

## 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

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19 <sup>th</sup> December 2019	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Farm Area (ha)	28	28	28
Average Pasture Cover (kg DM/ha)	2154	2218	2070
Pasture Growth (kg DM/ha/day)	38		
Rotation Length (days)	30	30	31
Cows in milk/cows calved	68/77	88/89	88/89
Production/cow/day (kg MS)	1.41	1.60	1.59
Production/ha/day (kg MS)	3.47	5.04	4.98
Production/ha season to date (kg MS)	521	735	781
Supplement Fed (kg DM/cow/day)	0	3.6 PKE	3.6 PKE
Supplement Fed 19/20 season (kg DM/cow)	162 Silage	616 PKE	610 PKE 105 Silage 23 DDG
Average Body Condition Score	4.2	4.3	4.2
3 week submission rate	90%	83%	81%
Worry Score (1 = Low, 10 = High)	2	2	2
Nitrogen – Season to Date (kg N/ha)	127	130	133
Milk FEI	A	B	B
Rainfall (mm last 2 weeks)	44mm		

### CURRENT MANAGEMENT

- Pasture residuals are high and recent rain has boosted pasture growth in the last couple of days
- Residuals are stinky and some strategic mulching behind cows on all farms will tidy up quality
- Both PKE herds will drop supplement feeding down by half immediately and PKE may be removed all together if pasture growth allows
- The Pasture Only Farm will drop out 4ha for silage harvest immediately, this farm only needs to grow at 46kgDM/ha/day to sustain this area
- 1.75t Sustain will be applied today before expected rain tomorrow. This is likely to be our cheapest form of feed and we will modify supplement use accordingly. We will apply this to better quality grazed pastures @60kg/ha.
- We have 94b silage on hand on the Pasture Only herd. Another 4ha will be harvested in the next few days. Any further surplus driven by N use will be harvested. Silage is very valuable on this farm as we cannot import feed and we will need to save at least 50b for winter/spring.

**For more information including past updates and field day handouts, go to [www.nddt.nz](http://www.nddt.nz)**

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