LUDF's progress on repro and flexible milking

Collar Fertility Overview Report

LUDF 2022/23 vs 2023/24 Comparison

April 2024

LUDF. Peter Hancox. 541 cows, 160 Ha farm, Lincoln.

SIDDC
South Island Dairying Demonstration Centre

LUDF
Tomorrow's farming, today

SELWYN RAKAIA VET SERVICES

VETERINARY CENTRE

Background

Fertility Focus 2021: Seasonal

Lincoln University
The Manager (University Dairy Farm) Hancox

Report date:	29/03/23
PTPT:	BQCY
Herd Code:	6/114
No of cows included:	559
These cows calved between:	10/06/21 and 16/12/21
Mating start & end date: (based on AB or pregnancy test data)	18/10/21 - 01/01/22
Next planned start of calving:	27/07/22
Duration of mating:	76 days
Duration of AB period:	75 days

incalf FERTILITY FOCUS
Version 3.01

DairyNZ

LIC

1 Overall herd reproductive performance

6-week in-calf rate
Percentage of cows pregnant in the first 6 weeks of mating

Your herd	68%
Aim above	78%

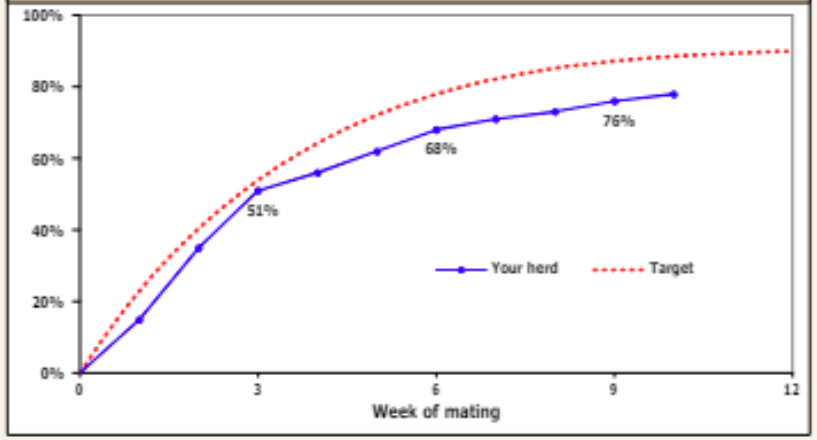
☆☆☆

Not-in-calf rate
Percentage of cows not pregnant after 76 days of mating

Your herd	21% (20-21%)
Aim for	11%

☆

% of herd in calf
Cumulative by week of mating



2 Drivers of the 6-week in-calf rate

3-week submission rate
% of cows that were inseminated in the first 3 weeks of mating

Your herd	94%
Aim above	90%

☆☆☆☆☆

Non-return rate
% of inseminations that were not followed by a return to heat

Your herd	
Aim above	

Conception rate
% of inseminations that resulted in a confirmed pregnancy

Your herd	46%
Aim above	60%

☆

Farm System Changes from 2021/22 to 2022/23

SIDDC Repro Benchmarking Project

***Started in 2021/22 Season (so consistent across both years)**

Flexible Milking

Background

Fertility Focus 2021: Seasonal

Lincoln University
The Manager (University Dairy Farm) Hancox

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Herd Code:	6/114
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Next planned start of calving:	27/07/22
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Duration of AB period:	75 days

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Version 3.01

DairyNZ

LIC

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6-week in-calf rate
Percentage of cows pregnant in the first 6 weeks of mating

Your herd	68%
Aim above	78%

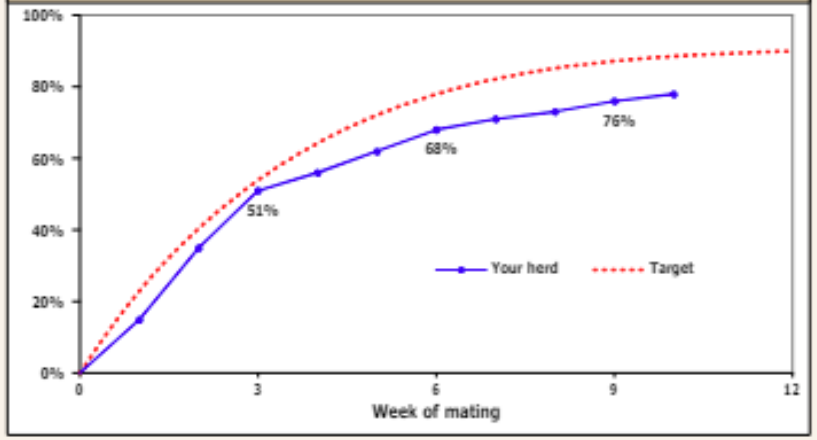
☆☆☆

Not-in-calf rate
Percentage of cows not pregnant after 76 days of mating

Your herd	21% (20-21%)
Aim for	11%

☆

% of herd in calf
Cumulative by week of mating



2 Drivers of the 6-week in-calf rate

3-week submission rate
% of cows that were inseminated in the first 3 weeks of mating

Your herd	94%
Aim above	90%

☆☆☆☆☆

Non-return rate
% of inseminations that were not followed by a return to heat

Your herd	
Aim above	

Conception rate
% of inseminations that resulted in a confirmed pregnancy

Your herd	46%
Aim above	60%

☆

SIDDC Repro Benchmarking Project

- **Allflex Sensehub Collars**
  - **Enabled full season AB**

- **Phantom Scanning (to reduce herd NICR)**

- **Longer mating length (enabled by short gestation semen)**

Fertility Focus 2022: Seasonal

ALDERBROOK #1
48 Headworks Road
RD 13
RAKAIA
7783

Report date:	08/03/23
PTPT:	PHFB
Herd Code:	6/11325
No of cows included:	660
These cows calved between:	17/06/22 and 23/12/22
Mating start & end date: (based on AB or pregnancy test data)	25/10/22 - 10/01/23
Next planned start of calving:	03/08/23
Duration of mating:	78 days
Duration of AB period:	78 days

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DairyNZ

infovet

1 Overall herd reproductive performance

6-week in-calf rate
Percentage of cows pregnant in the first 6 weeks of mating

Your herd	82% (81-82%)
Aim above	78%

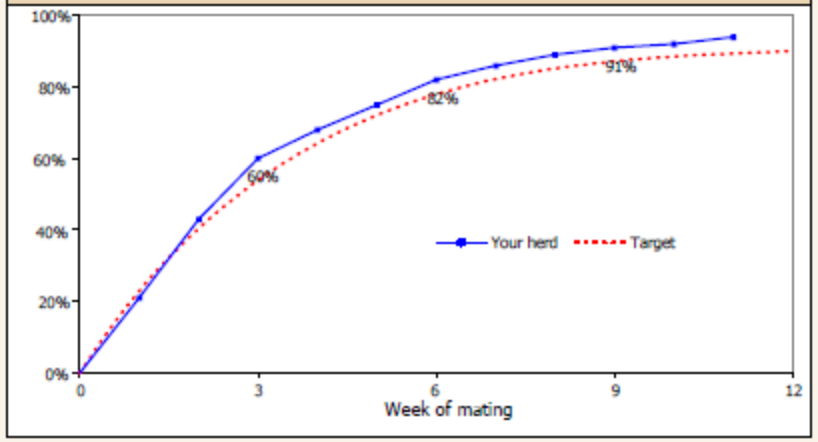
☆☆☆☆☆

Not-in-calf rate
Percentage of cows not pregnant after 78 days of mating

Your herd	6% (4-6%)
Aim for	10%

☆☆☆☆☆

% of herd in calf
Cumulative by week of mating



2 Drivers of the 6-week in-calf rate

3-week submission rate
% of cows that were inseminated in the first 3 weeks of mating

Your herd	94%
Aim above	90%

☆☆☆☆☆

Non-return rate
% of inseminations that were not followed by a return to heat

Your herd	
Aim above	

Conception rate
% of inseminations that resulted in a confirmed pregnancy

Your herd	59%
Aim above	60%

☆☆☆☆☆

3WICR
51% to 52%

6WICR
68% to 75%

Conception Rate
46% to 50%

NICR
21% to 9%

BUT:24 late losses (between phantom & final scan) = 4.4%
18 days longer mating length

Fertility Focus 2022: Seasonal

Lincoln University
The Manager (University Dairy Farm) Hancox

Report date:	28/03/24
PTPT:	BQCY
Herd Code:	6/114
No of cows included:	542
These cows calved between:	15/06/22 and 21/12/22
Mating start & end date: (based on AB or pregnancy test data)	23/10/22 - 23/01/23
Next planned start of calving:	01/08/23
Duration of mating:	93 days
Duration of AB period:	90 days

incalf FERTILITY FOCUS Version 3.01

DairyNZ

LIC

1 Overall herd reproductive performance

6-week in-calf rate
Percentage of cows pregnant in the first 6 weeks of mating

Your herd	75% (74-75%)
Aim above	78%

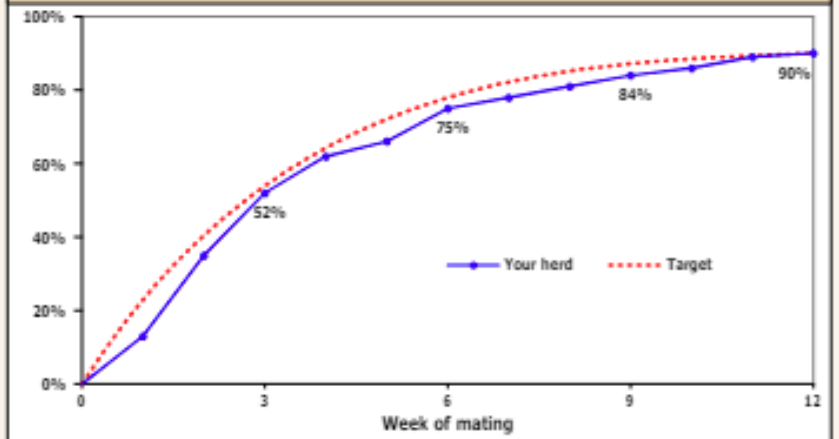
☆☆☆☆☆

Not-in-calf rate
Percentage of cows not pregnant after 93 d

Your herd	9% (8-9%)
Aim for	9%

13%??

% of herd in calf
Cumulative by week of mating



2 Drivers of the 6-week in-calf rate

3-week submission rate
% of cows that were inseminated in the first 3 weeks of mating

Your herd	87%
Aim above	90%

☆☆☆

Non-return rate
% of inseminations that were not followed by a return to heat

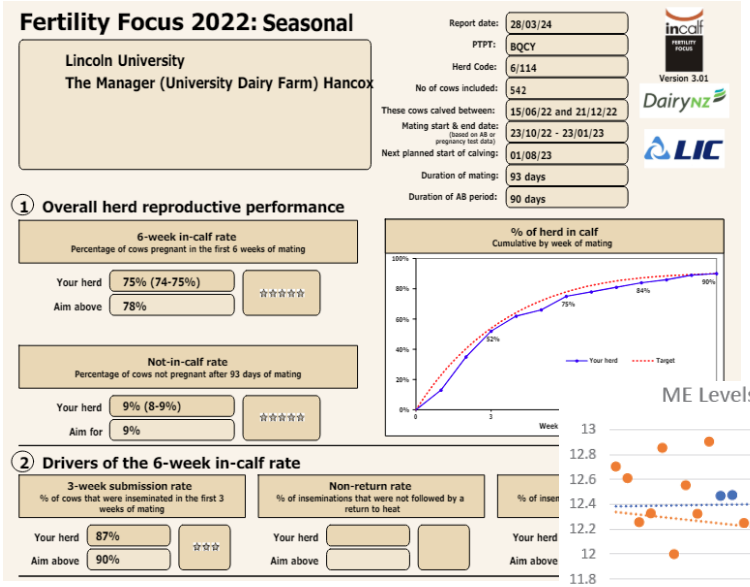
Your herd	
Aim above	

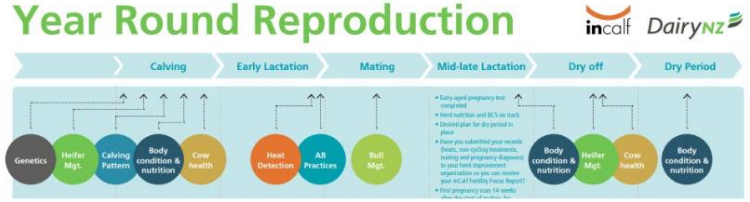
Conception rate
% of inseminations that resulted in a confirmed pregnancy

