

## 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. **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 18 <sup>th</sup> April 2024	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (excl silage pdks, kg DM/ha)	2071	2171	2092
Pasture Growth (kg DM/ha/d, last 2 weeks) *	38	40	36
Rotation Length (days)	37	32	40
Cows in Milk/Peak Cows	68/81	72/82	56/61
Production/cow/day (kg MS)	0.91	0.87	0.96
Production/ha/day (kg MS)	2.26	2.25	1.96
Production/cow season to date (kg MS/cow)	354	379	340
Production/ha season to date (kg MS/ha)	1,070	1,143	757
SCC ('000)	76	76	106
Supplement Offered (kg DM/cow/day)	PKE 2.7 Baleage 0	.PKE 2.7 Baleage 0	PKE 2.7
Purchased Supplement Fed to date (kg DM/cow)	PKE 759	PKE 689	PKE 353 Baleage 70
Homegrown Silage Fed to date (kg DM/cow)	160	213	567
Homegrown Silage on hand (kg DM/cow)	55	56	110
Average Body Condition Score (Milkers)	3.90	3.90	3.87
Manager Worry Score (1 = Low, 10 = High)	5	5	5
Nitrogen to date – 2023/24 Season (kg N/ha)	188	181	0
Rainfall (last two weeks)	66 mm		

\*Pasture growth rates are calculated using uncalibrated platemeter readings

### **CURRENT MANAGEMENT**

- Good rain has boosted pasture growth, unfortunately a bit late for this season's production but will allow us to set up well for next season
- All herds have lost weight during the last fortnight and are now on OAD milking to halt weight loss. We expect pasture intakes to rise now and will keep feeding the maximum PKE that FEI allows.
- We are expecting to dry cows off in early May and focus on building BCS during May and June
- Kikuyu mulching and undersowing is 60% done so far and Italian ryegrass is up and away
- Fescue paddocks are slowly establishing and all paddocks have been cricket and slug baited
- Blood tests will dictate mineral treatments in the next month, zinc continues for now as spores are high at present
- New feed pad construction is progressing well