

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 17 th April 2025	Baseline Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	1,857	1,950	1,883
Pasture Growth (kg DM/ha/d, last 2 weeks) *	23	20	25
Rotation Length (days, last 10 days)	29	32	30
Cows in Milk/Total Cows	68/68 OAD	0/68 Dry	55/55 TAD
Production/cow/day (kg MS/cow)	0.80	-	0.93
Production/ha/day (kg MS/ha)	1.99	-	2.07
Production/cow season to date (kg MS/cow)	416	398	427
Production/ha season to date (kg MS/ha)	1,248	1,188	950
SCC (000)	171	-	70
Supplement Offered (kg DM/cow/day)	0	0	2.9 PKE 0 Baleage
Purchased Supplement Fed season to date (kg DM/cow)	PKE 583 Baleage 214	PKE 538 Baleage 254	PKE 324
Homegrown Silage Fed to date (kg DM/cow)	340	239	360
Homegrown Silage on hand (kg DM/cow)	0	0	52
Average Body Condition Score (Milkers)	3.94	4.05	4.21
Nitrogen to date – 2024/25 Season (kg N/ha)	161	150	0
Managers Worry Score (1 = Low, 10 = High)	5	7	5
Rainfall (last two weeks)	97		

*Pasture growth rates are calculated using uncalibrated platemeter readings

CURRENT MANAGEMENT

- Warm rain is boosting pasture growth rapidly. Kikuyu regrowth behind the mulcher is rapid and relatively good quality. Pasture covers are rising despite the mulching programme in full swing.
- The growth has come just in time for the Baseline Farm who would have dried off if the rain hadn't come early April. This herd has run out of their annual supplement allowance but has held BCS on OAD milking so will continue milking until the beginning of May.
- The Low Emissions herd has gone to OAD milking to help maintain BCS for the remainder of the lactation. The Alternative Pastures herd dried off 2 weeks ago and has started putting on weight.
- Our permanent new grass paddocks on the Alternative Pastures farm were sown last week. We are also spraying out and sowing annual ryegrass in 3ha on each of the farms, in anticipation of sowing summer crops next spring.
- Zinc continues through the Dosatron.