Gwella ffrwythlondeb system lloia mewn dau floc

Improving fertility of a split block calving system

Croeso i chi gyd.

Welcome to this evenings Webinar.

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European Agricultural Fund for Rural Development:
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Fferm Nantglas, Talog Sir Gaerfyrddin

Iwan and his wife have been farming at Nantglas since September 2011, 75 ha dairy farm milking 200 cows on a split block calving system.

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IMPROVING FERTILITY OF A SPLIT BLOCK CALVING SYSTEM

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www.llyw.cymru/cyswlltffermio
www.gov.wales/farmingconnect

What's our objective at Nantglas?

Current calving pattern

- 2 x 12-week blocks
- 12w NIC >10%

Desired calving pattern

- 2 x 10-week blocks
- Sub 10% NIC at 10 weeks

PSC 28/2 & 20/8

What is measured?

6 WEEK CALVED RATE

6 WEEK IN-CALF RATE

NOT-IN-CALF RATE AT 12 WEEKS PLUS 10 WEEKS

SUBMISSION RATE

Things harder to measure

WORK-LIFE BALANCE

MORE TIME TO DEVOTE TO MANAGEMENT

What we have done so far

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Farm profile & some data analysis	Assessed housing – “snapshot”	Pre-calving BCS + some bloodwork
Mating plan for heifers	Clean checks and non-cyclers	Automated heat detection trial started

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What drives in calf rates?

