

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.

14 th August 2020	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Average Pasture Cover (kg DM/ha)	2199	2330	2166
Pasture Growth (kg DM/ha/day)	43		
Rotation Length (days)	45	49	44
Cows in milk/total cows	65/78	69/89	74/89
Production/cow/day (kg MS)	1.61	1.84	1.82
Production/ha/day (kg MS)	3.22	3.79	4.39
Production/ha STD – (kg MS)	64	68	91
Supplement Fed (kg DM/cow/day)	2.0 silage	2.6 PKE	2.7 PKE
Supplement Fed 20/21 STD (kg DM/cow)	102 Silage	113 PKE	126 PKE
Average Body Condition Score	Milkers 3.9	Milkers 4.2	Milkers 4.0
Proportion cows under BCS 4.0	36%	16%	21%
Worry Score (1 = Low, 10 = High)	6	5	5
Nitrogen – Season to Date (kg N/ha)	54	49	44
Milk FEI	A	A	A
Rainfall (mm last 2 weeks)	22 mm		

CURRENT MANAGEMENT

- New grass paddocks coming into round now with dry soil conditions allowing first grazings on all
- All farms are on top of grass and both PKE farms will hold their rounds at 80m²/c and increase PKE to 5-6kg/c/day. If FEI becomes challenging then the PKE Plus farm will swap in some DDG.
- The Pasture Only herd has lost significant condition and we estimate feeding levels at around 15kgDM/c/d including 2kgDM silage. There are only 20 bales silage left so we are reluctant to increase the silage feeding above half a bale yet in case it gets wet in Sept. Instead we will increase pasture allocation to 100m²/c which will increase intakes to around 17kgDM/c and decrease rotation to 40 days. In addition the whole herd will go on OAD milking to limit weight loss until the spring pasture flush arrives.
- The plate meter is overestimating pregrazing covers with strong Italian presence. This happens every year so we monitor residuals, condition loss and milk flow to estimate intakes and make decisions.
- Sustain at 90kg/ha and Progibb continue to be used to maximise pasture growth during this crunch period. Soil conditions are outstanding for this time of year and this is really helping all farms.

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

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