



Profitability. Sustainability. Competitiveness.

Northland DairyNZ Focus Farm

Final Field-day
26th May 2015

**Alister and Lyn Candy
Plateau View,
Signal Rd,
Okaihau**

BIG Thanks to our Sponsors:

**DairyNZ, ANZ, Ballance Agri-Nutrients, RD1, Bay Vets, CRV,
Northland Regional Council, Johnston O'Shea Ltd**



BETTER COWS | BETTER LIFE



Alister & Lyn Candy: Goals and Vision:

Vision: To enjoy farming; maintaining our current lifestyle while having a profitable bottom-line

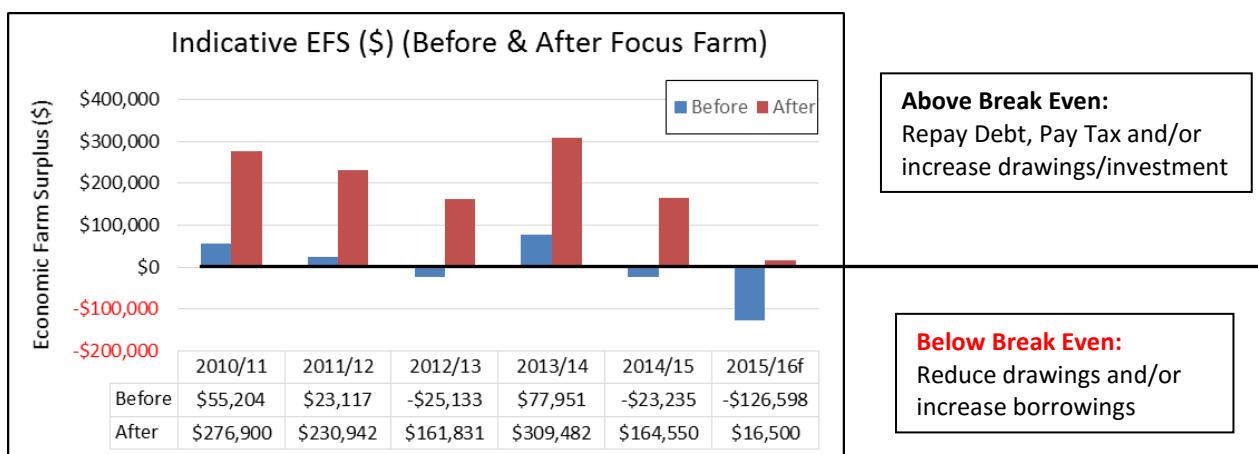
Goals and focus areas are represented in the planning wheel. Some of the key goals include:

- Reducing debt by \$100,000 per annum
- Increase Production by 10,000 kgMS per annum from 80,000 kgMS to 100,000 kgMS
- Continue to develop the Runoff

Alister and Lyn started the Focus Farm Journey in September 2011, it's been an exciting 4 years; we're pleased with the progress we've made toward achieving **Profit from Pasture** and looking forward to sharing that progress with you. There have been some great gains in milk production and reproduction, but financial changes have created a farm business that is stronger – better able to weather climatic or milk price fluctuations. Getting control of finances has been a key driver of these changes.

Impact of the Changes:

