

Backtrack Dairies – Weekly Summary

Week ending Saturday 6th February 2016

Backtrack Dairies

Two farming systems. One biological (Whakapono) and one conventional (Waiora).

Summary

- High per cow and per ha production maintained at 1.93 kg MS/cow and 6.07 kg/ha on Whakapono while Waiora also maintained its production at 1.87 kg MS/cow and 5.80 kgMS/ha.
- Only 1mm of drizzle this week and a couple of very hot days has meant the irrigation is back on and using spare water from the RDR scheme instead of stored water.
- Maintain 24 day round on quality pastures to continue producing at this level for another five weeks. Top if necessary paddock that are still carrying seed head.
- Whakapono cover dropped slightly to 2837 and Waiora holding at 2896 if you believe plate meter measurements. Residuals on both farms looking around 1700 – 1800 excepting a couple of paddocks on each side which probably means we should have done silage.
- Bought in about 150 Tonne DM grass as pit silage from neighbours for autumn (20cents/kgDM). Committed to this and probably another 130 tonne still to come.

Production

Whakapono production is ahead of Waiora in per cow and per ha/day probably due to better quality pasture available overall. Grain/PKE mix maintained at 1kg /cow/day.

Both farms have maintained per cow levels of 1.93 KgMS and 1.87 KgMS respectively.

Cows holding well as not being forced into base

Pastures

- Covers on Whakapono have remained high at 2837 on a 24 day round while Waiora is holding well at 2896 on a 24 day round
- Growth rates (52 Whakapono / 62 Waiora kgDM/ha/day) have definitely backed off which is reflected in covers and is not unusual given the big flush of growth over the last month.
- Both farms seem to be reading 300-400 kgDM/ha higher than normal with the stemmy base holding up the plate meter.
- Demand at 3.2 cows x 20 kgDM/cow/day = 64 so should be maintaining cover if not decreasing slightly, possibly the high clover content is helping with intakes and production as cows can harvest more of this type of feed using less energy to do it.
- Meanwhile Grain/PKE (33%/66%) is still going in at 1kgDM as still believe there is a return at average cost of \$276/t fed in shed. Grain is now down under \$300 per tonne delivered and PKE \$240 but milk price has also dropped 10% to \$4.15 + dividend 0.35c = \$4.50

Mating

- Finished first three weeks Friday with submission rates of 84% on Whakapono and 82% on Waiora including culls cycling but not mated for obvious reasons.
- Vet checked on Monday allowing a full cycle time of 24 days for some cows and not surprisingly half the cows coming up each day were new ones including October calvers.
- Intervention at this point is to metri-check everything not cycled including late calvers (excluding obvious culls) and PG the lot bringing forward cows due to cycle in the next ten days then repeating this 10 days later to catch the remaining cows that haven't cycled by then. PG is cheap at \$6/cow and less invasive than other intervention.
- Whakapono had 47 non-cyclers out of 475 cows eligible (18 culls and 9 late calvers) to cycle, with one needing a metri-cure for infection so 91% cycled naturally.
- Waiora had 85 non-cyclers out of 653 cows eligible, (31 culls and two late calvers) and no metri-cure needed so 87% cycled naturally.
- We have seen this trend over the last two seasons with Whakapono being 3 – 4% ahead of Waiora on submission rates and ending up 2% ahead on conception rates after 10 weeks mating.
- From here we will carry on with AI for another three weeks (seven weeks total then the last three weeks with Friesian bulls (14 purchased 500kg minimum) which arrived late today.
- Detection is myself mostly or our 2IC sitting up on a big tennis umpires chair at Whakapono in the morning and Waiora at night by tail painting and picking out cows for seven weeks.
- A bit of a prison sentence really but worthwhile financially and ensures consistency for the trial.
- Second round of PG done on Friday December 4th 10 days after the first one and at the end of the 5th week of AI
- Whakapono had 9 cows remaining to be mated
- Waiora had 26 cows remaining to be mated
- Finished six weeks of mating Thursday Dec 10 so will watch returns closely for when we can put bulls out
- At present getting around 7 cows per day on Whakapono and 10 on Waiora which also includes the culls which I decided to mate to short gestation Hereford to give me an option to sell as suckler cows to one of our graziers but also to take the pressure off the bulls
- Finished Seven weeks of AI last Thursday and not that impressed with returns still coming in at similar numbers as above each day which hopefully are mostly returned from PGs three weeks ago.
- Will do one more week of AI to make sure these PG returns are covered and most culls are mated to Hereford so calves are not kept.
- Bulls taken out on 10th January so just over ten weeks mating
- They will go next week to the works while Jersey bulls taken out of heifers last week are sold to another farmer to use next year as two year olds.

