

<b>Group:</b>	SMASH Field Day	<b>Supply number:</b>	Tatua 49	<b>Date:</b>	30-Nov-17
<b>Host Farmer:</b>	Bruce and Magaret Wilton				
<b>Consulting Officer:</b>	Frank Portegys	<b>Phone:</b>	027 807 96 85	<b>Email:</b>	frank.portegys@dairynz.co.nz

### On Farm Hazards

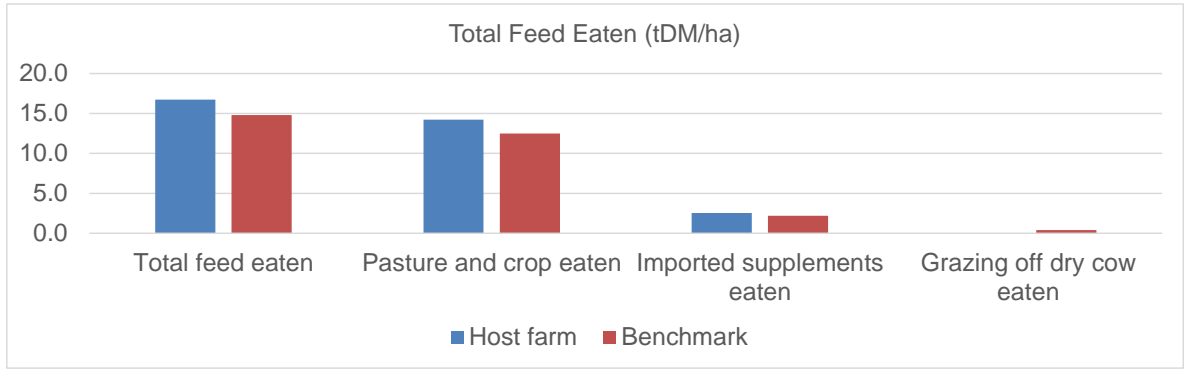
Slippery tracks and races if wet  
 Vehicles and machinery may be operating  
 Electric fences are on  
 Bulls on farm  
**Any accidents or near misses to be reported to DairyNZ staff**  
**No Go Areas:** Effluent ponds, chemical store.

### In case of emergency

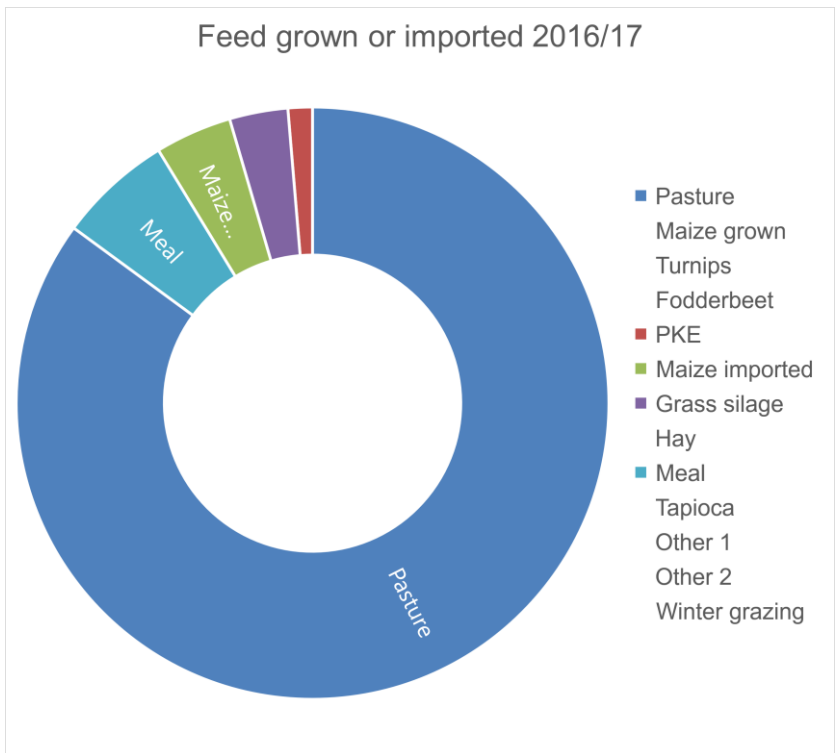
Phone 111  
 First aid kit and fire extinguisher located in DairyNZ car  
 Meeting point on tanker loop  
**Farm address:** 176 Wilton Rd  
**GPS Coordinates:** -37.6170403, 175.571341

