

## Supplement Use in a Variable Climate Project – NARF (Dargaville)

This project compares three farms with different supplement use on production, profit and environmental impact. The three farm systems are:

1. **Pasture Only Farm** - No imported supplement - 2.7 cows/ha
2. **PKE Only Farm** – PKE used to fill feed gaps within milk FEI limits – 3.1 cows/ha
3. **PKE Plus Farm** - PKE used until milk FEI limit and then other supplements added – 3.1 cows/ha

*This project is funded by DairyNZ, MPI (Sustainable Farming Fund) and Hine Rangi Trust.*

21st October 2020	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Average Pasture Cover (kg DM/ha)	2331	2315	2207
Pasture Growth (kg DM/ha/day)	42		
Rotation Length (days)	30	26	27
Cows in milk/total cows	77/77	88/88	88/88
Production/cow/day (kg MS)	2.09	2.05	2.25
Production/ha/day (kg MS)	5.49	6.43	7.06
Production - Season to date (kg MS/ha)	384	488	532
Supplement Fed (kg DM/cow/day)	0	2.0 PKE	1.7 PKE 1.0 DDG
Supplement Fed - Season to date (kg DM/cow)	181 Silage	310 PKE	293 PKE 147 DDG/SH
Average Body Condition Score	4.2	4.1	4.2
Proportion cows under BCS 4.0	5%	11%	2%
Worry Score (1 = Low, 10 = High)	4	4	3
Nitrogen – Season to Date (kg N/ha)	133	126	128
Milk FEI	A	A	B
Rainfall (mm last 2 weeks)	25 mm		

### CURRENT MANAGEMENT

- Dry conditions are limiting pasture growth to 42 kg DM/ha/day (>100 kg/day last October)
- All farms have adequate pasture cover now, however there is very little surplus
- Cows are milking very well, likely due to better than normal pasture quality on farm this year. We are especially impressed with the Pasture Only cows doing >2 kg/day MS after having most of September on once-a-day milking (in order to hold up cow condition)
- We will drop out all supplement on the two PKE supplemented farms for now.
- We are very keen to make silage on the Pasture Only and PKE Only farms to get us through summer as these farms cannot import other feed types. We are closing up a few paddocks, which we may have to graze if it stays dry. Our policy is not to feed supplements to generate a surplus for silage
- Most of the fescue paddocks have required topping to take off seed head
- Sustain will continue if we get rain

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