

June 2017

Highlight – Payout, Lowlight – Wet Soils

The new season starts on the front foot with all the major processors north of \$6 per kg MS.

Perhaps the confidence most evident in Fonterra's \$6.15 for 16/17 and \$6.50 for 17/18 – plus dividend.

Our Lower North Island budget signals care is still needed. By the time farm owners catch-up on R&M, deferred capex, pay tax and take a deserved increase in drawing – there is not a lot left over.

You might have noted that we endorse farmers taking an increase in drawings. It has been a tough couple of years and this has literally worn some people out.

Most of our clients taking one or two winter weeks off with the family. This personal investment is essential. Re-energise the mind and body, put 16/17 behind us and start the new season focussed and keen.

Where did the grass go?

After last months Milklines we had several readers come back to us asking how we could report a strong feed situation. There are several districts where late autumn conditions have actually been very tight.

Most notable is the Marlborough to Collingwood district who were extremely wet, to the point where grass was not growing. Manawatu has also been very wet. In response the rotation has been faster than planned to minimise damage, and the grass has been eaten.

Maize silage yields are well down in the Manawatu and from what we are hearing some farms will actually start 17/18 with less supplementary feed on hand. Fortunately most of our readers have good reserves.

Typically farmers are being more proactive with drying off dates, but this is not a consistent pattern. Some still chased the vat.

Right now soils are saturated, utilisation rates are low and dairy farm pasture covers are now at or below target. Winter grazing is probably okay, but again utilisation rates will be the deciding factor as to whether the cows come out of winter in good shape.

INSIDE MILKLINES

The 17/18 Budget

IRD Values

Back-Fencing

Staff Turnover – the cost!

Next Month

- Mid Canterbury Budget.

Global Dairy Trade
\$3,312 / t WMP

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Contact

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17/18 Budget Updated

With the milk price from Fonterra our Lower North Island budget for the coming season can be updated.

We have based our 17/18 forecast around an increase in milk production based on stronger feed inventories for most and an expectation of cows calving in better condition. Farmers are expected to be more proactive with the use of supplements.

Farm costs are expected to return to a more “true” maintenance level. Significant increases over the 16/17 season are budgeted in R&M, drawings, tax and capital expenditure.

		Revised		Original	
		2016-17		2017-18	
Milk Production	Milksolids	139,000		145,000	
Effective Milking Area	Hectares	150		150	
Peak Milking Numbers		380		380	
Income	June 30 Balance Date				
Milk & Dividends	Advance	667,200	\$4.80	717,750	\$4.95
	Capacity Adjust @ 51 cents	34,750	\$0.25	37,700	\$0.26
	Final Payment	72,500	\$0.50	151,510	\$1.09
	Dividends on 155,000	62,000	\$0.40	62,000	\$0.40
Livestock sales	Cull cows	72,000	\$900	58,140	\$850
	Reared Bull Calves			20,250	450
	Bobby + 4 day Calves	20,400		5,500	25
	10 bulls	12,000		13,000	1300
Livestock Purchases	10 breeding bulls	-18,500		-20,000	2000
Industry Levy	@ 3.6 cents / kg MS	-4,860		-5,220	
Net Income	Comments for 2017/2018 Season	\$917,490	\$6.54	\$1,040,630	\$7.18
Wages		75,000		78,000	
	1 casual	9,000		12,000	
	ACC	4,500		3,375	
Animal Health		29,000		32,000	
Breeding		15,990		19,680	
Dairy Shed		7,800		8,000	
Electricity		18,000		18,000	

Irrigation		32,000		38,000	
Feed	Grass Silage 150 t DM @ 28c/kg DM	40,480		42,000	
	Baleage- made on farm, 200 bales \$45	15,000		9,000	
	PKE or Similar imported feed	2,500		5,000	
	Hay	25,000		25,000	
	Calf rearing – @ \$115/head	14,375		16,100	115
	94 R1yr heifers @ \$9, 52 weeks	42,120		43,992	
Grazing	Wintering cows, 200 @ \$22, 8wks	28,160		35,200	
	Livestock Freight	5,120		5,120	
Pasture Renewal & Crop	8 Ha turnips/grass	10,400		10,400	
	grass to grass 10ha	0		7000	
Freight	\$11/cow	4,290		4,290	
Fertiliser Incl cartage & application	350 kg/Ha Sulphur Super	31,150		33,000	
	Urea - 350 kg/ha	31,343		34,125	
	Lime	1,000		2,000	
R&M		35,000		60,000	
Vehicle		34,000		38,000	
Weed & Pest		1,200		1,500	
Rates & Insurance	\$137/ha	21,000		22,050	
	\$107/ha	16,000		16,800	
	\$45/cow	18,000		18,900	
Administration					
Farm Working		2,500		5,000	
Total Expenses	Total	\$569,928	\$4.22	\$643,532	\$4.44
Cost of Production	% of Net Income	64%			62%
Drawings		55,000		75,000	
Debt servicing	Interest on \$3.3m	165,000	5.0%	181,500	5.5%
	O/D Interest, average \$100k	13,764		8,000	8%
Taxation		0		30000	
Capital & New Borrowing	Plant replacement or compliance mitigation activities	15,000		25,000	

