



IRISH CATTLE BREEDING FEDERATION

# C.O.W. v2

## Feedback and plans for the future



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*ICBF & Sheep Ireland Genetics Conference 2018*



Department of  
**Agriculture,  
Food and the Marine**  
An Roinn  
**Talmhaíochta,  
Bia agus Mara**

**ICBF & Sheep Ireland  
Genetics Conference 2018**

Wednesday & Thursday  
5th & 6th December  
Hodson Bay Hotel,  
Athlone



**#ISGC18**

Wednesday & Thursday  
5th & 6th December  
Hodson Bay Hotel,  
Athlone



# Farmers feedback



**190 cows**  
**Tipperary**

*"I use C.O.W. to identify cows to cull outside of the 'usual suspects'"*



**40 cows**  
**Cork**

*"C.O.W. on HerdPlus helps increase my herd profitability"*



**100 cows**  
**Mayo**

*"C.O.W is a great tool for identifying cows that are least likely to be profitable going forward"*



***My 12<sup>th</sup> lactation cow calves every year and provides the goods is only ranked in the bottom 20% .... [C.O.W. doesn't work]***



C.O.W. is a decision support tool that ranks dairy females on expected profit for the remainder of their lifetime

- Designed to aid in making informed herd decisions by identifying the expected **least profitable** dairy females **within the herd**
- Using multiple sources of the most **up-to-date information** to rank cows with herd

## Farmers feedback

- Why has my best cow ranked poorly today when she was the best on the list yesterday?

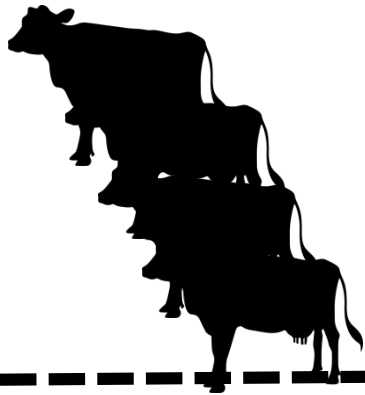
# C.O.W. = Cow's Own Worth

ICRF Genetic Evaluations Service

AI Code:	0-8	Breed:	HO (100%)	Sex:	MALE COW/HEIFER
Animal Name:	O-BEE MAHPRED JUSTICE		Owner:	EUROGENETIC N BULLS	
Date of Birth:	08-04-1998	Date of Evaluation:	Apr 2012	Polyploid Status:	PEE
National ID:	HOL1040001225819				

Help on understanding EBVs and Breeding Values - [Click Here](#)

Index	Score	Rank	Percentile
EBI	227	47%	
Milk Sub Index	31	91%	
Fertility Sub Index	37	90%	
Culling Sub Index	42	90%	
Beef Sub Index	-6	99%	
Health Sub Index	8	99%	
Maintenance Sub Index	-7	91%	



Age



Genetics

**Current Lactation**

- Production
- Health (SCC)
- Fertility (calving date)
- Management
- Maintenance

**Net Replacement Cost**

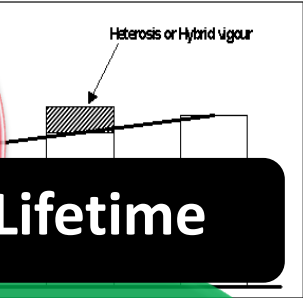
- Cull cow value
- Replacement cost

Lifetime

**Future Lactations**

- Production
- Health
- Beef
- Calving
- Management
- Maintenance
- Fertility
- Descendants