Recovery time

Insemination technique

Calving ease

Uterine health

Infectious disease

Submission x Conception

Lameness

Body condition

Heat detection

Bull management

Heifer growth

Mineral status

Key areas of Focus

Heifers & Front end load the calving pattern

Sell surplus late calvers

Metabolic disease

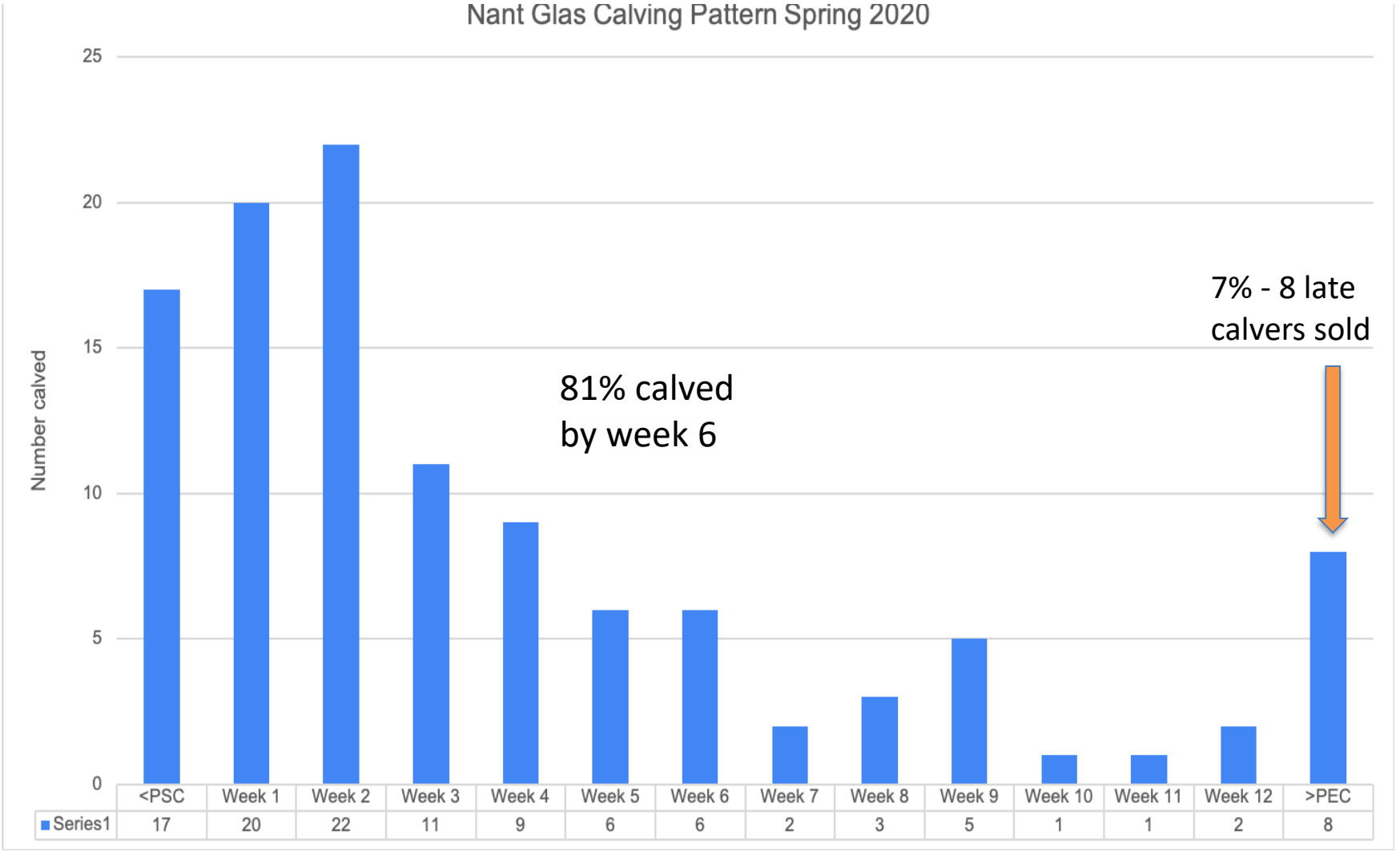
