Backtrack Dairies – Weekly Summary

Week ending Saturday 28th November 2015

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

Summary

- **Production**
  Whakapono maintains a slight advantage over Waiora in per cow and per ha prod /day due to higher intakes of available pasture. Not economic to fill this difference with supplement.
  Both farms have come off peak of 2.3 and 2.2 respectively and calf milk is no longer being taken from Waiora tank (500litres/day) as 120 calves have been weaned and left the farm.
  Hot dry windy weather will also cut back cow intakes while some pre-graze topping (Waiora 27ha) has counteracted this with cows cleaning up everything they could on offer with the rest blown away. We put topping skids on the new mower to lift residual to 6 cm to enhance regrowth and avoid damage to mower from pivot rut fill.
- **Pastures**
  Covers are even around 2720kgDM/ha after two paddock (15ha) were removed and done for silage on Whakapono.
  This silage was chopped and added to the stack of imported annual grass silage from our neighbour and was measured and tested separately so will have those results for DM and ME in a week.
  Silage purchased for 20 cents standing with mowing chopping, carting and covering estimated at 10 cents / kg DM. We mowed the silage on farm with new mower.
  Some post graze topping on paddocks not well grazed on last round (Whakapono 20 ha)
  Growth rates (79 Whakapono / 72 Waiora kgDM/ha/day) have dropped back as the ETs have increased and water restrictions and delivery problems have reduced plant available water but are still slightly above demand (66 kgDM/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.
  No intervention at this point.
  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.

- **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. Other nutrients 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 to be applied over December which will include N and K again for conventional farm as per last recommendation.

- **Irrigation**

  River levels have returned to normal which is a relief with 6mm of rain also last week but unfortunately the fresh water in the Rakaia caused some damage to the intake canal and two irrigation days were lost on the weekend which were luckily cool and overcast but meant we missed a good opportunity to catch up before things get hot again next week.

  So learnt a good lesson there about staying in the top end of the green band in case of breakdowns and that no system is bullet proof.

  Moisture meters are saying apply 20mm now then 15mm every second day after that until moisture levels lift (yeah right).

  We can apply a maximum of 5.2 mm per day with our pivots so obviously we need rain and a period of low ET days. Not looking likely with temps of 30 C forecast next week.

  Good to use these down times to apply effluent and keep storage space available for future rain events

  Have 19 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 no cases

  Whakapono 100000 no cases

  Lameness Waiora 2 cases

  Whakapono 1 case

  Penicillin mobs getting smaller with Waiora 16 and Whakapono 8 cows with 4 cows with bad udders and high cell count culled.

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

- **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 120 calves and sent off farm which will mean 500 litres less milk taken from tank

  Still 380 calves on farm including 50 beef calves (most will be sold December)

  150 more calves will be weaned and go to graziers this week as they are starting to make an impact on the feed available to cows picking the best feed.

  Up to 200 calves which are normally sold as surplus may have to stay on farm all season depending on demand/price but we have cashflowed this expecting them to sell at better prices as R2yrs and should be able to feed them given we are only 3.3 cows per ha.

  Last season we carried 130 extra calves and 100 R2yr heifers on farm which came back from grazing in February until end of April

  More will be weaned next week as they come up to 85 kg and get there second drench and 7:1 vaccination.

  Careful management with the current dry to try to maintain pasture quality without losing too much production from peak is the challenge with the only viable supplement PKE in shed feeding to maintain intakes.

