

Backtrack Dairies – Weekly Summary

Week ending Saturday 2nd April 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	26/3/16		2/4/16	
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	3.0	3.0
Cows in Milk	476	655	468	623
Cows in Vat	470	641	471	621
Ave. Pasture Cover	2601	2679	2667	2831
Ave. Pasture Growth	49	34	63	63
Area Grazed	6.02	7.19	5.50	6.33
Grazing Interval	26	29	28	33
Pasture Intake (est kgDM/cow)	17	17	22	18
Grass Silage Fed (kgDM/cow)	2	2	3	2
Grain/PKE Fed (kgDM/cow)	2	2	2	2
Total Fed KgDM/cow	21	21	26	21
Milk Solids (Kg/cow/day)	1.65	1.62	1.65	1.62
MS/ha/day	5.00	4.93	5.02	4.79
Nitrogen applied (kg N/ha)	0	0	0	0
Rainfall (mm for week)	8	8	3	3
Irrigation applied	24958	33399	26835	47063
Soil Temperature at 9am	18	16	17	15
Soil Moisture (between 65-76%)	67	78	73	81
Cell count (000's)	114	148	106	156
Mastitis Cases	0	1	0	0
Lameness Cases	6	6	2	1
Totals To Date				
Milk Solids to factory	209117	278235	214558	285272
Milk Solids inclu calf milk	214220	287559	219661	294596
MS/ha	1357	1327	1392	1360
Nitrogen applied (kg N/ha)	80	92	84	104
Supplements Fed (kg/cow)	674	707	724	740
Deaths %	11	16	11	15
Culls %	51	57	59	89

Summary

- Per cow and per ha production has fallen to 1.65 kg MS/cow and 5.00 kgMS/ha on Whakapono, with Waiora holding at 1.62 kg MS/cow and 4.93 kgMS/ha.
- Move from 24 to 36 days has meant cows are eating lower quality silage and PKE and grazing harder into the poorer quality of the base of pastures.
- Still producing higher per cow than last season with 120 less cows over both farms (10%) and production down 3% on Whakapono and 8% on Waiora to factory.
- Overall 6.6% down to factory but a lot less supplement used to date.
- 8 mm rain has helped but irrigation still necessary and river at low levels so water going on whilst available.
- River water available at present but only 1 day stored water left.
- Have increased the rotation two days on each farm and are about to move to 30+ day round.
- Whakapono cover has dropped slightly to 2601 kgDM/ha to 2652 with a PGR of only 49 kgDM/ha/day, while Waiora has dropped its high cover of 1839 kgDM/ha to 2679 at PGR of 34 kgDM/ha/day which seems opposite to last weeks pasture walk.
- 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 2kg/cow/day with grain dropped out as considered not economic at new lower milk price.

Baleage is added as needed to help extend the round at average of 2kg DM/cow/day at this stage.

Whakapono has dropped per cow levels to 1.65 KgMS and Waiora has remained stable but lower at 1.60 KgMS.

Irrigation

8 mm rain this week and means irrigation is on again. 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/m³). This works out at about \$1000/day for both farms.

Animal Health

	Whakapono	Waiora
Mastitis %	0	0

Lameness %	0.43	0.16
Penicillin Herd %	0.64	0.32

There is minimal mastitis on both farms. Lameness still a problem on Whakapono with 6 new cases this week and also 6 also 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 and held at 2601 from 2652 on a 24 day round, while Waiora has dropped a lot 160, to 2679 cover from 2839 as we move quickly to an average 36 day round with the first herd on 36 days with the first herd on Waiora and Whakapono receiving 2 kg of silage as baleage on average, while the second herd on Waiora makes use of the extra cover on their part of the farm we carried.

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 (49 Whakapono / 34 Waiora kgDM/ha/day), opposite to last week, seem to line up with the changes 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.

