



Providing knowledge

St Peter's School/Lincoln University
Demonstration Dairy Farm



ST PETER'S • CAMBRIDGE
NEW ZEALAND



Lincoln University
Te Whare Wānaka o Aoraki
AOTEAROA • NEW ZEALAND

New Zealand's specialist land-based university

Farm Focus Day

Wednesday, 17 May 2017

PROVIDING KNOWLEDGE – Wins and Lessons

Season review – Performance and profit.

Financial analysis – Looking back and looking ahead.

How do we compare – What would you do?

Dry off decisions – How do the cows look now?

Optional 1.30pm – Monitor farm walk – 1 hour (80ha).

Owl Farm Interactive Session

FOCUS DAY QUESTIONS: www.kahoot.it

Wi-Fi NETWORK: STPGuest

Wi-Fi GUEST PASS KEY: KCPBM-PKLLA





HEALTH AND SAFETY

Welcome to Owl Farm. We are a fully operational, commercial dairy farm with a number of potential hazards to both visitors and staff. Many of these potential hazards cannot be eliminated while also providing access to visitors therefore all staff and visitors **MUST** watch for potential hazards and act with caution.

St Peter's School / Owl Farm Hazard Notifications

- Children are the responsibility of their parent or guardian
- Normal hazards associated with a dairy farm
- Other vehicle traffic on farm roads and races
- Races may be slippery

ARE YOU TRAINED FOR WHAT YOUR ARE ABOUT TO DO? If not, STOP.

Emergency Contact Information

In the event of an emergency, ensure the scene is safe and raise the alarm to get Owl Farm staff and emergency services to assist.

Emergency Services

- **Fire, Police and Ambulance** **111**
1716 Cambridge Road, Follow Hanlin Road through the school to the farm

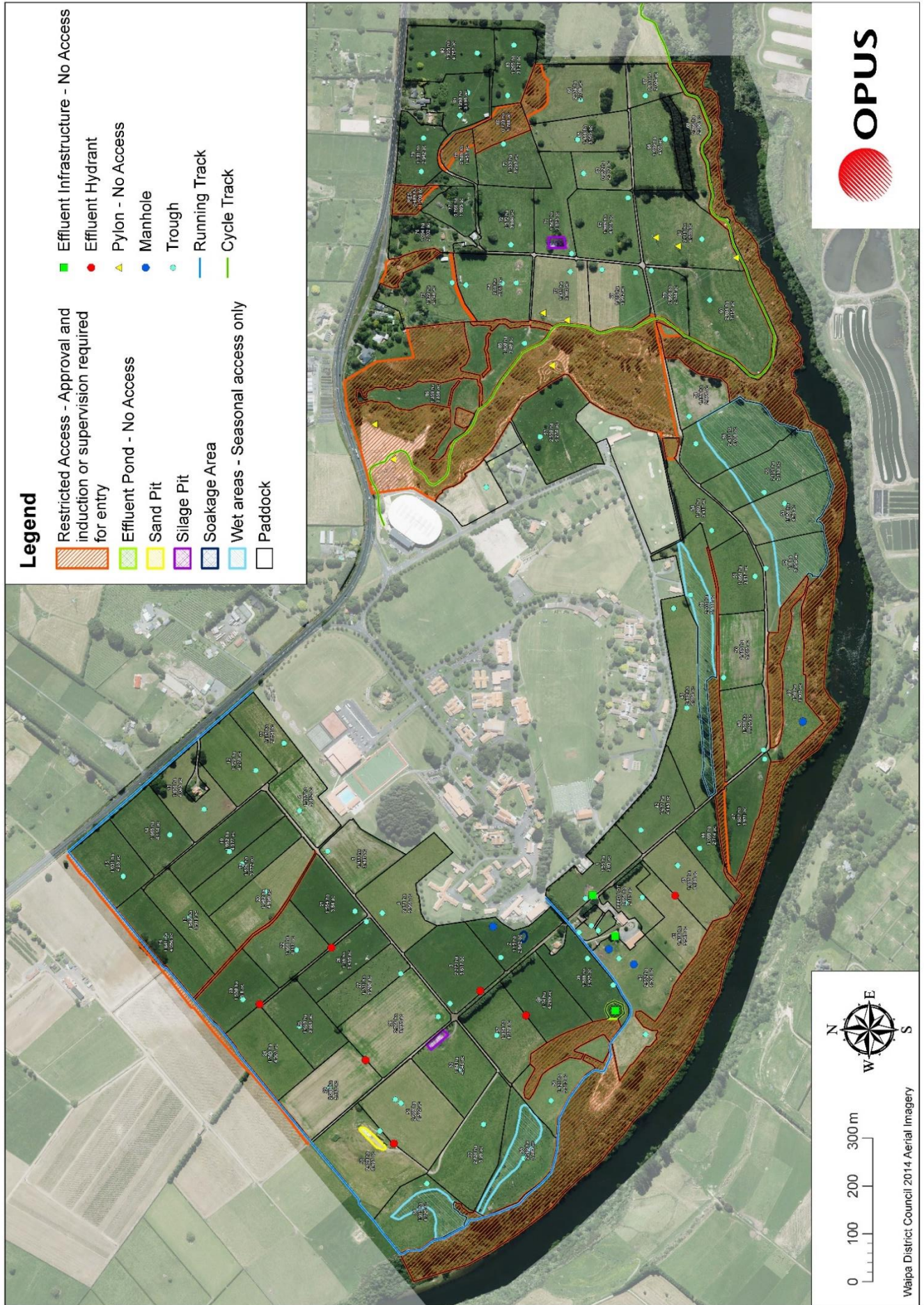
Farm Staff

- | | |
|--|--------------|
| • Louise Cook – Demonstration Manager | 027 808 5777 |
| • Tom Buckley – Farm Manager | 021 058 4916 |
| • Alaa Osman – Health and Safety Advisor | 027 384 9401 |

Safety Equipment Location

- | | |
|----------------------|---|
| • First Aid Kits | Dairy Shed and Vehicles |
| • Fire Extinguishers | Dairy Shed and Tractor |
| • Defibrillator | Main Office and St Peter's Medical Centre |

By entering Owl Farm and signing in at registration, you are acknowledging your understanding of any potential hazards and agree to take personal responsibility and act in such a manner as to protect yourselves and others also on-farm.





St Peter's School/Lincoln University
Demonstration Dairy Farm



OPUS



LIC



PGG Wrightson Seeds



DairyNZ



Ballance



OWL FARM - ST PETER'S SCHOOL / LINCOLN UNIVERSITY DAIRY FARM STRATEGY

1. Vision

a. Dairy Farm

- To apply proven research, utilising good on farm practice and scientific monitoring for the farm to become an exemplar in dairy production, financial, environmental and people performance, while maintaining the highest standards of health and safety.

b. Students

- To encourage more young people into the dairy industry.

2. Strategic Objectives

a. Dairy Farm

- Providing leadership to dairy farmers and the wider community by demonstrating progressive practices that can be achieved on farm.
- Optimise profit through identifying the appropriate dairy production system for Owl Farm.
- Achieving a farm sustainable environmental footprint based on industry good management practice.
- To attract, train and retain quality employees.

b. Students

- To provide educational opportunities and exposure to the dairy industry which demonstrates career opportunities to students.

3. Farm Development Stages

a. Stage 1 Objective (2015/16 – 2017/18)

Establish credibility by addressing current issues and performance, whilst setting up the farm for future development. During this stage, the farm will operate a pasture based system, with tactical supplementation strategies, based largely on existing infrastructure, to optimise profit while developing a resilient farm system.

b. Stage 2 Objective (2018/19 – onwards)

Testing and investigating in conjunction with partners, innovative strategies to lead sustainable profit. The farm system will be developed over years 1-3 and reflect demonstration requirements of industry that are relevant and appropriate at that time point.

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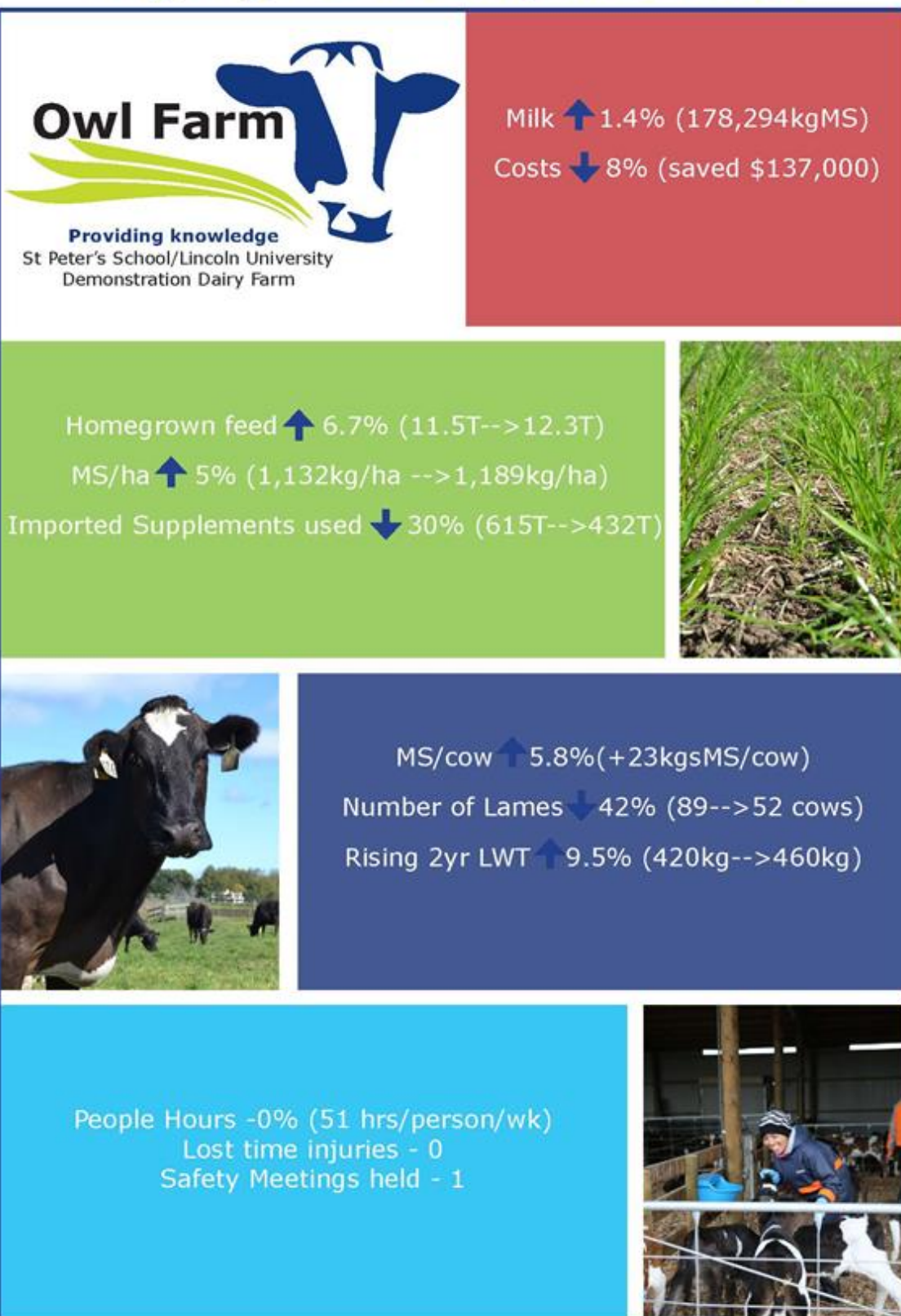
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OWL FARM SNAPSHOT

