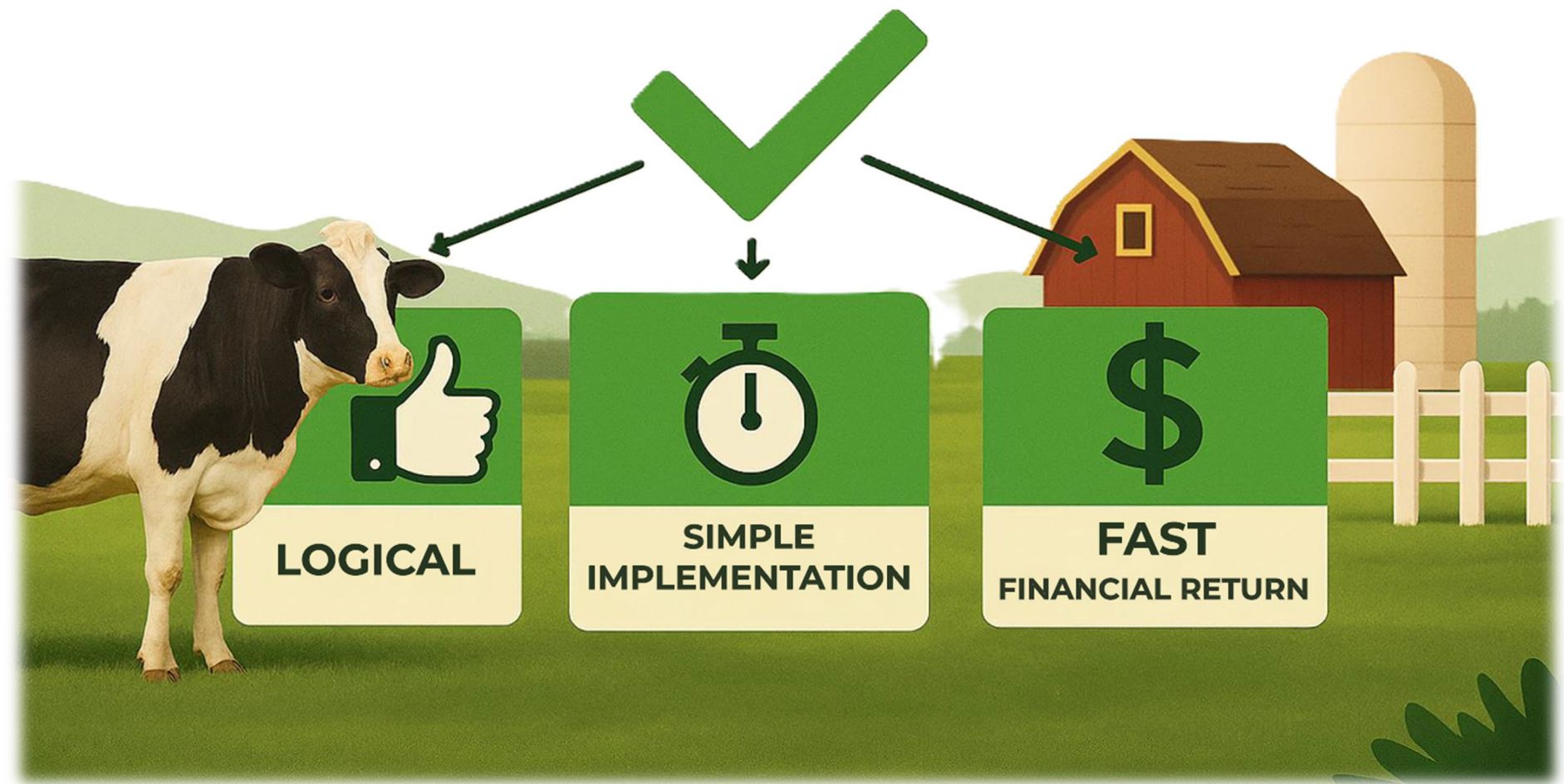


# Best Use of Available Data

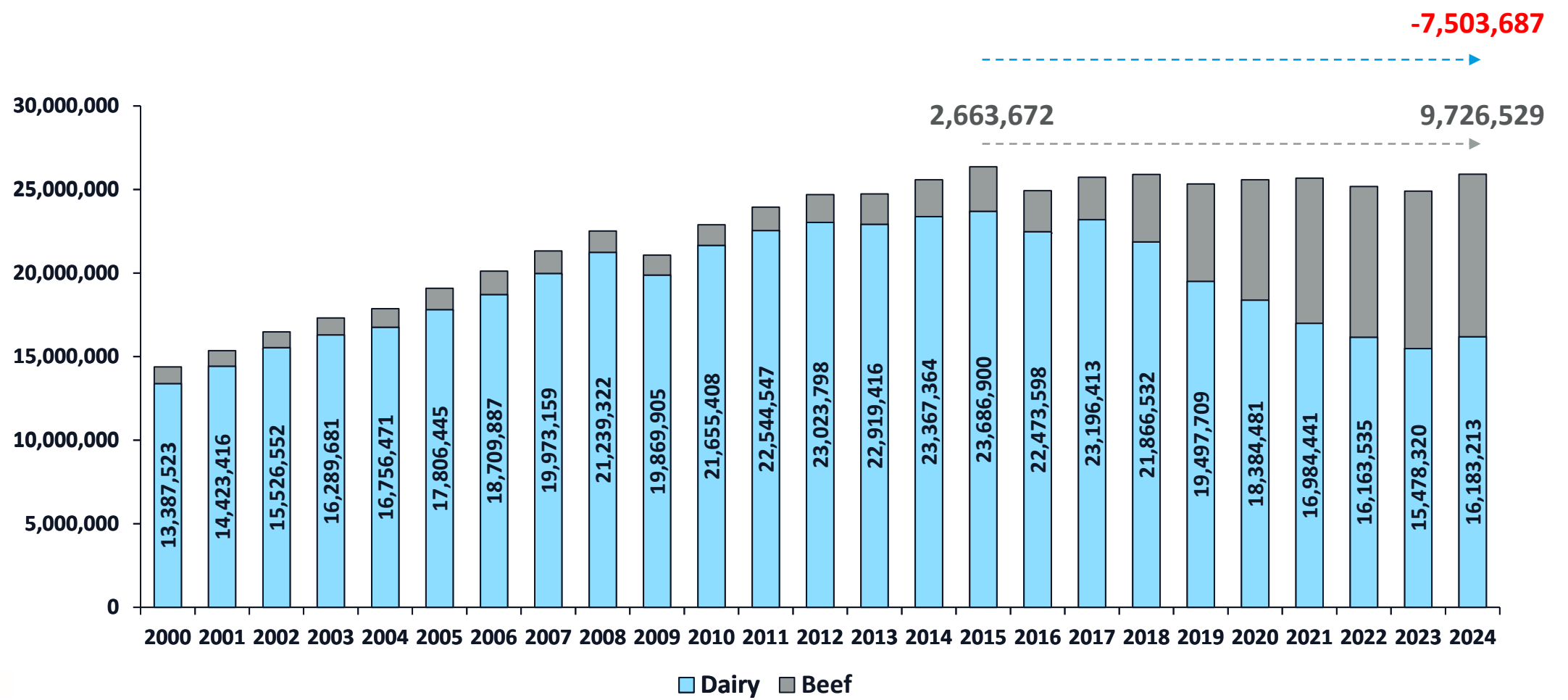
Caio Aranha Gamarra, DVM, MS  
Customer Success Specialist - Key Accounts



# WHEN DAIRY FARMERS WOULD EASILY ADOPT



# Semen Sales Reported Yearly



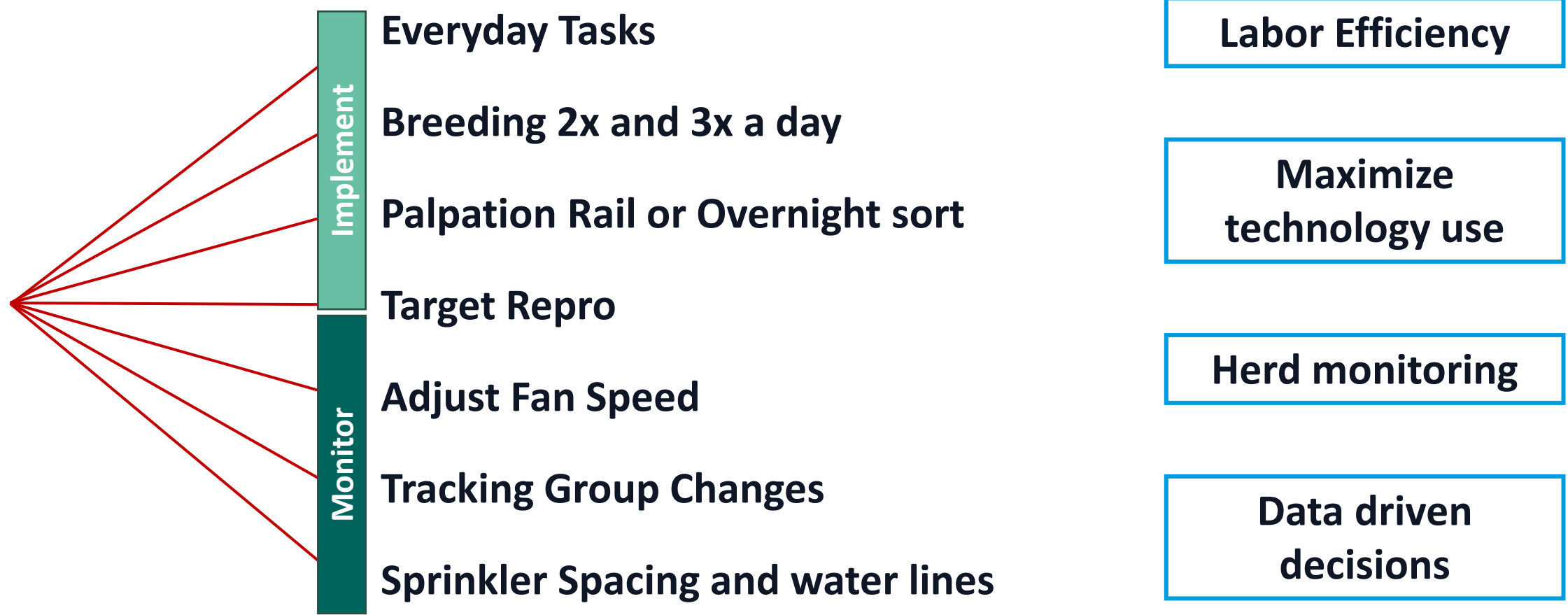
-7,503,687

2,663,672

9,726,529

■ Dairy ■ Beef





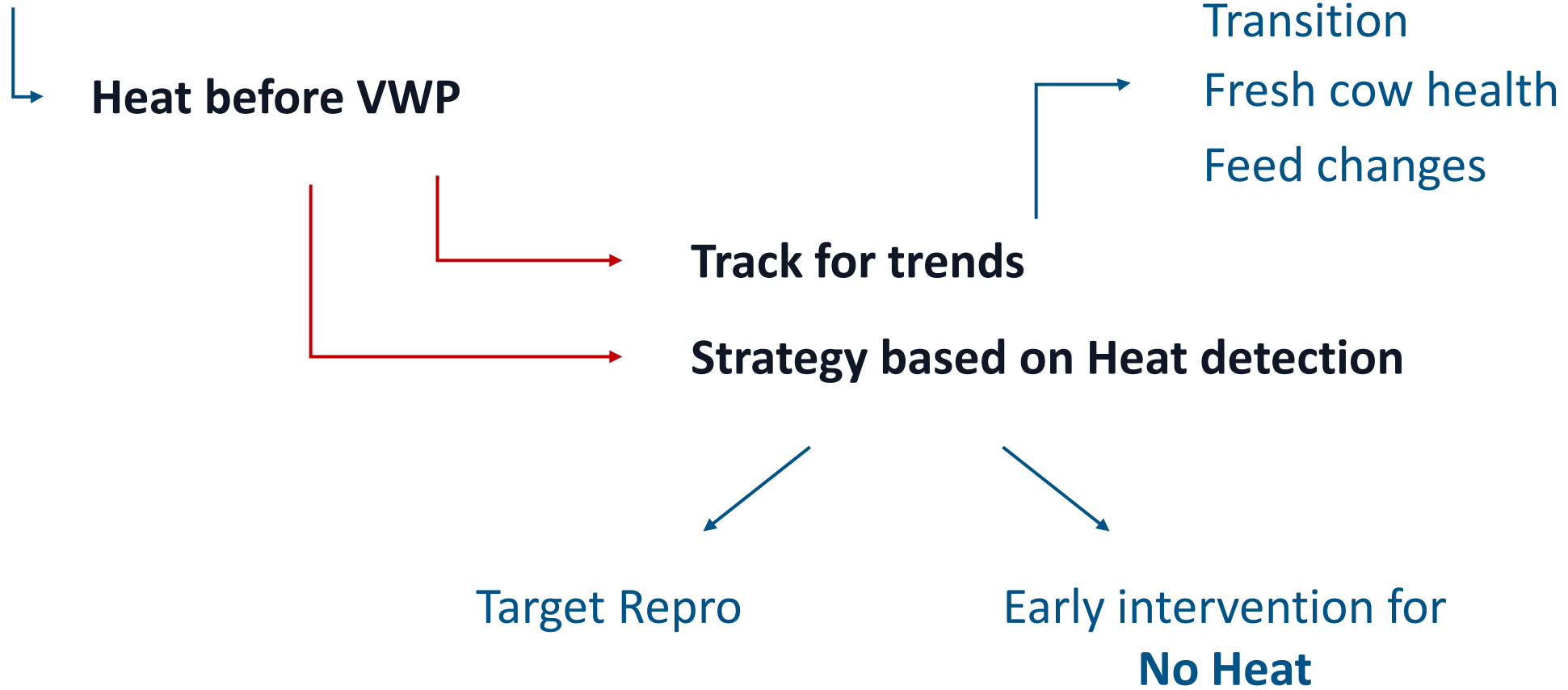
All Cows

Date	Br Elig	Bred	Pct	Pg Elig	Preg	Pct Aborts	
=====	=====	=====	===	=====	=====	===	=====
12/31/24	292	217	74	286	102	36	5
1/21/25	282	216	77	278	83	30	10
2/11/25	294	223	76	289	100	35	7
3/04/25	319	257	81	309	106	34	13
3/25/25	313	245	78	306	115	38	12
4/15/25	345	274	79	341	114	33	13
5/06/25	321	241	75	311	94	30	12
5/27/25	299	214	72	289	73	25	11
6/17/25	274	192	70	265	58	22	2
7/08/25	263	183	70	249	51	20	4
7/29/25	298	229	77	286	69	24	3
8/19/25	329	246	75	314	80	25	8
9/09/25	320	247	77	304	83	27	6
9/30/25	338	243	72	326	81	25	0
10/21/25	356	291	82	346	130	38	5
11/11/25	349	269	77	333	112	34	5
12/02/25	312	248	79	0	0	0	0
12/23/25	281	245	87	0	0	0	0
-----	-----	-----	---	-----	-----	---	-----
Total	4992	3787	76	4832	1451	30	116

