

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.

21 st May 2020	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Area in Rotation (with new grass pdks out)	25	25	25
Average Pasture Cover (kg DM/ha)	1511	1722	1491
Pasture Growth (kg DM/ha/day)	19		
Planned Rotation Length (days)	60	80	100
Cows in milk/cows calved	0/77	30/89	53/89
Production/cow/day (kg MS)	-	0.75	0.70
Production/ha/day (kg MS)	-	0.81	1.33
Production/ha season to date (kg MS)	833	1,147	1,296
Supplement Fed (kg DM/cow/day)	Nil	Milkr 4.5 PKE Dries 2.3 PKE	Milkr 3.4 PKE Dries 1.7 DDG Dries 1.7 PKE
Supplement Fed 19/20 season (kg DM/cow)	404 Silage	965 PKE 181 Silage	1,058 PKE 210 DDG 263 Silage
Average Body Condition Score	4.3	4.6	4.6
Empty Rate	6%	6%	7%
Worry Score (1 = Low, 10 = High)	7	3	5
Nitrogen – Season to Date (kg N/ha)	151	153	151
Milk FEI	-	B	B
Rainfall (mm last 2 weeks)	2 mm		

CURRENT MANAGEMENT

- Pasture cover has continued to drop on the Pasture Only and PKE Plus farms. This is the result of dry conditions combining with mulching of all kikuyu areas and 10% of the farms out for re-grassing. Mulching and drilling (or broadcasting) of Italian ryegrass into kikuyu areas has almost finished.
- Heifers are coming back onto the farms early next week which will put more pressure on the farms. One bright side is pasture utilisation is superb, unlikely that pugging damage will be an issue for the next month or more.
- The Pasture Only farm is challenged with low pasture cover and no ability to bring supplement onto the farm. Some baleage is on hand but this is targeted for next season (winter/spring). Ideally rotation length would be 80+ days to rebuild cover, however this would not adequately feed cows. Have compromised with a 60 day rotation which will provide around 8 kg DM/cow/day. Not really

enough to gain the cow condition we want so the lightest 10% of cows will be preferentially fed ahead of the herd. Reliant on warm rain to kick pastures back into life

- Dried off the remaining milkers on the PKE Only farm and PKE Plus farms. PKE feeding has stopped for a few days while they dry off but will start again early next week. Should easily achieve 5+ condition score by calving.
- Aiming for a 100 day rotation on the PKE Plus farm to rebuild covers. Pre-graze pasture covers are low resulting giving only 3-4 kg DM/cow/day of pasture so will supplement with 5 kg PKE.
- The PKE Only farm is in a better position with reasonable pre-graze covers for the next few weeks. Will target a 80 day rotation giving 6-7 kg DM/cow/day of pasture plus 2 kg PKE.
- Urea going on at 80 kg/ha.
- Our NARF field day (normally held in June) is postponed at this stage. We will be doing internet-based presentations in mid/late June. Full financial results for the farms will be presented.

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

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