

## **Backtrack Dairies – Weekly Summary**

Week ending Saturday 20<sup>th</sup> February 2016

### **Backtrack Dairies**

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

#### **Summary**

- High per cow and per ha production maintained at 1.92 kg MS/cow and 5.49 kg/ha on Whakapono while Waiora has fallen slightly to 1.77 kg MS/cow and 5.46 kgMS/ha.
- Only 8 mm rain has meant the irrigation is full on at 5.2mm /ha/day.
- Maintain 24 day round on quality pastures and aim to continue producing at this level for another month
- Whakapono cover maintained at 2900 and similar to Waiora around 3000 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 another 150 Tonne DM grass as pit silage at 18 cents/kgDM which will be the last giving us around 500t for both farms use.

#### **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 with grain about to run out so reassess its use as payout has dropped again

Both farms have dropped slightly per cow levels of 1.94 KgMS and 1.80 KgMS respectively

#### **Pastures**

Covers on Whakapono have remained high at 2872 on a 22 day round while Waiora has increased to 3005 on a 24 day round which has meant some topping has been necessary on both farms of the the worst paddocks including some on Waiora being done for second time. Growth rates (61 Whakapono / 80 Waiora kgDM/ha/day) seem right given the way the respective covers have gone and still 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 increasing, 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 is still going in at 1kgDM as still believe there is a return at average cost of \$276/t fed in shed. Grain about to finish.

- **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 5<sup>th</sup> 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 10<sup>th</sup> 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)	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**

- **November**

- 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

- **December**

- 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.

## **February**

Finished spreading fert on Whakapono so up to 100 kg/ha of N and is almost at budget of \$600/ha

Whakapono has received varying amounts of fert containing light rates of N and S (15 to 20 units)

Waiora fert 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

N to date on Waiora is 105kg /ha is slightly above Whakapono at 100kg/ha

So far but Waiora 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.

- **Irrigation**

4 mm rain this week and hot weather means irrigation is full on

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

Have 5 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 148000 2 cases

Whakapono 109000 1 cases

Lameness Waiora 6 cases

Whakapono 2 cases

Penicillin mobs Waiora 7 and Whakapono 11 cows

Lameness also becoming issue on Waiora but 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)

Control weeds, Californian thistle and gorse on fence lines

Start irrigation K-line and pivots as per moisture meter in four days.

