

# Longlands Farm – H Goodwin & Sons



# Background



- Farming partnership
- Invaluable support from herdsman
- Investment in improved cow comfort and welfare have improved cow performance
- Changes over the past 5 years have led to a 30% increase in yield across the herd
- Focus on genomic testing in recent years to drive performance
- Open farm Sunday - from 250 to more than 1500



# Stocking & Production

- 230 cows
- 160 followers
- Beef calves sold locally
- 11,900 Litres milk sold @ 4.07% BF & 3.35% P
- 3 x Milking
- Holstein herd, fully housed, all-year-round calving
- Arla 360 Starbucks contract
- 20:20 GEA herringbone parlour – auto ID & ADF
- 20,000 L outdoor tank
- 6000 L buffer tank



# Land & Cropping

- 480 acres
  - 193 owned
  - Remainder on various agreements (3yr FBTs/Annuals)
- Maize 200 ac
- Wheat 30 ac
- Temp grass 140 ac
- Rest: perm & low input grass or woodland







Group name	August Ration		Pre-Calves		F1	
Milk yield	40		40			
Weight change (kg/d)						
Feeds	kg fresh	kg DM	kg fresh	kg DM	kg fresh	kg DM
1st cut 2023 0720 sample C 25						
1st cut 2024 0824 sample C 25	18.00	5.28				
2nd cut 2023 0823 C 35						
3rd cut 2023 1023 C 35						
Straw, NIS Pellets C 100	1.00	0.98				
Butterfat Extra C 1575						
Magpac C 1275	0.25	0.24				
Wheat coarse C 185	0.50	3.30				
Repaired meal C 275	4.75	4.28				
Maize 2023 early cut C 40	21.40	7.77				
Maize 2023 late cut C 30						
Chopped straw C 70	0.50	0.42				
Prealver 470 (inc Resature) C 1370.8						
Special Yeast C 1078.6	0.10	0.10				
Milking cow Performance C 885	0.15	0.15				
Dry cow premium C 707						
Protein with Soya C 275	5.40	4.73			0.35	
Salt C 170	0.10	0.10				
Cal Mag (Mag Oxide) C 325	0.05	0.05			0.04	0.05
Limestone C 130	0.12	0.12				
October 2022 Protein C 260						
Advance MA C 340	0.030	0.030				
Water C 0	11.000	0.003				
Stockmol 20 C 240	1.000	0.700				
cod Prealver 500 FOC (205444) C 1443					0.800	0.485
<b>Total intake</b>	<b>67.6</b>	<b>28.10</b>			<b>22.2</b>	<b>12.8</b>

