

## Backtrack Dairies – Weekly Summary

Week ending Saturday 19<sup>th</sup> 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	12/3/16		19/3/16	
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	476	655	476	655
Cows in Vat	469	649	470	649
Ave. Pasture Cover	2773	2846	2652	2839
Ave. Pasture Growth	50	59	32	60
Area Grazed	7.13	7.39	6.04	8.12
Grazing Interval	22	26	24	26
Pasture Intake (est kgDM/cow)	19	19	19	19
Grass Silage Fed (kgDM/cow)	0	0	0	0
Grain/PKE Fed (kgDM/cow)	1	1	2	2
Total Fed KgDM/cow	20	20	21	21
Milk Solids (Kg/cow/day)	1.77	1.67	1.74	1.63
MS/ha/day	5.35	5.18	5.29	5.05
Nitrogen applied (kg N/ha)	14	28	0	0
Rainfall (mm for week)	0	0	33	33
Irrigation applied	46342	58250	16012	21395
Soil Temperature at 9am	17	16	16	14
Soil Moisture (between 65-76%)	69	73	71	77
Cell count (000's)	91	146	97	142
Mastitis Cases	0	0	1	0
Lameness Cases	8	1	4	4
<b>Totals To Date</b>				
Milk Solids to factory	197951	263560	203690	270990
Milk Solids inclu calf milk	203054	272884	208793	280314
MS/ha	1285	1257	1322	1292
Nitrogen applied (kg N/ha)	80	92	114	133
Supplements Fed (kg/cow)	652	689	658	695
Deaths %	11	16	11	16
Culls %	51	53	51	53

## Summary

- High per cow and per ha production has remained similar at 1.74 kg MS/cow and 5.29 kgMS/ha on Whakapono, with Waiora still lower at 1.63 kg MS/cow and 5.05 kgMS/ha.
- 32mm rain has meant nearly a week off irrigation which was most welcome as we are nearly out of stored water and don't want to purchase more.
- River water available at present but only 1 day stored water left. We will ration this out over 5 days just keeping the Kline going when needed as the pivots catch up easily when the river comes back off restriction which looks likely with a return to hot NW weather next week.
- Have increased the rotation two days on each farm and are about to move to 30+ day round. Whakapono is on 24 days while on Waiora's first herd are on 24 days while the smaller second herd is on 28 to give average of 26 days.
- This will require feeding 2 kgDM as baleage and an increase in PKE from 1 to 2 kg/day.
- Whakapono cover has dropped 120 kgDM/ha to 2652 with a PGR of only 32kgDM/ha/day, while Waiora has maintained its high cover of 1839 kgDM/ha with a PGR of 60 kgDM/ha/day.
- Residuals on both farms starting to look more acceptable around 1600 but are still plating high around 2000
- Will start culling cows 20 per week for the next 8 weeks which will help with lengthening rotation and reducing need for supplement but given we are 120 cows less compared to this time last season we can afford to carry these MT's longer in order to reach our target production of 500kgMS/cow.

## 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 1.74 KgMS and Waiora has remained stable but lower at 1.63 KgMS.

## Irrigation

32 mm rain this week and means irrigation is off. The river water is still available with the NW winds.

Have 1 day of stored water left but can purchase more at current price (8c/m<sup>3</sup>). This works out at about \$1000/day for both farms.

## Animal Health

	Whakapono	Waiora
Mastitis %	0.21	0
Lameness %	0.84	0.61

Penicillin Herd %	1.3	0.9
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There is minimal mastitis on both farms. Lameness still a problem on Whakapono with 4 new cases this week and also 4 on the larger 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 dropped a lot to 2652 on a 24 day round, while Waiora has held cover at 2839 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 (32 Whakapono/60 Waiora kgDM/ha/day) seem to line up with the change in cover but Waioras cover by eye appears similar to Whakapono but is maybe carrying more base.