River low but being supported by RDR water

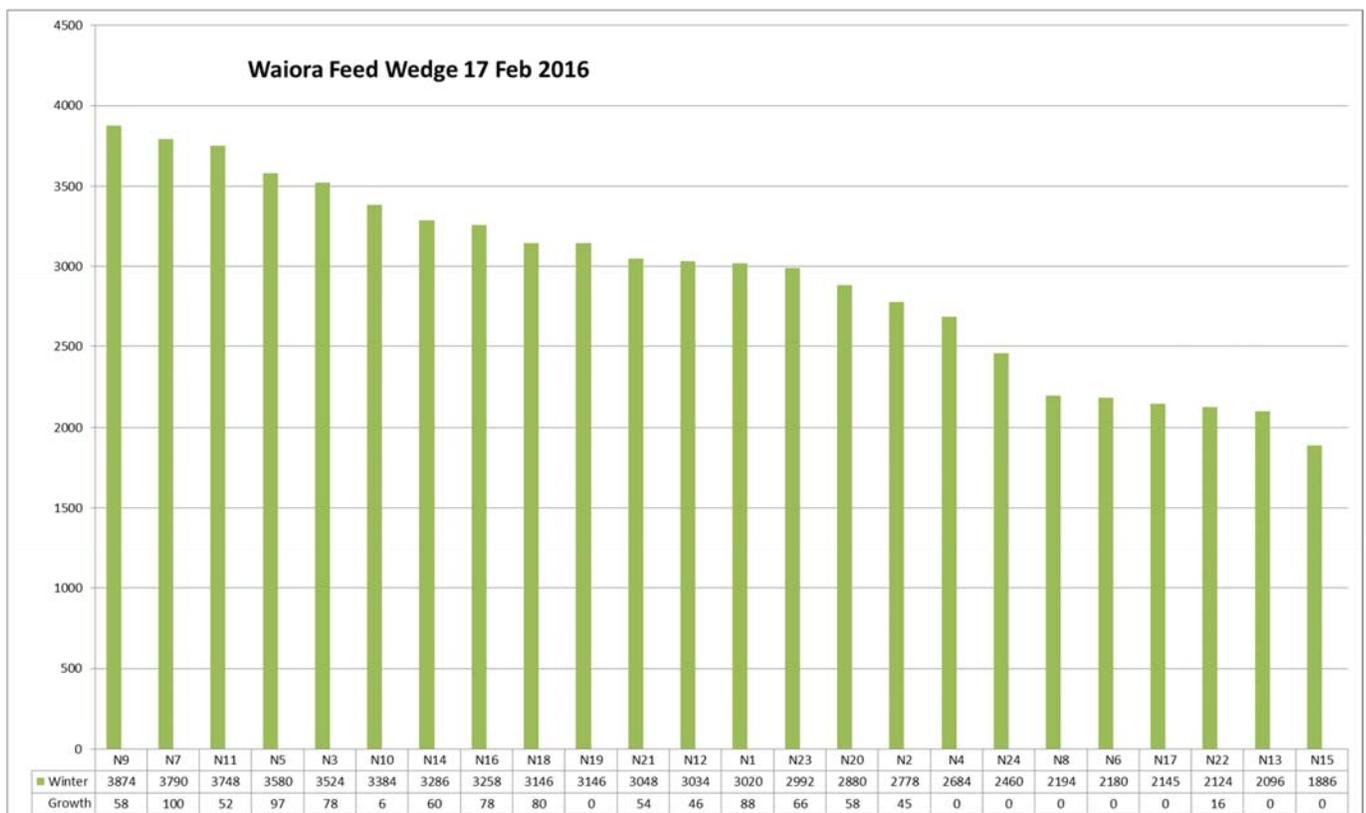
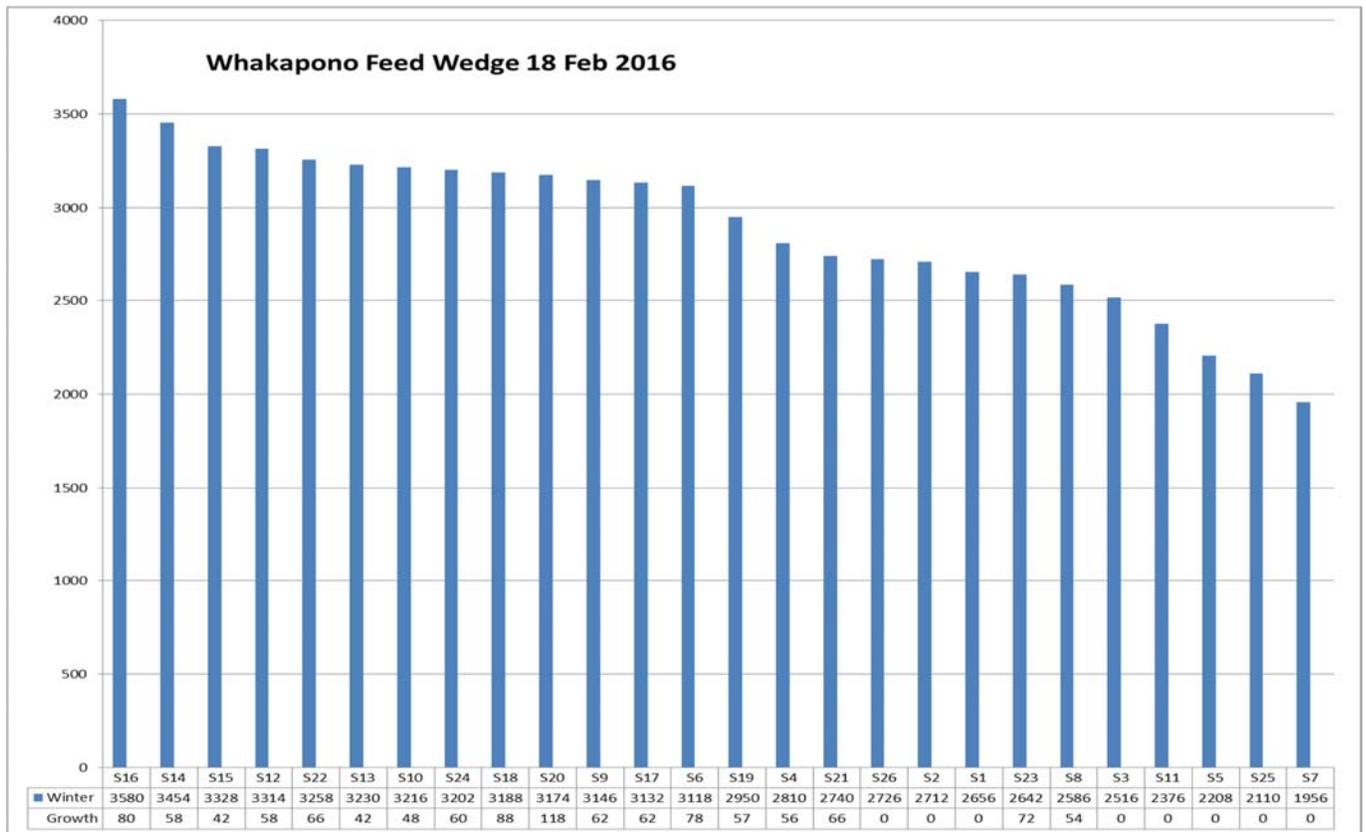
Flat line production for next month then look to get round out to 30+ days