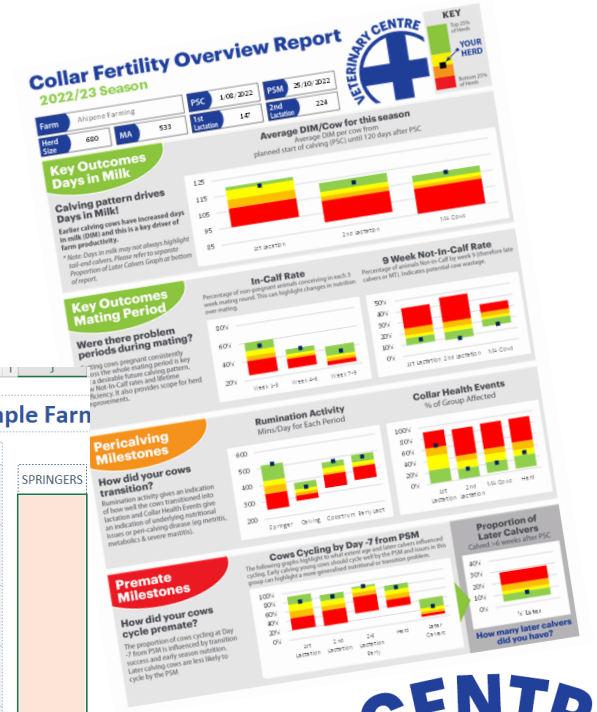
Your herd	50%
Aim above	60%

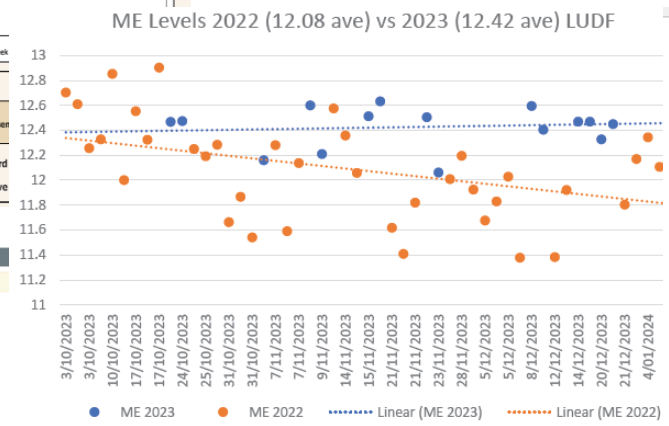
☆

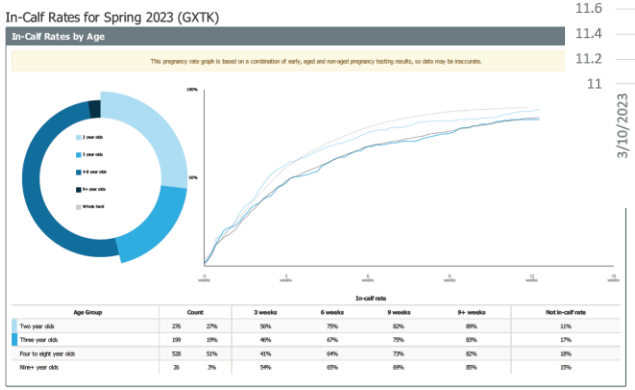
End of Season Data Review

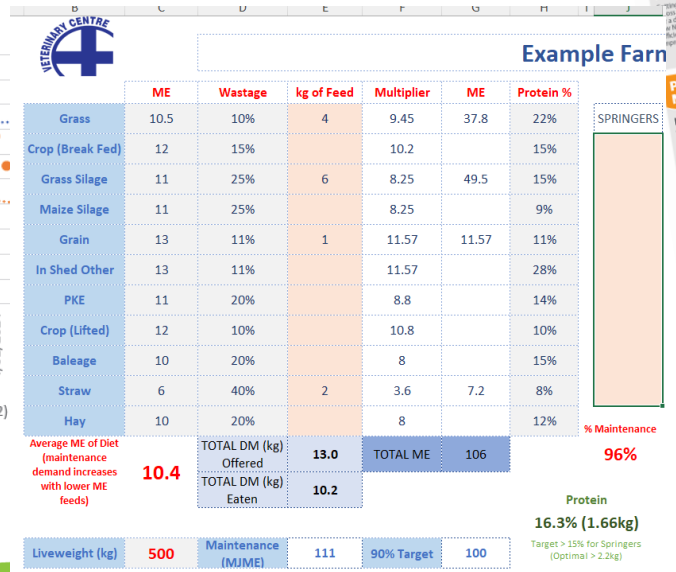








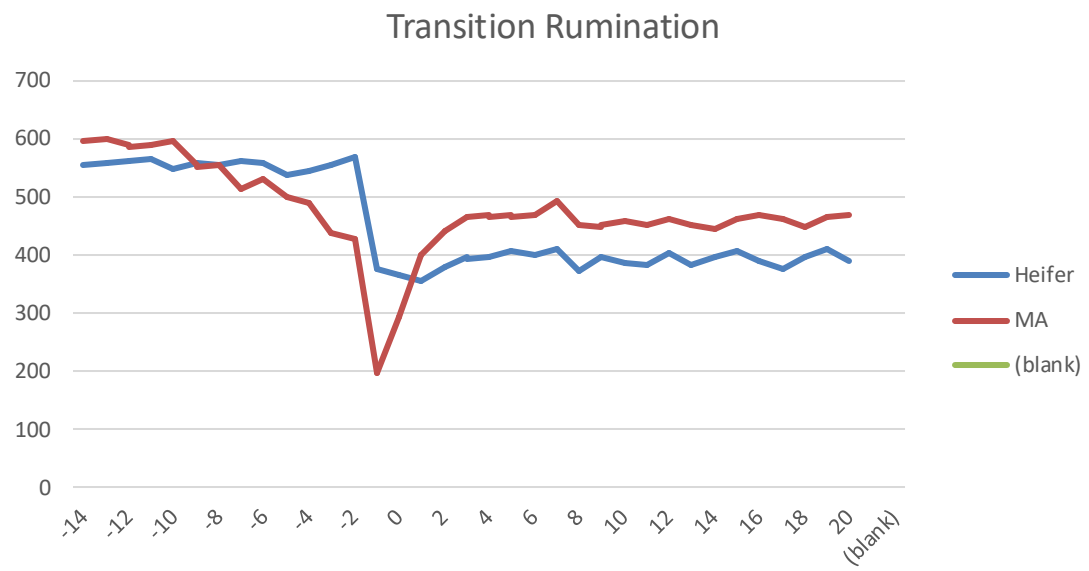




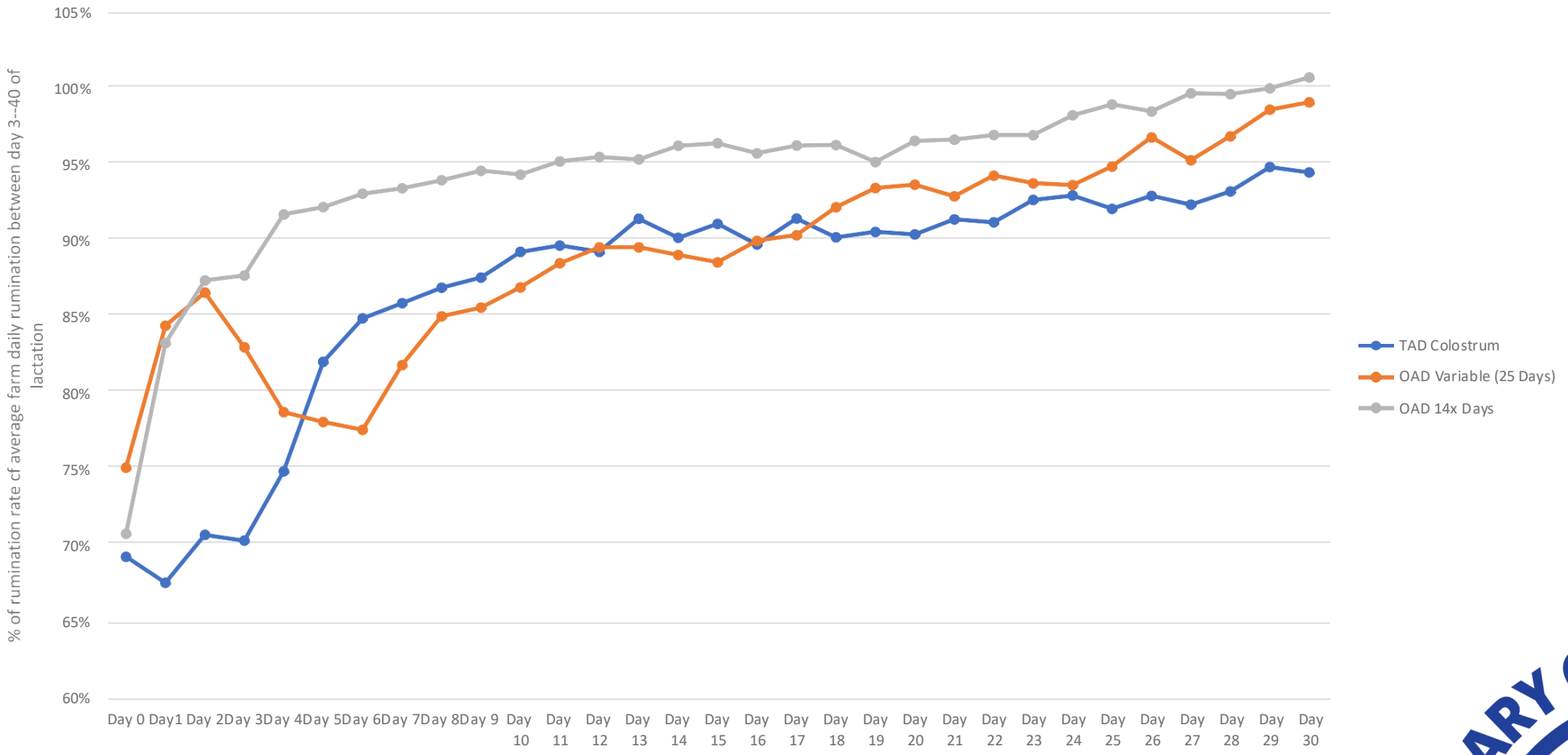
Transition (Springers through to +10-14 DIM)

Key Influence on:

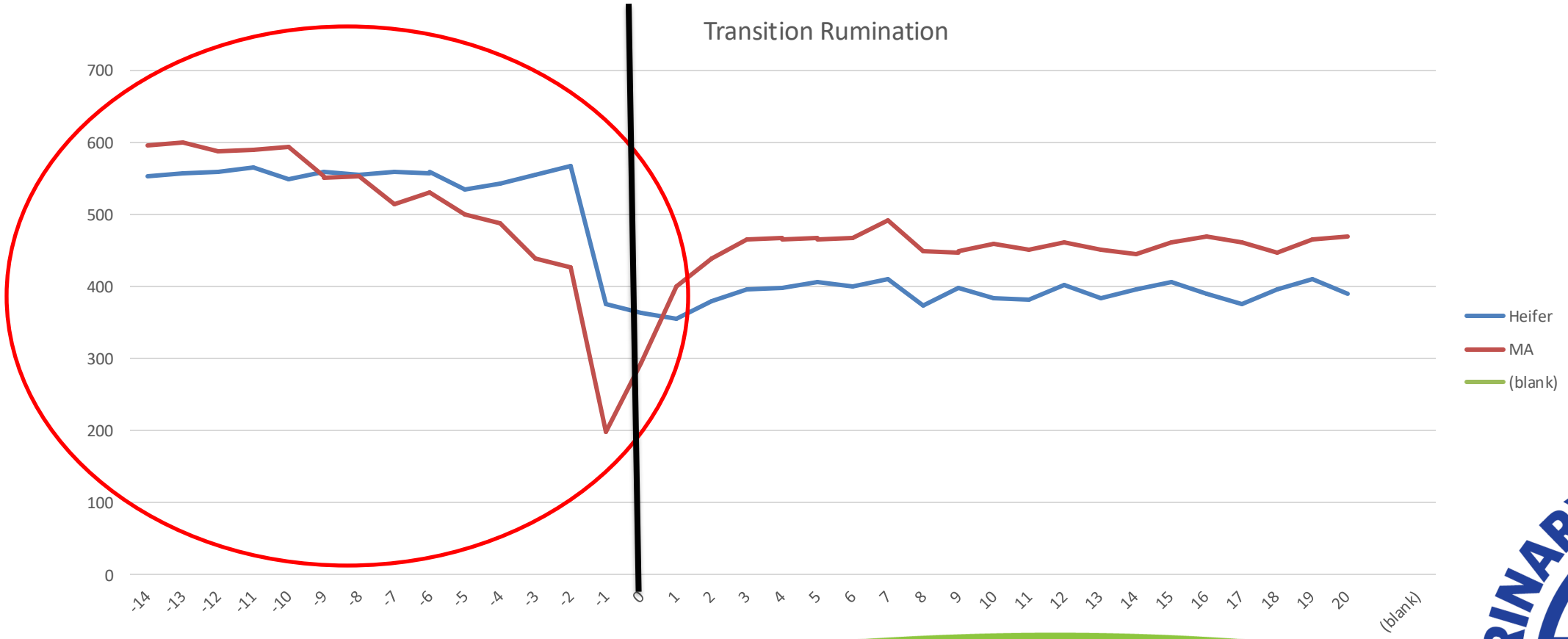
- BCS Loss Post Calving
- Endometritis Rates
- Oocyte quality (and first service conception rate)
- Cycling Rates
- Mastitis / Lameness
- Metabolic
- Peak Production



Daily Rumination Average by DIM (cf average 30-40 day farm rumination rate)



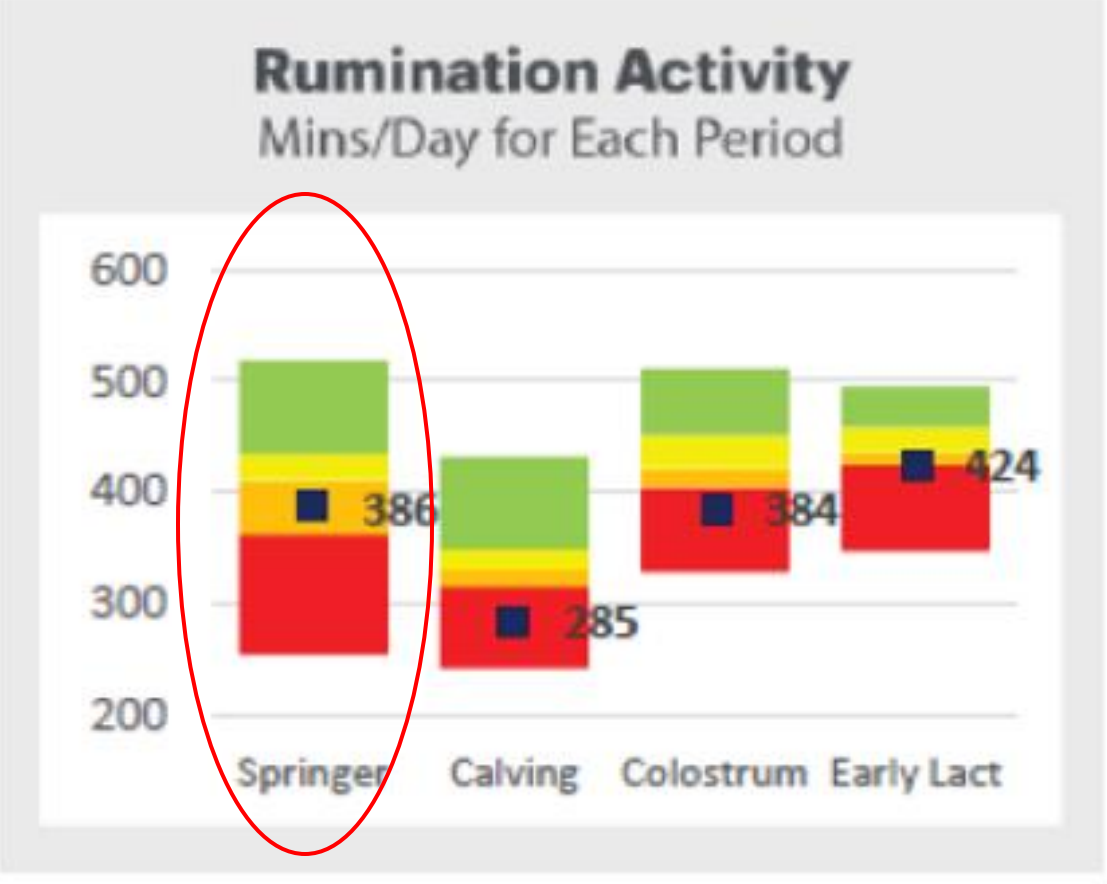
Transition Monitoring



Transition (Springers to Early Lactation)

Transition Rumination Rates:

2023



	ME	Wastage	kg of Feed	Multiplier	ME	Protein %
Grass	10.5	10%	4	9.45	37.8	22%
Crop (Break Fed)	12	15%		10.2		15%
Grass Silage	11	25%		8.25		15%
Maize Silage	11	25%		8.25		9%
Grain	13	11%		11.57		11%
In Shed Other	13	11%		11.57		28%
PKE	11	20%		8.8		14%
Crop (Lifted)	12	10%		10.8		10%
Baleage	10	20%	6	8	48	15%
Straw	6	40%		3.6		8%
Hay	10	20%		8		12%

SPRINGERS

% Maintenance

74%

Average ME of Diet (maintenance demand increases with lower ME feeds)	10.2	TOTAL DM (kg) Offered	10.0	TOTAL ME	86
		TOTAL DM (kg) Eaten	8.4		
Liveweight (kg)	500	Maintenance (MJME)	117	90% Target	105

Protein

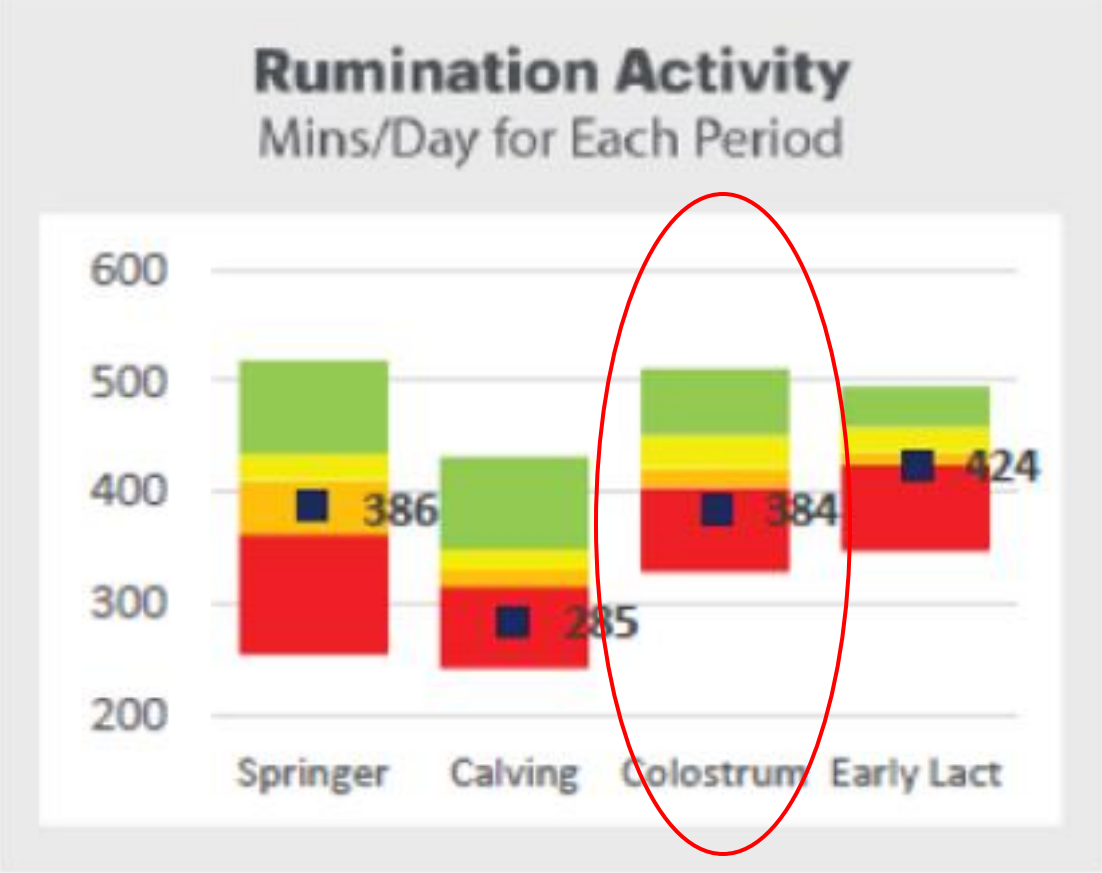
18% (1.51kg)

Target > 15% for Springers
(Optimal > 2.2kg)

Transition (Springers to Early Lactation)

Transition Rumination Rates:

2023



Colostrum (Day 1-4)	Grass = Ad-lib (1700-1800 residuals) *OAD Milking, Skip-a-day on Day 1 if Required*

1) Day 0 is Critical!

2) Avoid grazing below 1800

3) Allocate Enough Feed

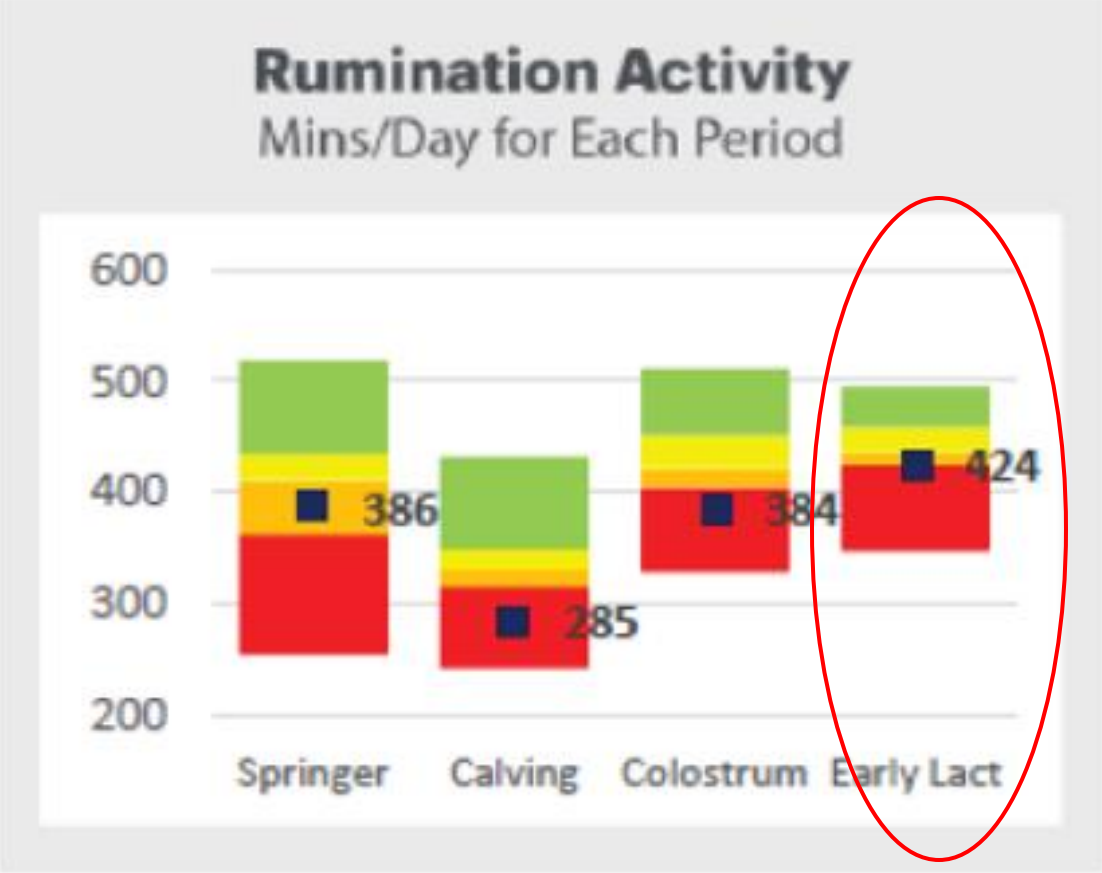
4) Offer multiple feeding opportunities

5) Limeflour!!!!

