82/82	84/84	61/61
Production/cow/day (kg MS/cow)	1.90	1.96	2.13
Production/ha/day (kg MS/ha)	5.69	5.78	4.75
Production/cow season to date (kg MS/cow)	138	141	139
Production/ha season to date (kg MS/ha)	418	425	315
SCC	31,000	34,000	48,000
Supplement Offered (kg DM/cow/day)	0	0	0
Purchased Supplement Fed season to date (kg DM/cow)	PKE 215 Baleage 21	PKE 199 Baleage 20	PKE 82
Homegrown Silage Fed to date (kg DM/cow)	0	0	28
Homegrown Silage on hand (kg DM/cow)	98	99	105
Average Body Condition Score (Milkers)	4.33	4.15	4.25
Nitrogen to date – 2023/24 Season (kg N/ha)	113	107	0
Pasture ME (MJ ME/kg DM)	11.8	11.2	11.9
Managers Worry Score (1 = Low, 10 = High)	3	3	3
Rainfall (last two weeks)	73		

\*Pasture growth rates are calculated using uncalibrated platemeter readings

### **CURRENT MANAGEMENT**

- Pasture growth and covers are in a healthy state. Pasture growth on all farms has been around 20% higher for this season to date compared to the average of the previous three seasons.
- Some grazing residuals have started rising, we are starting to mow the odd paddock behind the cows.
- All herds continue to milk well on pasture only diets. Milk production to date is similar to the average of the three previous seasons on the Baseline and Alternative Pasture Farms, despite supplement use being 50% lower than previous seasons. The Low Emissions Farm is 17% ahead of the previous three year average.
- Sustain application continues at 60 kg/ha while there is enough moisture.