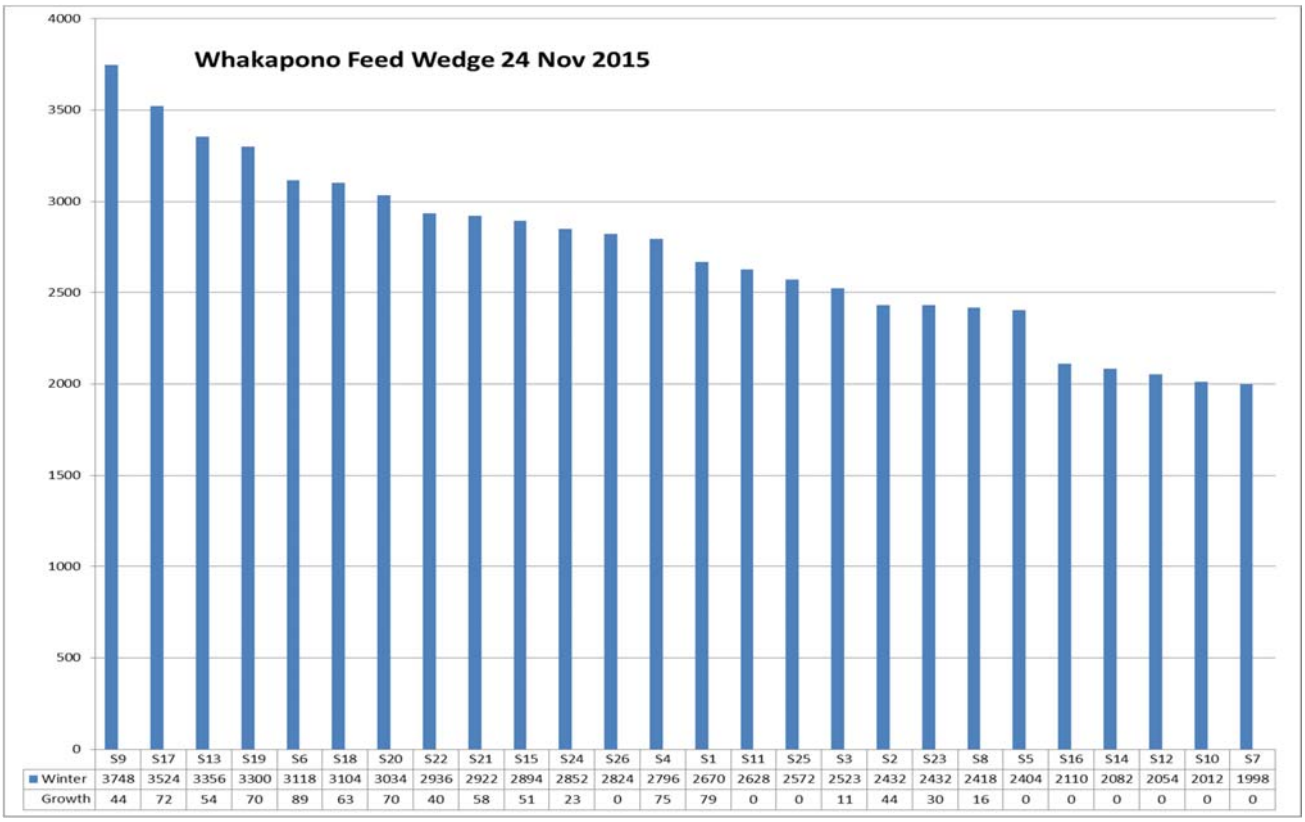
  Will be interesting what consultant Parry Matthews says after he has a look around today

  Current conditions will be a good test of the resilience of the two farms.

