

## 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 – 26 <sup>th</sup> January 2023	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha, excl silage pad)	2248	2231	2266
Pasture Growth (kg DM/ha/d, last 2 weeks)	52	59	63
Rotation Length (days)	27	28	32
Cows in Milk/Peak Cows	83/84	84/86	57/62
Area out for silage (% of farm)	0%	0%	26%
Production/cow/day (kg MS)	1.24	1.42	1.45
Production/ha/day (kg MS)	3.70	4.28	3.02
Production/cow – 2022/23 season (kg MS)	274	289	280
Production/ha – 2022/23 season (kg MS)	838	893	641
6 week in-calf rate	81%	82%	82%
Supplement Fed (kg DM/cow/day)	0	0	0
Total Purchased Supplement Fed (kg DM/cow 2022/23 season)	400 PKE 212 Purch Silage	268 PKE 213 Purch Silage	163 PKE 0 Purch Silage
Homegrown Silage Fed (kg DM/cow)	0	0	221
Homegrown Silage on hand (kg DM/cow)	265	386	372
Average Body Condition Score	4.1	4.2	4.2
Worry Score (1 = Low, 10 = High)	2	2	1
Nitrogen – Season to Date (kg N/ha)	153	152	0
Rainfall (mm last 2 weeks)	80 mm		

### CURRENT MANAGEMENT

- Good pasture growth and covers continue with regular rainfall
- All herds are on pasture only feeding with the Low Emissions farm also having 26% shut for silage harvest next week.
- High clover presence continues on all farms, with the Low Emissions farm having a very high clover proportion in pastures. This is likely to be driving higher milk production per cow.
- All farms have achieved 6 week in-calf rates over 80%. Final pregnancy testing will be done in February
- Facial eczema spore counts are being monitored regularly with warm humid conditions ideal for spore growth.

**Save the Date – NDDT Northland Dairy Farmers Conference – 21<sup>st</sup> February 2023, Whangarei**