

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 – 25 th July 2023	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha, excl silage pad)	2330	2277	2245
Pasture Growth (kg DM/ha/d, last 2 weeks)	34	39	29
Rotation Length (days)	57	56	65
Cows in Milk/Peak Cows	33/83	45/84	34/62
Supplement Fed (kg DM/cow/day)	4.9 PKE dries 3.1 PKE milkers	5.7 PKE dries 2.8 PKE milkers	6.1 Sil Dries 3.1 Sil Milkers
Purchased Supplement Fed (kg DM/cow 2023-24 season)	234 PKE	178 PKE	
Homegrown Silage Fed (kg DM/cow 2023/24 season)	0	56 Baleage	270 Baleage
Homegrown Silage on hand (kg DM/cow)	0	0	208
Average Body Condition Score (Dries)	4.9	5.26	4.81
Worry Score (1 = Low, 10 = High)	7	7	6
Nitrogen to date – 2023/24 Season (kg N/ha)	43	37	0
Rainfall (mm last 2 weeks)	35 mm		

CURRENT MANAGEMENT

- Conditions last week were better and growth rates lifted slightly. We have finally got close to target pasture cover and cow condition. It has taken a lot of supplement and a month longer than usual this winter.
- Dry cows are still being stood off paddocks with supplement most nights. We are holding rotation length to 30 sq.m per cow with the balance of daily allowance on the SRP going to milkers.
- Supplement is topping up intakes on all mobs at present. Pasture intake is very difficult to calculate with high wastage occurring and residuals difficult to assess.
- Calving is going well on all herds. MgO is being added to all supplement.
- Sustain has been applied at 80kg/ha following cows until last week. We are hoping to catch up in the next week with drier weather forecast. We will change to 100kg/ha Ammo36 from 1st August.
- Roll on spring...