

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.

10 th February 2020	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Average Pasture Cover (kg DM/ha)	1591	1565	1600
Pasture Growth (kg DM/ha/day)	8		
Rotation Length (days)	30	31	30
Cows in milk/cows calved	68/77	87/89	87/89
Production/cow/day (kg MS)	1.02	1.11	1.33
Production/ha/day (kg MS)	2.48	3.24	4.23
Production/ha season to date (kg MS)	686	966	1,022
Supplement Fed (kg DM/cow/day)	3.8 Silage	3.1 PKE 3.0 Silage	3.1 PKE 1.5 DDG 3.0 Silage
Supplement Fed 19/20 season (kg DM/cow)	213 Silage	712 PKE 34 Silage	703 PKE 43 DDG 114 Silage
Average Body Condition Score	4.0	4.0	4.0
Empty Rate	6%	6%	7%
Worry Score (1 = Low, 10 = High)	6	5	3
Nitrogen – Season to Date (kg N/ha)	139	140	142
Milk FEI	A	B	B
Rainfall (mm last 2 weeks)	0 mm		

CURRENT MANAGEMENT

- Another fortnight with no rain. Average pasture cover has continued to drop with pre-graze covers mostly under 2000 kg DM/ha. Some kikuyu paddocks have a bit of base which we are grazing into.
- The Pasture Only and PKE Only herds went on once-a-day (OAD) milking a fortnight ago. They both showed a drop of 0.1 – 0.15 kg MS/cow/day, not too bad considering pasture conditions have got poorer also over that time.
- The PKE Plus herd has been on twice-a-day milking, however they will now move to OAD due to concerns that their body condition has dropped. We want to be able to milk these cows right through into May.
- PD is done. The Pasture Only herd will drop the empty cows immediately (6% of herd), some culls already left this herd in spring not much room to cull any further. The PKE Only herd will drop empties and most culls (16%). The PKE Plus farm will continue to milk all cows through given the ability to bring in additional feed.

- At the present feeding rate we have around 30 days of silage left. With no guaranteed rain in sight we will take the opportunity of the reduced stocking rate on the Pasture Only and PKE Only farms to reduce silage feeding, hoping we can stretch it for 45 days to get the core of the cows through until we see rain again. This is a key strategy as the silage is allowing us to continue milking on these farms.
- Cricket baiting has occurred over the whole farm, trying to avoid additional pressure on the already stressed pasture.

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

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