



Supplement Use in a Variable Climate Project – NARF (Dargaville)

This project compares three farms with different supplement use on production, profit and environmental impact. Each farm is 28 ha. 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.*

8 th April 2021	Pasture Only Farm	PKE Only Farm	PKE Plus Farm
Average Pasture Cover (kg DM/ha)	1956	2115	1864
Pasture Growth (kg DM/ha/d, last 2 weeks)	28		
Rotation Length (days)	33	35	34
Production/cow/day (kg MS)	0.79	1.05	1.23
Cows in Milk/Peak Cows	62/78	77/88	86/88
Production/ha/day (kg MS)	1.76	2.95	3.78
Production - Season to date (kg MS/ha)	912	1184	1302
Supplement Fed (kg DM/cow/day)	1.0 Silage	4.1 PKE	3.7 PKE
		0.8 Silage	4.5 Silage
Supplement Fed - Season to date	350 Home Grown	677 PKE	683 PKE
(kg DM/cow)	Silage	247 HG Silage	288 DDG/SH
			262 Silage
Average Body Condition Score	4.1	4.2	4.2
Proportion cows under BCS 4.0	9%	8%	5%
Worry Score (1 = Low, 10 = High)	6	4	3
Nitrogen – Season to Date (kg N/ha)	174	172	168
Milk FEI	А	С	С
Rainfall (mm last 2 weeks)	14 mm		

CURRENT MANAGEMENT

- Dry conditions continue to keep pasture covers low. If it stays dry then pre-graze covers are likely
 to get more challenging when mulched paddocks come back into the round in 2 3 weeks time.
 Rotation length will be extended to 40 days to increase the recovery time for the mulched pastures
- PKE Plus cows are holding BCS under TAD milking. Other farms have been on OAD for months
- Most of the culls have been taken out of Pasture Only and PKE Only herds to help balance feed supply and demand
- July calvers on the Pasture Only farm that are under 4.0 BCS will be dried off immediately to ensure they get to 5.0+ by calving. Drying the whole herd off will be considered in 2 weeks time
- The PKE Plus farm has been purchasing and feeding baleage to hold off culling cows. The
 economics of doing this are marginal given it seems unlikely we will get an autumn flush of
 pasture, so some culls will now be taken out to reduce the need for baleage. PKE continues as
 much as milk FEI allows
- Kikuyu mulching continues behind the cows with Italian ryegrass either broadcast in front of the mulcher or drilled in behind the mulcher

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