Farm Business Type		Owner operator		Benchmark Group		Waikato owner operators (Average)	
Region	Waikato	Cow LWT (kg)	500	Breed	FX	BW / reliability:	86/44
Soil pH	6.2	Olsen P	36			PW/ reliability:	95/56
		2017/18		2016/17		2015/16	
Farm Details		Farm Target	Forecast Benchmark	Farm	DairyBase Benchmark	Farm	DairyBase Benchmark
Effective Dairying Area		97		97	154	97	144
Dairy run-off effective area (ha)		0		0	18	0	22
Milksolids (kg)		130,000		130,665	188,034	129,900	171,648
Peak cows milked		285		300	465	285	441
Stocking rate (cows/ha)		2.9		3.1	3	2.9	3.1
Cow liveweight/ha (kg/ha)		1,469		1,546	1,397	1,469	1,424
Comparative stocking rate (kgLWT/tDM)		84.1		77.9	75 to 85	73.9	75 to 85
Planned start calving (PSC) spring		18-Jul		15-Jul	27-Jul	15-Jul	27-Jul
<b>Environmental KPI's</b>							
Nitrogen applied for year (kgN/ha)		0		118	121	83	129
Nitrogen leached (kgN/ha/yr)		0		29		29	
Nitrogen Conversion Efficiency (NCE) %		0		32		32	
Effluent area (ha)		37		37		37	
<b>Production KPI's</b>							
Milksolids per ha (kg)		1340	-	1347	1,121	1339	1,192
Milksolids per cow (kg)		456		436	372	456	388
Milksolids target 31 December				808	681	854	752
Milksolids per cow as % of Lwt		91%		87%	80%	91%	84%
<b>Feed KPI's</b>							
Pasture and crop eaten (t DM/ha)		14.5		14.2	12.5	13.4	13
Imported supplements (t DM/ha)		1.9		3.0	2.2	3.4	2.4
Young Stock grazing on (t DM/ha)		0.4		0.3	0	0.4	0
Grazing off dry cows (t DM/ha)		0.0		0.0	0.4	0.0	0.3
Total feed eaten by milkers (t DM/ha)		15.9		16.4	14.8	15.9	15.5
<b>Reproductive Performance</b>							
6 week in calf rate (%)		0%	78%	73%	78%	78%	78%
Total length of mating (weeks)		0	10	11	0	12	0
Empty rate (%)		0%	Below 6%	9%	Below 6%	10%	Below 6%
<b>Financial KPI's (Dairy Business)</b>							
Farm Working Expenses (\$/kgMS)			\$ 3.51		\$ 4.21	4.26	\$ 3.79
Gross Farm Revenue (\$/kgMS)			\$ -		\$ 6.39	7.08	\$ 4.50
Operating Expenses (\$/ha)			\$ -		\$ 5,143	6,825	\$ 5,134
Operating Profit (EFS) (\$/ha)			\$ -		\$ 1,803	2,653	\$ 17

# Feed Summary 2016/17



2016/17				tDM per ha*	tDM per cow†
Tonnes of DM imported & grown					
Home grown	Pasture	1,666	85%	17.2	5.6
	Maize grown	-	0%	0.0	0.0
	Turnips	-	0%	0.0	0.0
	Fodderbeet	-	0%	0.0	0.0
Imported	PKE	26	1%	0.3	0.1
	Maize imported	82	4%	0.0	0.3
	Grass silage	62	3%	0.6	0.2
	Hay	-	0%	0.0	0.0
	Meal	122	6%	1.3	0.4
	Tapioca	-	0%	0.0	0.0
	Other 1	-	0%	0.0	0.0
	Other 2	-	0%	0.0	0.0
	Winter grazing	-	0%	0.0	0.0
	<b>Total</b>	<b>1959</b>	<b>100%</b>	<b>20.2</b>	<b>6.9</b>
<b>Home grown</b>		<b>1,666</b>	<b>85%</b>	<b>17.2</b>	<b>5.6</b>
<b>Imported</b>		<b>292</b>	<b>15%</b>	<b>2.2</b>	<b>1.0</b>
DairyNZ farm system		System 3			



\*Total feed grown or imported divided by total effective farm area

†Total feed grown or imported divided by peak cows milked

## The effect of stocking rate on efficiency of milk production



Comparative Stocking Rate (CSR) is a method of assessing the balance between feed demand and supply on farm.

CSR is total weight (kg) of animal live weight divided by the total amount of feed (KgDM) grown and imported onto the farm, including dry cow grazing.

Optimal CSR is 75-85 kgLWT/tDM.

Analysis of 20 years of farmlot trials show that reducing CSR by 10 units;

- decreases pasture utilisation by about 5%,
- increases per cow production by about 45 KgMS/cow