

Backtrack Dairies – Weekly Summary

Week ending Saturday 19th December 2015

Backtrack Dairies

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

Summary

- Recent Field day was quite well attended but would like to see more farmers come along. Excellent presentations from Richard Gillespie (Plant and Food), Rachael Bryant (Lincoln) and Jeremy Savage (MacFarlane Rural Business) followed by a farm walk rounded off the day. These presentations can be viewed on this site.
Next field day scheduled for May 10th which will include a full years comparison of production and financial data
Results to date indicate no stand out differences between the farms in terms of pasture or milk production with a slight advantage to the biological unit with fertiliser N use similar around 52/53 units applied to date with another 19/23 units going on now before Christmas similar to Lincoln Dairy farms N use.
Animal health and mastitis through the calving period showed no advantage while cell count has been lower on Whakapono (100000) since calving with a lot less cases in fact no cases for the last month while Waiora (125000) has been having around two cows per week. Lameness is similar although tends to be a steady amount on Waiora, mostly white line while Whakapono has sporadic bursts after wet weather mostly footrot or interdigital infections which are easy to treat but normally come back
- **Production**
Whakapono production is well ahead of Waiora in per cow and per ha/day probably due to better quality pasture available overall and due to the two silage paddocks being taken out returning to extend the round. A lot of pre graze topping on Waiora may mean cows are ingesting poor quality feed. Grain PKE mix increased to 3kg has seen production hold quite well on Whakapono but not on Waiora. Hard to explain at present but next herbage analysis may give some clues which should be back from Hills this coming week. This is a pasture sample taken from the next two paddocks in front of cows each month.
Both farms have come off peak now at 2.15 and 2.00 respectively.
Thirty more calves have been weaned and left the farm. There are still 200 calves being fed only milk from sick mob at lower amounts. These will be sold in the coming months if someone comes along with the right money. Good Tui ad.
Big rain (24mm) last week saw moisture levels back in black and K line areas able to catch up on corners.
15ha was pre mown on Whakapono and while 20 ha post mown and 20 ha pre mown on Waiora to try to tidy things up. Will have topped 50% of Whakapono and 66% of Waiora by Christmas which is a bit too much for my liking. Maybe it would be cheaper to make a bit more silage (baleage) and be prepared to feed it out again two weeks later if you had to. Still

the runs are on the board and per cow has been maintained better than ever with less cows so the jury is out. Is it more profitable to pre mow to increase intakes and post top to waste to allow cows to choose or better to take out silage then feedback to cows if need be. Or just milk a few more cows and make them work a bit harder.

- **Pastures**

Covers on Whakapono have maintained at 2505 on a 22 day round while Waiora which had no silage done has remained at 2687 on a 24 day round

Will be doing more pre and post mowing on both farms as the irrigation has caught up with recent rain and cooler weather.

Last chance to tidy things up before Christmas break where not much extra gets done.

Growth rates (40 Whakapono / 48 Waiora kgDM/ha/day) have dropped back even more on Whakapono but production and residuals are defying these figures as demand is 20 kgDM/ha higher than this and we are still holding quite well especially on Whakapono.

Both farms seem to be reading 300-400 kgDM/ha higher than normal with the stemmy base holding up the platometer.

Demand at 3.3 cows x 20 kgDM/cow /day = 66 so should be eating into cover but next pasture walk will tell us.

Meanwhile Grain PKE is helping fill the deficit providing 3kg per cow per day or 10 kgDM/ha/day ha/day

- **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 so

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.

- **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 \$150 /ha

Total spend to date \$493/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

- **Irrigation**

24 mm rain this week and cooler temperatures have helped get moisture levels back to normal with irrigators going full time. We cleaned out the sprinklers on the corner arms which were blocked and being robbed when the end gun is on and showing up quite badly in corners.

River was below minimum flow for two days so used stored water

Have 17 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 case

Whakapono 100000 1 case

Lameness Waiora 2 cases

Whakapono 3 cases

Penicillin mobs getting smaller with Waiora 12 and Whakapono 8 cows with 8 more cows with bad udders and high cell count culled.

More culls are booked to go early December as demand for calf milk reduces.

All calves had final 7: 1 vaccination and monthly white drench

- **Management**

Continue current management of 24 day round or less with surplus out with 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 before or leaving for silage if good quality.

Weaned 30 calves and sent off farm

Still 200 calves on farm including 50 beef calves

Get next round of fert on before Christmas and have all topping necessary done also.

Backtrack Dairies	29/11/15		6/12/15	
	Whakapono	Waiora	Whakapono	Waiora
Farm grazing ha	155	210	155	210
Cows in Milk	496	678	495	671

Ave. Pasture Cover	2592	2770	2505	2687
Ave. Pasture Growth	51	56	40	48
Area Grazed	5.96	8.31	5.38	8.30
Grazing Interval	26	25	29	25
Pasture Intake (est kgDM/cow)	20	19	15	23
Grass Silage Fed (kgDM/cow)	0	0	0	0
Grain/PKE Fed (kgDM/cow)	2	2	3	3
Total Fed KgDM/cow	22	21	18	26
Milk Solids (Kg/cow/day)	2.13	2.08	2.15	2.00
MS/ha/day	6.67	6.48	6.73	6.15
Nitrogen applied (kg N/ha)	0	0	0	5
Rainfall (mm for week)	0	0	24	24
Irrigation applied	43108	71090	33744	51744
Soil Temperature at 9am	16	14	15	14
Soil Moisture (between 65-76%)	65	75	69	75
Totals To Date				
Milk Solids to factory	111238	152788	118535	161836
Milk Solids inclu calf milk	115333	160789	122882	170215
MS/ha	725	729	772	772
Nitrogen applied (kg N/ha)	52	53	52	64
Supplements Fed (kg/cow)	541	578	560	597
Deaths	10	13	10	13
Culls	27	40	28	47

Feed Wedges