Cow comfort & mobility

Get body condition right

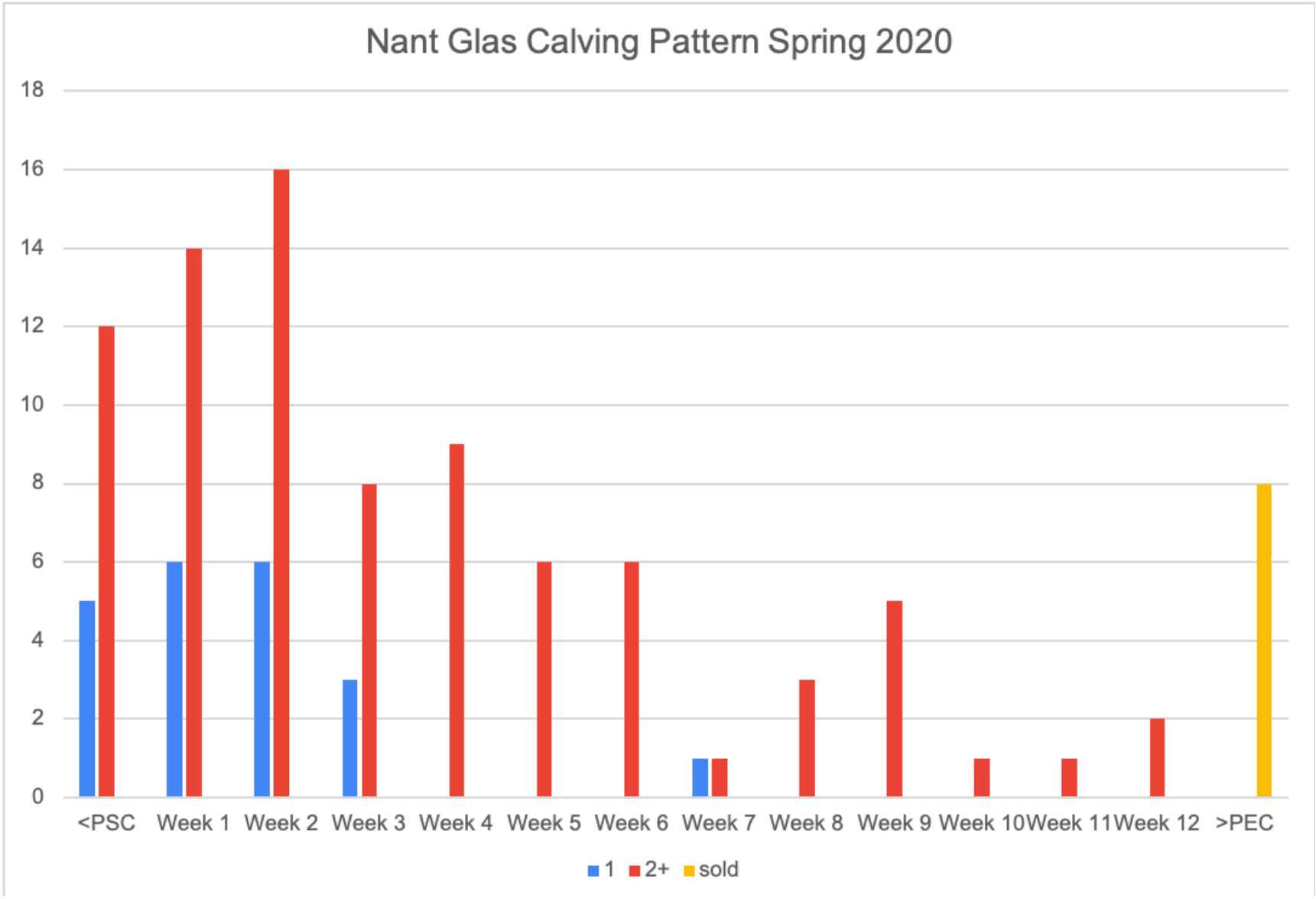
Submission rates

AI timing and technique

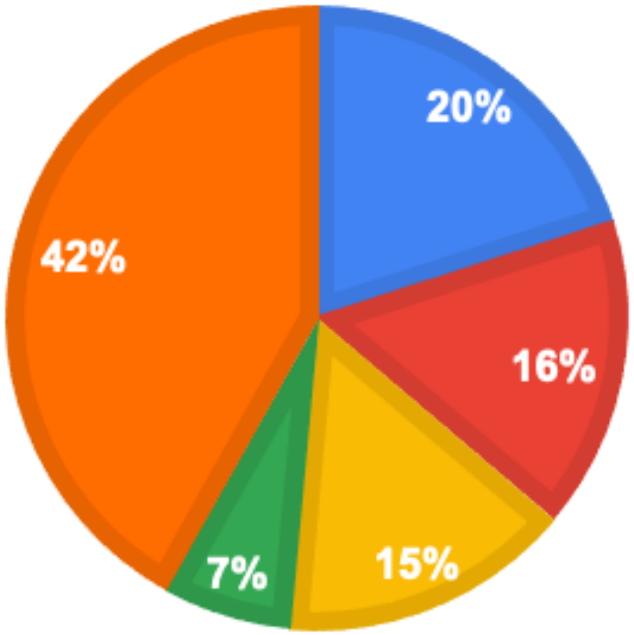
Current calving pattern



Heifers


Nant Glas Calving Pattern Spring 2020
18
16
14
12
10
8
6
4
2
0
<PSC
Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
>PEC
1
2+
sold

