

COMMERCIAL CASE STUDY PASTURE

NEW ZEALAND – COMMERCIAL APPLICATION, FULL FARM CASE SUMMARY

Peter & Mandy Paterson - Morrinsville, Waikato, NZ

Background and Key Stats

- Location: Morrinsville, Waikato, NZ - Peter & Mandy Paterson have owned and operated the farm for many years.
- Milking 215 cows on effective milking area of 72 Ha.
- Milk production 480kg MS per cow (NZ average is approximately 350kg MS per cow¹).
- Spring calving over 6 week period (moving to autumn).
- Production system based on maximising home grown feed - pasture and silage. Minimal supplementary feeding with concentrates. Operating a system with strong focus on biological health of soils. Soil type predominantly peat.
- Commenced transition to organic certification in November 2015.

Great Land Application and Split Paddock Trials

- Great Land has been applied to the whole farm at a rate of 10 L/Ha². Five applications over 18 months.
- Split paddock trials: in three separate paddocks, Great Land was applied to only one half of the paddock.
- A towed plate meter was used before and after every grazing to determine pasture growth and harvest volumes.

Outcomes and Observations

Trials demonstrated consistent gains of approximately 2 tonnes DM per Ha (over 19 months) in all three split paddocks, representing gains of between 9% and 15% over control (untreated) areas.

Observations

- Consistently more clover and increased density of total pasture cover.
- Pasture resilience in periods of stress.
- Better herd health through improved pasture nutrient density.
- Excellent establishment and growth of clover in new pastures.

Maize Silage Trial

A trial was conducted on two maize blocks last season to compare conventional v's organic systems. Great Land was applied to both blocks. The organic block achieved better yield by approximately 1 tonne DM per Ha.

Future

Organic certification. Incorporating Great Land will enhance transition to an organic system by more rapid improvement of soil biological health, enable lower use of soluble fertilisers and chemicals, and improved animal health.

¹ New Zealand Dairy Statistics 2012-13. DairyNZ.

² Trial application rates equivalent to new Great Land formulation, released December 2018

Kg DM Harvested per Ha (19 months)				
Paddock	Control	Great Land Treated	Var.(T-C)	Var.%
#38	24,742	26,969	2,227	9%
#36	18,172	20,933	2,761	15%
#67	18,965	20,786	1,821	10%