	Fonterra Co-op Loan			20,850	\$0.15
Total Other	Drawings, Debt, Tax, Capital	248,764		340,350	\$2.35
Cash Operating Result		\$98,798	\$0.48	\$56,748	\$0.39

Our thoughts looking at the budget ...

It wont take much to exhaust the available cash. There is deferred maintenance and capital expenditure that might not be fully covered in our budget, 39 – 48 cents “profit” is not a lot.

At this stage we foresee the average lower North Island farm will attend to these requirements ahead of bank debt reduction. The Fonterra Co-op loan is in our budget as a principal repayment, not netted out in the milk price. Farmers should correctly account for this in their cashbook and budget.

Income is well up in the 16/17 season at \$5.55 of in-season milk payments, plus dividend and net livestock returns, total \$6.54/kg MS.

The 17/18 season looks even better at \$6.30 in-season milk payment, which with dividend and stock sales gives \$7.18 cash receipts. On 150 HA there is \$123,140 more revenue.

However, when you look at outgoings it is our view that the average cost for running a lower North Island dairy farm is too high.

In 16/17 it is \$4.22 / kg MS, which is 64% of gross revenue. For true business resilience operating costs should be closer to 55% of gross revenue, which for 16/17 would mean target costs before drawings of \$3.60/kg MS.

For 17/18 we are forecasting \$4.44 cash costs before drawings, which is 62% of gross income.

Below the line

We expect the average dairy farmer will be paying provisional tax, a small increase in interest rates (up 0.5%) but lower overdraft interest repayments. This is because cash from 16/17 has been used to lower the current account balance.

Our net cash result in 17/18 leaves \$56,000 as the discretionary surplus or profit. Which will probably go into deferred maintenance or capital expenditure. At 39 cents per kg MS this is not a huge “profit” so care is very much needed to stay in control of expenditure, and to hit target milk production.

From a cashflow perspective we see the current account balance coming into positive territory by New Year 2018.

Overall – life is better, but counting chickens before they hatch is fraught with danger.

Next month the mid Canterbury Budget – some important differences. Why do they run at a lower operating cost per kg milksolid?

The full cost of staff turnover?

June is the traditional start date for new staff. Those people growing their careers or seeking a new opportunity on a new dairy farm. Unfortunately not enough of these people will be on the same farm in twelve months time.

Yes people can be replaced, but there are some direct and hidden costs associated with churn.

What is the cost of recruitment, training and lost team culture?

There are some excellent resources in the DairyNZ website, and one of these is the “turnover cost calculator”.

www.dairynz.co.nz/people/employer/staff-management/retaining-quality-people/employee-turnover-cost-calculator

It can be run very simply by entering the average employees salary and the average farm manager salary. The calculator then uses industry standard cost to determine what it costs an average farm when a team member leaves.

MilkLines tested a scenario based around an average team member salary of \$55,000 and the managers salary of \$80,000. The results for one staff member turnover were most interesting.

- Loss in productivity = \$20,096
- Loss in knowledge & skills = \$13,750
- Managers time engaging new staff = \$9,231
- Cost errors by new staff = \$6,154
- Time spent on tasks not done to standard = \$3,077
- On-farm training – managers time = \$9,231
- Recruitment cost – direct cost for doing own recruitment = \$1,538
- **TOTAL COST = \$63,077**

With this large number in mind, consider these challenging questions.

- Do you have a staff turnover issue?
- What are you putting in place with new staff to ensure you can retain them?
- What are you doing with existing staff – that you want to retain?
- If you have staff you would prefer to move on – what are you doing to ensure this happens in a legitimate manner and at least cost to your business.