Transition (Springers to Early Lactation)

Transition Rumination Rates:

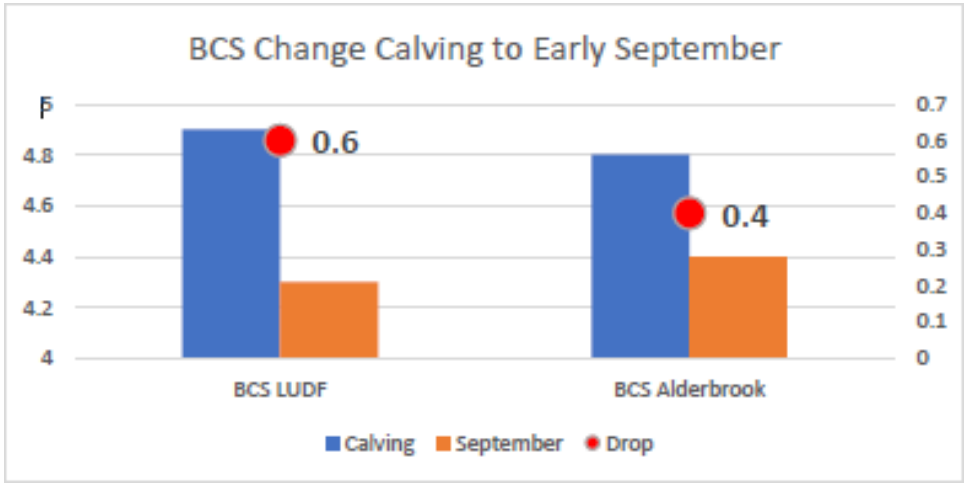
2023



Early Lactation (Day 8-10)	Grass = Typically 100% of diet. Silage more likely to be added in later round when ground drier (1600 residuals)

Other measures of transition success?

Transition Rumination Rates:



NEFA Blood Test Results:

Feeding Changes 2022/23

Feeding:

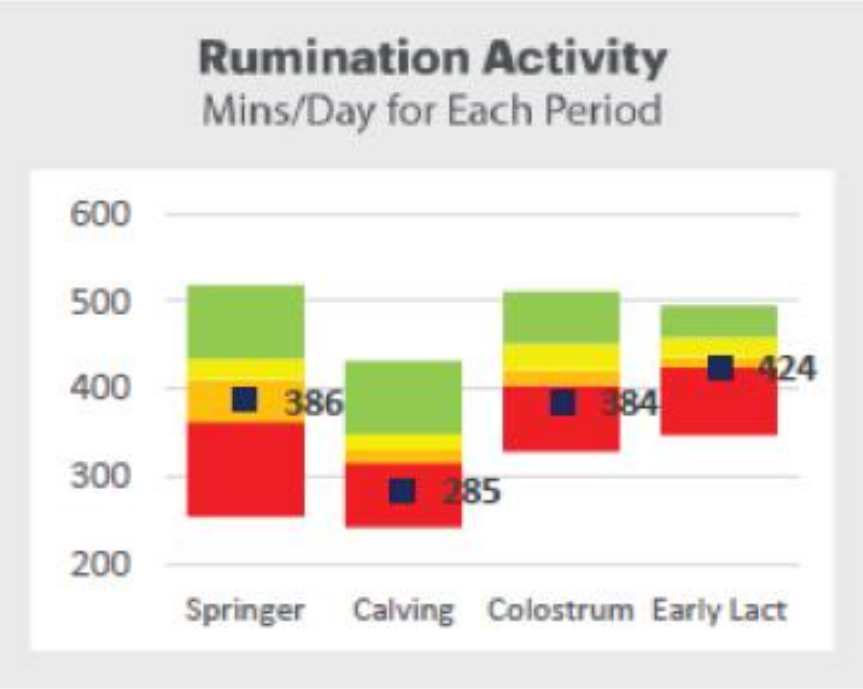
Diet for Period	LUDF 2022/2023	LUDF 2023/2024
Springers (Day -1 to -7)	Grass = 4kg Baleage = 6kg (Ad-lib) *Calving on cropping dirt*	*Grass = 6kg* *Silage = 6kg* *(Pre grazing 3,500 cover)*
Colostrum (Day 1-4)	Grass = Ad-lib (1700-1800 residuals) *OAD Milking, Skip-a-day on Day 1 if Required*	*Grass = 6kg (pre-grazing 3,300)* *Silage = 6kg* *OAD Milking*
Early Lactation (Day 8-10)	Grass = Typically 100% of diet. Silage more likely to be added in later round when ground drier (1600 residuals)	Grass = 14kg Silage = 2-3kg

Transition (Springers to Early Lactation)

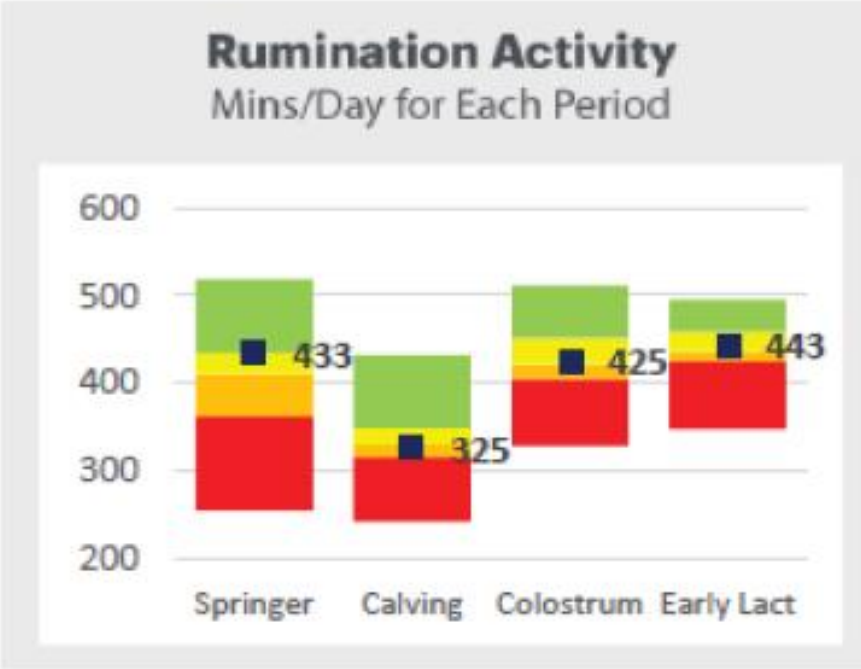
Transition Rumination Rates:

TRANSITION

2023

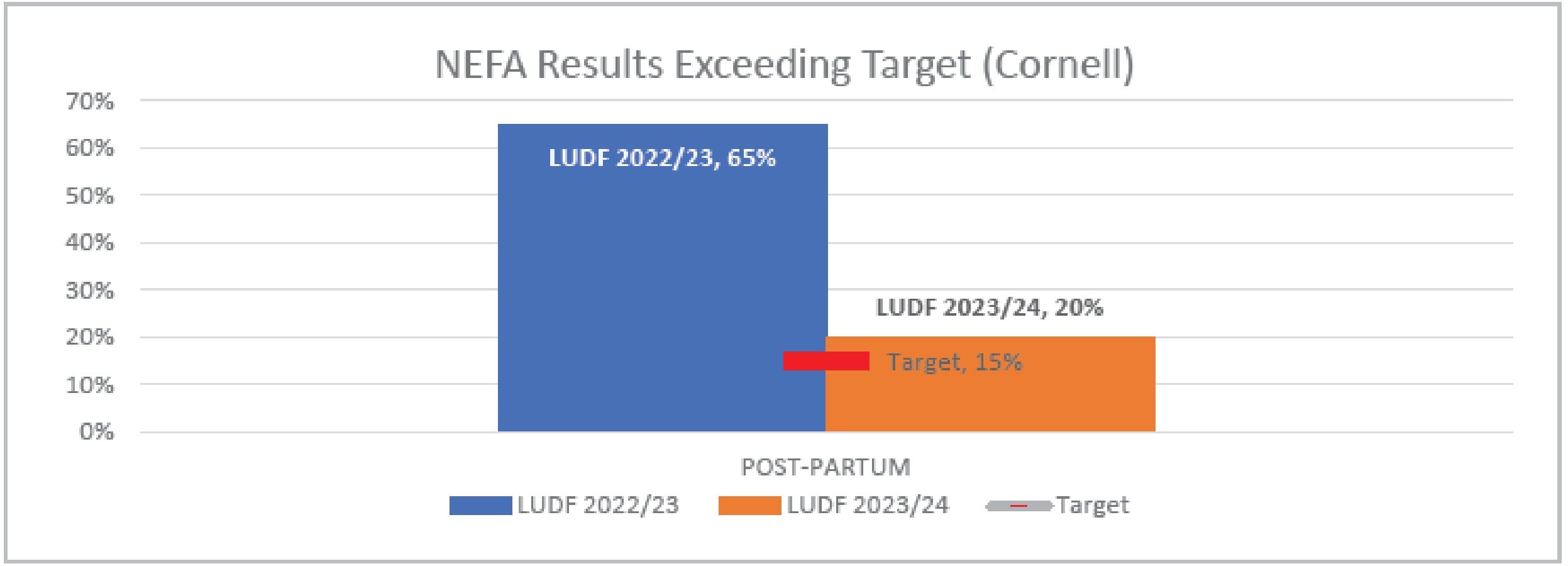


2024



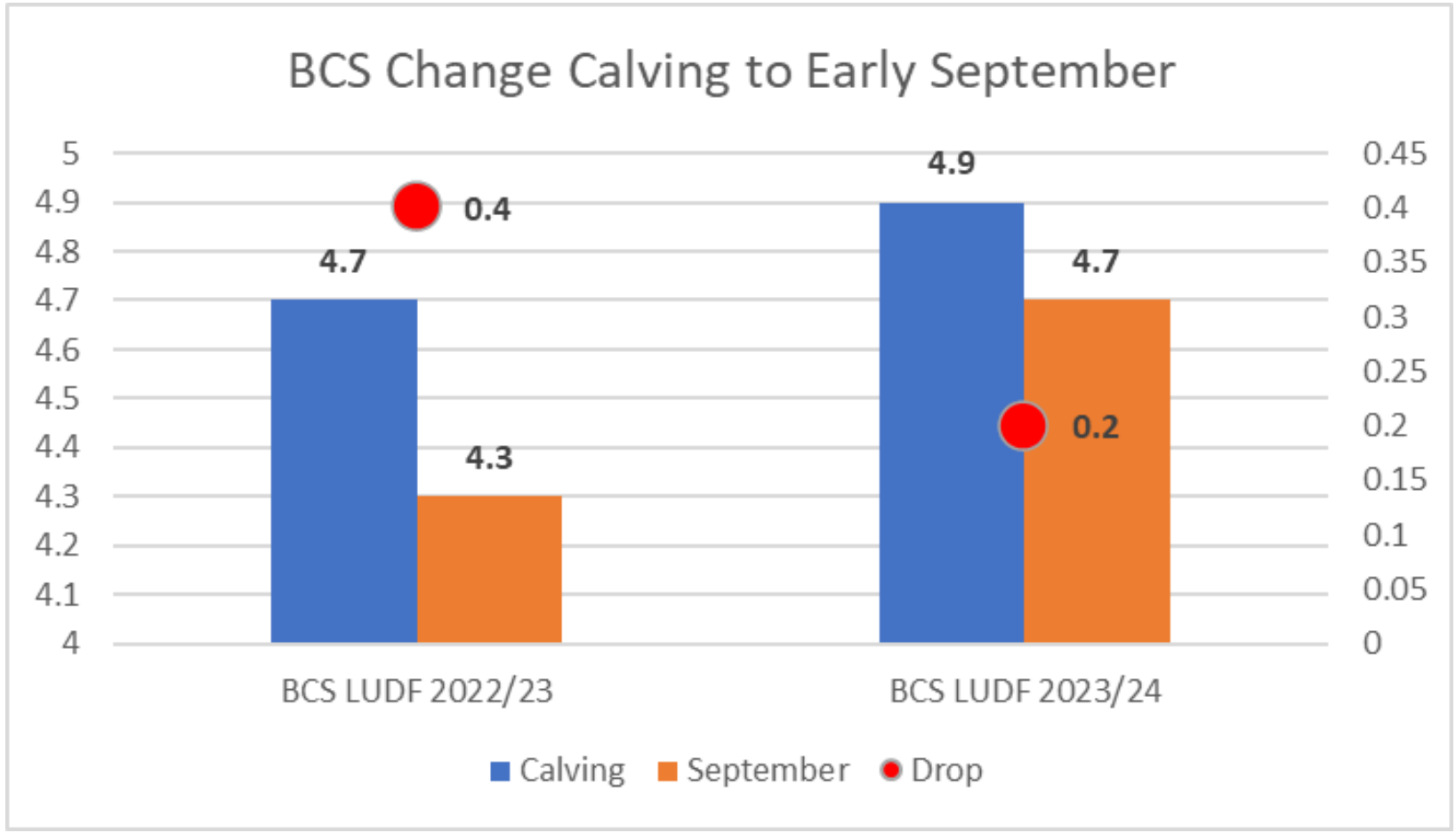
Period	Change
Springers	+47 mins/day
Calving	+40 mins/day
Colostrum	+41 mins/day
Early Lactation	+17 mins/day

NEFA Blood Test Results:



Pre-Mate Period (Cycling + Feeding)

