

## 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 30 <sup>th</sup> May 2024	Current Farm	Alternative Pastures Farm	Low Emissions Farm
Avg Pasture Cover (kg DM/ha)	2162	2143	2206
Pasture Growth (kg DM/ha/d, last 2 weeks) *	35	32	33
Rotation Length (days, last 10 days)	60	55	66
Cows in Milk/Total Cows	0/84	0/85	0/63
Production/cow season to date (kg MS/cow)	375	386	355
Production/ha season to date (kg MS/ha)	1,112	1,178	790
Supplement Offered (kg DM/cow/day)	0	PKE 2.2	0
Purchased Supplement Fed to date (kg DM/cow)	PKE 799	PKE 764	PKE 395 Baleage 70
Homegrown Silage Fed to date (kg DM/cow)	207	263	584
Homegrown Silage on hand (kg DM/cow)	0	0	103
Average Body Condition Score (Dries)	4.30	4.25	4.23
Manager Worry Score (1 = Low, 10 = High)	5	5	5
Nitrogen to date – 2023/24 Season (kg N/ha)	188	188	0
Rainfall (last two weeks)	80 mm		

\*Pasture growth rates are calculated using uncalibrated platometer readings

### CURRENT MANAGEMENT

- Pasture covers continue to drift up. Rotation length will be extended to 70 days on the Current and Low Emissions Farms, and 80 days on the Alternative Pastures Farm to try and lift pasture covers faster.
- Sustain will be spread on the Current and Alternative Pastures Farms at 60 kg/ha in the next week. Kikuyu growth has slowed sufficiently now and Italian rye is strong enough to compete. This will go on around ¾ of each farm, skipping paddocks that will be grazed in the next 2 weeks.
- Clover content is very high on the Low Emissions Farm (regularly 40 - 50% of pasture). Bloat oil is going in the troughs as a precaution.
- Most of the recently sown tall fescue paddocks have had their first grazing. We have been grazing these for only 1-2 hours to reduce the risk of nitrate poisoning and pasture damage.
- Cow condition has improved slightly but is behind target so PKE feeding will be reintroduced or increased on all farms to get cows up to weight by the end of June.