40.1 kg ECM from 28.1kg DMI  
1.43 kg ECM/kgDM

	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target
ECM (kg)	57.0	25-45	53.8	25-45						
ECM/kgDMI	12.8	11.7-13.7	12.6	11.7-13.7						
ECM/kgDMI	1.9	1.7-2	1.9	1.7-2						
ECM/kgDMI	8.7	10.0-10.2	10.2	10.0-10.2						
ECM/kgDMI	123	114	117	100						
ECM/kgDMI	9.0	9.4	9.3	8.2						
ECM/kgDMI	110	140	105	112						
ECM/kgDMI	63 (0.94)	4.8-6.1	7 (1.30)	4.7-6						
ECM/kgDMI	5.5	4.8-6.1	6.5	4.7-6						
ECM/kgDMI	3.9	2.5-6.5	4.4	2.5-6.4						
ECM/kgDMI	1.8	0-0.5	1.2	0.1-0.6						
ECM/kgDMI	0.6	0.1-0.2	0.6	0.1-0.2						
ECM/kgDMI	Max 1165		337	Max 432	298	Max 411				
ECM/kgDMI	30	31-36			48.4	38-64	56.2	38-64		
ECM/kgDMI	20.9	20-29			30.1	20-51	34.8	20-51		
ECM/kgDMI	21.9	21-25			12.3	0-4	9.2	1-5		
ECM/kgDMI	6.8	2-9			4.7	1-2	4.5	1-2		
ECM/kgDMI	3.7	Max 4.1			2.6	Max 3.3	2.4	Max 3.3		
ECM/kgDMI	48.1	>20			170.1	>20	216.9	>20		
ECM/kgDMI	16.3	16.5-18.5			13.9	13-15	11.7	13-15		
ECM/kgDMI	2527	2286			779	602	722	572		
ECM/kgDMI	2774	3442			1250	977	1014	948		
ECM/kgDMI	1059	Min 890			247	Min 196	199	Min 155		
ECM/kgDMI	9.5	10.9-11.4			11.3	10-10.5	9.6	10-10.5		
MP supply limited by	ERDIP				FME		FME			
Diet supplies	Litres/d				Litres/d		Litres/d			
Energy for	48.5	40.0								
Protein for	45.2	40.0								
To get per litre figures you must add actual litres on this F1 page										
Non-ferrous feeds	Chfeed/day	4.50			1.85		0.78			
		11.59 ppt	(30)							
All feeds	Chfeed/day	6.30			2.68		1.76			
		16.37 ppt	(30)							
Concentrate use	kg/holiday at 87% DM	15.0			4.7		2.7			
	Feed rate	0.39 kg/l	(30)							
Concentrate costs	£/Tonne at 87% DM	301			390		290			
Diet Nitrogen effc. (needs acid yield)		29.0%								

Farm: Rob Goodwin  
Longlands Farm, Caldwell  
Road  
DE12 6RY

Sample Description: Goodwin 1st cut 2024

Certificate ID: AR-24-EQ-005379-01

Laboratory ID: 106-2024-00006050

Barcode number: 18-PMW-002

PO Number:

Sample type:

Received On: 11-06-2024

Harvest Date: 11/05/2024

Reported On: 12-06-2024

On behalf of: Paul Macer  
Kite Consulting

Cut No. 1

Reported By: Sally Golding-Round

Additive:

Package: PEQ24: Grass Silage - Prof

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Farm: Rob Goodwin  
Longlands Farm, Derbyshire  
DE12 6RY

Sample Description: Maize 1st Batch 2023

Certificate ID: AR-23-EQ-015080-01

Laboratory ID: 106-2023-00015612

Barcode number: 18-PBH-774

PO Number:

Sample type:

Received On: 09-11-2023

Harvest Date: 01/05/2023

Reported On: 12-11-2023

On behalf of: Paul Macer  
Kite Consulting

Cut No. N/A

Reported By: Sally Golding

Additive:

Package: PEQ26: Maize Silage - Profi +

Nutritional Information

Determination	Results	Units	Interpretation of Results				Target Value
<b>Analysis</b>							
Dry matter	325	g/kg	20	200	380	560	
D Value	74	%	60	66	72	78	
ME	11.8	MJ/kg DM	9.5	10.5	11.5	12.5	
Fermentable ME	10.50	MJ/kg DM	5.00	7.96	9.00	11.00	
Crude Protein	113	g/kg DM	60	120	180	240	
Ammonia Fraction	11.0	% CP	0.0	5.0	10.0	15.0	
Nitrate	0	g/kg DM	0	1	3	10	
Sugar	109	g/kg DM	10	25	60	180	
NDF	468	g/kg DM	380	480	580	680	
ADF	273	g/kg DM	200	300	400	500	
ADL	18	g/kg DM	10	20	25	40	
NDFd	72	% NDF	50	65	70	80	
Crude Ash	75	g/kg DM	20	60	100	140	
Crude Fibre	253	g/kg DM					

Fermentation Characteristics

pH	4.4		3.4	3.9	4.4	4.9	
Lactic Acid	73.0	g/kg DM	0.0	30.0	70.0	110.0	
Acetic Acid	12.0	g/kg DM	0.0	0.0	20.0	40.0	
Acet + Prop Acid	13	g/kg DM	4	12	19	32	
Butyric Acid	1.8	g/kg DM	0.0	0.1	5.0	10.0	