AGE STRUCTURE OF SPRING CALVING HERD 2020



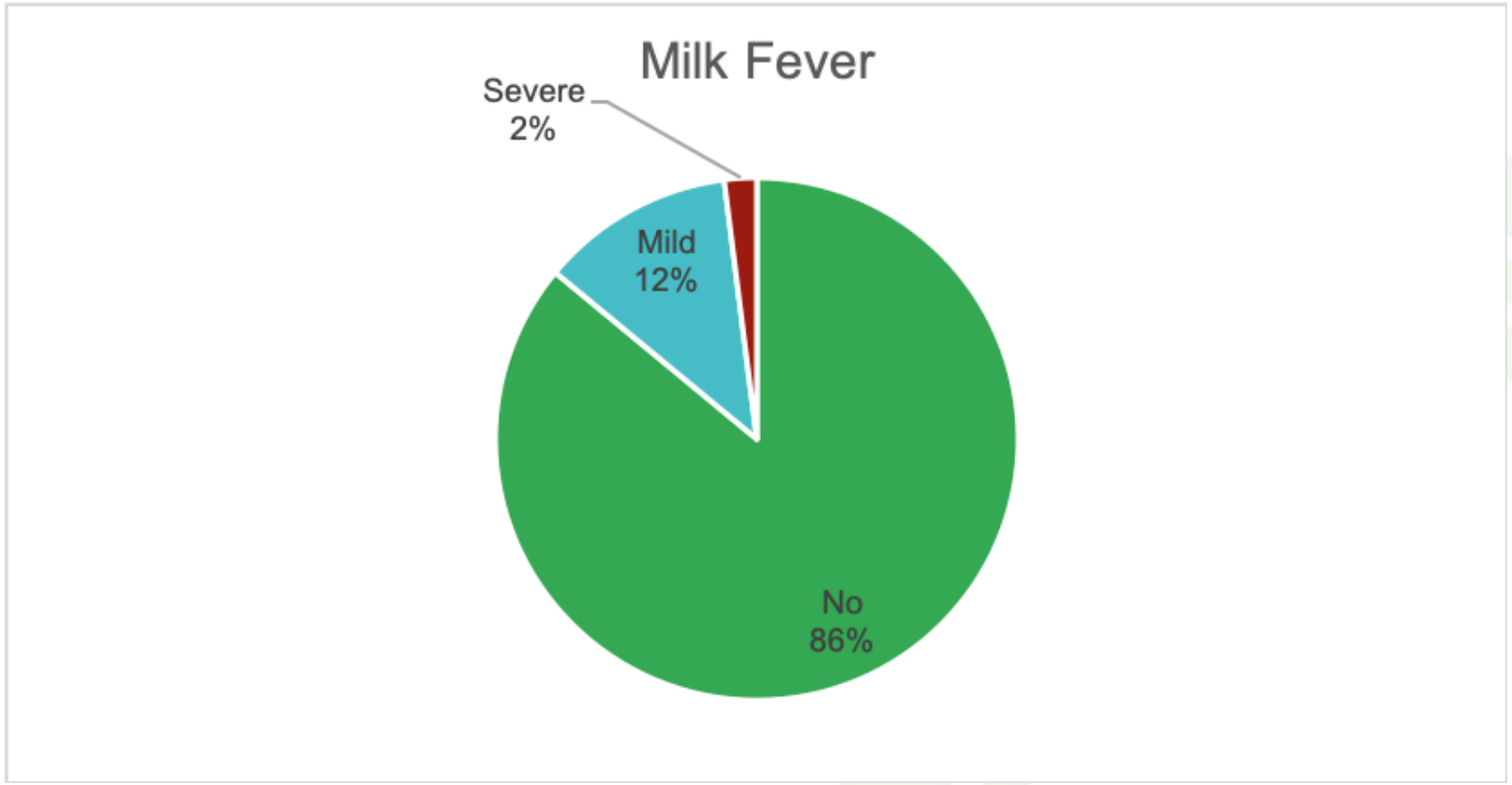
Calving

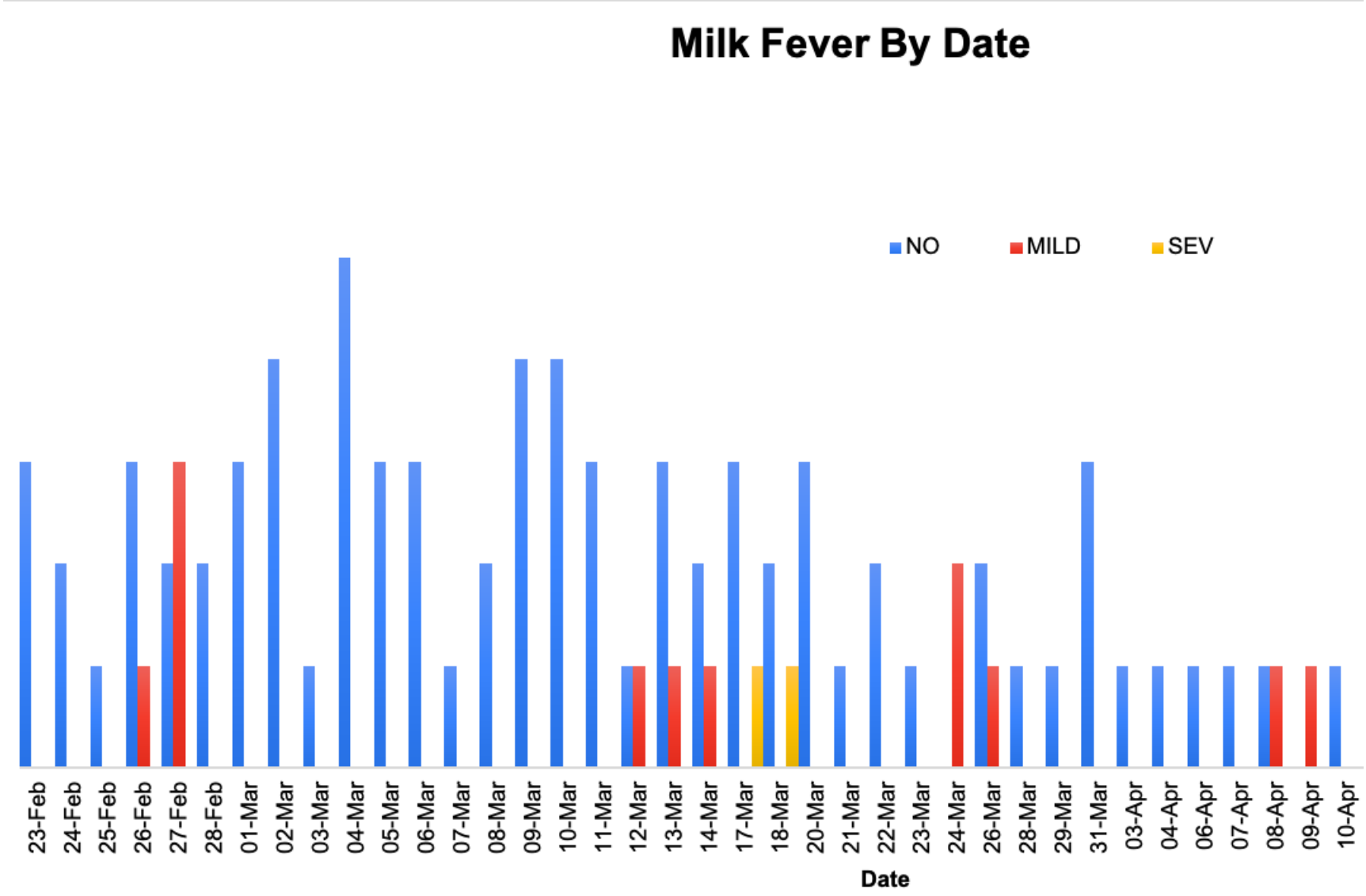
- 105 calved by 22/05
- 8 late calvers sold
- Very little calving difficulty or RFM – 5 assisted, 2 RFM
- 3 cows lost over calving period (metabolic)
- 15 Milk fevers occurred in small runs – helped with MagCl in water for dry cows twice daily

