

Backtrack Dairies – Weekly Summary

Week ending Saturday 9th 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	2/4/16		9/4/16	
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)	3.0	3.0	3.0	3.0
Cows in Milk	468	623	467	622
Cows in Vat	460	617	453	616
Ave. Pasture Cover	2667	2831	2776	2938
Ave. Pasture Growth	63	63	58	67
Area Grazed	5.50	6.33	4.74	6.12
Grazing Interval	28	33	33	34
Pasture Intake (est kgDM/cow)	22	18	18	25
Grass Silage Fed (kgDM/cow)	3	2	2	2
Grain/PKE Fed (kgDM/cow)	2	2	2	2
Total Fed KgDM/cow	26	21	23	29
Milk Solids (Kg/cow/day)	1.65	1.62	1.66	1.60
MS/ha/day	5.02	4.79	4.98	4.8
Nitrogen applied (kg N/ha)	0	0	0	0
Rainfall (mm for week)	3	3	12	12
Irrigation applied	26835	47063	5209	8840
Soil Temperature at 9am	17	15	16	14
Soil Moisture (between 65-76%)	73	81	72	79
Cell count (000's)	106	156	108	147
Mastitis Cases	0	0	0	1
Lameness Cases	4	3	7	4
Totals To Date				
Milk Solids to factory	214558	285272	219820	292174
Milk Solids inclu calf milk	219661	294596	224923	301498
MS/ha	1392	1360	1426	1393
Nitrogen applied (kg N/ha)	84	104	84	104
Supplements Fed (kg/cow)	724	740	724	740
Deaths %	12	17	12	17
Culls %	59	89	59	89

Summary

- Per cow and per ha production has held quite well 1.65 kg MS/cow and 4.98 kgMS/ha on Whakapono, with Waiora also holding at 1.60 kg MS/cow and 4.80 kgMS/ha.
- Moving 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 less supplement used to date.
- 8mm rain so irrigation off.
- Whakapono cover has increased from 2667 kgDM/ha to 2776 with a PGR of 58kgDM/ha/day, while Waiora has increased its cover of 2831 kgDM/ha to 2938 at PGR of 67 kgDM/ha/day also which seems accurate
- Able to back off silage to achieve target residuals of 1650 and achieve 30 day round.
- Residuals on both farms starting to look more acceptable around 1600 but are still plating high
- Delayed culling MT cows due to high pasture covers available and opportunity to make cheap milk and reach our budgeted production target
- Difficult to get cows into works even though booked two months ago so have decided 90 will go to buyers for eating winter feed on liveweight basis early May before we go to 40 day round. Lincoln has also decided to turn their high covers into milk.

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 1- 2 kg DM/cow/day

Irrigation

8 mm rain this week and means irrigation is off

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%	0.2%
Lameness %	1.5%	0.6%
Penicillin Herd %	3%	1%

There is minimal mastitis on both farms. Lameness still a problem on Whakapono with 7 new cases this week and also 4 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 increased from 2667 to 2776 on a 28 day round moving to 34 days, while Waiora is up again from 2831 cover to 2938 as we move to an average 34 day round 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 were not keen to take area out of round.

Residuals on Whakapono are starting to look more acceptable around 1600 - 1700

Growth rates (58 Whakapono / 67 Waiora kgDM/ha/day) seem to line up with the changes in cover but Waioras cover by eye appears similar to Whakapono but is maybe carrying more base. Effect of extra N on Waiora (23 units/ha) also becoming apparent with extra even growth between clumps, versus 14 units N on Whakapono

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.

