

## 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 – 30 <sup>th</sup> June 2022	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha)	1898	1944	1940
Pasture Growth (kg DM/ha/d, last 2 weeks)	15	16	13
Rotation Length (days) – avg last 2 wks	103	106	98
Cows in Milk/Peak Cows	0/85	1/86	1/63
SCC	-	-	-
Production/cow/day (kg MS)	-	-	-
Production/ha/day (kg MS)	-	-	-
Production/cow – 2022/23 season (kg MS)	-	-	-
Production/ha – 2022/23 season (kg MS)	-	-	-
Milk FEI	-	-	-
Supplement Fed Currently (kg DM/cow/day)	5.2 PKE 2.9 Baleage	3.1 PKE 2.9 Baleage	4.2 PKE 3.2 Baleage
Purchased Supplement Fed (kg DM/cow 2022/23 STD)	125 PKE 76 Purch Silage	38 PKE 80 Purch Silage	39 PKE 0 Purch Silage
Homegrown Silage Fed (kg DM/cow STD)	0	0	122
Home Grown Silage on hand (kg DM/cow)	0	0	83
Average Body Condition Score	5.0	5.1	4.8
Worry Score (1 = Low, 10 = High)	4	2	3
Nitrogen – Season to Date (kg N/ha)	20	17	0
Rainfall (mm last 2 weeks)	20 mm		

### **CURRENT MANAGEMENT**

- A couple of solid frosts last week have burnt the kikuyu on much of the farm, with some paddocks looking like they have been sprayed with glyphosate. This has significantly set back pasture growth and covers, especially on the Current and Low Emissions farms. Frost damage is much less on the Alternative Pastures farm, which has less kikuyu present.
- We will maintain our 100-day rotation on all farms through the next fortnight to try to build pasture covers. Our target of 2400 kg DM/ha average pasture cover by calving is now unattainable. Keeping rotation as long as possible into calving will help. Our spring rotation plan will ensure we don't speed up too fast, particularly important this year due to our low pasture covers.
- Most cows have achieved their target calving body condition score of 5+. Supplement feeding will be reduced on all farms.
- Nitrogen application continues behind the cows at 32 kg N/ha on the Current and Alternative Pastures farms.