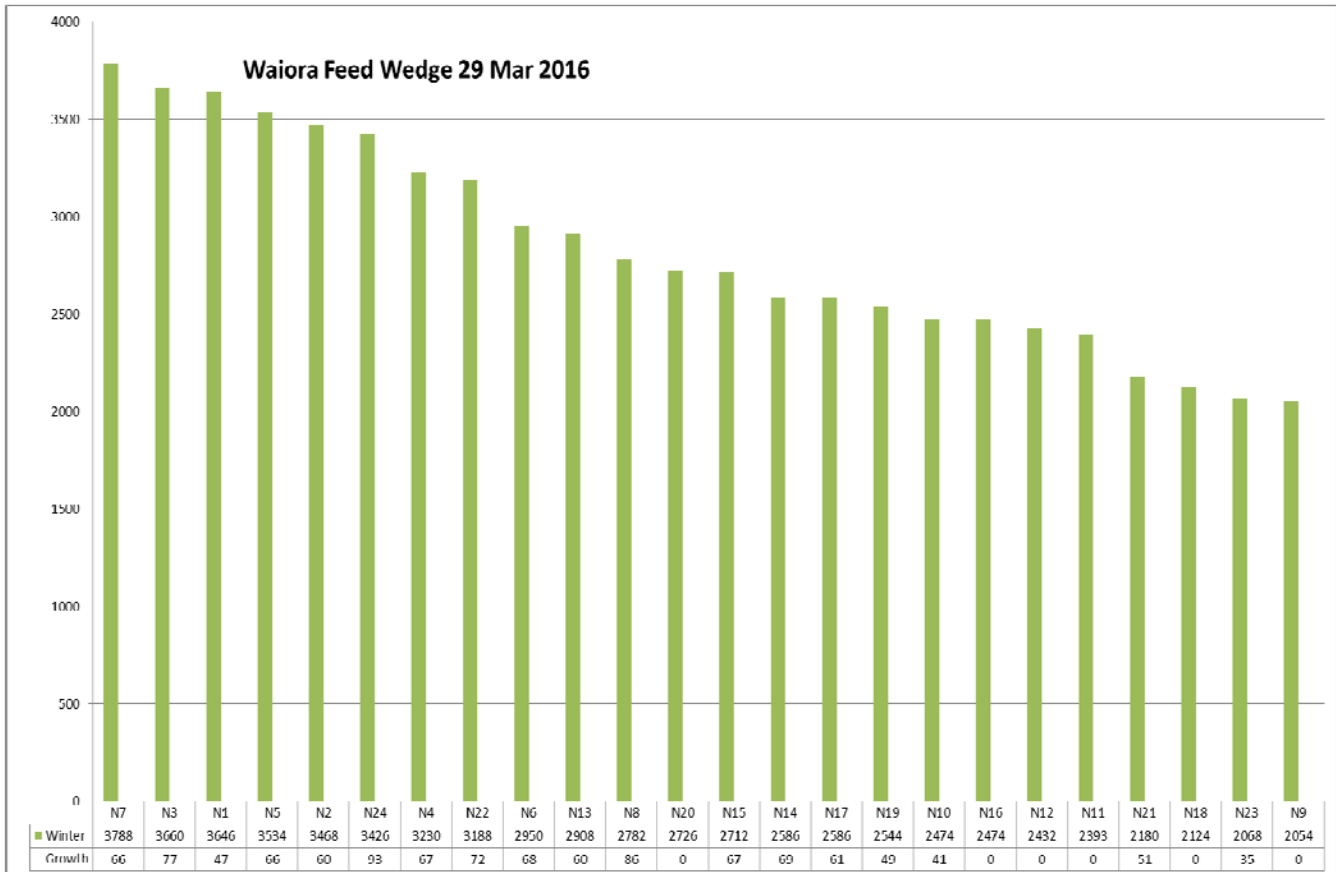
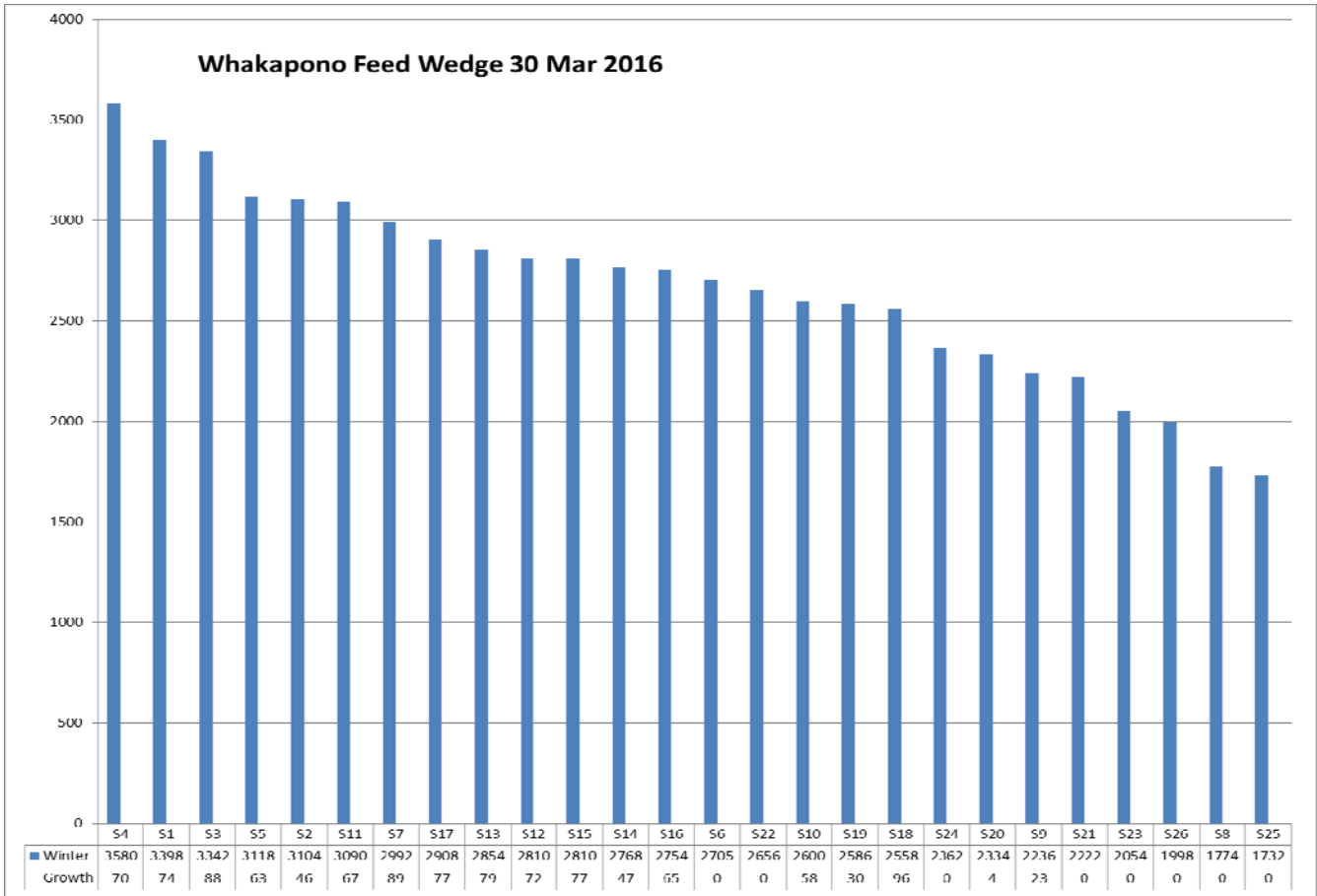
Herbage samples ,two from each farm directly in front of cows to be grazed are remarkably similar,one excellent and one average from each farm so cast no more light on per cow differences