- We haven't done a six week preg test as we went fishing for 10 days and normally do an eight week one early Feb so we have less rechecks to do. So the eight week test will split into the cows in-calf early (+65 days) which are basically all cows in-calf in August and the next 4 weeks are called late and can remain off farm for longer. For me this is the main benefit of doing the two scans. Normally 16 -20% of the cows will scan as MT but half of these will come into the late group as pregnant at the recheck early March.
- Heifers are also done at this time in one scan.

Pregnancy Test Results

	Waiora		Whakapono	
Total scanned	652		493	
August calving (first four weeks)	390	60%	304	62%
September calving (second four weeks)	148	23%	105	21%
Rechecks	114	17%	84	17%

So very similar results and hope that half of these cows will be in calf to the bull otherwise they will have been a waste of time and we may as well have done eight weeks of AB only.

Fertiliser

- Finished second round of fert with both spring recommendations including nitrogen and potassium.
- Waiora - Pdks >20 Olsen P received 500 kg/ha Serp super
 - < 20 Olsen P received 600 kg/ha Serp super
 - + 20 kg Sulphur gain pure
 - + 1 kg Selenium
 Sustain urea 50 kg/ha (23 N)
 Muriate of Potash 50 kg/ha (25 K)
 Pdks > 6 will receive 100 kg/ha KCl
 < 6 will receive 150 kg/ha KCl over next two months
- Decided to split this application with N to prevent luxury uptake by plant and causing pasture quality and animal health problems.
- Spend to date \$419 incl next two rounds N+K
- Should be two more rounds of Urea or SOA after this in late summer/autumn
- Whakapono - a general application over whole farm as we wait for soil tests to recommend different levels of nutrients for each paddock especially Ca/Mg needed as Ca still low and Mg levels too high. All other nutrients are good.
 - DAP 75 kg/ha
 - SOA 25 kg/ha
 - KSO4 25 kg/ha
 - Sulphur 10 kg/ha
 - Sel 1kg/ha