Remarks

Nutritional value and analysis result

Crude protein fibre content is : NDF N-Free 456 g/kg DM

Nutritional Information

Determination	Results	Units	Interpretation of Results				Target Value
<b>Analysis</b>							
Dry Matter	370	g/kg	190	270	350	430	350-380
D Value	69	%	64	68	72	76	70-72
ME	10.9	MJ/kg DM	10.1	10.8	11.5	12.2	11.2-11.5
Fermentable ME	9.60	MJ/kg DM	9.00	9.60	10.20	10.90	10.00-10.20
Crude Protein	72	g/kg DM	50	70	90	110	80-90
Ammonia Fraction	8.0	% CP	0.0	2.0	8.0	14.0	2.0-5.0
Starch	286	g/kg DM	120	240	360	480	300-360
Bypass Starch	30	%	20	22	25	28	25-34
Crude Oil	23	g/kg DM	25	30	35	40	25-35
Sugar	12	g/kg DM	1	10	15	30	1-15
NDF	470	g/kg DM	300	360	420	480	380-400
ADF	266	g/kg DM	210	270	330	390	280-320
ADL	21	g/kg DM	12	16	20	24	14-20
NDFd	65	% NDF	35	45	55	60	40-60
Crude Ash	34	g/kg DM	10	30	50	70	30-40
Crude Fibre	237	g/kg DM					

Fermentation Characteristics

Determination	Results	Units	Interpretation of Results				Target Value
<b>Analysis</b>							
pH	3.9		2.8	3.4	4.0	4.6	3.9-4.0
Lactic Acid	44	g/kg DM	2	45	60	70	40-60
Acetic Acid	16	g/kg DM	0	10	25	40	10-12



# Buildings

- 258 sand freestalls
  - milkers & true dry cows
- 19 sand freestalls
  - pre-calving cows
- Straw bedded
  - calving yard & pens
- 38 sand freestalls (locking yokes)
  - bulling heifers
- Youngstock
  - straw yards



# Infrastructure Investments

- Prior to investments, 230 cows milked 3x through a 20:20 herringbone parlour
- Producing 9000 litres/cow/year
- No major issues - visits to high performing herds inspired areas for improvements
- Updating old youngstock building into 60 sand cubicles for milkers
- Lighting & ventilation improved with the installation of LED lights and fans
- Converted main cubicle shed & existing straw shed - all milkers, dry cows and transition cows now on sand cubicles
- Silage clamps upgraded
- Calf shed 12 months ago





















# Performance

Results from investment included:

- Immediate uplift of 7 litres/cow
- Over the following 12 months, increases continued to reach current 12,000 litres
- Health of the herd has improved, including a reduction in lameness
- Mastitis is now just seven cases per 100 cows
- Overall antibiotic use has fallen by around 75%
- SCC at 145 now, previously ~200

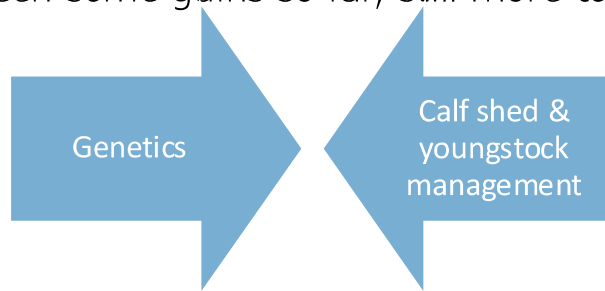


Next step - Genomics & targeted breeding



# Improving performance through genomics

1. Had previously genomic tested some animals but never really used the data
2. Previously importing in calf heifers from France & Germany - slowed progress down
3. Aim
  - Improve Herd performance & efficiency
  - Speed up pace of improvement
4. Seen some gains so far, still more to come

