

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 16th May 2024	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (excl silage pdks, kg DM/ha)	2121	2030	2068
Pasture Growth (kg DM/ha/d, last 2 weeks) *	38	33	33
Rotation Length (days)	66	53	53
Cows in Milk/Total Cows	0/68	0/69	0/49
Production/cow/day (kg MS)	0	0	0
Production/ha/day (kg MS)	0	0	0
Production/cow season to date (kg MS/cow)	375	386	355
Production/ha season to date (kg MS/ha)	1,112	1,178	790
Supplement Offered (kg DM/cow/day)	Home Bale 3.9	PKE 2.7	PKE 2.8
Purchased Supplement Fed to date (kg DM/cow)	PKE 799	PKE 733	PKE 391 Baleage 70
Homegrown Silage Fed to date (kg DM/cow)	198	232	584
Homegrown Silage on hand (kg DM/cow)	16	38	103
Average Body Condition Score (Dries)	4.16	4.02	4.32
Manager Worry Score (1 = Low, 10 = High)	4	5	5
Nitrogen to date – 2023/24 Season (kg N/ha)	188	186	0
Rainfall (last two weeks)	15 mm		

*Pasture growth rates are calculated using uncalibrated platometer readings

CURRENT MANAGEMENT

- All herds were dried off early May and are on feeding regimes to raise BCS to target 5.0 at calving in July
- Pasture covers are rising now as Italian ryegrasses respond to recent rain, and new pastures establish well
- New ryegrass pastures have had first grazings in the last week. Fescue paddocks are still a week or so off.
- Heifers are putting condition on nicely with 4kg PKE per day. They will join herds on their respective farms on 22nd May.
- New alternative pastures have been sprayed with Valdo, with good results.
- Minerals will be checked and administered in the next fortnight