Year		2015-2016	2016-2017
Physical Info	Total Farm Area	172	172
	Effective Area	155	150
	Effective area Leased	23	18
	Cows Wintered	470	453
	Peak Cows (1Dec)	445	423
Production	Total kgMS	176,197	178,249
	MS/cow	396	421
	MS/ha	1,137	1,188
	Ave SCC	112,000	125,000
Feed and Inputs	Feed Grown TDM/ha	13.5	14.2
	Feed Harvested TDM/Ha	11.5	12.3
	Supplements Imported TDM/Ha	3.97	2.88
	Nitrogen Applied/effective ha	149kg	150kg
Statistics	Cowshed	36 Rot	36 Rot
	Feed infrastructure	NIL	NIL
	Herd Figures	BW 162/189 PW	BW 107/128 PW
	Industry BW/PW	BW 111/123 PW	BW 64/73 PW
	Effluent Storage	Clay lined pond	Clay lined pond
	% farm effluent applied to	44Ha 29%	44Ha 29%
	Soils are a mix of Clays and Sands, on largely flat terraced contour		
	Operation regrassing via crop and regrassing - 15% per year		
	3 permanent staff members are employed - with no relief staff required to cover time off or calf rearing duties.		

KEY PERFORMANCE MEASURES 2016-17

Highlights and improvements



NOTES

OWL FARM NUMBERS – SEASONAL UPDATE

“DESCRIBE 2017? A SURPRISINGLY GOOD RESULT, FROM A REALLY CHALLENGING YEAR!”

Proud of production, given that in December even 170,000kgs seemed a very big stretch.

- More milk/cow – up from 84% to 88% of LWT. Consequence of feeding all cows better for longer by milking less cows for the same feed through the autumn period.
- Late spring production disappointing - as was the case across North Island - with poor utilization and low DM %. Compounded by a conservative rotation in early spring. Need more aggressive management around Balance Date to run high quality into the surplus period.

Animal Health had real wins and also some real lessons for us.

- Lameness incidence reduced from 89 to 52 cows that have required attention. Footbath used to address footrot in spring. Preventative trimming employed. Having the right tool to quickly and safely examine cows is a huge benefit.
- On-farm teams becoming more experienced in identifying practices of people that impact on lameness in cows.
- Spring mastitis also impacted production. Few herd tests prior, and a “best attempt” at SAMM plan lead to high incidence of mastitis at calving in a wet spring. Good information for dry off and appropriate treatment this year.
- Facial Eczema prevention after a very high rate of affected cows last year lead to gold-standard prevention this year. Lower eczema challenge means we will look at hybrid prevention strategies moving forward.

Home grown feed harvested up by 6.7% - 0.8T/Ha or 120T in total. Harvesting 12.3T/ha and growing 14.2T.

- Increase in Chicory Yield/ha through crop establishment focus and minimizing weed infiltration.
- Benefits of regrassing programme coming through for the first area of the farm regrassed. Regrassing this autumn, as part of cropping programme plus grass-to-grass. Additional undersowing on poorest pastures. Very necessary for future performance of farm. However late establishment has made the feed budget very tight.
- Harvesting genuine surplus through monitoring wedge. One large stack early and two sets of baleage harvested later. Strategic use of PKE to fill deficit, and extend/hold longer rotation to protect grass growth.
- Choice to discontinue importing Maize silage onto farm, whilst it is fed in paddock. Very poor utilisation and repeated pasture damage on feed out strips makes it detrimental to improving our profit.

Static team all season, much of the improvement in performance can be attributed to growth and development of all staff within their roles.

- Bulk Milk SCC managed well under 150,000 despite the significant number of early season cases of mastitis.
- Awareness of causes and prevention of on-farm lameness has had a big impact on the number of lame cows that have occurred.
- All staff are actively involved in measuring and monitoring pasture now but not having enough team meetings is a work-on for coming season.
- Safety Management around stock whilst giving stock zinc boluses ensured prevention of injury.
- Another work-on, is not having enough regular focus specifically on keeping health and safety systems updated. E.g. Reviewing hazard register for changes and ensuring everyone keeps the risks fresh in their mind.

Environmental highlights for the year include:

- Better record keeping of effluent applications, and consistent application to whole effluent area has ensured better use of a very valuable resource.
- Used Nitrogen really strategically throughout the season, with the use of coated urea throughout the year and PhasedN in Spring and Autumn.

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FINANCIAL ANALYSIS

	Total Figures			\$/kgMS			Waipa	Comment Notes
	2016	2017	2018	2016	2017	2018	2015-16	
Milksolids produced	176,197	178,294	173,115					
Total Milk Receipts	612,155	962,788	1,035,228	\$3.47	\$5.40	\$5.98	\$3.94	Cash payout received per annum
Net Cattle Income	84,030	69,870	69,870	\$0.48	\$0.39	\$0.40	\$0.56	
Dividends and Other income	69,360	77,100	74,400	\$0.56	\$0.57	\$0.57	\$0.10	Dividend \$0.40
Total Income	793,985	1,133,158	1,202,898	\$4.51	\$6.36	\$6.95	\$4.60	
Personnel Costs	213,452	176,200	176,200	\$1.21	\$0.99	\$1.02	\$0.98	1
Animal Health	45,916	47,976	36,550	\$0.26	\$0.27	\$0.21	\$0.23	2
Total Breeding	21,414	34,750	34,750	\$0.12	\$0.19	\$0.20	\$0.12	
PKE	103,156	35,607	54,821	\$0.59	\$0.20	\$0.32		3
Maize Silage	113,860	72,000*		\$0.65	\$0.40*			4
Grass Silage Harvested	13,760	26,710	24,750	\$0.00	\$0.15	\$0.14		5
Giberellic Acid	-	5,000	5,000	\$0.02	\$0.03	\$0.03		
Calf Meal	4,000	6,609	5,363	\$0.08	\$0.04	\$0.03		
Purchased Silage	-	12,839	-	\$0.00	\$0.07	\$0.00		
Chicory	24,711	25,000	23,900	\$0.14	\$0.14	\$0.14		
Net made purchased cropped	259,487	111,765	113,834	\$1.47	\$0.63	\$0.66	\$1.15	
Fertiliser & Nitrogen	94,865	86,051	84,500	\$0.54	\$0.48	\$0.49	\$0.31	6
Re-grassing	22,052	28,000	14,664	\$0.13	\$0.16	\$0.08	\$0.07	7
Replacement Heifers & Calves	74,195	65,632	65,200	\$0.42	\$0.37	\$0.38	\$0.31	8
Shed Expenses	11,836	16,000	12,000	\$0.07	\$0.09	\$0.07	\$0.05	9
Electricity	11,290	15,000	15,000	\$0.06	\$0.08	\$0.09	\$0.10	
Freight	12,284	9,000	9,000	\$0.07	\$0.05	\$0.05	\$0.04	
R&M Total	45,650	42,710	36,760	\$0.26	\$0.24	\$0.21	\$0.24	10
Vehicle and fuel	19,850	23,800	21,800	\$0.11	\$0.13	\$0.13	\$0.16	11
Weed & Pest Control	1,204	5,000	5,000	\$0.01	\$0.03	\$0.03	\$0.02	
Administration	38,140	30,926	28,647	\$0.22	\$0.17	\$0.17	\$0.10	
Insurance	-	20,625	20,625	\$0.00	\$0.12	\$0.12	\$0.06	
Rates	15,353	16,377	16,868	\$0.09	\$0.09	\$0.10	\$0.10	
ACC Levies* TBC 2017 & 2018	8,728	4,500	4,500	\$0.05	\$0.03	\$0.03	\$0.02	
CASH Farm Working Expenses	895,716	734,312	695,898	\$5.08	\$4.12	\$4.02	\$4.06	
Leased milking land	34,779	30,000	30,000	\$0.20	\$0.17	\$0.17	\$0.07	
Interest - Farm Loan	208,605	177,803	187,371	\$1.18	\$1.00	\$1.08	\$1.12	12
Depreciation - Farm	67,979	67,979	67,979	\$0.38	\$0.38	\$0.39	\$0.38	
Total Financial Charges	311,363	289,282	299,624	\$1.77	\$1.55	\$1.65	\$1.57	
Total OPEX	1,207,079	1,023,594	995,521	\$6.85	\$5.67	\$5.67	\$5.63	
*Maize silage used but not purchased in financial year. Figures below indicate effective Farm working costs								
Total Farm Working Expenses	895,716	806,312	695,898	\$5.08	\$4.52	\$4.02	\$4.06	3*

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FINANCIAL COMMENTARY – CURRENT AND COMING SEASON

Significant improvements in the overall profitability have occurred in the past 12 months for a variety of reasons, some we can take credit for and others we can't.

Payout is included on a cash basis, accounting for the cash paid in the 12month period. This includes prior season's deferred, and current season advance rates. Assumes forecast payout of \$6.00 for the coming season.

