

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 23 rd January 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	1,820	1,803	1,827
Pasture Growth (kg DM/ha/d, last 2 weeks) *	19	21	13
Rotation Length (days, last 10 days)	28	27	29
Cows in Milk/Total Cows	82/82	81/81	59/59
Production/cow/day (kg MS/cow)	1.61	1.8	1.61
Production/ha/day (kg MS/ha)	4.76	5.41	3.38
Production/cow season to date (kg MS/cow)	314	314	317
Production/ha season to date (kg MS/ha)	941	938	705
SCC (000's)	39	67	39
Supplement Offered (kg DM/cow/day)	3.0 PKE 6.5 Home Silage	3.0 PKE 6.6 Home Silage	2.7 PKE 4.5 Home Sil
Purchased Supplement Fed season to date (kg DM/cow)	PKE 377 Baleage 21	PKE 359 Baleage 20	PKE 110
Homegrown Silage Fed to date (kg DM/cow)	172	157	100
Homegrown Silage on hand (kg DM/cow)	119	43	285
Average Body Condition Score (Milkers)	4.21	4.13	4.23
Nitrogen to date – 2024/25 Season (kg N/ha)	161	145	0
Managers Worry Score (1 = Low, 10 = High)	5	5	5
Rainfall (last two weeks)	16		

*Pasture growth rates are calculated using uncalibrated platometer readings

CURRENT MANAGEMENT

- Pasture growth and pasture covers continued to crash due to lack of rain. Pasture quality is also poor at 9 – 9.3MJME/kgDM.
- Despite this milk production and BCS are holding up surprisingly well, and we haven't had cows milking at these levels in summer for some years. Good quality silage is supporting this, although we are coming to the end of our home-grown silage and will need to purchase bales soon.
- The high milk price and availability of good quality bales at \$90 (around 250kgDM/b) means we will not dry any cows off at this stage. Some rain is expected next week so hopefully this boosts the pasture growth and quality, and the chicory regrowth.
- We will start zinc treatment for facial eczema prevention in late January
- Crickets are starting to appear with several large cracks in the clay visible, so we will also begin cricket baiting immediately.