Check them below.

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

Demand at 3.1 cows x 1 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 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

1 st 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

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			
March	Sustain Urea	60	28					
Total to Date Applied			133	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.

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.

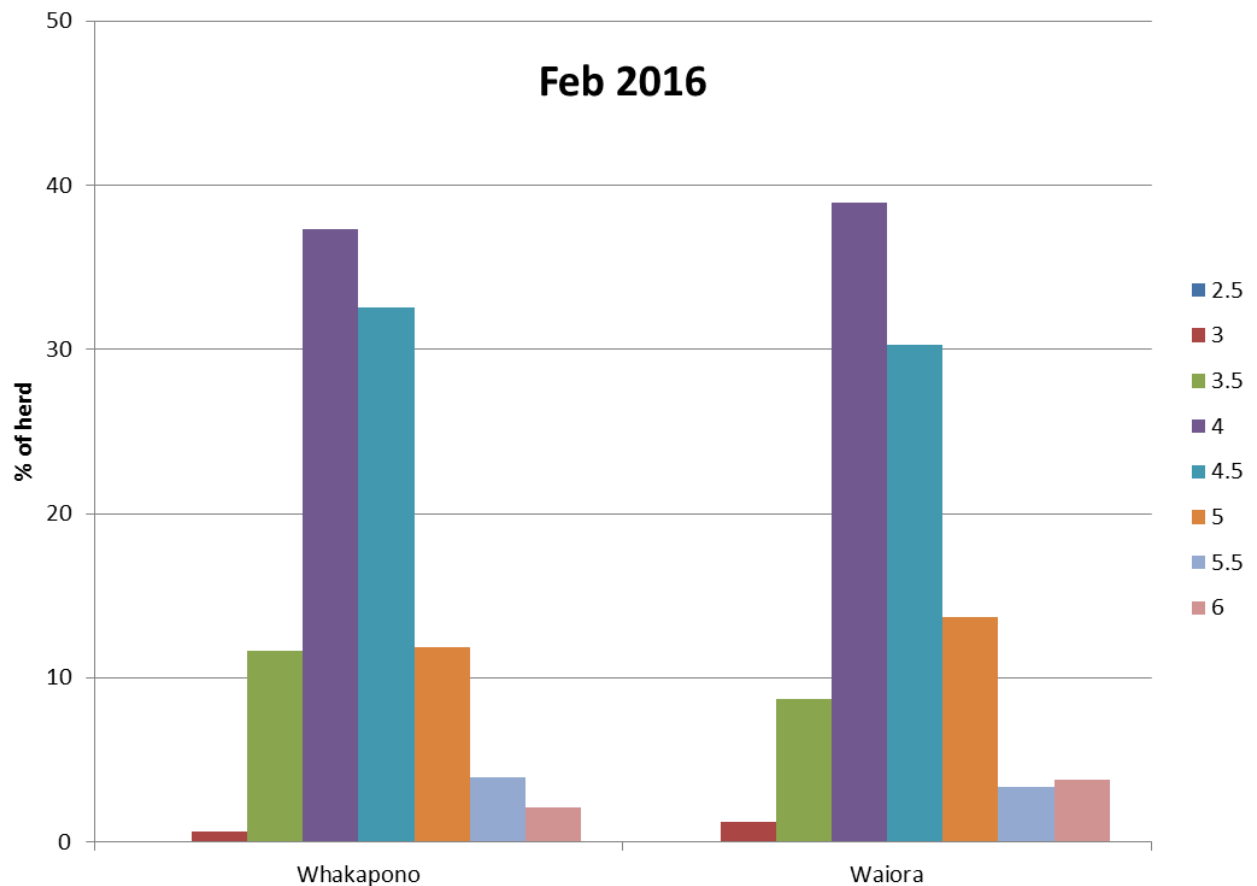
Started applying final round of Ammo30N to Waiora following cows

Whakapono will receive no more fertiliser this season and will be very interesting to see what grows from this point on.

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.

Next condition score will be in early April



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 40 heifer calves on farm plus 8 beef calves.

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.

Cancel final herd test as don't have scope with MT rate to cull too many more culls on low production.

We can still use our milk meters to find obvious ones and back that up with herd test data.

Same with high cell count cows.

Start preparing info for May 10th field day.

Easter break well earned.