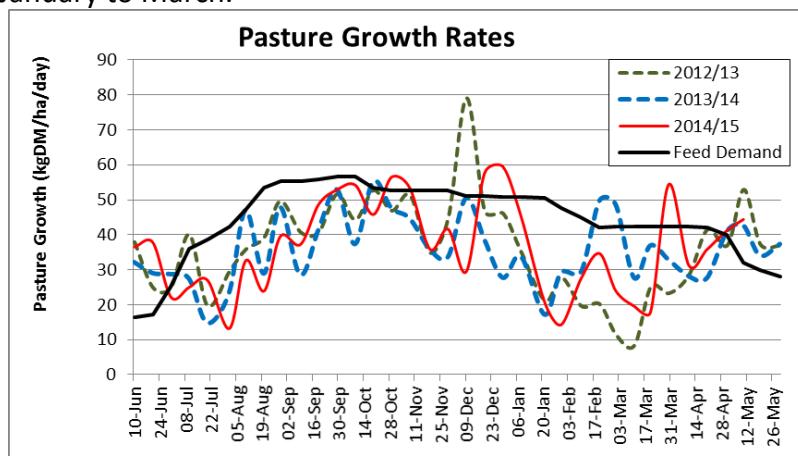
The potential impact of these changes is outlined in the graph below. This graph compares production of 73,000 kgMS and farm working expenses of \$5.09/kgMS (Before), against 105,000 kgMS and farm working expenses of \$3.70/kgMS (After), with \$120,000/year drawings/debt servicing in both scenarios. Recent milk prices have been used to illustrate the impact these changes would have on the farm business.



Over these 6 years, the cumulative profit is predicted to be a loss of **-\$18,694** for the “before” scenario, compared with \$1,160,204 for the “after” scenario, a difference of almost \$1.2 million between the scenarios. Which farm would you like to be running?

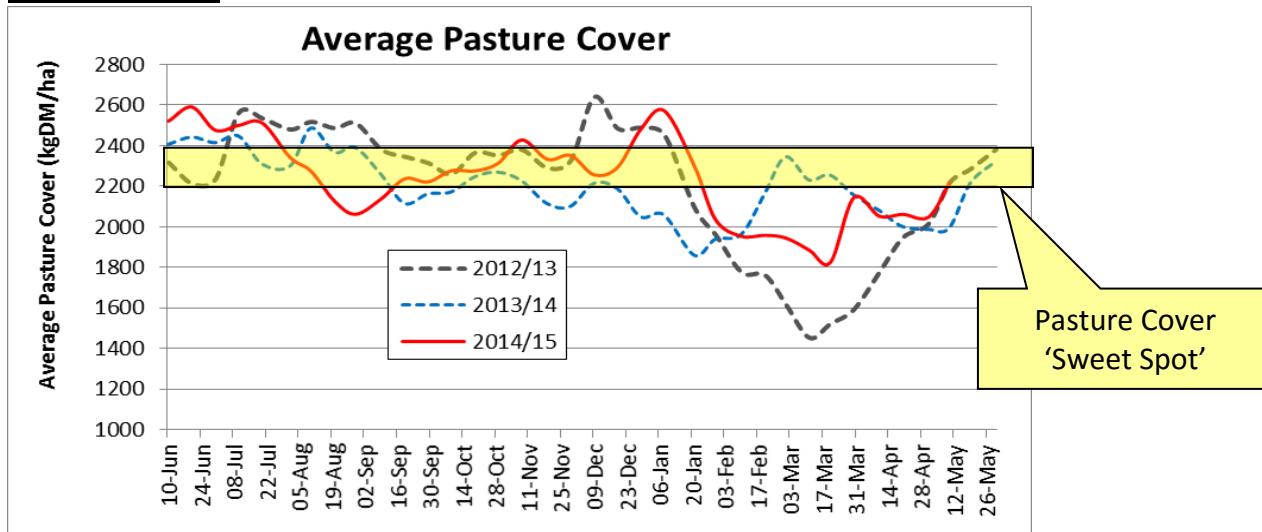
Pasture Growth:

2014-15 season was a challenging season for pasture growth; pasture growth was lower than recent years in the winter and spring, followed by explosive growth in December, then dry weather from January to March.



A gap between the Red line (Pasture Growth) and Black line (Feed Demand) represents the feed deficit/surplus. The last 3 seasons have shown similar trends in pasture growth – a feed deficit in early lactation, a short dry period in late spring (mating), followed by rain around December, then dry weather through summer contributing to a feed deficit. These prolonged deficits have required some nimble management.