One or more Heat

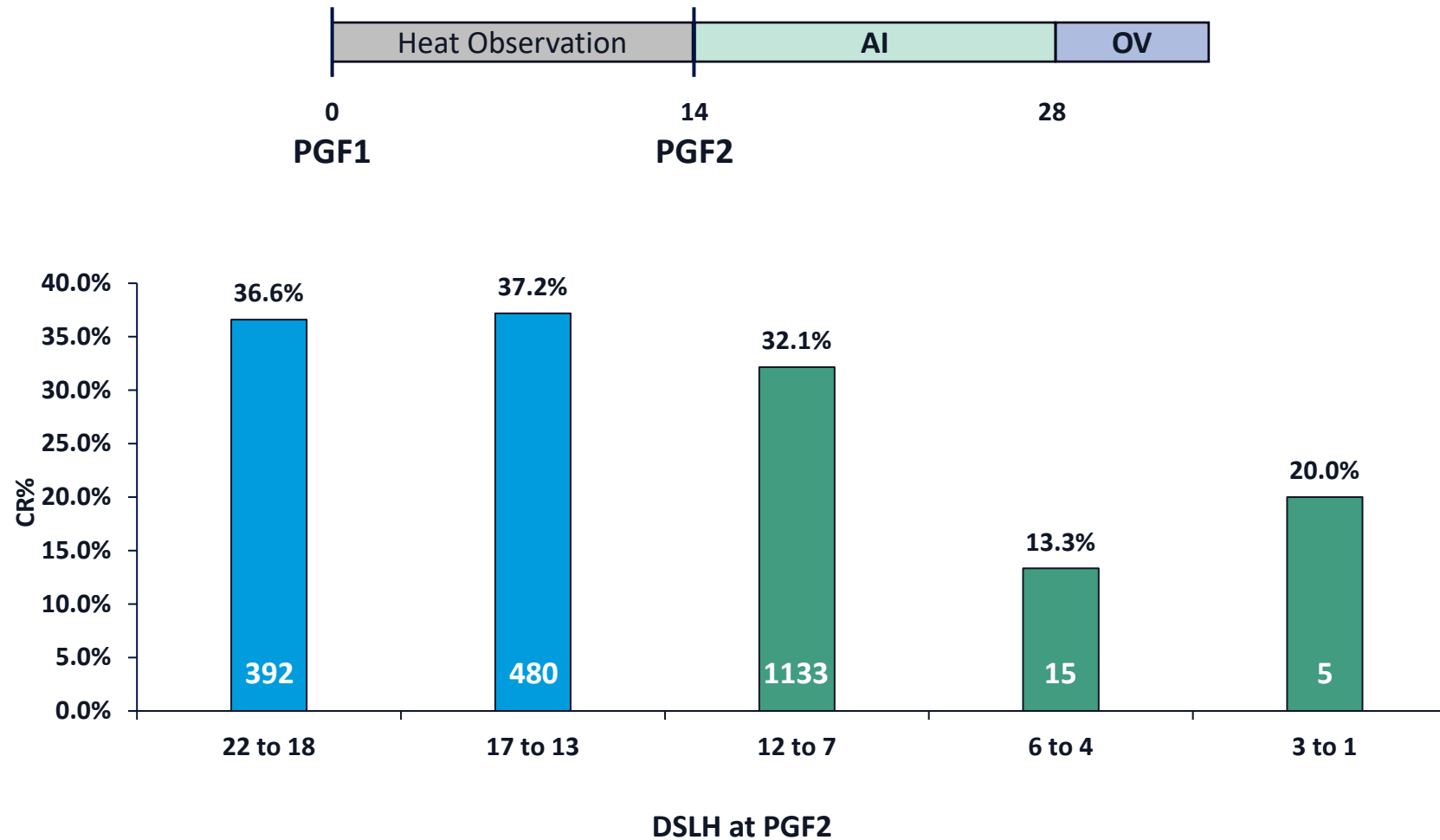
Date	Br Elig	Bred	Pct	Pg Elig	Preg	Pct Aborts	
=====	=====	=====	===	=====	=====	===	=====
12/31/24	414	311	75	405	137	34	8
1/21/25	406	287	71	399	109	27	19
2/11/25	429	322	75	421	142	34	9
3/04/25	504	382	76	488	143	29	21
3/25/25	513	378	74	504	156	31	17
4/15/25	573	450	79	560	185	33	22
5/06/25	512	377	74	494	138	28	14
5/27/25	472	331	70	454	103	23	15
6/17/25	446	298	67	433	88	20	4
7/08/25	453	288	64	432	79	18	5
7/29/25	522	389	75	499	117	23	6
8/19/25	563	411	73	537	146	27	14
9/09/25	529	399	75	503	132	26	9
9/30/25	545	391	72	529	138	26	2
10/21/25	537	411	77	525	173	33	6
11/11/25	536	412	77	516	163	32	7
12/02/25	466	356	76	0	0	0	0
12/23/25	391	345	88	0	0	0	0
-----	-----	-----	---	-----	-----	---	-----
Total	7954	5837	73	7699	2149	28	178

# Heat Data



# PGF from Last Heat - Cows First Service

#2,025



# Breeding Window

Time stamp

- Countdown from 25



J. Dairy Sci. 108:8945–8958

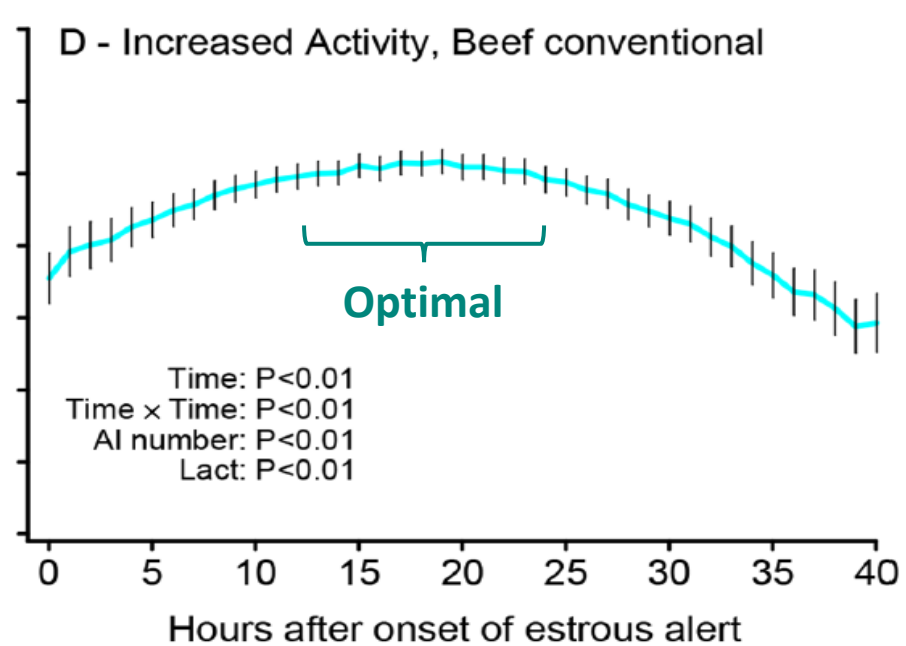
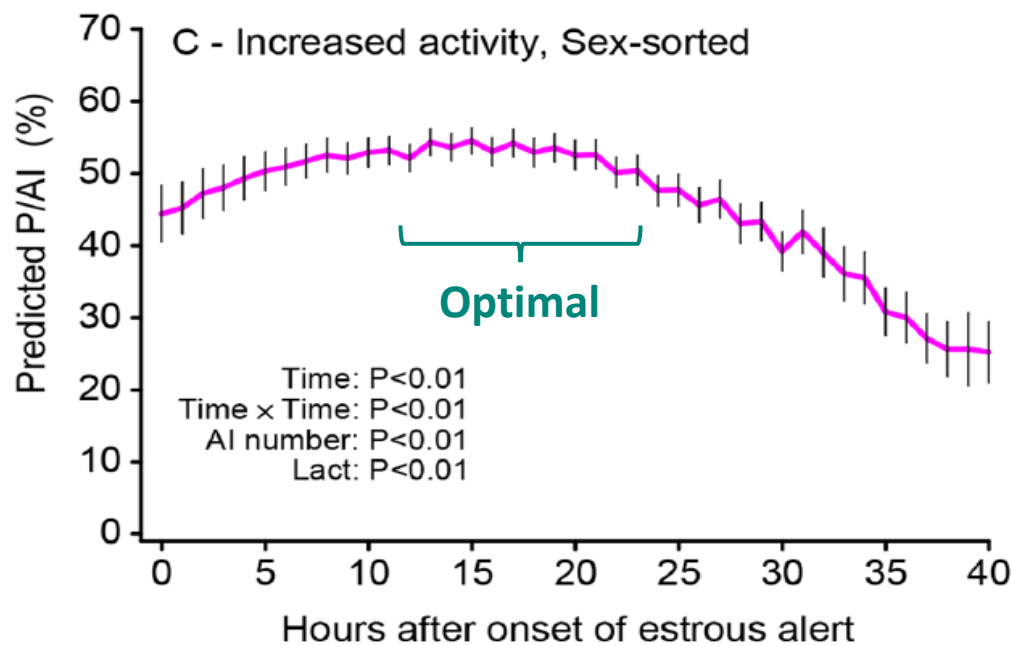
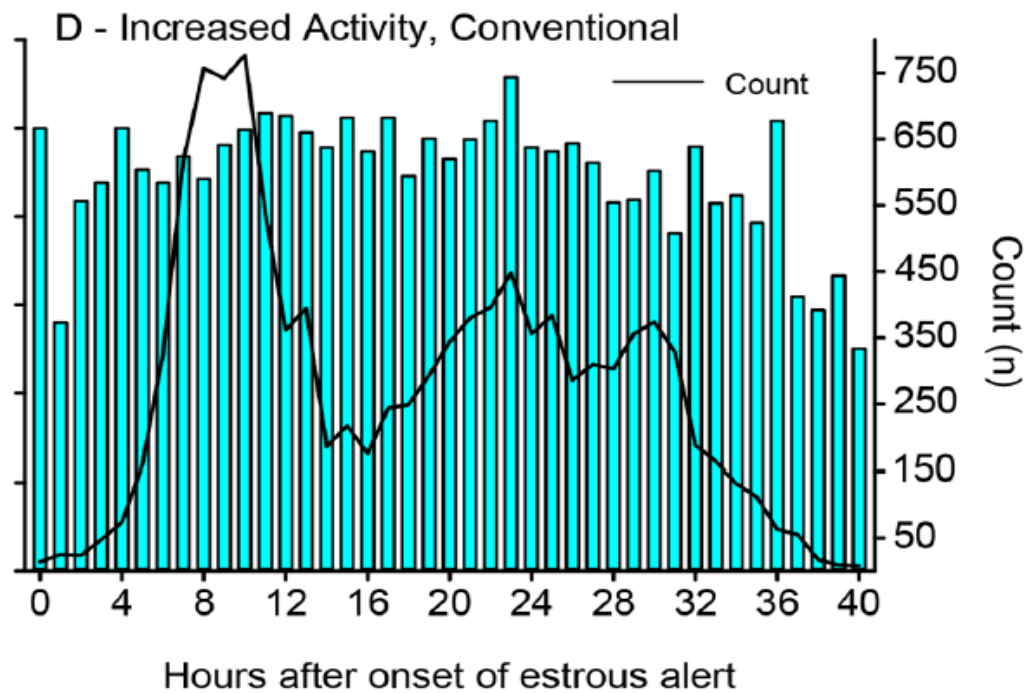
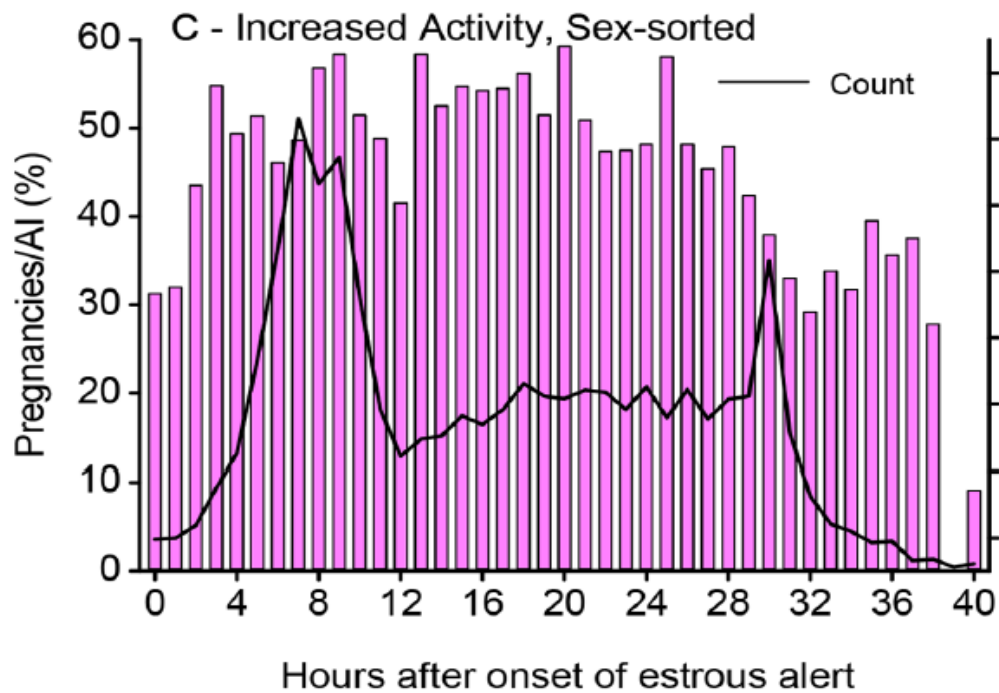
<https://doi.org/10.3168/jds.2025-26428>