+ predictions on fertility, survival and SCC performance



## E.B.I. = Economic Breeding Index

Feb **Genetics** Half

Mar

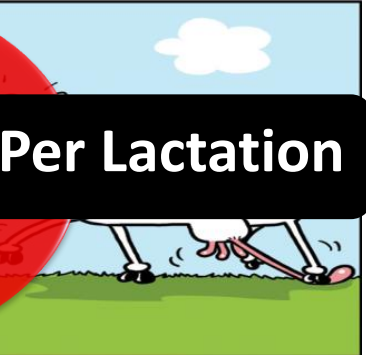
Apr  
May



Permanent Environment

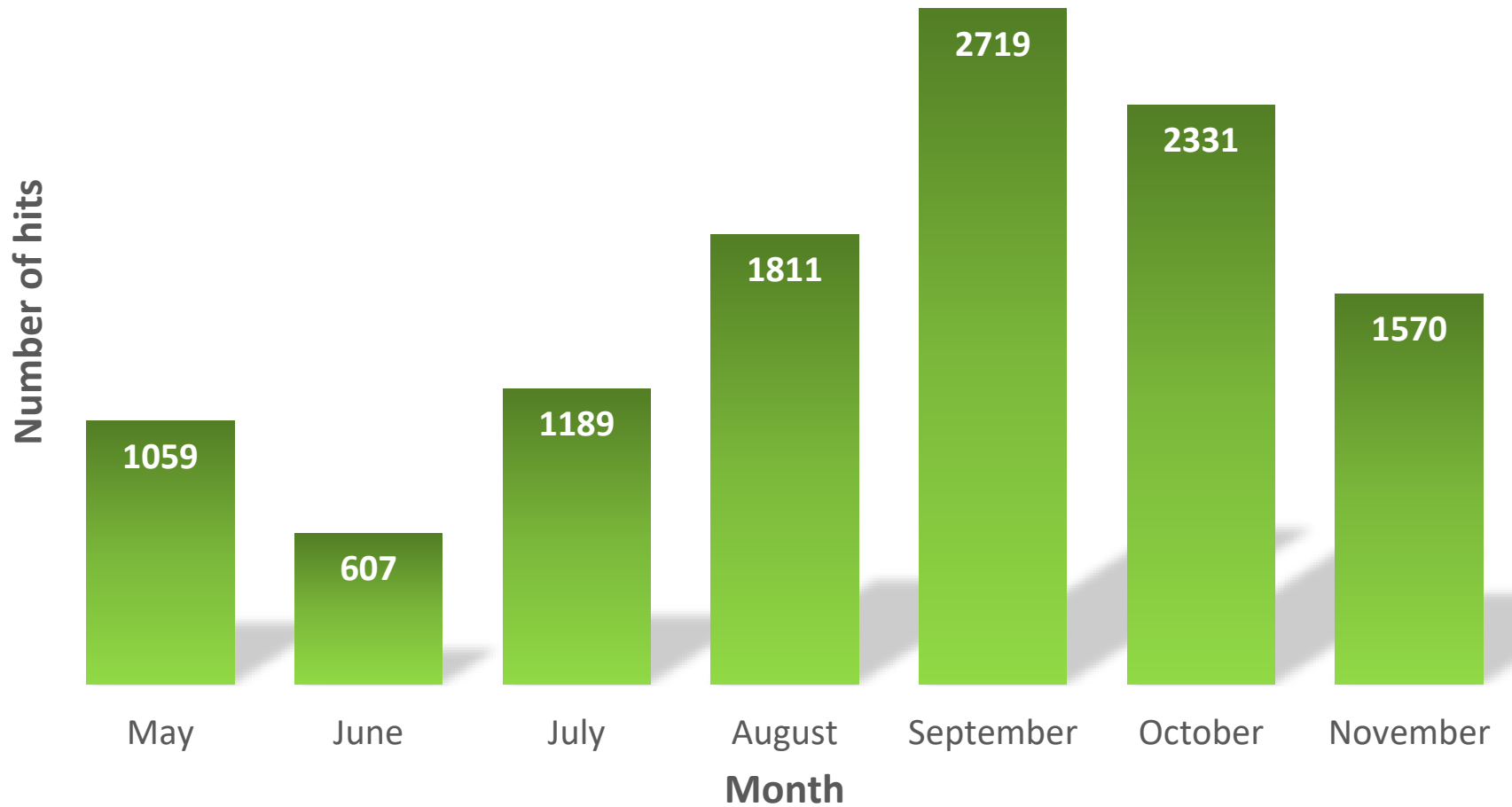
**Per Lactation**

- Production
- Fertility
- Beef
- Calving
- Management
- Maintenance
- Health



# Feedback

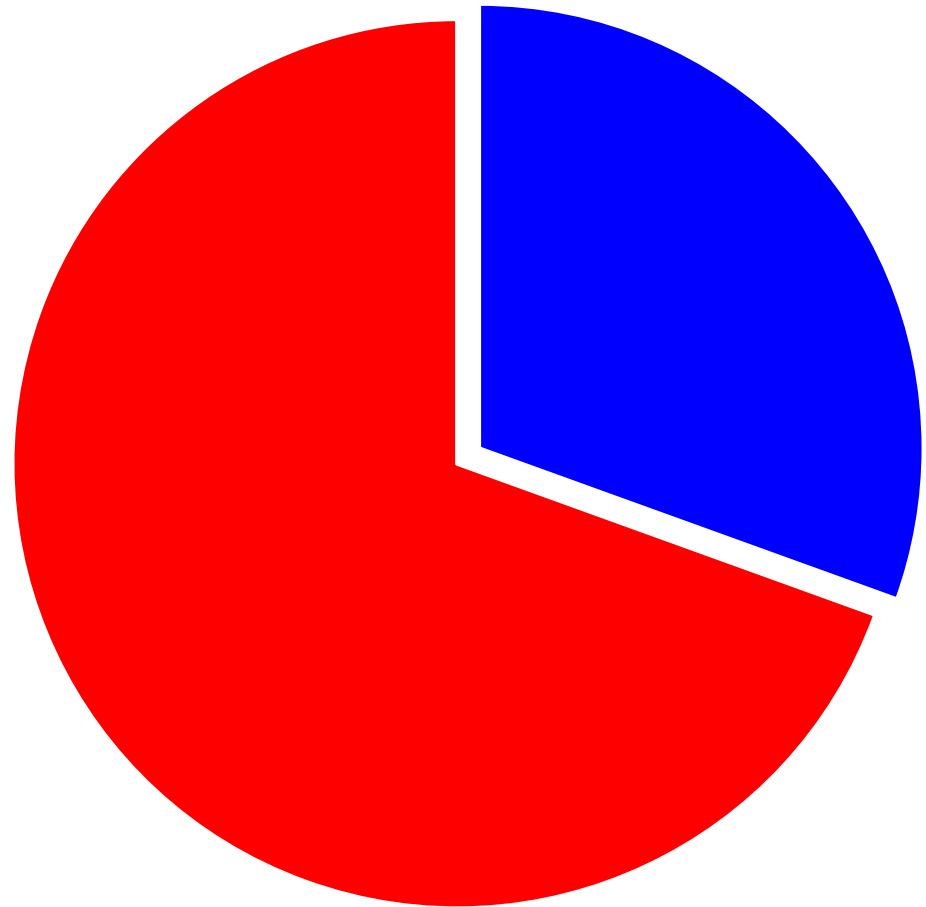
## Frequency of hits on C.O.W. profile 2018