Back Fencing – (Stefan Bryant)

We all know the correlation between pasture eaten per ha and farm profitability is strongly linked. A recent visit to a client reminded me of a practical idea that farmers can implement to increase the amount of pasture eaten per ha.

This client consistently achieves 12 – 13 TDM pasture eaten / ha from their non-irrigated dairy farm. They regularly monitor pasture covers and use the feed wedge to manage and allocate feed, have a good re-grassing program and have optimum fertility.

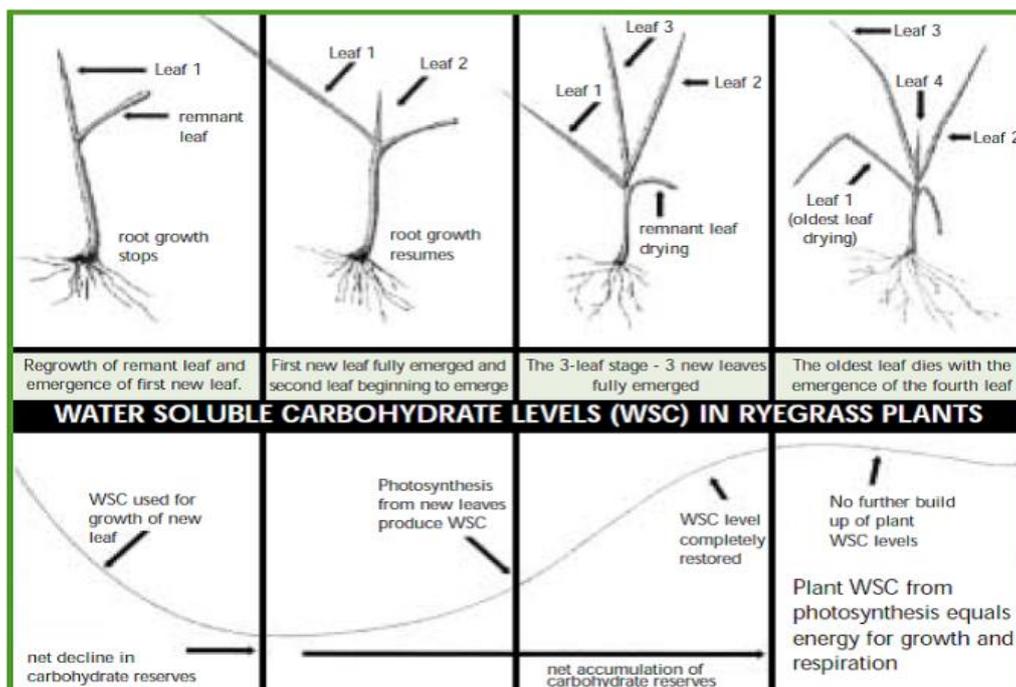
Something that gets them that bit more is that they go the extra mile and they always back fence after the herd has grazed.

Sounds simple but it does take effort and discipline.

This article will cover a bit of science, i.e. the why we would back fence and then go into the how and what it takes to do it successfully.

Once a ryegrass plant gets to the three leaf stage the plant roots have stored energy reserves in the form of water soluble carbohydrates. Once the plant is grazed the energy reserves are released from the roots and used by the ryegrass plant to grow the first new leaf.

This can be seen in the diagram below, at the leaf 1 phase the energy reserves are at a low point and the plant grows the next leaf by photosynthesis. From leaf phase 1 – 3 the energy reserves in the roots are restored back to their potential.



What happens when the energy from the roots is released to grow the first leaf and then this delicious palatable leaf is re-grazed?

We have a plant that has very little energy reserves left and is very slow to start re-growing. This happens in set stocking situations and when paddocks are back grazed. By allowing this to happen we suppress pasture growth.

Typically, in a rotational grazing situation on a dairy farm we don't do a huge amount of back-grazing. It's when we have small mobs of cows during winter and spring grazing large paddocks that we tend to back-graze paddocks over an extended period. Often the "hospital mob" grazes the paddocks around the milking shed in a set stocked manner. Support blocks are also often grazed like this.

Lessons from TechnoGrazing

Back in the early 90's Harry Weir invented the Technograzing systems which used a cell grazing system to achieve very intensive and efficient pasture utilisation from intensive beef and sheep finishing. The results were outstanding. In many cases productivity doubled, see the table below, mainly due to managing ryegrass pastures to maximise growth.

Table 1 Production gains from TechnoGrazing on several farms.