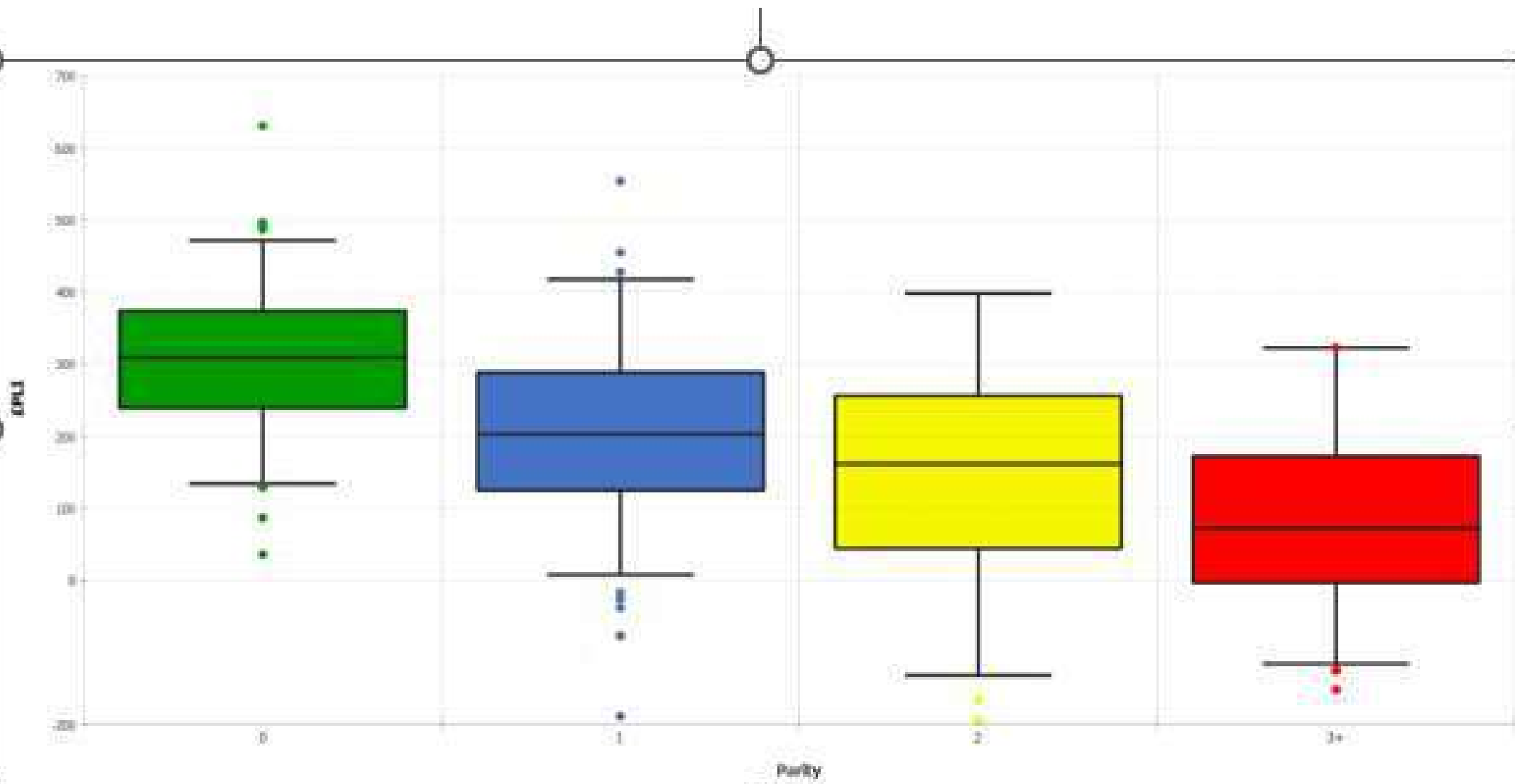


5. Genomics will allow us to get even more selective going forward

# Genomics & targeted breeding

- Participated in 3-year EcoFeed project
- All cows & youngstock genomically tested
- Av £PLI gain £73/year (above UK average £60/year)
- Total solids/cow/year (kg) increased by 13% over 3 years
- 0-24m heifers are in top 20% of UK rankings for £PLI, EnviroCow, milk and total solid PTAs
- Av £PLI for 0-24 month heifers is £310; the best heifer is £631
- 64% greater potential for milk production when comparing 0-12 months with milking cows
- 68% greater potential for total milk solids when comparing 0-12 months with milking cows
- Fertility, lifespan and feed efficiency (EcoFeed) traits have also increased during this time