## 30% of herds used C.O.W.

- 1500+ herds
- 175,000+ cows ranked through C.O.W. since May 2018

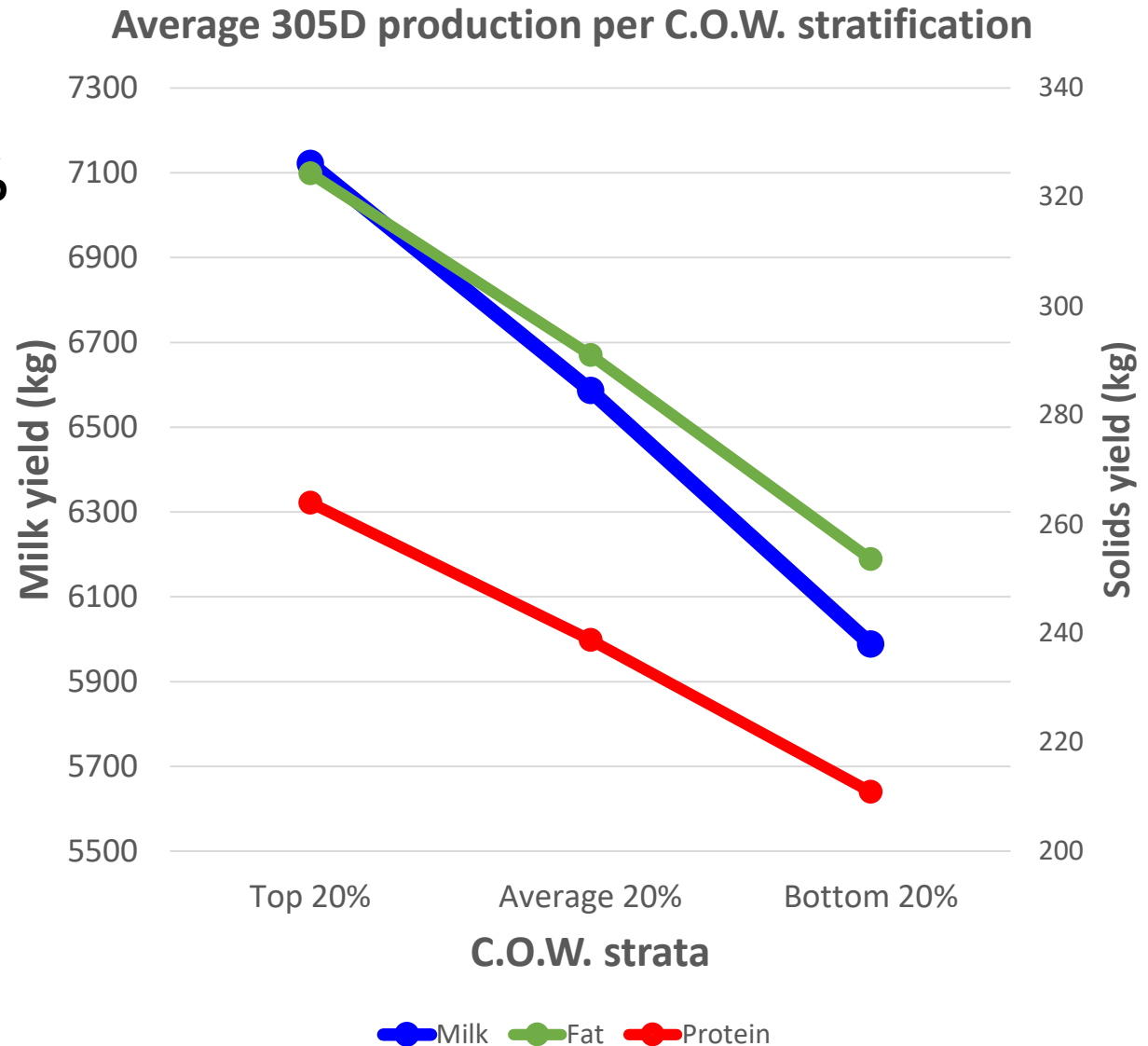
Eligible herds



# Analysis on herds using C.O.W.

## Production differences between top and bottom 20%

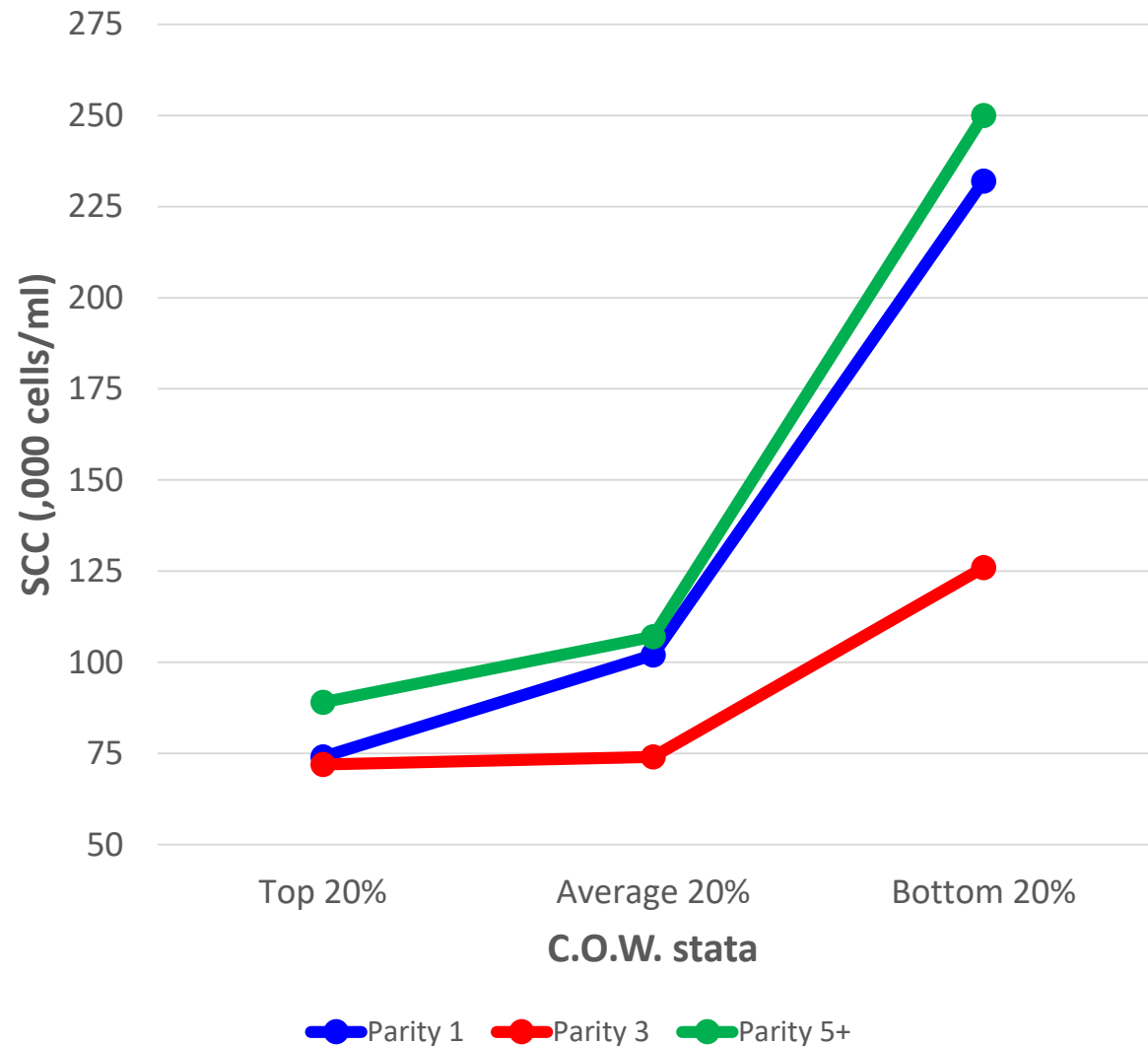
- 1133 kg less milk
- 71 kg less fat
- 53 kg less protein