1. Personnel costs reduced from prior year with no relief staff required and no turnover in the year/
2. Animal health reduction anticipated through a reduction in mastitis at calving, and revised zinc strategy to prevent facial eczema.
3. PKE for the current season was purchased at \$205/T landed on farm. PKE is budgeted for the coming season at \$230/Tonne landed on farm. The amount fed at the moment largely exhausts the potential of the 3kg/cow/day guideline, through summer and autumn. Any climatic events would require purchase of other supplements.
4. Maize silage in the 2016-2017 financial year was purchased during the prior season. This means from a cash point of view, we don't pay for it in the current year. However, we did USE it this year, and when we compare year on year it is murky. The acknowledgement that we have an effective cost of maize silage in this year of \$0.40/kgMS is shown in red, and at the bottom of the table to indicate our most accurate reflection of this year's cost of production.
5. Grass silage harvested is forecasted to remain at current levels. Without Maize silage in the budget, forage supplements are critical to manage eczema risk in Autumn, along with helping mitigate the total daily PKE demand/cow in the milking diet to remain under the 3kg/cow guideline.
6. Fertiliser spend has decreased between the 2016 and 2017 seasons by staff spreading fertiliser on the farm throughout the year with our own spreader. This allows more nutrients to be applied for the same total fert spend.
7. With a large amount of regrassing completed this and last year, a conscious decision has been made to slow the total rate of renewal back to a total of 15% of the farm completing into new grass per annum.
8. There are less young stock being reared now with a slightly lower stocking rate. In-calf R2s returned this year 22kg above target at approximately 460kg.
9. Shed expenses reduce slightly in the coming year as a complete re-fit of shed rubberware (including internals) was completed in this season.
10. R&M estimates are decreasing over time as large projects are now completed. The farm now has power maintained to all paddocks, and water systems reliable (if still somewhat restricted by existing small pipes.) A large cowshed repair to a drive motor in spring this year is not expected to be repeated.
11. Vehicle and fuel costs are expected to reduce, with motorbikes due for replacement and less supplement being fed in the coming season.
12. The Interest attached to the farm loan is calculated based on starting with "Industry Average" debt levels 1 June 2015 of \$20/kgMS. The total debt was increased to reflect the cash loss incurred in the 2015-2016 season with a very low payout.

The interest rate used for the 2016-2017 season is 4.65%p.a

The cash surplus of \$124,000 in the current season is available for debt reduction and the decision this year by the farm is to pay down term debt.

For the coming season, the expectation is that interest rates will begin to rise and total interest payable (after paying down \$124K of term debt) increases by \$9,568 at an interest rate of 4.9%.

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REGRASSING SUMMARY

Prepared by Kyle Gardyne, PGG Wrightson Seeds



Chicory Paddocks	Paddocks
Excess AR37 + Clover @25kg/ha	14, 23, 45, 51, 53, 54 – 8.7
LUSH AR37 @ 28kg/ha*	37, 38, 39 – 6.9 ha
Total	15.6 ha
Undersowing	Paddocks
Lush AR37 s/s @15/ha	12, 13, 16, 17, 18, 19, 20, 21, 22, 69, 70, 72, 73, 74
Rely AR37 s/s @ 15kg/ha	62, 63, 65, 66, 71
Total	31.6 ha
Annual Regrassing	Paddocks
Winter Star II s/s @ 28kg/ha	4, 26, 27, 28, 29, 31, 32, 41, 43
Total	17.4 ha
Grass to Grass	Paddocks
Lush AR37 s/s @ 28kg/ha	59, 60, 61, 64
Total	8.6 ha
Total Area regrassed	73.2 ha

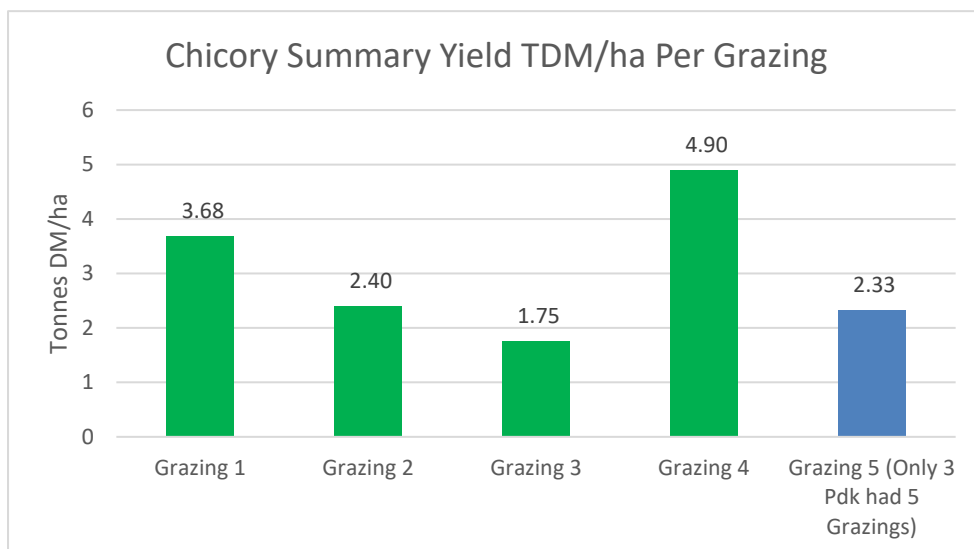
*** Due to the late sowing date, Italian Rye Grass was sown instead of Base AR37 Perennial Ryegrass.**

Very good chicory growth lead to a decision to delay spraying out the chicory for 2 weeks. The very wet period that followed made it very difficult to spray out and drill the chicory paddocks. It was decided on the 27th of April that the last three paddocks (37, 38 and 39) should be planted in Italian Ryegrass with an endophyte.

The persistence of Perennial Ryegrass can be compromised by late plantings. Planting a fast establishing Italian Ryegrass will mean these paddocks will be back in rotation quicker. The down side being the regrassing cost has been deferred until next autumn.

There was a significant amount of undersowing undertaken again this year. This represents the lack of investment in the farms pastures over the years as identified by the pasture condition scores carried out in Feb 2017. Blocks 1 and 2 pasture density had significantly decreased this summer due to large numbers of Black Beetle and summer grass weeds.

Therefore, it was recommended to spray out some of these pastures out and plant an Italian Ryegrass with the intention of using this as a 12-24month break crop before planting these back into Perennial Ryegrass. This will help break pest and weed cycles, and offer a developmental tool to get back into a good performing ryegrass.



Chicory paddocks yielded an average of 12.7T in the first 4 grazings. The paddocks grazed a 5th time yielded another 2.3T. Over the whole area that averages 13.3T grown.

Allowing for lost grass yield while the chicory was in ground and all costs of establishing the crop generates a cost of feed of 14.6c/kgDM or \$146/TDM.

A very cost-effective and high quality summer feed, that contributes to an even better new grass paddock through breaking the weed and pest cycle.

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OWL FARM HERD – RECORDS

Prepared by Jack Hooper, LIC



St Peter's farm currently has BW of 107/47 and a PW of 128/66 and 100% recorded ancestry placing genetically in the top 5% of all herds nationally. A position reached through a good history of using the best bulls available, good recording and culling of poor performers.

When the R2 heifers are tagged with herd numbers in the next few weeks, the new BW/PW - the new seasons herd will start with approximately a BW of 112 and PW of 133. High BW herds are more efficient in producing kilograms of milksolids per kilograms of liveweight, use resources and partition nitrogen more efficiently which are consistent with the farm system goals of a farm that is effectively on the banks of the Waikato River.

Currently the herd is described as crossbred with the herd having 52% Friesian and 48% Jersey in the genepool. The current breeding goal is to maintain a genetically superior herd of F10 – F12 cows. 2016 - Herd mated to Premier Sires Forward Pack for 6 weeks followed by a week of short gestation length semen. A dual breed mating plan was in place. Cows F9 to F16 mated to Kiwi Cross Sires and cows F0 – F8 mated to Friesian sires.

A summary of stock movements for the year is included below.

	Mob	Open	Born	Die	Buy	Sell	Age in	Age out	Close
<i>Cows</i>	454			5		100	92		441
<i>2015 born heifers</i>	101					9		92	
<i>2016 born Heifers</i>			114						114
<i>Bobby Calves</i>			440			440			
<i>Total</i>	555		554	5	0	549	92	92	555

SOIL ANALYSIS RESULTS

Owl Farm has had a focus in the last 12 months on "Home Grown Feed". Activities have included autumn soil testing (7 blocks and 9 crop paddocks). N-Guru was used to model the best approach to nitrogen application.

Fertiliser recommendations in the last 12 months have focussed on correcting low pH, frugal use of P, careful use of N, increasing the amount of S and applying maintenance K (Potash). Soil testing results show that lime applications have taken effect, with soil pH rising across all blocks. The aim being for them to all be comfortably above pH 5.8.

Several blocks have an Olsen P above recommended levels, but the majority of the farmland is now within ideal Olsen P levels. Blocks with high Olsen P levels will be managed by using half rates of maintenance fertiliser until the target range is achieved.

Ballance team


Ian Tarbotton – Farm Management Committee

Mark Ter-Morshuizen – Fertiliser representative

Murray Lane – Forage Specialist


Ian Power – Overseer Expert

Mandy McPhail – Marketing and Sponsorship



Ballance agri-nutrients

Add. Client Ref: Owl Farm
Submitted By: M Ter-Morshuizen



Hill Laboratories
TRIED, TESTED AND TRUSTED

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Hamilton 3240 New Zealand

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W www.hill-laboratories.com

Date Received: 02-Mar-2017
Date Reported: 08-Mar-2017

Soil Analysis Results							
Sample Name:	Soil Type*	pH pH Units	Olsen Phosphorus mg/L	Sulphate Sulphur mg/kg	Potassium MAF units	Calcium MAF units	Magnesium MAF units
1	Ash	5.7	38	75	11	11	18
2	Ash	6.1	58	13	10	12	30
3	Ash	6.3	58	13	11	16	26
4	Ash	5.8	33	45	14	10	28
5	Ash	6.3	32	31	21	14	31
6	Ash	6.4	36	48	11	15	28
7	Ash	6.2	44	47	10	13	27

