

## 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.*

9 <sup>th</sup> September 2021	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2353	2283	2315
Pasture Growth (kg DM/ha/d, last 2 weeks)	58	60	46
Rotation Length (days) – avg last 2 wks	34	32	44
Area out for silage	0	22%	13%
Cows in Milk/Peak Cows	82/86	83/86	56/59
Production/cow/day (kg MS)	2.0	2.1	1.9
SCC ('000)	109	85	77
Production/ha/day (kg MS)	5.47	5.98	3.73
Production/ha/season to date	192	216	129
Milk FEI Zone	A/B	A	A
Supplement Fed (kg DM/cow/day, milkers)	2.7=>0 PKE	0	0
Purchased Supplement Fed (kg DM/cow/season to date)	153 PKE 81 Purch Bale	115 PKE 6 Purch Bale	66 PKE 139 HG Bale
Average Body Condition Score (Milkers)	4.2	4.1	4.1
Worry Score (1 = Low, 10 = High)	3	4	2
Nitrogen – Season to Date (kg N/ha)	76	85	0
Rainfall (mm last 2 weeks)	59 mm		

### **CURRENT MANAGEMENT**

- Pasture growth has picked up prior to this cold snap
- Soil conditions are amazing for this time of year and have allowed great utilisation and residuals
- Rotation lengths are speeding up further on all farms
- The Current Farm is speeding up to 30 days having recently dropped supplement out. We expect to drop paddocks out in the next 2 weeks
- The Alt Pastures farm dropped out 22% of the farm today and sped up to 19 d rotation to keep on top of fescue seedhead emergence.
- The Low Emission farm is seeing rising residuals so we dropped out 13% today and will speed up to 30d rotation. Paddocks are looking yellow with no N but growth is keeping up with demand on the lower stocking rate.
- N as Ammo36 is continuing on Current and Alt Pastures farms
- All cows are now being monitored for pre-mating heats
- Copper, Selenium, Cobalt and Magnesium are all going through the Dosatron

*For more information including past updates and field day handouts, go to [www.nddt.nz](http://www.nddt.nz)*