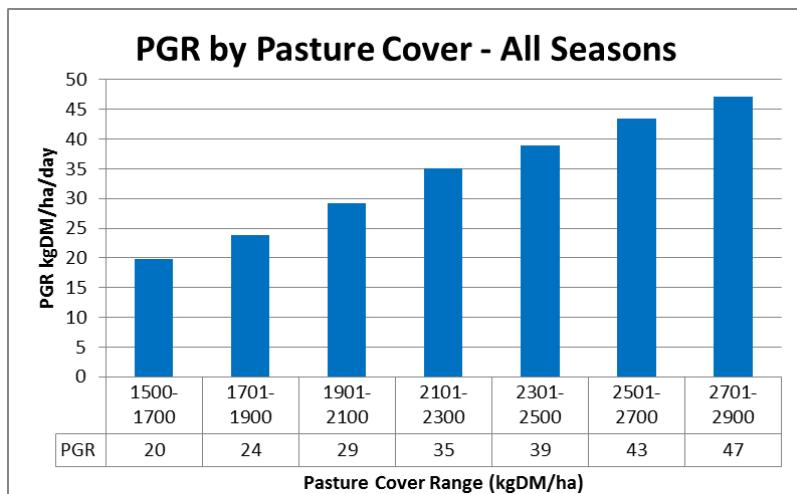
Pasture Cover



The pasture cover “Sweet Spot” represents a balance; enough pasture to maximise growth, without compromising pasture quality. Pasture cover dropped outside the sweet spot in late winter, PKE was used to hold the rotation and rebuild pasture cover. Rain in December resulted in pasture cover increasing quickly and maintaining feed quality was challenging, compounded by dry weather from January-April. Moving to a long rotation and sending empties and culls early helped hold pasture cover despite dry weather in summer.

Grass Grows Grass:

Analysis of the pasture growth rates from the Focus farm clearly shows the **Grass Grows Grass** principle. Pasture growth rates were analysed based on different pasture cover bands; the higher the pasture cover, the higher the pasture growth rates with the same trend happening across the seasons:



What's the Number 1 Rule of Pasture Farming? Rotation, Rotation, Rotation!

This reinforces the importance of rotation length, especially when pasture cover is low and it's just as true in a dry summer as during winter. If you want to increase pasture production, matching rotation length to leaf emergence rate is a good place to start; a slow rotation when pasture growth is low, a faster round when pasture growth is faster. Longer round grows more ryegrass, use your rotation length to keep pasture cover in the sweet spot – Use the Spring Rotation Plan from calving to balance date.

Feed Eaten

Our key focus has been ***Profit from Pasture***; pasture harvested has been an important performance indicator. We've used milk production and stock numbers to estimate Pasture and Crop eaten (tonnes dry-matter per hectare). This analysis strips out the impact of supplementary feed or winter grazing and identifies how much home-grown feed you harvest. Even with higher supplement use, pasture harvested has lifted – indicating supplement has been used to drive pasture growth and utilisation.

	2014/15 Actual	2014/15 Budget	2013/14	2012/13 <i>Drought</i>	2011/12	2010/11
Imported Feed:						
Grass Silage and Hay tDM	0	0	0	0	5	6
PKE (tonnes of DM)	211	195	224	107	100	43
Molasses tDM	0	0	0	0	3	50
Maize Silage	0	0	0	70	0	0
Meal or PKE/Broll (tDM)	0	0	11	16	21	0
Total Imported Feed (t DM)	211	195	235	193	139	99
Home Grown Hay & Silage Fed	0	0	0	25	5	-
Grazing Off (Cows) (tonnes DM)	68	89	89	120	67	71
Imported Feed and Grazing (tDM)	279	284	324	313	161	170
<i>Imported Feed/Grazing (tDM/ha)</i>	2.71	2.76	3.15	3.03	1.5	1.6
<i>Imported Feed/Grazing (kgDM/cow)</i>	888	904	1029	990	519	515
Cows (at Peak)	315	315	315	316	310	330
Total Feed Eaten (tDM/ha)	13.3	13.6	14.0	11.7	10.7	10.5
Pasture and Crop eaten (tDM/ha)	10.6	10.8	10.8	8.7	9.1	9.0
Pasture Grown (tDM/ha) ¹	13.26		13.07	13.25	14.94	
Pasture Eaten (% Grown)	80%		84%	68%	63%	

