

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.

8 th January 2020	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Average Pasture Cover (kg DM/ha)	1918	1918	2047
Pasture Growth (kg DM/ha/day)	27		
Rotation Length (days)	32	31	30
Cows in milk/cows calved	68/77	87/89	88/89
Production/cow/day (kg MS)	1.36	1.51	1.42
Production/ha/day (kg MS)	3.30	4.68	4.46
Production/ha season to date (kg MS)	588	829	872
Supplement Fed (kg DM/cow/day)	0	1.8 PKE	1.8 PKE
Supplement Fed 19/20 season (kg DM/cow)	162 Silage	652 PKE	642 PKE 105 Silage 23 DDG
Average Body Condition Score	4.0	4.2	4.0
6 week in-calf rate	71%	76%	76%
Worry Score (1 = Low, 10 = High)	4	2	3
Nitrogen – Season to Date (kg N/ha)	139	140	142
Milk FEI	A	A/B	A
Rainfall (mm last 2 weeks)	0 mm		

CURRENT MANAGEMENT

- Three windy weeks without rain is dropping pasture covers and quality. Pasture growth has dropped down to 27 kg DM/ha/day over the last 10 days and will likely drop further as no rain is forecast. Cow condition has also dropped slightly.
- The expected drop in pasture offered to cows over the next couple of weeks will be filled by increasing the PKE to around 3 kg DM/cow/day on the two PKE farms and feeding silage on the Pasture Only farm at around 3 kg DM/cow/day.
- Milk FEI has been in the A zone on the two PKE supplemented farms. Increasing PKE feeding to 3 kg DM/cow/day will likely take us well into the B zone. If more supplement is required then silage will be added in on the PKE Only farm and DDG on the PKE Plus farm.
- Feeding supplements is the preference to culling at this stage. Early PD has indicated a six week in-calf rate of 71 – 76% on the three farms. Ideally, we wait until the later PD is done before we take any culls out, however if the dry weather sticks around then we might have to start culling earlier than that on the Pasture Only and PKE Only farms.

For more information including past updates and field day handouts, go to www.nddt.nz

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