

## 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 30% 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.*

1 <sup>st</sup> July 2021	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Average Pasture Cover (kg DM/ha)	2645	2584	2651
Pasture Growth (kg DM/ha/d, last 2 weeks)	51	49	38
Rotation Length (days)	59	53	85
Production/cow/day (kg MS)	-	-	-
Cows in Milk/Peak Cows	0/84	0/84	0/60
Supplement Fed (kg DM/cow/day)	2.1	2.1	3.0
Average Body Condition Score	4.9	5.1	4.9
Worry Score (1 = Low, 10 = High)	4	3	2
Nitrogen – Season to Date (kg N/ha)	29	34	0
Rainfall (mm last 2 weeks)	68 mm		

### **CURRENT MANAGEMENT**

- Pasture covers have risen from 2,035 kg DM/ha on 31<sup>st</sup> May to now average 2,626 kg DM/ha, the result of good pasture growing conditions and good soil conditions. This puts all farms in a good position for calving (5<sup>th</sup> July)
- During June the kikuyu/ryegrass pastures that received nitrogen on 4<sup>th</sup> June (28 kg N/ha) have shown average growth of 55 kg DM/ha/day, while pastures with no nitrogen averaged 45 kg DM/ha/day
- Most of the fescue and cocksfoot pastures sown in March look good, however some show strong poa presence. Targeting to graze as many as we can now while soil conditions are good
- Cow condition is almost there. We still have 26% of cows at 4.5 CS rather than the 5+ we are targeting. We will keep feeding above maintenance to get these last cows there
- Targeted rotation length on the Current and Alternative Pastures farms is currently 60 days. The Low Emissions farm is 85 days, due the expectation of lower pasture growth due to no nitrogen applied
- A spring rotation plan has been drawn up for each farm with assumed balance date of 1<sup>st</sup> September on the Alternative Pastures farm and 10<sup>th</sup> September on the kikuyu/ryegrass farms

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