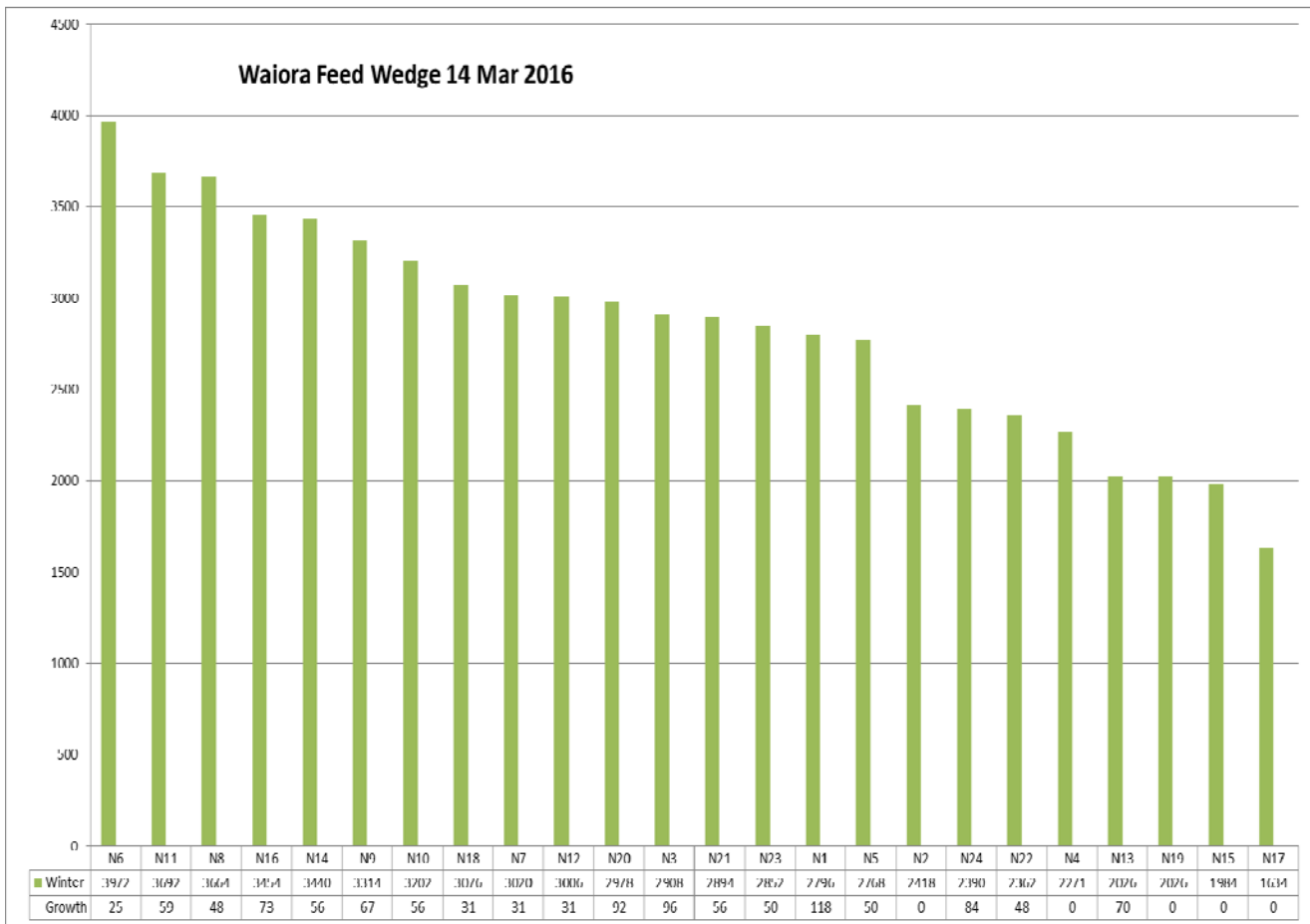
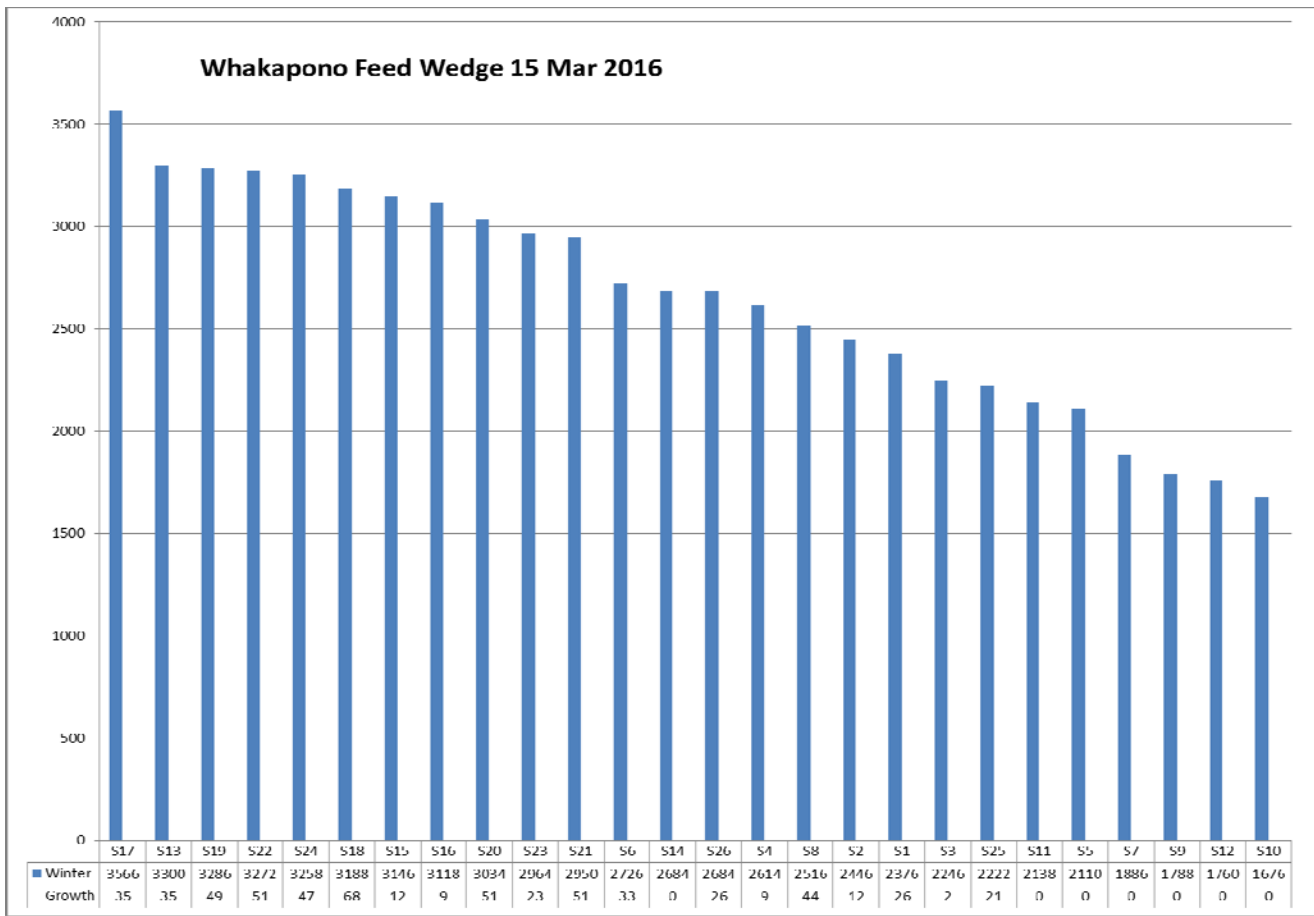
Whakapono maintaining higher per cow production but lower cover may mean quality is better to the base of the sward and is being turned into milk instead of being rejected or taking more energy to digest.