N P K S

19 15 12 10

Cost \$120/ha

Fertiliser spend to date \$205/ha

NB: both farms on same fert budget from now on, aim \$600/ha incl. N

- Next round of fert on Waiora at 100 kg/ha Sustain Urea /MOP 50:50 mix is being applied now over December includes N (23kg/ha) and K (25kg/ha) again for conventional farm as per last recommendation .Expect three more rounds of N after this,
- Next fertiliser for Whakapono is another similar DAP SOA mix similar to the above with 20 units of N while we have started to apply Ca/Mg needs of Whakapono from Neal Kinsey 's recommendation including varying rates of Aglime and dolomite depending on individual paddocks needs at 12 m spread but will be all on before Christmas.
- Silage paddocks also received extra N and K
- Cost of the next application \$138 /ha plus the lime dolomite at average of \$200 /ha
- Total spend to date \$543/ha so still have room in budget for more autumn fert.
- Waiora will continue with Sustain urea /MOP mix giving 23 units of N and 25 units of K over December so not hugely different then
- All fert was applied pre-Christmas so will look to next round late Jan/early Feb
- Started next round of fert late Jan on Whakapono with some soil balancing done as in December.
- Unfortunately I made some errors with the December applications putting some early paddocks on at lighter rates so had to put heavier rates on the remaining paddocks as all the fert was mixed up already. This will be corrected in the Jan/Feb applications so the total nutrient and spend will be the same. So ironically slightly more artificial N has been applied to date on Whakapono, while Waiora is also ticking along nicely on similar low rates.
- Possibly one more light application of SOA could be applied to Whakapono in March but it is expected that two more applications of urea and some lime on paddocks below 6.2 will be needed before May to Waiora.
- Have applied Sustain N at 60 kg/ha or 23 units of N to one third of the farm following the cows on Waiora with paddocks with potassium testing 6 or under receiving another 50 kg/ha of KCl on $\frac{3}{4}$ of the farm.
- Whakapono has received varying amounts of fert mostly containing light rates of N+S (15 – 20 units) as SOA and urea with some needing potash also addressed.

Irrigation

- 1mm of rain this week and hot temperatures have meant irrigators are going again full time.
- River was below minimum flow most days but have had spare water available from the RDR while cropping farmers are busy trying to get crops harvested.
- Have 10 days stored water left but can purchase more at current price (8c/m3)
- Works out at about \$1000/day for this farm

Animal Health

Minimal mastitis on both units cell count Waiora 125000 1 cases

Whakapono 100000 1 cases

Lameness Waiora 5 cases

Whakapono 6 cases

Penicillin mobs Waiora 12 and Whakapono 12 cows

- Lameness also becoming an issue on Waiora but they seem to be recovering well with early detection and treatment.
- 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.

Management

- Continue current management of 24 day round. More attention to grazing residuals and need to control pastures without restricting intakes. This may mean topping after cows in poorer quality pdks (ie: give cows the choice) or mowing in front better quality ones.
- Still 127 heifer calves on farm plus 23 beef calves (stopped feeding them milk)
- Most of the heifers (70) will go next week to our dryland grazier who now has feed after recent rain
- Control weeds, Californian thistle and gorse on fence lines
- Start irrigation K-line and pivots as per moisture meter
- River low but being supported by RDR water
- Flat line production for next month then look to get round out to 30+ days in March
- Use preg test and next herd test data (11th / 12th Feb) to cull cows that aren't contributing before start feeding silage to get round out.

Backtrack Dairies	24/1/16		31/1/16	
	Whakapono	Waiora	Whakapono	Waiora
Farm grazing ha	155	210	155	210
Cows in Milk	495	658	495	658
Cows in Vat	485	648	486	651
Ave. Pasture Cover	2895	2883	2837	2896
Ave. Pasture Growth	70	55	52	62
Area Grazed	7.22	7.76	5.67	8.63
Grazing Interval	21	27	27	24
Pasture Intake (est kgDM/cow)	26	26	16	29
Grass Silage Fed (kgDM/cow)	0	0	0	0
Grain/PKE Fed (kgDM/cow)	1	1	1	1
Total Fed KgDM/cow	27	27	17	30
Milk Solids (Kg/cow/day)	1.96	1.86	1.93	1.87
MS/ha/day	6.15	5.75	6.07	5.80
Nitrogen applied (kg N/ha)	0	0	0	0

Rainfall (mm for week)	45	45	0	0
Irrigation applied	20522	7084	23097	29049
Soil Temperature at 9am	18	17	20	18
Soil Moisture (between 65-76%)	59	70	63	72
Cell count	138	125	106	137
Totals To Date				
Milk Solids to factory	160337	215126	166918	223657
Milk Solids inclu calf milk	165440	224450	172021	232981
MS/ha	1042	1026	1085	1067
Nitrogen applied (kg N/ha)	79	73	79	73
Supplements Fed (kg/cow)	599	636	614	651
Deaths	10	16	10	16
Culls	33	50	33	50

Feed Wedges