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## Effect of timing of artificial insemination with conventional or sex-sorted semen on fertility of lactating dairy cows

V. G. Santos,<sup>1,2\*</sup> P. D. Carvalho,<sup>3,4</sup> A. H. Souza,<sup>3</sup> S. Priskas,<sup>5</sup> J. A. L. Castro,<sup>1</sup> A. M. F. Pereira,<sup>1,2</sup> P. J. Ross,<sup>4</sup> J. Moreno,<sup>4</sup> M. C. Wiltbank,<sup>3</sup> and P. M. Fricke<sup>3</sup>

TX and AZ open dry lot #10,000 cows enrolled



# Breeding - Achieving The Next Percentage Point

**Independent**  
of X Breeding  
and sorting

% Cows in heat by VWP – Herd KPI

Early intervention for no-heat cows

Target **R**eproductive **M**anagement

**Improved**  
by sorting

Breeding 2x or 3x

Overnight + Morning sort

Daily tasks

Transition cow health

Resume Estrus

Repro shots; TAI breeding

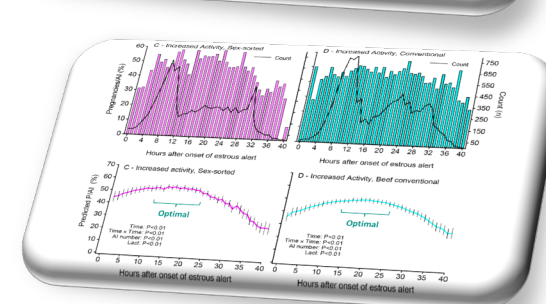
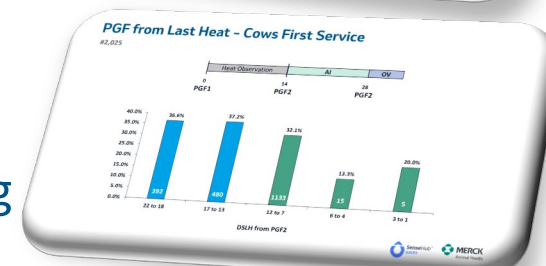
1+ day a week of shots

Optimum breeding time

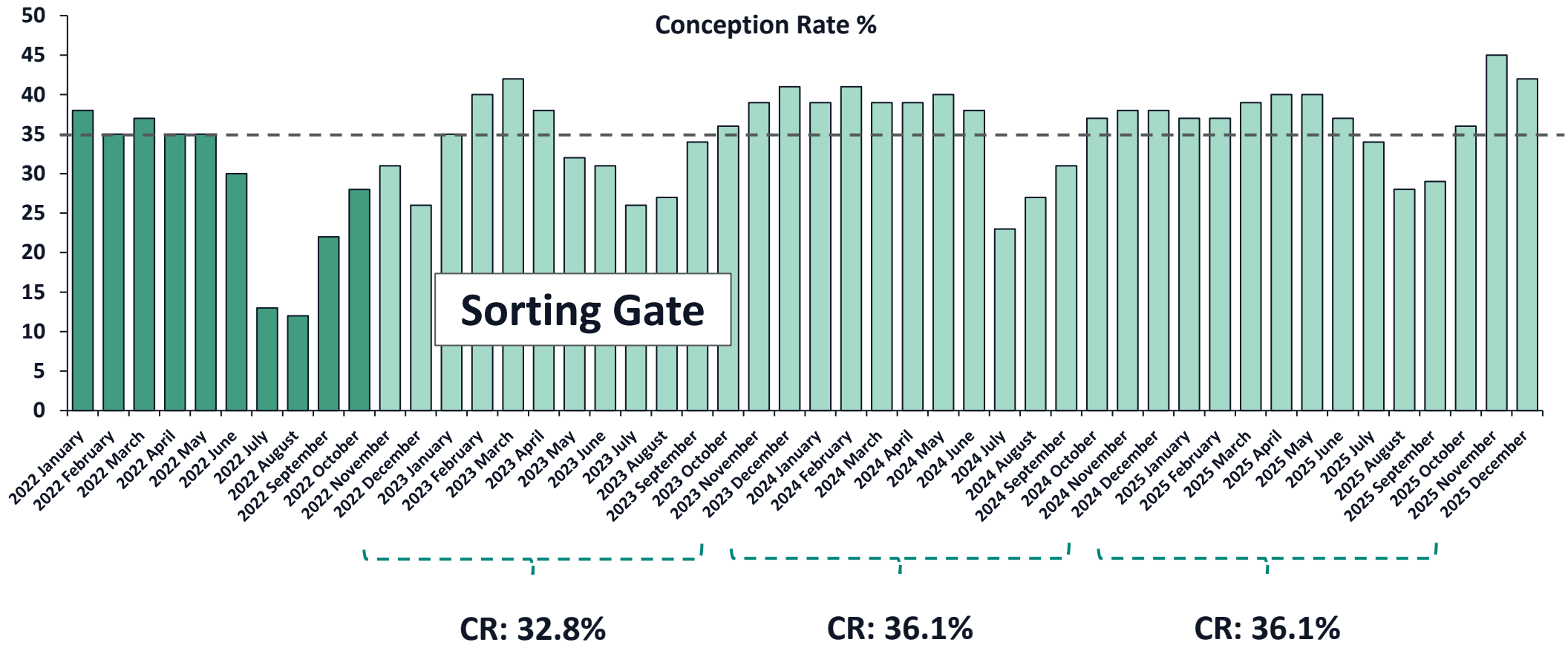
Avoid later breeding

Compliance on DIM for task

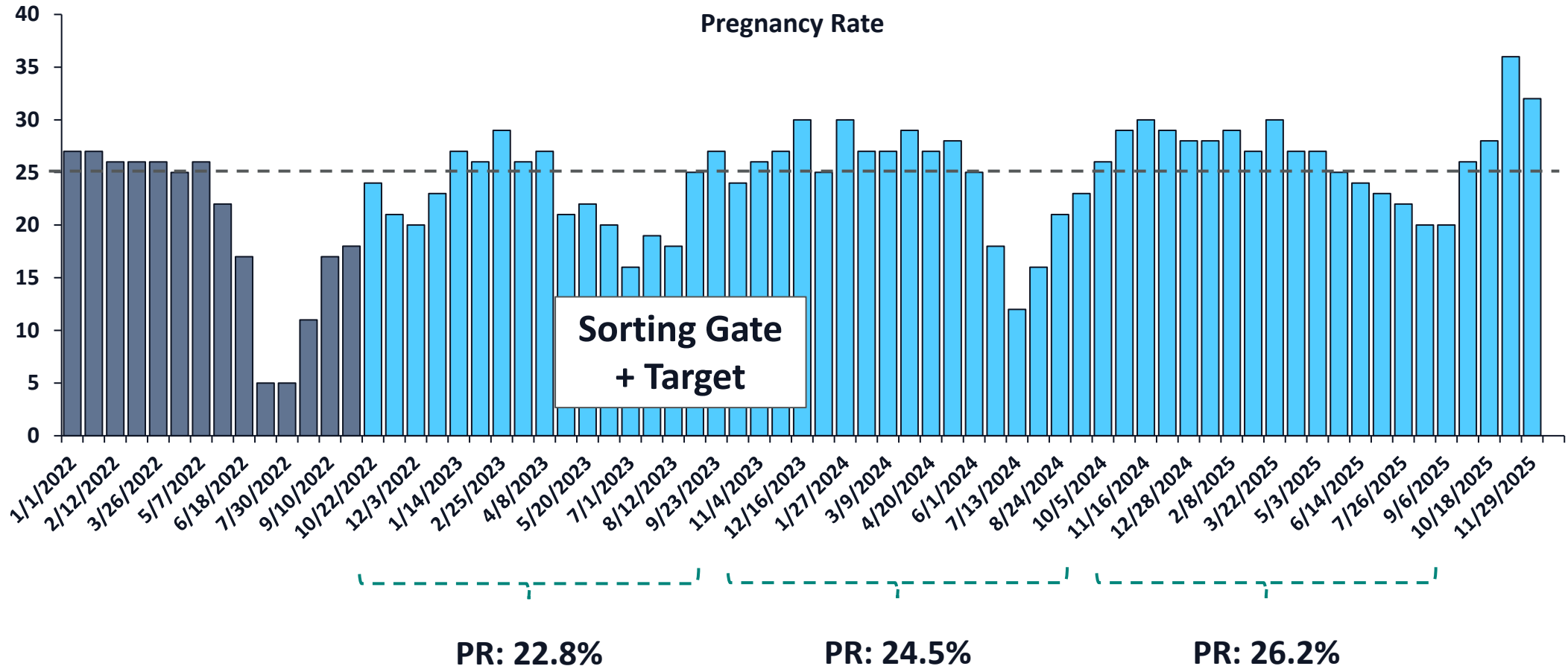
Date	BLIP	BLIP	Prog	PG	PG	PG	PG	PG	PG	Date	BLIP	BLIP	Prog	PG	PG	PG	PG	PG	PG
10/27/24	414	341	78	480	137	34	8			10/27/24	480	357	74	240	100	34	8		
11/03/24	466	287	71	399	109	27	19			11/03/24	390	214	71	276	100	35	7		
01/11/25	469	305	75	451	162	34	8			01/11/25	394	233	76	239	100	35	7		
03/04/25	504	392	76	484	147	28	21			03/04/25	394	233	76	239	100	35	7		
05/05/25	551	378	74	504	150	21				05/05/25	349	235	81	300	100	34	13		
07/05/25	574	450	79	540	145	33	17			07/05/25	313	245	79	306	111	38	13		
09/06/25	612	377	74	494	139	26	14			09/06/25	245	274	79	261	114	35	13		
11/01/25	612	351	70	494	132	23	10			11/01/25	299	214	79	323	14	30	12		
01/01/26	444	299	67	433	88	20	4			01/01/26	274	182	70	249	58	22	2		
03/03/26	459	284	64	412	70	19	5			03/03/26	243	143	70	249	91	20	4		
05/05/26	347	389	75	432	113	23	6			05/05/26	229	224	73	234	89	24	3		
07/07/26	348	411	77	537	144	27	14			07/07/26	309	244	70	213	80	25	8		
09/09/26	329	399	70	510	136	26	9			09/09/26	300	247	77	244	83	27	4		
11/11/26	345	391	72	529	138	26	9			11/11/26	306	243	72	326	81	25	0		
01/13/27	337	412	72	549	140	28	9			01/13/27	306	242	82	346	100	38	5		
03/15/27	306	412	77	525	173	35	6			03/15/27	349	249	77	333	112	34	0		
05/17/27	444	356	74	0	0	0	0			05/17/27	212	248	79	0	0	0	0		
07/19/27	392	348	68	0	0	0	0			07/19/27	261	248	87	0	0	0	0		
09/21/27	444	356	74	0	0	0	0			09/21/27	261	248	87	0	0	0	0		
11/23/27	444	356	74	0	0	0	0			11/23/27	261	248	87	0	0	0	0		
Total	704	5837	73	7499	2144	24	178			Total	4902	3787	76	4932	1491	30	114		