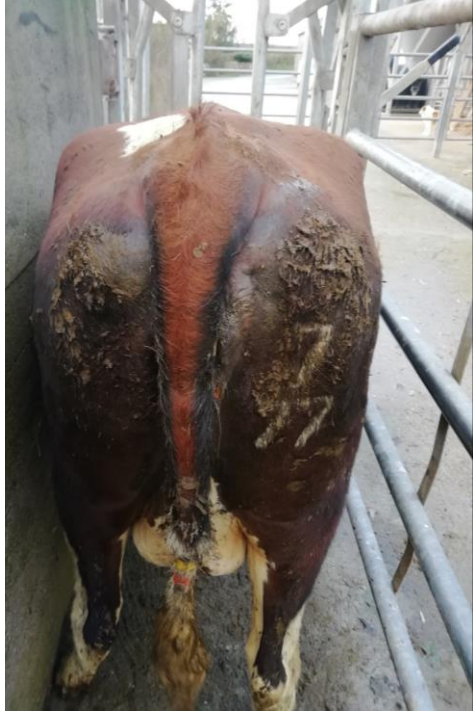
Calving Records

Calving Records Nant Glas Spring 2020

Ref	Date	Cow ID	Lactation	Condition	Calf	Calf ID	Difficulty?	Cleansed?	Milk Fever?	Complications	Treat date(s)	Treatments	Comments
16	28/2	781	1 (2) 3 4 5+	U (R) O	LB LH DB DH (TW)	1314 / 1315	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
17	"	574	1 2 (3) 4 5+	U (R) O	LB (LH) DB DH TW	1316	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
18	1/3	996	(1) 2 3 4 5+	U (R) O	LB (LH) DB DH TW	1317	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
19	"	777	1 (2) 3 4 5+	U (R) O	LB (LH) DB DH TW	1318	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
20	"	824	1 (2) 3 4 5+	U (R) O	(LB) LH DB DH TW	1332	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
21	2/3	943	(1) 2 3 4 5+	U (R) O	(LB) LH DB DH TW		(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
22	"	949	(1) 2 3 4 5+	U (R) O	(LB) LH DB DH TW		(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
23	"	5812	1 2 3 4 (5+)	U (R) O	LB (LH) DB DH TW	1319	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
24	"	449	1 2 3 4 (5+)	U (R) O	LB (LH) DB DH TW	1320	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
25	3/3	1449	1 2 3 (4) 5+	U (R) O	LB (LH) DB DH TW	1321	1 2 3 4 5	Q RFM	None Mild Sev	Mastitis Metritis Other			
26	4/3	241	1 2 3 4 (5+)	U R (O)	LB (LH) DB DH TW	1322	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
27	"	226	1 2 3 4 (5+)	U (R) O	(LB) LH DB DH TW	1333	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
28	"	823	1 (2) 3 4 5+	(U) R O	(LB) LH DB DH TW	1334	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
29	"	999	(1) 2 3 4 5+	U (R) O	LB (LH) DB DH TW	1323	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			
30	"	285	1 2 3 4 (5+)	U (R) O	LB (LH) DB DH TW	1324	(1) 2 3 4 5	(Q) RFM	None Mild Sev	Mastitis Metritis Other			


Milk Fever
Severe
2%
Mild
12%
No
86%


Milk Fever By Date
NO
MILD
SEV
23-Feb
24-Feb
25-Feb
26-Feb
27-Feb
28-Feb
01-Mar
02-Mar
03-Mar
04-Mar
05-Mar
06-Mar
07-Mar
08-Mar
09-Mar
10-Mar
11-Mar
12-Mar
13-Mar
14-Mar
17-Mar
18-Mar
20-Mar
21-Mar
22-Mar
23-Mar
24-Mar
26-Mar
28-Mar
29-Mar
31-Mar
03-Apr
04-Apr
06-Apr
07-Apr
08-Apr
09-Apr
10-Apr
Date

