

Backtrack Dairies – Weekly Summary

Week ending Saturday 12th March 2016

Backtrack Dairies

Two farming systems. One biological (Whakapono) and one conventional (Waiora). Both farms have a stocking rate of 3.3 cows/ha at peak.

Week Ending	5/3/16		12/3/16	
Backtrack Dairies	Whakapono	Waiora	Whakapono	Waiora
Farm grazing ha	155	210	155	210
Peak Cows	506	690	506	690
Stocking Rate (cows in milk/ha)	3.1	3.1	3.1	3.1
Cows in Milk	482	655	476	655
Cows in Vat	474	653	462	649
Ave. Pasture Cover	2761	2869	2773	2846
Ave. Pasture Growth	49	60	50	59
Area Grazed	6.71	8.93	7.13	7.39
Grazing Interval	23	24	22	26
Pasture Intake (est kgDM/cow)	18	18	19	19
Grass Silage Fed (kgDM/cow)	0	0	0	0
Grain/PKE Fed (kgDM/cow)	1	1	1	1
Total Fed KgDM/cow	19	19	20	20
Milk Solids (Kg/cow/day)	1.83	1.76	1.77	1.67
MS/ha/day	5.60	5.46	5.35	5.18
Nitrogen applied (kg N/ha)	0	0	14	28
Rainfall (mm for week)	0	0	0	0
Irrigation applied	40186	62525	46342	58250
Soil Temperature at 9am	17	16	17	16
Soil Moisture (between 65-76%)	68	78	69	73
Cell count (000's)	121	125	91	146
Mastitis Cases	1	1	0	0
Lameness Cases	3	0	8	1
Totals To Date				
Milk Solids to factory	192147	255947	197951	263560
Milk Solids inclu calf milk	197250	265271	203054	272884
MS/ha	1247	1220	1285	1257
Nitrogen applied (kg N/ha)	100	105	80	92
Supplements Fed (kg/cow)	646	676	652	689
Deaths %	2	2	11	16
Culls %	9	8	51	53

Summary

- High per cow and per ha production has dropped again slightly to 1.77 kg MS/cow and 5.35 kg/ha on Whakapono, while Waiora has also dropped to 1.67 kg MS/cow and 5.18kgMS/ha.
- No rain has meant the irrigation is full on at 5.2mm/ha/day to cope with high temps and NW winds.
- River water available at present but only 2 days stored water left.
- Maintain 24 day round on quality pastures and aim to continue producing at this level for another week before moving to 30 days.
- Whakapono cover has remained steady at 2773 and similar on Waiora at 2846.
- Cows probably dropping due to heat and eating lower into the base of some of the untopped paddocks.
- Residuals on both farms starting to look more acceptable around 1700 but are still plating high around 2000.
- Final pregnancy test result a bit of a disaster with Whakapono at 14% and Waiora at 15%. Both 5-6% worse than last year. We will try to analyse what went wrong, but have heard some other bad figures around the area so hopefully it is season specific. Lincoln was also 14% after 10 weeks. Some of these were culls not mated just to make me feel a little better.
- Starting to feel the effects of two weeks without rain and some very hot days with pasture and milk production slowing. Also less in-shed feeding (no grain) will have contributed to the recent fall in production.

Production

Whakapono production is ahead of Waiora in per cow and per ha/day probably due to better quality pasture available overall (more clover).

PKE has been maintained at 1kg/cow/day with grain dropped out as considered not economic at new lower milk price.

Whakapono has dropped slightly per cow levels of 1.77 KgMS and Waiora has dropped further to 1.67 KgMS.

Irrigation

No rain this week and hot weather means irrigation is full on. The river water is still available with the NW winds.

Have 2 days stored water left but can purchase more at current price (8c/m3). This works out at about \$1000/day for both farms.

Animal Health

	Whakapono	Waiora
Mastitis %	0%	0.15%
Lameness %	0.63%	0%
Penicillin Herd %	2.94%	0.92%

There is minimal mastitis on both farms. Lameness still worse on Whakapono with 8 new cases this week and none on Waiora.

Whakapono does have disadvantage of one herd of 500 cows compared to two herds of 300-350 on Waiora so a lot less time on concrete.

Also Whakapono has longer walks on tracks which the two pivots go over and wet continuously whereas Waioras four pivots don't cross any tracks so stay mostly dry and clean, which could be why there is less footrot there.