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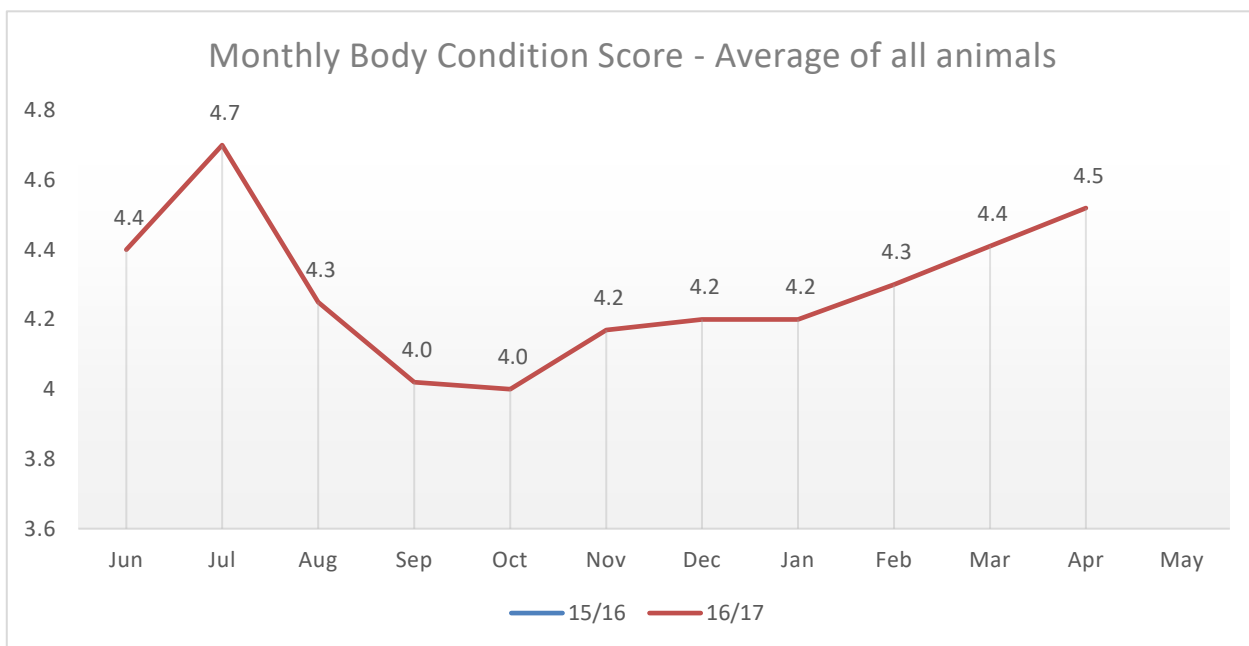
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BODY CONDITON SCORE

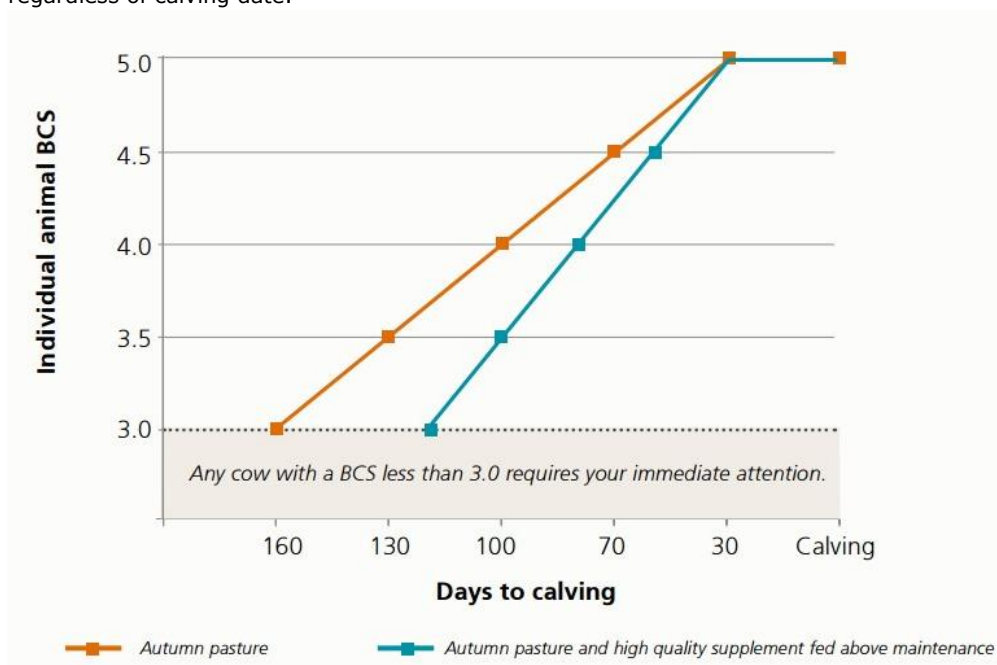
The body condition score of cows and heifers has been monitored throughout the year, scored by an accredited assessor from DairyNZ.

The herd was under target at the start of calving in July, but is currently tracking ahead of last season and on target to meet the Pre-calving BCS of an average of 5.0 for cows and 5.5 for heifers.



To achieve this, a dry-cow feeding plan that allowed for gain was designed and budgeted, then cows were dried off to decision rules that ensured they had sufficient time to gain condition.

Cows were tail-painted based on calving date, to easily draft the light cows due for dry off at each point in time. On April 18th 100 cows were dried off that were due to calve in the first 2 weeks and currently under BCS 4.5, AND any cow with BCS under 4.0 regardless of calving date.



This graph illustrates the time before calving cows must be dried off to reach their calving diet based on her body condition score and time until calving.

It also shows the relative impact high quality supplements can have on this timeframe.

However the cost-effectiveness of using supplements to shorten the timeframe will vary based on the relative value of milk due to milk payout.

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OWL FARM WEEKLY MONITOR WALK

As we move forward into a new season with a much diminished arsenal of supplements and a strong desire to increase our pasture harvested and pasture quality – the focus on pasture management is as important as it has ever been. This means that we need to ensure we validate our own maths by focussing on what our residuals are, as the cows very good at telling us whether we got the pre-grazing cover right.

We are starting a weekly monitor walk of the top block of the farm – approximately 80 ha that will be completed at 11am every Tuesday.

We hope that this regular platemetering will keep us fit and focussed, along with giving a second validation of pre-grazing and post grazing covers to ensure we maximise out pasture grown and eaten.

These walks are open to the farming community, so individuals, groups, visitors and students can share the experience with us and enjoy some robust discussion as we work to ensure we get the best estimate of what the cows are being fed.

The other outcome of these walks is hopefully a further opportunity to engage with other farmers for advice and support in both directions!

So feel free to drop by and bring your own platemeter, probe, or eye-ometer to the Demonstration office, leaving at 11am Tuesdays!



St Peter's School/Lincoln University
Demonstration Dairy Farm

Owl Farm - Weekly Monitor Walk

Tuesdays, 11am - 12pm

Providing knowledge - Home Grown Feed



Weekly 1 hour farm walk, departing from the Owl Farm office

- Monitor pasture covers on Owl Farm's top block
 - Focus on home grown feed
- Bring your own measuring method to compare

All Welcome!

Owl Farm, St Peter's School, SH1, Cambridge

For further information email: theresa@owlfarm.nz or phone: 07 827 9738

www.owlfarm.nz

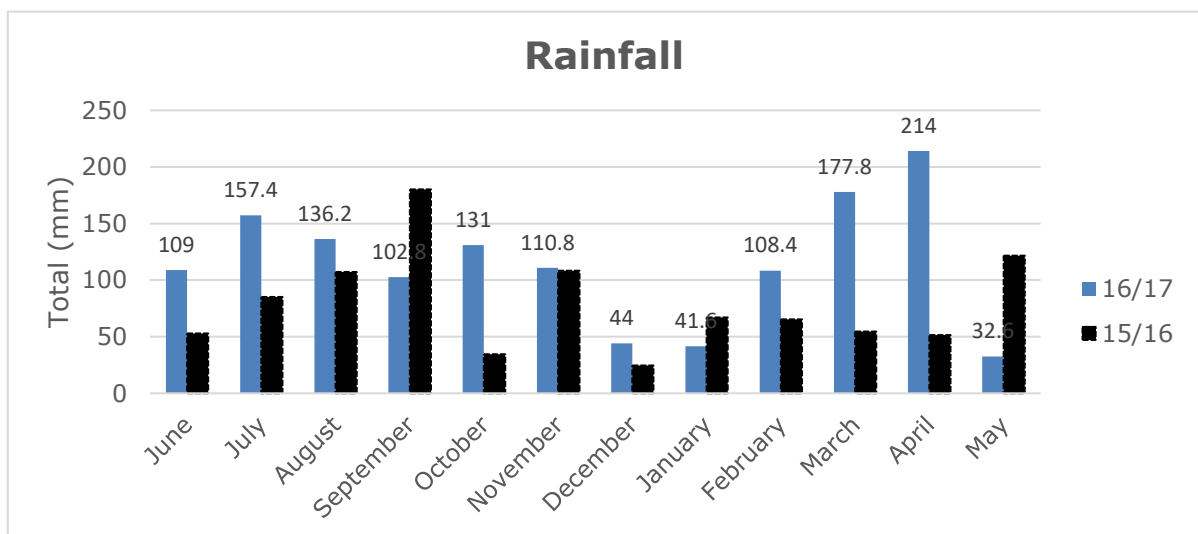
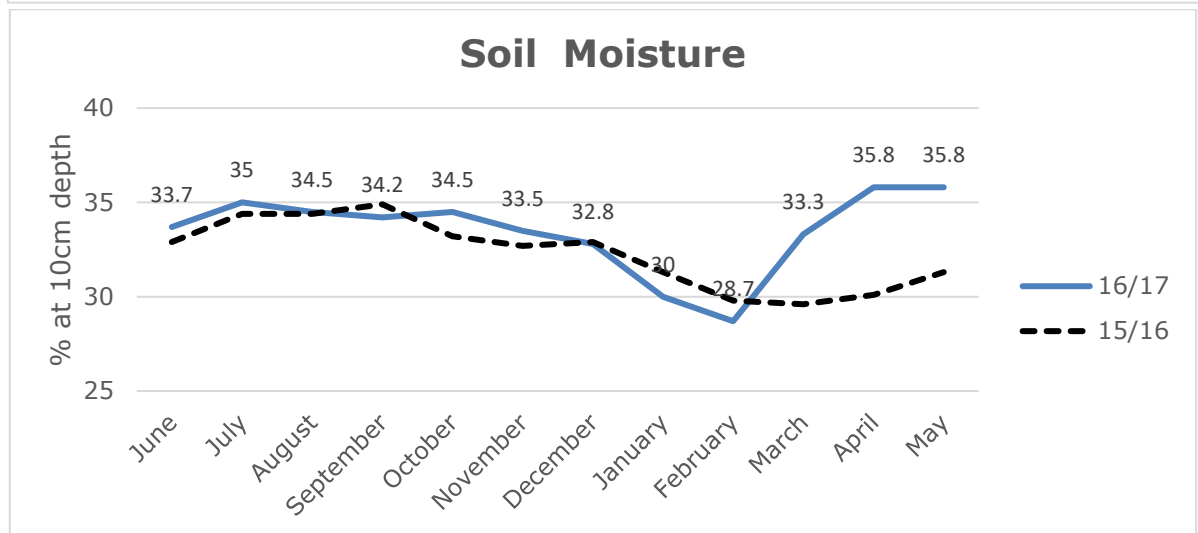
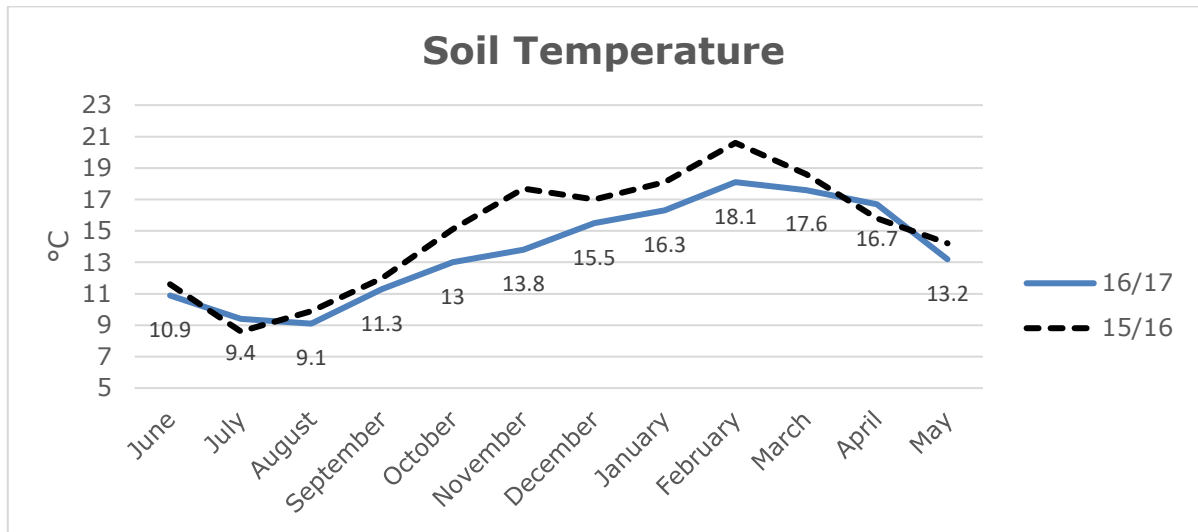