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

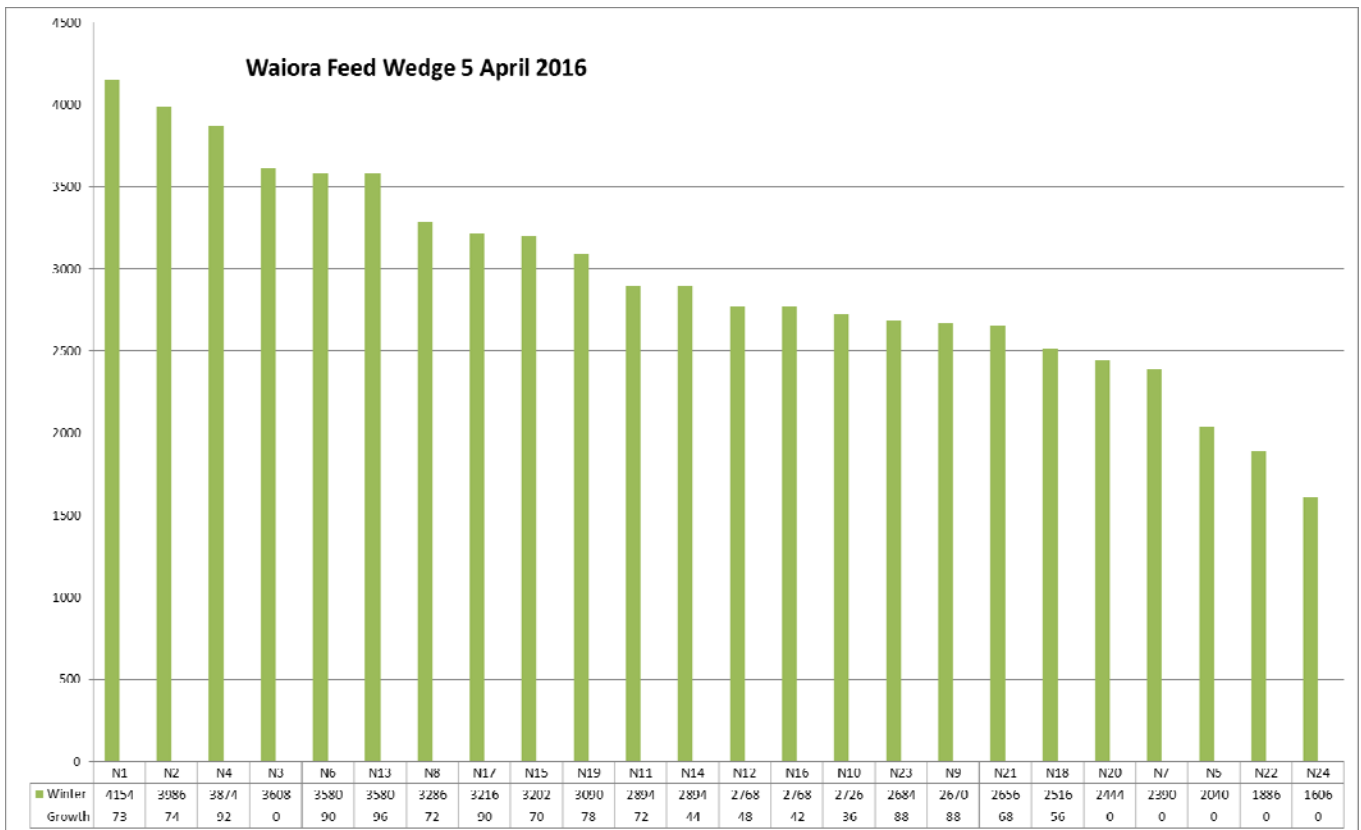