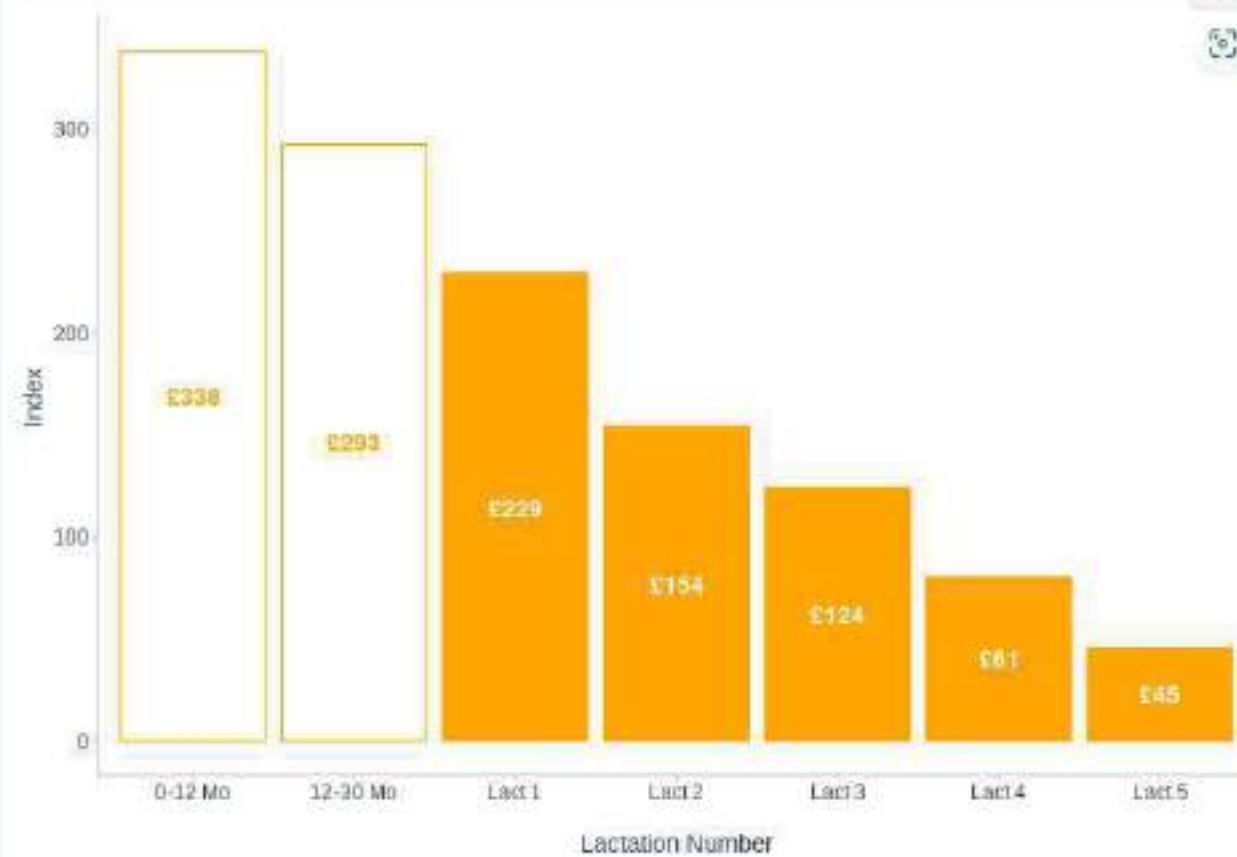
**EPLI by lactation number (parity): note the large increase from 1<sup>st</sup> lactation to youngstock**