# Analysis on herds using C.O.W.

**SCC differences  
between top and  
bottom 20% by  
parity**

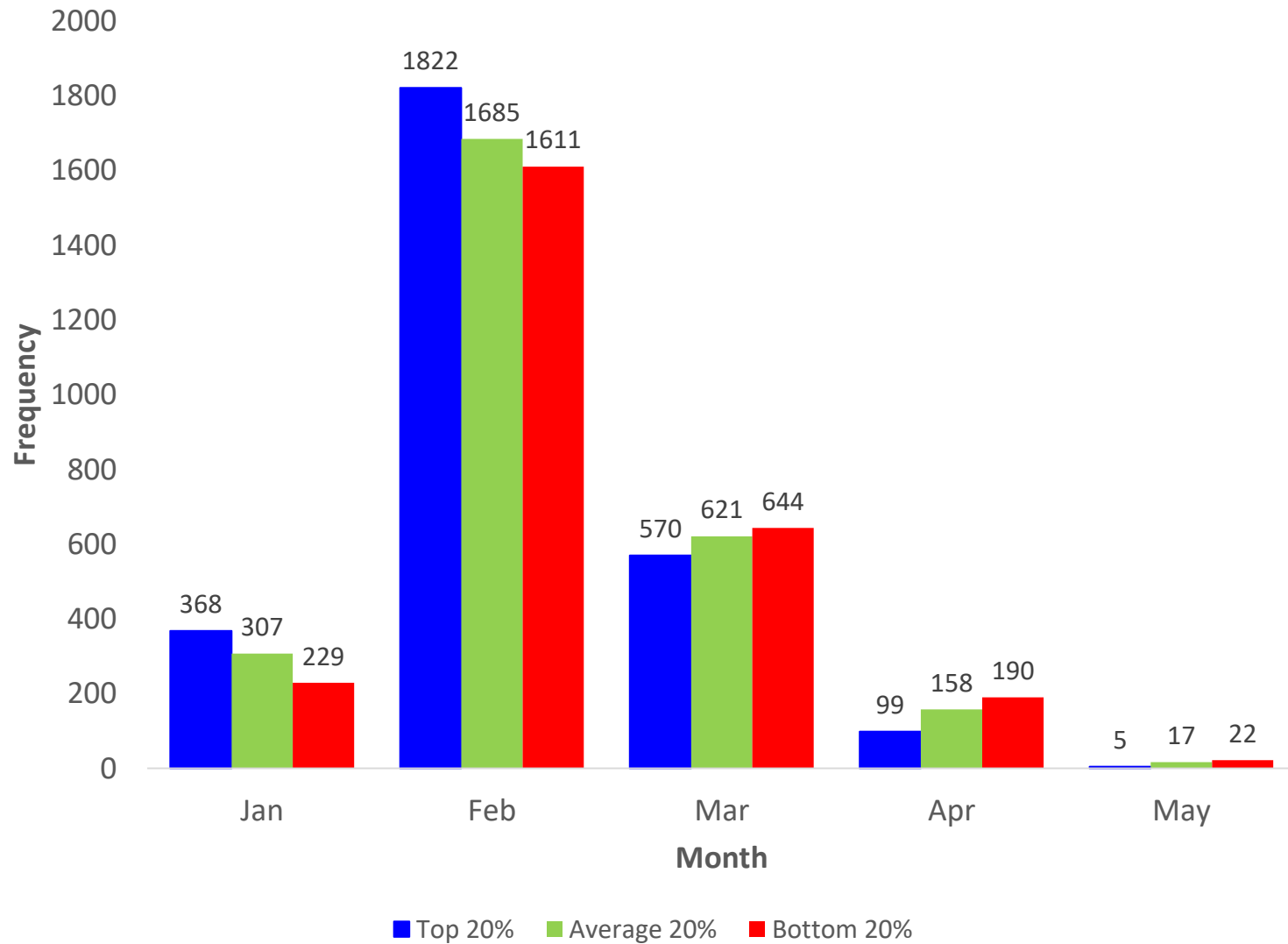
Average SCC per C.O.W. stratification and parity