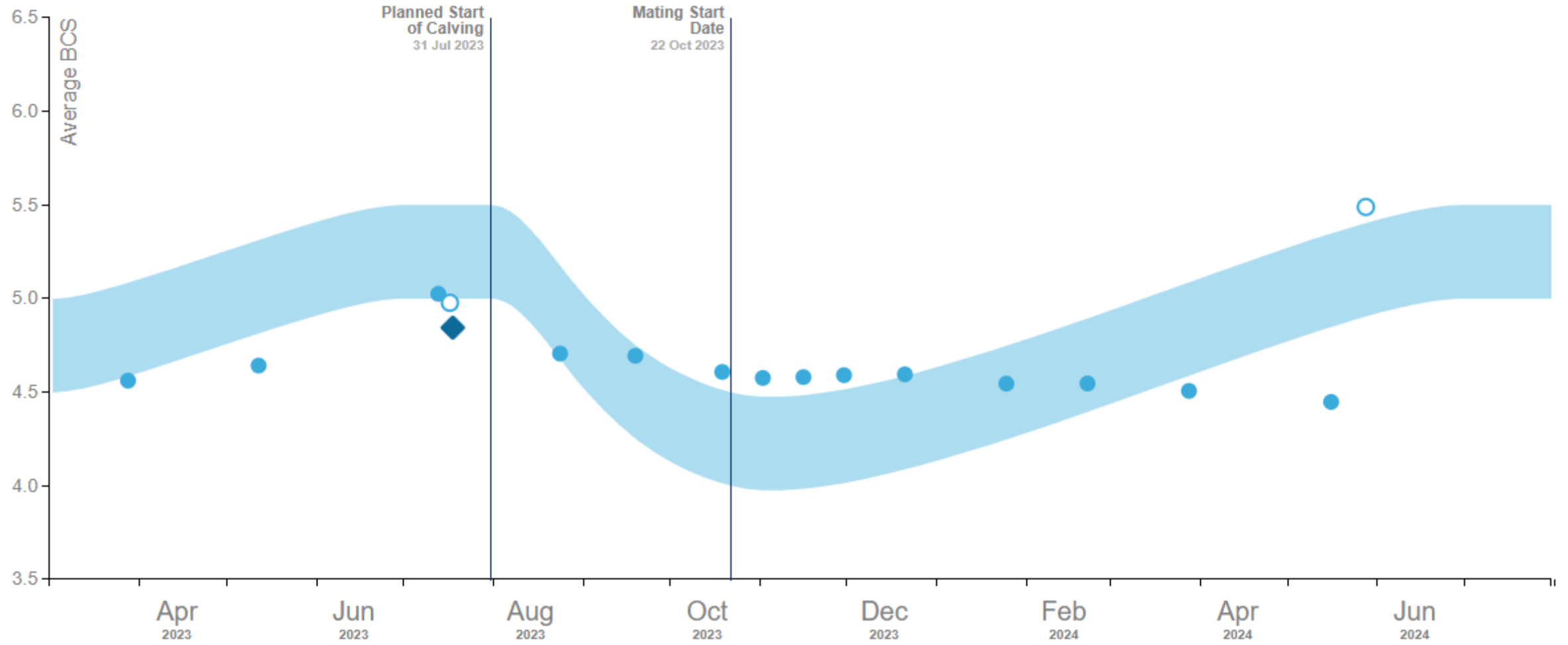
BCS Change Calving to September



BCS for 1 March 2023 - 31 July 2024

Body Condition Scores

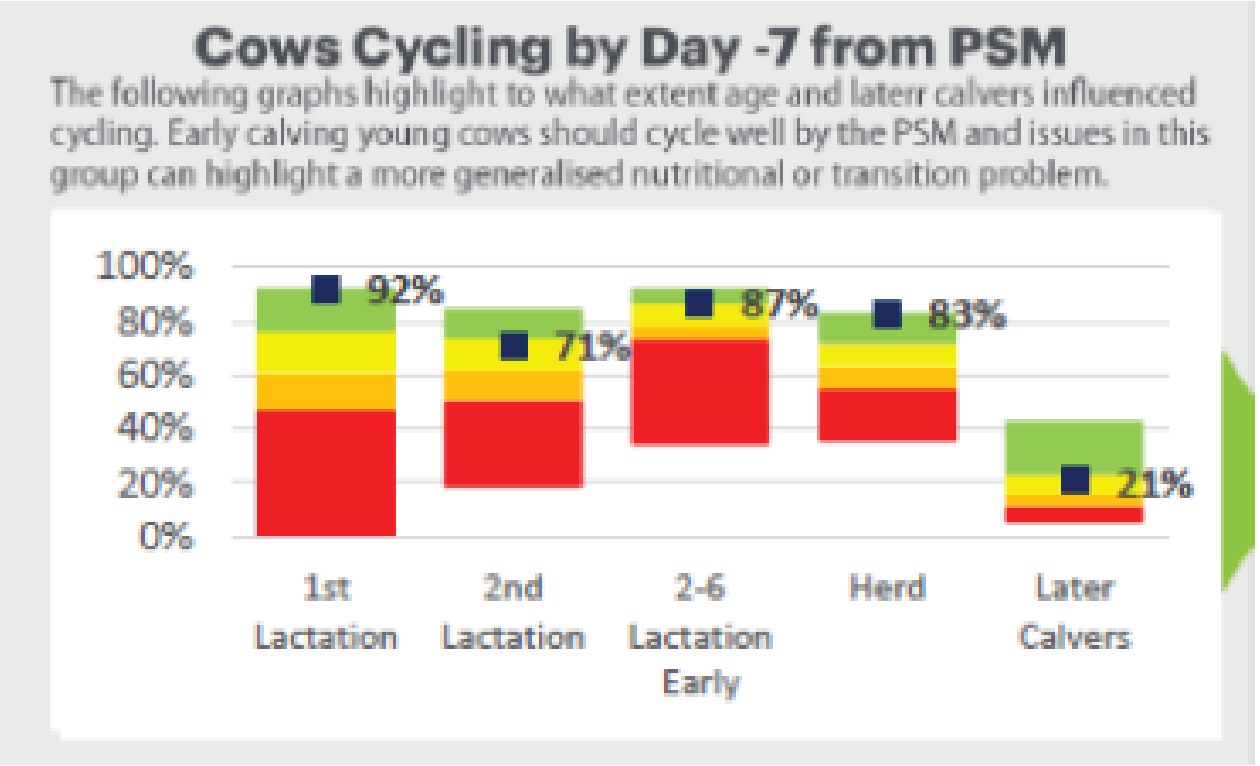
Print



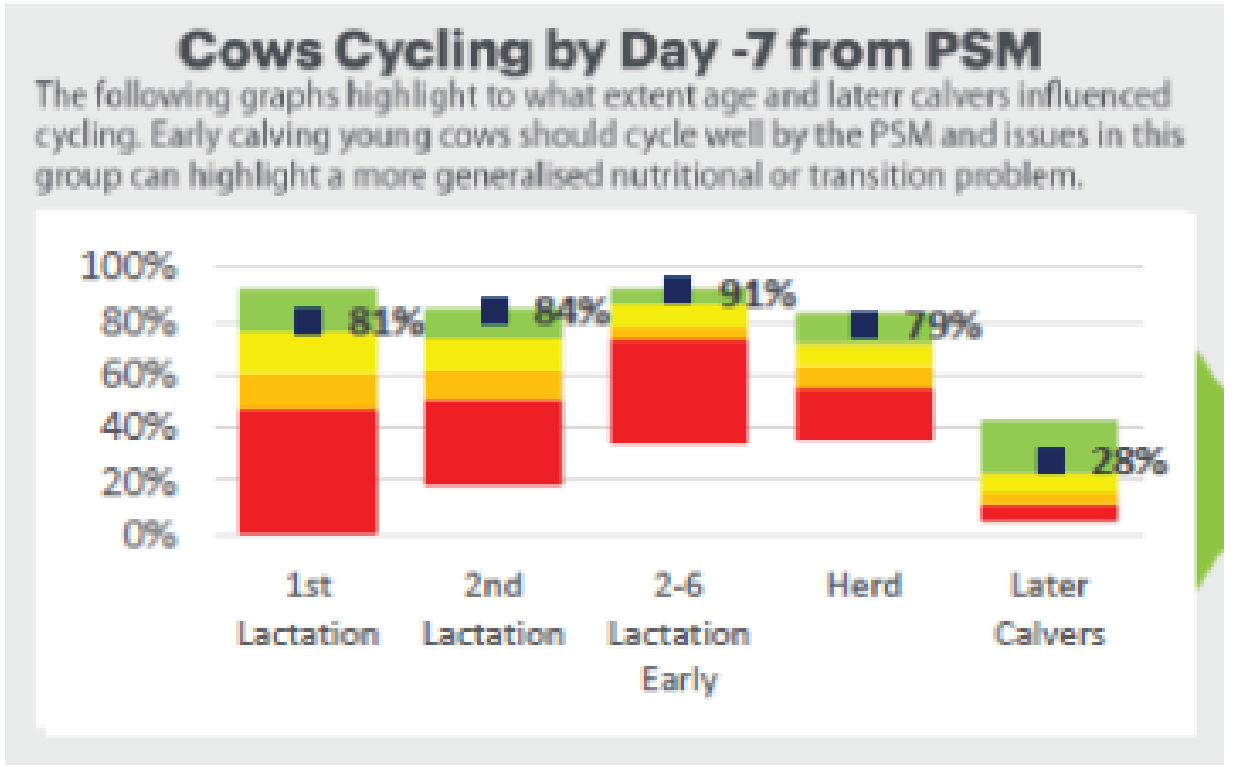
Pre-Mate Cycling Rates (Day -7 from PSM)

Group	Change
1st Lactation	-11%
2nd Lactation	+13%
2-6 Lactation Early	+4%
Herd	-4%

2022/23



2023/24

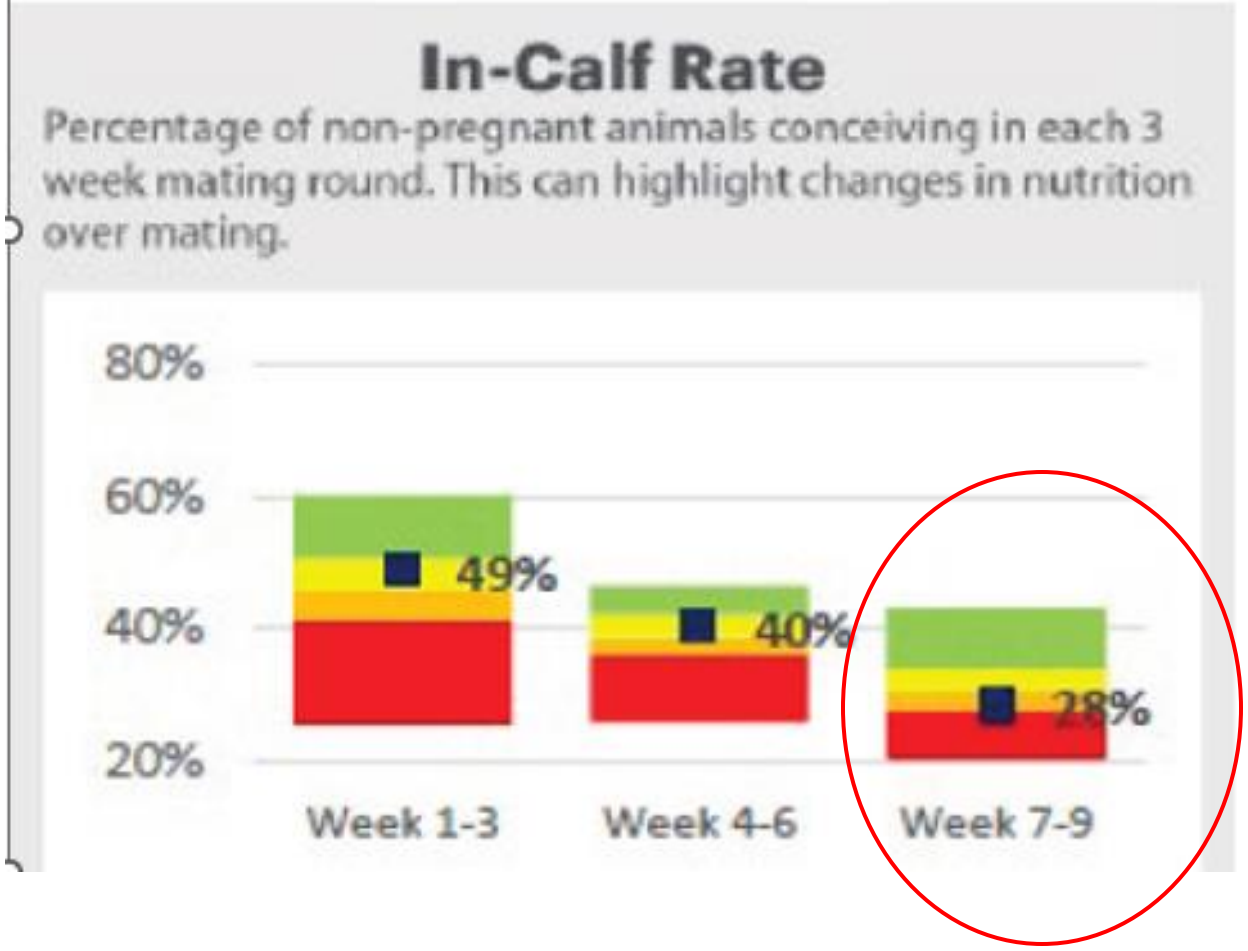


(NOTE PSM delayed 5 in 2022 season – heifers & herd calved VERY early)

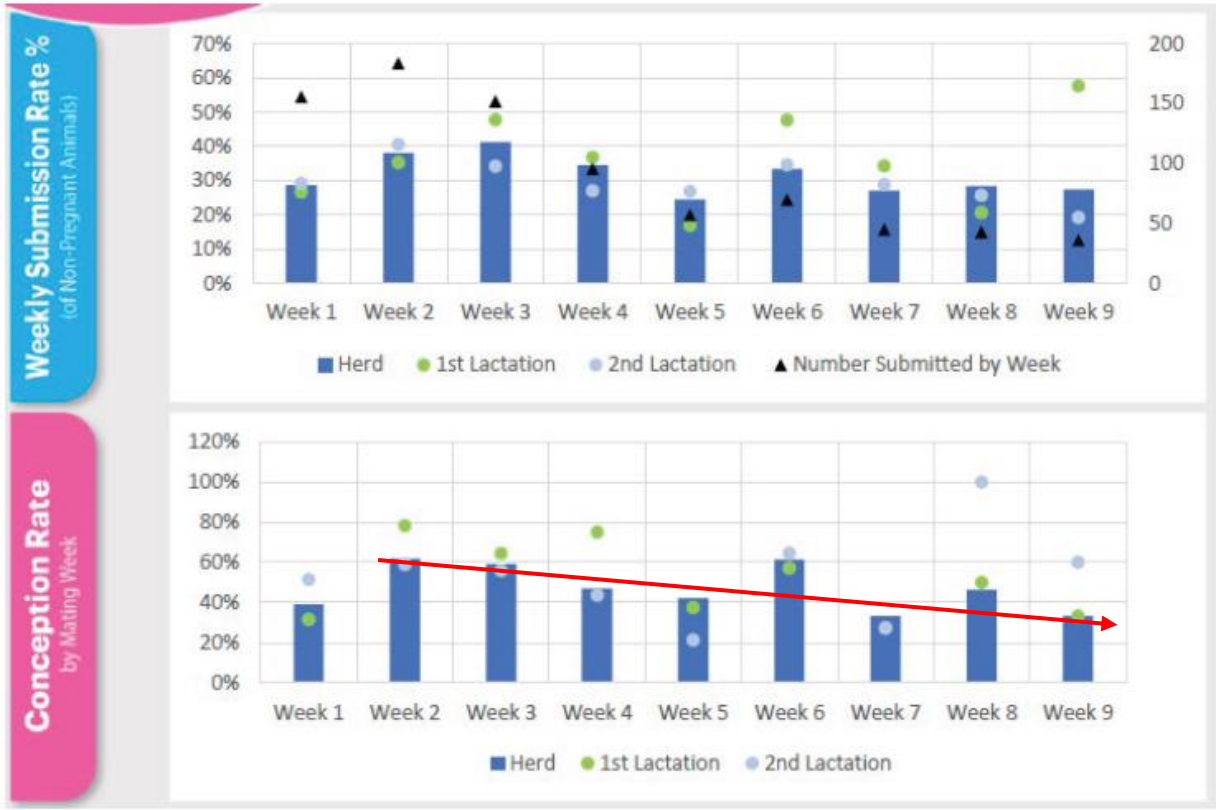
Mating Period

% of Non-Pregnant Cows Conceiving in each 3 Week Mating Round

2022/23



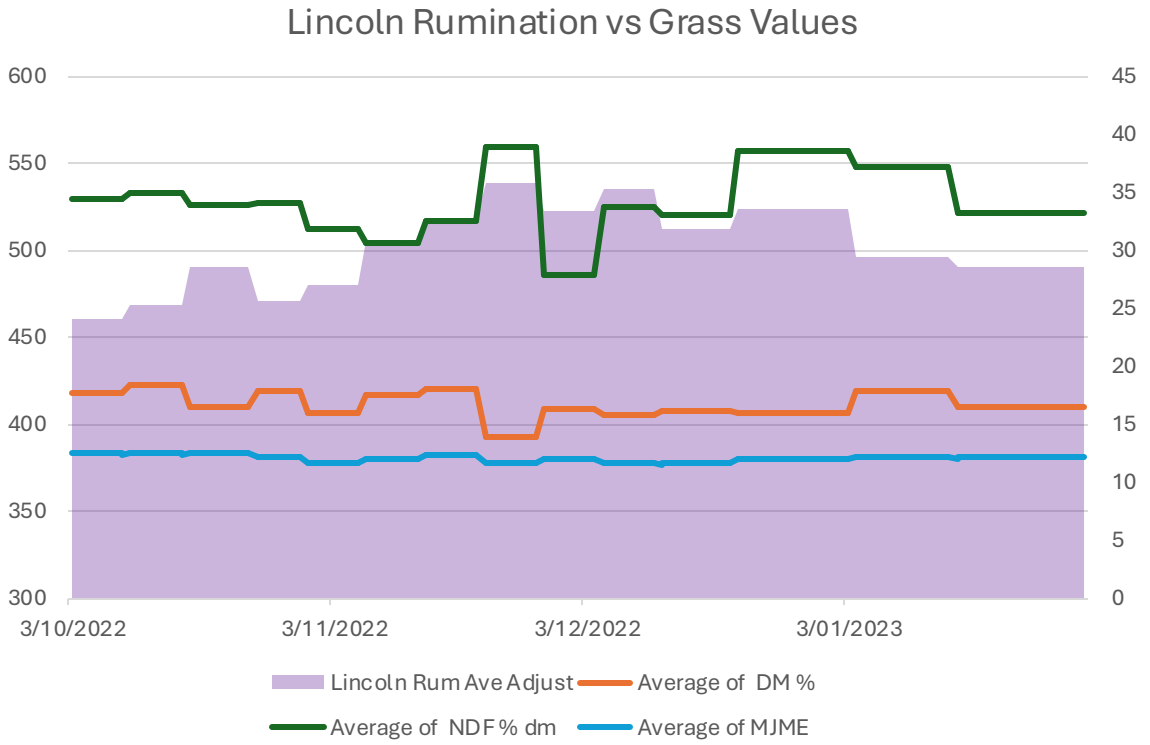
2022/23



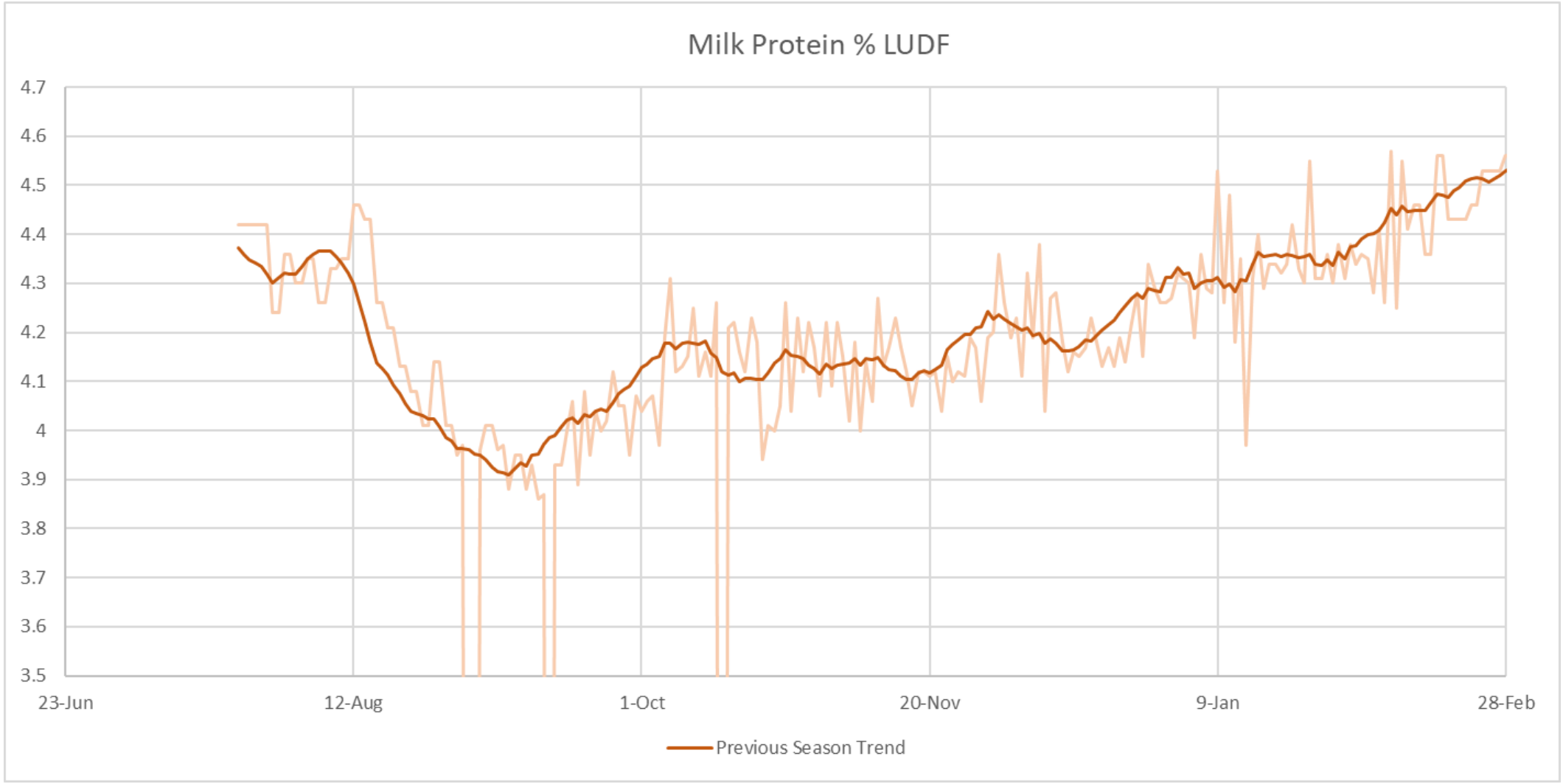
Energy Deficit?