¹Based on farm walk data

In 2014/15 culls were marketed early (Dec) and empties marketed shortly after pregnancy testing, prompted by lower milk price forecasts. This proved to be a good decision, more PKE was fed than budgeted, but early culling reduced PKE required by at least 60 t (\$19,000). This is in contrast to the 2013/14 season, when strong milk prices made it viable to milk empties to the end of the season.

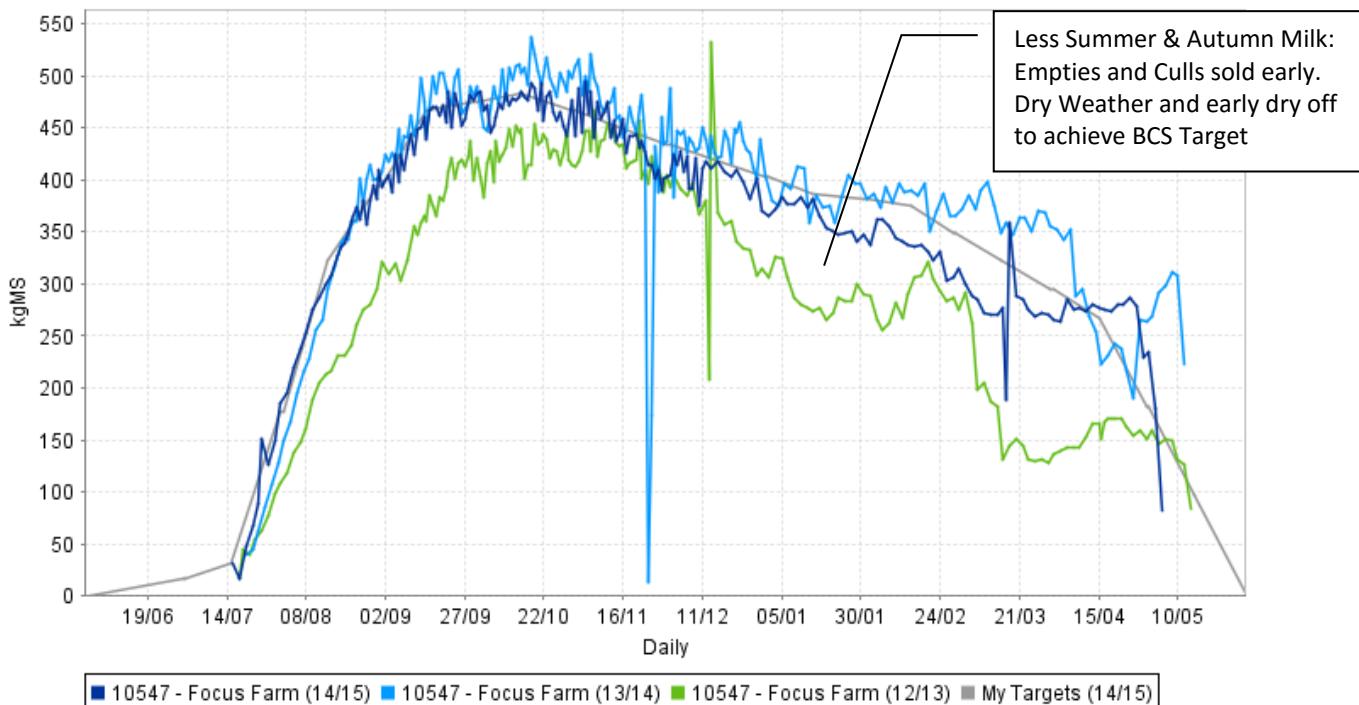
Milk Production:

Recent Milk Production is summarised in the table below. The 3 year average before the focus farm was 73,307 kgMS (232 kgMS/cow and 712 kgMS/ha). The farm had produced 96,000 kgMS In 2005/06, but subsequent production had slumped as drought, spread calving and thin cows impacted the farm.