Pastures

Covers on Whakapono have maintained at 2773 on a 24 day round, while Waiora has also held cover at 2846 on an average 26 day round with the first herd on 24 days and a 28 day round for the second herd, which makes use of the extra cover on their part of the farm.

This feed could have been made into silage but was thought too close to autumn when we normally extend the round and also very dry so not keen to take area out of round.

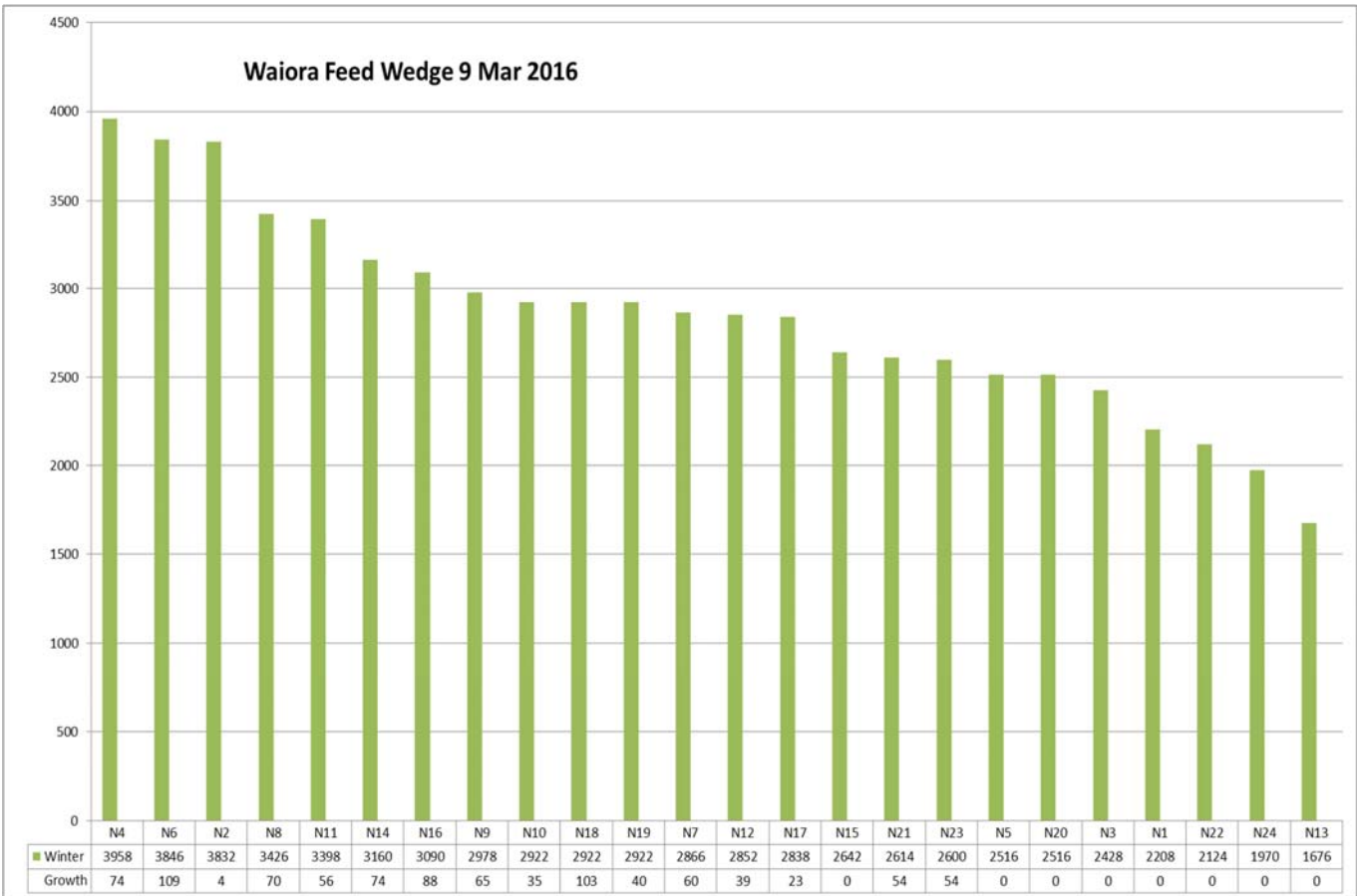
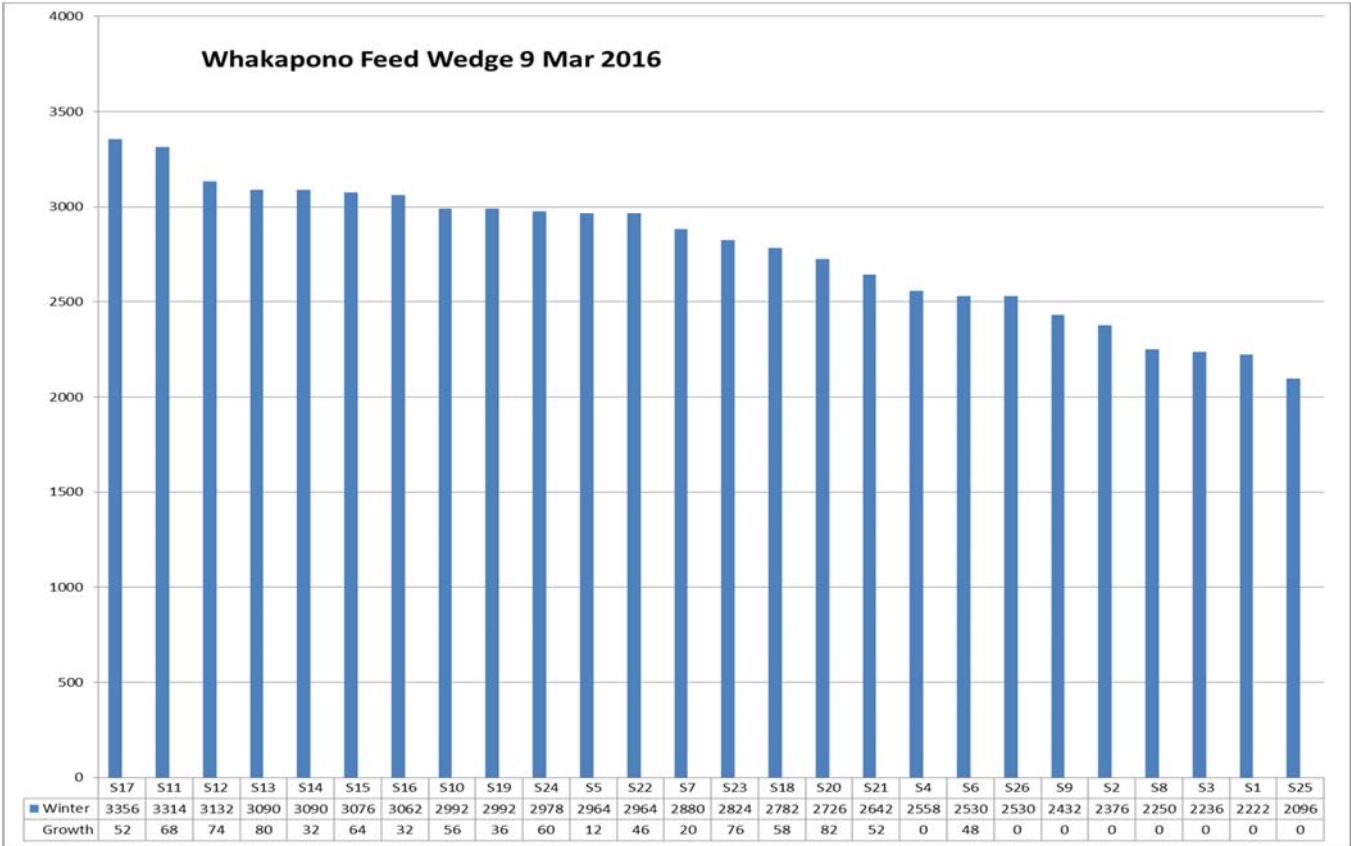
Residuals on Whakapono are starting to look more acceptable around 1600 but still plating at 2000.

Growth rates (50 Whakapono/59 Waiora kgDM/ha/day) are virtually the same as last week so with similar hot weather (high temperatures and strong NW winds) ET's high but irrigators are keeping up.. Also NW winds means the river is up so we aren't using stored water.