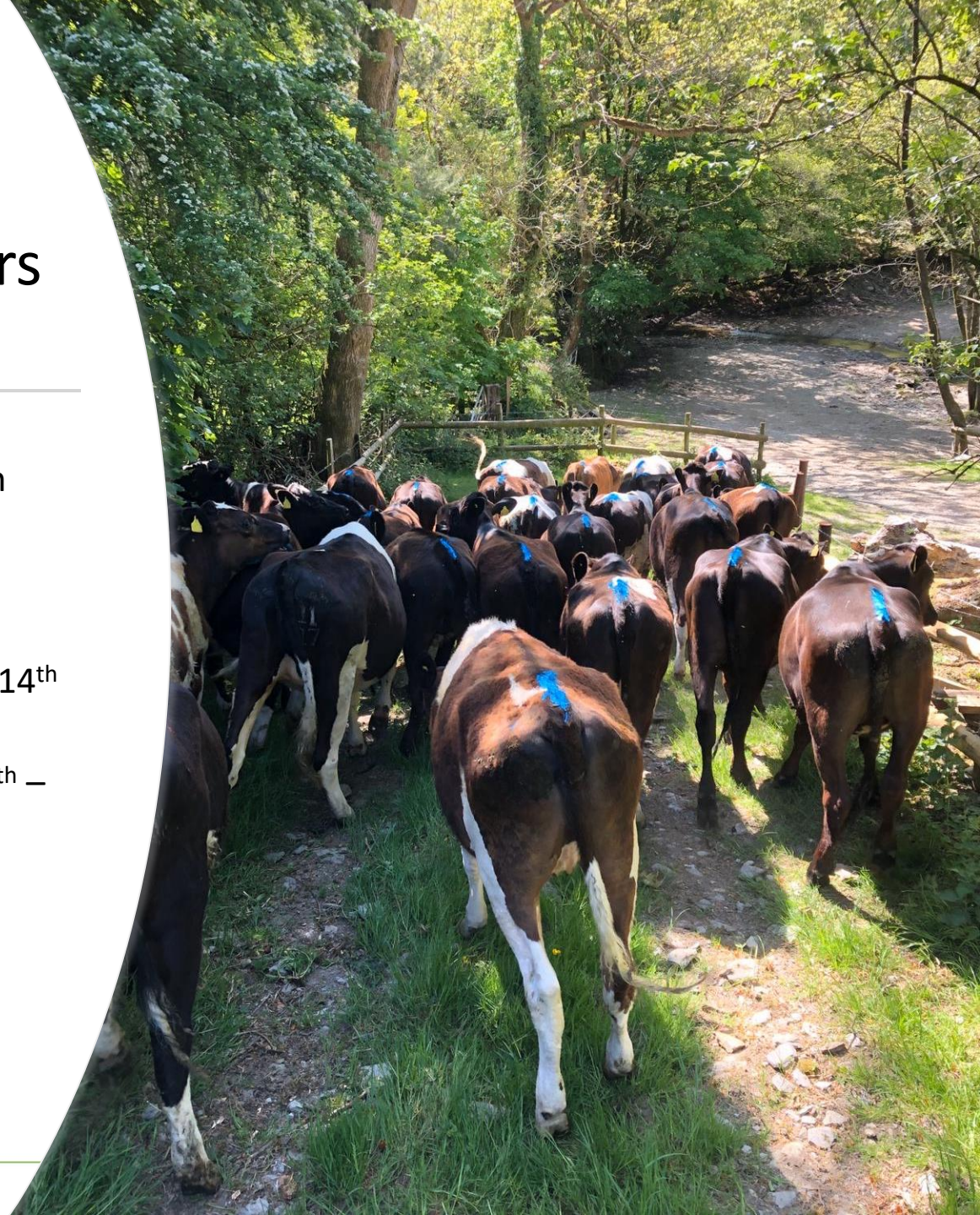


Dairy Active 26/2/2020

Cow ID	Due date	Lactation	BCS	Breed
781	3/3	2nd	3.5	FJ
823	11/3	2nd	3	FJ
136	6/3	6	3.75	F
799	8/3	2nd	3.75	FJ
94	3/3	6	4.25	F
38	4/3	8	4	F
824	8/3	2nd	3.5	FJ
137	5/3	6	3.5	FJ
620	4/3	3rd	3.5	F
777	1/3	2nd	3.5	FJ

Front end load heifers

- 28 Heifers strategic prostaglandin program
- PG and tail-painted Monday 11th May
- 15 Served to observed heat 13th/14th & 15th
- PG unserved animals Monday 18th – 8 served 20th
- Bull in 21st May



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Uterine health

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Metricheck - cows clean - just 2 cows positive

Non-cyclers

Collars fitted 12th April – 1 week to stabilize and then started recording heats for 4 weeks premating

11 cows without ref heat examined and synchronized with CIDR 1 week before PSM

Covid 19 disruption: What we haven't been able to do so far

- AI refresher / troubleshoot
- Physical pre-mating visit for cows, pasture, tracks, management plan

Improving submission rates

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The key to tightening the calving pattern