# Is my KPI of Interest Preventing Improvement?



# Is my KPI of Interest Preventing Improvement?



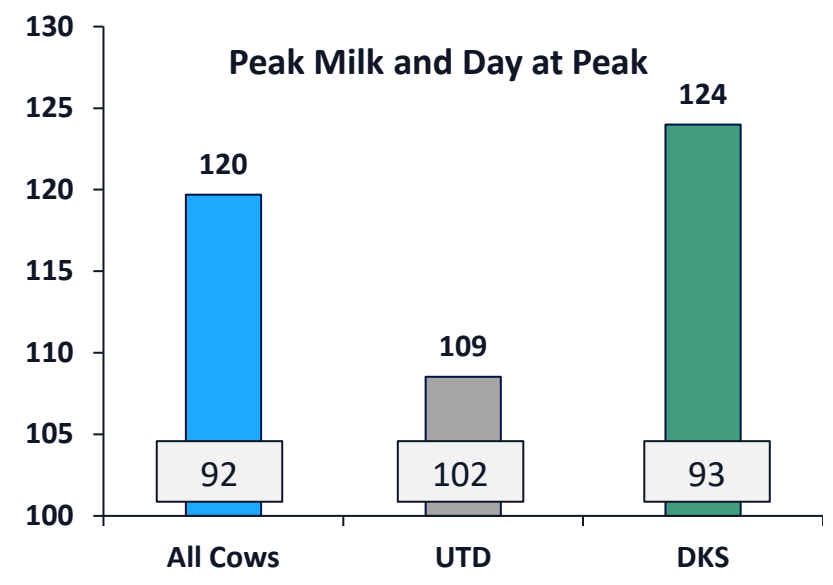
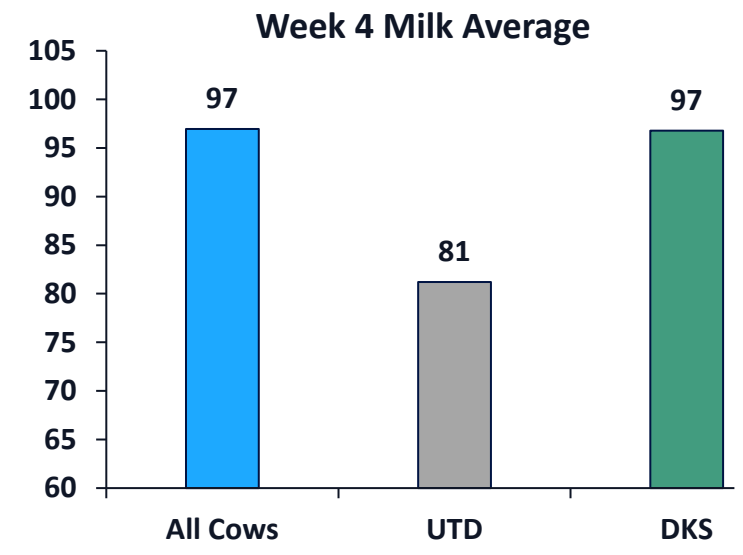
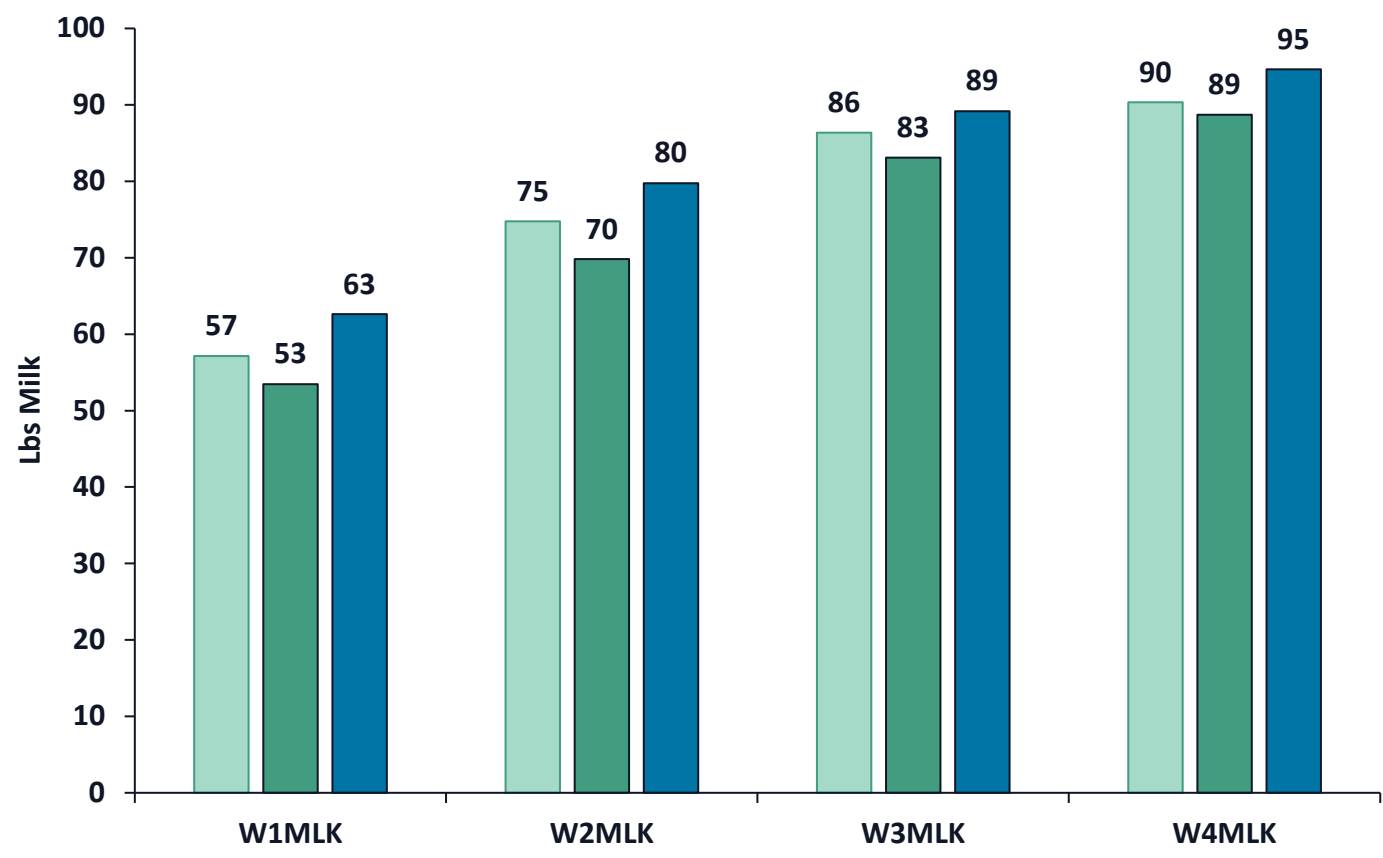






# Milk Production Based on Intervention

Legend: ■ Drench ■ Okay ■ No Health Event



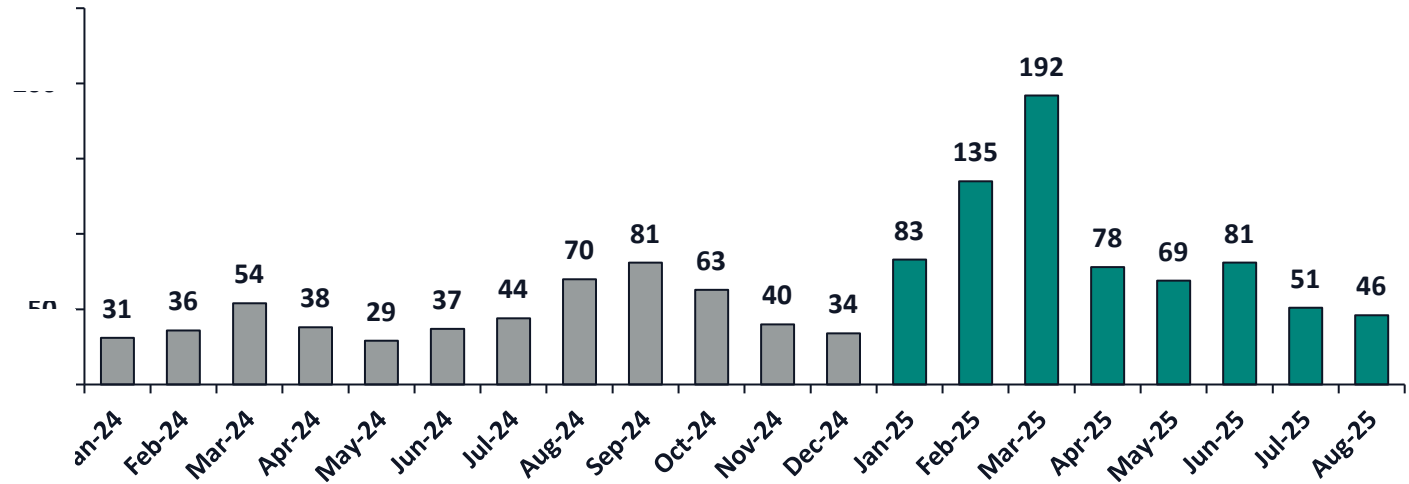
UTD: RP and/or Metritis

DKS: digestive, Ketosis, Sick

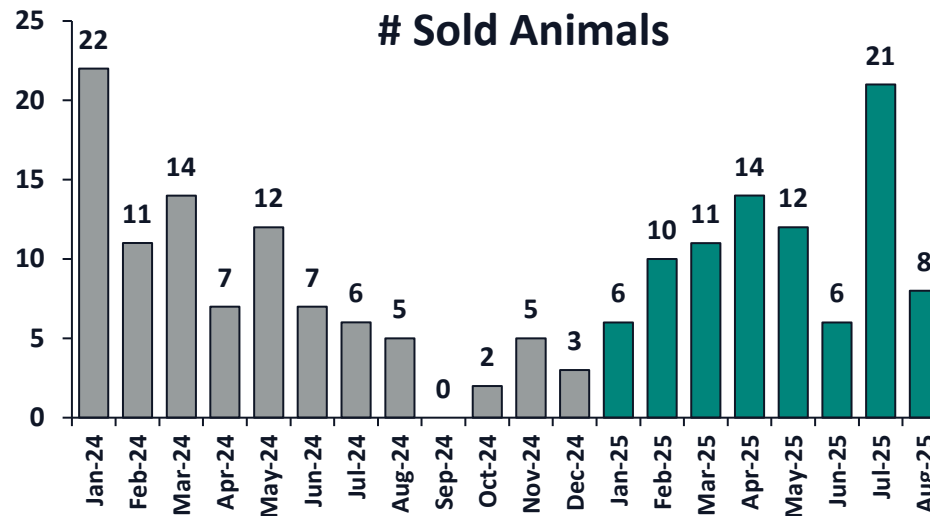
# Cow Health - What Should I Look for?

- ↳ Cows I don't need to touch
- Dry week events
- Close up alerts
- Mid Lactation alerts
- Late Lactation Alerts

