



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.

7 th 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)	1678	1690	157
Pasture Growth (kg DM/ha/day)	30		
Rotation Length (days)	36	37	33
Cows in milk/cows calved	40/77	30/89	53/89
Production/cow/day (kg MS)	0.69	0.84	0.80
Production/ha/day (kg MS)	1.20	1.02	2.05
Production/ha season to date (kg MS)	828	1,135	1,277
Supplement Fed (kg DM/cow/day)	Nil	Milkrs 3.9 PKE	4.5 PKE
		Dries 2.6 PKE	0 DDG
Supplement Fed 19/20 season (kg DM/cow)	404 Silage	930 PKE	1,010 PKE
		181 Silage	204 DDG
			263 Silage
Average Body Condition Score	4.1 (Milkers)	4.5 (Milkers)	4.4
	4.3 (Dries)	4.3 (Dries)	
Empty Rate	6%	6%	7%
Worry Score (1 = Low, 10 = High)	4	4	5
Nitrogen – Season to Date (kg N/ha)	146	147	149
Milk FEI	Α	A/B	В
Rainfall (mm last 2 weeks)	15 mm		

CURRENT MANAGEMENT

- 10% of each farm out for re-grassing and most kikuyu paddocks now mulched has put enough pressure on farms that we will dry the Pasture Only herd off tomorrow and lengthen the rotation
- Both PKE herds will lengthen rotation now using PKE and dry off on 20th May which is 50 days from calving
- Cow condition is on track to reach 5.0 at calving but the Pasture Only herd will need to manage the balance between feeding dries for weight gain and building pasture cover for calving.
- Rotations will be lengthened to 50-80 days on all farms. This is calculated on the 25ha that is in pasture. The new grass paddocks will likely be out until July at least.
- Mulching will be finished in 10 days. We will take the unusual step of applying N to mulched and undersown kikuyu paddocks in May. The pressure on pasture cover warrants this. Urea will be spread at 70kg/ha around 2 weeks behind the mulcher as regrowth takes off.

- All ryegrass paddocks had N applied in the last 3 weeks and are starting to recover. It would have been a difficult autumn if we had not had kikuyu, particularly on the Pasture Only farm.
- Dry cows continue to follow milkers on highest kikuyu residuals to help clean-up prior to mulching
- All but one of the new fescue paddocks have failed due to a combination of slugs and drought. These were resown yesterday with slug bait and DAP. If we were not trialling new alternative species we would have used a quicker growing winter species.
- Heifers are on non-milking areas and will come on to the farms in 10 days. We are using PKE to grow these well and keep them off the milking area for as long as possible. They were teatsealed yesterday.
- Financial results will be presented in June

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