# Analysis on herds using C.O.W.

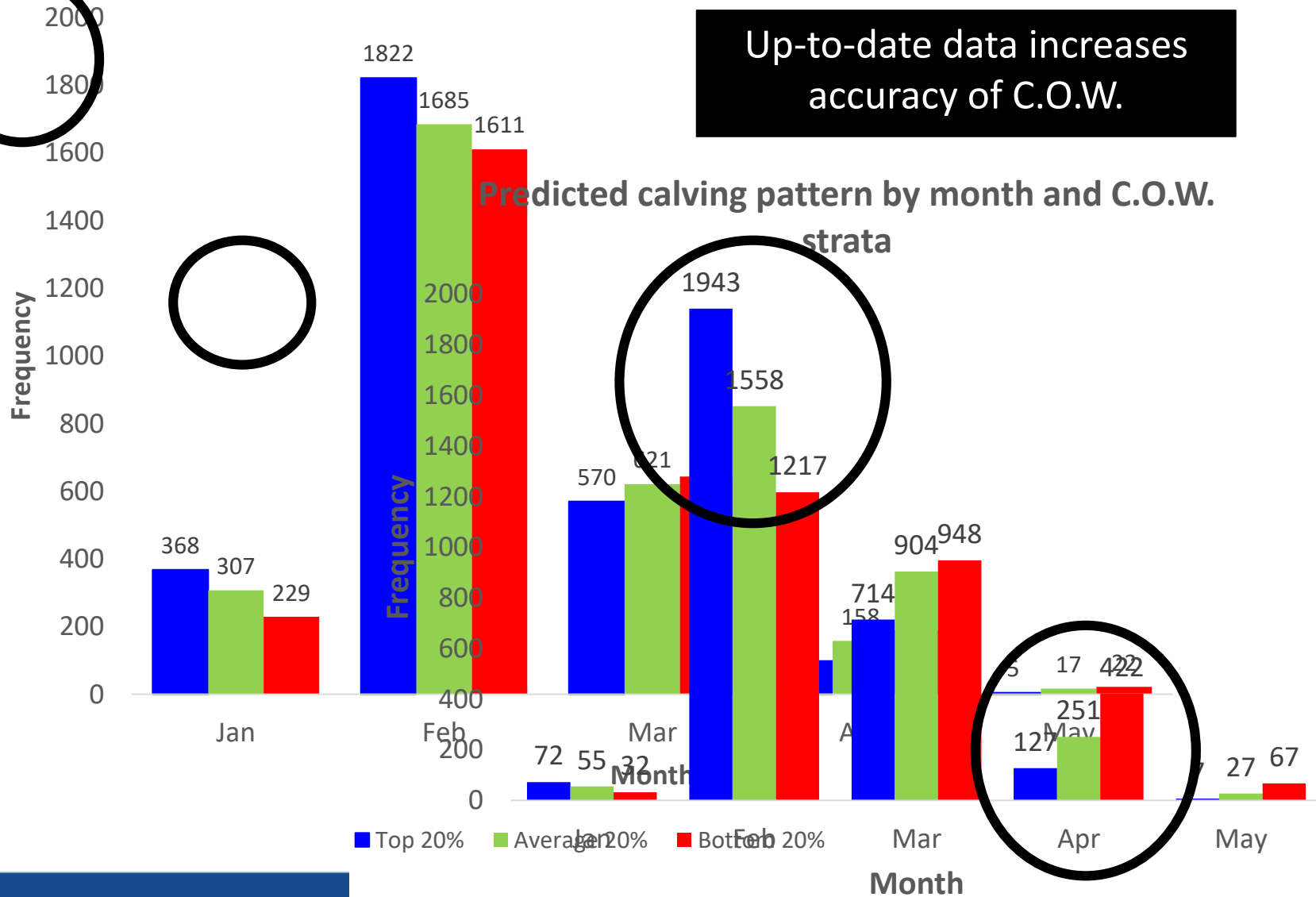
Calving pattern 2018 by month and C.O.W. strata



# Analysis on herds using C.O.W.

Calving pattern 2018 by month and C.O.W. strata

Up-to-date data increases accuracy of C.O.W.