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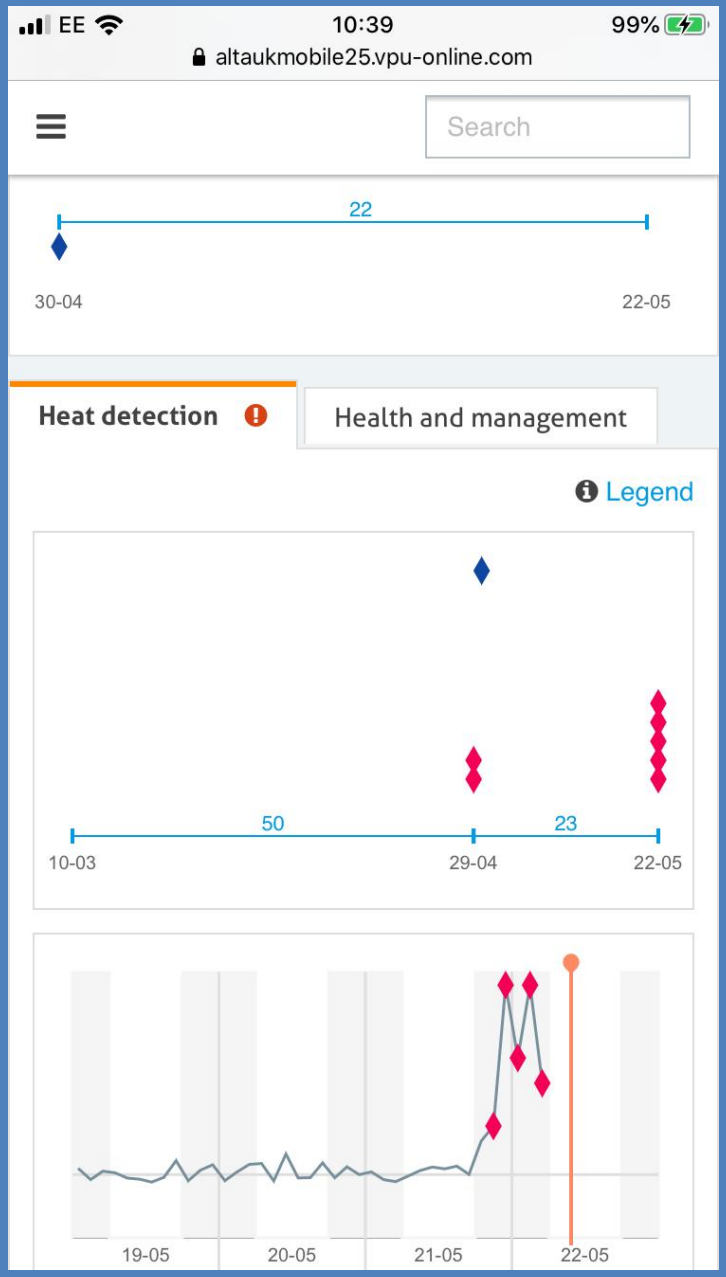
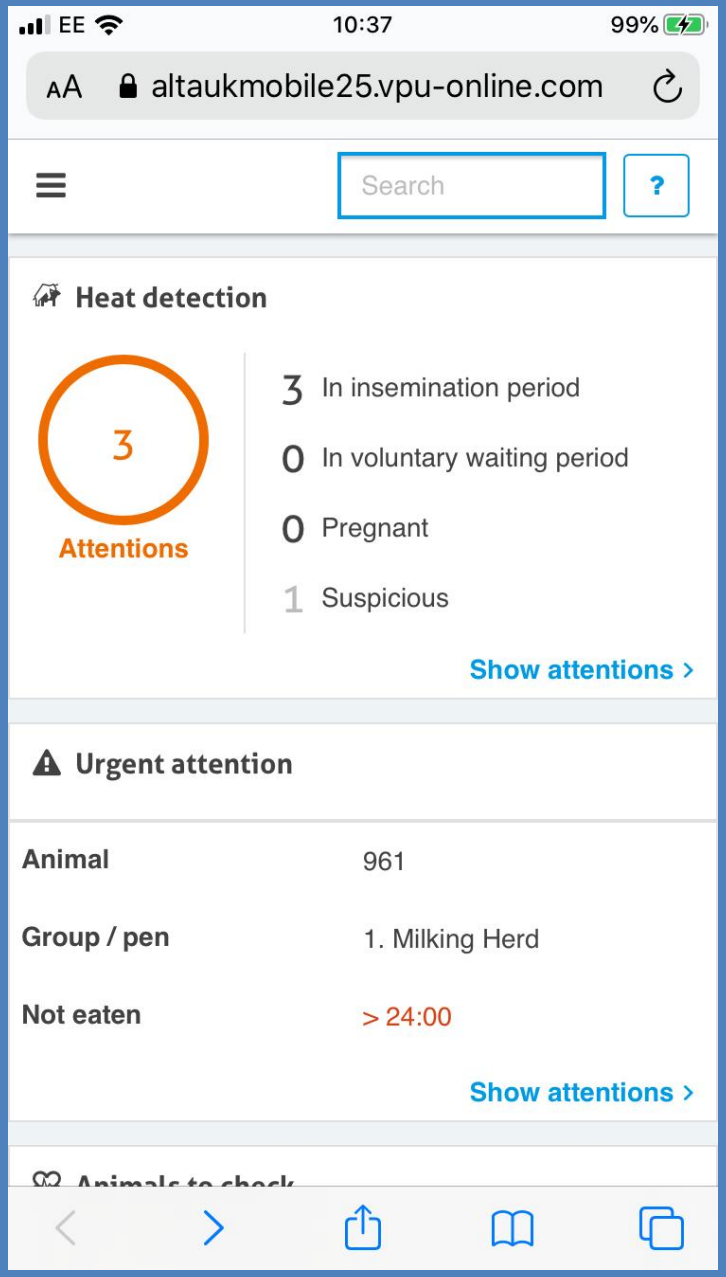
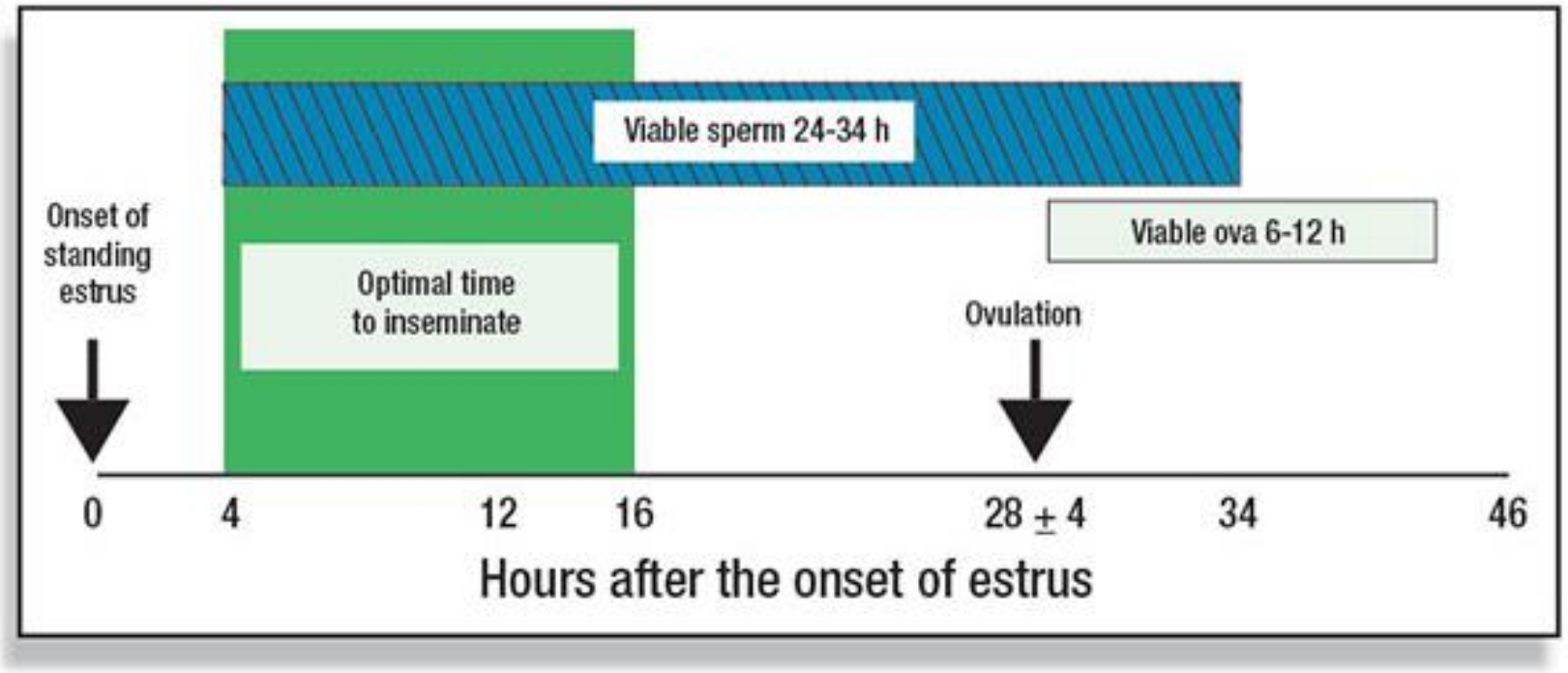