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APPENDIX...

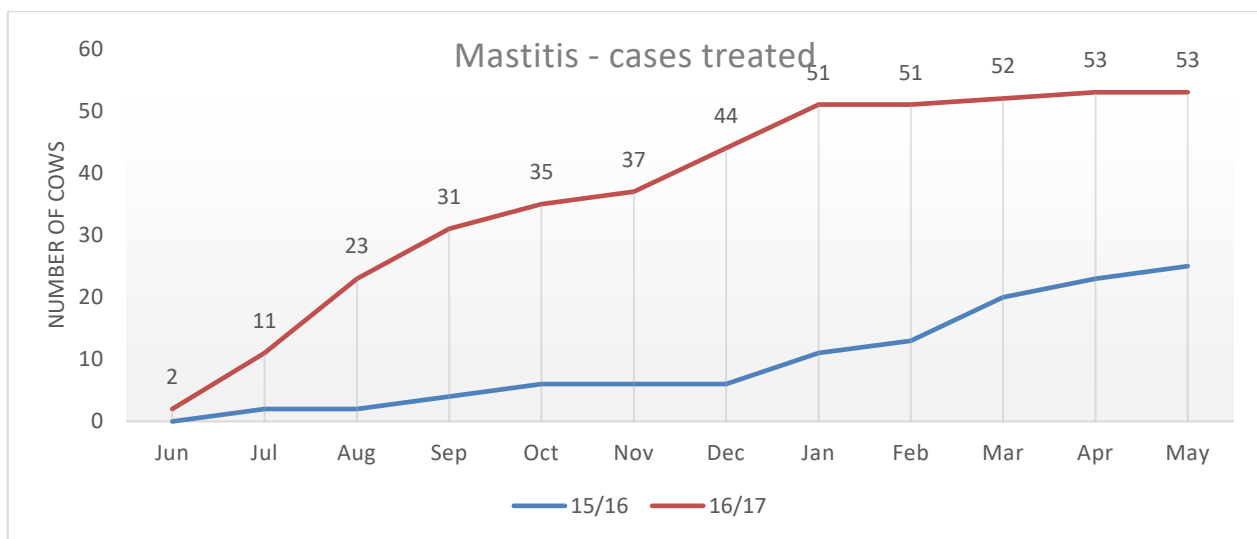
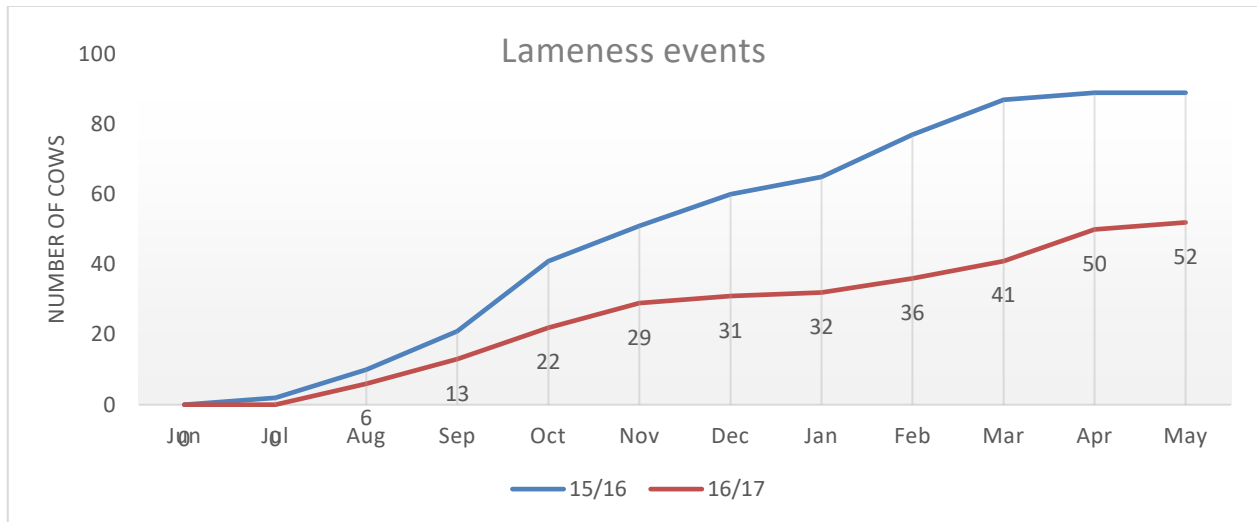
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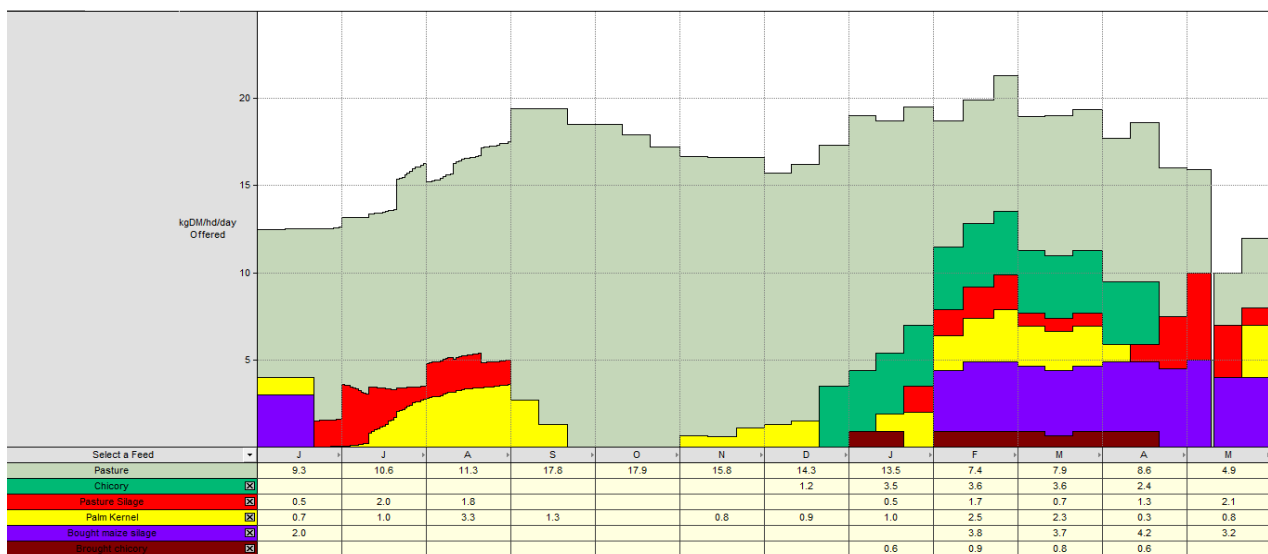
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SUMMARY DATA