	Focus Farm	kgMS	Peak Cows	kgMS/ha	kgMS/cow	Cows/ha
2014/15	Year 4	103,109	320	1001	322	3.11
2013/14	Year 3	111,745	318	1085	351	3.09
2012/13	Year 2	84,878	315	824	269	3.06
2011/12	Year 1	82,717	310	803	267	3.01
2010/11		77,462	330	752	235	3.20
2009/10		70,338	320	683	220	3.11
2008/09		72122	320	680	225	3.11

The focus farm has targeted good milk before Christmas (66,000 kgMS by end of Dec) to reduce reliance on autumn production and make the most of reliable winter and spring pasture growth.

Milk production was slightly behind the previous season due to a wet spring. The production gap widened once the culls and empties were marketed from December and the dry weather impacted in Jan/Feb. Milk production held well through March and April, but the cows were slow to gain condition; most of the feed was used for milking. Given the low milk price this season, the decision was made to dry the cows off rather than run the risk of missing BCS targets and compromising next season.



Reproduction:

Two key focus areas for reproduction have been:

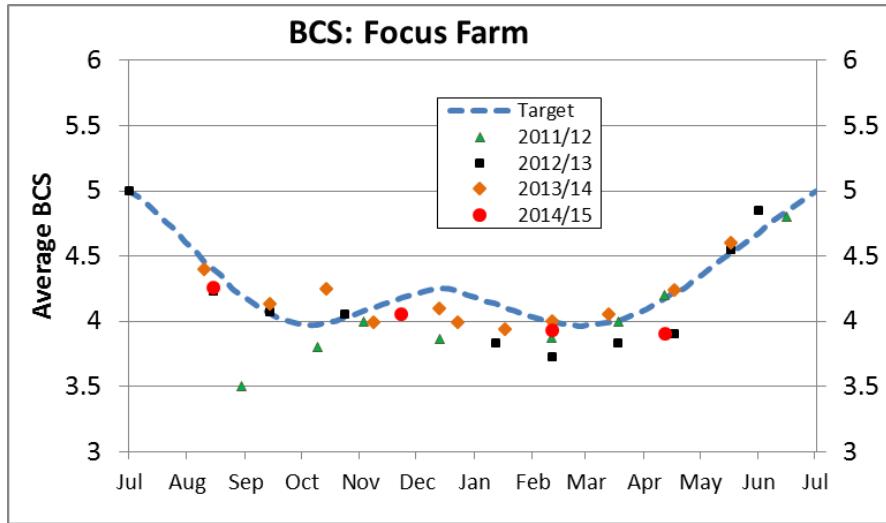
- Achieving body condition score (BCS) target at calving
- Improving young-stock growth rates

Prostaglandin was used in the 2012 and 2013 mating to bring cycling cows a week earlier (65% of cows responded). Mating was brought forward 5 days in 2013; Alister and Lyn have made huge gains with reproduction, but as the fertility focus report indicates, there is still scope for further improvements. No CIDR's or Inductions are used.

	3 Wk Submission Rate (%)		First Scan	Empty Rate	6 Week In Calf Rate (%)
	Whole Herd %	First Calvers (%)			
2010 mating	33	24	-	10% (17 wk mating)	40
2011 mating	54	73	66% (6.5 wks mating)	8.3% (13 wk mating)	63
2012 mating	72	81	80% (7 wks mating)	8.5% (12 wk mating)	66
2013 mating*	76	75	52% (3 ½ wks mating)	11% (12 wk mating)	63
2014 mating	76	79	71% (6 ½ wks mating)	9.4% (12 wk mating)	71
Target	90%	90%		6%	78%
Your farm					