The next herbage samples next week may shed some light on this.

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, 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 <sup>th</sup> October
Metri-checking & PG 1	23 <sup>rd</sup> November
PG 2	4 <sup>th</sup> December
Change to short gestation semen	10 <sup>th</sup> December
AI Finished	22 <sup>nd</sup> December
Bulls entered herd	22 <sup>nd</sup> December
Bulls removed from herd	10 <sup>th</sup> January
Pregnancy Scanning 1	2 <sup>nd</sup> February
Pregnancy Scanning 2	3 <sup>rd</sup> March

## Pregnancy Test Results

1 <sup>st</sup> 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%)
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2 <sup>nd</sup> 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				
<b>Total to Date Applied</b>			114	27	41	112	123	923

### 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			
<b>Total to Date Applied</b>			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 Waiora 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 Waiora 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.

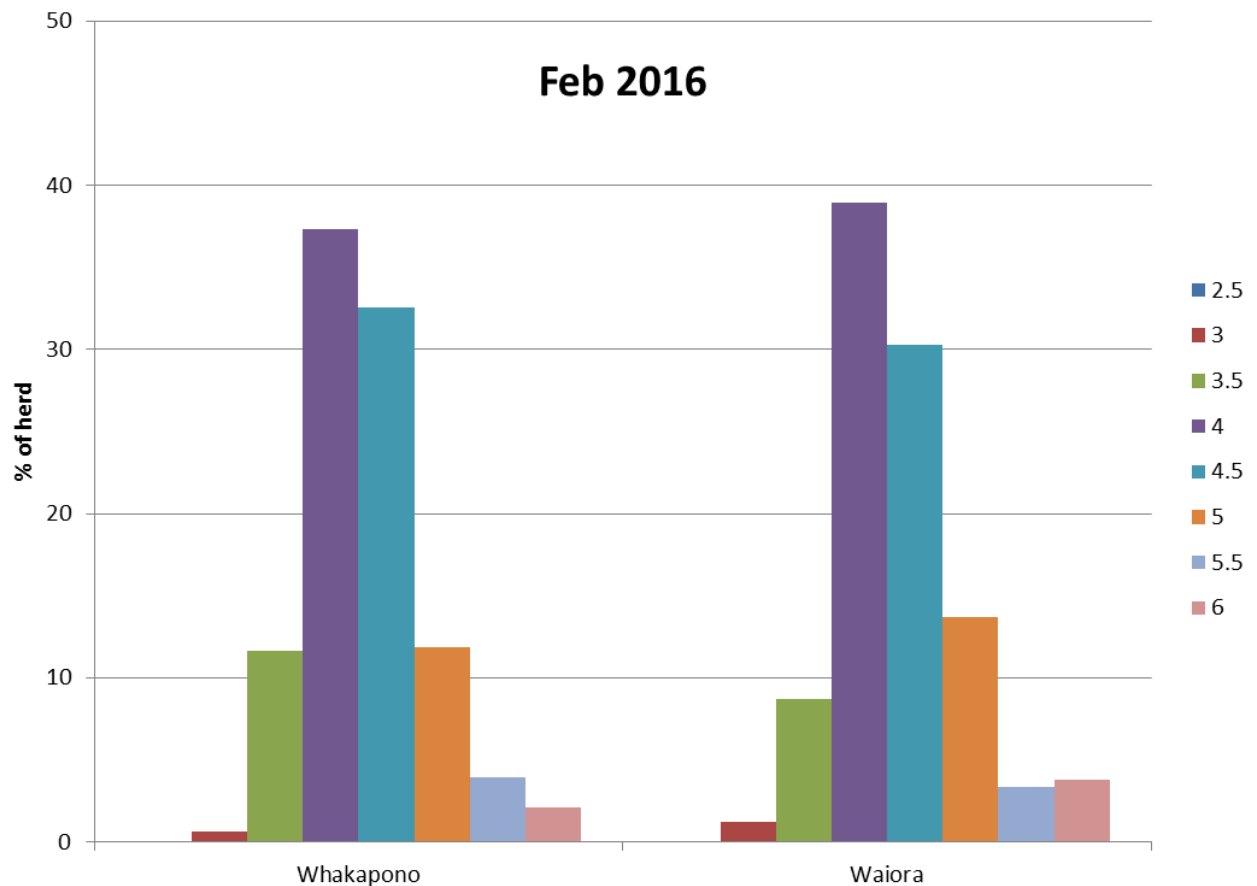
One thing is for sure, given the current situation with dairying, next seasons budget will be tighter as we strive to be more efficient with nutrients and remain profitable.

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

- Increase rotation to 36 days using supplement and reducing cow numbers.
- Make use of N in fert to boost growth rates while weather still warm
- Start culling MTs and obvious culls bearing in mind we still have our target production in mind and a relatively low stocking rate compared to previous years
- Still 25 heifer calves on farm plus 25 beef calves to be sold this week
- Control weeds, Californian thistle and gorse on fence lines.
- 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.