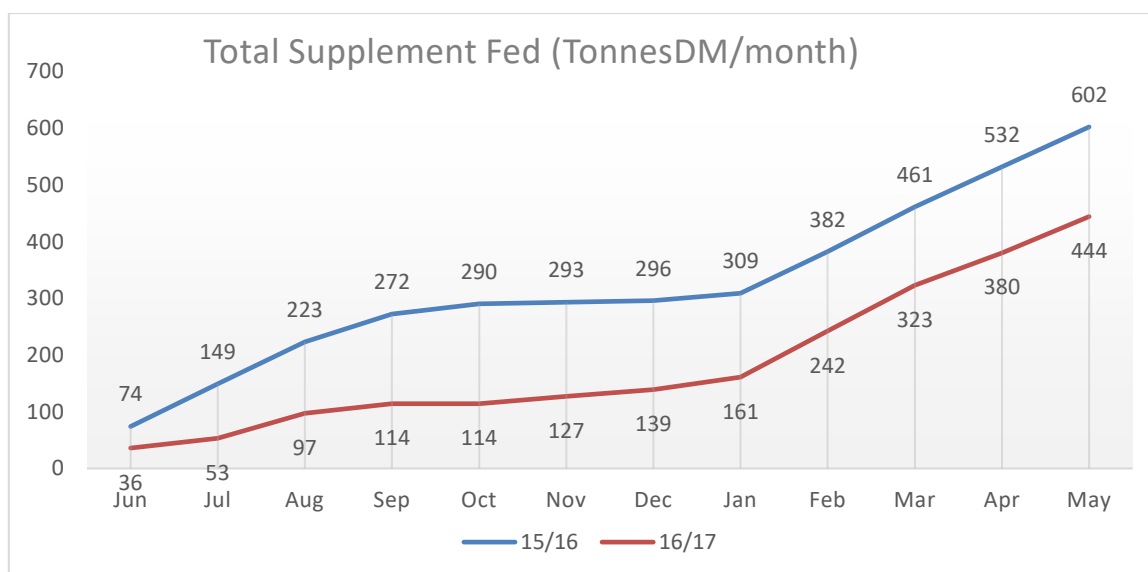
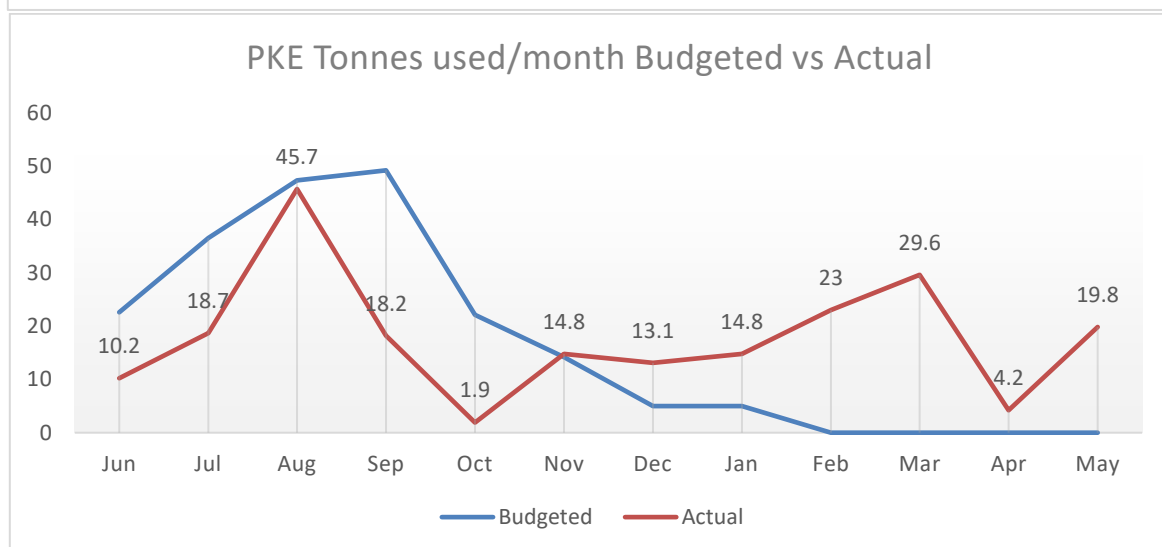
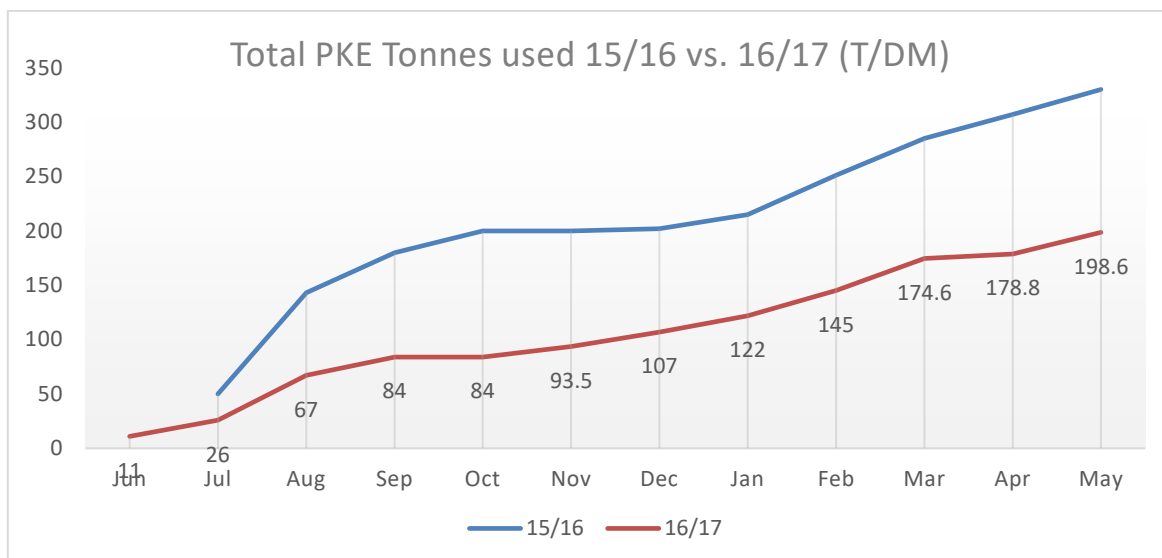
Supplementary feed use throughout the 2016-2017 season



NOTES



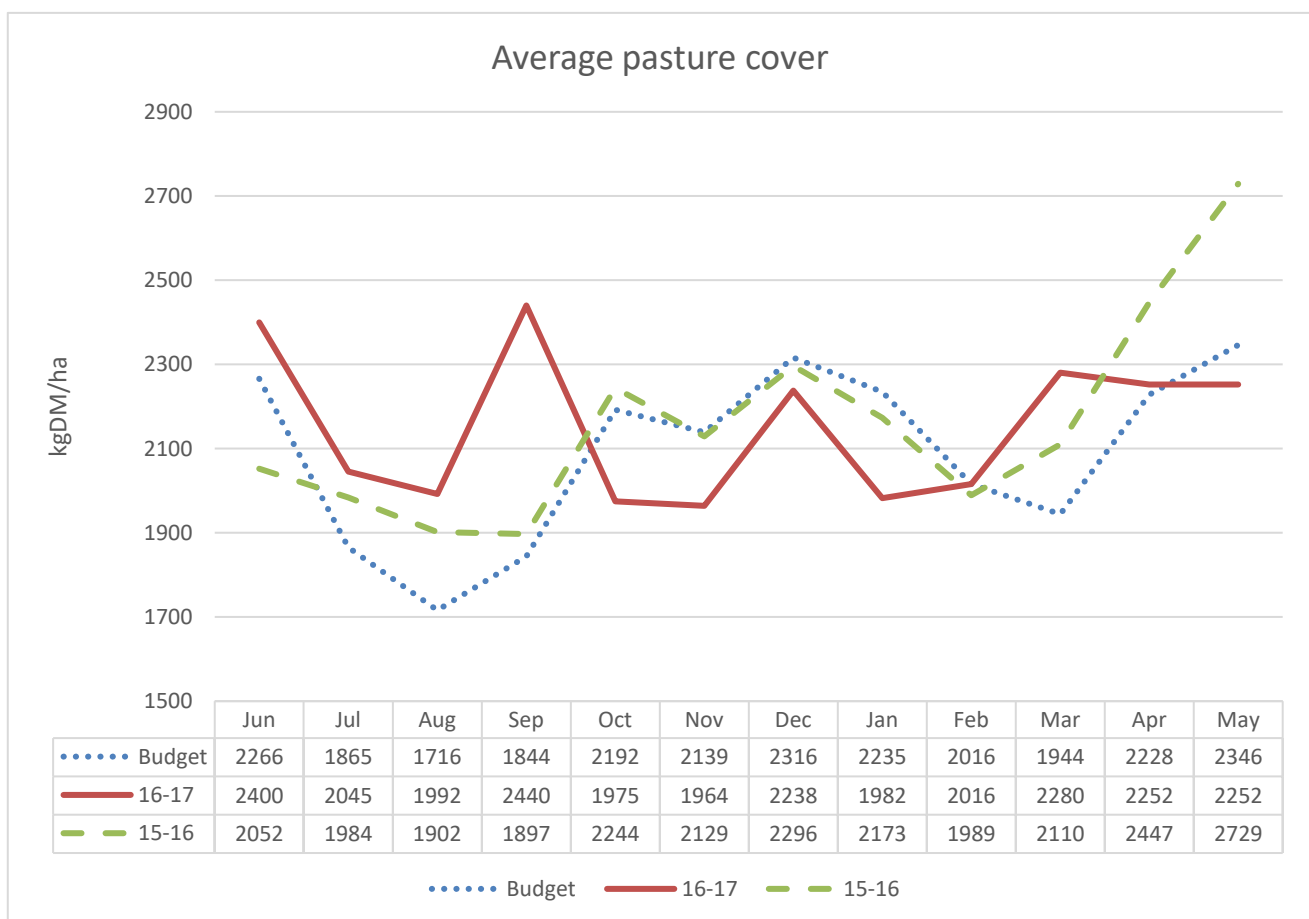
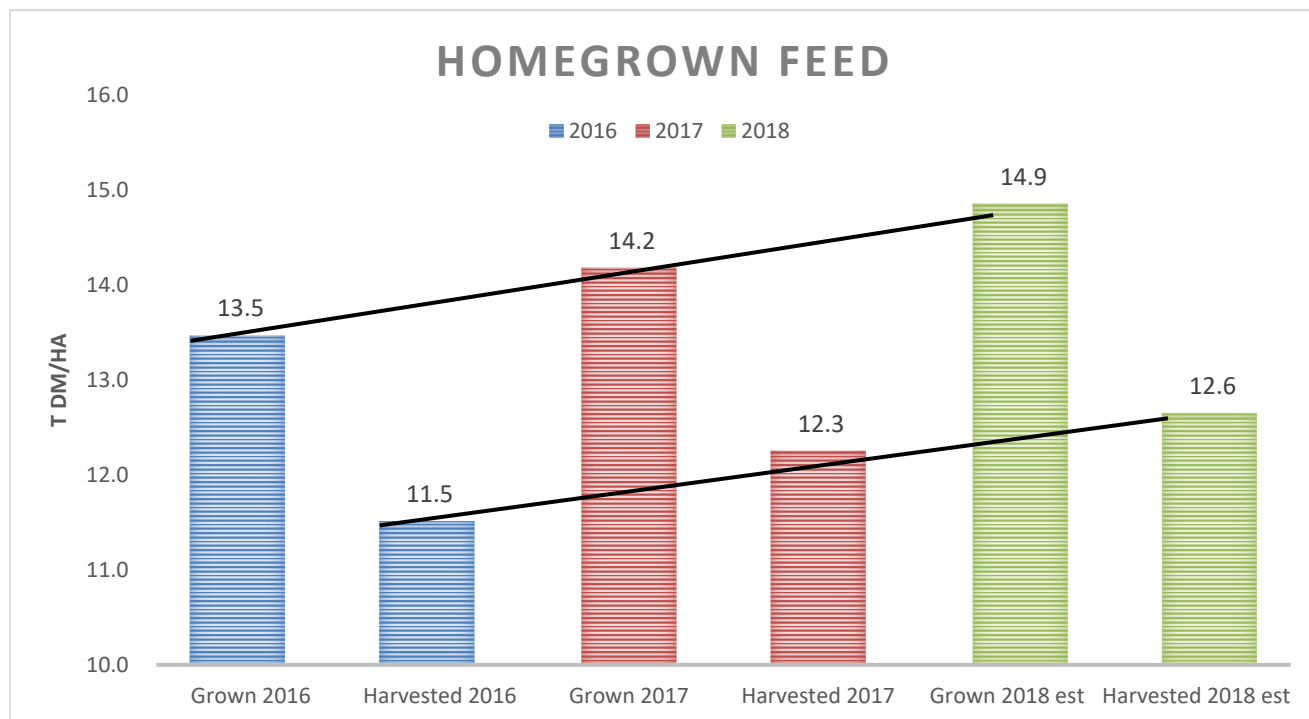
SUMMARY DATA



