

Future Dairy Farm Systems Project – NARF (Dargaville)

This project commenced June 2021. It will compare 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, 3.0 cows/ha
2. **Alternative Pastures Farm** – Fescue & cocksfoot based pastures, up to 190 kg N/ha, 3.0 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, 2.1 cows/ha

This project is funded by DairyNZ, MPI (Sustainable Farming Fund) and Hine Rangi Trust.

15 th July 2021	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2426	2553	2394
Pasture Growth (kg DM/ha/d, last 2 weeks)	15	32	16
Rotation Length (days)	56	53	66
Production/cow/day (kg MS)	-	-	-
Cows in Milk/Peak Cows	20/84	19/84	15/60
Supplement Fed (kg DM/cow/day)	0	0-2.1	0
Average Body Condition Score (Dries)	5.0	5.1	5.0
Worry Score (1 = Low, 10 = High)	5	4	5
Nitrogen – Season to Date (kg N/ha)	32	39	0
Rainfall (mm last 2 weeks)	24 mm		

CURRENT MANAGEMENT

- Pasture growth has crashed with the cold weather, particularly the kikuyu pastures
- Pasture covers have all dropped but are still above target
- We are trying to graze new fescue/cocksfoot pastures in the dry weather, and get across the yellowed kikuyu with dry cows on the other two farms.
- Cow condition has reached target with 5-12% of cows at 4.5 and the balance at 5.0 or better
- Rotation length will be sped up slightly on the Alt Pastures farm as this farm is still growing well and we are worried about the high pasture cover in many paddocks. This farm is allocating 100sq.m to milkers and 50sq.m to dries per 24 hours. The other two farms are at 80sq.m. for milkers and 40sq.m for dries
- A spring rotation plan has been drawn up for each farm with assumed balance date of 1st September on the Alternative Pastures farm and 10th September on the kikuyu/ryegrass farms
- Supplement will be fed if cows are stood off paddocks, or if residuals drop below target levels.
- N applications continue on the Current and Alt Pasture farms

For more information including past updates and field day handouts, go to www.nddt.nz