# C.O.W. Beyond 1 dimension



## Two cows TODAY

- Same details
- Same point in time today

**As a herd manager, ask yourself?**

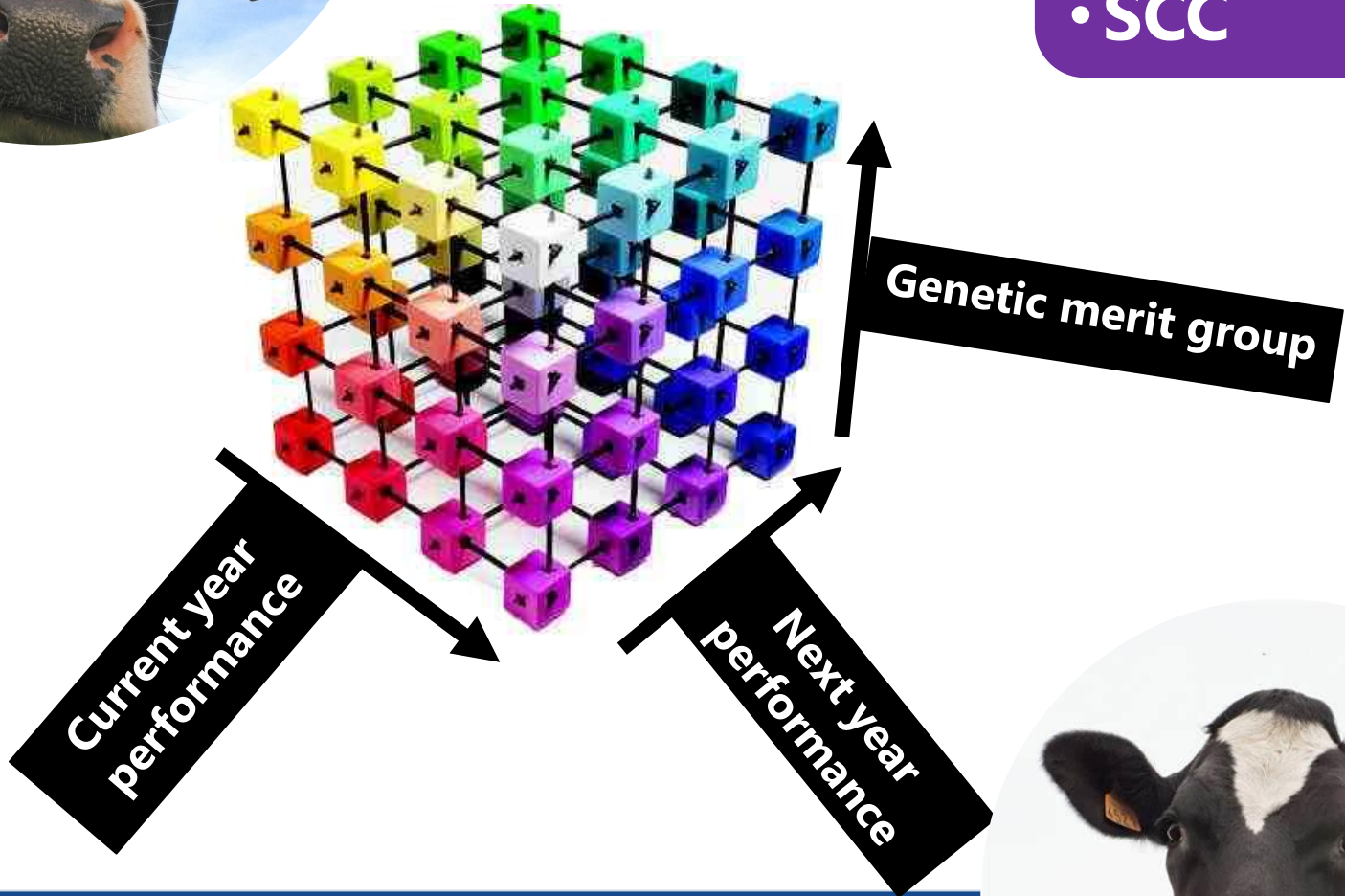
- ❖ Do these cows have the same FUTURE?
- ❖ Can you remember if these cows had the same PAST?