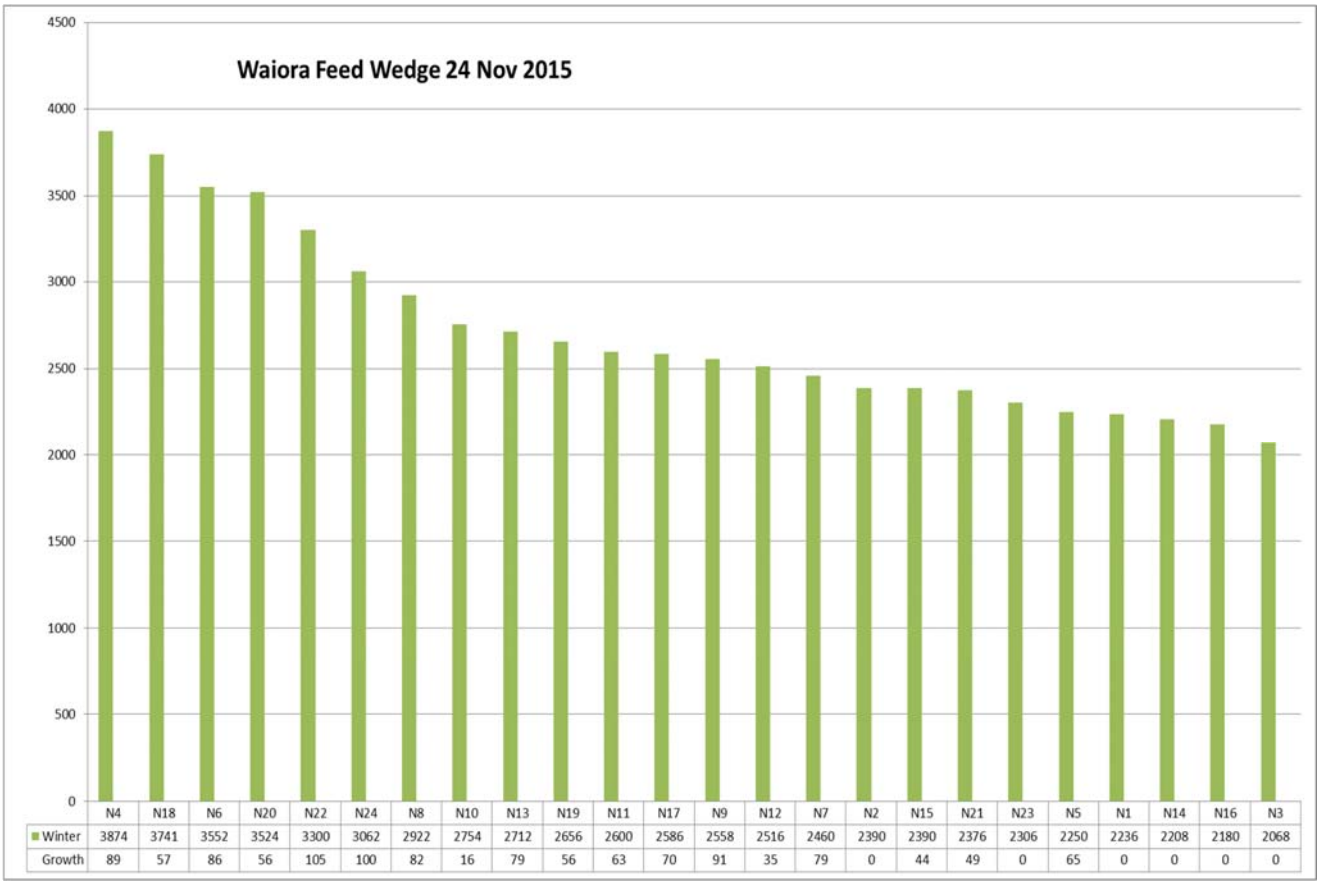
After the first three months of the season praying for the nor-wester we are now crying out for a southerly, apparently one coming Sunday.

	15/11/15		22/11/15	
Backtrack Dairies	Whakapono	Waiora	Whakapono	Waiora
Farm grazing ha	155	210	155	210
Cows in Milk	505	686	501	681
Ave. Pasture Cover	2877	2693	2721	2718
Ave. Pasture Growth	90	87	79	72
Area Grazed	6.58	8.36	6.06	8.85
Grazing Interval	24	25	26	24
Pasture Intake (est kgDM/cow)	18	15	21	24
Grass Silage Fed (kgDM/cow)	0	0	0	0
Grain/PKE Fed (kgDM/cow)	1	1	1	1
Total Fed KgDM/cow	19	16	22	25
Milk Solids (Kg/cow/day)	2.29	2.20	2.26	2.20
MS/ha/day	7.10	6.86	5.97	5.95
Nitrogen applied (kg N/ha)	0	0	0	0
Rainfall (mm for week)	5	5	0	0
Irrigation applied	0	0	45910	67315
Soil Temperature at 9am	14	12	15	14
Soil Moisture (between 65-76%)	63	63	57	57
Totals To Date				
Milk Solids to factory	89266	123230	95745	131980
Milk Solids inclu calf milk	92542	128333	99399	137398
MS/ha	584	588	625	630
Nitrogen applied (kg N/ha)	57	62	57	62
Supplements Fed (kg/cow)	411	448	418	455
Deaths	10	12	10	13
Culls	18	33	22	37

