

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 14 th December 2023	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (excl silage pdks, kg DM/ha)	2150	2215	2122
Pasture Growth (kg DM/ha/d, last 2 weeks)	74	79	51
Rotation Length (days)	27	26	26
Cows in Milk/Peak Cows	79/81	81/82	61/61
Production/cow/day (kg MS)	1.51	1.61	1.33
Production/ha/day (kg MS)	4.27	4.68	2.96
SCC ('000)	49	86	70
Supplement Offered (kg DM/cow/day)	0	0	0
Purchased Supplement Fed to date (kg DM/cow)	499 PKE	468 PKE	219 PKE 70 Baleage
Homegrown Silage Fed (kg DM/cow)	0	46 Baleage	560 Baleage
Homegrown Silage on hand (kg DM/cow)	230	173	110
Average Body Condition Score (Milkers)	4.0	4.1	4.0
Manager Worry Score (1 = Low, 10 = High)	3	3	3
Nitrogen to date – 2023/24 Season (kg N/ha)	187.5	181	0
Rainfall (last two weeks)	48 mm		

CURRENT MANAGEMENT

- Strong winds have dried up ground quickly and we expect pasture growth to drop off rapidly from now on
- Pasture residuals have dropped on the Current Farm and BCS has dropped slightly so we will introduce PKE back in to this herd again.
- The other herds have both held their weight but we will be watching pasture residuals and milk production closely with the expectation that we may need to feed supplement in the next 2 weeks if no rain arrives.
- The chicory crop is finally growing after a slow start, kikuyu regrowth will be sprayed tomorrow if the wind drops off.
- Bulls are coming out in the next week and our first PD for dating purposes is before Xmas