	LUDF	Liam
	NEFA Levels	NEFA Levels
10th Aug	.7	.4
29th Sept	.3	.3
27th October	.2	.3
10th November	.4	.2
24th November	.1	.2
8th Dec	.1	.2
22nd Dec	.2	.2

* NOTE: This energy pinch has been noted at around the same date in previous seasons, and doesn't appear to be a seasonal anomaly.

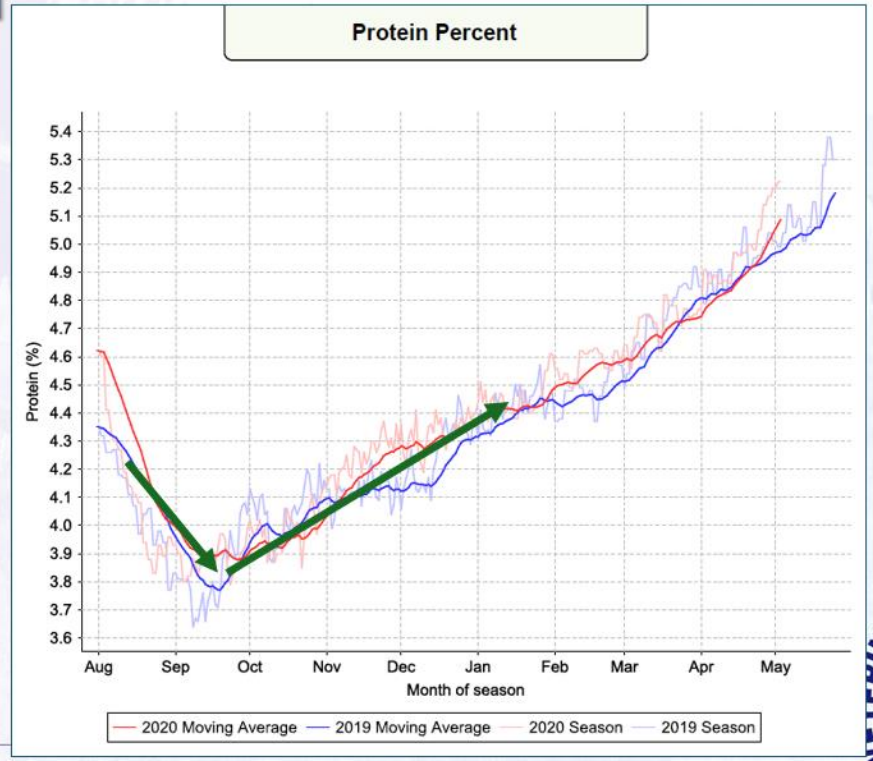


Milk Protein?

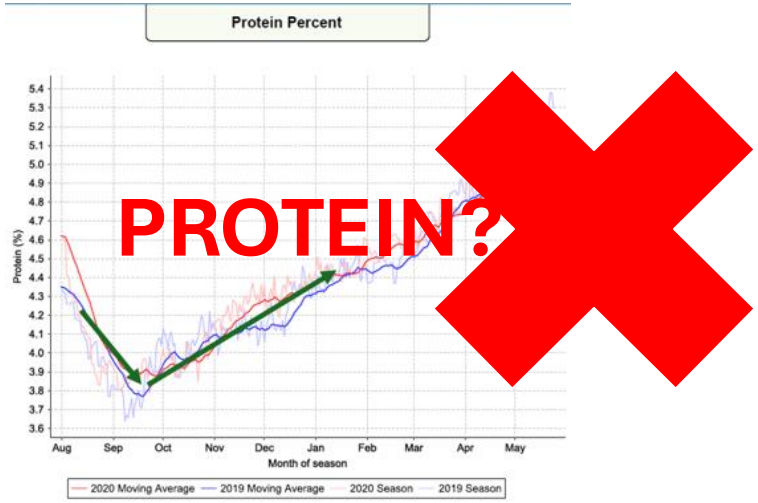


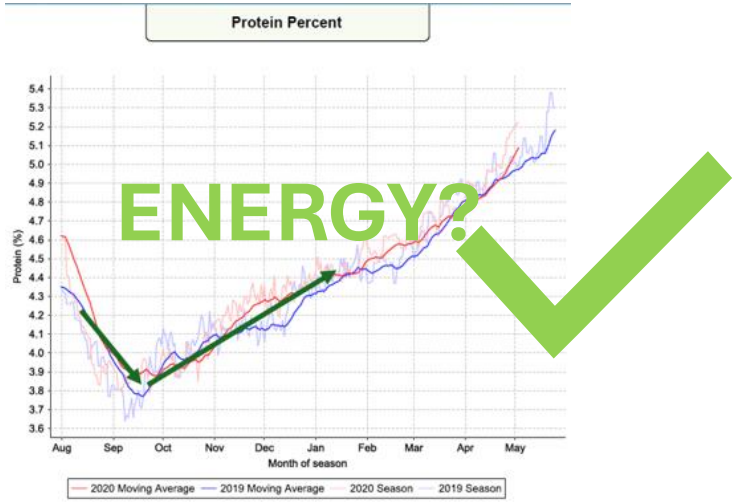
The Nike Tick – Is it real?

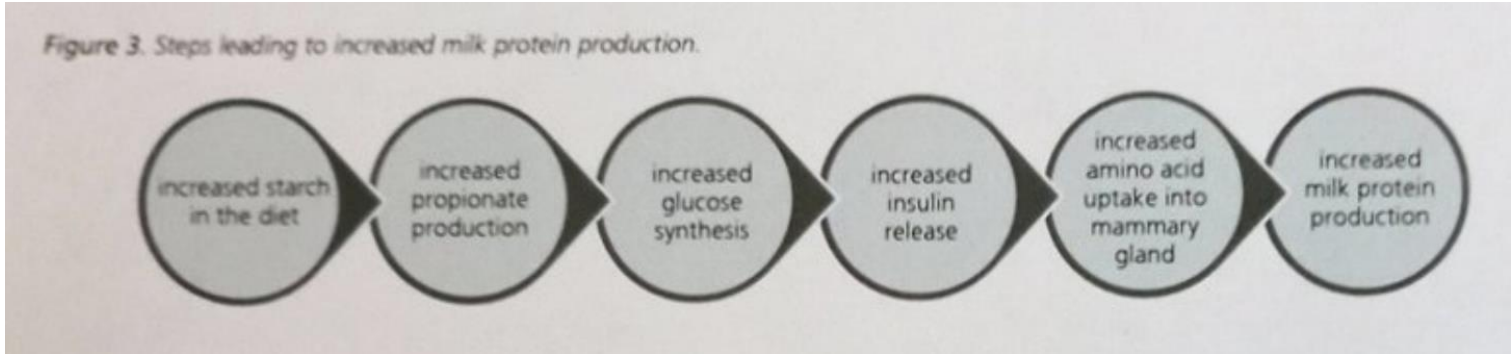
Feeding over Mating - Milk Protein as an Indicator



The Science – Energy & Milk Protein

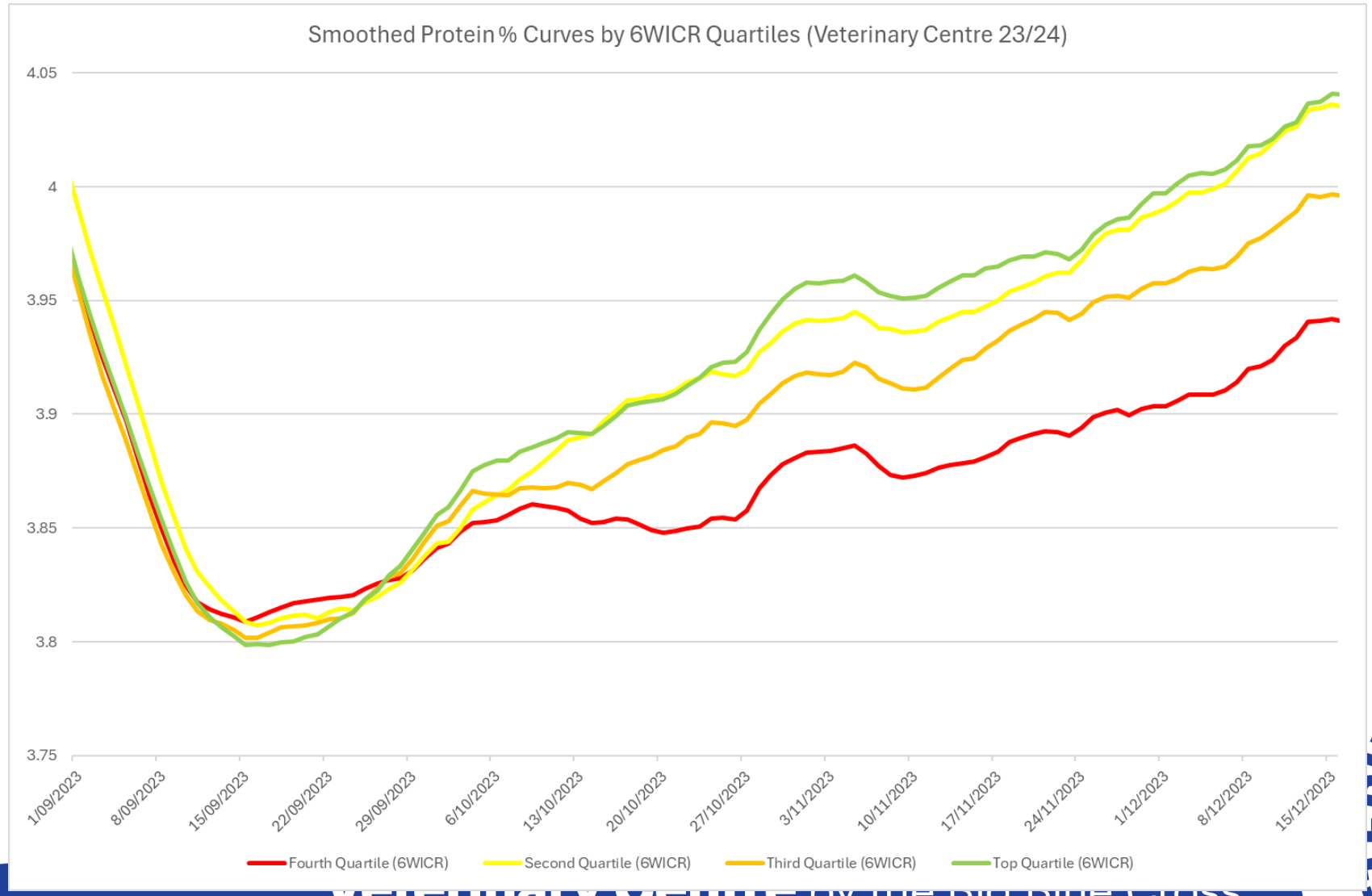




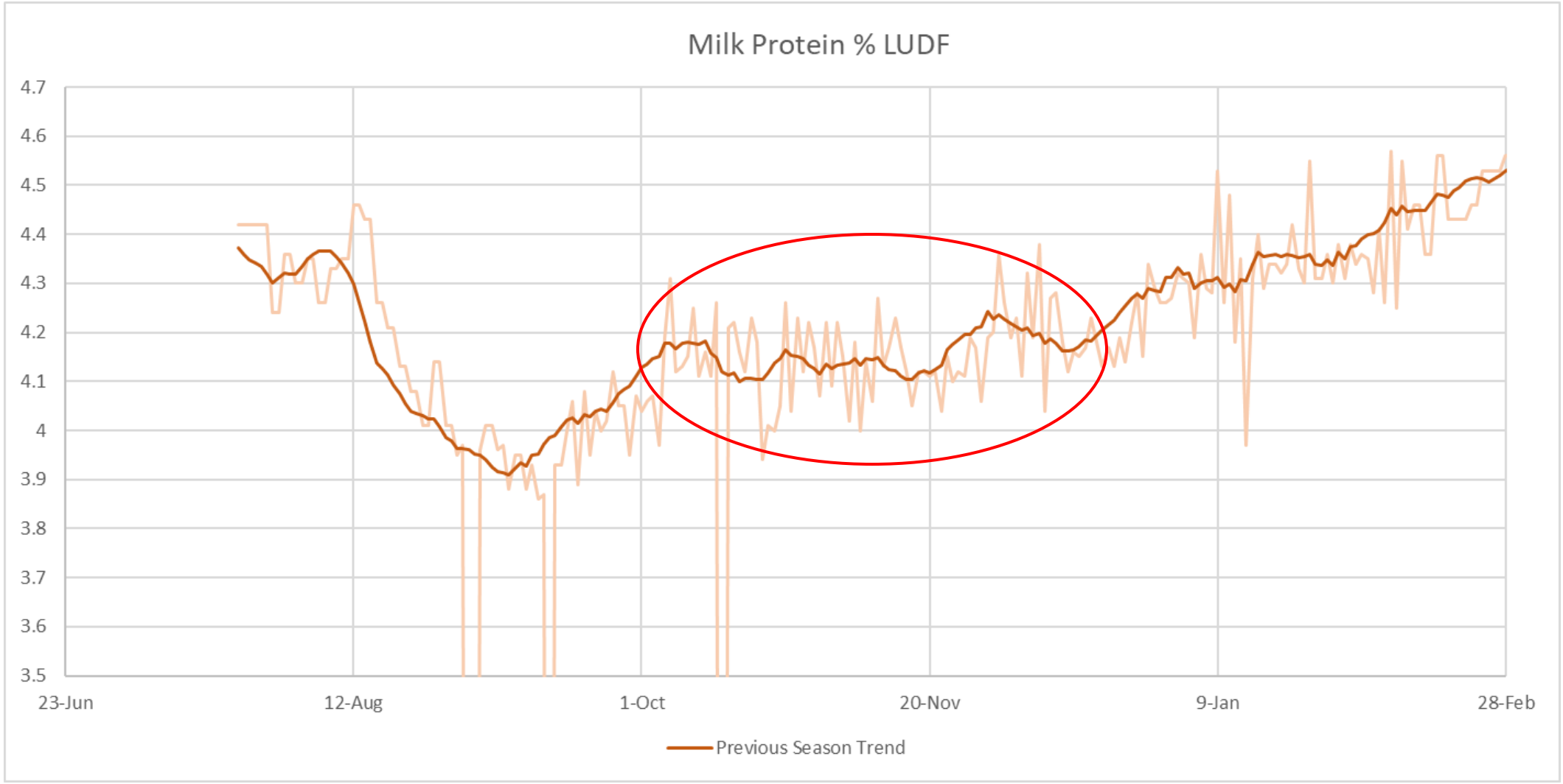


"So basically starch/concentrate/energy feeding increases insulin which ends up increasing MP synthesis"

Protein Curves vs Repro Quartiles 23/24



How do you fix the flat line?