EE
10:39
99%
altaukmobile25.vpu-online.com
Search
22
30-04
22-05
Heat detection
Health and management
Legend
50
23
10-03
29-04
22-05
19-05
20-05
21-05
22-05


EE
10:37
99%
AA
altaukmobile25.vpu-online.com
Search
?
Heat detection
3
Attentions
3 In insemination period
0 In voluntary waiting period
0 Pregnant
1 Suspicious
Show attentions >
Urgent attention
Animal
961
Group / pen
1. Milking Herd
Not eaten
> 24:00
Show attentions >
Animals to check

A.I. Timing


Viable sperm 24-34 h
Onset of standing estrus
Optimal time to inseminate
Viable ova 6-12 h
Ovulation
0
4
12
16
28 ± 4
34
46
Hours after the onset of estrus

This seasons left-field challenge

"PICA"

Probable Phosphorous deficiency but so-far unconfirmed

- Differentials for PICA include

- Salt (sodium) deficiency
- Fibre (Acidosis)
- Parasitism
- Other mineral deficiency (?)
- Behavioural

Seek advice from vet to investigate

Farm	Dairy Active	Nantglas Farm	
Material Type	Fresh Grass		
Variety		Additive	
Lab Report No.	L076975	Received Date	15/05/20

48936

Major Minerals (DM Basis)	Unit	Result	Low / High
Calcium	%	0.55	
Phosphorus	%	0.24	
Magnesium	%	0.14	
Sodium	%	0.19	
Potassium	%	3.03	
Chloride	%	1.29	
Sulphur	%	0.33	
CAB	meq/kg	293	

Trace Elements (DM Basis)			
Iron	mg/kg	86.9	
Manganese	mg/kg	80.5	
Cobalt	mg/kg	0.02	
Zinc	mg/kg	23.8	
Selenium	mg/kg	0.025	

Antagonists (DM Basis)			
Aluminium	mg/kg	23.9	
Lead	mg/kg	0.17	
Molybdenum	mg/kg	0.22	

Copper (DM Basis)			
Copper	mg/kg	5.9	

Cobalt is below the limit of detection of 0.075mg/kg

10th May

3rd June

Diolch i chi am wrando.

Thank you for listening.