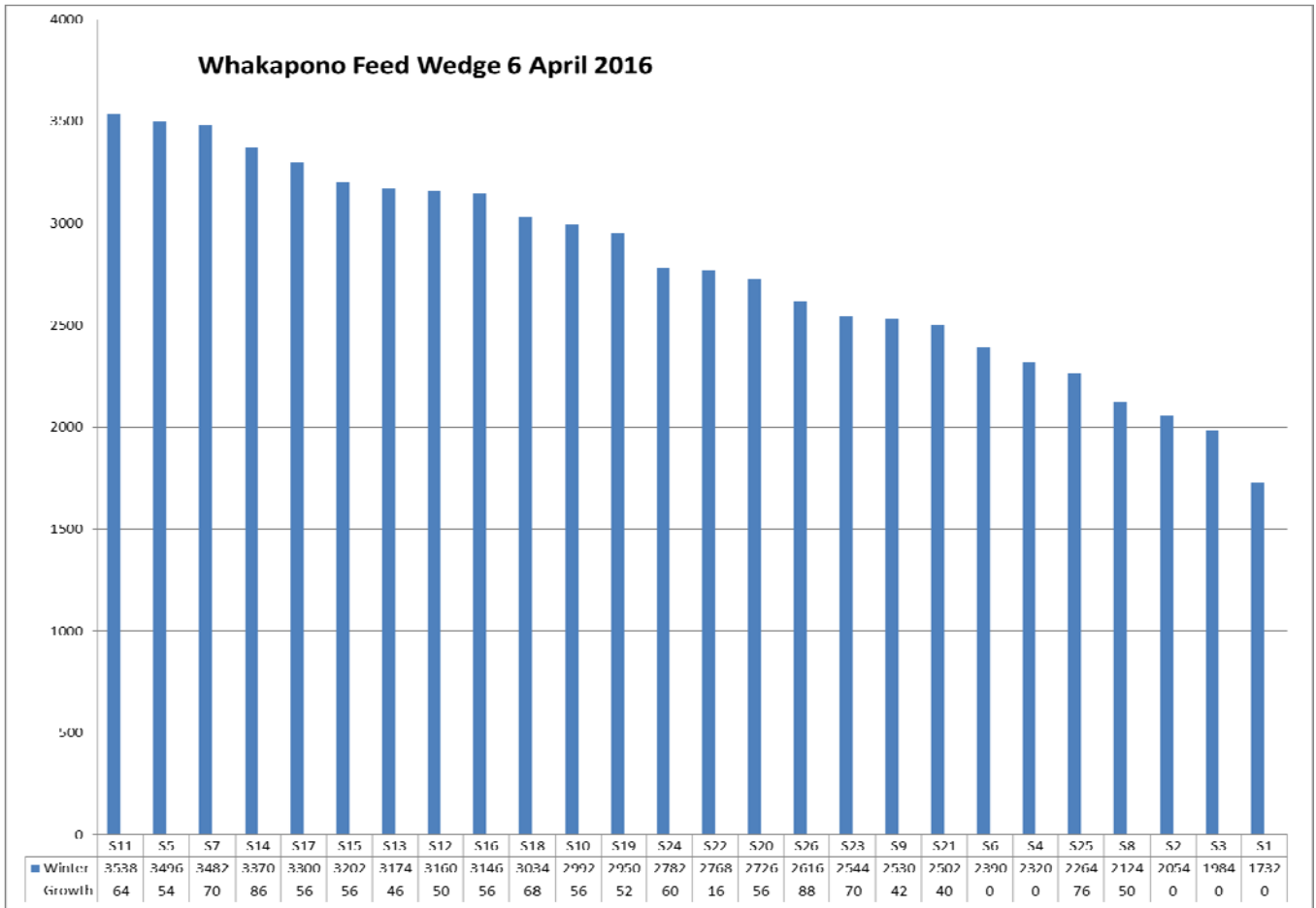
Check them below.