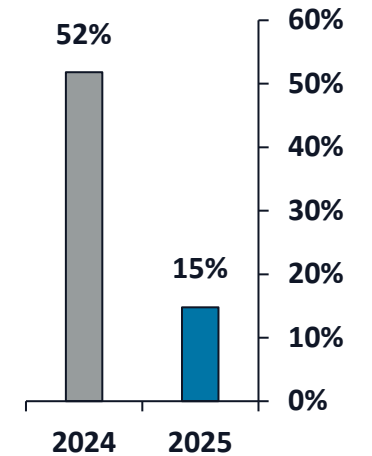
### # Pneumonia Events



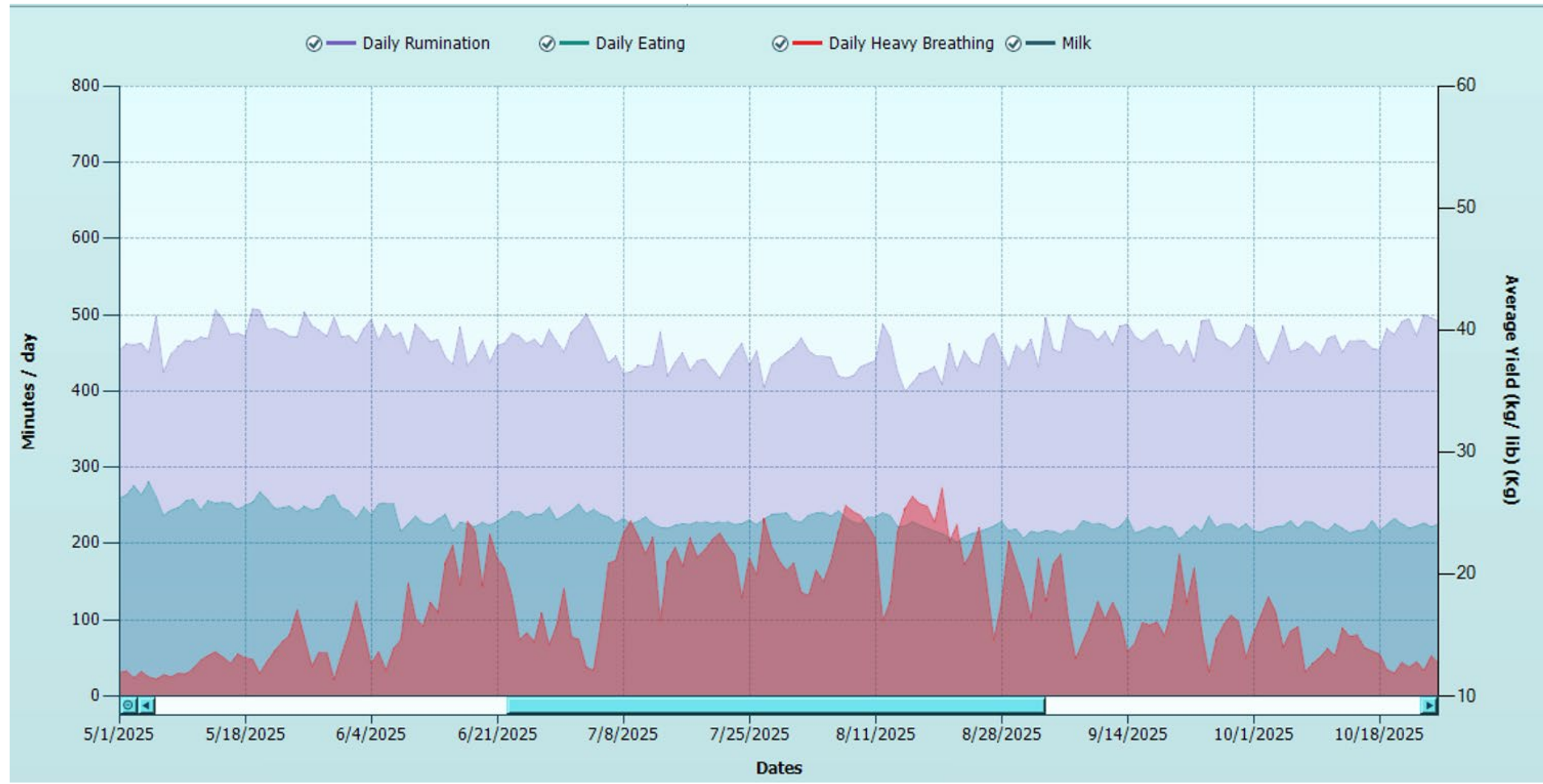
### # Sold Animals

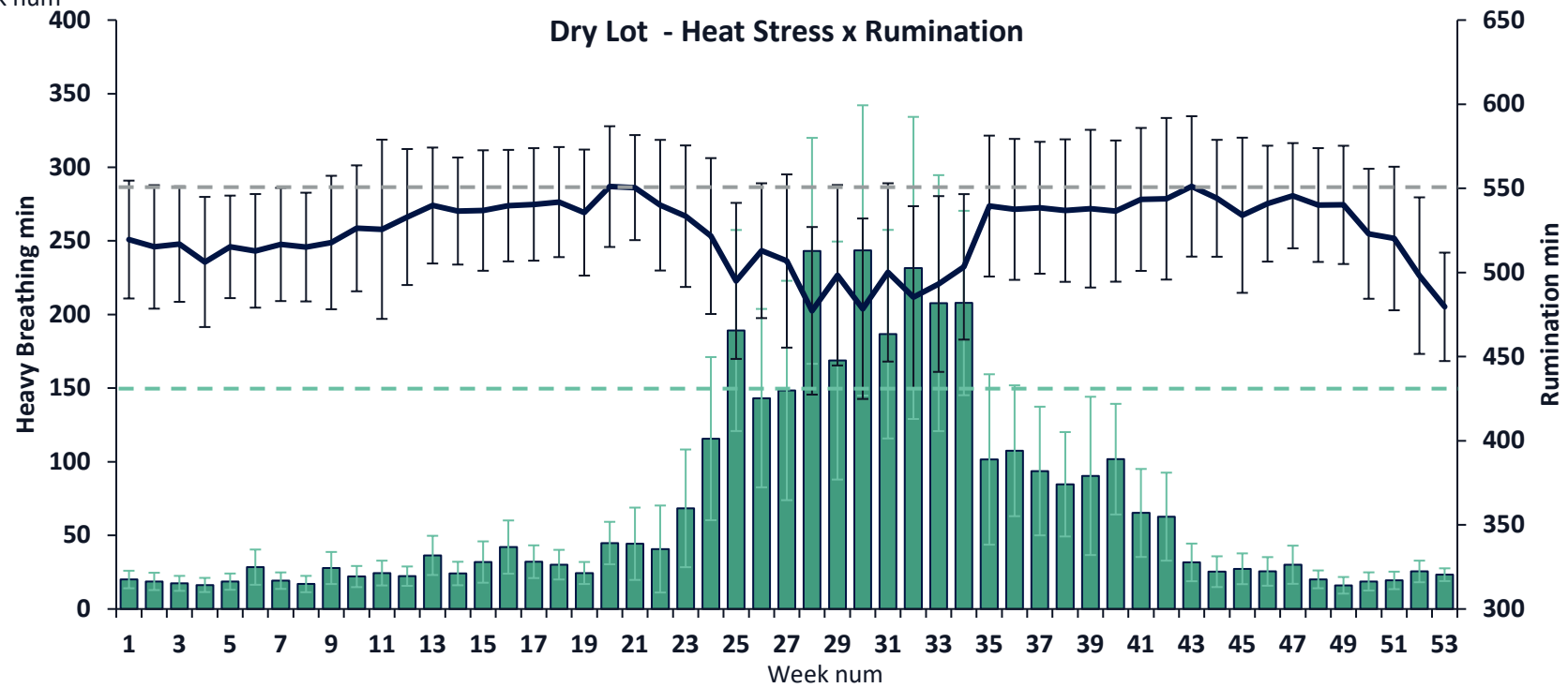
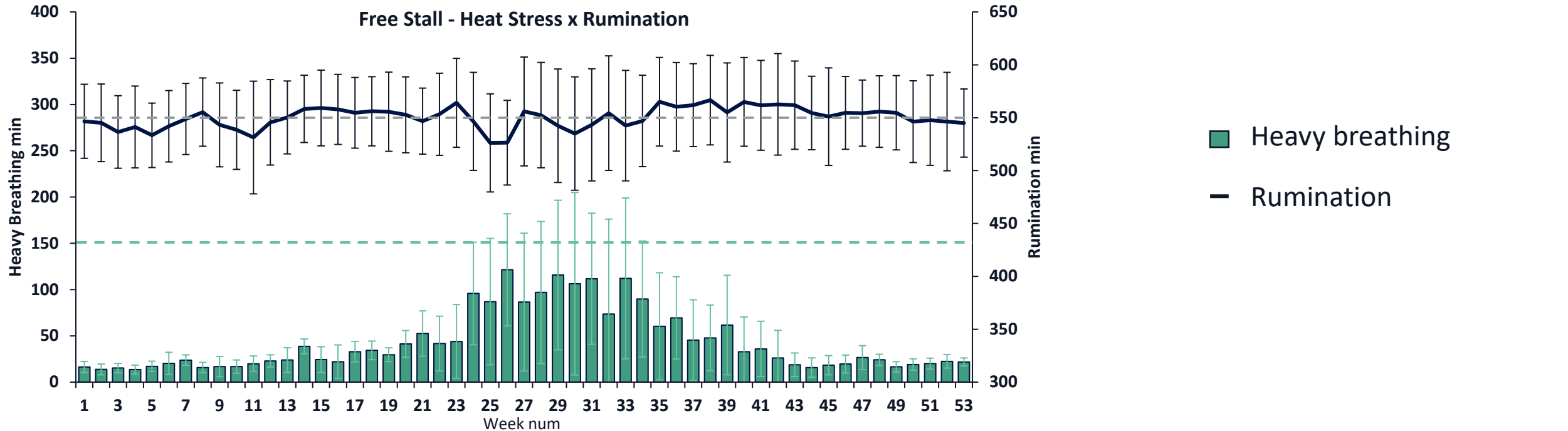