Feed Wedges

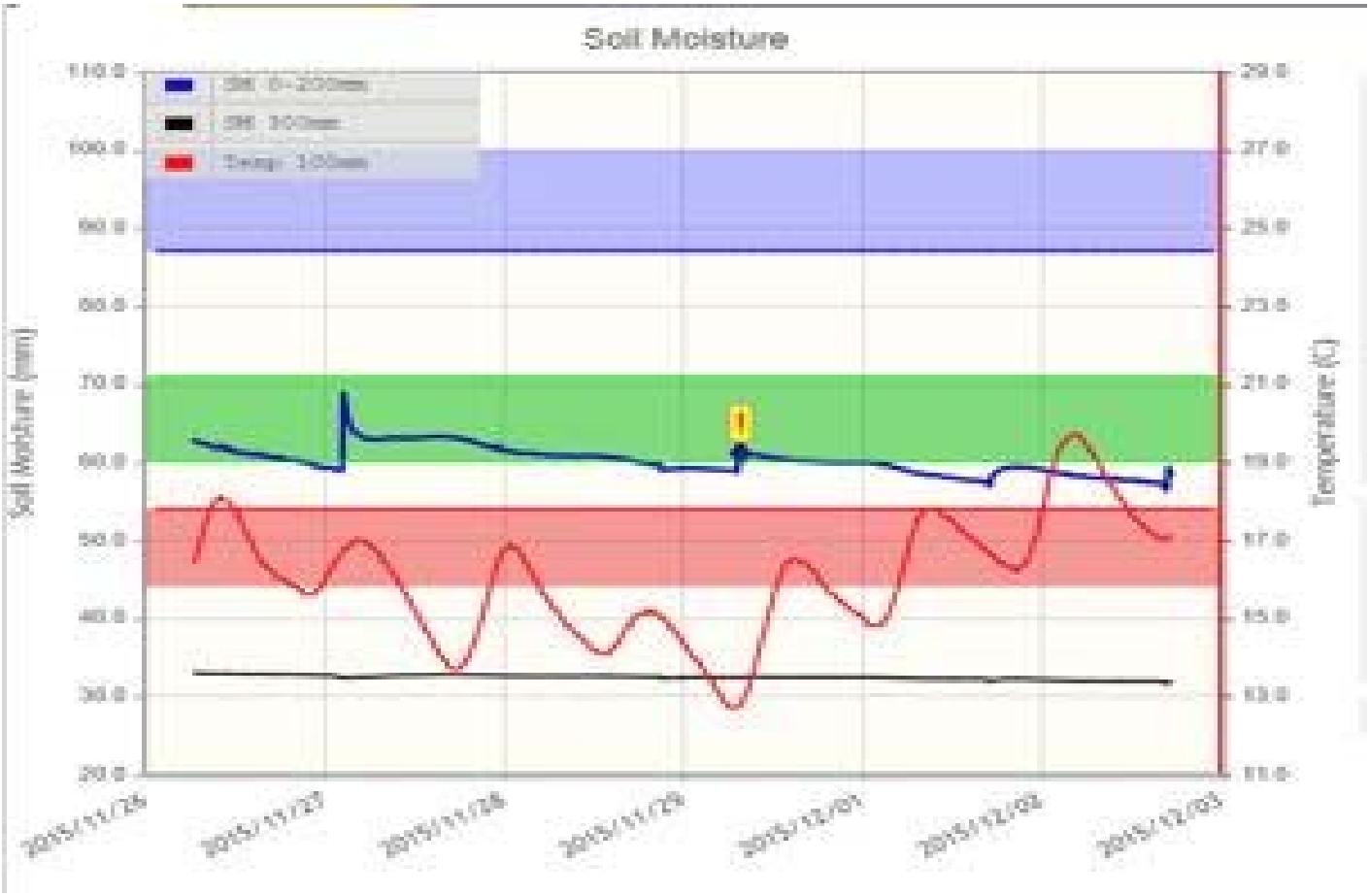


	S9	S17	S13	S19	S6	S18	S20	S22	S21	S15	S24	S26	S4	S1	S11	S25	S3	S2	S23	S8	S5	S16	S14	S12	S10	S7
Winter	3748	3524	3356	3300	3118	3104	3034	2936	2922	2894	2852	2824	2796	2670	2628	2572	2523	2432	2432	2418	2404	2110	2082	2054	2012	1998
Growth	44	72	54	70	89	63	70	40	58	51	23	0	75	79	0	0	11	44	30	16	0	0	0	0	0	0



	N4	N18	N6	N20	N22	N24	N8	N10	N13	N19	N11	N17	N9	N12	N7	N2	N15	N21	N23	N5	N1	N14	N16	N3
Winter	3874	3741	3552	3524	3300	3062	2922	2754	2712	2656	2600	2586	2558	2516	2460	2390	2390	2376	2306	2250	2236	2208	2180	2068
Growth	89	57	86	56	105	100	82	16	79	56	63	70	91	35	79	0	44	49	0	65	0	0	0	0

Waiora Soil Moisture



Whakapono Soil Moisture