

Future Dairy Farm Systems Project – NARF (Dargaville)

This project compares the impact on productivity, profitability, people and the environment on three farms:

1. **Baseline (Current) Farm** – Kikuyu & ryegrass based pastures with up to 190 kg N/ha/annum, 3.1 cows/ha
2. **Alternative Pasture 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 19 th February 2026 | Baseline Farm | Alternative Pasture Farm | Low Emissions Farm |
|--|--------------------------|--------------------------|--------------------|
| Average Pasture Cover with silage paddocks | 2,410 | 2,166 | 2,362 |
| % farm out for turnips | 9% | 12% | 9% |
| Pasture Growth (kg DM/ha/d, last 2 weeks)* | 71 | 47 | 55 |
| Rotation Length (days, last 10 days) | 33 | 31 | 33 |
| Cows in Milk/Total Cows | 80/80 | 82/82 | 64/64 |
| SCC (000's) | 67 | 150 | 185 |
| Production/cow/day (kg MS/cow) | 1.44 | 1.49 | 1.64 |
| Production/ha/day (kg MS/ha) | 4.15 | 4.4 | 3.82 |
| Production/cow, season to date (kg MS/cow) | 345 | 331 | 340 |
| Production/ha, season to date (kg MS/ha) | 1022 | 976 | 794 |
| Supplement Offered Milkers (kg DM/cow/day) | 0 | 0 | 0 |
| Purchased Supp Fed, season to date (kg DM/c) | PKE 632 Purch bale 24 | PKE 549 | PKE 302 |
| Homegrown Silage Fed to date (kg DM/cow) | 28 | 36 | 135 |
| Homegrown Silage on hand (kg DM/cow) | 382 | 404 | 364 |
| Average Body Condition Score (Milkers) | 3.98 | 3.94 | 4.02 |
| Nitrogen to date – 2025/26 Season (kg N/ha) | 170 | 164 | 0 |
| Managers Worry Score (1 = Low, 10 = High) | 1 | 2 | 1 |
| Rainfall (last two weeks) | 28 | | |

*Pasture growth rates are calculated using uncalibrated platometer readings

CURRENT MANAGEMENT

- Pasture growth has slowed but is still high for February. Extra silage was made to try and control pasture quality and more will be cut next week on the Baseline and Low Emissions farms.
- Cows are milking well aided by leafy growth and good turnip yields. Clover levels are high on the Low Emissions farm as expected.
- We are focussed on keeping quality feed going into herds as we set up for our Extended Lactation trial, with around half of each herd empty. Maintaining good milk production over summer is critical for the carryover cows.
- We will feed PKE, and good quality spring-made silage through the autumn as necessary.
- Crop paddocks will be sprayed and sown into either perennial ryegrass or tall fescue mixes as soon as the turnips are finished. We are aiming for seed in the ground by mid March.
- Facial eczema spores are rising so we are dosing with zinc at full rates now.