NOTES




PASTURE HARVESTED



NOTES



CASHFLOW BUDGET

<div>  <div>DAIRY CASHFLOW (GST excl.)</div> </div>													
CLIENT: OWL Farm		FOR YEAR ENDED: May-18											
INCOME	TOTAL	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
CATTLE	69,870				4,125	4,125					20,540	20,540	20,540
MILK	1,029,558	7,680	26,744	62,873	110,332	132,842	131,658	84,049	135,938	88,162	67,163	132,963	49,154
DIVIDEND	74,400					37,200						37,200	
REBATES	-												
OFF FARM	23,400	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950
TOTAL	1,197,228	9,630	28,694	64,823	116,407	176,117	133,608	85,999	137,888	90,112	89,653	192,653	71,644
EXPENSES	TOTAL	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
CATTLE	-												
WAGES	176,200	14,683	14,683	14,683	14,683	14,683	14,683	14,683	14,683	14,683	14,683	14,683	14,683
ANIMAL HEALTH	36,550	1,500	7,500	1,500	2,400	1,200	4,800	2,100	1,200	6,750	3,700	300	3,600
BREEDING	34,750	-	-	1,500	-	1,250	5,000	21,250	1,250	3,250	-	1,250	-
DAIRY SHED & ELECTRICITY	27,000	1,150	4,100	1,750	2,150	3,200	1,600	1,600	3,000	3,600	1,700	2,600	550
PURCHASED FEED	59,821	10,660	4,560	-	-	-	-	-	6,200	19,000	18,321	1,080	-
GRAZING-yearlings	49,036	4,086	4,086	4,086	4,086	4,086	4,086	4,086	4,086	4,086	4,086	4,086	4,086
GRAZING-calves	15,400	-	-	-	-	-	-	2,567	2,567	2,567	2,567	2,567	2,567
FERTILISER	73,500	1,000	5,000	1,500	13,000	10,000	7,000	5,000	8,500	-	19,000	-	3,500
FERTILISER SPREADING	5,000	-	-	-	5,000	-	-	-	-	-	-	-	-
FRIEGHT (Stock)	9,000	-	-	-	-	-	-	4,000	-	-	-	-	5,000
CARTAGE (Fertiliser)	4,500	-	300	-	1,050	500	550	400	-	-	1,450	-	250
WEEDS & PESTS	5,000	-	-	-	-	2,000	-	-	-	3,000	-	-	-
CONSULTANCY	7,200	600	600	600	600	600	600	600	600	600	600	600	600
SILAGE	24,750	-	-	-	-	16,500	8,250	-	-	-	-	-	-
CROPPING	23,900	-	-	-	8,900	5,000	-	-	-	-	10,000	-	-
REGRASSING	14,664	-	-	-	-	-	-	-	-	1,664	7,500	5,500	-
R & M	36,760	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063
VEHICLE Exp.'s	21,800	1,817	1,817	1,817	1,817	1,817	1,817	1,817	1,817	1,817	1,817	1,817	1,817
GENERAL	28,647	2,387	2,387	2,387	2,387	2,387	2,387	2,387	2,387	2,387	2,387	2,387	2,387
OVERHEADS	41,993	2,818	6,279	2,818	2,818	2,818	2,818	2,818	5,168	2,818	2,818	5,168	2,834
INTEREST COST	200,000	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667
LEASE LAND	30,000	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
TOTAL	925,471	62,932	73,543	54,872	81,122	88,272	75,822	85,538	73,688	88,452	112,859	64,268	64,104
MONTHLY SURPLUS	0	-53,302	-44,848	9,952	35,285	87,845	57,786	461	64,200	1,660	-23,206	128,385	7,540
CLOSING BALANCE	271,757	-53,302	-98,151	-88,199	-52,913	34,932	92,718	93,179	157,379	159,038	135,832	264,217	271,757

The sensitivity table below shows what happens to the net profit for the farm, if there is a change in price up or down, and production up or down. As we know the industry we farm in is volatile, and knowing the potential risk and reward for our individual farm must be completed to ensure that we make decisions that explore our farm's vulnerability and resilience to fluctuations beyond our control.

PRODUCTION/PRICE SENSITIVITY					
PRICE VARIANCE					\$0.59
PRODUCTION VARIANCE (KG's)					17,347
	\$4.75	\$5.34	\$5.93	\$6.53	\$7.12
138,778	-\$98,884	-\$16,519	\$65,846	\$148,210	\$230,575
156,125	-\$16,519	\$76,141	\$168,801	\$261,462	\$354,122
173,473	\$65,846	\$168,801	\$271,757	\$374,713	\$477,669
190,820	\$148,210	\$261,462	\$374,713	\$487,964	\$601,216
208,167	\$230,575	\$354,122	\$477,669	\$601,216	\$724,763

NOTES



BODY CONDITION SCORE

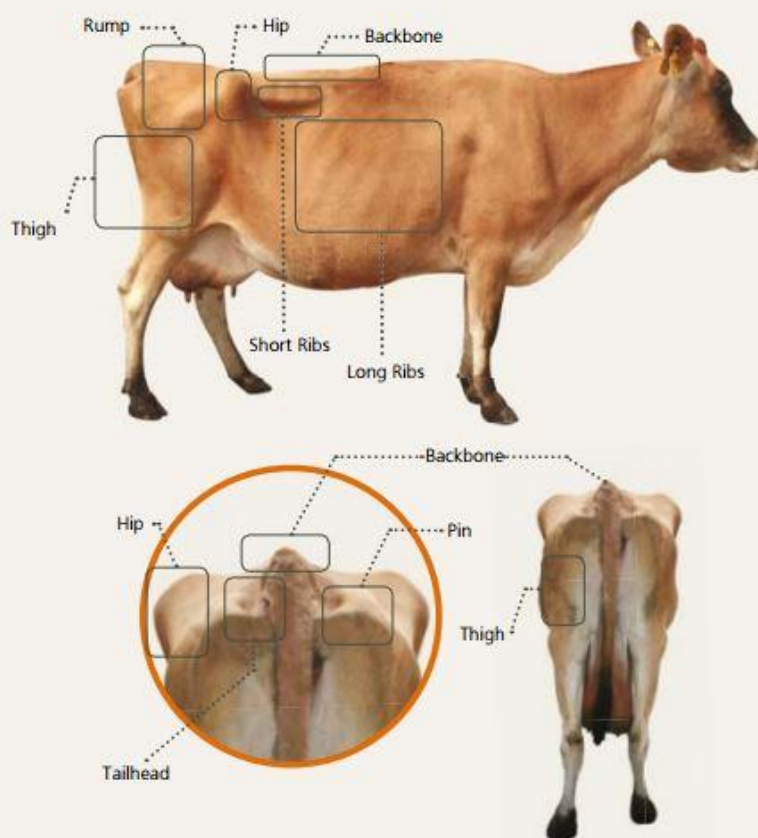
DairyNZ Body Condition Scoring - https://www.dairynz.co.nz/media/443179/bcs_reference_guide.pdf

Assessing BCS using the DairyNZ method

Key points

- Body condition score (BCS) is a subjective assessment of a cow's energy reserves. However, the BCS systems in place can accurately categorise the "fatness" of a cow if the assessor is well trained and experienced
- Body condition scoring is a simple process that rates the "fatness" of a cow on a scale of 1 to 10, where 1 is emaciated and 10 is obese. It is important to calibrate the eye by first condition scoring cows "hands on" at the dairy or in a vet/AB race before assessing cow BCS in the paddock
 - Line up 15 cows with a range of BCS
 - Put your hands on the important body points (outlined below) as cows tend to vary in shape and where they store fat. Assessing all of these points allows an assessor to be consistent across breeds and cow ages
 - Feel the amount of fat cover over the recommended body points and the differences between the cows
 - Allocate a score to each of the eight body parts and average the different areas to come up with the BCS for that cow.
- Having calibrated your eye, assess BCS of at least 70 randomly selected cows in each herd to get a good indication of the average (and range) BCS of the herd
- Body condition scoring is easy but requires practice.

Important body points to consider when condition scoring cows.