### Treated Before Sold

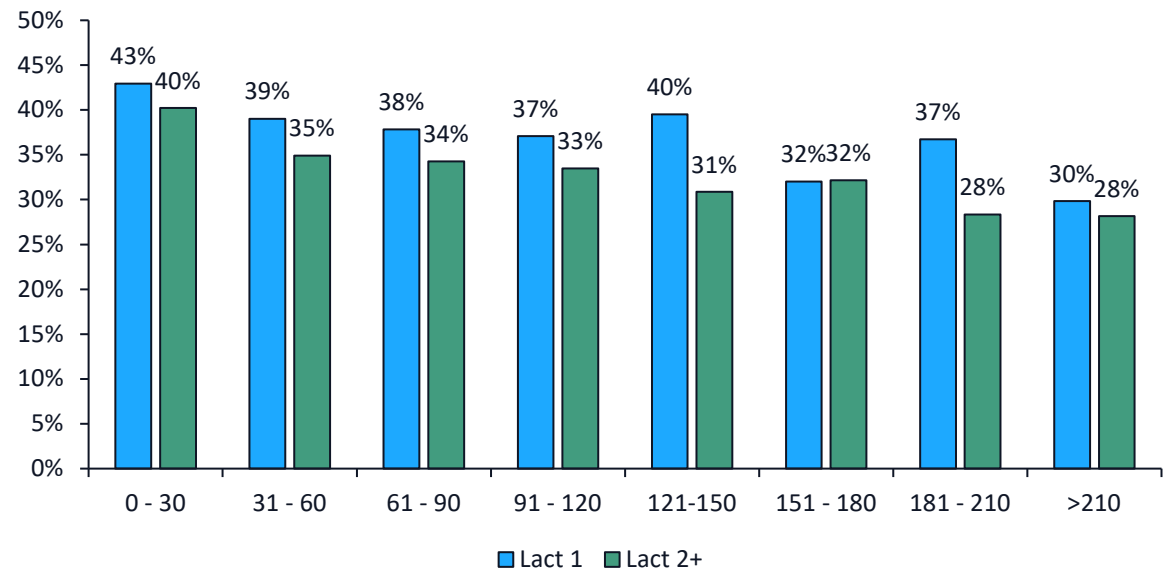


# Heat Stress

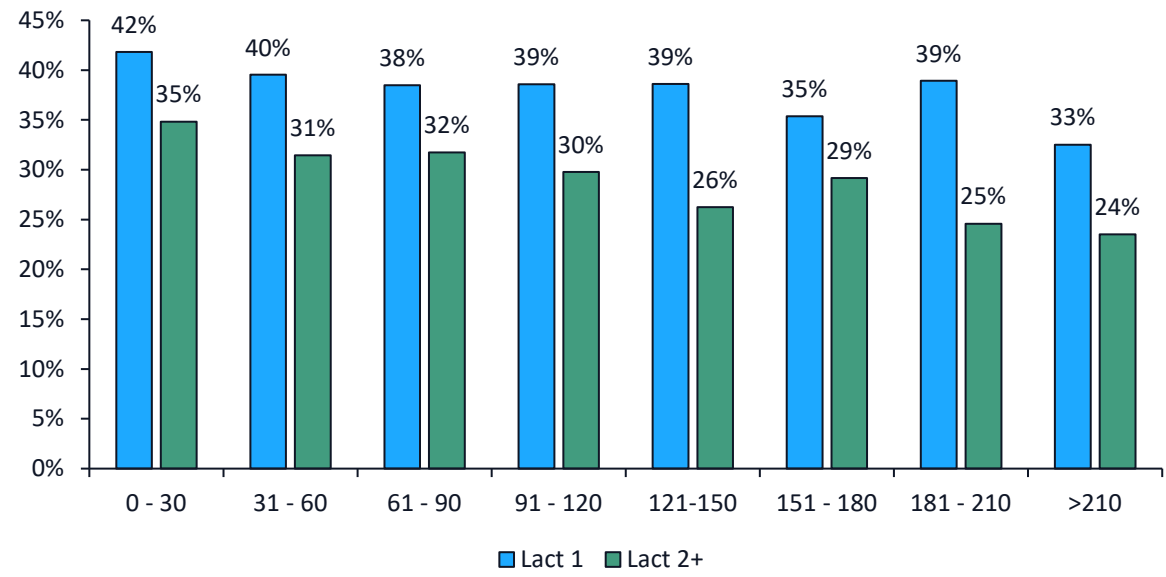




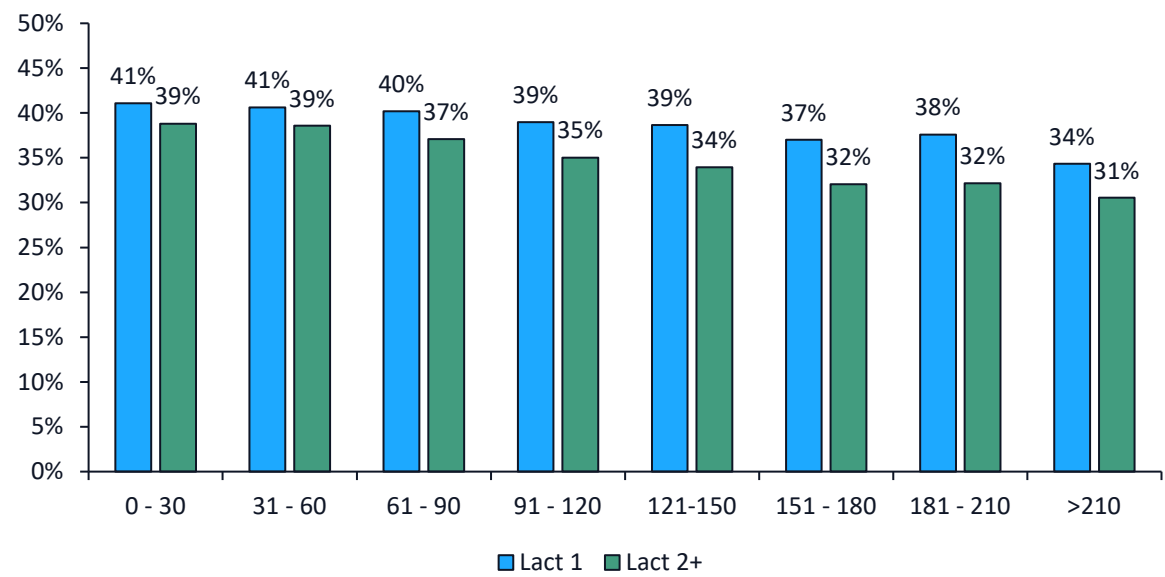
FS - All Cows and Services



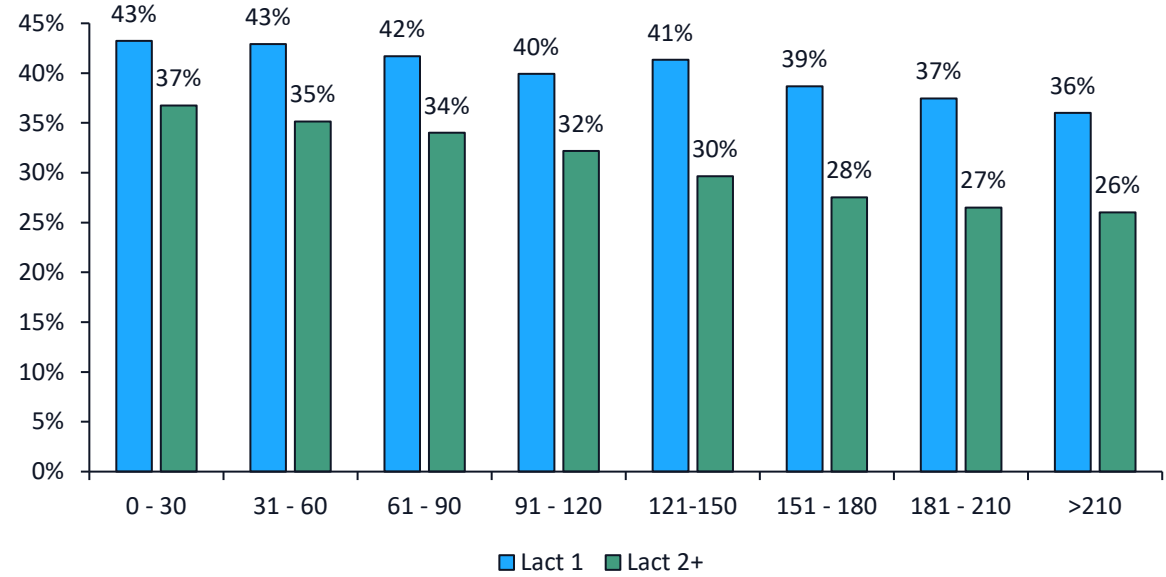
FS - All cows - Sexed



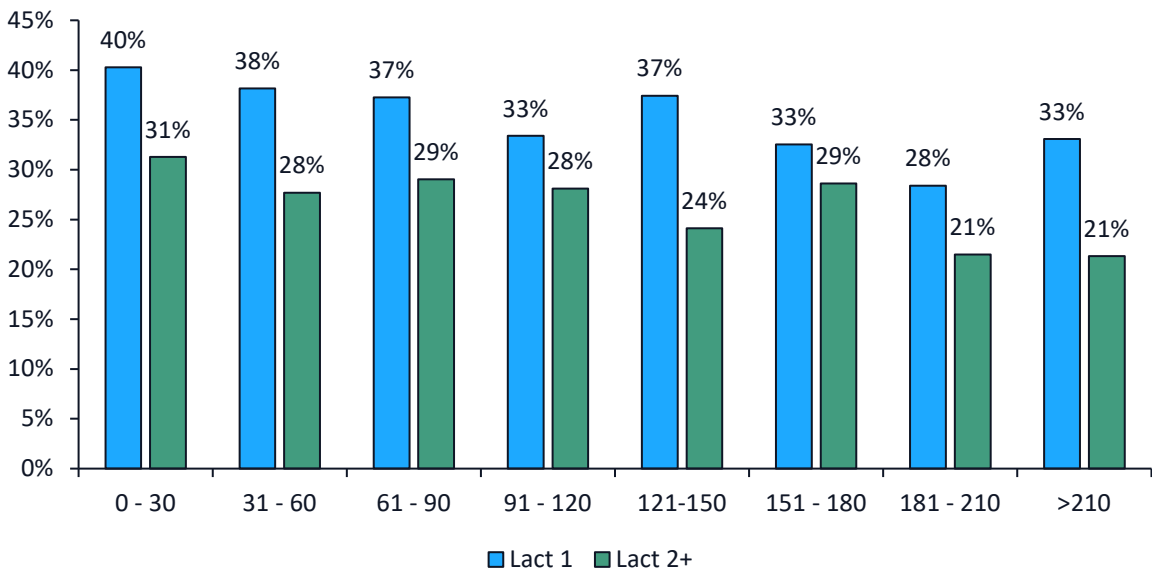
DL - All Cows and Services



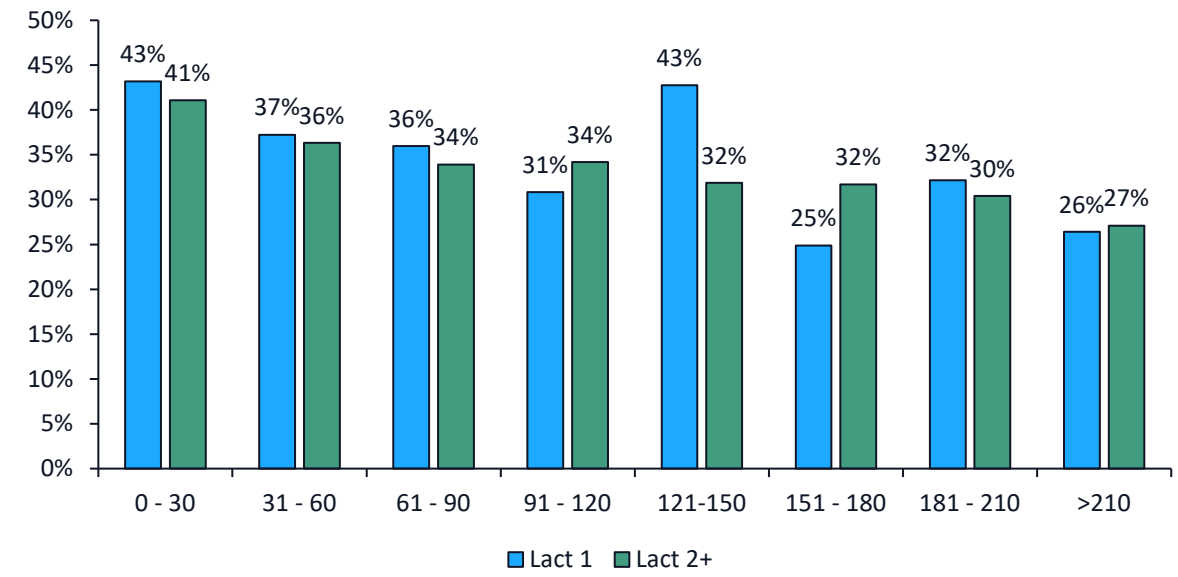
DL - All cows - Sexed



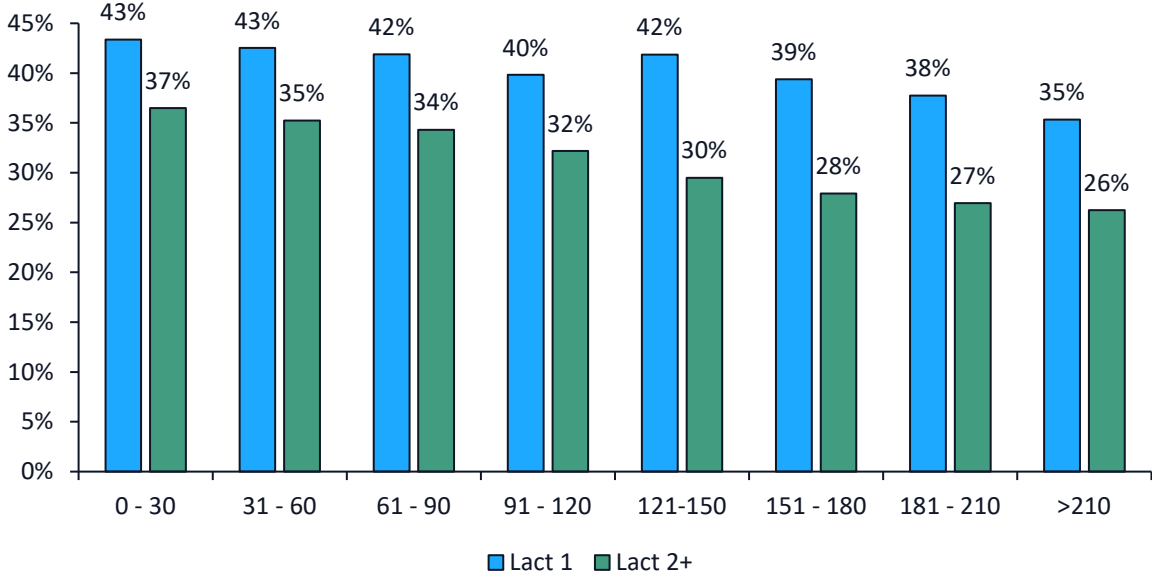