Farm Name	LUDF 2022/23			Date	4/07/2024	

Ave ME of Grass (22/23) = 12.08

	ME	Wastage	kg of Feed	Multiplier	Protein %	Protein (kg)	ME
Grass	12.08	10%	19	10.872	25%	4.28	206.568
Crop (Break Fed)	12	15%		10.2	15%		
Grass Silage	11	25%		8.25	25%		
Maize Silage	11	25%		8.25	9%		
Grain	13	5%		12.35	11%		
In Shed Other	13	11%		11.57	28%		
PKE	11	5%		10.45	14%		
Crop (Lifted)	12	10%		10.8	10%		
Baleage	10	20%		8	17%		
Molasses	12	5%		11.4	4%		
Straw	6	40%		3.6	3%		
Other (i.e DDG)	12.5	5%		11.875	28%		
		TOTAL DM (kg) Offered	19.0		Totals	25.0%	207
		TOTAL DM (kg) Eaten	17.1			Protein %	Total ME

Average ME of Diet (maintenance & milk demand increases with lower ME feeds)

12.1

Liveweight (kg)	475	Walk (km) Flat	2.00
Milk kgMS/Cow	2.00	Walk (km) Rolling	
		Walk (km) Hilly/Steep	

Ver 3

Maintenance (MJME)	53.675
Milk (MJME)	154
Walking	4
Total Demand (MJME)	212

Feed Offered vs Demand (%)	Expected Weight Change
98%	-0.14 Kg/Day
-5.11 MJME	-0.14 BCS
NEGATIVE ENERGY BALANCE	Expected BCS Change over 30 days

VETERINARY CENTRE

Lactational Energy Checker

Urea Supplementation

1st Round – 25kg N/ha

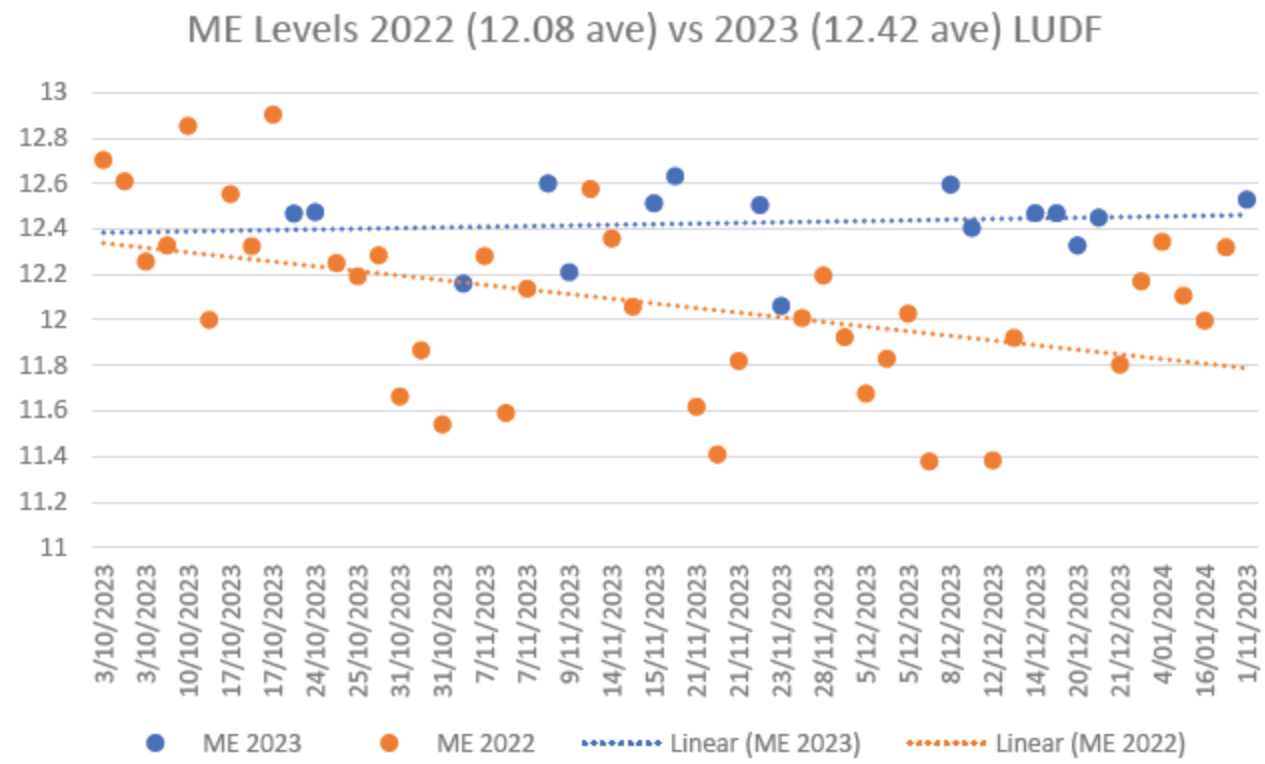
2nd Round (Sept) – 46kg N/ha

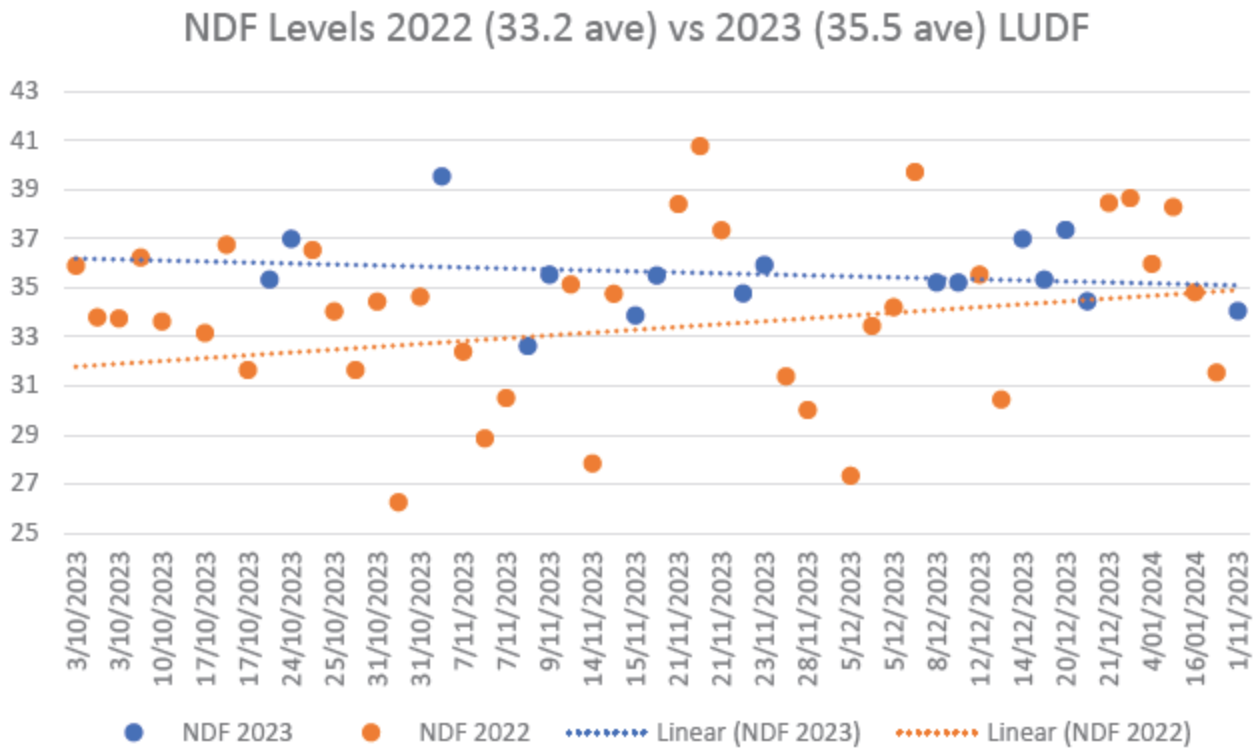
3rd Round (October) – 40 kg N/Ha

Luxury nitrogen levels in the soils during the heading phase encourage vegetative growth, plus we get higher response rates. Nitrogen rates were cut Jan/Feb to keep under the 180 kgN/Ha Cap.

Date	Event	Description	Area	Rate/Reading
28/10/2023	Fertiliser	UREA Bulk	50.97	Variable
21/10/2023	Fertiliser	UREA Bulk	32.12	Variable
16/10/2023	Fertiliser	UREA Bulk	12.68	85kg/ha
16/10/2023	Fertiliser	UREA Bulk	36.72	85kg/ha
16/10/2023	Fertiliser	UREA Bulk	20.06	85kg/ha
12/10/2023	Fertiliser	FLOWFERT N	34.15	222L/ha
06/10/2023	Fertiliser	FLOWFERT N	33.37	222L/ha
29/09/2023	Fertiliser	UREA Bulk	35.79	85kg/ha
26/09/2023	Fertiliser	AMMO 31 Bulk	39.17	100kg/ha
13/09/2023	Fertiliser	AMMO 31 Bulk	37.64	100kg/ha
05/09/2023	Fertiliser	AMMO 31 Bulk	80.55	100kg/ha

Grass Quality





Farm Name	LUDF 2023/24				Date	4/07/2024	
	ME	Wastage	kg of Feed	Multiplier	Protein %	Protein (kg)	ME
Grass	12.42	10%	19	11.178	25%	4.28	212.382
Crop (Break Fed)	12	15%		10.2	15%		
Grass Silage	11	25%		8.25	25%		
Maize Silage	11	25%		8.25	9%		
Grain	13	5%		12.35	11%		
In Shed Other	13	11%		11.57	28%		
PKE	11	5%		10.45	14%		
Crop (Lifted)	12	10%		10.8	10%		
Baleage	10	20%		8	17%		
Molasses	12	5%		11.4	4%		
Straw	6	40%		3.6	3%		
Other (i.e DDG)	12.5	5%		11.875	28%		
		TOTAL DM (kg) Offered	19.0		Totals	25.0%	212
Average ME of Diet (maintenance & milk demand increases with lower ME feeds)	12.4	TOTAL DM (kg) Eaten	17.1			Protein %	Total ME

Ave ME of Grass (22/23) = 12.42

Feed Offered vs Demand (%)	Expected Weight Change
100%	0.02 Kg/Day
+0.71 MJME	0.02 BCS
POSITIVE ENERGY BALANCE	Expected BCS Change over 30 days

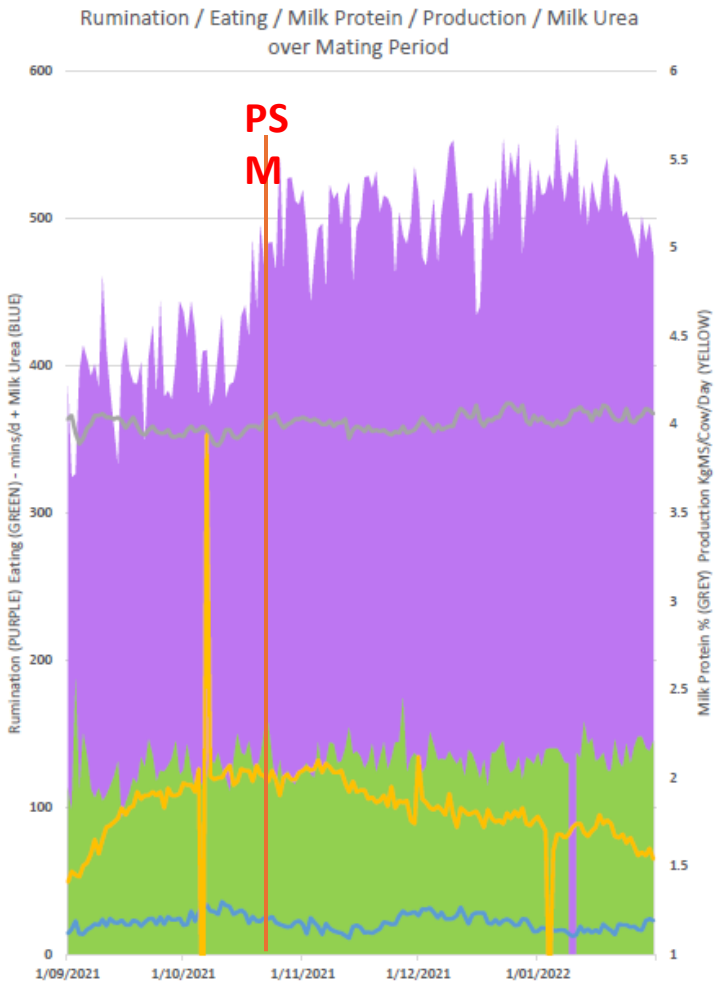
Liveweight (kg)	475	Walk (km) Flat	2.00
Milk kgMS/Cow	2.00	Walk (km) Rolling	
		Walk (km) Hilly/Steep	

Ver 3

Maintenance (MJME)	53.675
Milk (MJME)	154
Walking	4
Total Demand (MJME)	212

Lactational Energy Checker

Balancing the Diet



Do your energy sums

Concentrate

	DM	ME	CP	N content	NDF	SSS	Starch	Fat
	%	ME/kgDM	%DM	%DM	%DM	%DM	%SSS	%
Barley	89.0	13.0	11	1.8	21.0	61.4	90.0	2.0
Bran	85.0	9.8	17.1	2.7	51.0	20.6	95.0	4.4
Canola meal	90.0	11.5	38	6.1	30.0	-	1.5	3.5
Lupin	89.0	12.0	34.2	5.5	33.0	22.0	90.0	5.5
Maize grain	89.0	13.6	8	1.3	9.0	75.1	99.0	4.3
Oats	89.0	11.5	13	2.1	31.0	47.5	90.0	4.9
Peas	87.0	13.0	24	3.8	23.0	46.0	-	1.8
Soya bean meal	90.0	12.9	50	8.0	14.0	27.0	90.0	1.4
Soya bean hulls	88.0	12.0	13.5	2.2	60.0	27.0	1.4	-
Tapioca	88.0	12.8	5	0.8	20.0	27.0	71.0	2.0
Wheat	89.0	12.6	11.3	1.8	14.0	70.0	90.0	1.9
Whole cotton seed	88.0	16.0	23	3.7	44.0	70.0	90.0	18.0
Cotton seed meal	89.0	12.0	min 43	min 6.9	20-23	70.0	1.5	0.1

Mating Period

Group	Change
Week 1-3	+3%
Week 4-6	+2%
Week 7-9	+8%

% of Non-Pregnant Cows Conceiving in each 3 Week Mating Round

2022/23

In-Calf Rate

Percentage of non-pregnant animals conceiving in each 3 week mating round. This can highlight changes in nutrition over mating.

2023/24

In-Calf Rate

Percentage of non-pregnant animals conceiving in each 3 week mating round. This can highlight changes in nutrition over mating.

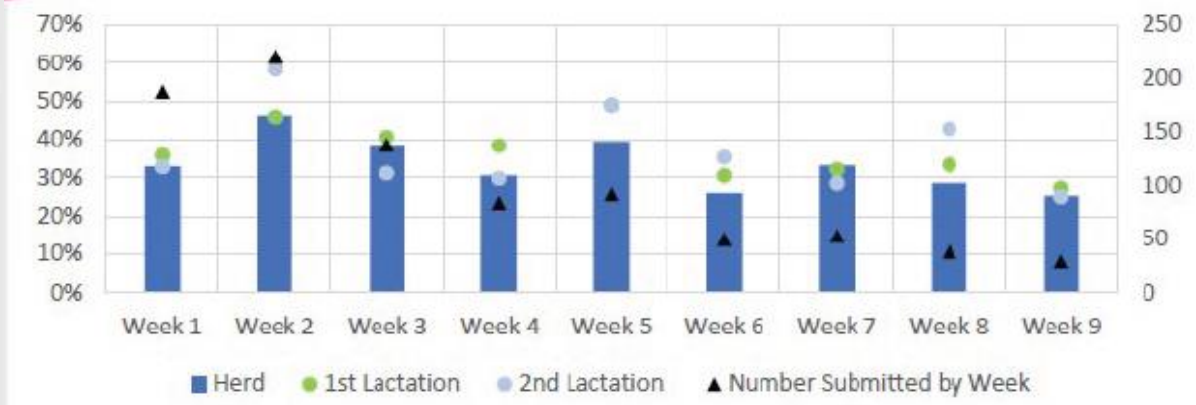
Weekly Conception Rate

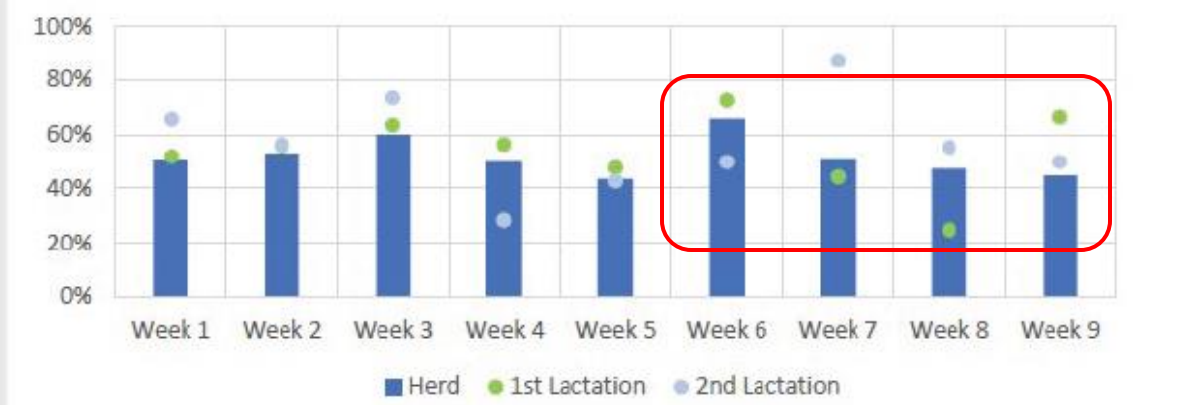
2022/23

Weekly Submission Rate %
(of Non-Pregnant Animals)