Use preg test and next herd test data to knock out cows that aren't contributing before start feeding silage to get round out.

Backtrack Dairies	7/2/16		14/2/16	
	Whakapono	Waiora	Whakapono	Waiora
Farm grazing ha	155	210	155	210
Cows in Milk	488	657	482	657

Cows in Vat	484	642	473	647
Ave. Pasture Cover	2872	3005	2897	2927
Ave. Pasture Growth	61	80	58	58
Area Grazed	5.06	9.32	5.49	8.83
Grazing Interval	24	23	24	24
Pasture Intake (est kgDM/cow)	17	18	19	19
Grass Silage Fed (kgDM/cow)	0	0	0	0
Grain/PKE Fed (kgDM/cow)	1	1	1	1
Total Fed KgDM/cow	18	19	20	28
Milk Solids (Kg/cow/day)	1.94	1.80	1.92	1.77
MS/ha/day	6.05	5.50	5.85	5.46
Nitrogen applied (kg N/ha)	0	0	0	0
Rainfall (mm for week)	4	4	8	8
Irrigation applied	31650	46275	40115	55922
Soil Temperature at 9am	20	18	20	18
Soil Moisture (between 65-76%)	69	74	69	74
Cell count	108	136	109	148
<b>Totals To Date</b>				
Milk Solids to factory	173481	231744	179832	239774
Milk Solids inclu calf milk	178584	241068	184935	249098
MS/ha	1127	1105	1168	1143
Nitrogen applied (kg N/ha)	80	82	80	82
Supplements Fed (kg/cow)	620	657	632	669
Deaths	10	16	11	16
Culls	39	51	45	51

## Feed Wedges





Waiora – paddock N6



Whakapono – paddock S1

These were taken at the same time the pasture samples were taken this week. See the link to the results for more information.