6 | DairyNZ body condition scoring

NOTES



HERD PERFORMANCE

Herd lactation averages to 12/04/2017

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2016 Calvers 1-305 day lactation averages

Age group	No. of animals	No. dry	Milk (l)	Fat (%)	Fat (kg)	Protein (%)	Protein (kg)	Milksolids (kg)	Days	SCC (000)	BW (\$)	PW (\$)	LW (\$)
2 Years	98	43	3932	5.05	198	3.83	150	349	256	45	127/44	149/47	152
3 Years	80	17	4562	5.04	230	3.85	176	406	247	61	118/45	129/60	127
4 Years	63	11	4537	4.92	223	3.79	172	395	243	60	112/46	125/68	130
5 Years	54	6	4942	4.82	238	3.68	182	420	247	54	100/48	118/76	130
6 Years	39	8	4078	5.12	209	3.71	151	360	222	83	93/49	103/75	103
7 Years	33	2	4823	4.94	238	3.69	178	416	243	101	91/50	132/79	135
8 Years	25	2	4048	4.98	202	3.75	152	353	222	114	83/50	119/81	78
9 Years	22	4	4477	5.36	240	3.71	166	406	241	122	55/53	101/82	127
10+ Years	17	5	3976	5.06	201	3.55	141	343	215	91	67/52	104/82	64
Whole Herd	431	98	4382	5.01	219	3.76	165	384	243	68	105/47	127/66	127
Excess													

The fewer herd tests an animal has in a lactation, the less accurate and complete the accumulated lactation figures will be.

Herd test averages

[Print](#)

Test date	Interval (days)	No. of animals	Milk (l)	Fat (%)	Fat (kg)	Protein (%)	Protein (kg)	Milksolids (kg)	SCC (000)	Total fat	Total protein	Total milksolids
04/09/2016		384	23.00	4.88	1.12	3.71	0.86	1.98	104	431	328	760
01/12/2016	88	406	17.20	4.72	0.81	3.66	0.63	1.44	81	330	255	585
23/01/2017	53	413	15.70	5.15	0.81	3.80	0.60	1.41	95	335	247	581
28/03/2017	64	349	13.30	5.87	0.78	4.17	0.56	1.34	130	272	194	466

2015 Spring Born

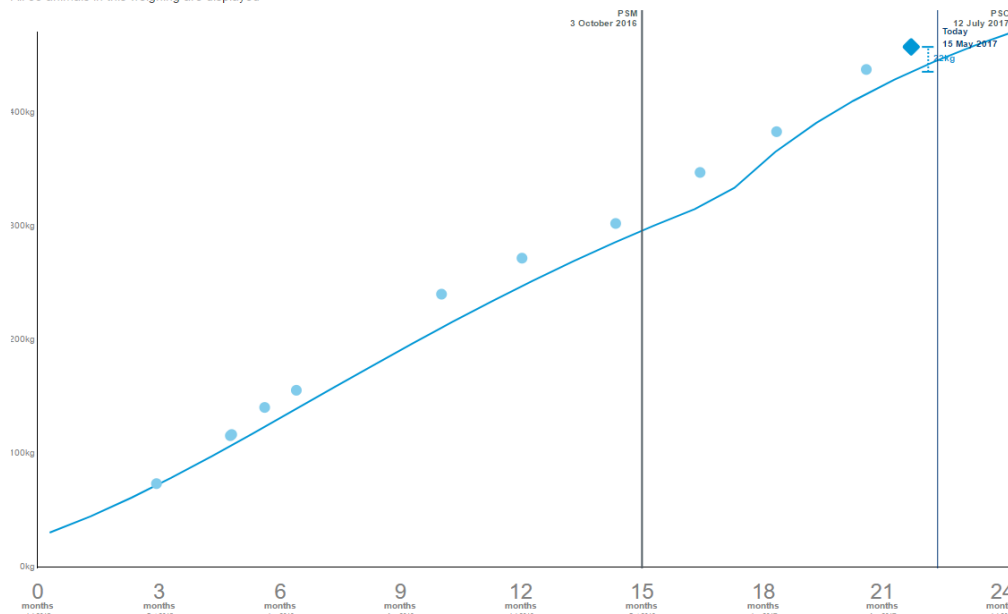
R2s250417

25/04/2017

Young stock trend

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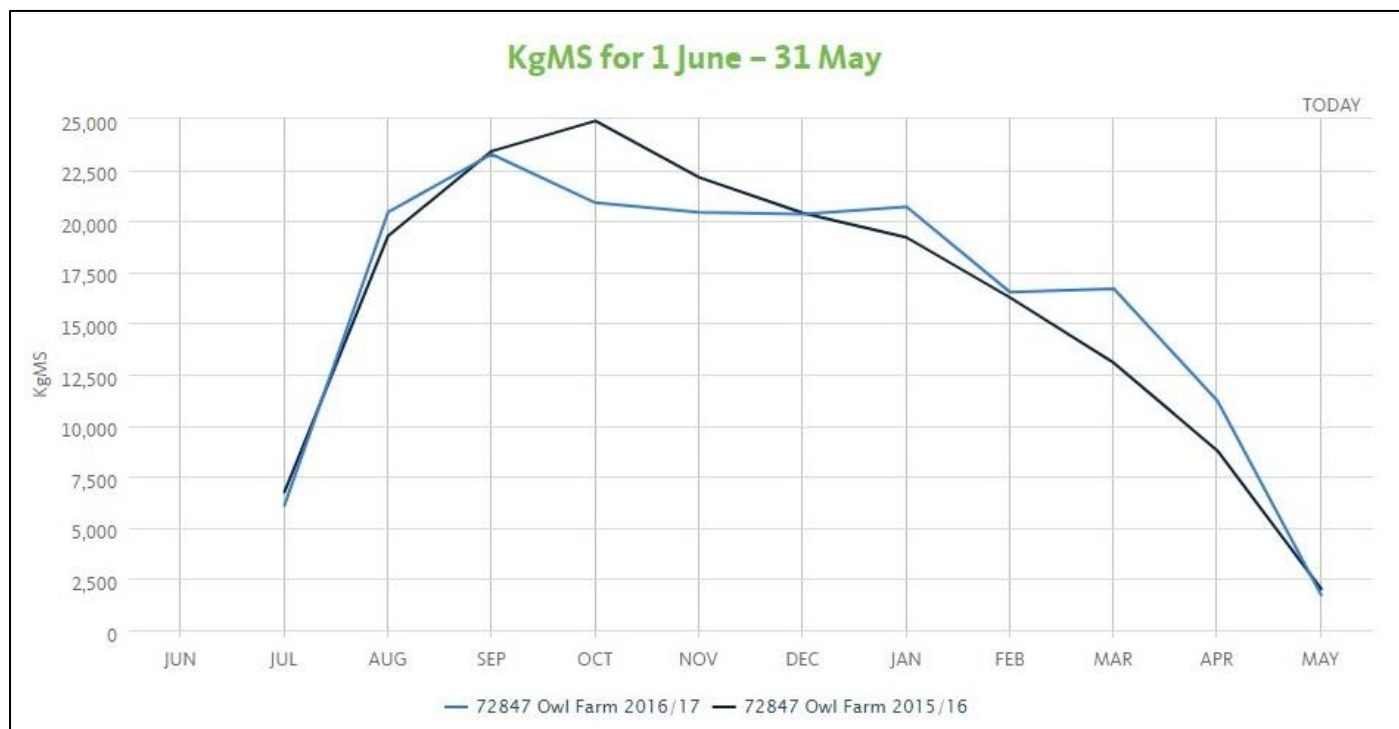
All 88 animals in this weighing are displayed



NOTES

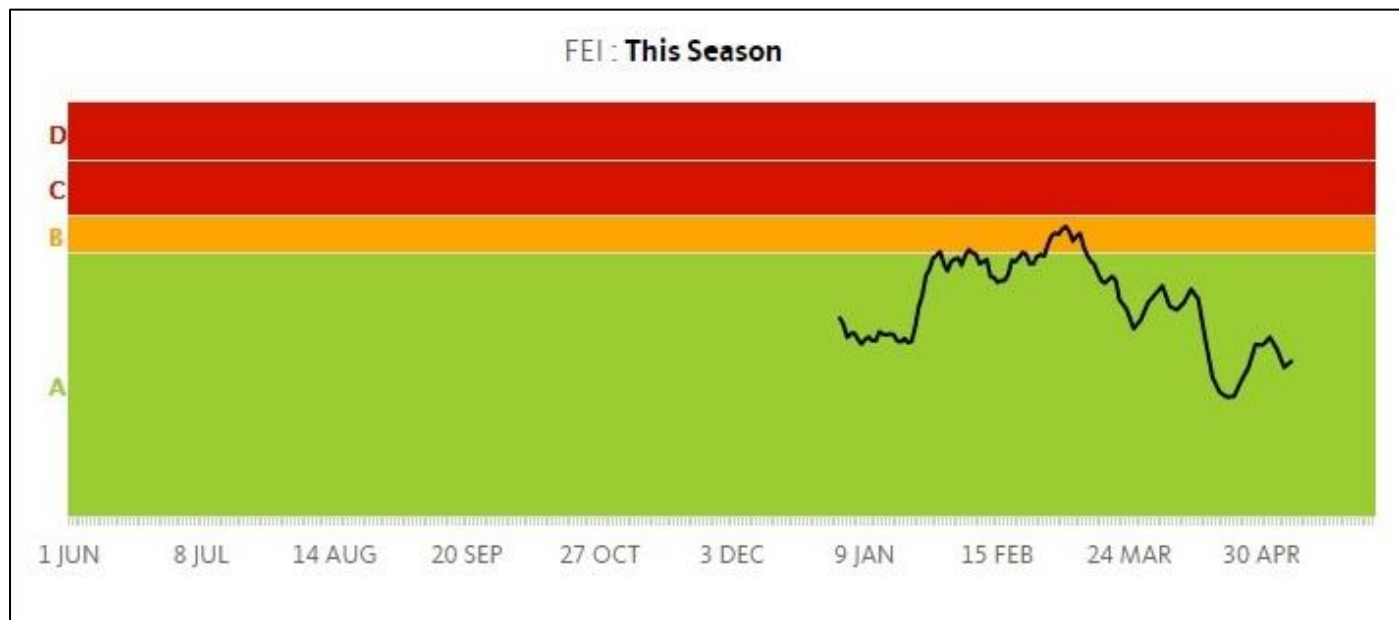


MILK PRODUCTION SUMMARY



THE FAT EVALUATION INDEX

This Graph illustrates the fat evaluation completed by Fonterra for Owl Farm this season. The Red area is the threshold that we will endeavour to stay beneath. This is only an advisory limit at this point in time. Moderating the amount of dietary fat will affect our result on this graph, and help all farmers know how much PKE they can feed on their farm.



NOTES





Next Farm Focus Day
Wednesday, 13 September 2017

Weekly Monitor Walk
Tuesdays, 23 and 29 May
6, 13, 20 and 27 June 2017

2017 NZ National Fieldays
Wednesday 14 to Saturday 17 June 2017
Main Pavilion, Stand PB28 and PB30



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NOTES