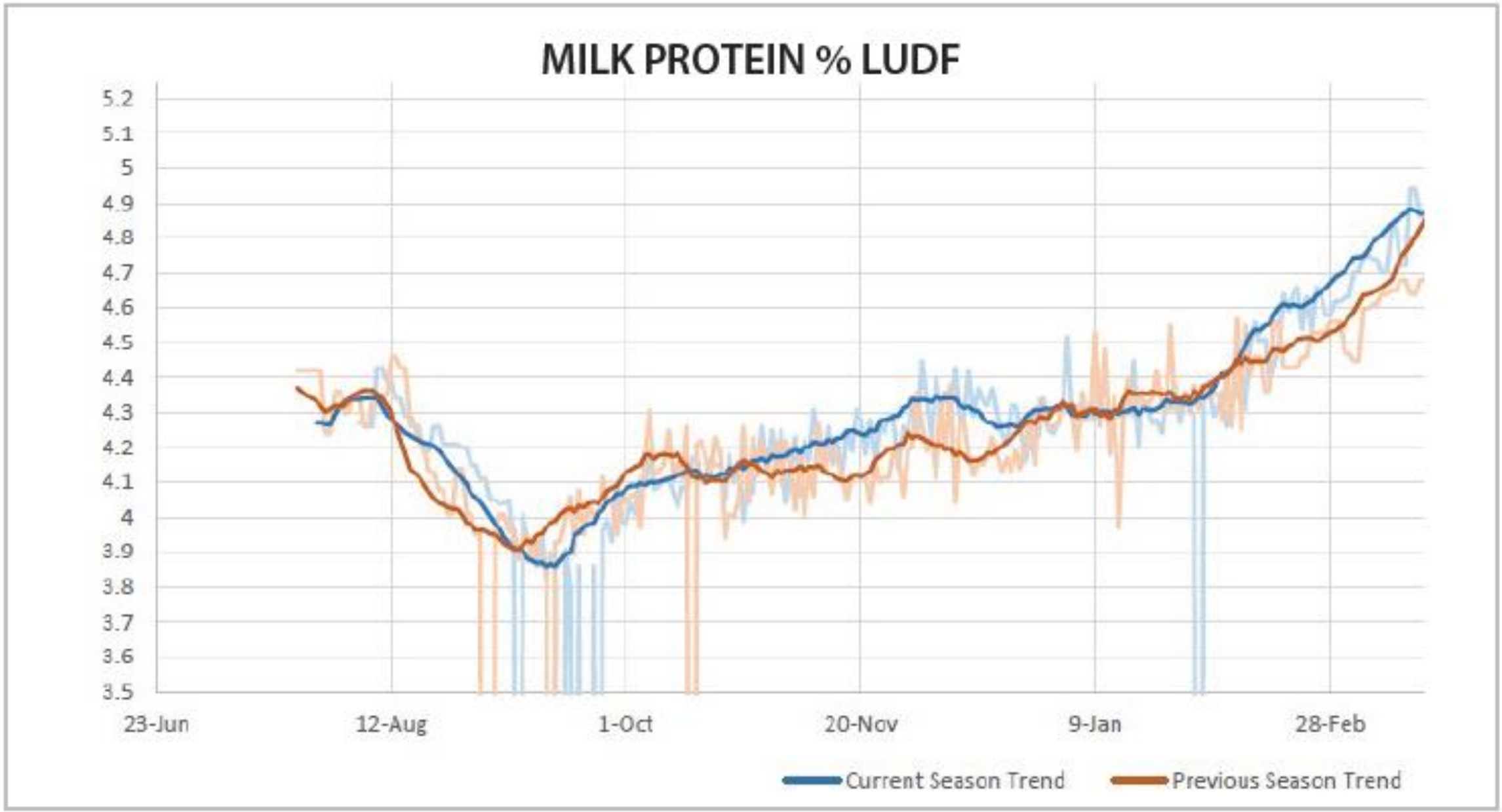
Conception Rate
by Mating Week

2023/24

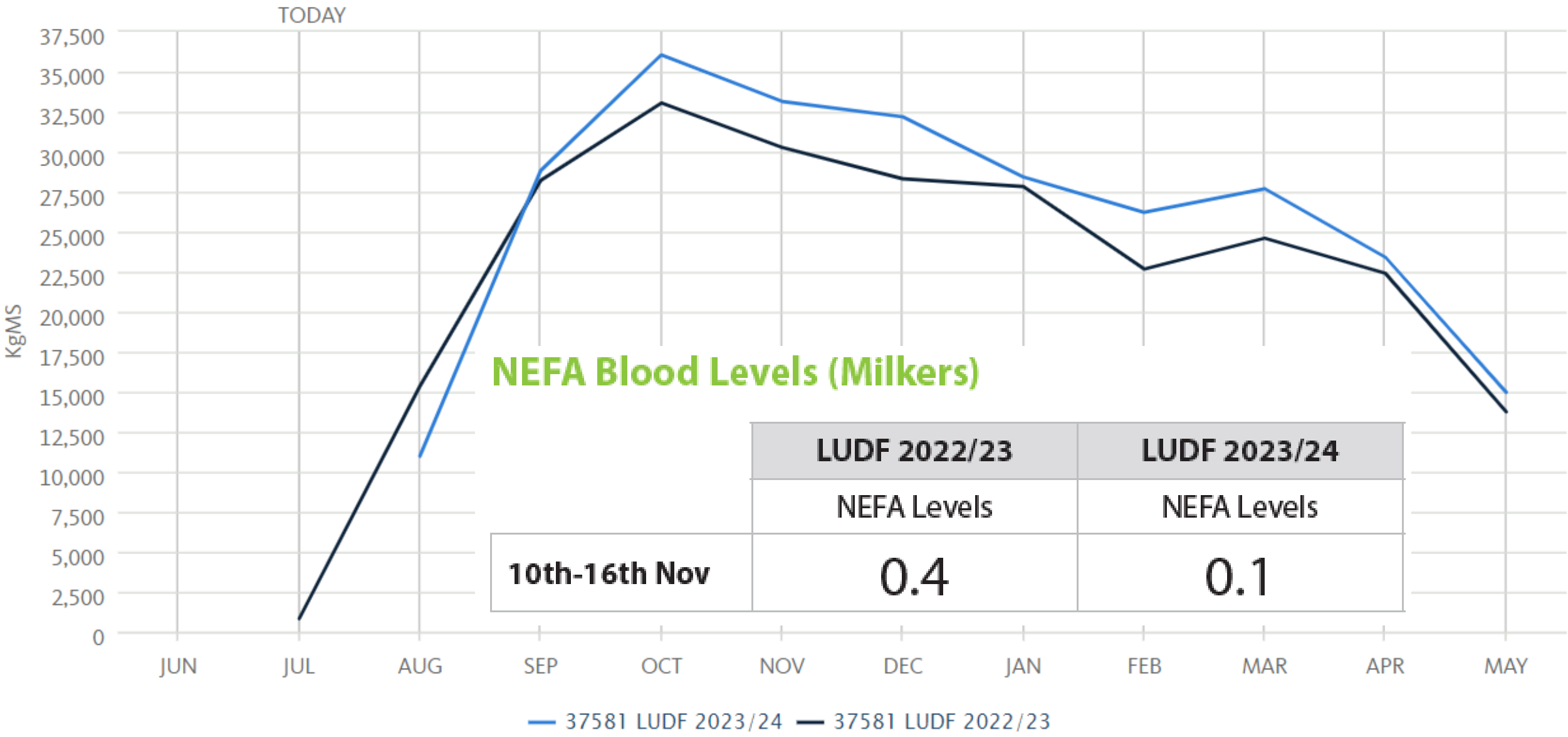




Milk Protein Curve (the NIKE Tick) as a Proxy for Energy Balance



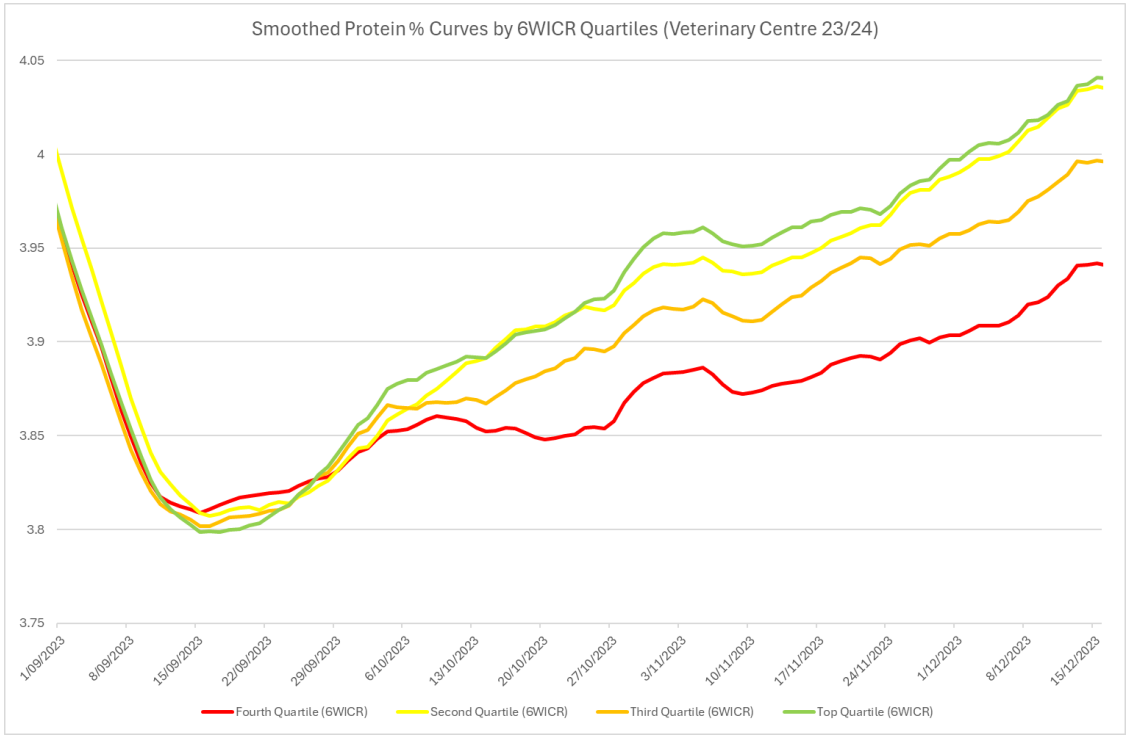
Milk Solids / Lactation Curve

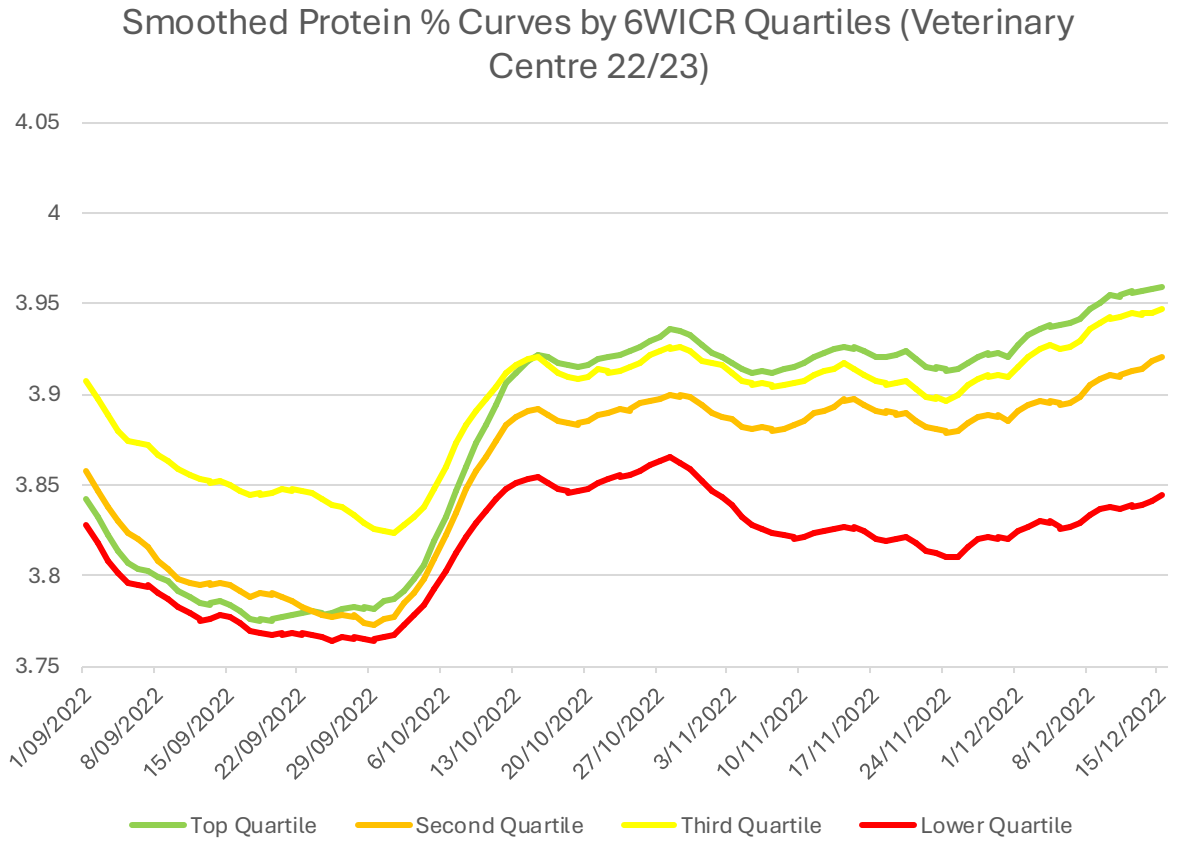


NEFA Blood Levels (Milkers)

	LUDF 2022/23	LUDF 2023/24
	NEFA Levels	NEFA Levels
10th-16th Nov	0.4	0.1

Urea or Season???
Protein Curves 23/24 vs 22/23





Addressing the NICR

PHANTOM COWS

EXTENDING MATING

Phantom Cows

LUDF 23/24 season phantom cow summary

4 phantom scanning visits -

05/12/2023	15 phantoms treated
14/12/2023	11 phantoms treated
28/12/2023	8 phantoms treated
08/01/2024	8 phantoms treated

Total 42 phantom treatments (38 cows), 4 cows got treated twice, after not responding to their first PG shot.

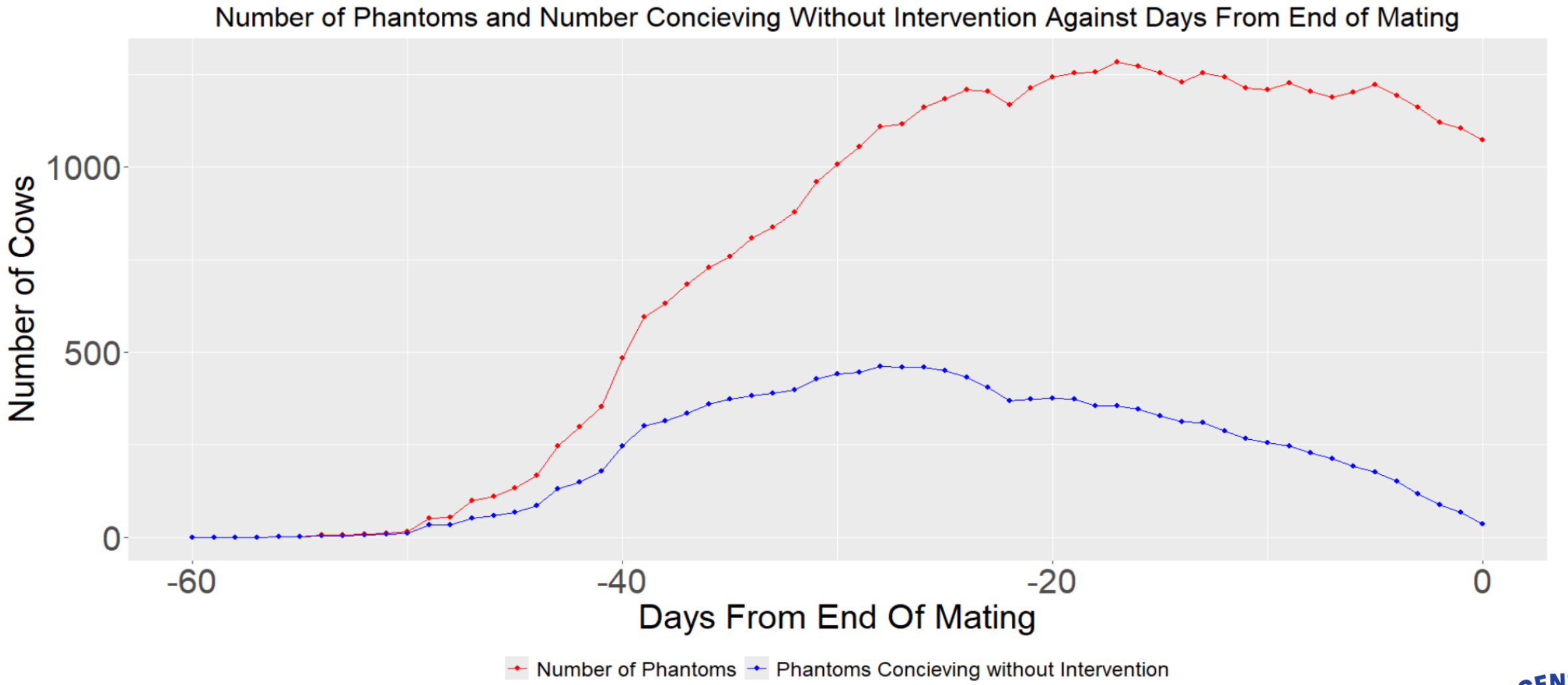
26 of the 38 cows (68%) ended up pregnant.
Drop in MT rate = 4.8%

LIKELY ~ 20% of intervention cows would have got pregnant without intervention (VC internal data set), so impact drop = 3.4%

PHANTOM COWS

In 2022/23 if NO intervention EXPECTED NICR from JUST Phantom cows would have been >10%

(In 2023/24 <7%)


Number of Phantoms and Number Concieving Without Intervention Against Days From End of Mating
Number of Cows
1000
500
0
-60
-40
-20
0
Days From End Of Mating
Number of Phantoms
Phantoms Concieving without Intervention