Farmer	Before TechnoGrazing	After TechnoGrazing
J. Gunson	11–12 stock units/ha 550–560 kg liveweight gain/ha	25 stock units/ha 1190 kg liveweight gain/ha
D. Holden	0.5–1.9 bulls/ha	1600 kg liveweight gain/ha 3.5–3.7/ha
A. Mabin	0.5–1.9 bulls/ha	3.5–3.7/ha
N. Prendergast	110 bulls (1.5/ha)	220 bulls (5/ha)
J. Rowley	140 bulls finished (3.9/ha)	270 bulls finished (7.5/ha)
A. Scoular	540 kg liveweight gain/ha	900 kg liveweight gain/ha

I am not suggesting that we go out and Technofence our dairy farms, (although I do have a client that has done that and it is working well) the Technograzing system has shown what can be achieved when we graze our pastures using sound grazing principles.

So where is your opportunity, is it on the dairy platform when grazing small mobs, is it at the support block with heifer grazing management? What's the size of the prize for you? For every additional 0.5 TDM / ha that can be harvested that's 33 – 45 kg of MS, at a \$6 milk price that's \$200 - \$270 / ha additional profit. Perhaps for the support block it means your carrying capacity can be increased or more supplement can be harvested.

What's needed to implement some of the principles?

- Firstly, you need the will to do it, the belief that its worth putting into practice and getting your staff on board with it.
- You need to be able to accurately calculate daily grazing requirements for stock. If you put up a back fence there's no "margin for error".

- Be prepared to learn as you go. The livestock will tell you in residual and behaviour whether you are meeting their needs, and pasture production if measured (& it should be) will give the vital feedback.
- You need lots of portable fences and standards.
- You need portable water troughs that can be moved from break to break. The Technograzing system uses plug in portable troughs, in the case of a few small mobs on the dairy farm or a mob of heifers, portable troughs with a 2-300 m length of hose that can be connected into a water trough outlet are perfect, they are around \$750 including pipe and fittings.



All in all it's a small investment for a good return.

Better N Use

If I said dairy farmers waste a lot of nitrogen, you might think this is another story about N leaching. But the greatest wastage or inefficiency in nitrogen use occurs because we get the timing between application and grazing wrong.

There are huge gains available to virtually every farmer using nitrogen as demonstrated in the following.

- Trial work shows a 12:1 response in good conditions is a reasonable expectation, but it will take 30 days to get a full response.
- Put on 30 kg N, get 360 kg extra DM, divide by 30 days = extra growth of + 12 kg DM/Ha/day.
- BUT - for a typical dairy farm. Nitrogen is applied at day 5 after grazing, farm is on a 23 day round.
- So you have 23- 5 = 18 days of growth response.
- 18 days * 12 kg grass DM growth/day = extra 216 kg grass DM/HA
- 216 kg grass from 30 kg N = 7:1 response.
- You have lost 104 kg DM/HA or 1/3rd of immediate N potential!
- Can we get some of that potential back?
- Timing of application is the answer.
- We know the time frame to go from soil to plant leaf is 5 to 7 days ...
- Lets apply the N in front of the cows – say day 2 before grazing.
- 23 day rotation + 2 days pre-grazing = 25 days for the nitrogen to respond.
- 25 days x 12 kg DM/day = 300 kg DM – not 216 from above.
- Proactive use of N in spring can lift average pasture cover 100 kg DM/HA.
- 100 kg more grass, 10 kg grass per kg MS = +10 kg MS/HA.
- = 10 kg @ \$6.50/kg MS = \$65/HA
- For no extra cost.
- Note we got 300 kg grass from 30 kg N = 10:1 real response.

Or ...

- If getting an extra 200 kg grass DM is sufficient.
- Still apply early at day -2, but NOW use less nitrogen.
- Instead of 30 kg N/Ha we could use 20 kg N/Ha.
- We get a 10:1 response in 25 days so we get 200 kg extra grass.

Our message – don't waste a third of your nitrogen by applying after grazing, be proactive and get out in front.

By being proactive you can expect to gain 100 kg pasture DM/HA/application or you could reduce your nitrogen inputs by 33% and still grown the same amount of grass.

IRD Values

The livestock values announced in mid May for taxation purposes (& benchmarking) are up significantly on last year.

Mixed age cows at \$1,649 compared with 2016 values of \$1,356.

For properties with stable herd size and using the herd scheme this change in value will have minimal impact.

BakerAg Winter Seminar – our best line-up ever! One third of the tickets sold a month out from the event.