*2013 Mating brought forward 5 days

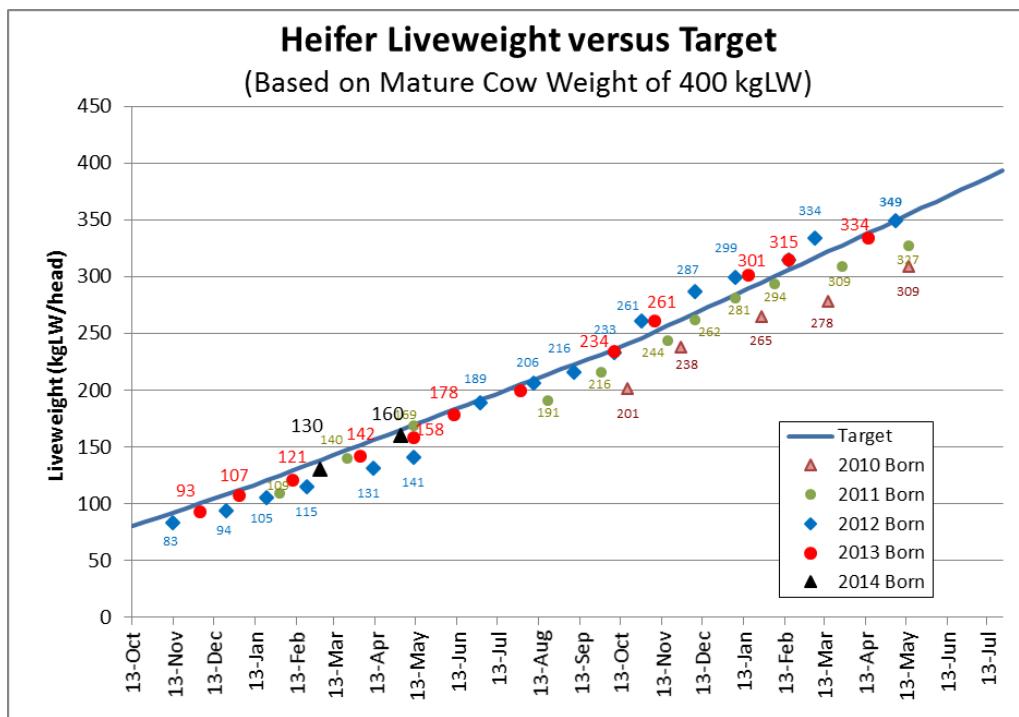
Body Condition Score (BCS): Achieving BCS target of 5 by calving (or 5.5 for first and second calvers) is non-negotiable and has been a key component of the milk production increase.



Despite being well fed with supplement in late lactation, cow condition has been below target through the autumn. Drying the cows off in early May should ensure the cows achieve BCS target. The intention is to get cow as close to possible to BCS before sending them to the runoff – light cows will remain on the milking platform and be offered PKE to ensure they achieve target

Youngstock:

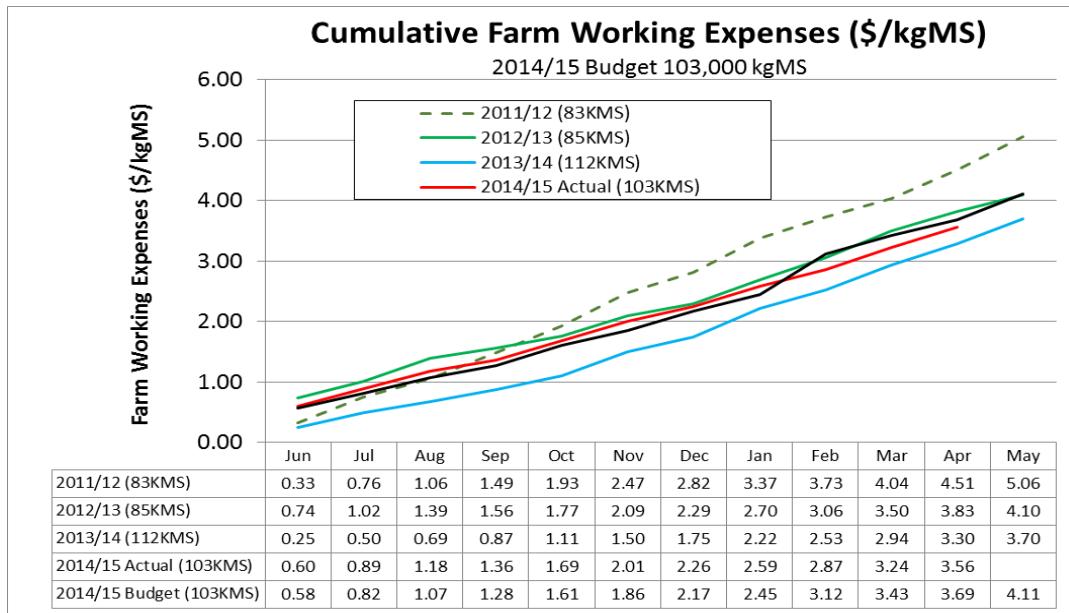
Heifer growth has improved – paddock subdivision and water, along with a lime application have improved pasture quality at the support block. Yearlings and calves are fed PKE if required (e.g. during dry weather). We have adjusted the target liveweight for mature cows from 446 kgLW/cow to 400 kgLW/cow (a figure Alister and Lyn are more comfortable with). This means the heifers should be 360 kgLW at 22 months (mid May):



Heifers are weighed monthly through the summer and autumn (when heifers are drenched).

Financial Update

Farm expenditure has been managed closely, tracking well against budget through the early part of the season. The decision to sell the culls early and sacrifice milk production means farm working expenses are likely to be above the \$3.70/kgMS target, but overall budgeted expenditure should be similar.



Managing and focussing expenditure has played an important role on the focus farm. Extra milk production has diluted expenses on a \$/kgMS basis, with overall expenditure increasing only slightly.

There were three steps to achieving these financial gains:

1. Benchmark:

- Compare your expenses against other farms using DairyBase
- Look at areas where you are higher than the benchmark
 - Are there opportunities to reduce expenditure in these areas
- Look at areas where you are lower than the benchmark
 - Is it sustainable, are you missing an opportunity?
- Don't use the benchmark as a target – who wants to be Average?
- Work with your Rural Professionals and develop a plan to reduce costs – Alister and Lyn reprioritised expenditure – reduced expenses in some areas (e.g. Nitrogen) and spent more in others (e.g. PKE)

2. Budget:

- Budgets give you the full picture – programs like Cashmanager Rural make it easy to change the budget and look at different options. Uncertainty about the milk price is a good reason to do a budget, not an excuse to avoid it.
- Use the budget as the farm plan, start with the big expenses (e.g. Fertiliser, Feed, Wages & Repairs and Maintenance) and try to get the timing right with seasonal expenses (e.g. Breeding, electricity, Animal Health)
- Put plans you develop with Rural Professionals into the budget – use it to stay on track with the changes and check how you're going
- Use the budget to check the predicted bank balance – does it work or do you need to look at deferring or spreading some expenses – if you defer expenses make sure to include them in the budget

3. Monitor & Manage:

- Monitoring is all about being in control – having time and confidence to make decisions
- Budgets give you something to monitor against – monitor actual expenses against the budget monthly (variance report), you get better information than just doing every 2 months for GST
- Monitoring allows you to identify blow-outs early and get control before it becomes an issue
- Update the budget with actual expenses (revised budget report) and use it forecast the bank balance – you can see the crunch time 6-8 months in advance and make plans to avoid issues
- Monitoring and managing gives farmers confidence and control, but it also builds confidence with bank managers, accountants and consultants

CANDY FOCUS FARM CHECKLIST:

Here is a take home checklist of the key changes that drove Alister and Lyn's fantastic improvement in performance and profit. Can you put a tick by some of these to improve profit and performance on your farm?