Days From End of Mating	10	15	20	25
Percentage of Herd to Scan	73.4%	69.0%	64.1%	57.8%
Phantom Percentage	8.3%	9.2%	10.0%	11.4%
Percentage Mismated	2.8%	2.6%	2.3%	2.5%
Submission Rate Phantoms Before End of Mating	35.4%	49.0%	58.2%	64.7%
Percentage phantoms conceiving naturally	20.0%	26.1%	29.6%	35.5%
GPG +P4 Pregnancy Rate	45.0%	45.0%	45.0%	45.0%
Empty Rate Difference	25.0%	18.9%	15.4%	9.5%
DIM Change per phantom cow	-0.93	0.31	1.43	1.97
Benefit from Days in Milk per Phantom Cow	-$8.18	$2.71	$12.60	$17.32
Benefit from Empty Rate per Phantom Cow	$250.13	$188.92	$154.06	$95.31
Total Cost Benefit	$286,835	$216,087	$175,669	$85,557
Cost Benefit Per Phantom	$183.75	$133.06	$106.53	$50.75
Herd Empty rate change	1.52%	1.20%	0.99%	0.63%
ROI	4.16	3.27	2.77	1.82

Conclusions

1. **Treating after first round of AB**
   - There was a positive return on investment of 1.7- 2 x
   - Delaying slightly to 26+ days resulted in a better ROI
   - Expected herd empty rate change 0.6-0.7%
   - Never too late to intervene

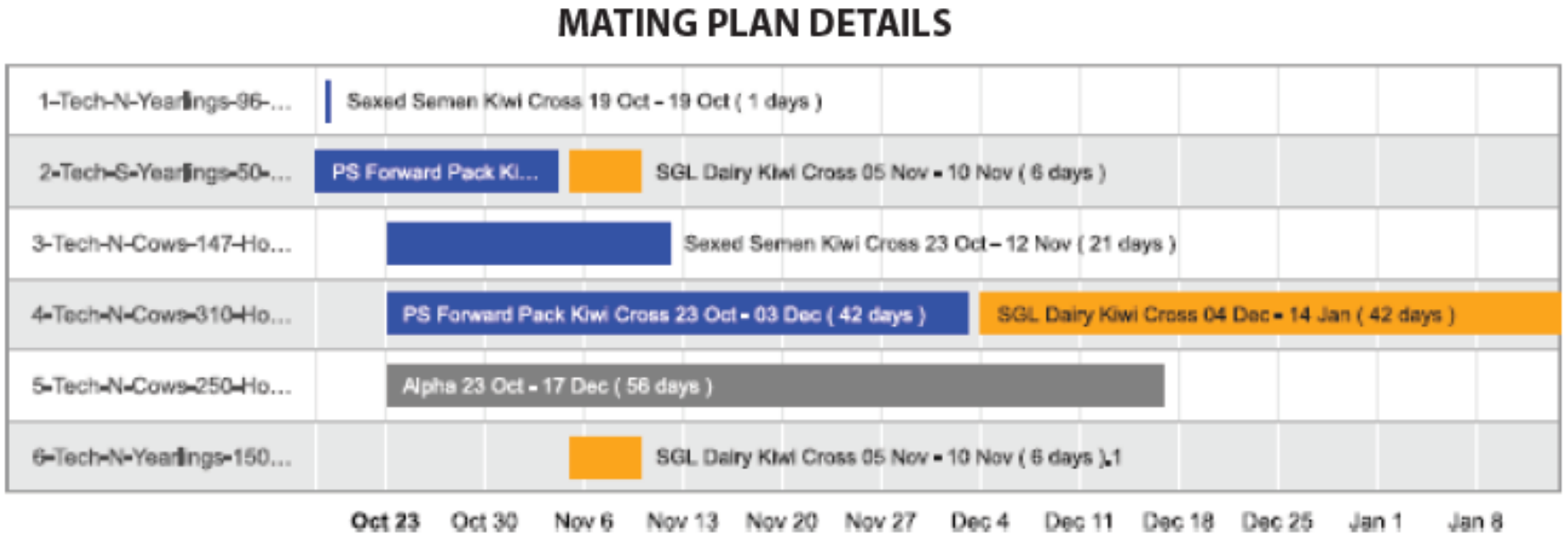
2. **Phantom cow scanning**
   - Scanning 10 days before the end of mating gave the biggest return
   - Reducing the cut off from 35 to 28 days increased the benefits
   - 1.5% reduction in empty rate
   - Mismatings a significant issue to be aware of

ANIMAL HEALTH SERVICES VETS

VETERINARY CENTRE

Mating Period / SGL Semen

The mating period was extended from the traditional 10 weeks to 12 weeks for the 2023 mating period. Ultrashort gestation semen was used for the tail end of mating:



Scanning was completed on a weekly basis through December, with a final scan in Late February. It was confirmed that an additional 4.2% (24) cows were in calf with combining the collar and short gestation technologies. Mating can be extended without collars, however we will be demanding staff do extra work (drafting) through the xmas/new year break. Collars are automated.

EXTENDING MATING

In 2022/23 by extending the mating length 3.3% more cows got in calf

In 2023/24 4.2% (with 5 days less mating)

Fertility Focus 2022: Seasonal

Lincoln University
The Manager (University Dairy Farm) Hancox

Report date:	28/03/24
PTPT:	BQCY
Herd Code:	6/114
No of cows included:	542
These cows calved between:	15/06/22 and 21/12/22
Mating start & end date: (based on AB or pregnancy test data)	23/10/22 - 23/01/23
Next planned start of calving:	01/08/23
Duration of mating:	93 days
Duration of AB period:	90 days

incalf FERTILITY FOCUS Version 3.01

DairyNZ

LIC

1 Overall herd reproductive performance

6-week in-calf rate
Percentage of cows pregnant in the first 6 weeks of mating

Your herd	75% (74-75%)
Aim above	78%

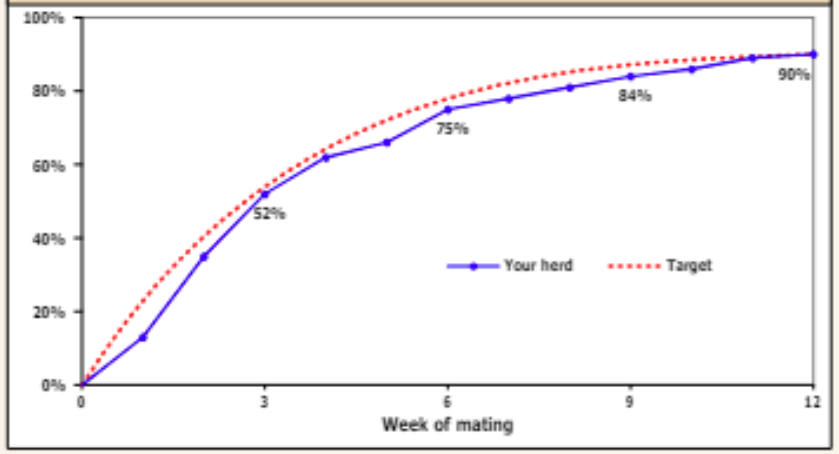
☆☆☆☆☆

Not-in-calf rate
Percentage of cows not pregnant after 93 d

Your herd	9% (8-9%)
Aim for	9%

13%??

% of herd in calf
Cumulative by week of mating



2 Drivers of the 6-week in-calf rate

3-week submission rate
% of cows that were inseminated in the first 3 weeks of mating

Your herd	87%
Aim above	90%

☆☆☆

Non-return rate
% of inseminations that were not followed by a return to heat

Your herd	
Aim above	

Conception rate
% of inseminations that resulted in a confirmed pregnancy

Your herd	50%
Aim above	60%

☆

3WICR
52% to 54%

6WICR
75% (held)

Conception Rate
50% to 53%

NICR
9% (13%?) to 7%

5 DAYS LESS MATING

Fertility Focus 2023: Seasonal

Lincoln University
The Manager (University Dairy Farm) Hancox

Report date:	04/07/24
PTPT:	BQCY
Herd Code:	6/114
No of cows included:	563
These cows calved between:	14/06/23 and 20/12/23
Mating start & end date: (based on AB or pregnancy test data)	22/10/23 - 14/01/24
Next planned start of calving:	30/07/24
Duration of mating:	85 days
Duration of AB period:	85 days

incalf FERTILITY FOCUS Version 3.01

DairyNZ

LIC

1 Overall herd reproductive performance

6-week in-calf rate
Percentage of cows pregnant in the first 6 weeks of mating

Your herd	75% (75-76%)
Aim above	78%

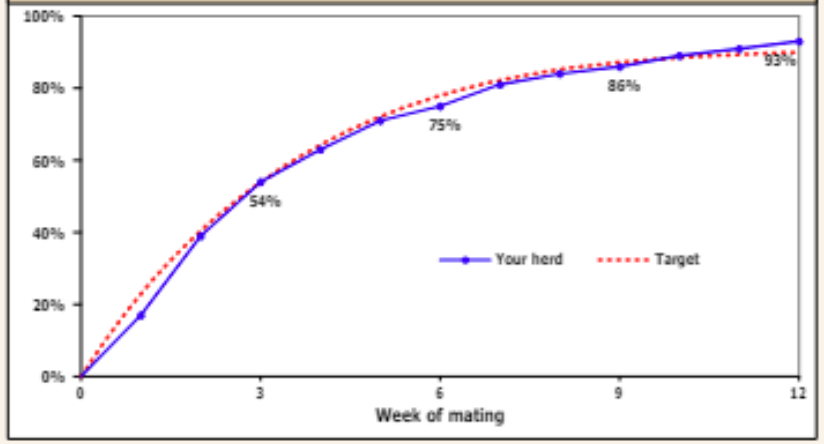
☆☆☆☆☆

Not-in-calf rate
Percentage of cows not pregnant after 85 days of mating

Your herd	7%
Aim for	9%

☆☆☆☆☆

% of herd in calf
Cumulative by week of mating



2 Drivers of the 6-week in-calf rate

3-week submission rate
% of cows that were inseminated in the first 3 weeks of mating

Your herd	91%
Aim above	90%

☆☆☆☆☆

Non-return rate
% of inseminations that were not followed by a return to heat

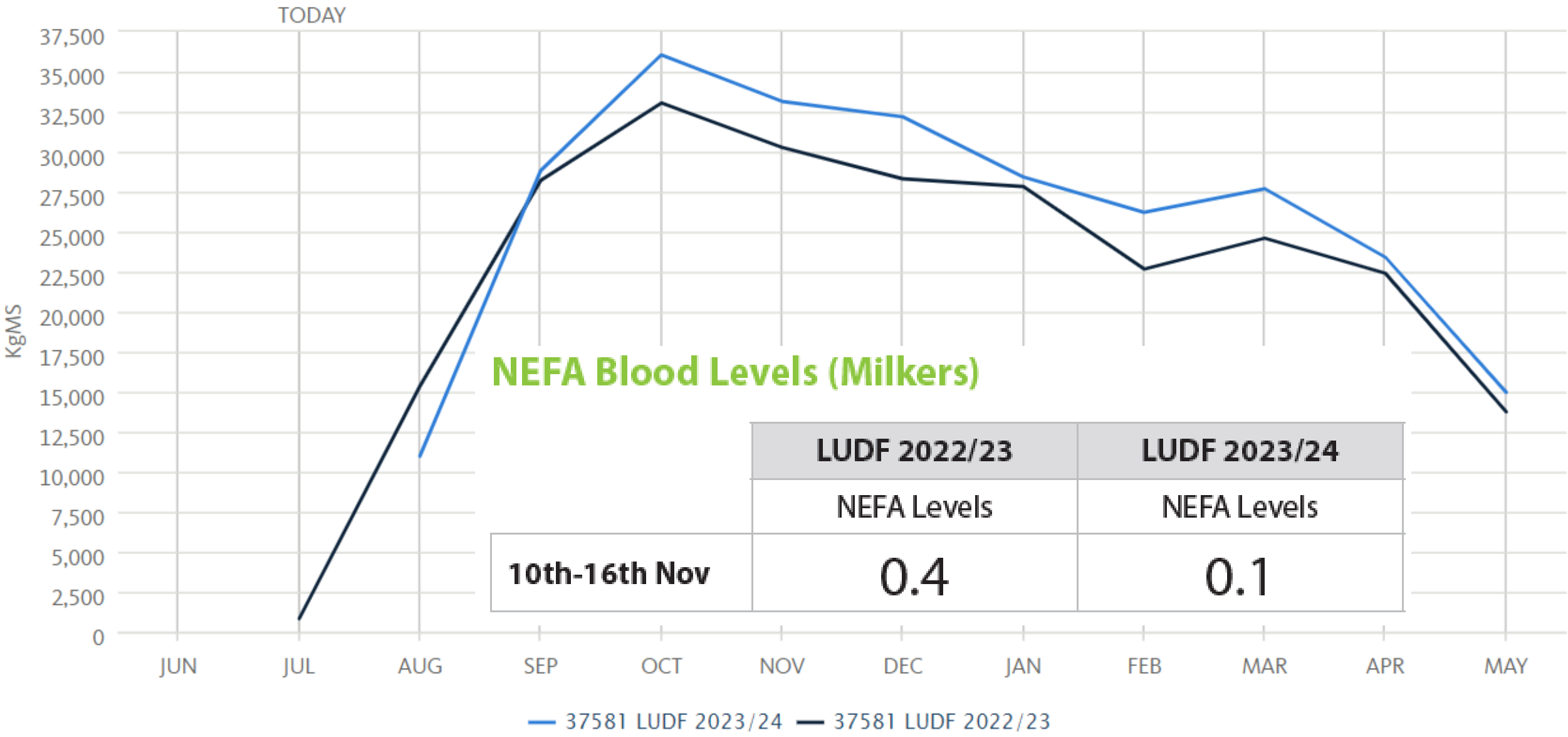
Your herd	
Aim above	

Conception rate
% of inseminations that resulted in a confirmed pregnancy

Your herd	53%
Aim above	60%

☆☆☆

Milk Solids / Lactation Curve



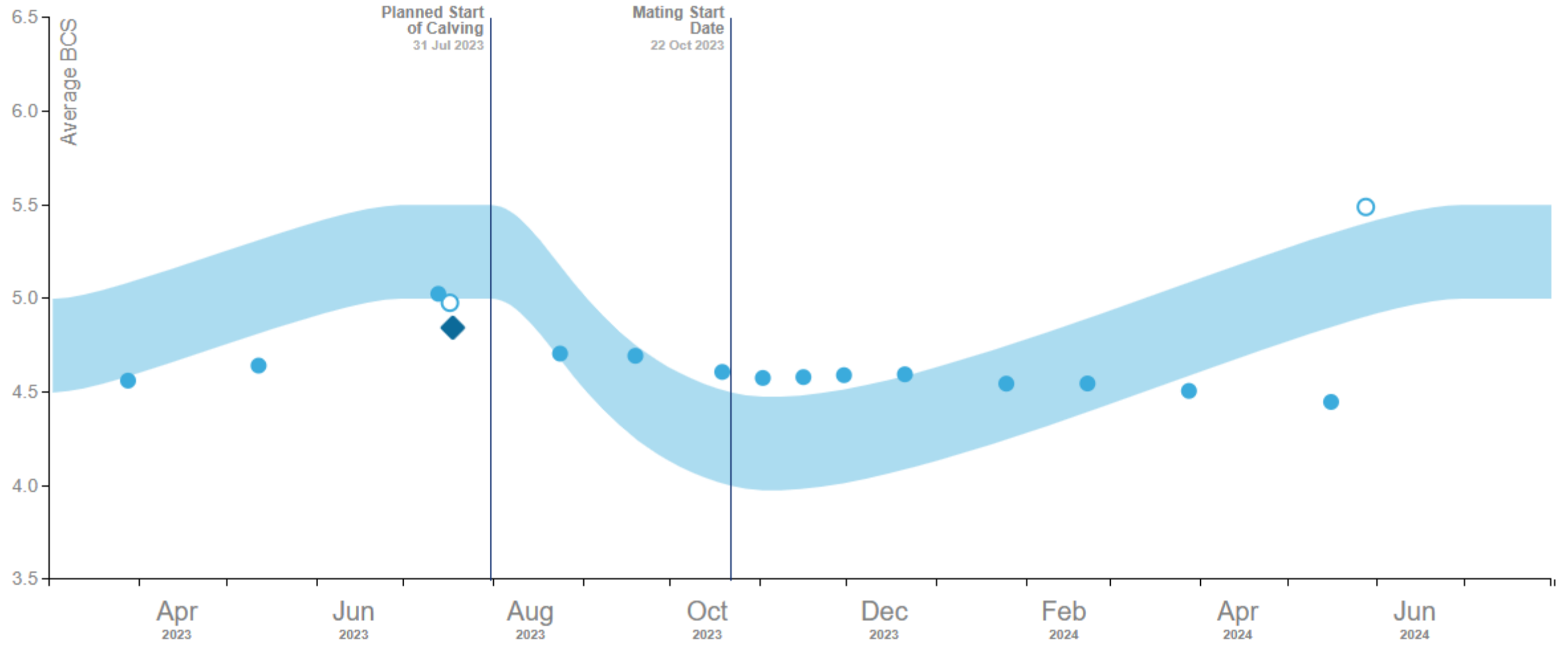
NEFA Blood Levels (Milkers)

	LUDF 2022/23	LUDF 2023/24
	NEFA Levels	NEFA Levels
10th-16th Nov	0.4	0.1

BCS for 1 March 2023 - 31 July 2024

Body Condition Scores

Print



Thank you to our SIDDC partners for enabling this project and to Ryan Luckman from The Veterinary Centre.

SIDDC
South Island Dairying Demonstration Centre

LUDF
Tomorrow's farming, today

Lincoln University
DairyNZ
ravensdown
LIC
agresearch
Fonterra
Dairy for life
SIDE