Without doubt this year's winter seminar has the best ever line-up. Most reader will have seen our after-dinner speaker, late on Saturday afternoon hosting Ultimate Fishing – Matt Watson.

This year's event is much more than one after dinner speaker. We have an afternoon totally filled with skilled and knowledgeable speakers, aligned to our topic of "Inspiring Agriculture".

- Melissa Clark-Reynolds – disruptive technologies.
- Dr Charles Murfield – alternate solutions to drenching and weed spraying.
- Ian Williams – how are our farm systems being changed in the name of "sustainability".
- Richmond Beetham – the wakeup call from the Waikato!
- James Lockhart & Sully Alsop- Benchmarking, a fad or real tool for progress?
- Steve Maharey and Andrew Gibbs – international change and megatrends – what does it mean for NZ?
- Willie Falloon – what are we changing.



Put the date in your diary – tickets are limited to maximum 250 head.

When: Wednesday July 5th

Where: Copthorne Solway Park Masterton

Rangitikei / Manawatu / Tararua attendees – hop on the **free bus**, no driving, more networking.

Tickets: \$185+GST – includes dinner and drinks.

For more information and to pre-book your tickets talk to Delwyn delwyn@bakerag.co.nz

Good for a laugh

Bob was in trouble. He forgot his wedding anniversary. His wife was really angry.



She told him "Tomorrow morning, I expect to find a gift in the driveway that goes from 0 to 200 in 6 seconds AND IT BETTER BE THERE!" The next morning, he got up early and left for work.

When his wife woke up, she looked out the window and sure enough there was a box gift-wrapped in the middle of the driveway.

Confused, the wife put on her robe and ran out to the driveway, brought the box back in the house.

She opened it and found a brand new bathroom scale. Bob has been missing since Friday.

SITUATION REPORT		May 17 - Jun 17			
PASTURE GROWTH (Pasture growth figures include the use of nitrogen)					
		May-17		May-16	Forecast June
Manawatu	Irrigated	20		40	12
	Non-irrigated	20		30	12
Tararua		18		35	10
Wairarapa	Irrigated	28		35	18
	Non-irrigated	28		25	18
Canterbury		32		20	18
Otago		28		18	15
Tasman		15		24	15
Southland		22		25	12
PASTURE COVER (End of month)					
		May-17		May-16	Forecast June
Manawatu	Irrigated	2000		2100	2100
	Non-irrigated	2000		2000	2100
Tararua		1900		2200	2100
Wairarapa	Irrigated	2100		2000	2250
	Non-irrigated	2000		1900	2250
Canterbury		2180		2100	2300
Otago		2000		2100	2100
Tasman		1950		2000	2050
Southland		2050		2200	2200
DAILY MILK PRODUCTION (MS / cow) Derived from DSM data, typically representing upper quartile performance					
		May-17		May-16	Forecast June
Manawatu	Irrigated	1.20		1.10	N/A
	Non-irrigated	1.20		0.80	Winter milk 1.50
Tararua		1.10		0.80	N/A
Wairarapa	Irrigated	1.25		1.00	Winter milk 1.50
	Non-irrigated	1.00		0.80	Winter milk 1.50
Canterbury		1.30		1.25	N/A
Otago		1.30		1.25	N/A
Tasman		0.90		1.00	N/A
Southland		1.20		1.20	N/A

SITUATION REPORT		May 17 - Jun 17			
LIVESTOCK		Now		Last Month	Last Year
Lower North Island					
Cull Cow	170-220kg CWT	750-900		750-900	700-900
Incalf Cows	June delivery	1400-1800		1400-1800	1200-1500
Carryover Cows in-calf	June delivery	1400-1600		1400-1600	
Recorded R2 hfr in calf	2015 born, delivery now	1300-1550		1300-1550	1100-1400
Weaner Heifer calves (F12)	2016 born	700-900		700-900	
Friesian bulls (R1)	2016 born	700-900		700-950	600-800
South Island					
Cull Cow	200-240kg CWT	725-850		725-850	650-1100
Incalf Cows	June delivery	1500-1850		1600-1975	1500-1700
Recorded R2 hfr in calf	2015 born, delivery now	1200-1700		1450-1700	1100
Recorded yearling hfr (R1)	2016 born, delivery now	850-1050		850-1050	600-700
Friesian bulls (R2)	2015 born	1100-1400		1100-1400	1500
Friesian bull calves (R1)	2016 born	700-1050		650-900	500-700
FERTILISER					
Prices as at 3 May					
Urea @ 100 kg/Ha	\$/Ha applied	68.20		68.20	67.00
Superphosphate @ 350 kg/Ha	\$/Ha applied	131.65		131.65	144.25
DAP + Potash Blend	\$/Ha applied	148.04		148.04	166.58
@ 200 kg/Ha					
EXCHANGE RATE (US)		0.706		0.693	0.671
Fonterra Unit Price		Co-op Group Shares	6.00	5.98	5.70
International Commodities					
Corn	USD/MT FOB	157.87		159.55	174.31
Whole Milk Powder	USD/MT FAS	3,312		3,233	2,252
Crude Oil WTI (Nymex) Price	USD per Barrel	48.36		48.04	49.33
Please note we include these three international commodities for readers as a guide. These commodities are connected to the US milk supply and the short to medium term milksolids price.					