Demand at 3.0 cows x 18 kgDM/cow/day = 54 kgDM/ha/day so should be gaining cover, with PKE in shed at 2 kg/hd/day and 2kgDM silage reducing pasture demand further

Feed Wedges

Both wedges look good with a healthy bow wave of feed ahead of us to use to finish the season meaning less reliance on supplement.

Waiora has higher top end all on second herd area where cover was carried forward instead of making silage and is being utilised on longer round now.



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 (317).

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 Waiora's 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.

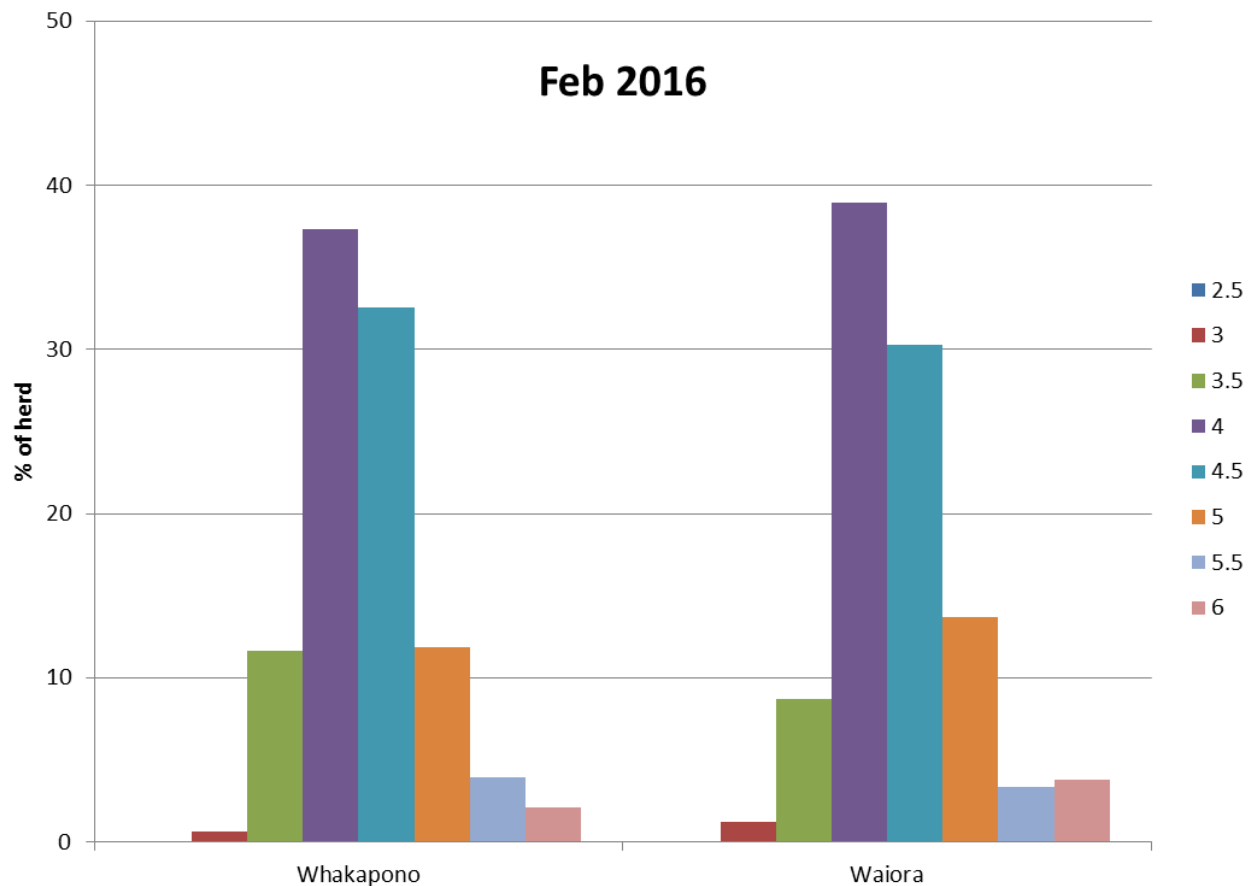
Started applying final round of Ammo30N to Waiora following cows

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 but anectotally cows appear to be putting on weight so well see if this farmers gut feel is accurate or not.



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.
- Delay culling MTs except problem 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 jersey bull 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

Next Condition Score next week.