£48.78

Average Gain in Genetic Merit per Year



Interactive Gain Plot



£CCI by lactation number

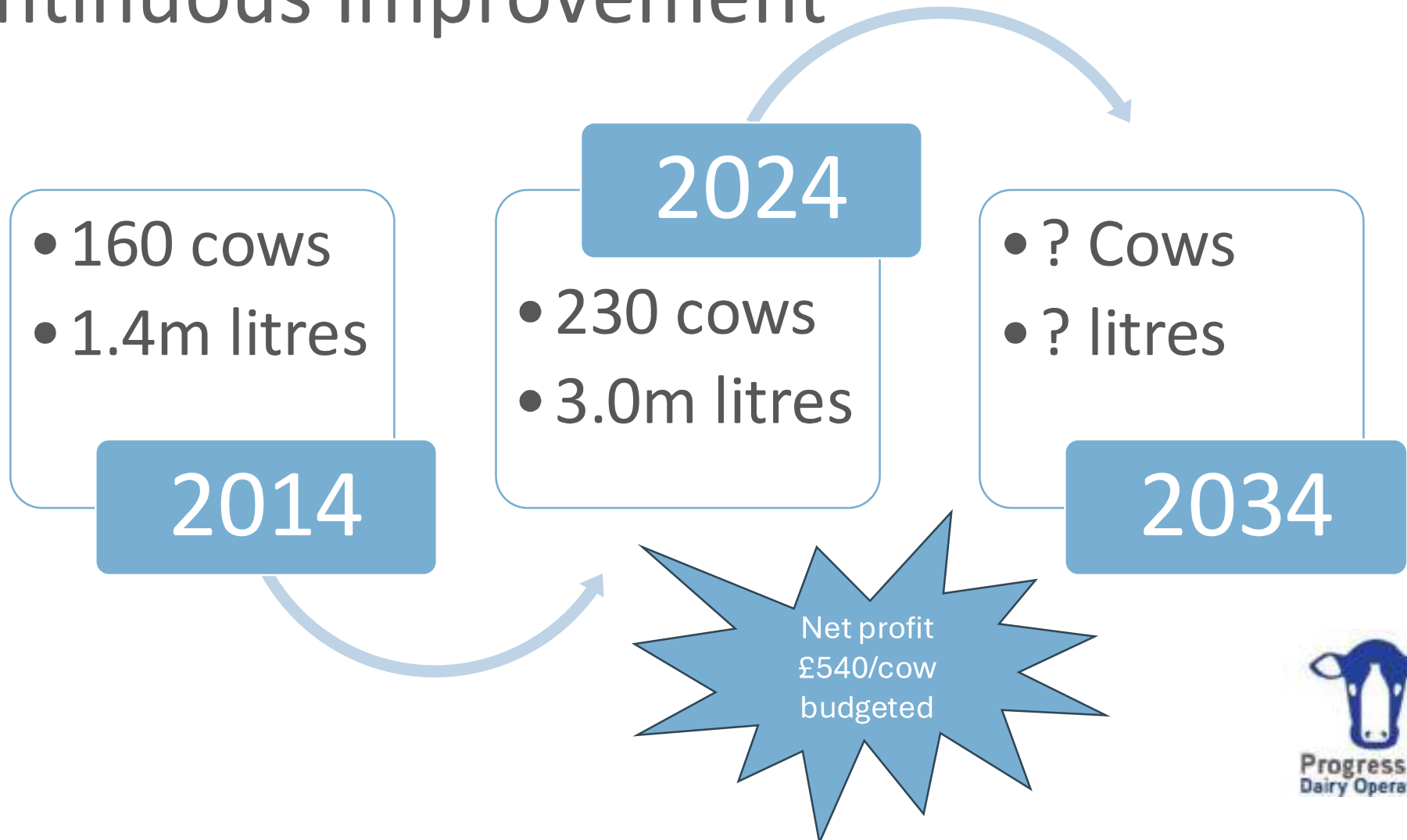
£CCI is Cogent's Customer Index

Based on £PLI but weighted towards the Arla milk contract





# Continuous Improvement



# Thank you!



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