FS - Heat Cows - Sexed



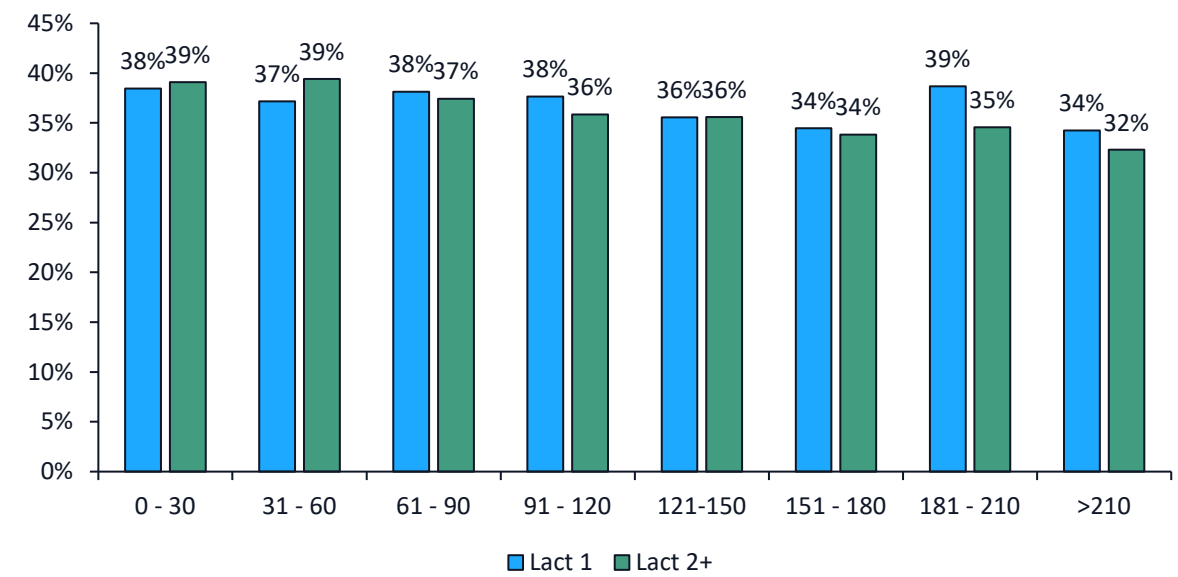
FS - Heat Cows - Beef



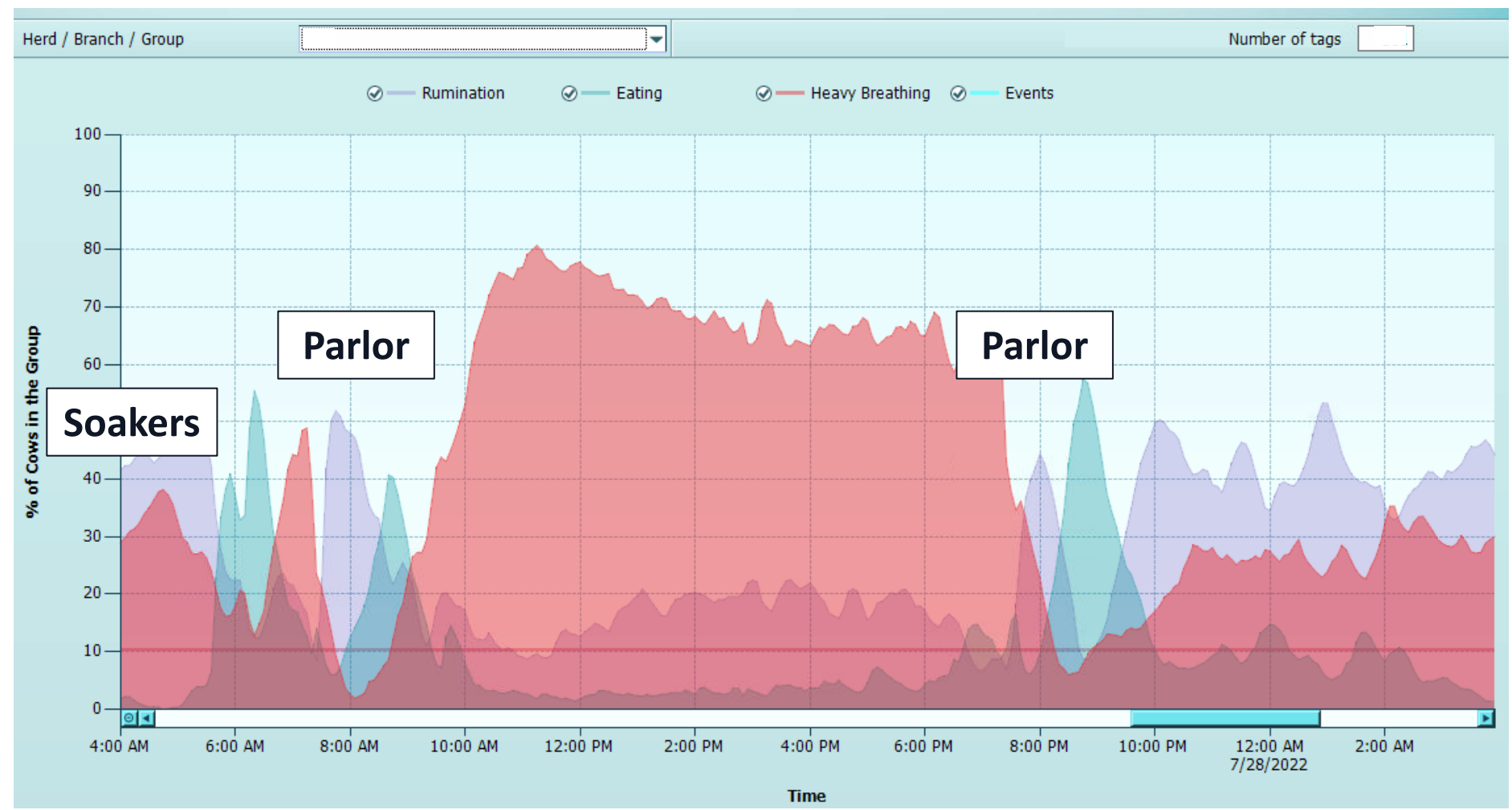
DL - Heat Cows - Sexed



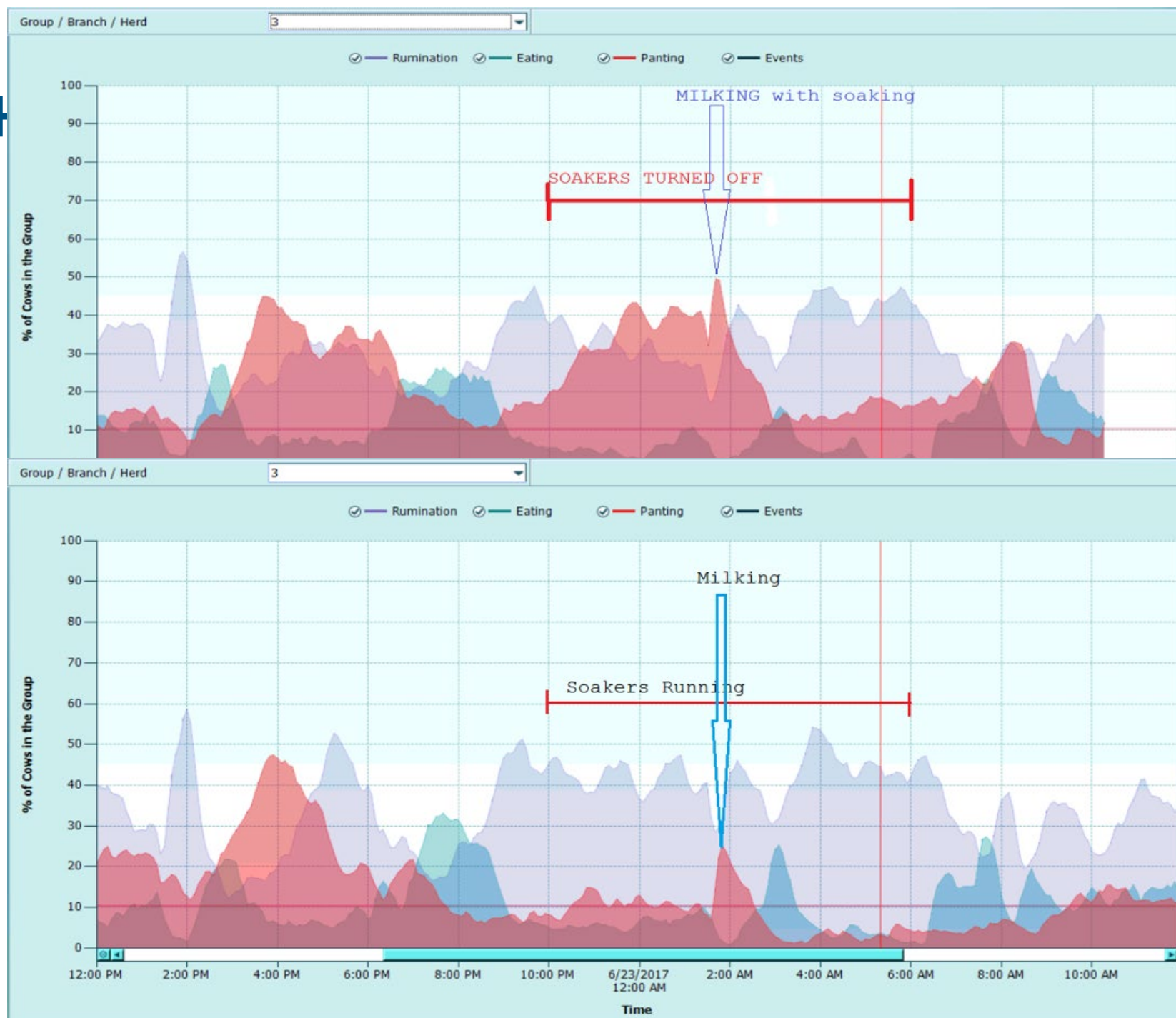
DL - Heat Cows - Beef



# Group Heat Stress



# Group F

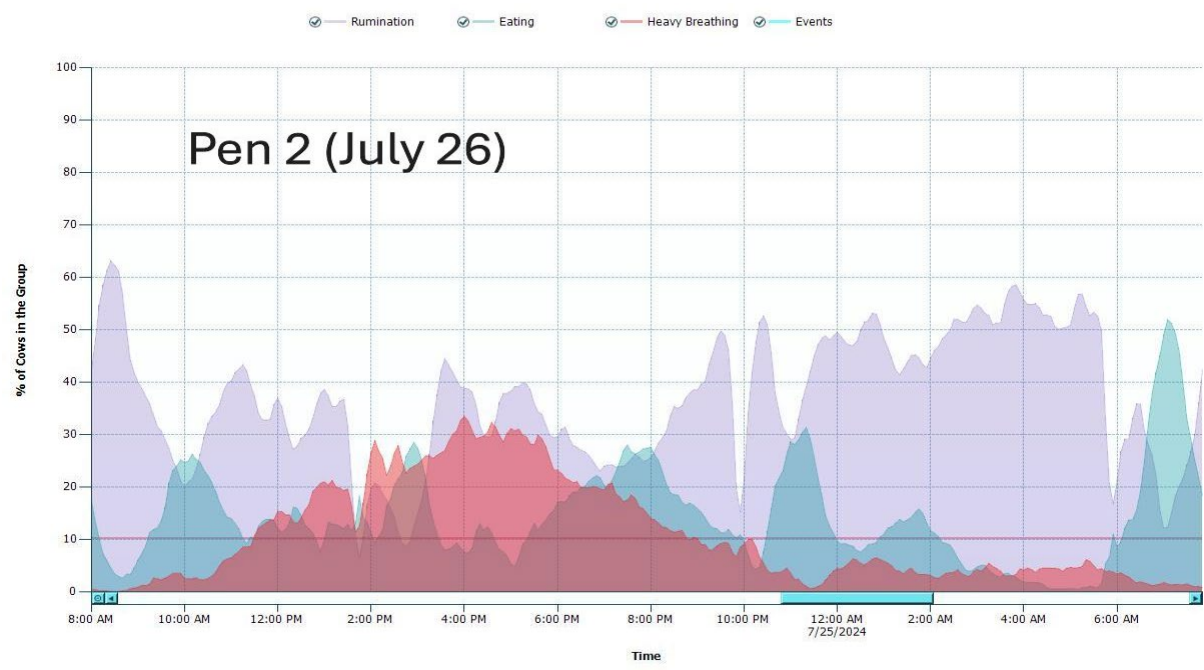
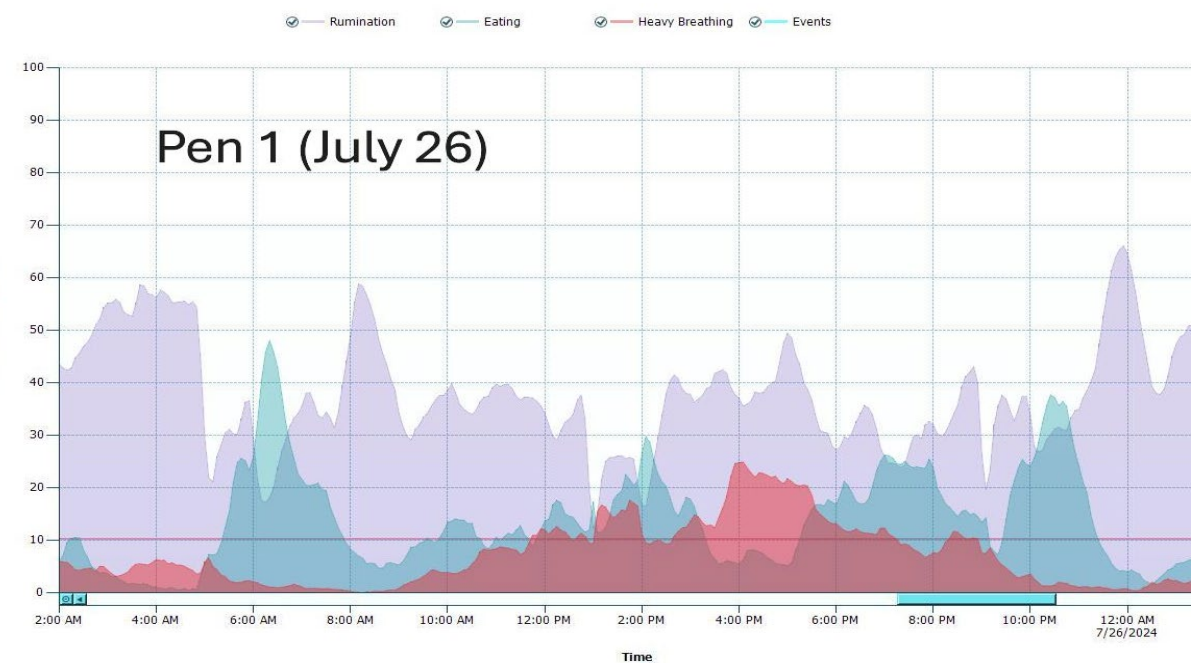


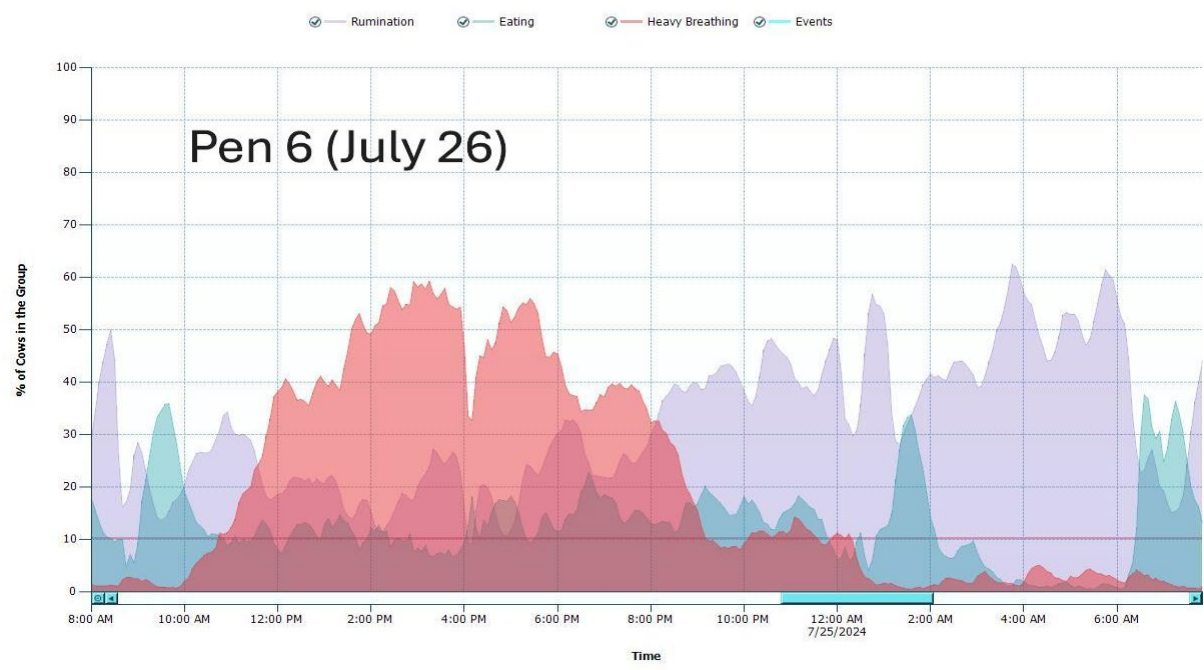
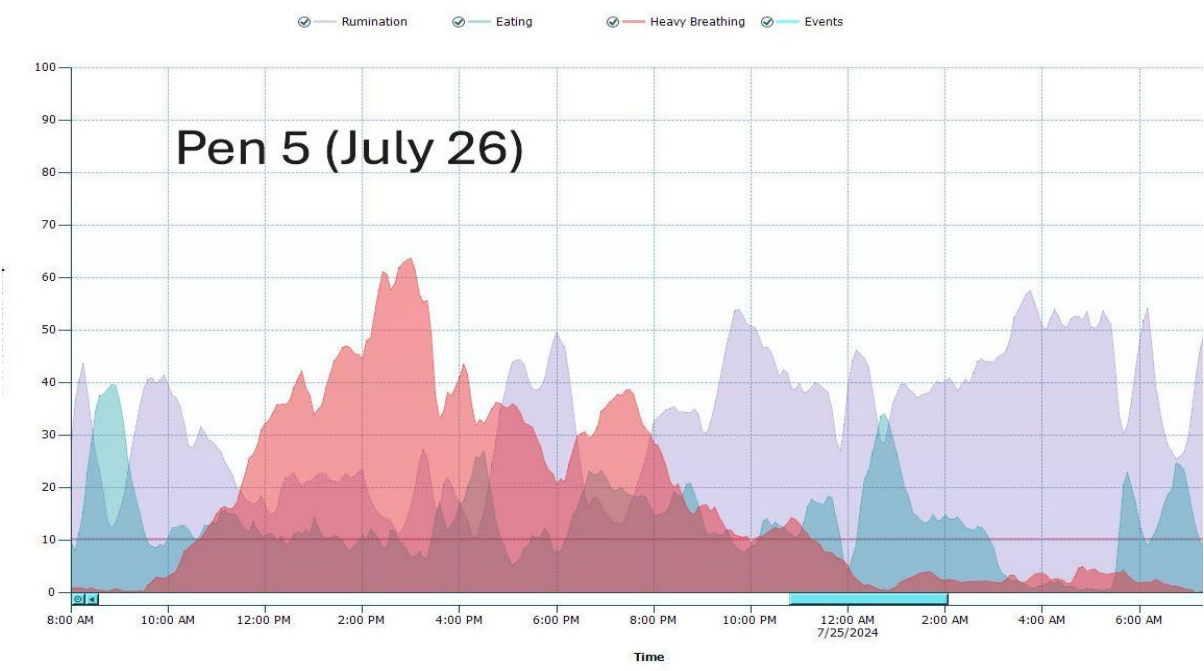
b<sup>m</sup>

