

# Dairy Farm 5.411 to 6.1.3 conversion comparison

StAG

23 June 2015



Proud Partners



With funding from



# Dairy farm comparison

Farm 1		Area	05.4.11 N/Ha/y	05.4.11 N/y	06.1.3 N/Ha/y	06.1.3 N/y	Increase
2003-2004 Dairy land use	Flat	49	68	3332	76	3724	112%
	Rolling	94	69	6486	72	6768	104%
	Effluent	20	64	1280	124	2480	194%
	Summer crop	9.7	94	912	165	1601	176%
	Winter crop	8	96	768	239	1912	249%
	Trees	6	11	66	14	84	127%
	Total	187	69	12844	89	16569	129%

Farm 2		Area	05.4.11 N/Ha/y	05.4.11 N/y	06.1.3 N/Ha/y	06.1.3 N/y	Increase
2003-2004 Dairy land use	Milk 1	23	38	874	70	1610	184%
	Milk 2	19	51	969	89	1691	175%
	Effluent	36	47	1692	117	4212	249%
	Milk3	54	37	1998	74	3996	200%
	Milk4	99	49	4851	85	8415	173%
	Total	231	45	10384	86	19924	192%

- Farm 1 transition low
- Farm 2 transitioned high
- Effluent and fodder blocks tend to have large increases
- Relative block areas are important

# Farm 1

Farm 1		Area	05.4.11 N/Ha/y	05.4.11 N/y	06.1.3 N/Ha/y	06.1.3 N/y	Increase
2003-2004 Dairy land use	Flat	49	68	3332	76	3724	112%
	Rolling	94	69	6486	72	6768	104%
	Effluent	20	64	1280	124	2480	194%
	Summer crop	9.7	94	912	165	1601	176%
	Winter crop	8	96	768	239	1912	249%
	Trees	6	11	66	14	84	127%
	Total	187	69	12844	89	16569	129%

- Flat and rolling blocks are the majority of farm area
- Bmed as pumices but changed to podzols to align with input standards
- Drainage reduced with input standards

Farm 1		Area	05.4.11 N/Ha/y	05.4.11 N/y	06.1.3 N/Ha/y	06.1.3 N/y	Increase
2003-2004 Dairy land use	Flat	49	52	2548	81	3969	156%
	Rolling	94	54	5076	76	7144	141%
	Effluent	20	48	960	123	2460	256%
	Summer crop	9.7	94	912	178	1727	189%
	Winter crop	8	96	768	247	1976	257%
	Trees	6	9	54	14	84	156%
	Total	187	55	10318	93	17360	168%

- If BM soils changed back to podzols then BM N losses reduce
- Increase drainage in 6.1.3 to be similar to 5.4.11 file...

# Farm 2

Farm 2		Area	05.4.11 N/Ha/y	05.4.11 N/y	06.1.3 N/Ha/y	06.1.3 N/y	Increase
2003-2004 Dairy land use	Milk 1	23	38	874	70	1610	184%
	Milk 2	19	51	969	89	1691	175%
	Effluent	36	47	1692	117	4212	249%
	Milk3	54	37	1998	74	3996	200%
	Milk4	99	49	4851	85	8415	173%
	Total	231	45	10384	86	19924	192%

- Lower starting point due to lower drainage ~1300mm
- 6.1.3 drainage increased to ~1500mm resulting in a large N increase
- 150 kg more MS/Ha

Farm 1		Area	05.4.11 N/Ha/y	05.4.11 N/y	06.1.3 N/Ha/y	06.1.3 N/y	Increase
2003-2004 Dairy land use	Flat	49	50	2450	84	4116	168%
	Rolling	94	52	4888	79	7426	152%
	Effluent	20	47	940	134	2680	285%
	Summer crop	9.7	74	718	180	1746	243%
	Winter crop	8	78	624	249	1992	319%
	Trees	6	9	54	15	90	167%
	Total	187	52	9674	97	18050	187%

- Increase MS in both and reduce 5.4.11 drainage to match farm 2...
- Percentage shift similar to farm 2.

# Summary

- Extreme examples
- Both farm data and physical data can change with version updates
- OVERSEER is a calculator – same data in same data out
- OVERSEER often has bugs or changes to science which are only corrected or included in the next version



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