# How do we predict future performance??



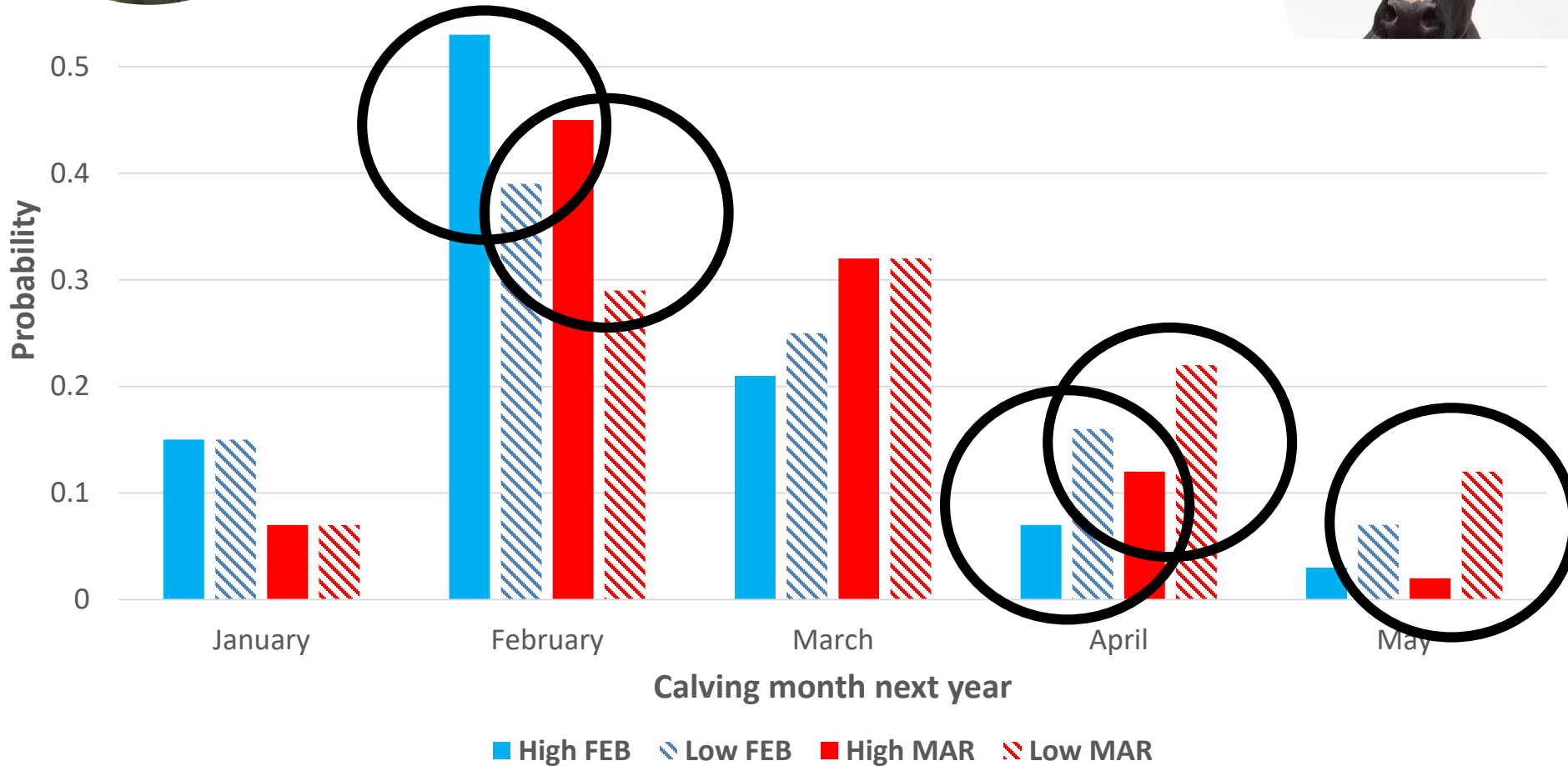
- Fertility
- Survival
- SCC



# How do we predict future performance??



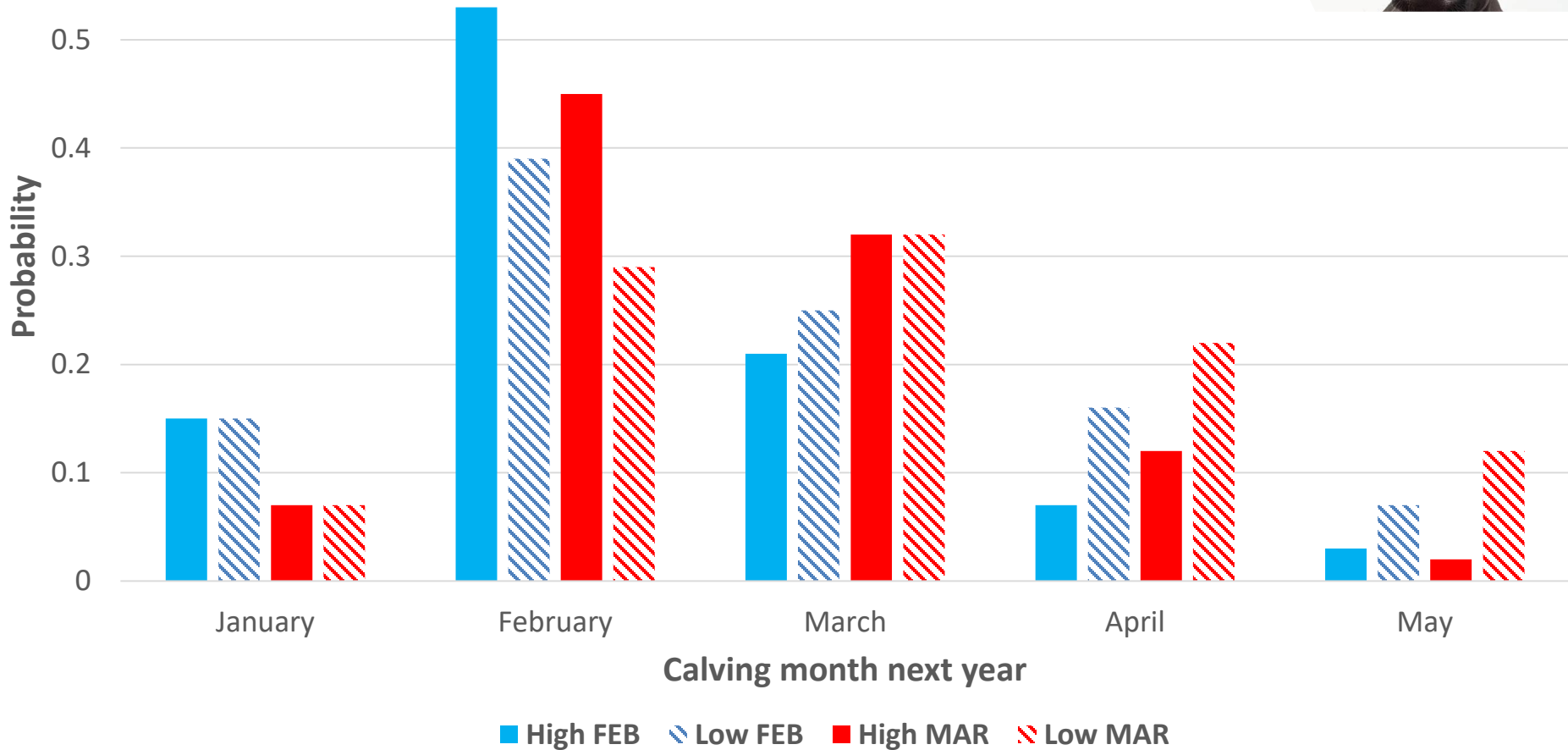
## Future fertility performance prediction



# How do we predict future performance??

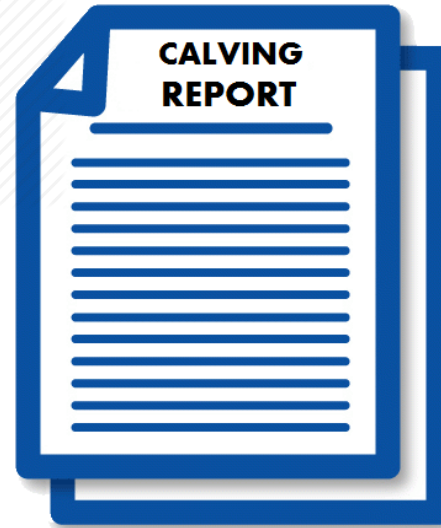
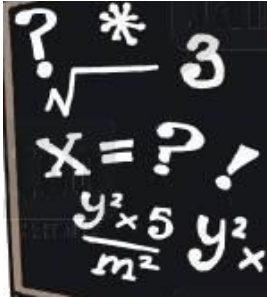


