

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.

12 th August 2021	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2003	2064	2041
Pasture Growth (kg DM/ha/d, last 2 weeks)	30	33	29
Rotation Length (days)	80	53	63
Production/cow/day (kg MS)	1.74	1.93	1.90
Cows in Milk/Peak Cows	58/84	63/84	46/60
Supplement Fed (kg DM/cow/day)	3.9 PKE 5.3 Baleage	3.6 PKE	6.7 Baleage
Average Body Condition Score (Milkers)	4.3	4.3	4.3
Worry Score (1 = Low, 10 = High)	5	3	2
Nitrogen – Season to Date (kg N/ha)	56	57	0
Rainfall (mm last 2 weeks)	37 mm		

CURRENT MANAGEMENT

- Pasture growth picked up somewhat with warmer soil temps and low rainfall
- The Current Farm was in a feed deficit through speeding up the rotation too much in July when grazing off frosted kikuyu, so has now fed baleage and PKE to slow rotation down and recover pasture cover. This has worked well and rotation length will now speed up to 45 days
- Rotation on the Alt Pastures farm is speeding up to 35 days in order to keep on top of pasture quality, PKE will be dropped out if residuals rise too much
- The Low Emissions farm is ticking along with the saved baleage being used to keep rotation length slightly slower than the other two farms. This is currently at 55 days.
- N in the form of Ammo36 at 100kg/ha continues behind the herds on the Current and Alt Pasture farms.

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