FEED MARKET								Utilised		
Lower North Island		Now	Last Month	kgDM OR kgDM/day	MJME	Utilisation	Cents / MJME	Cents / kgDM		
Barley ex Silo (incl. bagging & delivery)	\$/tonne	400	400	860	12.5	95%	3.9	49		
Palm Kernel - delivered	\$/tonne	265	260	920	11.0	85%	3.1	34		
Dried Distillers Grain (Wheat) incl. delivery	\$/tonne	430	430	920	12.7	85%	4.3	55		
Condensed Distillers Syrup	\$/tonne			420	15.0	90%	N/A	0		
Molasses (feed grade) Excl. delivery	\$/tonne	320	320	750	11.6	90%	4.1	47		
Maize - standing (Indicative ONLY)	c/kg DM	21	21							
Maize - In the pit (Indicative ONLY)	c/kg DM			350	10.8	80%	N/A	0		
Grass - standing (good quality)	c/kg DM	16	16							
Grass Silage - in the stack	c/kg DM	28		180	10.5	80%	3.3	35		
Baleage	\$/round	80	85	250	10.5	85%	3.8	38		
Straw	\$/round	50	50	200	8.0	80%	3.9	31		
Hay Large Round	\$/round	80	85	240	9.5	80%	4.7	42		
Calf grazing	\$/hd/week	5	5	4	11.0	80%	2.0	18		
Yearling grazing	\$/hd/week	9	9	7	11.0	80%	2.1	18		
Winter cow (Average quality)	\$/hd/week	18	18	12	9.5	80%	2.8	21		
Winter cow (Good quality)	\$/hd/week	26	25	14	11.0	80%	2.9	27		
Winter Incalf R2yr	\$/hd/week	20	20	12	11.0	80%	2.7	24		

South Island

Barley - ex farm	\$/tonne	330	310	860	12.5	95%	3.2	40
Palm Kernel - delivered	\$/tonne	255	235	920	11.0	85%	3.0	33
Dried Distillers Grain (Wheat) incl. delivery	\$/tonne	435	435	920	12.7	90%	4.1	53
Condensed Distillers Syrup	\$/tonne			420	15.0	90%	N/A	0
Molasses (feed grade) Excl. delivery	\$/tonne	320	320	750	11.6	90%	4.1	47
Maize - standing	c/kg DM							
Maize - In the pit	c/kg DM			330	11.8	80%	N/A	0
Grass - standing	c/kg DM	10	10					
Grass Silage - in the stack	c/kg DM	25	25	180	10.5	80%	3.0	31
Baleage	\$/med. Square	85	85	250	10.5	85%	3.8	40
Straw	c/kg DM	18	18	220	8.0	80%	1.3	10
Calf grazing	\$/hd/week	7	7	4	11.0	80%	2.8	25
Yearling grazing	\$/hd/week	12	12	7	11.0	80%	2.8	24
Winter cow grazing	\$/hd/week	24	23	14	11.0	80%	2.7	24
Winter Incalf R2yr	\$/hd/week	19	19	12	11.0	80%	2.6	23

All prices are exclusive of GST and provide a guide on the current market.

Actual prices can and will vary.

NB: Condensed Distillers Syrup is currently available but mostly manufactured into a pelletised product. Barley ex silo in NI includes delivery cost (bagged).

(N/A - insufficient market evidence at this point)

Utilisation and MJME figures are from DairyNZ Facts and Figures publication.

Dairy System Monitoring provides a guide on upper quartile performance and is a service provided by BakerAg and Macfarlane Rural Business.