## Future fertility performance prediction





FUTURE PREDICTIONS



# C.O.W. profile in an instant!

C.O.W. (Cow's Own Worth) Profile [Click on an Animal Number or Jumbo to view more details.](#)

Help PDF

Help



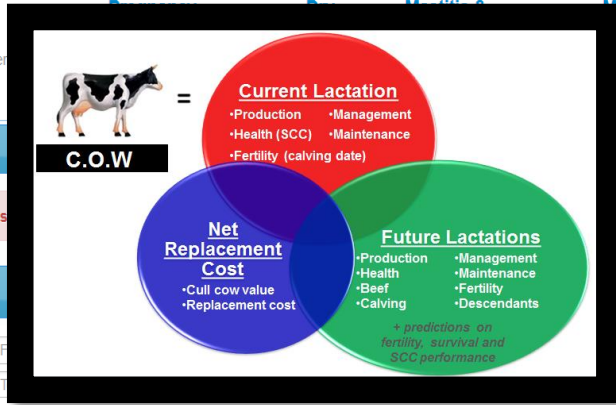
## Record Events

Missing Sire

7 Missing

Heat & AI/Serve

206 Cows Served



Milking

Imperament

0 Cows Scored

Mark For Culling

0 Cows Marked

Eligible Animals

Missing Animals

Please ensure to record health events (particularly mastitis)

Showing 1 to 203 of 203 entries

Hide filters

Excel

PDF

Print

From  To  Jumbo  Animal Number

From Date  To Date  Preg Diag  Marked For

Rank	Animal Details			C.O.W. Components			EBI	Fertility				SCC	
C.O.W. Rank	Jumbo	Animal Number	Lact	C.O.W. (€)	Current Lact Profit (€)	Future Lacts Profit (€)	Net Replace Cost (€)	EBI (€)	Last Calving Date	Preg Diag	Expected Calving Date	Marked For Culling	SCC (,000 c/ml)
1	2127	2127	2	1895	216	873	805	136	31-JAN-17	IN CALF	07-FEB-18	NO	27
2	2098	2098	2	1820	190	826	804	152	20-FEB-17	IN CALF	13-FEB-18	NO	20
3	2332	2332	1	1788	127	754	907	151	08-FEB-17	IN CALF	01-FEB-18	NO	50
4	2262	2262	1	1779	116	754	909	172	15-FEB-17	IN CALF	11-FEB-18	NO	18
5	1968	1968	3	1770	210	859	702	130	26-JAN-17	IN CALF	21-FEB-18	NO	14
6	1857	1857	3	1726	223	802	701	110	21-FEB-17	IN CALF	14-FEB-18	NO	10
7	1733	1733	4	1643	222	823	598	153	18-FEB-17	IN CALF	28-MAR-18	NO	29
8	2232	2232	1	1600	106	586	908	155	10-FEB-17	IN CALF	13-APR-18	NO	25





# Plans for C.O.W. 2019

## 1. Implement new developments

- a) New traits
- b) New models
- c) New economic values
- d) Updated transition matrices

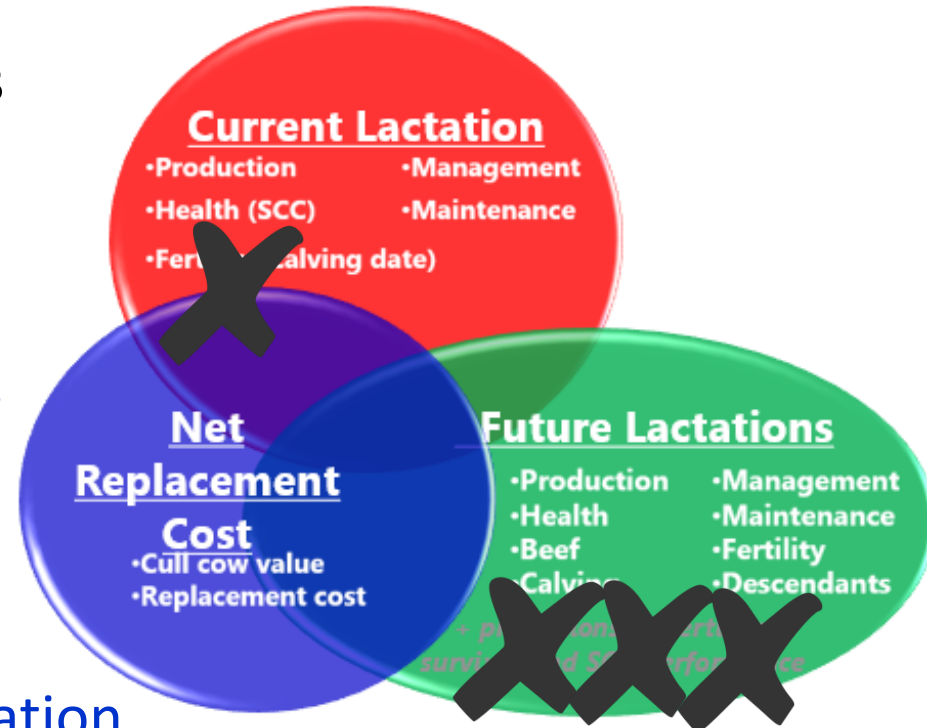
## 2. Non-seasonal C.O.W. profile version

- a) Research under-way
- b) Pilot herds needed for validation

## 3. Rank heifers

- a) Planned as a future improvement

## 4. Customisation of C.O.W. profile??





## Our Farmer & Government Representation



## Our AI & Milk Recording Organisations



## Our Herdbooks



# Acknowledging Our Members