Still reading 300-400 kgDM/ha higher than normal with the stemmy base holding up the plate meter.

Demand at 3.1 cows x 18 kgDM/cow/day = 56kgDM/ha/day so should be at least maintaining cover if not dropping slightly , with PKE in-shed helping in shed at 1kg/hd/day.

Feed Wedges



Mating

	Whakapono	Waiora
Submission Rate	84%	82%
Non-cyclers	9%	12%
AI length	8 weeks	8 weeks
Mating length	11 weeks	11 weeks
Detection Method	Manager/2IC checking cows every morning and tail paint	Manager/2IC checking cows every afternoon and tail paint

Timeframe of Mating	Dates
Planned Start of Mating	30 th October
Metri-checking & PG 1	23 rd November
PG 2	4 th December
Change to short gestation semen	10 th December
AI Finished	22 nd December
Bulls entered herd	22 nd December
Bulls removed from herd	10 th January
Pregnancy Scanning 1	2 nd February
Pregnancy Scanning 2	3 rd March

Pregnancy Test Results

1st Scan	Whakapono	Waiora
Total Cows Scanned	493	652
August Calving (first four weeks)	304 (62%)	390 (60%)
September Calving (second four weeks)	105 (21%)	148 (23%)
Rechecks	84 (17%)	114 (17%)

2 nd Scan	Whakapono	Waiora
Total Cows Rechecked	80 (16%)	117 (17%)
Late Oct to Bull	12 (2%)	19 (3%)
No of Cows Empty	68	98
% of cows Empty	14%	15%

So very disappointing results but appear to be quite common around the county and also Lincoln posted a similar result at 14% after 10 weeks. I will check how many of these are culls that I didn't mate until late on purpose, which will make me feel a bit better if they make up some of these MT's.

Good job the beef schedule is good and I have plenty of heifers (300).

Heifers on the three blocks ranged from 4-7% MT which is normal for us.

Fertiliser

Whakapono – Top Soils

Month	Fertiliser Product	Application Rate (kg/Ha)	N	P	K	S	Mg	Ca
July	Sulphate Ammonia	150	32			35		
	Mag Sulphate (K)	25				4	4	
October	Sulphur	10				9		
	Sulphate Ammonia	25	6			6		
	Pot Sulphate/KCL	25			12	3		
	DAP	75	14	15				
December	Urea	20	9.2					
	Sulphate Ammonia	50	11			12		
	Pot Sulphate/KCL	52			25	6.8		
	DAP	48	8.6	9.6				
	Sulphur	10				8.6		
	Lime	639						383
Dolomite	1080					119	540	
January	Urea	5	2.3					
	Sulphate Ammonia	64	14			15		
	Pot Sulphate/KCL	5			2.4	0.7		
	DAP	5	0.9	1				
February	Urea	5	2.3					
	Sulphate Ammonia	50	11			12		
	Pot Sulphate/KCL	5			2.4	0.7		
	DAP	5	0.9	1				

Total to Date Applied			114	27	41	112	123	923
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Waioira - Ballance

Month	Fertiliser Product	Application Rate (kg/Ha)	N	P	K	S	Mg	Ca
July	Sustain Ammo 30N	100	30	1		13		
October	Muriate of Potash/Sustain Urea	100	25		22			
November	Serpentine Super/Sulphurgain Pure (Olsen P < 20)	526		22		40.5	16	53
	Serpentine Super/Sulphurgain Pure (Olsen P > 20)	626		15		28.5	11	37
December	Muriate of Potash/Sustain Urea	100	25		22			
January	Muriate of Potash/Sustain Urea*	100	25		22			
Total to Date Applied			105	38	67	82	27	90

*Waioira fertiliser going on mostly at 100 kg/ha which is a 50:50 mix of Sustain Urea and MOP with one third of paddocks only receiving 50 kg of Sustain urea if K levels were > 6.

February Application

Finished spreading fertiliser on Whakapono so up to 100 kg/ha of N and is almost at budget of \$600/ha. Whakapono has received varying amounts of fertiliser containing light rates of N and S (15 to 20 units).

N to date on Waioira is 105kg/ha is slightly above Whakapono at 100kg/ha.

So far Waioira has spent less than \$500/ha so has more up sleeve for final two applications. Eight paddocks on Waioira with pH below 6.2 have had 2-3 t/ha lime applied while all other paddocks have pH above this after whole farm receiving 2t/ha two years ago.