## California Dairy

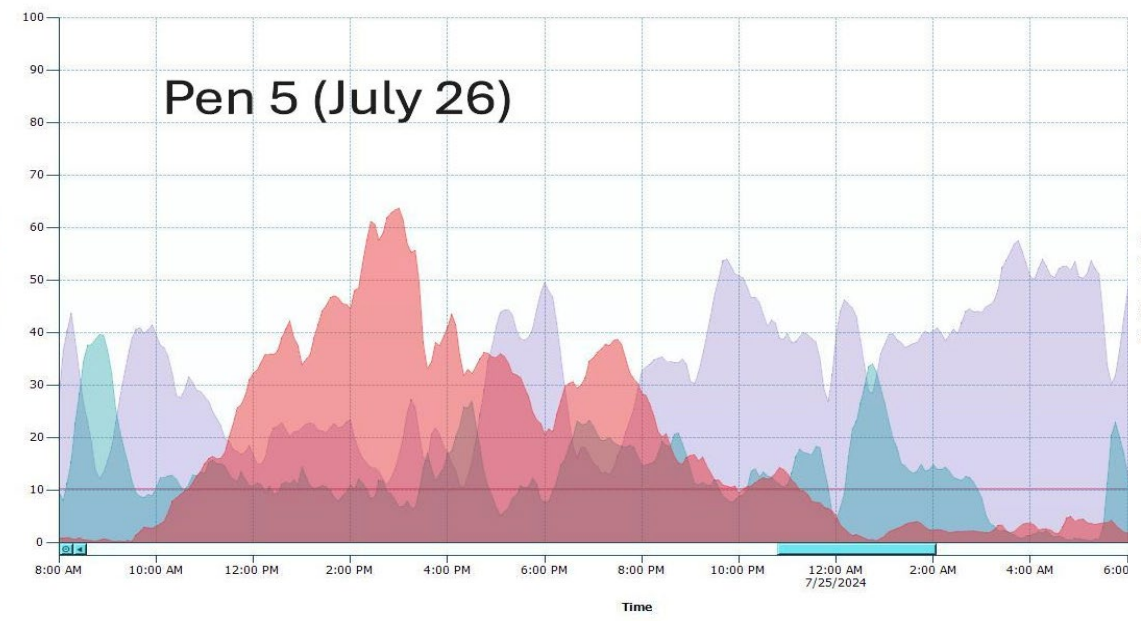
- Daily Heat Stress became a primary tracking metric immediately due to extreme heat waves that hit the area after install
- Fans turn on at 50% speed when temperature reaches 67 degrees; Full speed at 72 degrees
- Improvements in cooling systems were already planned for Winter 2024



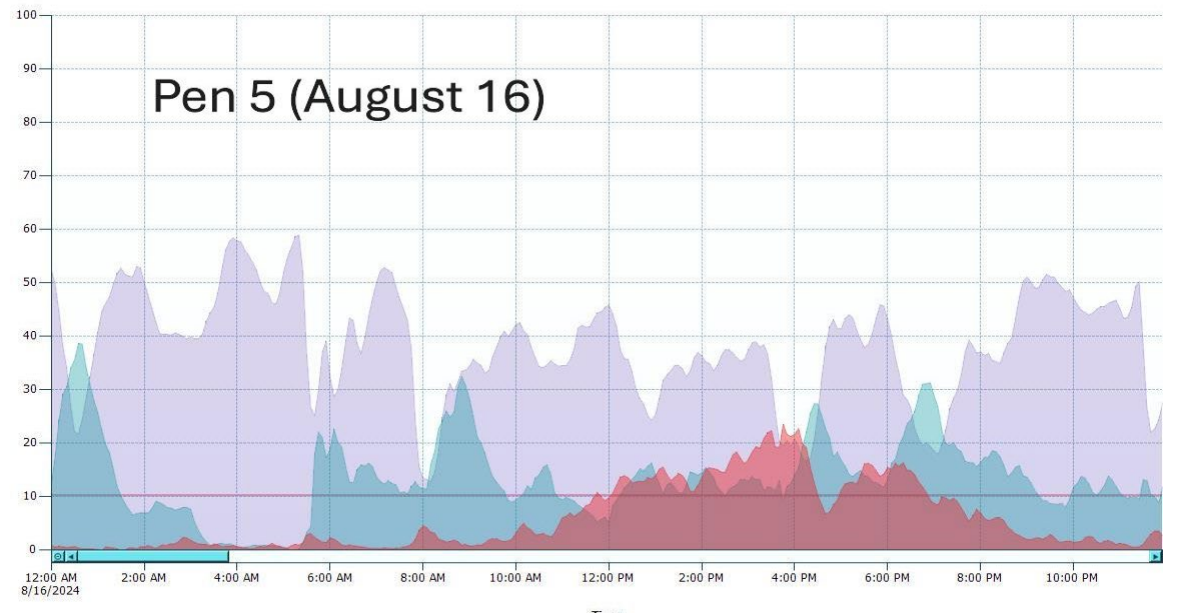




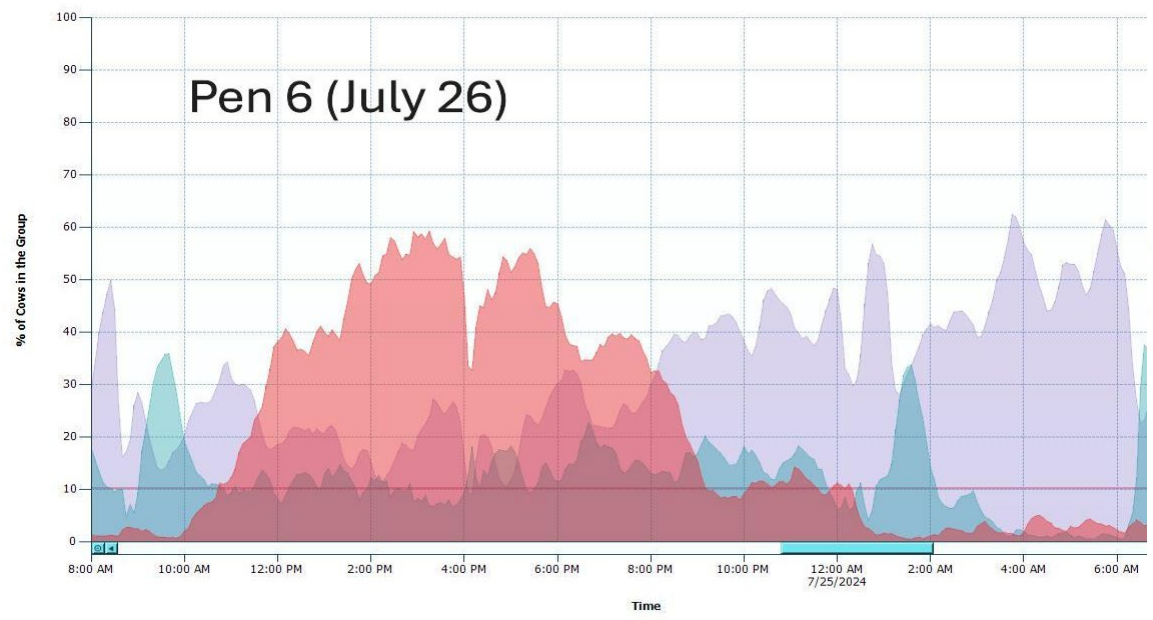
Rumination  Eating  Heavy Breathing  Events



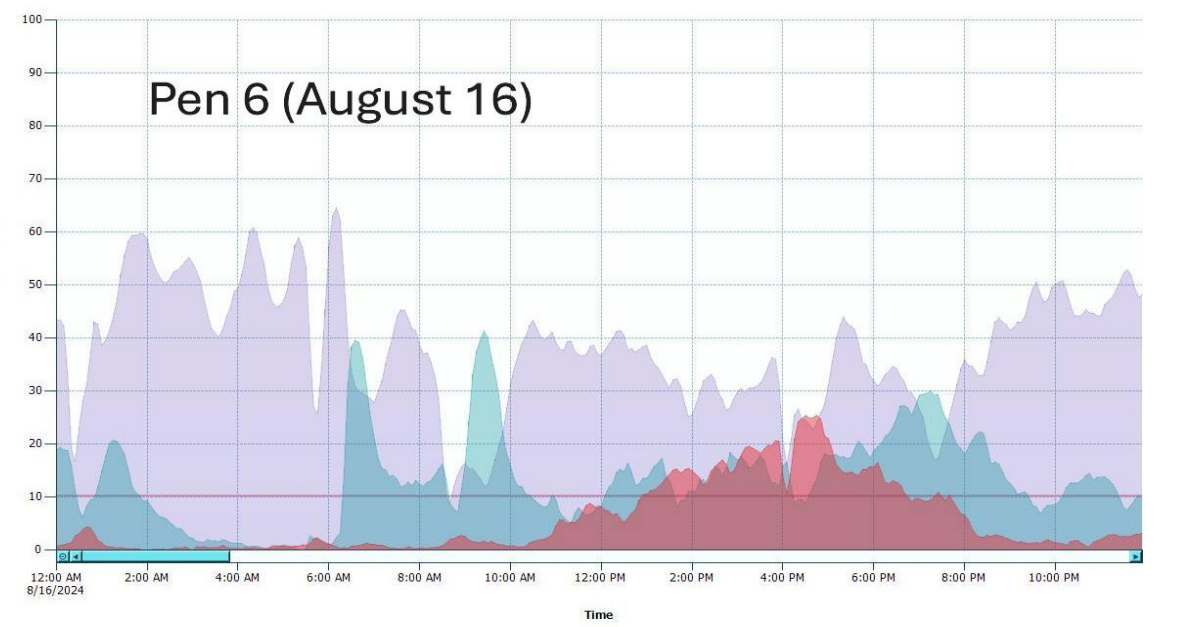
Rumination  Eating  Heavy Breathing  Events



Rumination  Eating  Heavy Breathing  Events

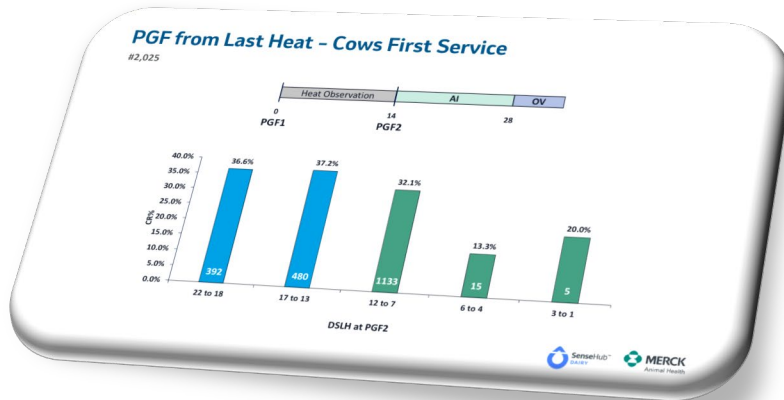


Rumination  Eating  Heavy Breathing  Events

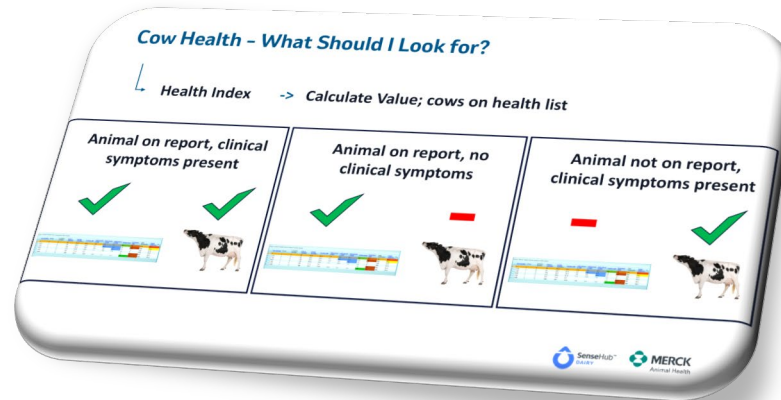


# Where We Go From Here

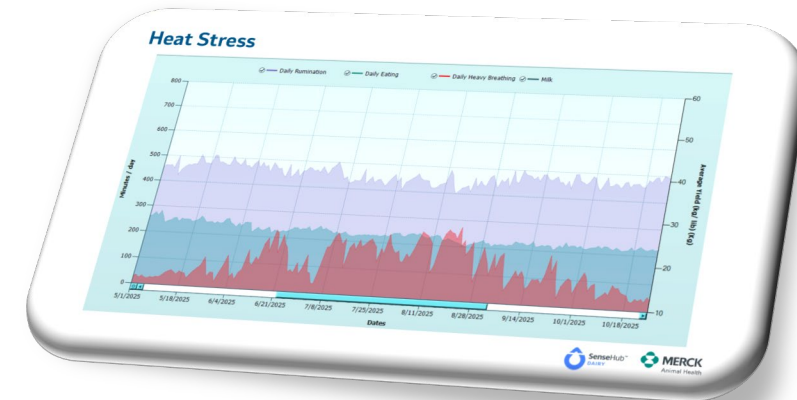
## Reproduction



## Cow Health



## Heat Stress



**Caio Aranha Gamarra, DVM, MS**

Customer Success Specialist – Key Accounts

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