What Changed	How Well Are You Doing This?				
	I'm Not	Pretty Poor	I'm OK	Pretty Good	I'm a Star
Pasture:					
Checking Post Grazing Residuals Each Day					
Rotation Length Targets for Each Month					
Spring Rotation Plan to Allocate Feed in winter					
10 Day Farm Walk & Feed Wedge					
Winter Feed Budgets					
Runoff/Winter Grazing Plan					
Supplement Plan – When & How Much					
Standoff Plan to Avoid Pugging					
Nitrogen Plan – When and How Much					
Animal:					
Assess Body Condition Score Regularly					
Achieve Body Condition Score 5 at Calving					
Weigh Youngstock & Compare against targets					
Creating a preferential mob for "at risk" stock					
Analyse Reproductive Performance annually					
Reproduction Plan (Key dates and Actions)					
Financial:					
Benchmark on DairyBase					
Annual Cashflow Budget					
Monitor Expenses Against budget (monthly)					
Use Cashmanger to do my GST					
Adjust Budget when Fonterra changes forecast					
Share my Budget with People I Trust					

WHO WILL YOU SHARE THIS SHEET WITH TO MAKE A POSITIVE DIFFERENCE TO YOUR BUSINESS & YOUR FAMILY?

Pasture

- **Target Residuals:** This tells you how well the cows are being fed - Intakes were calculated to leave 1500 residuals for milkers
- **Target Rotation Length:** Have rotation length targets for each month – this drives growth rates
- **Spring Rotation Plan:** Use the SRP to manage rotation and area grazed from planned start of calving to balance date. It was made By Northland farmers for Northland farmers
- **Farm Walks:** Alister and Lynn measured their grass every 10 days and used the results to allocate their grass and supplements
- **Runoff and Feed Budget:** Have a plan for winter at the runoff, daily shifts were essential
- **Supplements Used Accurately and Profitably:** Aliser and Lynn used their supplements to fill true feed deficits and rotation length and post grazing residuals. Plan how much you'll need and monitor against the plan
- **Avoiding Pugging:** Alister and Lynn used a variety of strategies to avoid damaging pasture during wet periods – you don't need a herd home or standoff pad, just some planning
- **Nitrogen:** Nitrogen was used following grazing though the winter to increase growth rates and strategically with rain to slow the rotation before summer

Cows

- **Regular BCS** Alister and Lynn learned to consistently condition score their cows
- **Target BCS.** Getting all cows to condition score 5 at calving was an important goal. OAD milking at risk cows was a strategy used to improve cow condition
- **Target intakes.** Alister and Lynn worked hard to accurately fully feed their cows, without wasting grass
- **Reproduction focus.** A big effort was made to improve their 6 week in calf rate
- **OAD milking** of light condition cows to help them cycle

Young stock

- **Regular Weighing and Monitoring.** Young stock were weighed and drenched regularly and their progress monitored against their target weights
- **Preferential Mobs:** Animals below target were split out and given preferential feeding
- **PKE over first summer.** PKE was fed over the calves first summer to maintain the challenging target growth rates – the energy of summer/autumn grass is not sufficient
- **Improved subdivision** Alister and Lynn dramatically improved the subdivision on their runoff. Daily shifts and improved pasture quality led to better growth rates.

Financial

- **Benchmarking:** Comparing Alister and Lynn's income and costs with other similar dairy farm businesses and top performing operators – Question what's different and why
- **Make A Plan:** Work with trusted rural professionals to manage expenditure
- **Budget:** Alister and Lynn shared their budget with Charmaine and the Management team to create an ambitious budget
- **Cash Manager:** Coding and recording all expenditure and income to ensure there is good financial information to drive decisions
- **Monitoring Budget v Actual.** Each month they compared their actuals against budget to see how they were going and identify issues early