March

Commenced applying fert to Waioira following cows as we prepare to head out to 30+ day rotation using Sustain Urea at 60 kg/ha or 28 kg/ha of nitrogen to boost cover. This will take total to 133 kg/ha of N to date.

A final application of Sustain Ammo 30N will go on in April taking N total to 160 units very similar to Lincoln at 167 units of N who are limited by their nutrient budget.

Total spend from Ballance including lime \$111,000 or \$529/ha well under our \$600/ha budget.

Also started applying autumn mix to Whakapono with low rate of nitrogen at 14 units and very small amounts of P, K and S and should be the final application this season to this farm. This will take farm to total N use of 119kg/ha for season.

Despite this total spend for the season will total \$101,000 or \$653/ha well over the budgeted \$600/ha.

It is worth noting that of the \$200/ha spent on Ca/Mg on Whakapono to achieve the desired 68/12% of base saturation that could be viewed as a capital application of nutrients. The

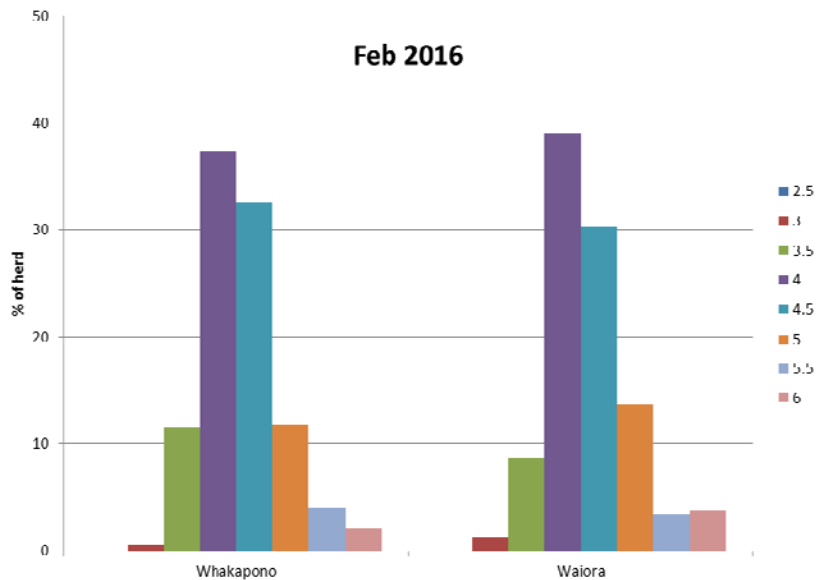
next soil tests will show this as will Waioras need for lime next season if pH drops below desired levels around 6.2.

One thing is for sure, given the current situation with dairying, next seasons budget will be tighter as we strive to be more efficient with nutrients and remain profitable.

I feel confident given the recommendations on both farms that we have nutrients “in the bank” that we can draw on if things get much tougher.

Cow Condition

Cow condition has declined slightly on both farms with the average at 4.35. There is 13% of Whakapono cows below CS 4.0 and 10% on Waiora below CS 4.0. The industry target is no more than 15% of the herd below CS 4.0 at this time. This means that both farms are still under this target and are in a good position to make calving condition targets. The spread is shown in the graph below.



Herd Test Results

Farm	No. of herds	Herd Size	Milk (L)	Milkfat (%)	Milkfat (kg)	Protein (%)	Protein (kg)	Milk Solids (kg)
Whakapono		473	23.0	5.04	1.16	4.20	.97	2.12
Waiora		626	21	4.63	.97	4.06	.85	1.82
Canterbury	94	648	19.5	4.71	.92	3.92	.77	1.69

Management

Continue current management of 24 day round. More attention to grazing residuals and need to control pastures without restricting intakes.

Still 25 heifer calves on farm plus 25 beef calves to be sold

Control weeds, Californian thistle and gorse on fence lines.

Start irrigation K-line and pivots as per moisture meter.

River water available so maintain moisture levels at upper end of optimum in case of breakdown and to reduce need to use stored water unnecessarily.

Flat line production for next month then look to get round out to 30+ days.

Use preg test and next herd test data to knock out cows that aren't contributing before start feeding silage to get round out.